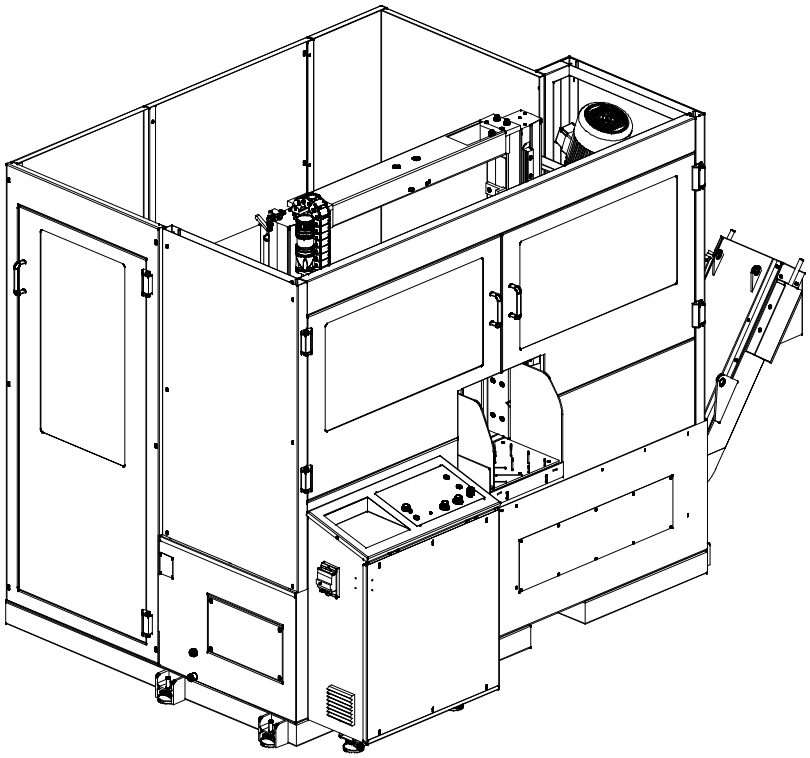

USE AND MAINTENANCE MANUAL

EN

H-14A

YEAR OF MANUFACTURE: _____

CE

EN

"CE" CONFORMITY DECLARATION
(according to EEC MACHINES DIRECTIVE 2006/42/CE annex II A)

The manufacturer:

MEP S.p.A.
Via Enzo Magnani, 1
61045 Pergola (PU) ITALIA
Tel. 072173721- Fax 0721734533

Hereby declares that the bandsawing machine:

Machine Type:	**SAWING MACHINE**
Machine model:	**H- 14A**
Serial number:	
Year of manufacture:	

is in specification with the following directives:

- **EEC MACHINES DIRECTIVE 2006/42/CE (D.Lgs. 17/2010)**
  - **EN 13898:2003 + A1:2009**
  - **EN 12100:2010**
- **DIRECTIVE 2014/30/UE "EMC" (D.Lgs. 80/2016)**
  - **EN 50370-1:2005 Emission**
  - **EN 50370-2:2003 Immunity**
- **DIRECTIVE 2014/35/UE "LVD" (D.Lgs. 86/2016)**

Responsible of a Technical File
(Walter Di Giovanni)

c/o MEP SPA
Via Enzo Magnani, 1
61045 - Pergola - PU - ITALY

Managing Director
(William Giacometti)

Pergola, lì _____

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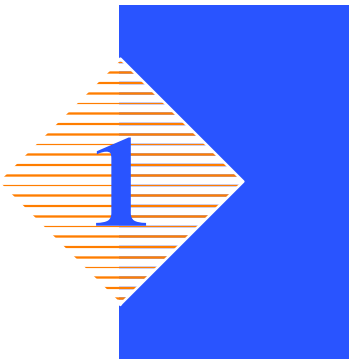
Introduction and technical specifications



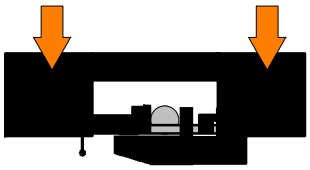
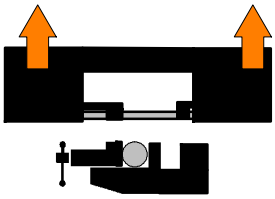
Foreword

For decades we have been committed to construction of the very best in metal cutting saws. With all our experience, technological know how for the latest in product and design, Hyd- Mech is able to offer customers specific solutions to all cutting needs and requirements.
In response to modern production technologies **Hyd- Mech** has developed this new band saw. **H- 14A**.
This work tool has been designed as a simple and reliable answer to the wide range of cutting needs of the modern workshop.
Sturdy structure, silent and safe operation it can cut with minimal waste and is extremely versatile, ideal for cutting stainless steel, light alloys, aluminium, copper and bronze offering exceptional speed and precision.
Its high cutting capacity enables it to handle both single workpieces and bundles, making this machine the ideal solution for satisfying the wide range of cutting needs of machine shops, turneries, structural steel shops and engineering workshops.
Please keep this instruction manual for future reference in a known location and easily accessible to all users of the device. HYD·MECH offers a great variety of options, components, and features for its various models.
Therefore, some of the equipment described in this manual (various illustrations and drawings) may not be applicable to your particular machine.
The information and specifications provided in this manual were accurate at the time of printing. HYD·MECH reserves the right to discontinue or change specifications or design at any time without notice and without incurring any obligation.
Congratulations for having chosen this product which, **by following the instructions contained in this user and maintenance handbook** will guarantee years of dependable service.

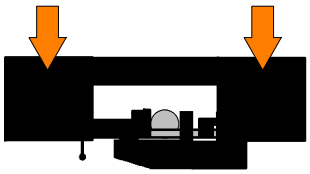
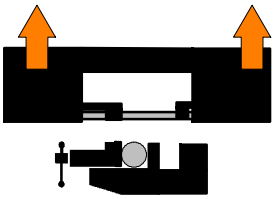
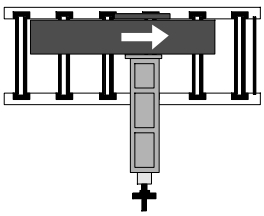
Warning This band saw has been exclusively designed to cut metals.

Machine presentation

La **H- 14A** is a hydraulic electro- mechanical cutting saw for solid and section cutting of metals. Machine operation is either SEMIAUTOMATIC or AUTOMATIC.
In the Semiautomatic cycle, after setting the bow cutting sequence from the control panel and the speed of the descent cutting head, the operator closes the vice by pushing the button from the control panel and pushes the start key to start up the belt. Then:

1. The cutter vice closes	2. The head lowers until the cut is made (FC-TA)	3. The head returns to start position (FCTI)	4. The cutter vice opens
			

In the Automatic cycle, after setting the bow cutting sequence from the control panel and the speed of the descent cutting head, the operator closes the vice by pushing the key from the control panel and pushes the start key to start the belt. Then:

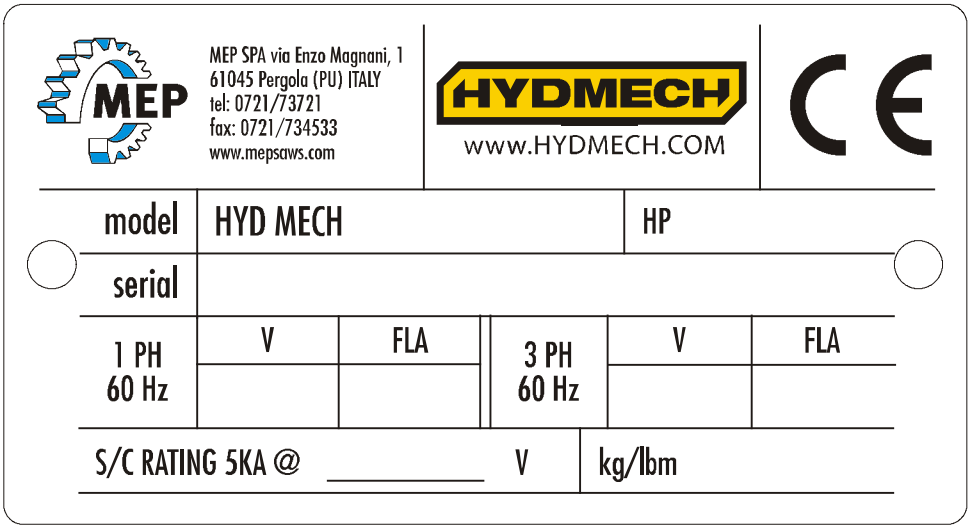
1. The cutter vice closes	2. The head lowers until the cut is made (FC-TA)	3. The head returns to start position (FCTI)	4. The feed vice closes
			
5. The cutting vice opens	**6. The cutting material is fed**	**7. The cutting vice closes**	**8. The feeder vice opens and the cutting cycle starts again**
			

Attention Before starting any of the work cycles, consult Chapter 5, where all the work phases are explained in detail.

Machine specification

The anodised aluminium name plate is riveted on the side of the machine; the same data are reproduced on the declaration of conformity included with this use

and maintenance manual.



N.B. When communicating with the Technical Service department, the model, serial number and year of manufacture of the machine must be quoted.

Technical data general table

CUTTING SPEEDS		
Blade rotation speed	ft/min mt/min	49 ÷ 377 15 ÷ 115

BAND SAW		
Nominal dimensions	in mm	15’ 2” 43/64 x 1” 21/64 x 1/32 4640 x 34 x 1,1
Tolerance	in mm	15’ 2” 43/64 ± 1” 9/16 4640 ± 40
Blade height	in mm	1” 21/64 34
Blade thickness	in mm	1/32” 1,1
Blade tension	lbs kg	2750 1250

Attention When choosing the cutting tool, if its dimensions do not correspond to those included in the ”Rated size” section, check that the dimensions at least fall within the admissible max/min specifications.

RATED ELECTRICAL POWER		
Head spindle motor	HP kW	8.85 6,6
Electric coolant pump motor	HP kW	0.25 x 2 0,19 x 2
Power pack motor M1	HP kW	1.74 1,3
Transformer supply Step motor drive	HP kW	0.67 0,5

RATED ELECTRICAL POWER		
Blade tensioning motor	HP kW	0.34 0,25
Switching power supply	HP kW	0.53 0,4
Chip Conveyor	HP kW	0.5 0,37
Max. installed electrical power	HP kW	12.2 9,1
VFD	HP kW	10.5 7,5

FULL LOAD AMPERAGE		
FLA (240 V)	Amps	40
FLA (480 V)	Amps	20

WORKING PRESSURE		
Head working pressure during descent/ascent	psi bar	362.595 25
Vice working pressure during opening/closure phase	psi bar	362.595 25
Hydraulic control unit working pressure	psi bar	580.152 40
Hydraulic blade tensioning (optional)	psi bar	319.0836 22

MATERIAL FEEDER		
Feeder stroke	in mm	23” 5/8 600
Max weight capacity	lbs Kg	3300 1500
Bar feed force	N	10000

LUBRICANT/COOLANT FLUID AND OIL		
Oil for monobloc hydraulic power pack	capacity lt	73
Lubricant/coolant fluid (5- 6% oil concentration)	capacity lt	190

CUTTING AND FEED VICES		
Vice max. opening	in mm	14” 11/64 360

SPINDLE MOTOR SPECIFICATIONS
4- pole, three- phase, asynchronous;

No.of poles	Frequency (Hz)	Current (Volts)	Absorption (Amps)	Power (hp)	rpm
4	60	127/240	46.8/27	8.844	1720
4	60	277/480	21.5/12.4	8.844	1720
Stator wound with enamelled copper wire, class H 200° C.					
Class F insulation (limit temperature TL 155° C).					

SPINDLE MOTOR SPECIFICATIONS
4- pole, three- phase, asynchronous;

No.of poles	Frequency (Hz)	Current (Volts)	Absorption (Amps)	Power (hp)	rpm
IP 55 protection rating (total against contact with live parts, water sprayed from all directions, with shaft oil seal).					
Conforming to CEI norms, publication: IEC 34 of 01/07/1985.					

HYDRAULIC POWER PACK MOTOR SPECIFICATIONS M1
4- pole, three- phase, asynchronous;

No.of poles	Frequency (Hz)	Current (Volts)	Absorption (Amps)	Power (hp)	rpm
4	60	136/240	9.4/5.4	1.742	1700
4	60	277/480	4.7/2.7	1.742	1700
Class F insulation (limit temperature TL 155° C).					
Protection rating IP 55.					
Conforming to CEI norms, publication: IEC 34 of 01/07/1985.					

BLADE TENSIONING MOTOR
4- pole, three- phase, asynchronous;

No.of poles	Frequency (Hz)	Current (Volts)	Absorption (Amps)	Power (hp)	rpm
4	60	230/400	1.85/1.07	0.335	1600
4	60	277/480	1.55/0.89	0.335	1600
Class F insulation (limit temperature TL 155° C).					
Protection rating IP 55.					
Conforming to CEI norms, publication: IEC 34 of 01/07/1985.					

ELECTROPUMP MOTOR
Single phase; Frequency 60 Hz.

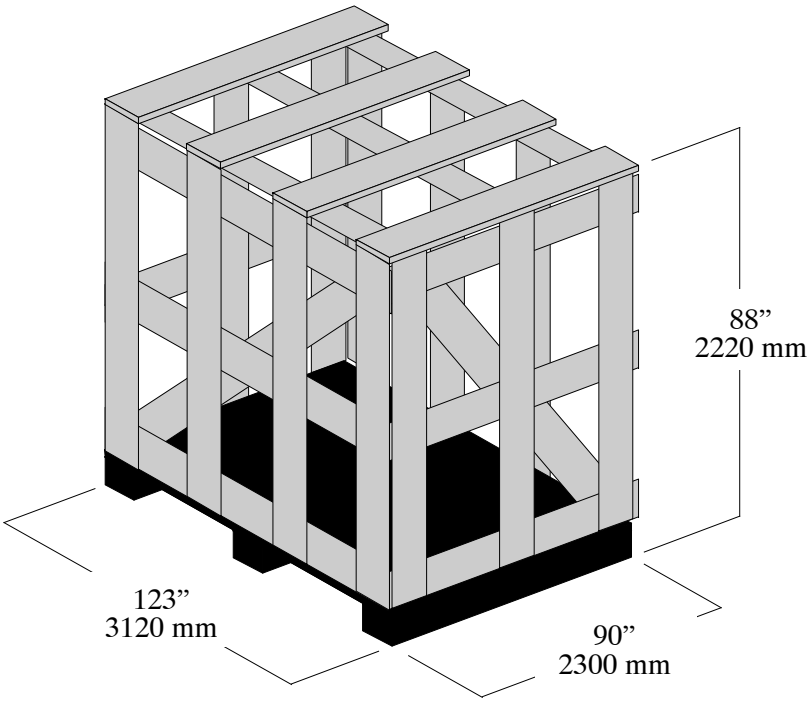
Voltage (Volts)	Absorption (Amps)	Power (hp)	rpm	Delivery rate lt/min	Head (ft.)
230/400	0.74/0.43	0.2546	3400	85/3	0/19’ 8” 7/32
440/460	0.6	0.2546	3400	85/3	0/19’ 8” 7/32
Protection rating IP 55.					
Conforming to CEI norms, publication: IEC 34 of 01/07/1985.					

SPECIFICATIONS ENGINE CHIP CONVEYOR
4- pole, three- phase, asynchronous; frequency 50 Hz.

Nr. of poles	Voltage (Volts)	Absorption (Amps.)	Power (kW)	RPM
4	230/400	2/1,15	0,37	1.4
Protection rating IP 54.				
Conforming to CEI norms, publication: IEC 34 of 01/07/1985.				

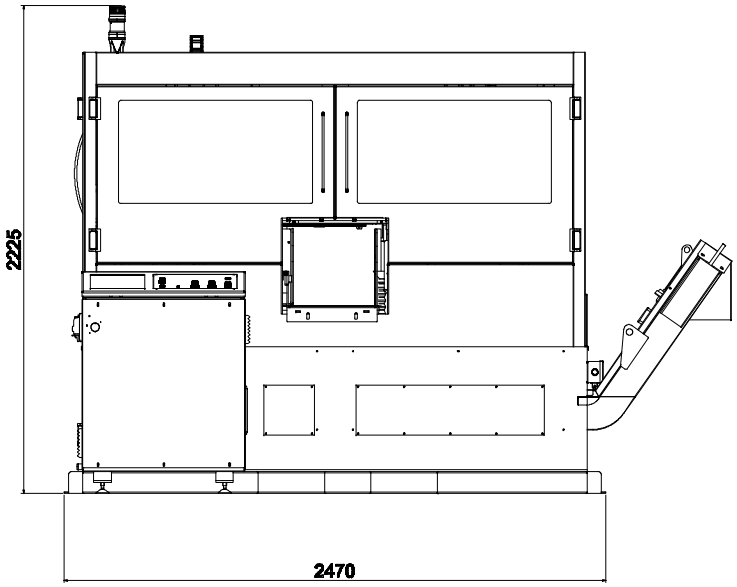
CUTTING CAPACITY		
Section	●	■
0°	13” 25/32 355 mm	13” 25/32 355 mm

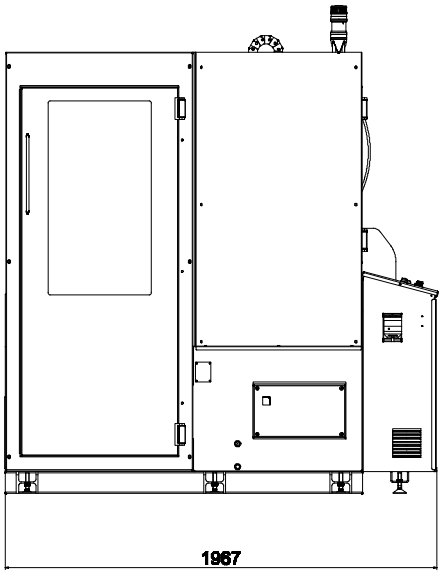
PACKED WEIGHT		
Wooden cage and pallet	Kg	300
Wooden pallet	Kg	150

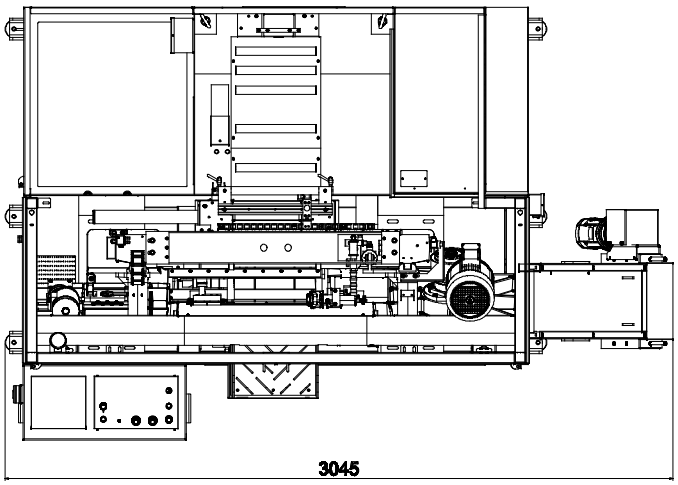


Dimensions

MACHINE INSTALLED		
Work table height	mm	860
Weight	Kg	2800





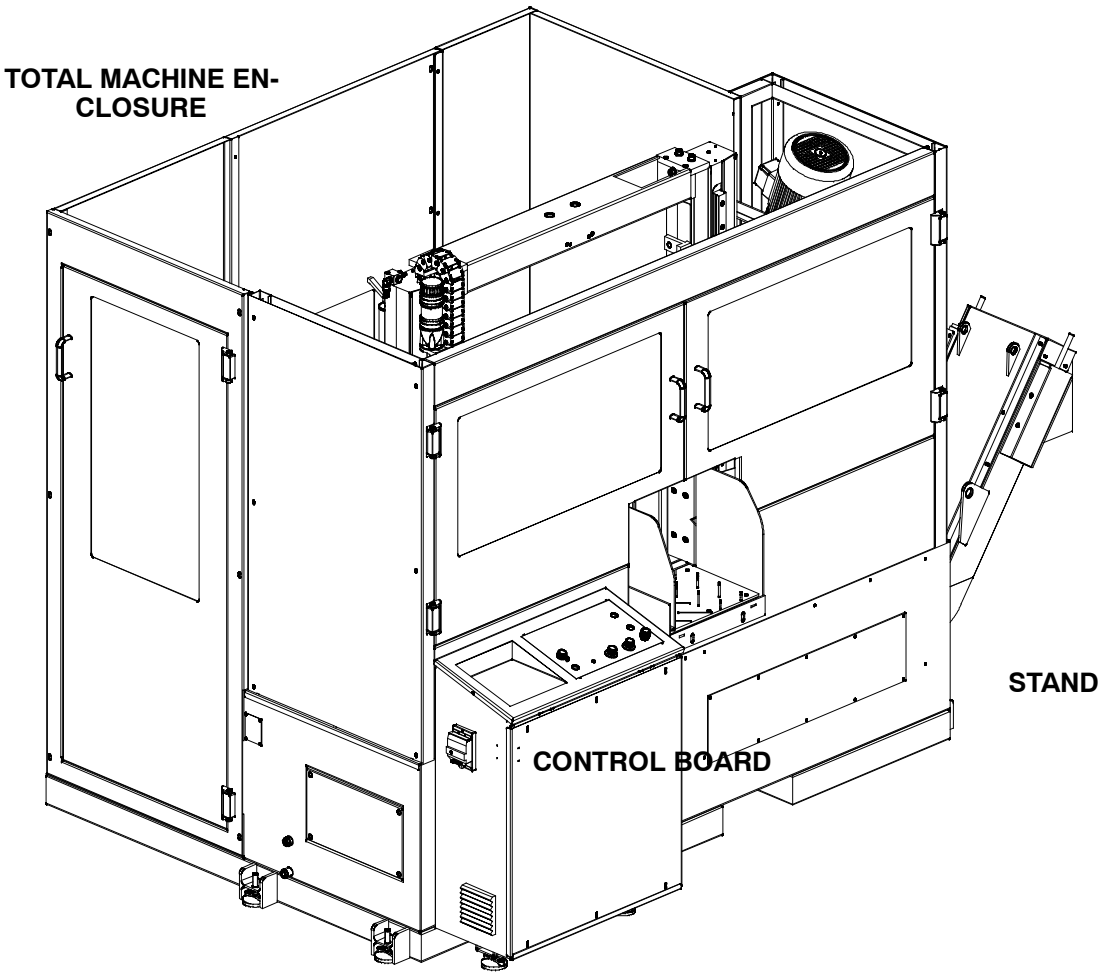


Functional parts

2

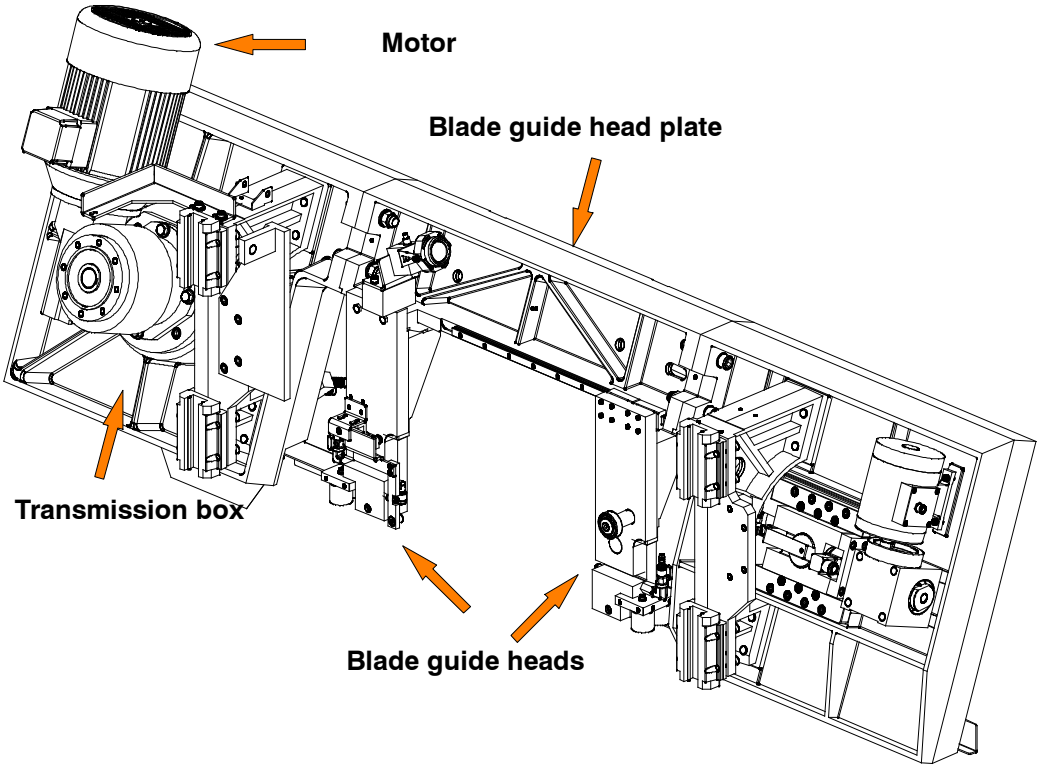
H-14A model

In order for the user to move towards a full understanding of how the machine works, which is described in detail in the chapter 5, this chapter deals with the main units and their locations.



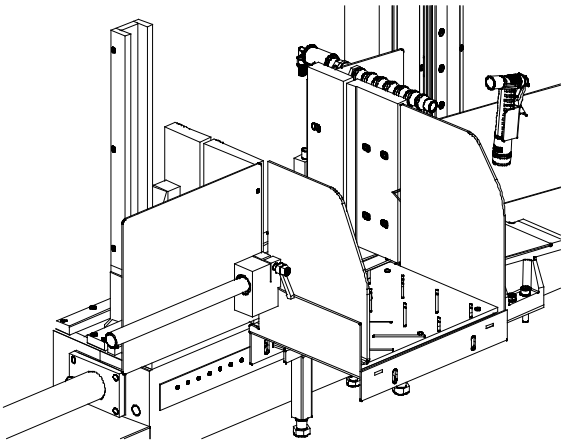
Cutting head

The operating head is the cutting component and is made up of a bow from cast iron on which the following elements are installed: band, band guide components, band tensioning unit, worm screw reducer and spindle motor.
The cutting bow slides on linear guides, with ball recirculation slides, installed on columns for getting a better cutting stability and longer blade life. Feeding is by a stepper motor and screw/nut with recirculating balls.
The machine is equipped with a laser system to position the bar accurately to carry out non- standard or facing cuts.



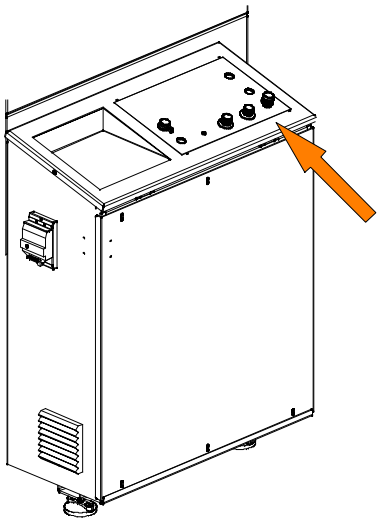
The cutting vice

The vice is the unit that clamps the workpiece during cutting; it consists of a vice support, fixed to the work table on which a mobile jaw is mounted. The opening or closing movement is carried out through the relevant keys on the consolle.



Control Panel

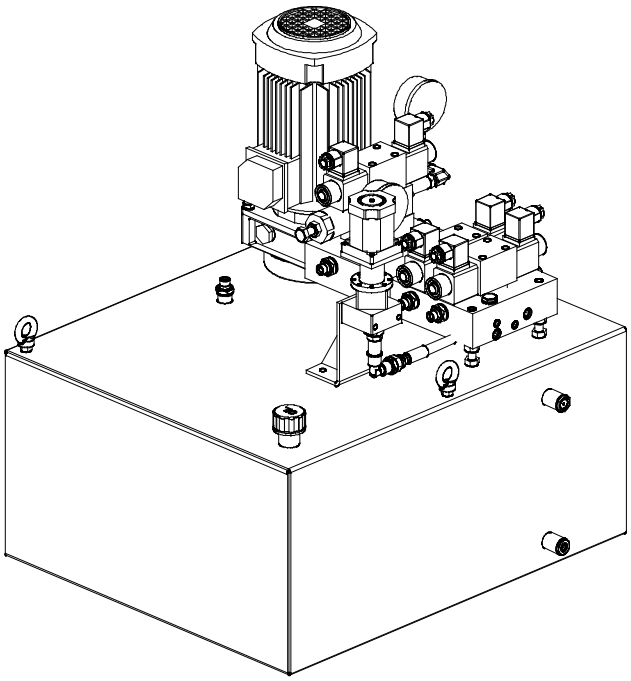
The control panel has a protection rating of IP 54 and contains the electronic equipment. Access to the control panel is protected by a safety panel mounted on hinges and fastened with screws, specially designed to prevent tampering.
The control panel is installed on a structural fixed console and enables the operator to steadily monitor the cutting area in total safety.



Control panel

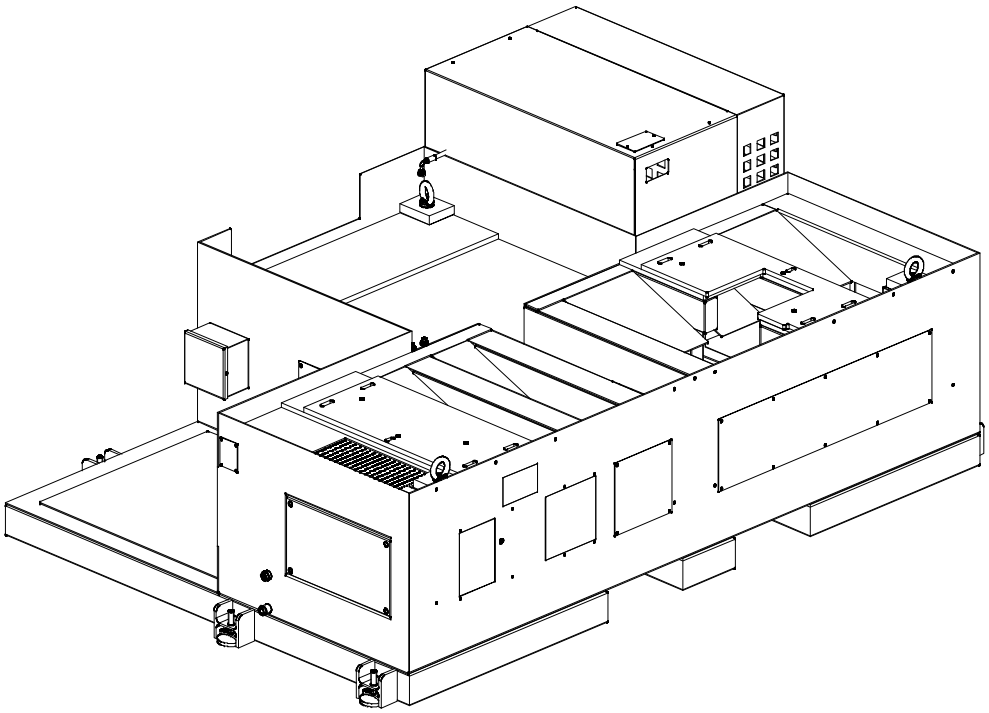
Hydraulic Power Pack Unit

The hydraulic control unit operates the cutting vice and the feeding vice and balances the weight of the cutting bow.
It is located in the machine rear part under the metal protection. The oil exchange in the circuits is operated by solenoid valves driven by the machine controller.



Base

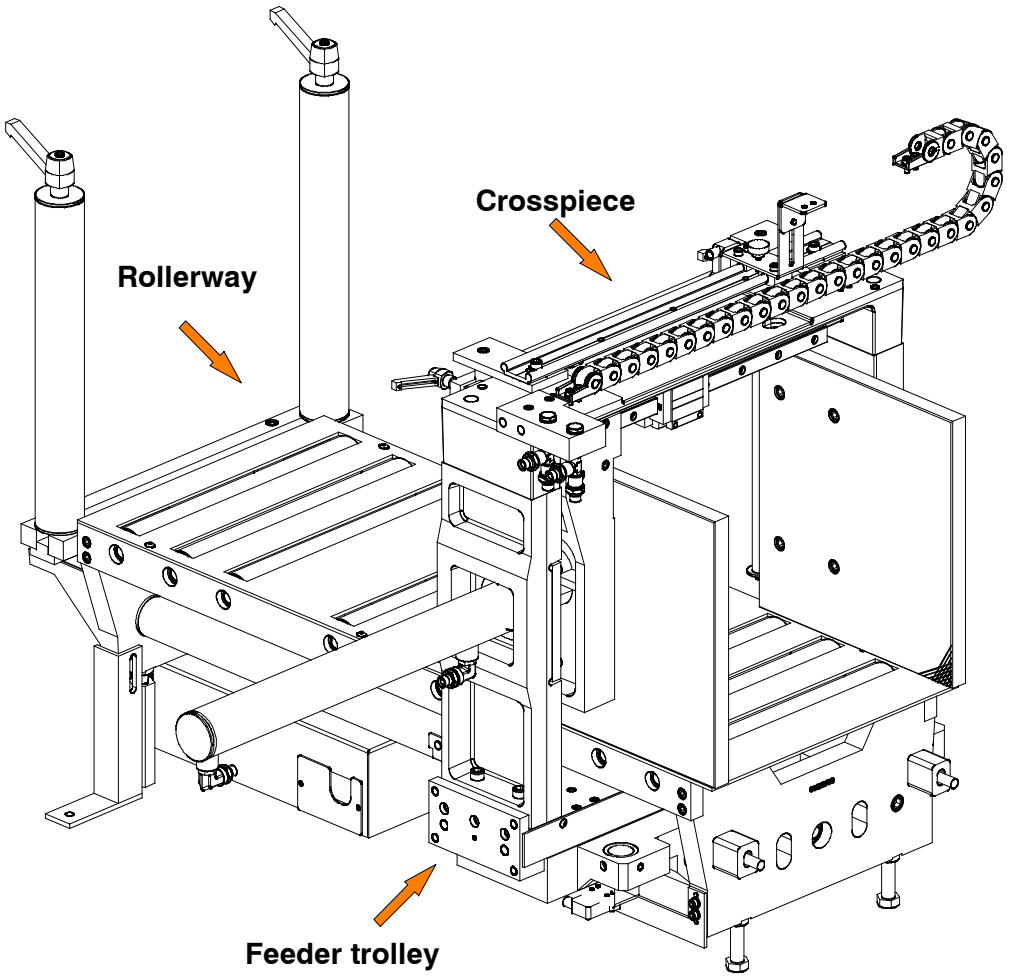
This unit features a large coolant collection surface which conveys the coolant to the rear tank via the tank cover, and a swarf collection drawer.
The electric pump seated inside the tray sucks the clean liquid from the progressive filter system and makes it circulate again to ensure an efficient flowing of the processing residues and the lube- refrigeration of the cutting tool.



The coolant gun is on the right of the cutting plane. On the front right of the base there is a chip extractor.
The hydraulic control unit and the electric board are located in the right rear side.

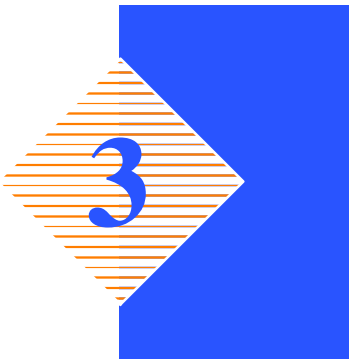
Feeder

The material is fed by the feeding shuttle which clamps the material with the hydraulic vice and draws the cutting material by sliding on ground guides. The numeric control very accurately drives the stepper motor of the feeding shuttle, thus enabling the operator to set 5 sequences of 20 programs each chosen among max. 100 cutting programs, with different quantity and length, on the same bar.



The stepper motor and the power supply structure, can supply power to bars up to 3000 Kg even when sheared, because they are equipped with a self- aligned vice.

Safety and accident prevention



The **H- 14A** has been designed and produced in accordance with European standards. For the correct use of the machine we recommend that the instructions contained in this chapter are carefully followed.

Use of the machine

The **SHARK 230 NC- HS** band saw cutting machine is intended exclusively for cutting metallic materials, ferrous or non- ferrous, in section or solid.
Other types of material and machining are not compatible with the specific characteristics of the saw.
The employer is responsible for instructing the personnel who, in turn, are obliged to inform the operator of any accident risks, safety devices, noise emission and accident prevention regulations provided for by international standards and national laws regarding the use of the machine. The operator must be perfectly aware of the position and function of all the machine's controls.The instructions, warnings and accident prevention standards in this manual must be respected without question by all those concerned.The following definitions are those provided for by **EEC MACHINES DIRECTIVE 2006/42/CE** :

- "Danger zone": any zone in and/or around a machine in which the presence of a person constitutes a risk for the safety and health of that person.
- "Person exposed": any person finding himself either completely or partly in a danger zone.
- "Operator": the person or persons given the responsibility of installing, operating, adjusting, maintaining, cleaning, repairing or transporting the machine.

Attention

The manufacturer declines any responsibility whatsoever, either civil or criminal, should there be unauthorised interference or replacement of one or more parts or assemblies on the machine, or if accessories, tools and consumable materials are used that are different from those recommended by the manufacturer itself or if the machine is employed in a plant system and its proper function is thereby altered.

General recommendations

LIGHTING

Insufficient lighting for the types of operation envisaged could constitute a safety hazard for the persons concerned. For this reason, the machine user must provide lighting in the working area sufficient to eliminate all shadowy areas while also avoiding any blinding light concentrations. (Reference standard ISO 8995- 89 “Lighting in work environments”).

CONNECTIONS

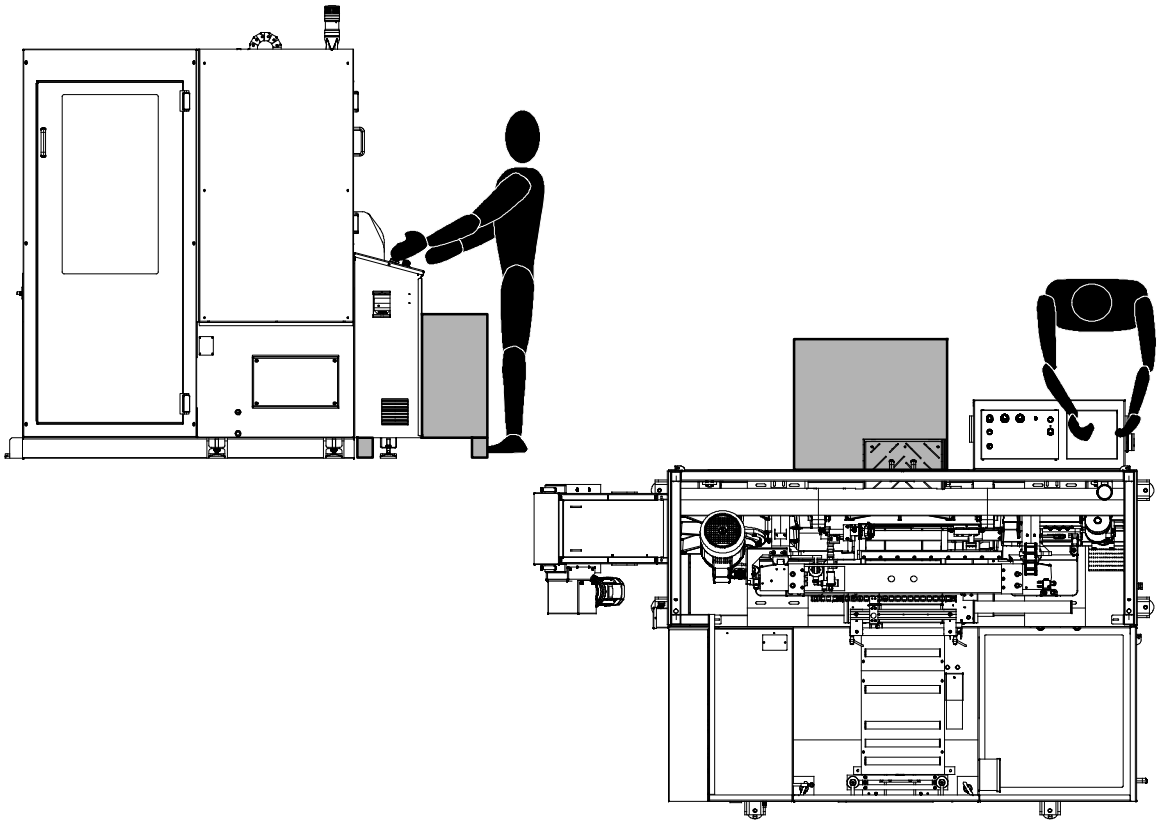
Check that the power supply cables and pneumatic feed systems comply with the maximum machine absorption values listed in the “Machine Specification” tables; replace if necessary.

EARTHING

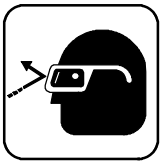
The installation of the earthing system must comply with the requirements set out in EN STANDARD 60204- 1:2010.

OPERATOR POSITION

The position of the operator controlling machine operations must be as shown in the diagram below.



Recommendations to the operator



Always wear proper goggles or protective glasses.

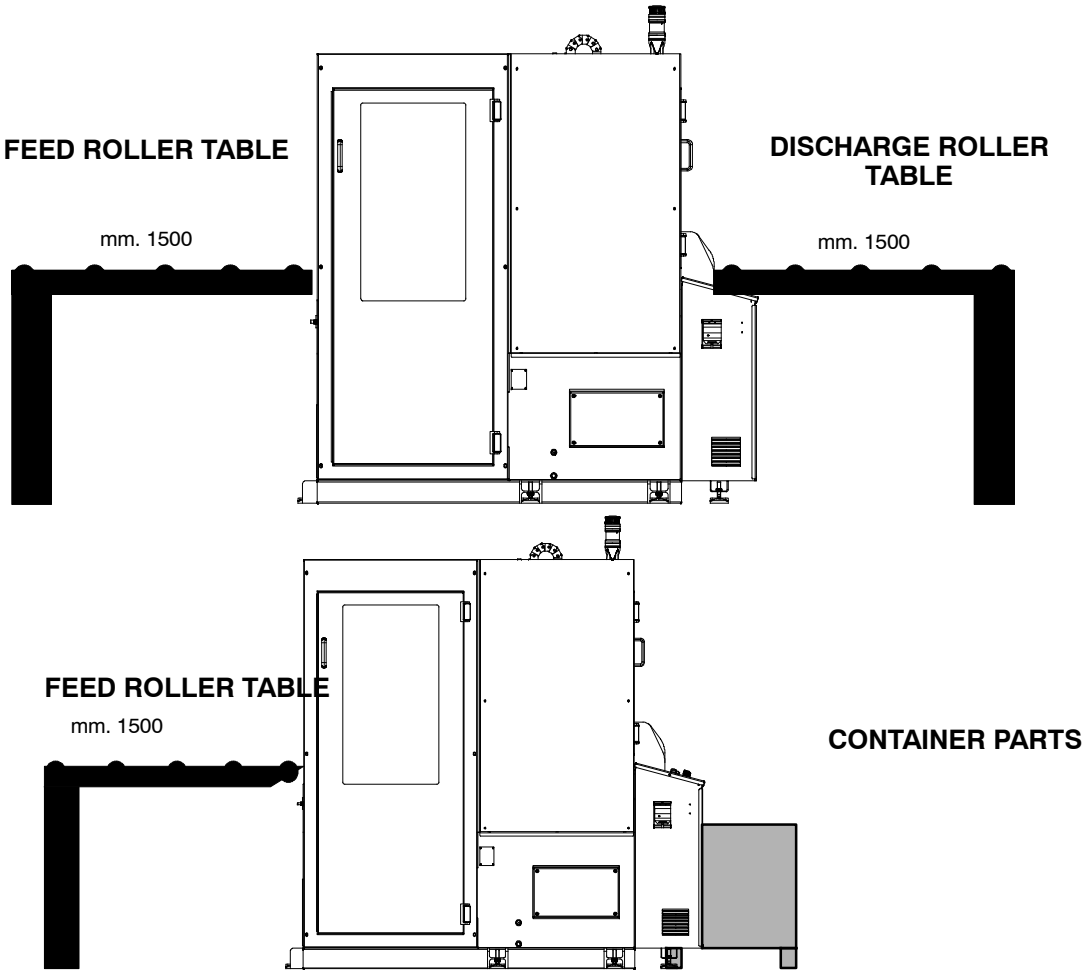
Do not use the machine without the guards in position. Replace the polycarbonate windows, if subject to corrosion.

Do not allow hands or arms to encroach on the cutting zone while the machine is in operation.

Do not wear oversize clothing with long sleeves, oversize gloves, bracelets, necklaces or any other object that may become entangled in the machine during working; long hair must be tied back and bunched.

Always disconnect the power supply to the machine before carrying out any maintenance work whatsoever, including in the case of abnormal operation of the machine.

Before starting cutting operations, support the material at both ends of the machine using the support arm - standard, or OPTIONAL accessories such as the feed and discharge roller tables shown in the diagram below. Before removing the devices supporting and moving the material, fasten the latter in place using the machine's clamping devices or other suitable equipment.

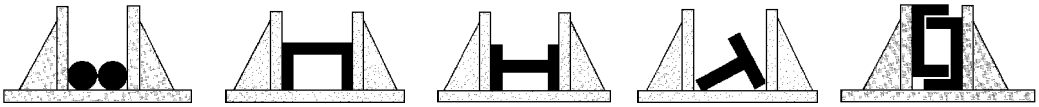


Any maintenance work on the hydraulic or pneumatic systems must be carried out only after the pressure in the system has been released.

The operator must not perform any risky operations or operations not required for the machining operation under way (e.g. remove swarf or metal shavings from the machine while cutting).

Remove equipment, tools or any other objects from the cutting zone; always keep the working area as clean as possible.

Before starting any cutting operations, ensure that the workpiece is securely held in the vice and the machine has been set correctly. A number of examples of how to clamp different profiles correctly in our machines are shown below.



Do not use the machine to cut pieces that exceed the capacity of the machine as listed in the machine specifications.

Never move the machine while it is cutting.

Do not use blades of different sizes to those recommended in the machine specifications.

When cutting very short pieces, make sure that they are not dragged behind the support shoulder, where they could jam in the blade.

When working on the band saw, wear gloves only when handling materials and for tool changing or adjustment operations. Only perform one operation at a time and do not hold more than one item or operate more than one device simultaneously. Keep hands as clean as possible.

Warning: if the blade jams in the cut, press the emergency stop push- button immediately. If this does not free the blade, slowly loosen the vice, remove the piece and check the blade or blade teeth for breakage. Replace the blade if necessary.

Before carrying out any repair work on the machine, consult the Hyd-Mech Technical Assistance Service: this can be done through a representative in the country of use of the machine.

Adjustment of the blade- guide head must only be carried out with the machine at a standstill.

Machine safety devices

This use and maintenance manual is not intended as purely a guide for the use of the machine in a strictly productive environment, it is instead an instrument providing information on how to use the machine correctly and safely. The following standards are those specified by the EEC Committee in the directives regarding safety of machinery, health and safety at work, personal protection and safeguarding of the environment. These standards have been applied to the **H- 14A** band saw.

Reference standards

MACHINE SAFETY

- EEC MACHINES DIRECTIVE 2006/42/CE ;
- EEC directive no. 2014/30/EU “EMC - Electromagnetic Compatibility”;
- EEC Directive No. 2014/35/EU known as “Low voltage directive”.
- EN 13898:2003+A1:2009 Machine tools - Safety - Sawing machines for cold metal
- EN 12100:2010 ”Safety of machinery - General principles for design - Risk assessment and risk reduction”.

HEALTH AND SAFETY AT WORK

- EEC Directive No. 80/1107; 83/477;86/188;88/188; 88/642 for the protection of workers against risks caused by exposure to physical, chemical and biological agents during working;
- EEC Directive No. 89/391 and Special EEC Directives No. 89/654 and No. 89/655 for improvements in health and safety at work;
- EEC Directive No. 90/394 for the protection of workers against risks deriving from exposure at work to carcinogenic substances;
- EEC Directive No. 77/576 and No. 79/640 on safety signs at work.

PERSONAL PROTECTION

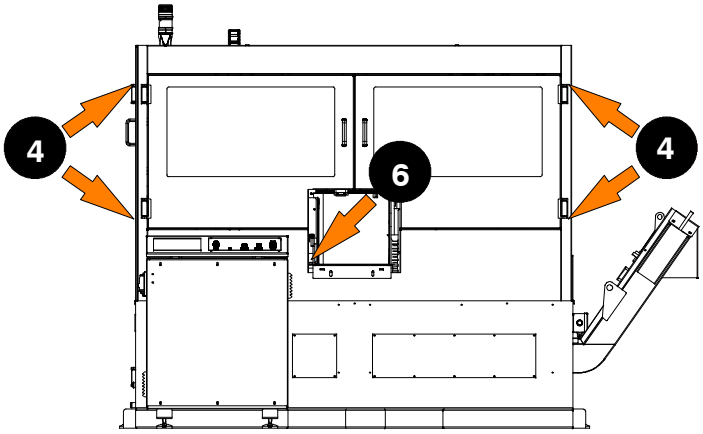
- EEC Directive No. 89/656 and No. 89/686 on the use of personal protection devices.

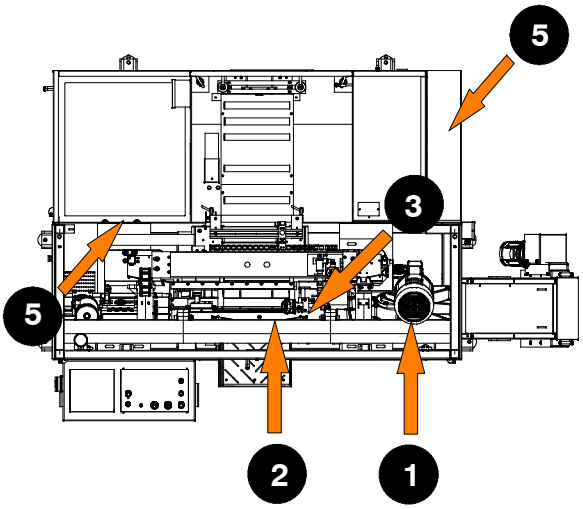
ENVIRONMENTAL PROTECTION

- EEC Directive No. 75/442 on waste disposal;
- EEC Directive No. 75/439 on the disposal of used oil.
- Directive 2002/95/EC on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS).

Protection against accidental contact with the blade

1. Metal guard screwed to the rear blade guide head;
2. metal guard screwed to the front blade guide head;
3. front head sliding support: when the head is at maximum aperture, the support ensures that the blade is covered, leaving free only the part of the blade engaged in the actual cutting, in accordance with Presidential Decree no. 547/55, art. 108;
4. front protection doors, with electric limit switches, to enable the access to the cutting area only with stopped machine;
5. enclosure on the whole machine perimeter.
6. the cutting vice is started up by hydraulic devices, and the blocking of the piece occurs through a control panel key;





Electrical equipment

In accordance with Italian standard CEI EN 60204- 1:2010, derived from European Standard EN 60204- 1:2010:

- Access to electrical control panel limited by screws and panel- lock device, allowing panel to be opened only after the electricity supply has been turned off;
- 24 Vac Control voltage for actuators, in accordance with chapter 6 or European Standard ”Control and indication circuits”, paragraph 2 ”Control Circuits” sub- section 1 ”Preferential voltage values for control circuits”;
- plant short- circuit protection by means of rapid fuses, earthing of all plant parts connected with work as well as all foreseeable accidental contact; a thermal- magnetic overload cutout switch shuts down the motor;
- protection from accidental start- up by a minimum voltage relay in case of power failure.

Emergency devices

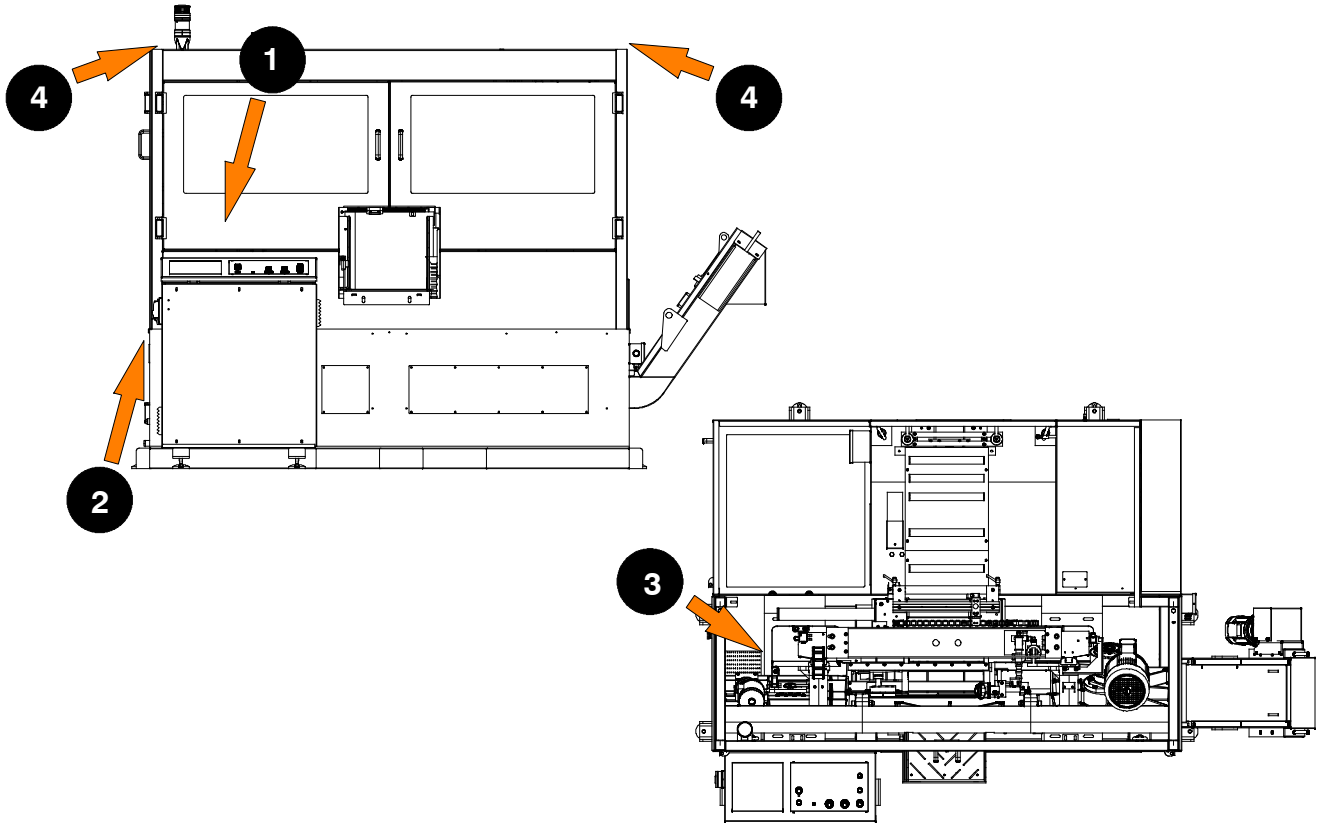
In accordance with Standard EN 60204- 1:2010:

- **Chapter 5 Section 6 Sub- section 1 ”Emergency stop device”**: «the emergency stop device immediately stops all the dangerous and other functions of the machine»;

- **chapter 6 Section 2 Sub- section 4 Point 7 ”Protective guards”:** «the removal of protective guards designed to prevent access to dangerous parts or zones causes the machine to stop immediately; replacing the guards does not restart the functions, which must be reset».

...Emergency devices applicable to the H- 14A:

1. **Emergency stop**: a non- return mushroom- head pushbutton, colour red on yellow background, is located on the control panel of the machine. To release the pushbutton, the actuator must be rotated 45° . After the emergency situation has been resolved, the machine must be reset.
2. **Automatic thermal- magnetic cutout switch with thermal- magnetic relay:** the machine auto switch, has two protection systems against voltage drops. In the case of a voltage drop, all electrical components are disengaged, the machine stops immediately, and automatic restart when the power supply returns is inhibited. Another function is that of resetting the thermal relay provided to protect against overcurrents.
3. **Loading cell for band tensioning detection:** the machine stops immediately if the blade breaks or pressure in the tensioning cylinder drops.
4. **Protective guard for blade:** a coded microswitch is operated if the blade cover is accidentally or intentionally opened during the machine operating cycle, immediately shutting down all functions.



Noise level of the machine

Noise can cause hearing damage and represents one the problems faced by many countries who adopt their own standards. In accordance with the **EEC MACHINES DIRECTIVE 2006/42/CE** , we are listing the standards that specify noise levels for machine tools.
The following paragraph explains the modes and the detected sound power and pressure values released by the sawing machine.
These values comply with norm EN 13898:2003 + A1:2009, EN ISO 12100:2010 and EN ISO 4871:2009,concerning the rules for drawing and presenting a procedure for noise tests and the declaration and check of sound emission values by machines and equipment.

Noise level measurement

Noise levels are measured using an instrument known as an Integrator noise- meter which registers the equivalent continuous acoustic pressure level at the work station.The damage caused by noise depends on three parameters: level, frequency and duration. The equivalent level concept Leq combines the three parameters and supplies just one indication. The Leq is based on the principle of equal energy, and represents the continuous stationary level containing the same amount of energy, expressed in dBA, as that actually fluctuating over the same period of time.This calculation is made automatically by the integrator noise- meter. The measurements are taken every 60 seconds, in order to obtain a stabilised value. The reading stays on the display for a sufficient time to enable a reading to be taken by the operator.Measurements are taken by holding the instrument at approximately 1 metre from the machine at a height of 1.60 metres above the platform at the operator's work station.
Two measurements are taken: the first while the machine operates without cutting anything, the second while cutting in manual mode.

Noise level values

Identification	
Machine type	Band saw for metal applications
Model	**H- 14A**
Reference standard	ISO 3746

Results		
Test 1st	**Description**	Steel cut C53- tube thickness 350x280 mm bi- metal blade 4640x34x1.1
	Results	**Mean sound level (Leq) 72,45 dB (A)** Environmental correction (K) 3,84 dB(A) Peak sound power (Lw) 83,60 dB(A)
Test 2nd	**Descriprion**	Steel cut C40 - HPE 300x300 mm bi- metal blade 4640x34x1.1
	Results	**Mean sound level (Leq) 70,33 dB(A)** Environmental correction (K) 3,84 dB(A) Peak sound power (Lw) 81,48 dB(A)
Test 3rd	**Description**	Ø 150 mm solid tube in chromed stainless steel bi- metal blade 4640x34x1.1
	Results	**Mean sound level (Leq) 71,95 dB(A)** Environmental correction (K) 3,84 dB(A) Peak sound power (Lw) 83,11 dB(A)

Vibration emission

This sawing machine complies with the norms EN1299 and EN1033, as the machine vibration emission on the devices controlled by the operator does not exceed the threshold of 2.5 m/s^2

Electromagnetic compatibility

As from 1 January 1996 all electrical and electronic appliances bearing the CE marking that are sold on the European market must conform to Directive 2014/30/UE e 2014/35/UE and **EEC MACHINES DIRECTIVE 2006/42/CE** . The prescriptions regard two specific aspects in particular:

1. "EMISSIONS: during its operation, the appliance or system must not emit spurious electromagnetic signals of such magnitude as to contaminate the surrounding electromagnetic environment beyond clearly prescribed limits";
2. "IMMUNITY: the appliance or system must be able to operate correctly even when it is placed in an electromagnetic environment that is contaminated by disturbances of defined magnitude".

The following text contains a list of the applied standards and the results of the electromagnetic compatibility testing of machine model **H- 14A**;
Test report no. 011200.

Emissions

- EN 61000-6-4 (2002) Electromagnetic Compatibility (EMC) - Generic standard regarding emissions. Part 6-4: Industrial Environment.
- EN 55011 (1999) Industrial, scientific, and medical radio frequency appliances (ISM). Characteristics of radio frequency disturbance - Limits and methods of measurement.
- EN 55014-1 (2002) Electromagnetic Compatibility - Prescriptions for domestic appliances, electric power tools, and similar equipment. Part 1: Standard Emission in relation to product family.
- EN 50370-1:2005 Electromagnetic compatibility (EMC) - Product family standard for machine tools - Part 1: Emission

CONDUCTED EMISSIONS				
Gate A	**Freq. (MHz)**	**Q- peak limit (dBuV)**	**Mean value limit (dBuV)**	**Result**
A.C. power supply input	0.15 - 0.5 0.5 - 5 5 - 30	79 - 73 (linear reduction with log of frequency) 73 73	66 - 60 (linear reduction with log of frequency) 60 60	Complies

CONDUCTED EMISSIONS - ANALYSIS OF INTERMITTENT DISTURBANCES	
Gate	**Result**
A.C. power supply input	Not applicable

IRRADIATED EMISSIONS			
Gate	**Freq. (MHz)**	**Q- peak limit (10 m) (dBuV/m)**	**Result**
Enclosure	30 - 230 230 - 1000	40 47	Complies

Immunity

- CEI EN 61000-6-2 (2000) Electromagnetic Compatibility (EMC) - Generic standard on immunity. Part 6-2: Industrial Environment.
- EN 61000-4-2 + A1 (1996-1999) Electromagnetic Compatibility (EMC) - Part 4: Test and measurement techniques - Section 2: Electrostatic discharge immunity tests - Basic publication.
- EN 61000-4-3 Electromagnetic Compatibility (EMC) - Part 4: Test and measurement techniques - Section 3: Radiated, radio- frequency, electromagnetic field immunity test.
- EN 61000-4-4 (1996) Electromagnetic Compatibility (EMC) - Part 4: Test and measurement techniques - Section 4: Fast transients/bursts immunity tests - Basic publication.
- EN 61000-4-5 (1997) Electromagnetic Compatibility (EMC) - Part 4: Test and measurement techniques - Section 5: Surge immunity test.
- EN 61000-4-6 (1995) Electromagnetic Compatibility (EMC) - Part 4: Test and measurement techniques - Section 6: Immunity to conducted interference, induced by radio frequency fields.
- EN 61000-4-11 (1977) Electromagnetic Compatibility (EMC) - Part 4: Test and measurement techniques - Section 11: Voltage dips, short interruptions and voltage variations immunity tests.
- EN 50370-2:2003 Electromagnetic compatibility (EMC) - Product family standard for machine tools - Part 2: Immunity

IMMUNITY TO ELECTROSTATIC DISCHARGES			
Gate	**Test levels**	**Evaluation criterion**	**Result**
Enclosure	contact 4 kV steel plate 4 kV in air 8 kV	B	Complies

IMMUNITY TO VOLTAGE (BURSTS)			
Gate	**Test levels**	**Evaluation criterion**	**Result**
A.C. power supply input	2 kV	B	Complies

IMMUNITY TO CONDUCTED ELECTROMAGNETIC FIELDS			
Gate	**Test levels**	**Evaluation criterion**	**Result**
A.C. power supply input	10V	A	Complies

IMMUNITY TO IRRADIATED ELECTROMAGNETIC FIELDS			
Gate	**Test levels**	**Evaluation criterion**	**Result**
Enclosure	10 V/m	A	Complies

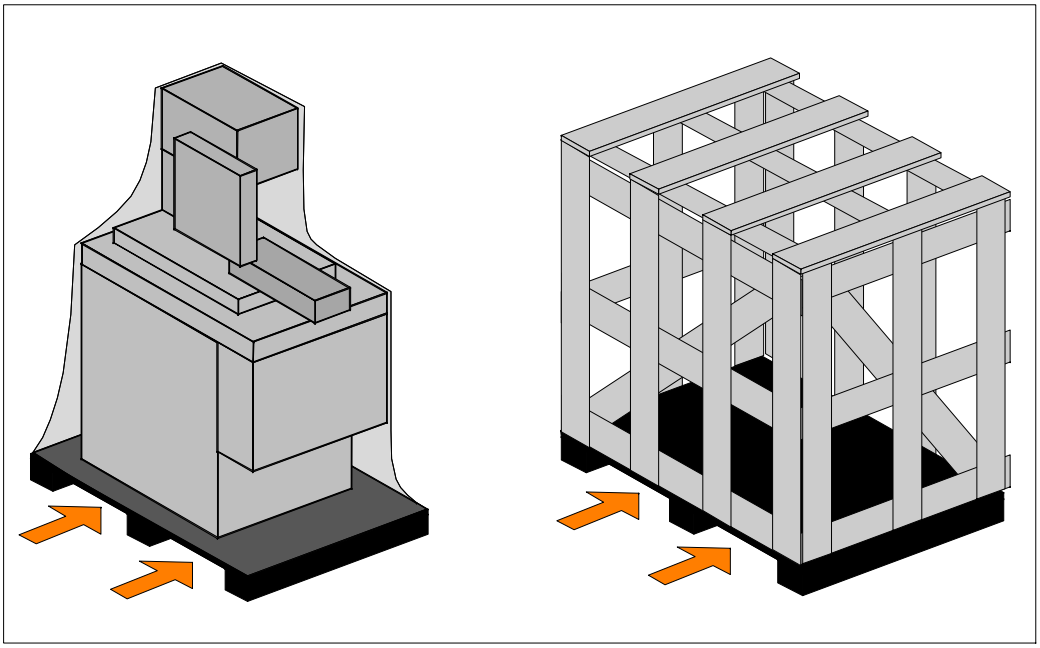
Machine installation

4

Packaging and storage

Hyd- Mech use packing materials that guarantee the integrity and protection of the machine during its transport to the customer.

The type of packing differs according to the size, weight and destination. Therefore the customer will receive the machine in one of two following ways:

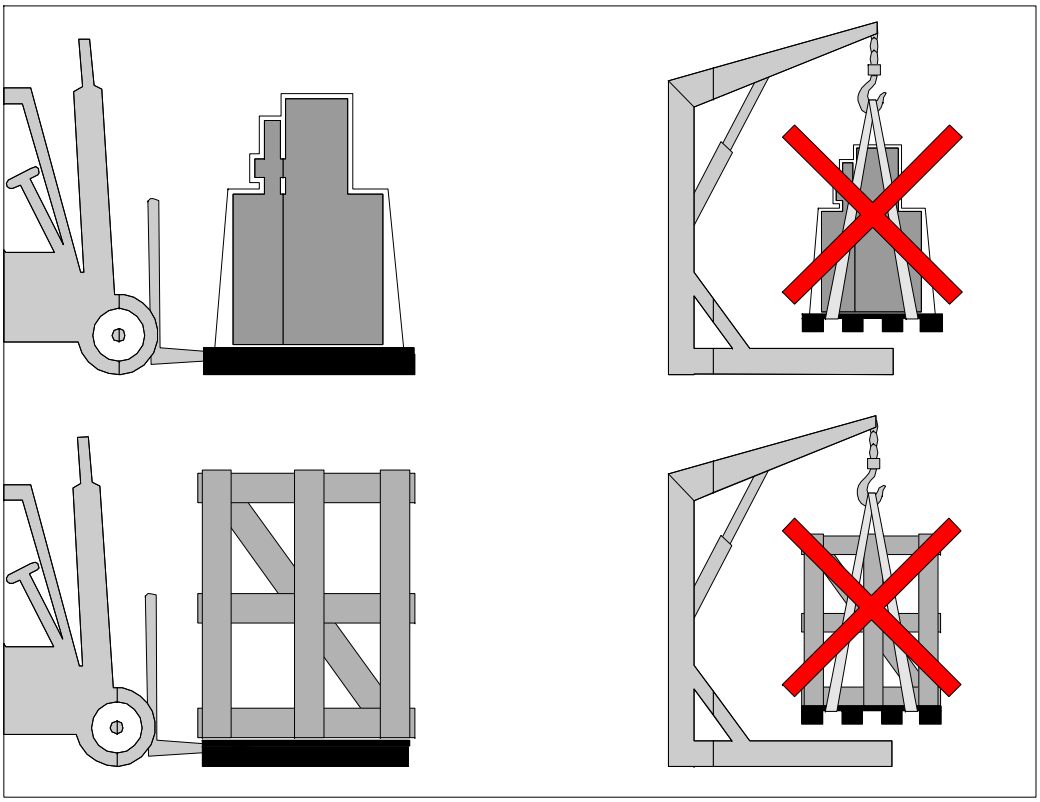


1. on a pallet with straps and heat- shrink plastic;
2. on a pallet with straps, heat- shrink plastic and a wooden crate.

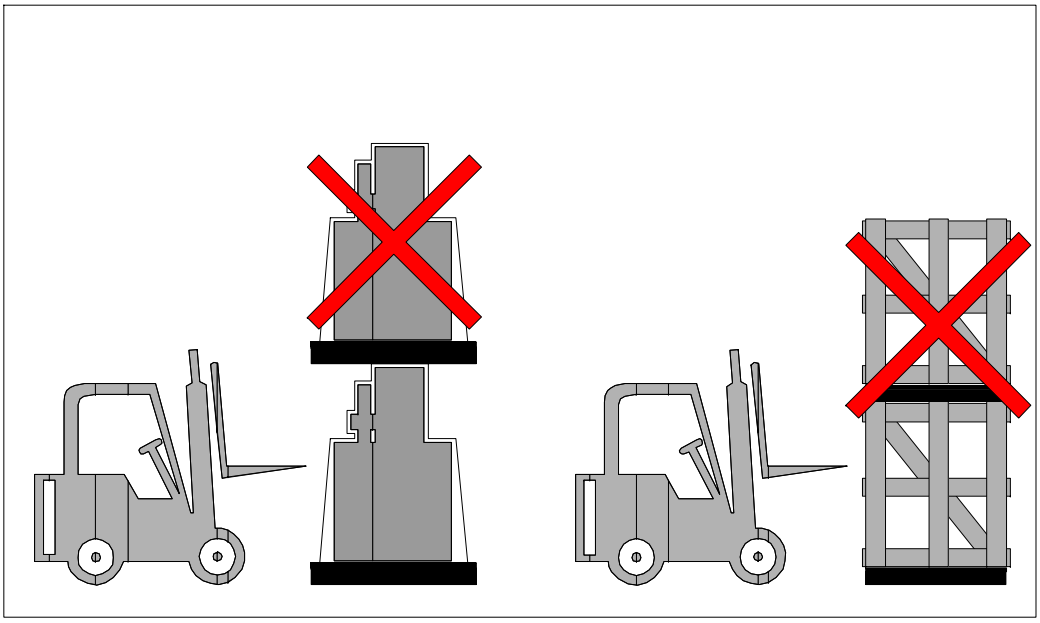
Warning In both cases, for correct balancing the machine must be handled using a fork- lift truck, inserting the tines at the points indicated by the arrows, using the reference marks on the crate itself.

Attention Before carrying out lifting operations, make sure that the weight of the machine, as indicated on the crating or other packaging, is within the forklift truck load limit.

Attention Do not handle the packed machine using slings.

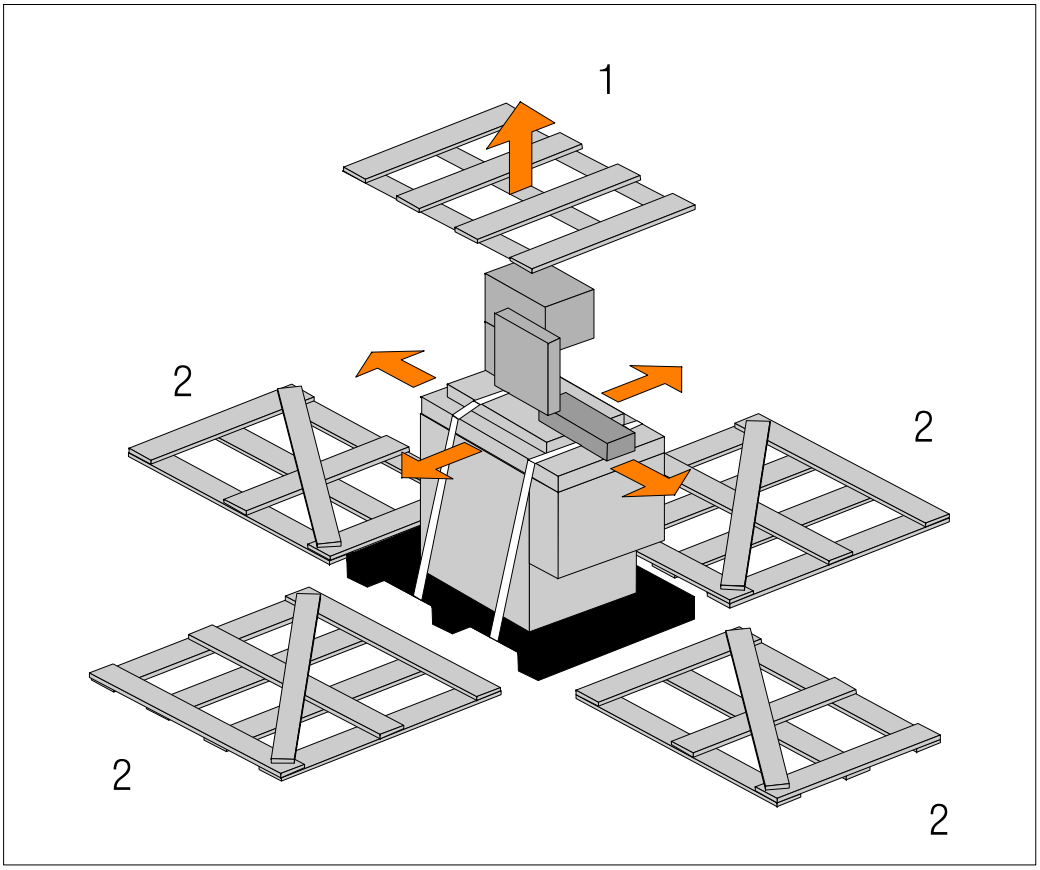


Attention When storing, machines palletized and shrink- wrapped must not be stacked two high, and machines pallettized and crated must not be stacked three high.

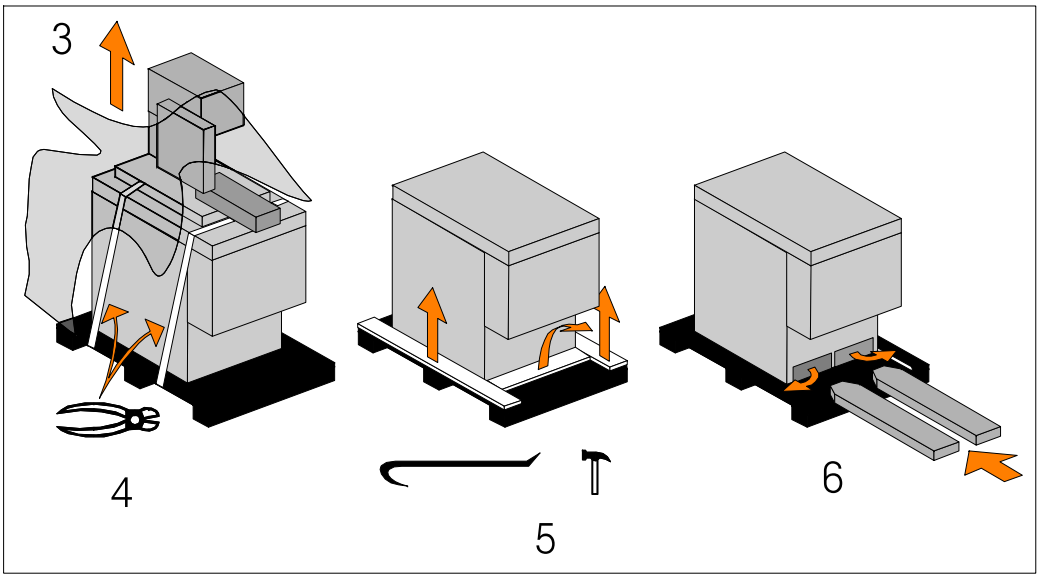


To install the machine, first remove the packing, paying particular attention not to cut any electric wires or hydraulic hoses; if necessary use pliers, a hammer and a cutter.
Open crate in the illustrated order:

1. remove nails and lift the top of the cage;
2. remove nails and lower walls;



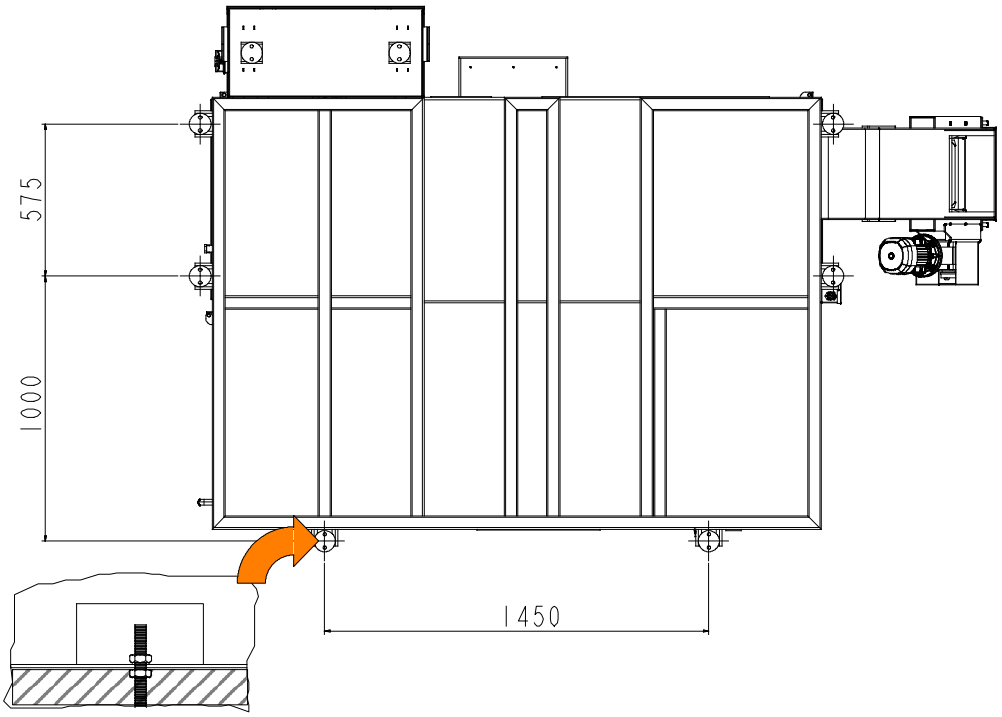
3. remove heat- shrink covering;
4. remove the straps;
5. remove nails from pallet securing planks and remove planks;
6. remove the front panel and insert fork tines.



To locate the machine in the workplace, **the machine dimensions** and necessary operator working space, including **the spaces laid** down in safety standards, **must be taken into account.**

Anchoring the machine

The base of the machine is anchored to the floor by two permanent studs located on the sides of the base. The studs are screwed into nuts previously sunk into the concrete, and tightened from above with lock nuts. The schematic specifications set out in Chapter 1 should be taken into account when positioning the machine.



Minimum requirements

For the machine to function correctly, the room in which it is to be installed must satisfy the following requirements:

- power supply voltage/frequency: refer to the values on the rating plate;
- temperature of machine location: from - 10 to + 50 C;
- relative humidity: not more than 90%
- lighting: not less than 500 Lux.

Warning The machine is already protected against voltage variations, but will only run trouble-free if the variations do not exceed ± 10%.

Check list

Before starting installation, check that all the accessories, whether standard or optional, supplied with the machine are present. The basic version of the **H- 14A** machine is supplied complete with:

CHARACTERISTICS	STANDARD	OPTIONAL
The bow is made from alloy cast iron to give more stability to the machine and also for longer blade duration	✓	
Bow runs on linear guides with ball- bearing slides	✓	
Bow movement with hydraulic cylinder on linear guides with ball- recirculating slides	✓	
Protection from contact with the machine's moving parts (see drawing with overall dimensions)	✓	
Blade 15' 2" 43/64 x 1" 21/64 x 1/32 in	✓	
Hydraulic vertical vice (max 355 x 355)*		✓
Cabinet for electrical and electronic equipment with totally identifiable cabling	✓	

CHARACTERISTICS	STANDARD	OPTIONAL
Control and enabling system protected from electrical or electromechanical hazard at input and output	✓	
Simplified touchscreen control panel managed by next- generation Hyd-Mech controlled designed exclusively for Hyd- Mech sawing machines	✓	
Programmable head travel limit via control panel according to dimensions of bars to be cut	✓	
Software to control, assess and correct in real time the shearing stress, the shearing torque and the blade tensioning.	✓	
M50 controller with EC Windows operating system	✓	
Laser projector to position the bar accurately to carry out non- standard or facing cuts and lamp for lighting the cutting area	✓	
Control keyboard to reach positions from which the operator can perform operations with safety and maintain visual control	✓	
Control from keyboard to move the pulley for belt substitution	✓	
Pneumatic control unit for self- registering forward	✓	
Emergency with signalling of open blade door with interlocked safety limit switches	✓	
Inverter for continuous blade speed regulation single range from 49 to 377 ft/min	✓	
Motor- driven chip ejector	✓	
Vertical roller table pair		✓
Great quantities of cutting liquid (230 lt/min)	✓	
Steel blade- guiding cutting heads, with rollers and recordable hard metal slides, can be open for easier blade substitution, with prepared nozzles for traditional lubrication and minimal lubrication (optional)	✓	
Automatic adjustment of the front blade- guide head according to the dimensions of the bars to be cut to make the blade as stable as possible and to protect its section not involved in the cutting	✓	
Brush for cleaning the blade	✓	
Band rotation control with immediate stop system in case of tool blockage	✓	
Feed/discharge roller table idle and motorized		✓
Cutting vice double- locking (scrap 119 mm)		✓
Discharge roller table K110HD		✓
Acoustic signal and flashing light device for machine- stop	✓	
Feed device with recirculating ball/lead screw with 1’ 11” 39/64 in	✓	
Maximum non- feedable bar waste 4” 23/32 in	✓	
Self- aligning feed vice for bar feed (Including deformed bars)	✓	
Work table spray gun	✓	
Coolant tank incorporated in pedestal	✓	
Pair of electric pumps for the band lubrication and cooling.	✓	
Cutting oil 5 lt		✓
Jaws to reduce scraps to max. 25/32 in*		✓
Blade deviation control	✓	
Vice pressure adjustment		✓
Electro- mechanical servo- system for the blade dynamic tensioning	✓	
Software update and changes through USB: insert in the suitable port on the control console	✓	
Min. lubrication system		✓
Machine preset for being handled by lift truck	✓	
Wrenches, Instruction Manual, complete with spare parts order form in corresponding user language	✓	

***ACCESSORIES AVAILABLE ON REQUEST**

The bag of accessories is enclosed in the machine before being packed and contains:

- hex wrenches 3/4/5/6/10 mm
- 10 mm socket wrench;
- 36 mm wrench;
- blade cleaning brushes;
- use and Maintenance manual, including order form for parts in relevant user language.

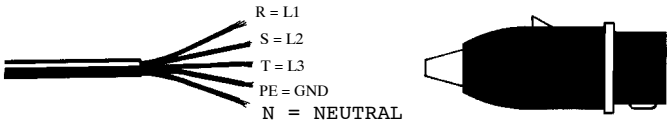
Connection to the power supply

Before connecting the machine to the power supply, check that the socket is not connected in series with other machines. This requirement is fundamental for the good operation of the machine.

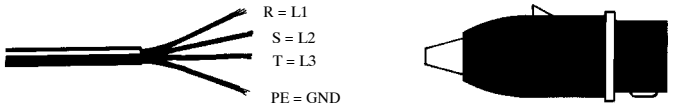
To connect the machine to the power supply, proceed as follows:

▶ connect the power supply cable of the machine to a plug which matches the socket to be used. (EN 60204-1; par. 5.3.2)

CONNECTION FOR **"5-CORE"** WIRE SYSTEMS WITH NEUTRAL



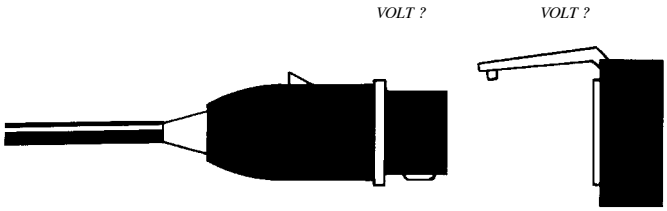
CONNECTION FOR **"4-CORE"** WIRE SYSTEMS WITH NEUTRAL



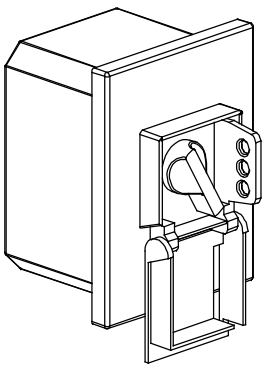
Attention

When using systems with a neutral wire, special care must be taken when connecting the **blue** neutral wire, in that if it is connected to a phase wire it will discharge the **phase voltage** to the equipment connected for **voltage: phase-neutral.**

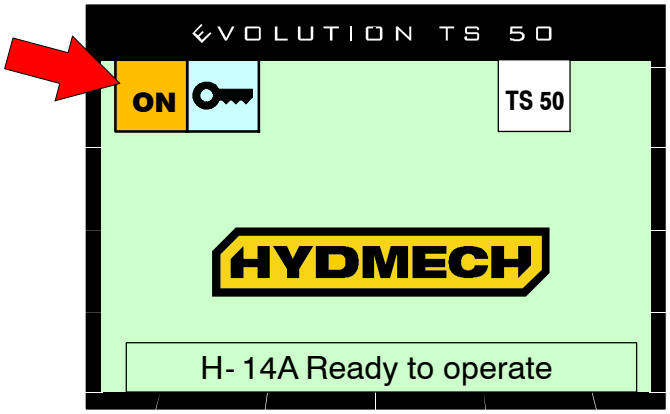
▶ Insert the plug in the socket, ensuring that the mains voltage is the same as that for which the machine has been setup.



▶ Power the machine, rotating the main switch on the base right side (the control console lights up);



▶ press the ON button on the control console;

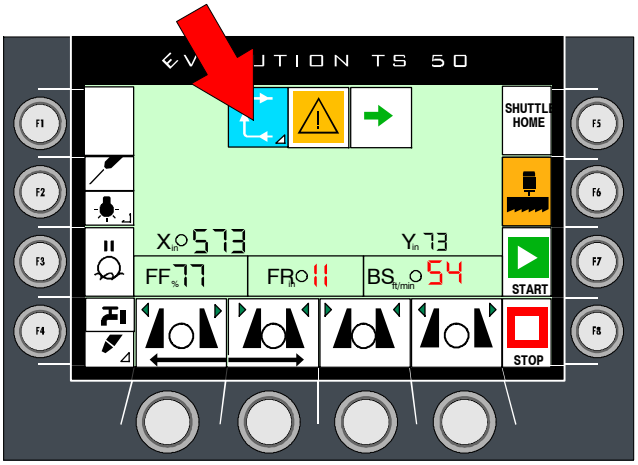


▶ press RESET.

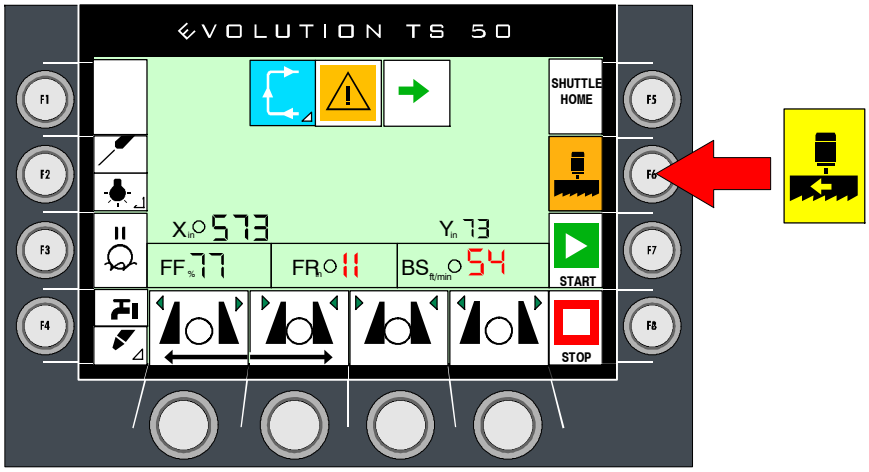
The above sequence (ON and RESET buttons) must be performed each time the machine is switched on and before tensioning the saw band during a normal production cycle.

▶ make sure the machine is not in emergency status (red mushroom head button released); otherwise, release the emergency stop button and press RESET.

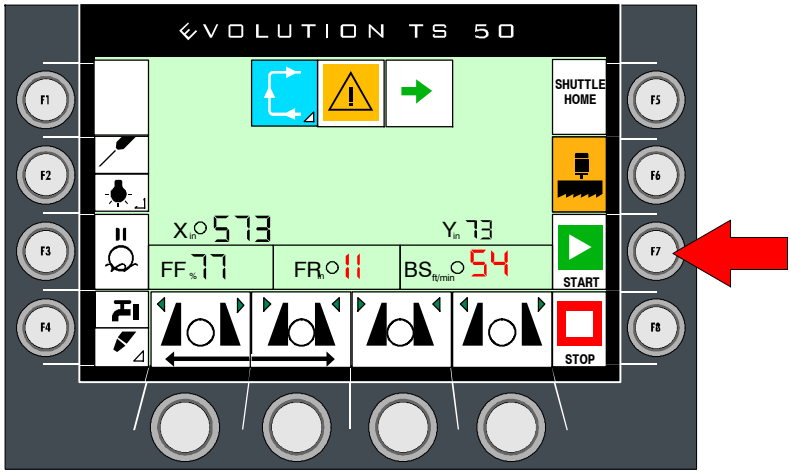
▶ Select the semiautomatic machining mode, pressing the box shown in the figure on the touch screen.



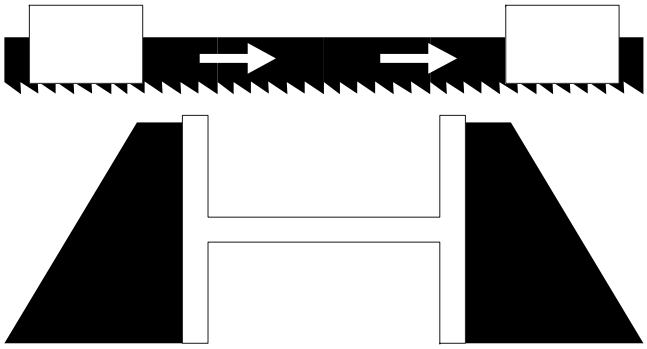
▶ Enable the band rotation pressing the key shown in the figure (F6) pressed; the box lights on to indicate it has been selected.



▶ Start the cutting cycle by pressing the button shown in the figure (F7) pressed; the band starts turning and the machine cuts.



Attention **Ensure that the blade moves in the correct direction as shown in the figure.** If it does not, simply reverse two of the phase wires on the machine power supply input.



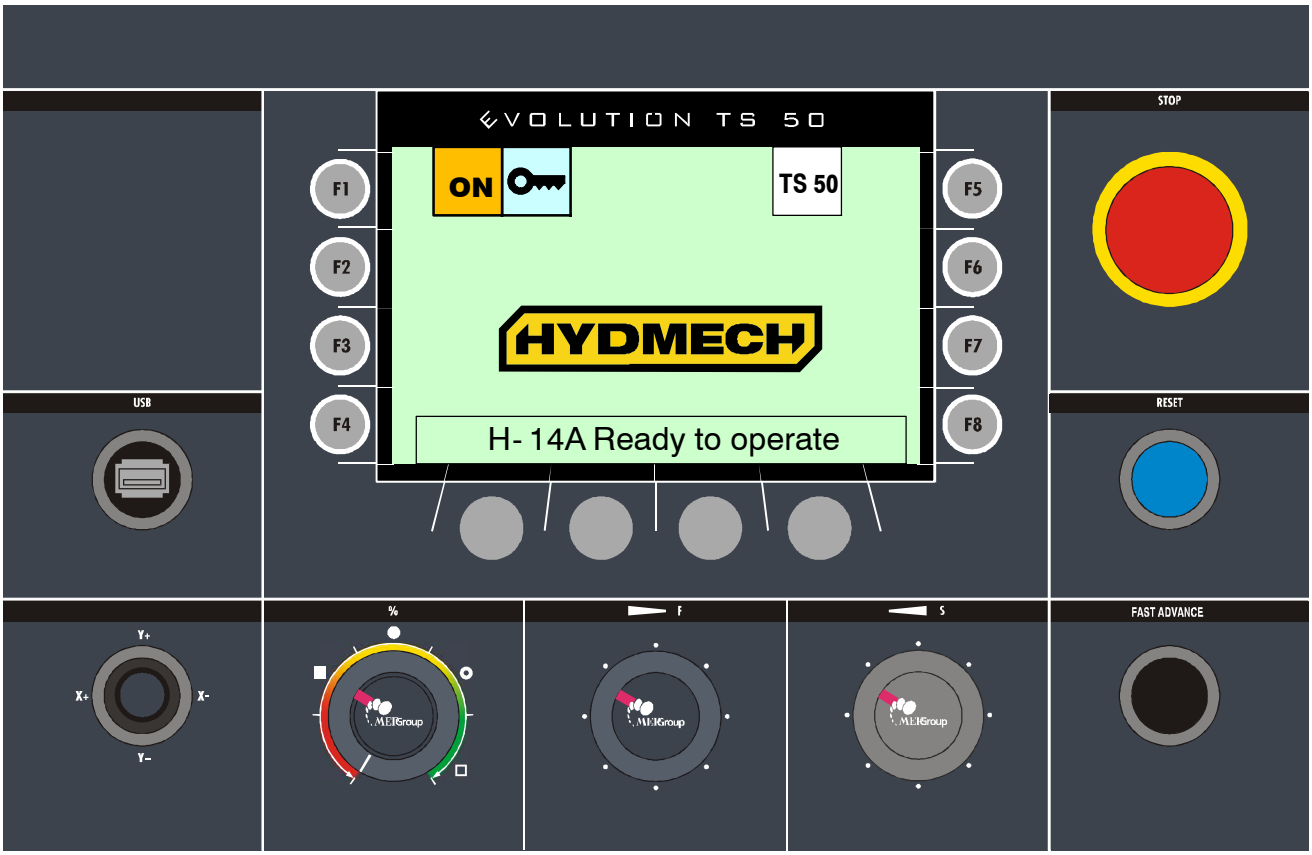
The sawing machine is now ready to start the work for which it was designed. Chapter 5 provides a detailed description of the various functions of the machine and its operating cycles.

Description of machine operation

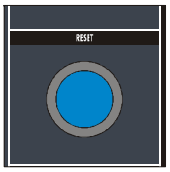
This chapter analyses all the machine functions. We begin with a description of the pushbuttons and other components on the control panel.

Description of the control panel

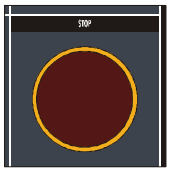
The control console is housed inside the control panel, a tamperproof IP 54 protection class housing sealed against dust and moisture. The control panel swivels on two articulated joints so that it can be positioned as required by the operator for greater ease- of- use and safety. The control board of the **H- 14A** is shown in the picture below:



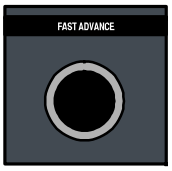
Key of control console keyboard



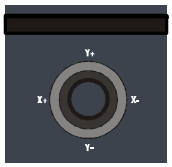
RESET:
Press to reactivate machine functions after an alarm.



EMERGENCY STOP:
This button will stop both the hydraulic and blade motors. The head motion will cease. The vises remain as they are, but if closed, they will lose gripping force. For this reason all long stock should be supported so that it will not fall.
To reset the button, simply rotate through 45°.

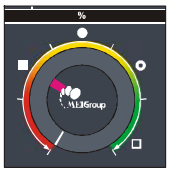


FAST ADVANCE BUTTON:
Hold down to increase up/down speed head and forward/backward speed feeder.

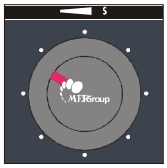


JOYSTICK:
is enabled to move the head upwards and downwards and to move the feeder forwards and backwards.

FEED RATE POTENTIOMETER:
Adjusts the head feeding speed.

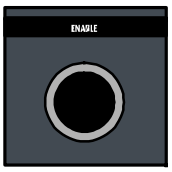


FEED FORCE POTENTIOMETER:
Potentiometer for adjusting the blade motor max. absorption.



BLADE SPEED POTENTIOMETER:
Potentiometer for the continuous adjustment (inverter) of the band rotation speed.

USB PORT:
Communication port for software update and machine diagnostics.



ENABLE COMMANDS:
It is located on the right side of the control panel. Hold down to enable the opening and closing of the vises.

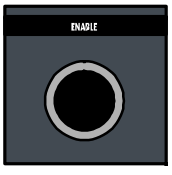
THERMAL - MAGNETIC CIRCUIT - BREAKER WITH UNDERVOLTAGE COIL

On the right side of the control board, the machine is equipped with a main switch that, when set ON (1), powers the machine.
The main switch is fitted with three power failure protection systems. In fact, in the event of a power failure, this switch disconnects all the electrical devices, causing the machine to immediately shut down, and prevents it from automatically starting up again when power is restored. This device also resets the thermal relay fitted to protect against current overloads.

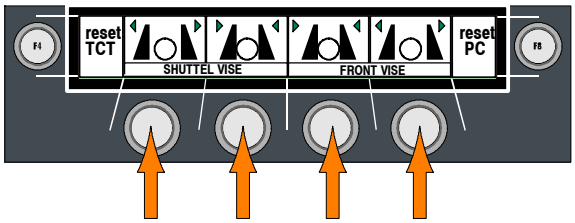
Basic instructions for carrying out a cutting operation cycle

Opening / closing the vises

To operate the jaws, press and hold the ENABLE button and press the button to open or close the vises (cutting or feeding).

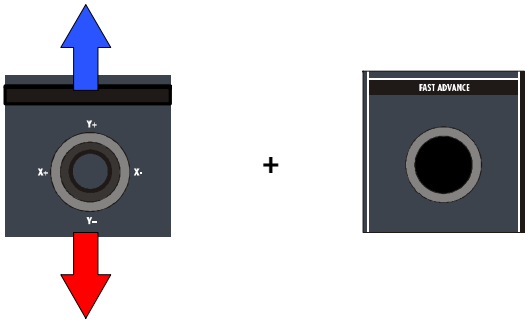


+



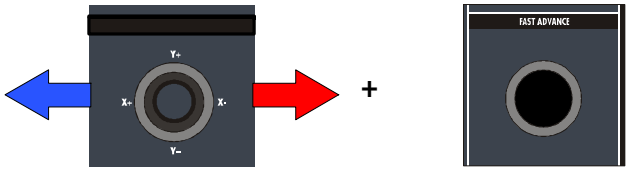
Moving the cutting head up and down

The feeding head can be moved upwards and downwards using the joystick; if you hold the fast advance key pressed at the same time the cutting head moves faster.



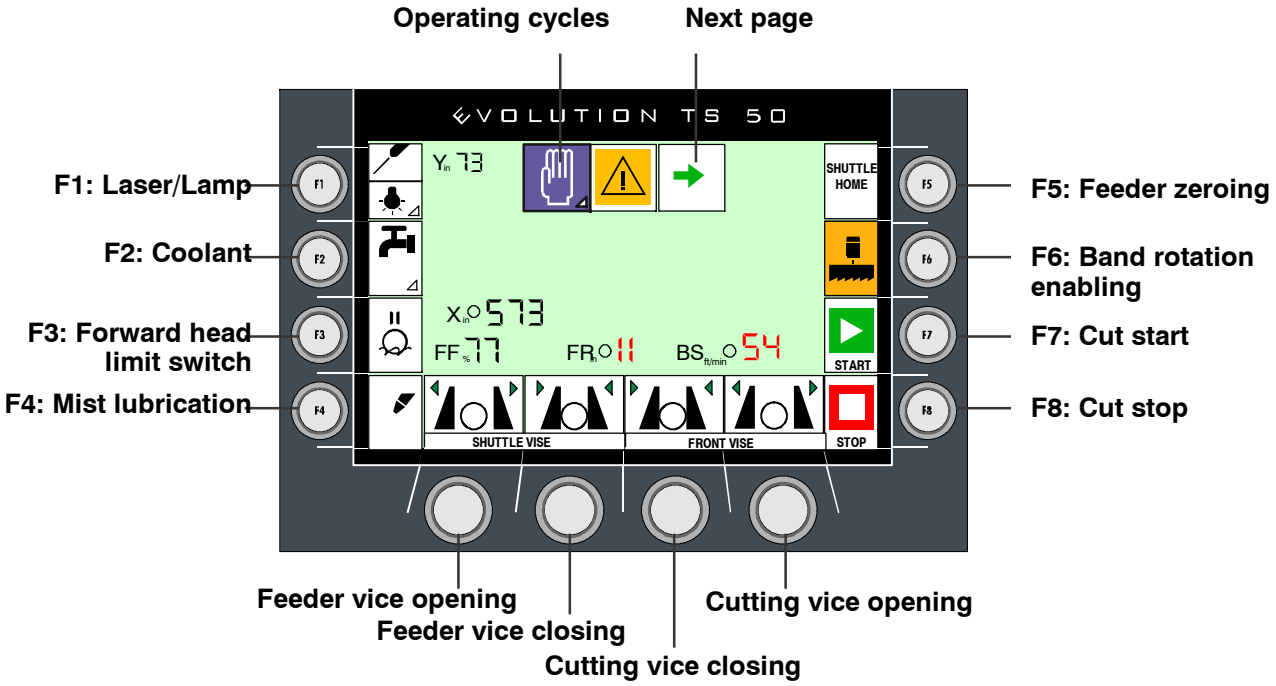
Manoeuvring the feeder

The feeder can be moved using the joystick, only if the head is completely up. If you hold the fast advance key pressed at the same time the feeder moves faster.

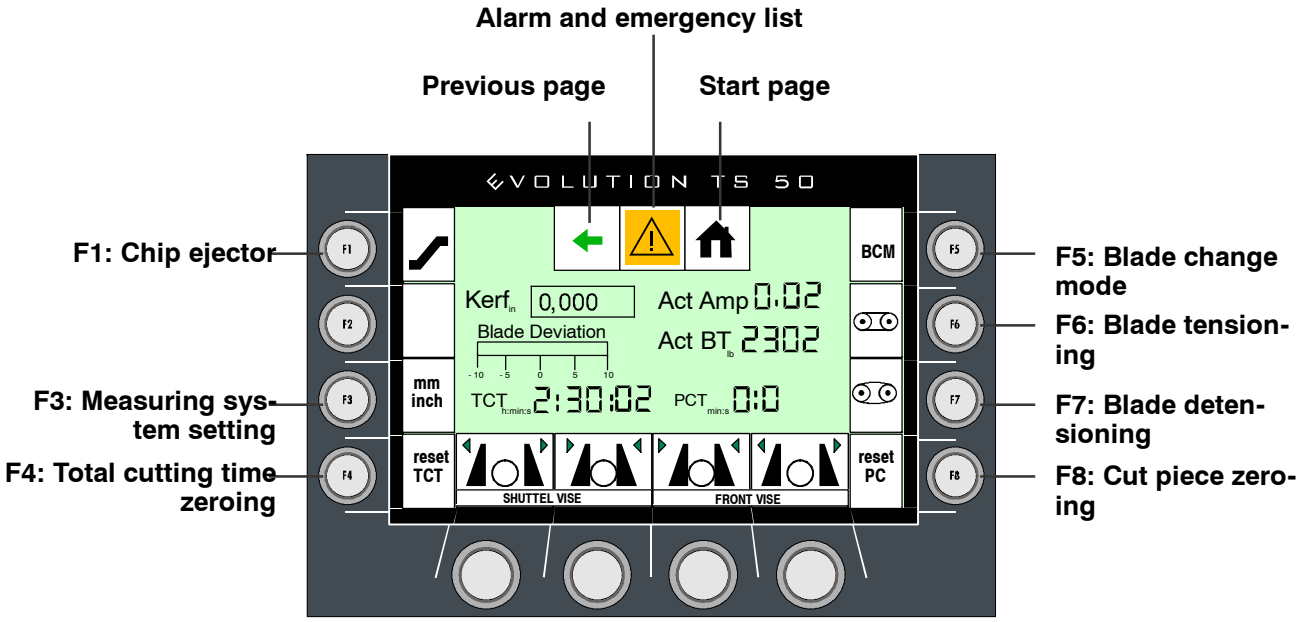


Symbol key

The key for the symbols used on the display follows.

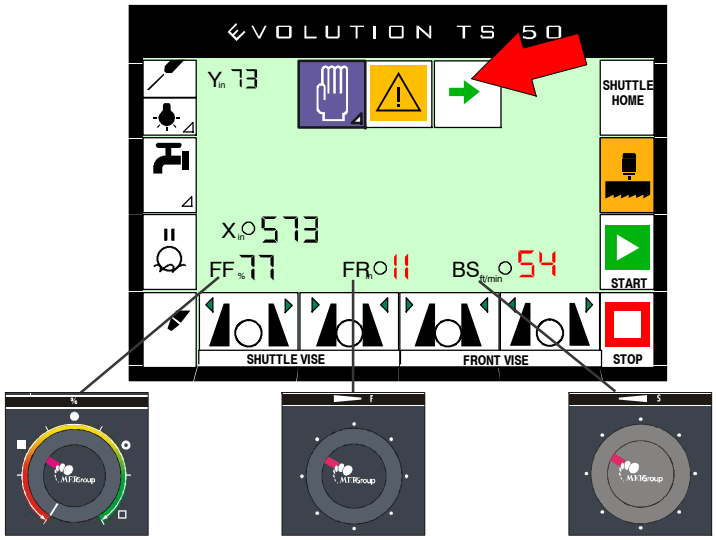


Pressing the “Next page” key, you can display the second machining screen:



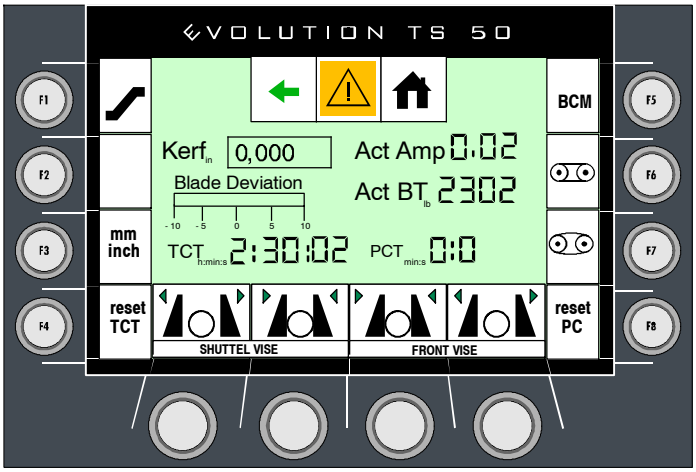
Operating parameters

During the machining cycle, by pressing the box in the figure, it is possible to check the machine operating parameters:
FF = Feed Force, value of the cutting force that can be set through the potentiometer from the control board.
FR = Feed Rate, value of the cutting head lowering speed that can be set through the potentiometer from the control board.
BS = Blade Speed, value of the band rotation speed that can be set through the potentiometer from the control board.

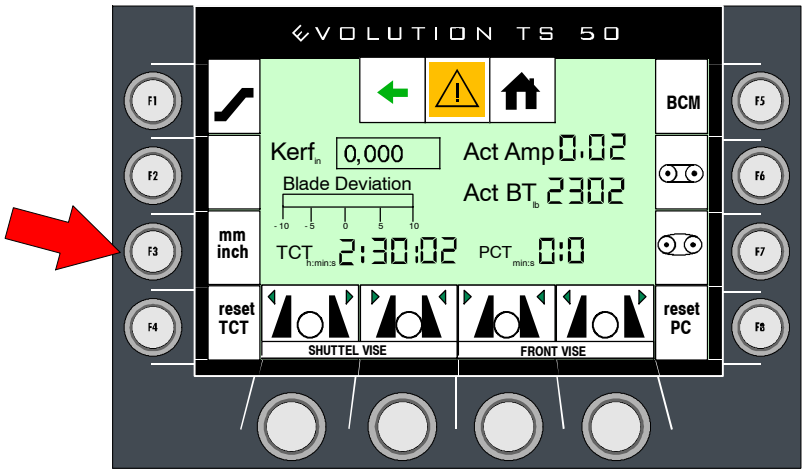


Pressing the arrow key shown in the figure the second page of the operating parameters can be displayed:
Kerf = blade thickness
Blade deviation = Blade deviation
Act BT = Actual Blade Tension, current value of blade tension;

Act AMP = Actual Ampere, current value of motor absorption;
PCT = Partial Cutting Time;
TCT = Total Cutting Time.

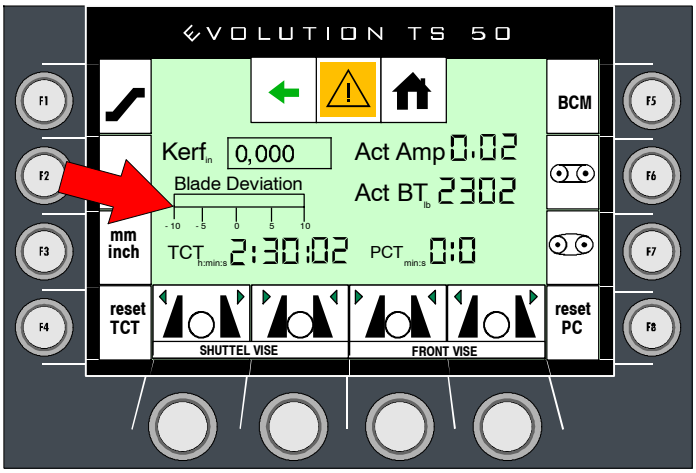


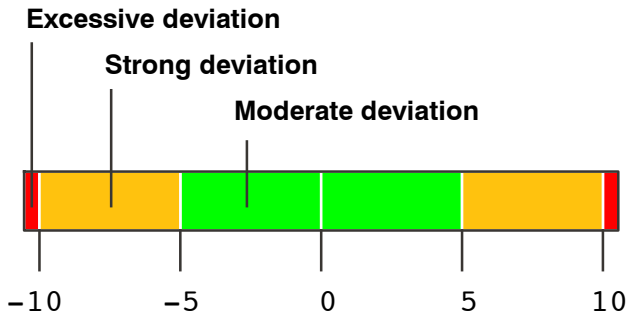
N.B. Pressing the key shown in the figure the decimal metric measuring system or the Imperial measuring system can be set.



Warning

The machine is provided of ”Blade deviation control” that allows to monitoring in real time the blade flexion, showing an alarm over the display. The diagram shows the left and right range of the blade deviation, green when the deviation is within +/- 5 and yellow when it is within +/- 10. If the value exceeds the range, the diagram shows a red color and the machine stops.
It is recommended to check the blade tension, blade speed based on the hardness of the material, the blade wear and the blade guides wear, or the setting of the blade guide components.



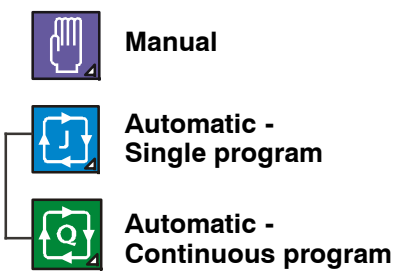


To enable or disable the control deviation blade must enter SET-UP and set the operation in ”BLADE DEVIATION”

Cutting cycles

This sawing machine can carry out single or series cuts stored in max. 100 programs (job), that can even be repeated, to be ordered in a 5 preset sequence (queue) compose by 20 programs each one.

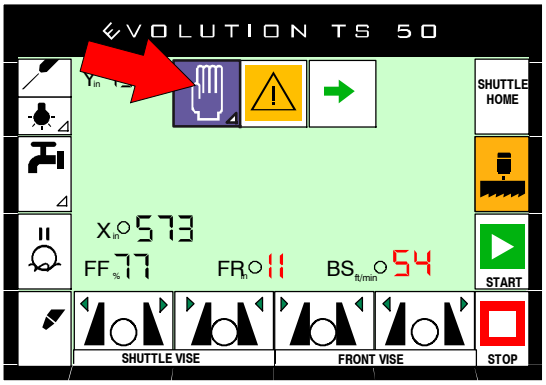
▶ After the initialization of the sawing machine the display shows the following screen. Press the box shown in the figure until the symbol of the wished cycle is displayed.



Manual

Automatic - Single program

Automatic - Continuous program

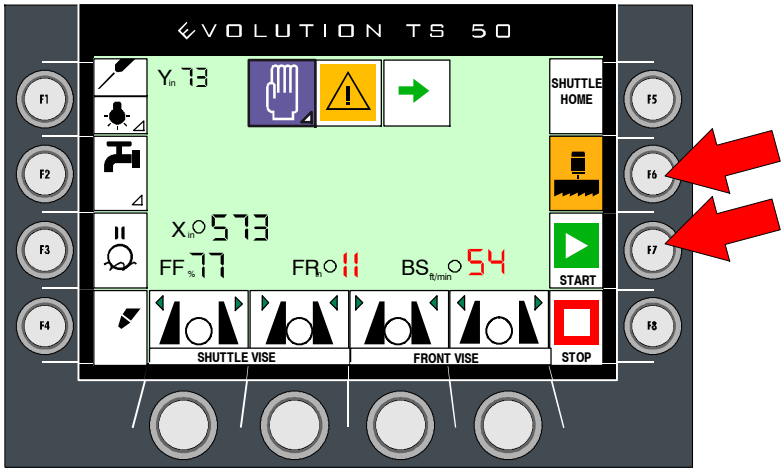


The available machining cycles are: manual, automatic with single program and automatic with continuous program.
In the manual cycle the cutting only involves the setting of the rear head limit switches (RHLS) and forward head limit switches (FHLS); then, after having positioned the material at the wished cutting length, start by the Cut start key (F7).
As for the automatic cycle, it can operate with single or automatic program.

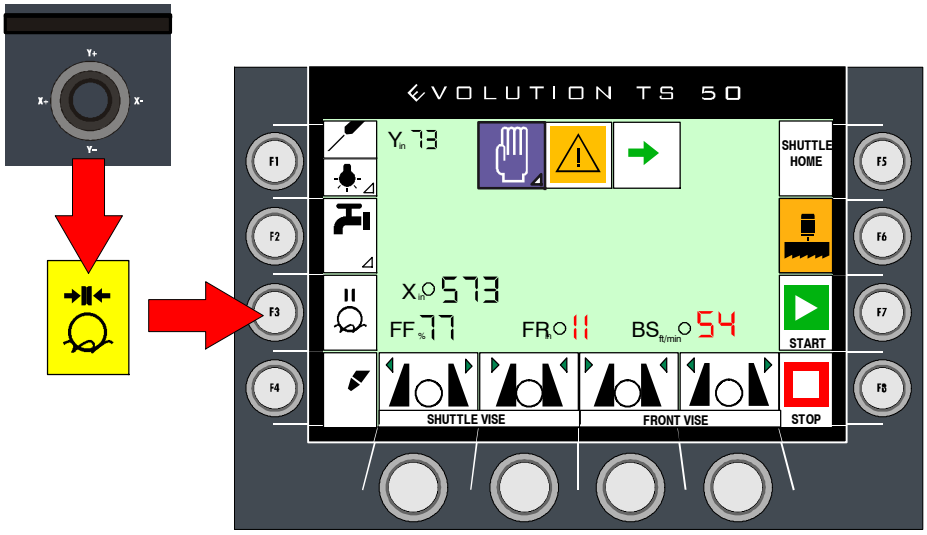
Cutting stroke setting

To set the cutting stroke it is necessary to determine the RHLS (rear head limit switch) and FHLS (forward head limit switch) points.

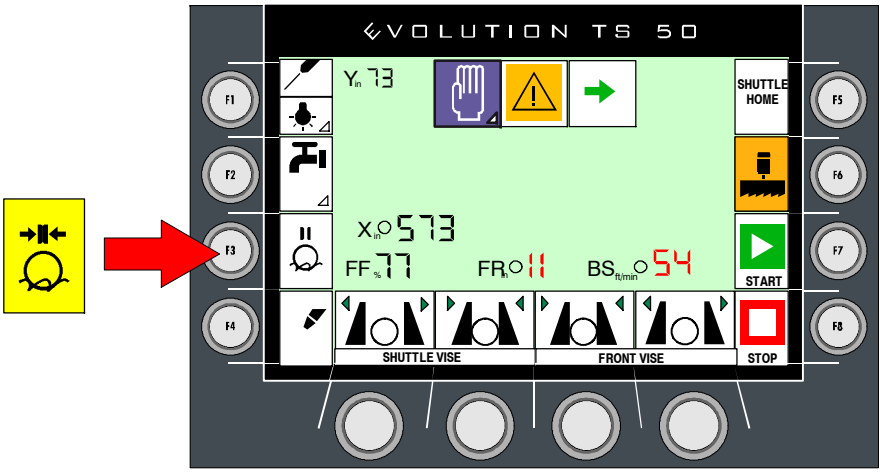
- To set the RHLS point just press the cycle start key (F7), after having pressed the band rotation enabling key (F6), to start the band rotation and the head lowering: in this way the RHLS (rear head limit switch) point is automatically stored and determines the head start position when the cycle is started.



- To set the FHLS after having set the RHLS point, delete the existing FHLS point lowering the head using the joystick; the FHLS setting box (F2) starts flashing to indicate that the FHLS point has been deleted.

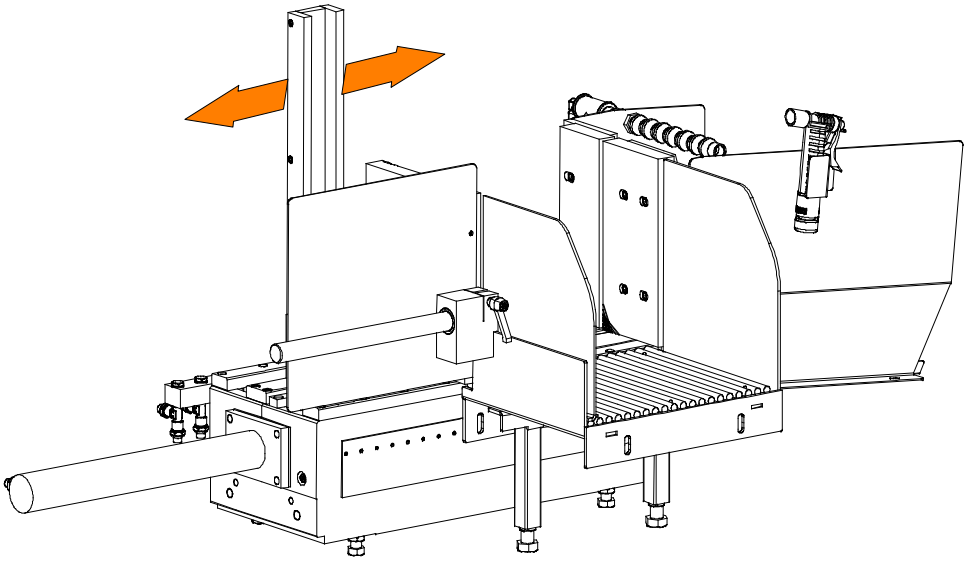


▶ When the head reaches the wished cutting end point, press the FHLS setting key (F2) shown in the figure, the corresponding box lights up to indicate that it has been set.

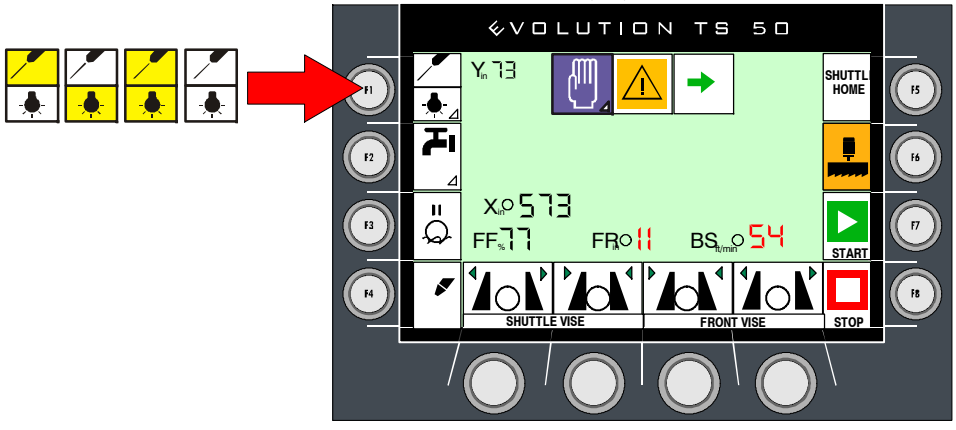


Width of cut

The machine is fitted with protections that protect the entire blade stroke leaving only the part of the blade required to make the cut itself exposed. This includes the rear (fixed) head and the front (mobile) head, as required by current standards.
The cutting width is automatically adapted with the positioning of the cutting vice on the loading side.



N.B. The machine is equipped with a lamp for lighting the working table and with a laser projector to aid the machine positioning under the blade vertical. These options can be selected by pressing once or more times the same key (F1) on the icon left.



Preliminary check list for cutting operation

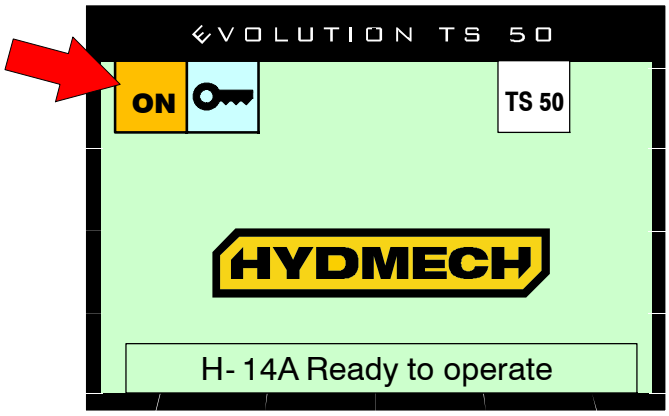
To guarantee complete safety during cutting cycles, the operator should work through a check list of the entire apparatus, checking:

- blade tension;
- that the work piece is properly clamped in place;
- that the blade teeth are correct for the job to be begun;
- that the speed selected is right for the kind of piece to be cut;
- that all protections are in place and correctly locked;
- the level of lubricant/coolant and that the electropump is activated;

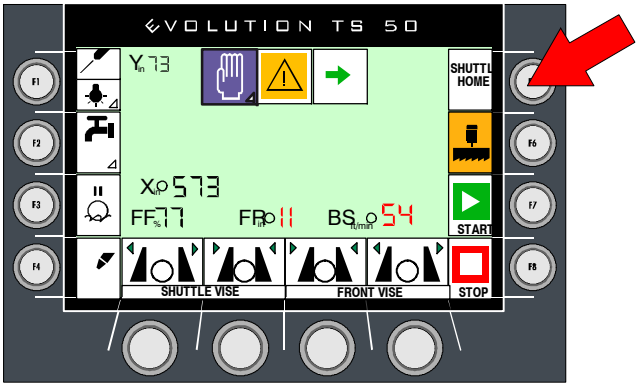
Manual operating cycle

The operation sequence for running a manual cutting cycle:

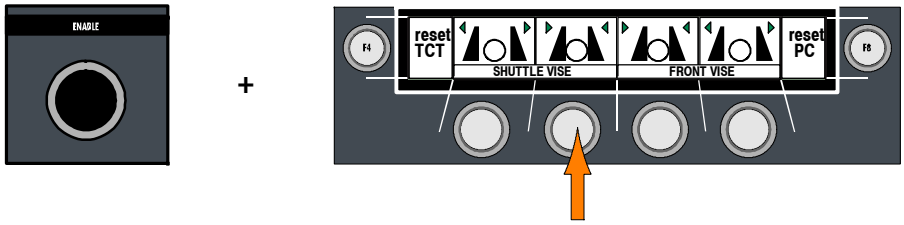
- power up the machine by turning the main switch;
- Tap on the box with the on symbol on the touchscreen.



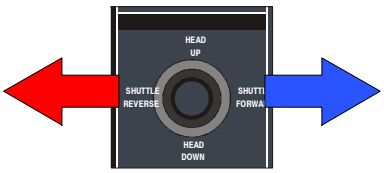
- press reset and release the emergency button if pressed, the head rises completely
- Zero the feeder by pressing the key shown in figure (F5).



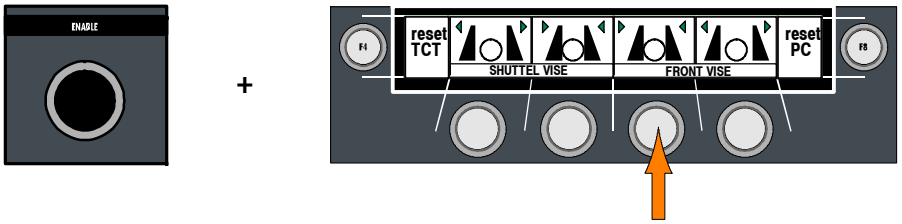
- Position the material inside the feeding vice.
- Close the feeding vice by pressing the relevant key on the console.



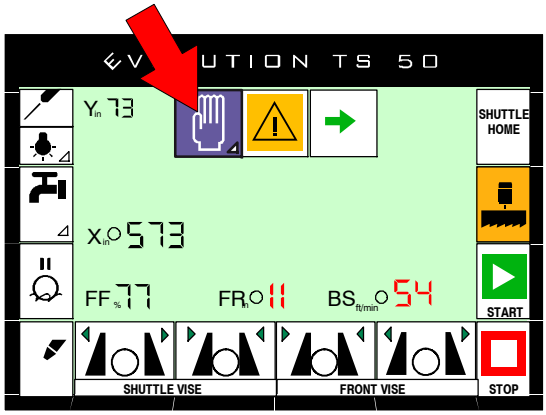
▶ Feed the material being machined and move it using the joystick. The machine is equipped with a lamp for lighting the working table and with a laser projector to aid the machine positioning under the blade vertical.



▶ Close the front vice by holding down the corresponding key from the control panel.

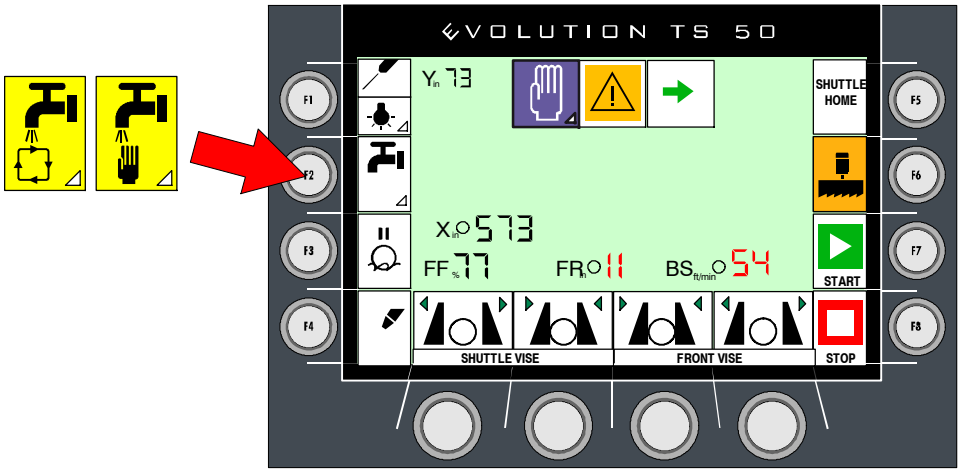


▶ Select the manual machining mode, pressing the box shown in the figure on the touch screen.



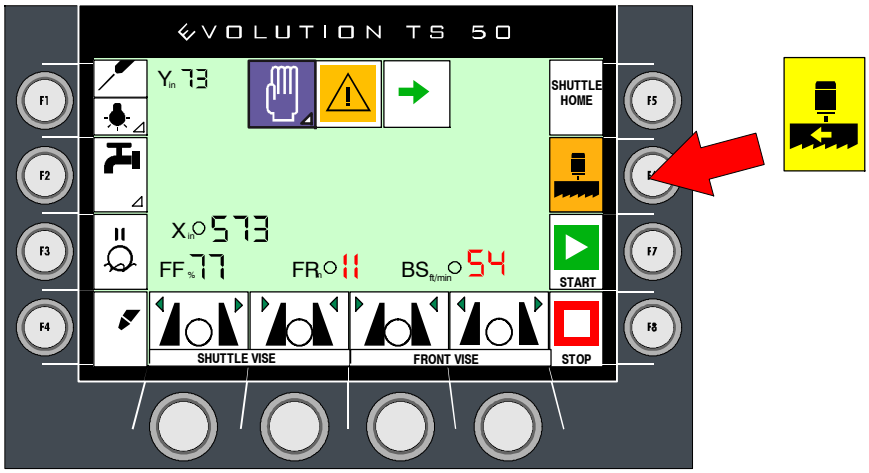
▶ Set the cutting parameters, previously shown, using the following adjusters.

▶ Set the fluid jet by pressing the button shown in the figure (F2). The box will light up to indicate that it is selected. Adjust the amount using the valves on the blade guide head. Press the button repeatedly to select the dispensing mode (automatic or manual).

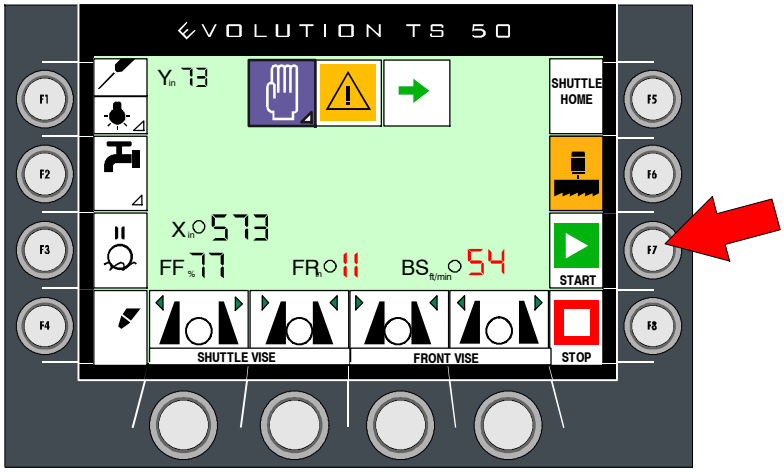


▶ Position the head at approximately 10 mm (0.39 in) from the workpiece.

▶ Press the band rotation enabling key (F6).



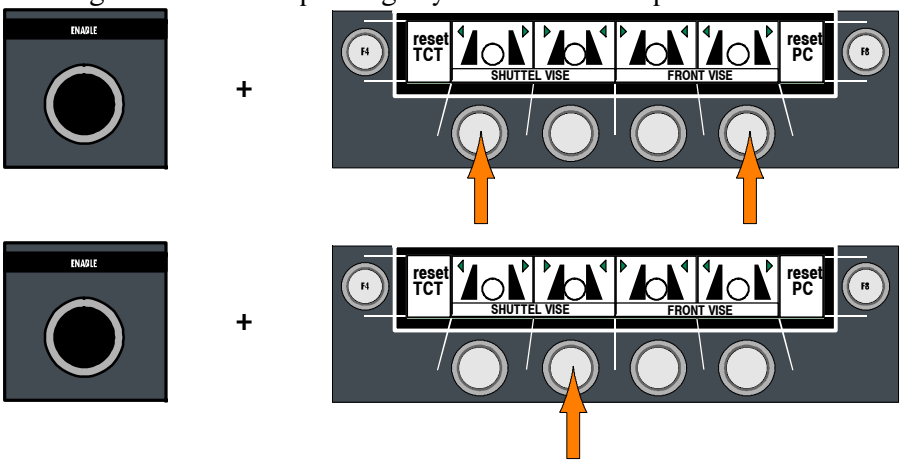
▶ Press the cycle start key (F7) to start the band rotation and the head lowering at the set speeds. The RHLS point is automatically stored in this way, as explained before.



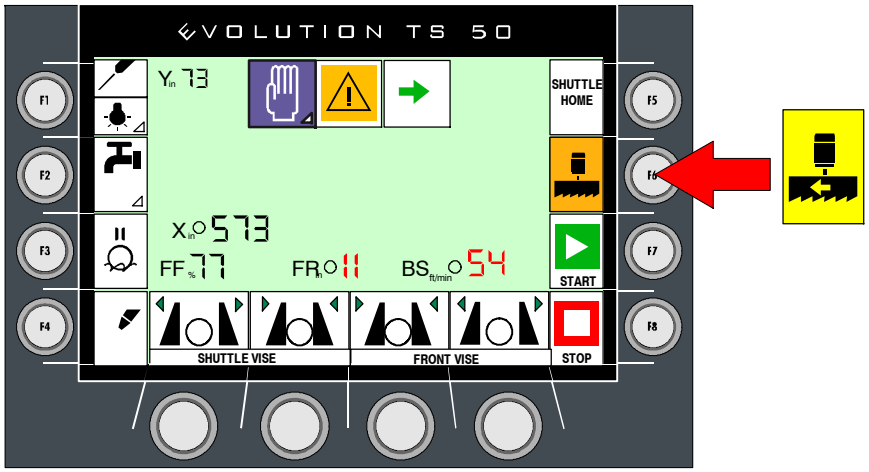
N.B. If the existing FHLS point is to be deleted now, follow the operations described above.

▶ When the head reaches the FHLS point the band stops and the head returns to the set RHLS point, ready to make a new cutting cycle.

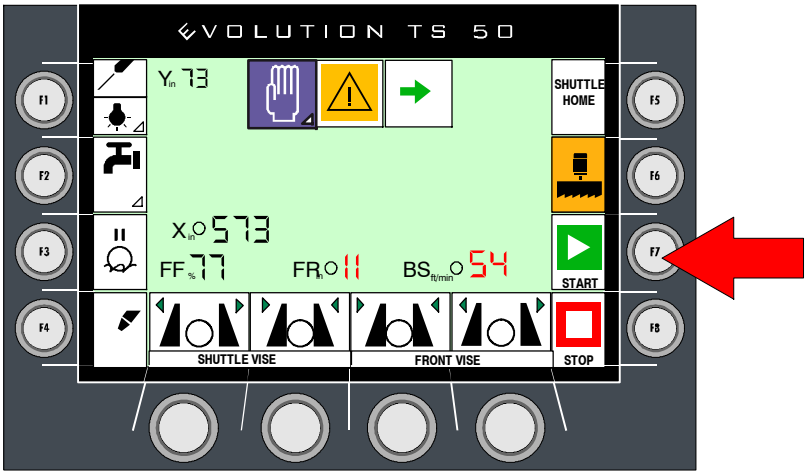
▶ Open both vices by holding the open vices button.
Then feed the workpiece, as already explained, and finally close the front vice by holding down the corresponding key from the control panel.



▶ Enable the band rotation by pressing the key shown in the figure (F6), the box lights on to indicate it has been selected.

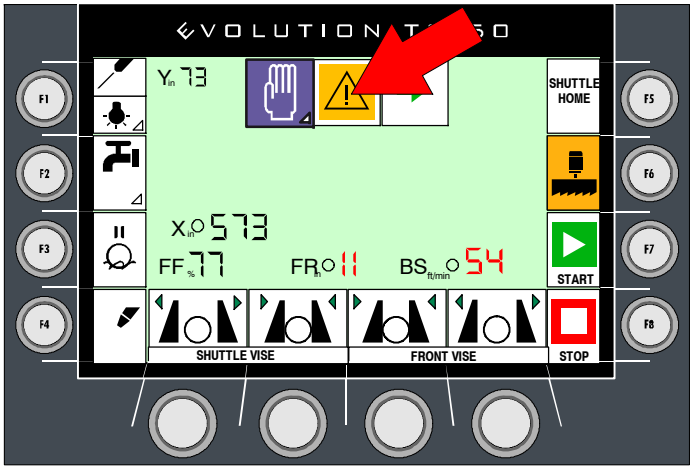


▶ Start the cutting cycle pressing the key shown in the figure (F7), the band starts turning and the machine cuts.
At the cut end, the head rises again, ready for a new machining cycle.



N.B. Tap on the touchscreen box shown in the figure to see problems during operation. The box will turn blue to indicate caution and red to indicate a machine

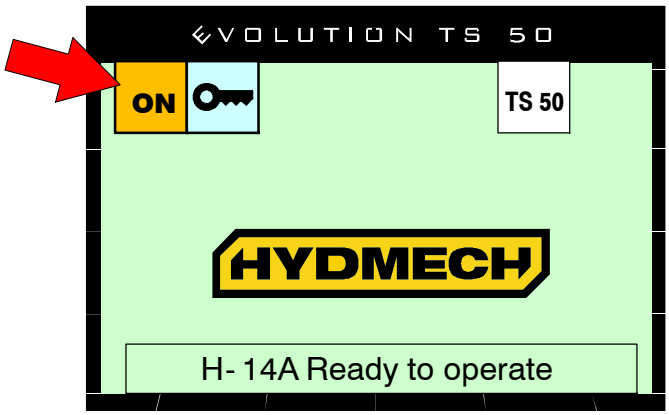
alarm. See chapter 10 for a complete list of alarms.



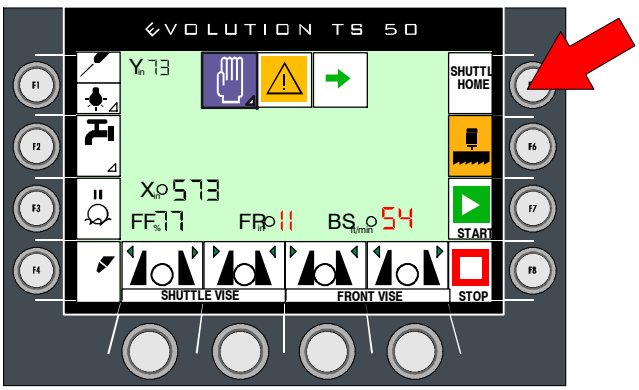
Automatic mode single job

The operation sequence for running in automatic mode and single job:

- ▶ power up the machine by turning the main switch;
- ▶ tap on the box with the on symbol on the touchscreen;

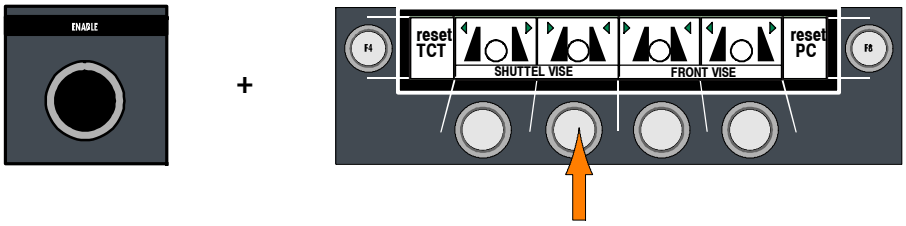


- ▶ press reset and release the emergency button if pressed, the head rises completely.
- ▶ Zero the feeder by pressing the key shown in figure (F5).

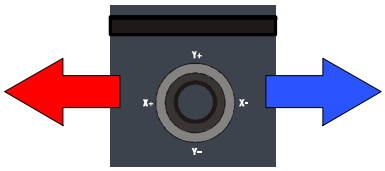


- ▶ Position the material inside the feeding vice.

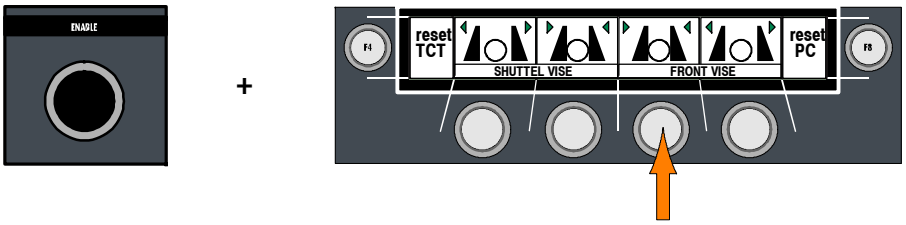
▶ Close the feeding vice by pressing the relevant key on the console.



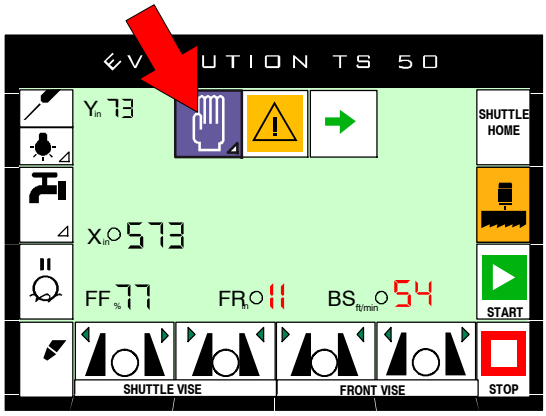
▶ Position the workpiece, moving it by the joystick.



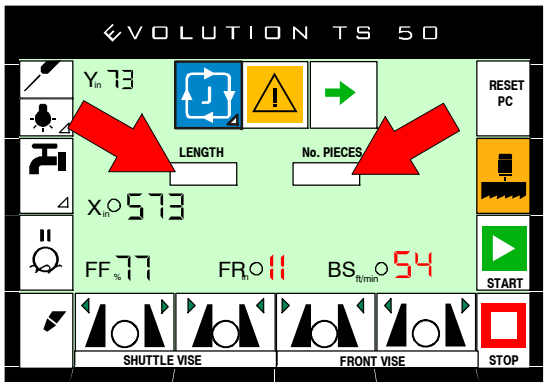
▶ Close the front vice by holding down the corresponding key from the control panel.



▶ Select the automatic machining mode with single program, pressing the box shown in the figure on the touch screen.

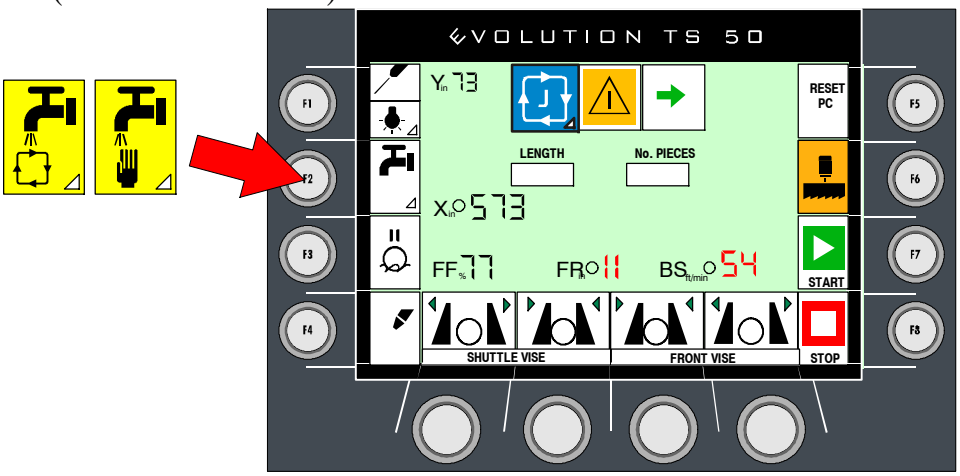


▶ Set the wished length and the wished number of cuts pressing the boxes shown in the figure and entering the values on the keypad that pops up automatically.



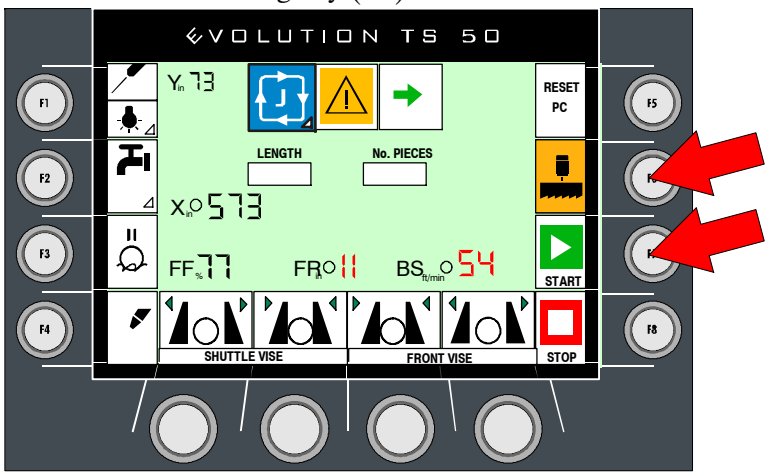
▶ Set the cutting parameters, previously shown, using the following adjusters.

▶ Set the fluid jet by pressing the button shown in the figure (F2). The box will light up to indicate that it is selected. Adjust the amount using the valves on the blade guide head. Press the button repeatedly to select the dispensing mode (automatic or manual).



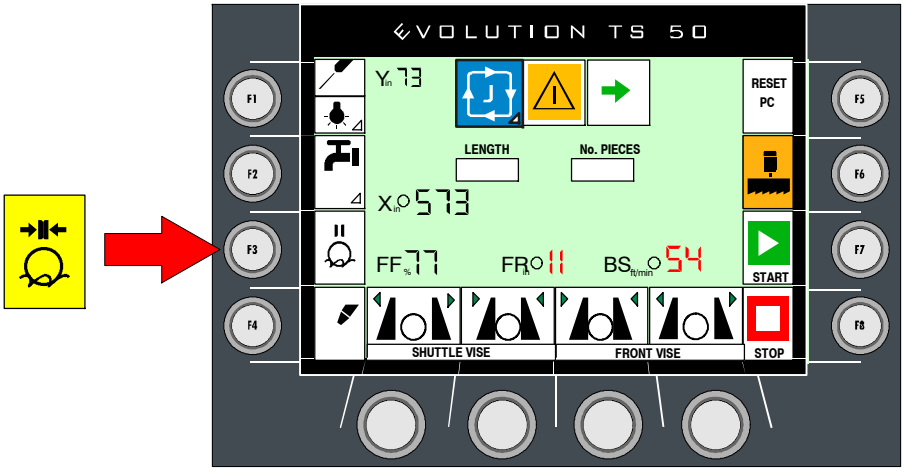
▶ Position the head at approximately 10 mm (0.39 in) from the workpiece.

▶ Press the band rotation enabling key (F6).



▶ Press the cycle start key (F7) to start the band rotation and the head lowering at the set speeds. The RHLS point is automatically stored in this way, as explained before.

N.B. If the existing FHLS point is to be deleted now, follow the operations described above.

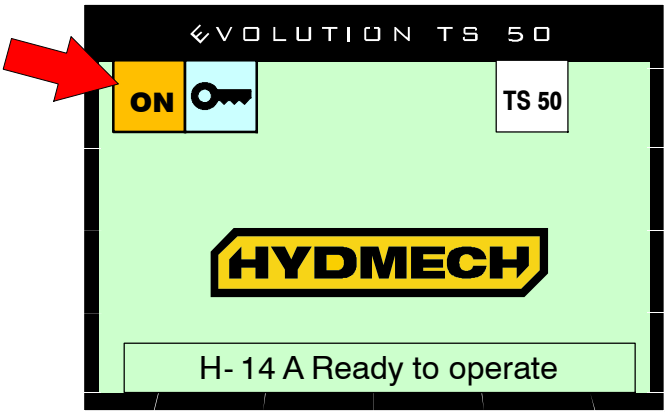


The sawing machine makes the programmed cuts. At the end, the head rises again and the band motor stops.

Automatic mode queue

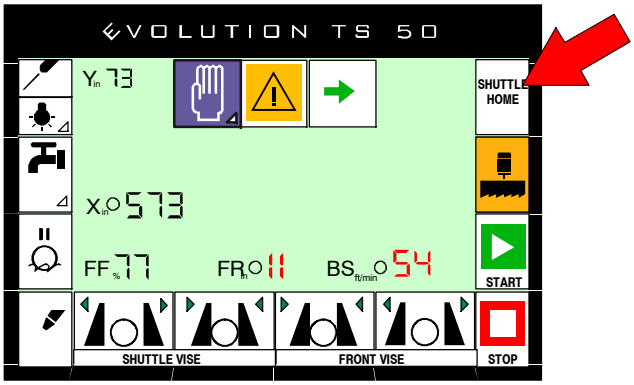
The operation sequence for running in automatic mode queue:

- ▶ power up the machine by turning the main switch;
- ▶ tap on the box with the on symbol on the touchscreen;



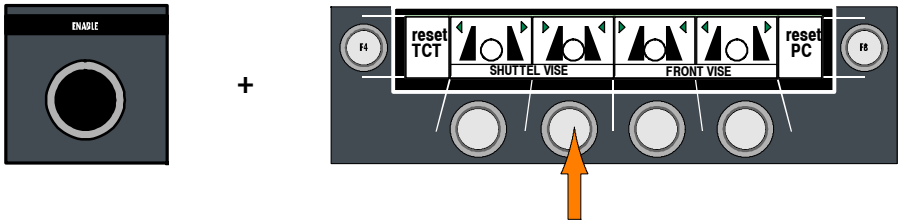
- ▶ press reset and release the emergency mushroom button if pressed, the head rises completely.

N.B. If previous machinings have been made already and the feeder has not been zeroed, zero it pressing the key shown in the figure.

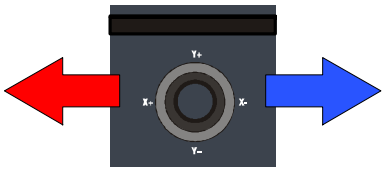


▶ Position the material inside the feeding vice.

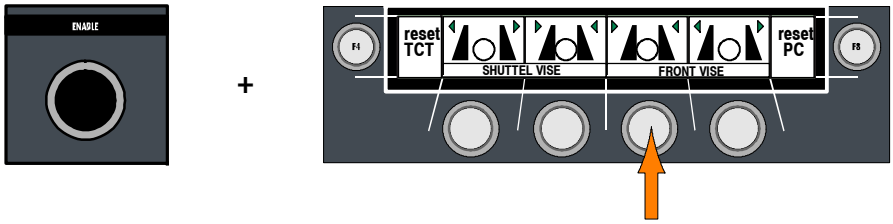
▶ Close the feeding vice by pressing the relevant key on the console.



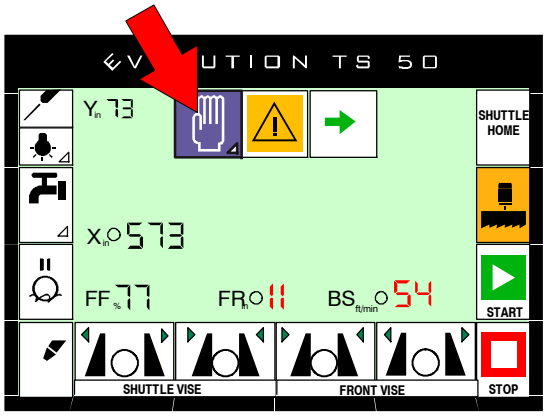
▶ Position the workpiece, moving it by the joystick.



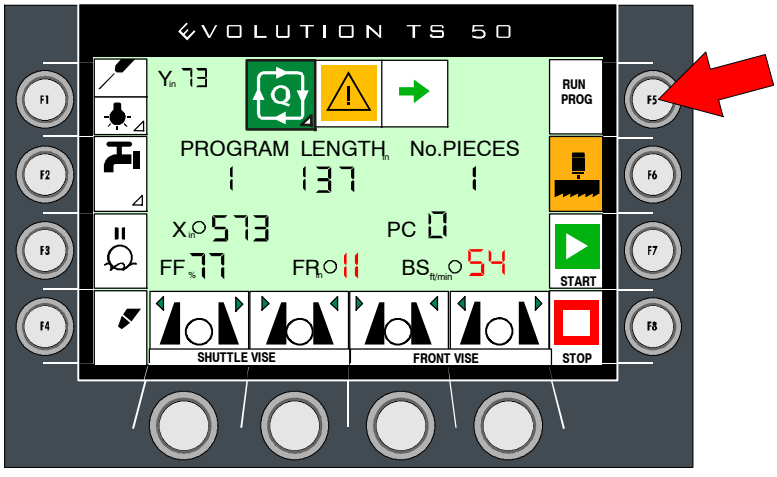
▶ Close the front vice by holding down the corresponding key from the control panel.



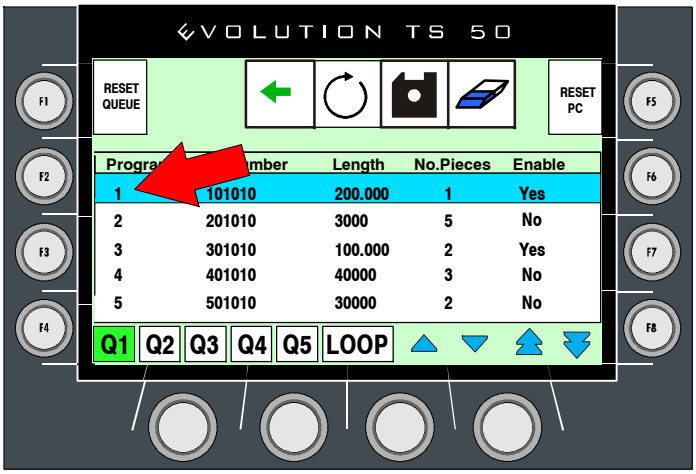
▶ Select the automatic machining mode with continuous program, pressing the box shown in the figure on the touch screen.



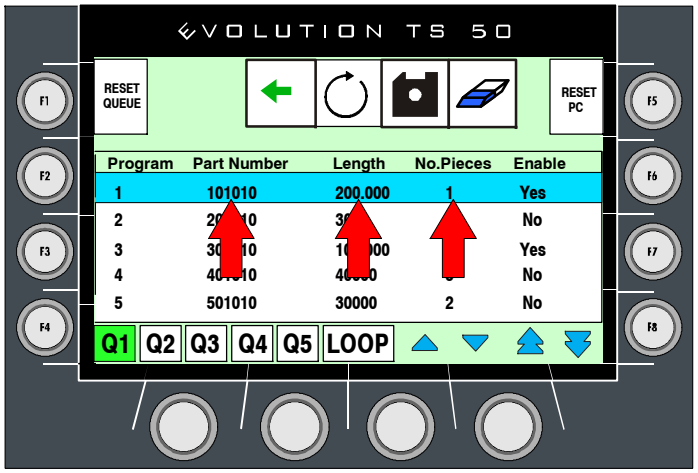
▶ Press the RUN/PROG key to access the programming page for the automatic operation with continuous program.



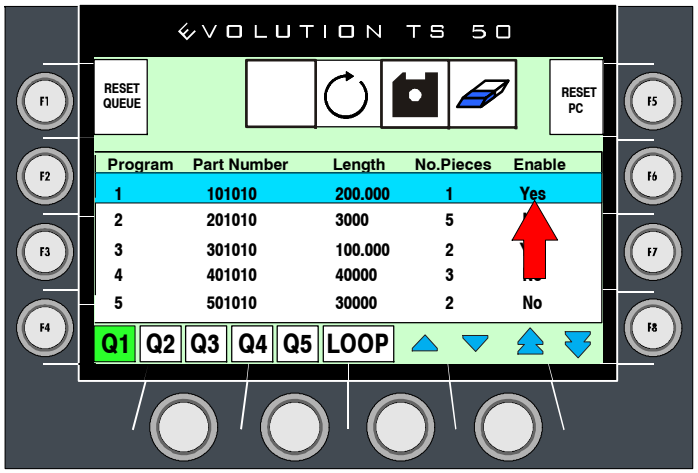
▶ The display shows the following screen listing all programs (max. 20) of the queue selected. Press the program number to select the one to be set.



▶ Press to edit all values of “Part Number” (company identification code), “Length” (piece length), and “Nr. Pieces” (number of pieces) using the key-pad.

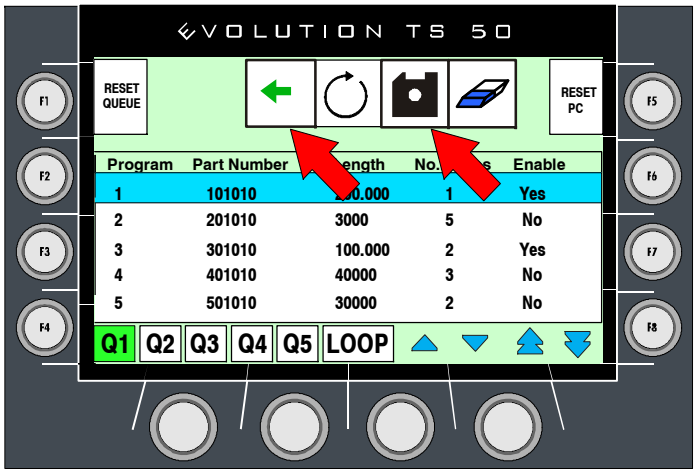


▶ In the end choose to activate or deactivate the selected by “Enable” (Yes / No).

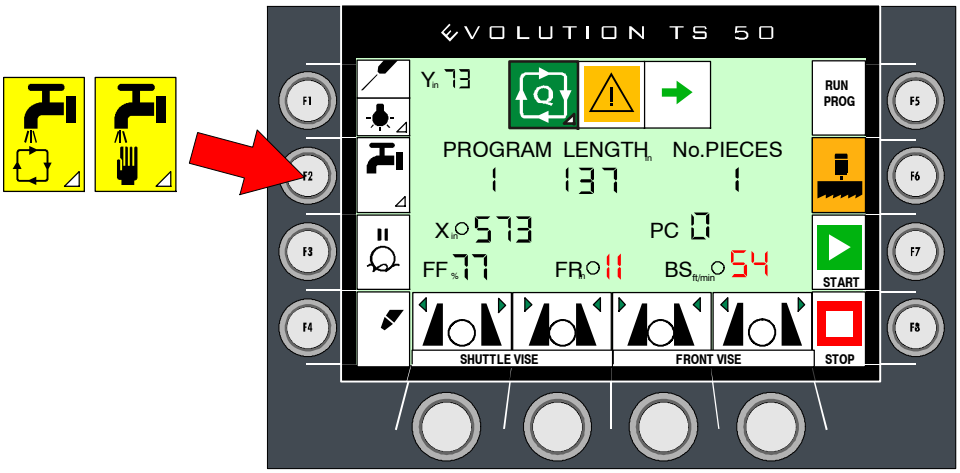


N.B. Press the F1 key to zero the program queue.
Press the F5 key to zero the piece number.

Before returning to the machining screen, press the data saving key and then the green arrow shown in the figure.



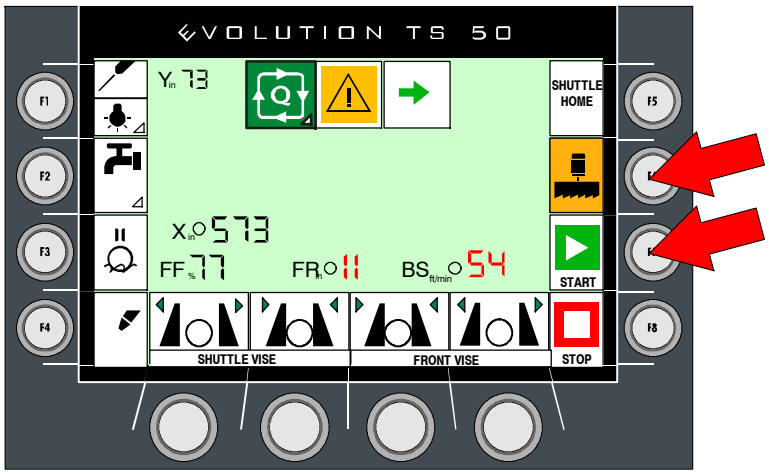
▶ Set the fluid jet by pressing the button shown in the figure. The box will light up to indicate that it is selected. Adjust the amount using the valves on the blade guide head. Press the button repeatedly to select the dispensing mode (automatic or manual).



▶ Set the cutting parameters, previously shown, using the following adjusters.

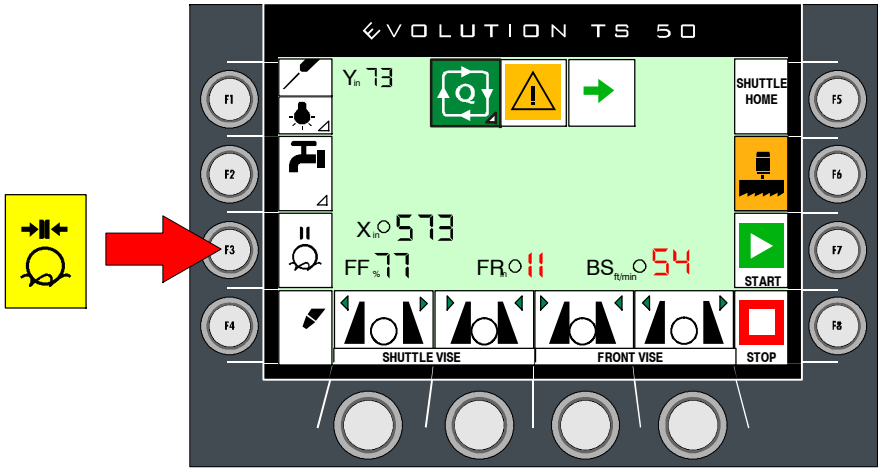
▶ Position the head at about 10 mm (0.39 in) from the material being machined, moving it with the joystick.

▶ Press the band rotation enabling key (F6).



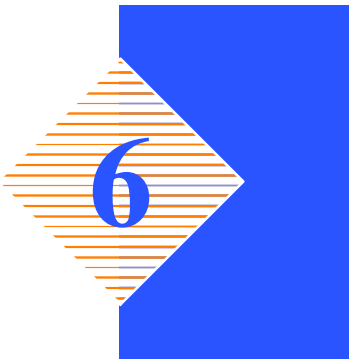
▶ Press the F7 cycle start key to start the band rotation and the head lowering. The RHLS point is automatically stored in this way, as explained before. At the end, the band stops and the head rises again.

N.B. If the existing FHLS point is to be deleted now, follow the operations described above.



The sawing machine then feeds new material performing all the program cuts and continues with the set sequence. If the machining cycle must be stopped, press F8 Cycle Stop. To start it again, press F7 Cycle Start.

Diagrams, exploded views and replacement parts



This chapter contains functional diagrams and exploded views of the **H- 14A**. This document is intended to help in identifying the location of the various components making up the machine, giving information useful in carrying out repair and maintenance operations; This chapter will also enable the user to order replacement parts with no risk of misunderstanding, as all parts are given codes.

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1	INDICE CONTENUTI		14	AUSILIARI MOTORE STEPPER	
	Content Index			Stepper Motor Auxiliary Circuits	
2	INDICE CONTENUTI		15	UNITA' CENTRALE MEP50	
	Content Index			Central Unit MEP50	
3	LEGENDA SIMBOLI		16	INGRESSI DIGITALI MEP50	
	Symbol Key			Digital Input MEP50	
4	LEGENDA SIMBOLI		17	INGRESSI DIGITALI MEP50	
	Symbol Key			Digital Input MEP50	
5	ALIMENTAZIONE		18	USCITE DIGITALI MEP50	
	Power Supply			Digital Output MEP50	
6	ALIMENTAZIONE MOTORI 240V		19	USCITE DIGITALI MEP50	
	Motor Power Supply 240V			Digital Output MEP50	
7	ALIMENTAZIONE MOTORI 240V		20	INGRESSI ANALOGICI MEP50	
	Motor Power Supply 240V			Analog Input MEP50	
8	ALIMENTAZIONE TRASFORMATORI		21	INGRESSI ANALOGICI MEP50	
	Transformer Power Supply			Analog Input MEP50	
9	ALIMENTAZIONE MOTORE STEPPER		22	USCITE STEPPER MEP50	
	Stepper Motor Power Supply			Stepper Output MEP50	
10	ALIMENTAZIONE AUSILIARI		23	USCITA ANALOGICA E SERIALE MEP50	
	Auxiliary Circuit Power Supply			Analog Output and Serial MEP50	
11	RELE SICUREZZA EMERGENZA		24	ALIMENTAZIONE E ENCODER PANNELLO	
	Emergency safety relay			Power Supply and Panel Encoder	
12	RELE SICUREZZA RIPARI		25	OPTIONAL	
	Machine Guard Safety Relay			Optional	
13	AUSILIARI INVERTER		26	MORSETTIERA QUADRO	
	Inverter Auxiliary Circuits			Panel Terminal Board	

Note :

REV.	MODIFICA	DATA	FIRME
R 1.2	Add -SE2 enable manual vises command (pg.17)	24/07/2017	Solfanelli
1.1	Add WEPC emergency powered conveyor cable (pg11)	03/11/2016	Solfanelli
1.0	Review 2016 with new electrical box carpentry	15/07/2016	Solfanelli
0.1	Added Three-phase Inverter Line reactor (L1)	16/04/2015	Solfanelli

Dis. N. H14A24060CSA
CAD SPAC
File H14A.1/dwg
Data 24/07/2017

Impianto/Plant: *H14A_240V.60Hz*
Denominazione/Title: INDICE CONTENUTI / *Content Index*
Ordine/Requisition:
Commessa/Order: H14A
Esecutore/Executor: Solfanelli

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27	INTERNO QUADRO		40	DISTINTA MATERIALI	
	Board Inside			Material List	
28	GUAINE E ACCESSORI		41	DISTINTA CAVI	
	Sheaths and Accessories			Cable list	
29	RIASSUNTIVO CAVI		42	DISTINTA CAVI	
	Cable summary			Cable list	
30	RIASSUNTIVO CAVI				
	Cable Summary				
31	RIASSUNTIVO CAVI				
	Cable Summary				
32	RIASSUNTIVO CAVI				
	Cable Summary				
33	RIASSUNTIVO CAVI				
	Cable Summary				
34	RIASSUNTIVO CAVI				
	Cable Summary				
35	RIASSUNTIVO CAVI				
	Cable Summary				
36	RIASSUNTIVO CAVI				
	Cable Summary				
37	DISTINTA MATERIALI				
	Material List				
38	DISTINTA MATERIALI				
	Material List				
39	DISTINTA MATERIALI				
	Material List				

Note :

REV.	MODIFICA	DATA	FIRME
R 1.2	Add -SE2 enable manual vises command (pg.17)	24/07/2017	Solfanelli
1.1	Add WEPC emergency powered conveyor cable (pg11)	03/11/2016	Solfanelli
1.0	Review 2016 with new electrical box carpentry	15/07/2016	Solfanelli
0.1	Added Three-phase Inverter Line reactor (L1)	16/04/2015	Solfanelli

Dis. N. H14A24060CSA
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Impianto/Plant: *H14A_240V.60Hz*
Denominazione/Title: INDICE CONTENUTI / *Content Index*
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Sim.\Sym.	File	Descrizione\Description
	H5	Lampada *Lamp*
	H11	LED *Led*
	M2	Motore asincrono trifase *Three–phase inductor motor*
	M9	Motore corrente alternata monofase *Single–phase inductor motor*
	Q1360	Int. automatico magnetotermico sezionatore tripolare *Three–phase automatic switch*
	R1	Resistore *Resistor*
	R6	Potenziometro *Potentiometer*
	R60	Potenziometro *Potentiometer*
	S2	Comando a Pulsante NO *Push button NO*
	S4C	Pulsante di emergenza NC *Emergency push button NC*
	S5	Comando rotativo a due posizioni NO *Rotary selector two position*

Sim.\Sym.	File	Descrizione\Description
	S7	Comando a pedale NO *Control pedal NO*
	S13C	Fine corsa comandato a camma libero NC *Limit switch free NC*
	S14C	Fine corsa comandato a camma azionato NC *Limit switch actuated NC*
	S15C	Comandato dal livello di un fluido (livellostato) NC *Water gauge NC*
	T2	Trasformatore per ausiliari con schermo *Trasformer for auxiliary white shield*
	Y1	Elettrovalvola (A) *Solenoid valve (A)*
	Y1A	Elettrovalvola (B) *Solenoid valve (B)*
	KA1	Bobina rele' Aux *Auxiliary relay coil*
	KM1	Bobina contattore *Contactor coil*
	BLK11	Trasformatore per ausiliari con schermo *Trasformer for auxiliary white shield*
	BLK12	Inverter (potenza) *Inverter (power)*

Sim.\Sym.	File	Descrizione\Description
	BLK13	Azionamento (potenza) *Drive (power)*
	BLK14	Inverter (ausiliari) *Inverter (auxiliary)*
	BLK15	Azionamento (ausiliari) *Drive (auxiliary)*
	BLK21	Motore passo-passo *Stepper motor*
	BLK41	Raccordo SX *Connector SX*
	BLK42	Raccordo DX *Connector DX*
	BLK43	Tubo corrugato *Corrugated pipe*
	BLK44	Riduzione PG *PG adapter*
	BLK51	Dado PG *PG nut*
	BLK56	Terminale a puntale *Terminal*
	BLK57	Filo unipolare *Wire*

REV.	MODIFICA	DATA	FIRME
R 1.2	Add -SE2 enable manual vises command (pg.17)	24/07/2017	Solfanelli
1.1	Add WEPC emergency powered conveyor cable (pg11)	03/11/2016	Solfanelli
1.0	Review 2016 with new electrical box carpentry	15/07/2016	Solfanelli
0.1	Added Three-phase Inverter Line reactor (L1)	16/04/2015	Solfanelli

Dis. N. H14A24060CSA
CAD SPAC
File H14A.1/dwg
Data 24/07/2017

Impianto/Plant
H14A_240V.60Hz

Denominazione/Title
LEGENDA SIMBOLI
Symbol Key

Ordine/Requisition
Commessa/Order H14A
Esecutore/Executor Solfanelli

MEP

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Sim.\Sym.	File	Descrizione\Description
	BLK58	Fascette plastiche di fissaggio *Plastic clamp*
	BLK60	Terminale a occhiello *Terminal*
	BLK66	Sacchetto portafusibile *Bag fuse*
	SPX08E	Dispositivo di prossimita' induttivo D.C. NO *Sensor of proximity fed DC NO*

Sim.\Sym.	File	Descrizione\Description

Sim.\Sym.	File	Descrizione\Description

REV.	MODIFICA	DATA	FIRME
R 1.2	Add -SE2 enable manual vises command (pg.17)	24/07/2017	Solfanelli
1.1	Add WEPC emergency powered conveyor cable (pg11)	03/11/2016	Solfanelli
1.0	Review 2016 with new electrical box carpentry	15/07/2016	Solfanelli
0.1	Added Three-phase Inverter Line reactor (L1)	16/04/2015	Solfanelli

Dis. N. H14A24060CSA
CAD SPAC
File H14A.1/dwg
Data 24/07/2017

Impianto/Plant
H14A_240V.60Hz

Denominazione/Title
LEGENDA SIMBOLI
Symbol Key

Ordine/Requisition
Commessa/Order H14A
Esecutore/Executor Solfanelli

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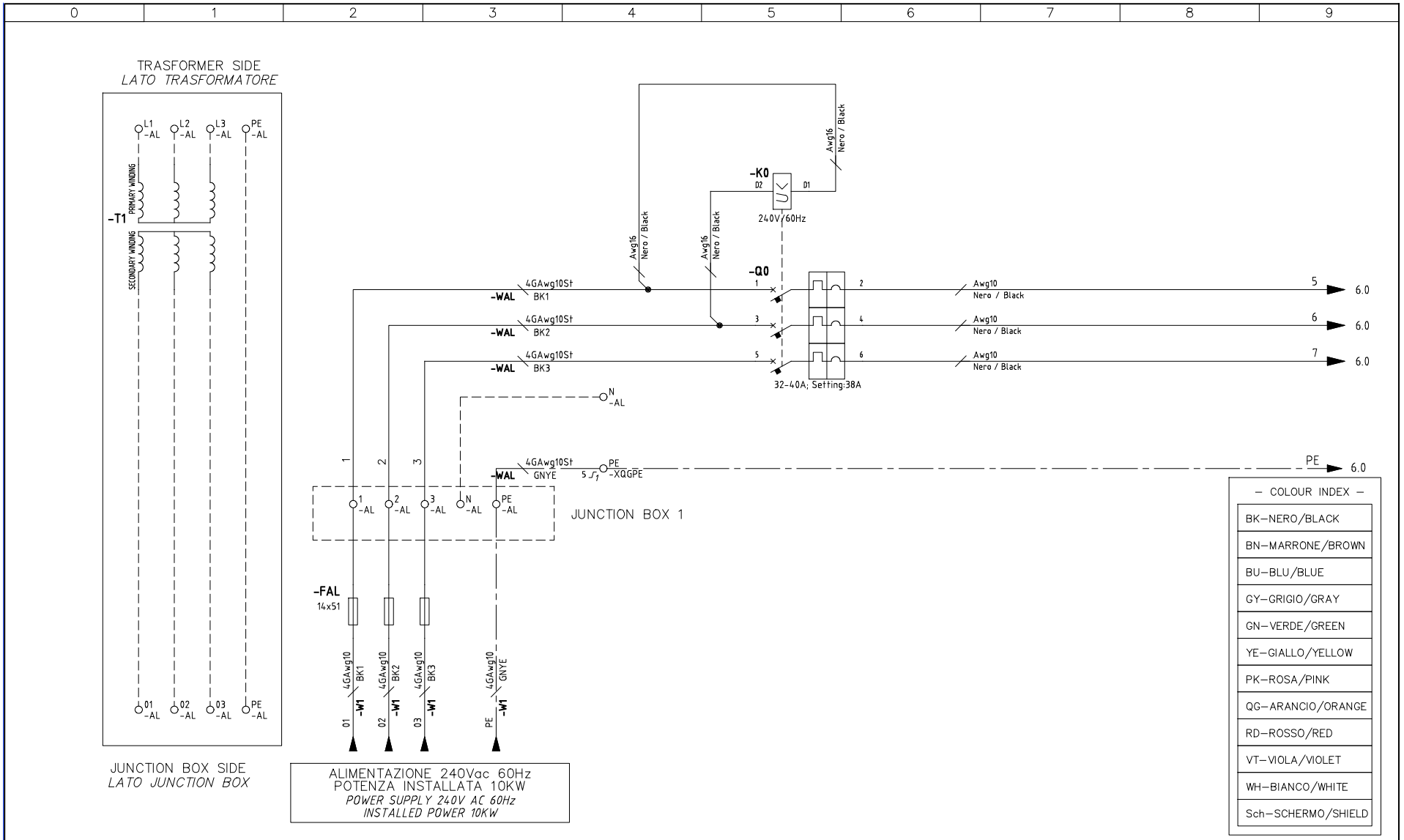
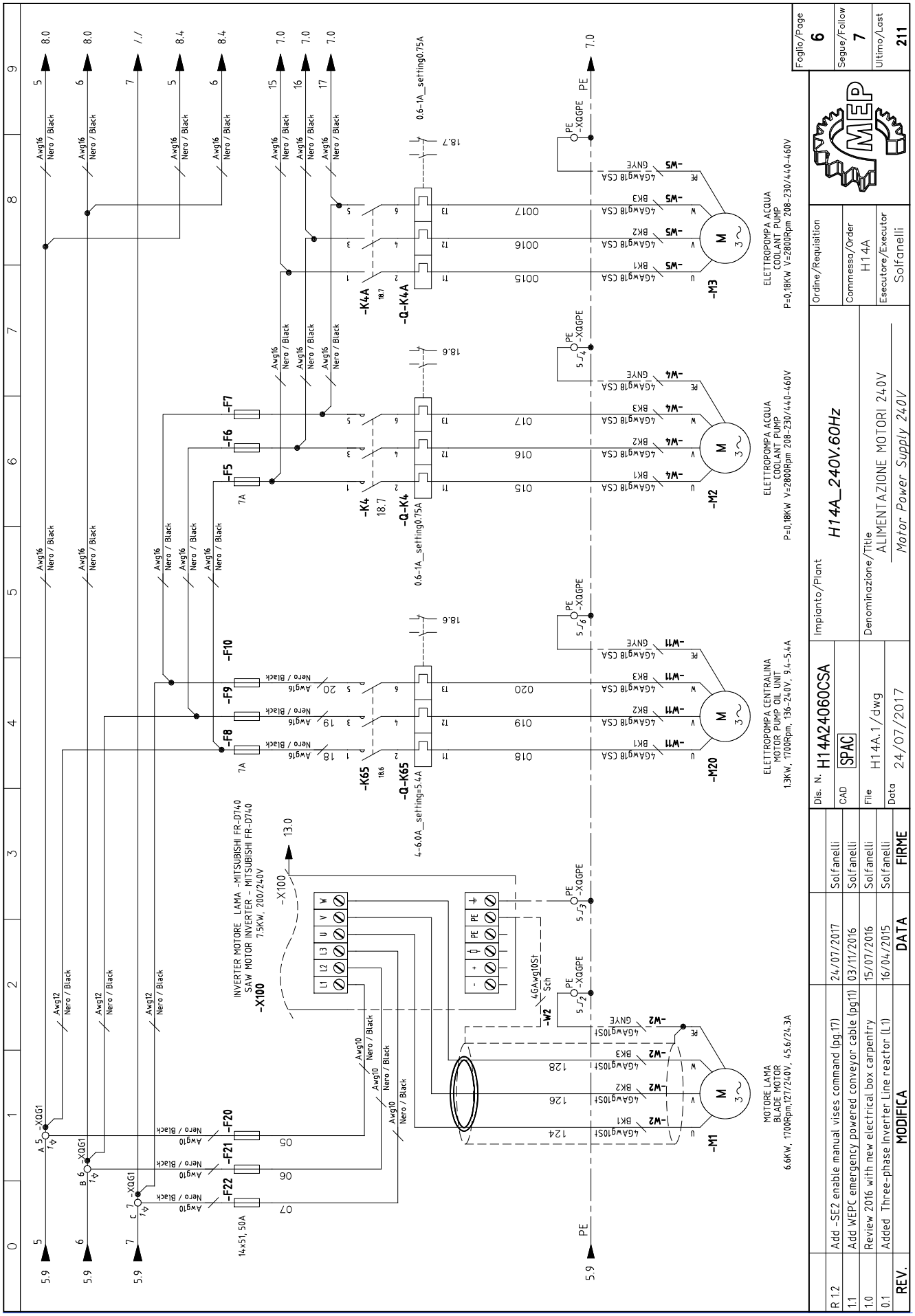
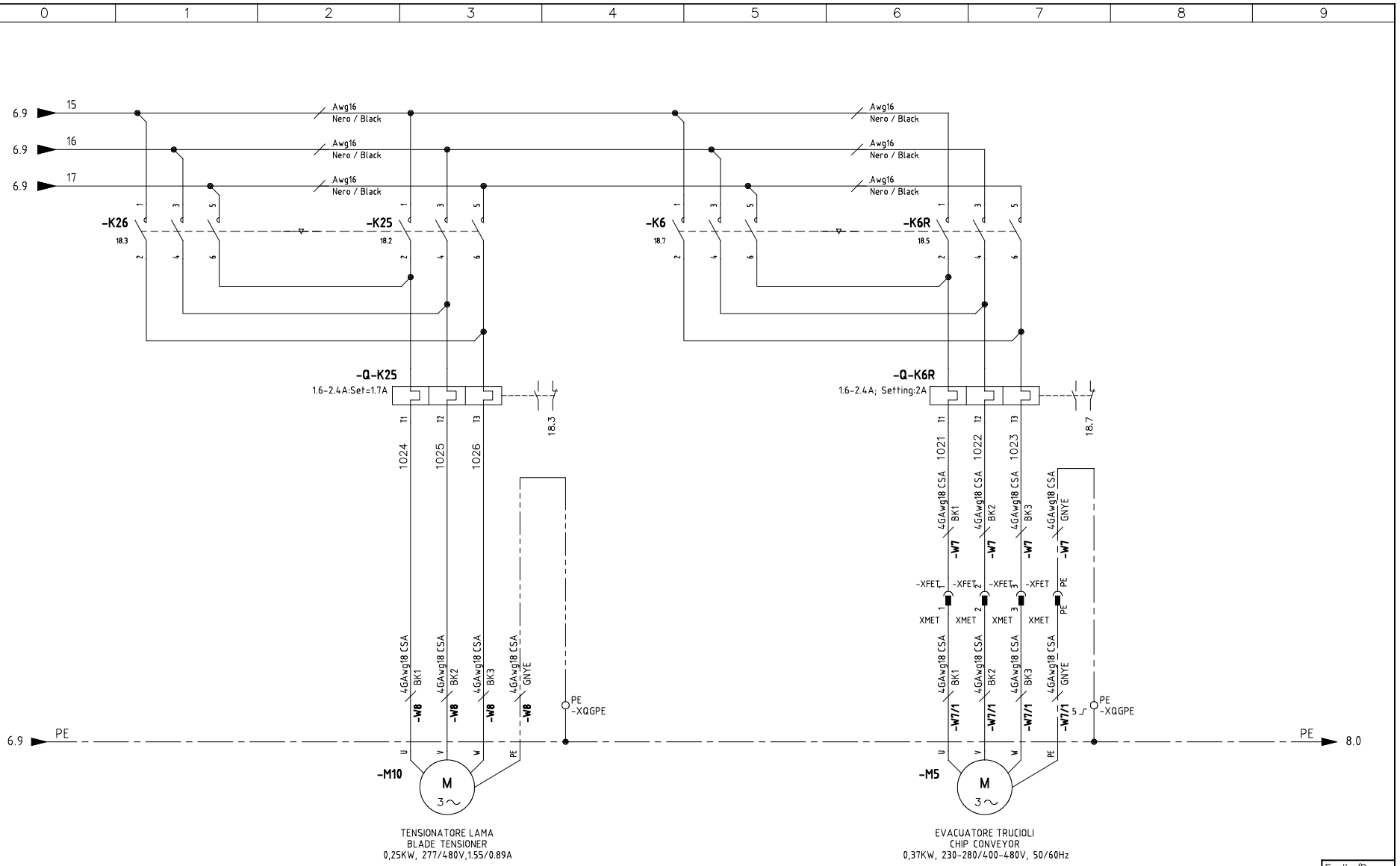


REV.	MODIFICA	DATA	FIRME
R 1.2	Add -SE2 enable manual vises command (pg.17)	24/07/2017	Solfanelli
1.1	Add WEPC emergency powered conveyor cable (pg11)	03/11/2016	Solfanelli
1.0	Review 2016 with new electrical box carpentry	15/07/2016	Solfanelli
0.1	Added Three-phase Inverter Line reactor (L1)	16/04/2015	Solfanelli

Dis. N.	H14A24060CSA
CAD	SPAC
File	H14A.1/dwg
Data	24/07/2017
Impianto/Plant	*H14A_240V.60Hz*
Denominazione/Title	ALIMENTAZIONE *Power Supply*
Ordine/Requisition	
Commessa/Order	H14A
Esecutore/Executor	Solfanelli
Foglio/Page	5
Segue/Follow	6
Ultimo/Last	211


H14A_240V.60Hz
Impianto/Plant
Dis. N. H14A24060CSA
CAD SPAC
File H14A.1/dwg
Data 24/07/2017
Denominazione/Title
ALIMENTAZIONE MOTORI 240V
Motor Power Supply 240V
Ordine/Requisition
Commessa/Order H14A
Esecutore/Executor Solfanelli
Foglio/Page 6
Segue/Follow 7
Ultimo/Last 211
REV. MODIFICA DATA FIRME
R 1.2 Add -SE2 enable manual vises command (pg 17) 24/07/2017 Solfanelli
1.1 Add WEPC emergency powered conveyor cable (pg11) 03/11/2016 Solfanelli
1.0 Review 2016 with new electrical box carpentry 15/07/2016 Solfanelli
0.1 Added Three-phase inverter Line reactor (L1) 16/04/2015 Solfanelli
-M1 MOTORE LAMA BLADE MOTOR 6.6KW, 1700Rpm,127/240V, 45.6/24.3A
-M20 ELETTROPOMPA CENTRALINA MOTOR PUMP OIL UNIT 1.3KW, 1700Rpm, 136-240V, 9.4-5.4A
-M2 ELETTROPOMPA ACQUA COOLANT PUMP P=0,18KW V=2800Rpm 208-230/440-460V
-M3 ELETTROPOMPA ACQUA COOLANT PUMP P=0,18KW V=2800Rpm 208-230/440-460V
INVERTER MOTORE LAMA -MITSUBISHI FR-D740
SAW MOTOR INVERTER - MITSUBISHI FR-D740
7.5KW, 200/240V
-X100
-K65 -Q-K65 4-6.0A_setting=5.4A
-K4 -Q-K4 0.6-1A_setting0.75A
-K4A -Q-K4A 0.6-1A_setting0.75A
-F8 -F9 -F10 -F5 -F6 -F7 -F20 -F21 -F22
14x51, 50A
-W1 -W4 -W5 -W3 -W2
4GAwg18 CSA
4GAwg10St
Awg16 Awg12 Awg10
Nero / Black
GNYE
BK1 BK2 BK3
-XQG1 -XQGPE



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Dis. N. H14A24060CSA
CAD SPAC
File H14A.1/dwg
Data 24/07/2017

Impianto/Plant
H14A_240V.60Hz

Denominazione/Title
ALIMENTAZIONE MOTORI 240V
Motor Power Supply 240V

Ordine/Requisition

Commessa/Order
H14A

Esecutore/Executor
Solfanelli

MEP

Foglio/Page 7
Segue/Follow 8
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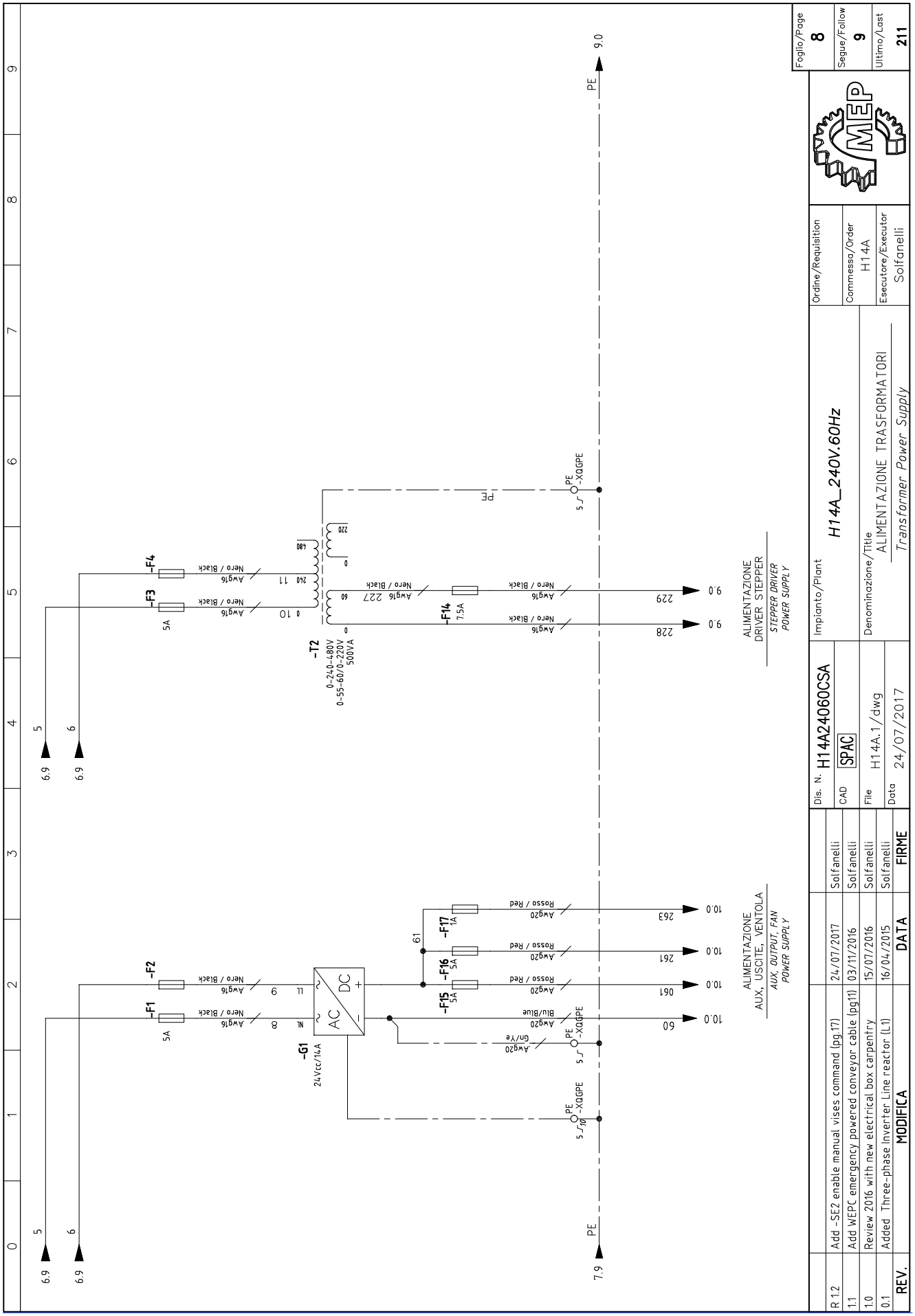
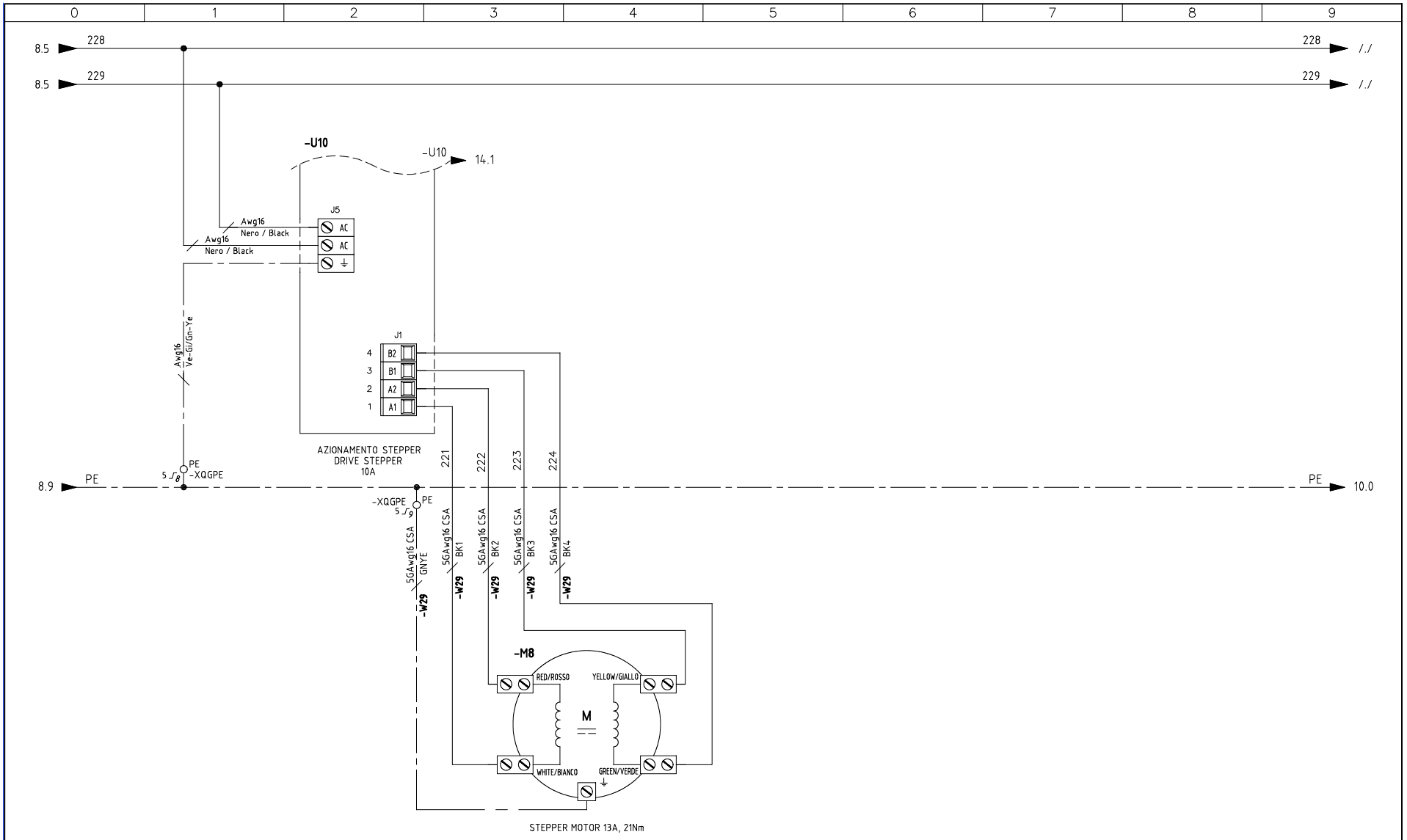

-T2
0-240-480V
0-55-60/0-220V
500VA
-G1
24Vcc/14A
-F1
-F2
-F3
-F4
-F14
7.5A
-F15
-F16
-F17
ALIMENTAZIONE
DRIVER STEPPER
STEPPER DRIVER
POWER SUPPLY
ALIMENTAZIONE
AUX. USCITE, VENTOLA
AUX. OUTPUT, FAN
POWER SUPPLY
H14A_240V.60Hz
ALIMENTAZIONE TRASFORMATORI
Transformer Power Supply
H14A24060CSA
SPAC
H14A.1/dwg
24/07/2017
Solfanelli
MODIFICA
DATA
FIRME
Add -SE2 enable manual vises command (pg.17)
Add WEPC emergency powered conveyor cable (pg11)
Review 2016 with new electrical box carpentry
Added Three-phase inverter Line reactor (L1)
Foglio/Page 8
Segue/Follow 9
Ultimo/Last 211



REV.	MODIFICA	DATA	FIRME
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Dis. N. H14A24060CSA
CAD SPAC
File H14A.1/dwg
Data 24/07/2017

Impianto/Plant
H14A_240V.60Hz

Denominazione/Title
ALIMENTAZIONE MOTORE STEPPER
Stepper Motor Power Supply

Ordine/Requisition

Commessa/Order
H14A

Esecutore/Executor
Solfanelli

MEP

Foglio/Page
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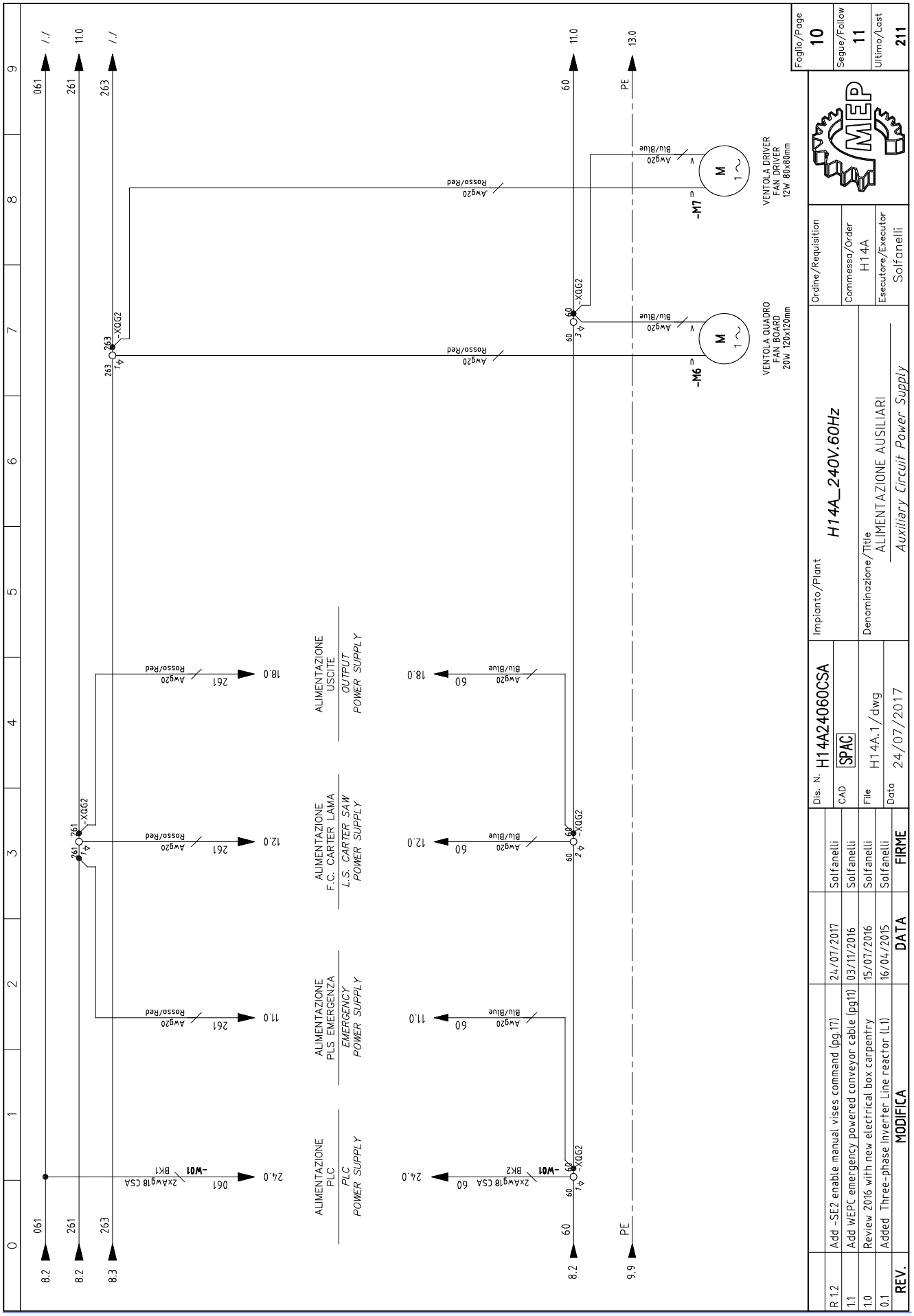
ALIMENTAZIONE PLC
POWER SUPPLY
ALIMENTAZIONE PLS EMERGENZA
EMERGENCY POWER SUPPLY
ALIMENTAZIONE F.C. CARTER LAMA
L.S. CARTER SAW POWER SUPPLY
ALIMENTAZIONE USCITE
OUTPUT POWER SUPPLY
VENTOLA QUADRO FAN BOARD 20W 120x120mm
VENTOLA DRIVER FAN DRIVER 12W 80x80mm
-M6
-M7
-XQG2
-W01
Awg20 Rosso/Red
Awg20 Blu/Blue
2xAwg18 CSA
Impianto/Plant
H14A_240V.60Hz
Denominazione/Title
ALIMENTAZIONE AUSILIARI
Auxiliary Circuit Power Supply
Dis. N. H14A24060CSA
CAD SPAC
File H14A.1/dwg
Data 24/07/2017
Ordine/Requisition
Commessa/Order H14A
Esecutore/Executor Solfanelli
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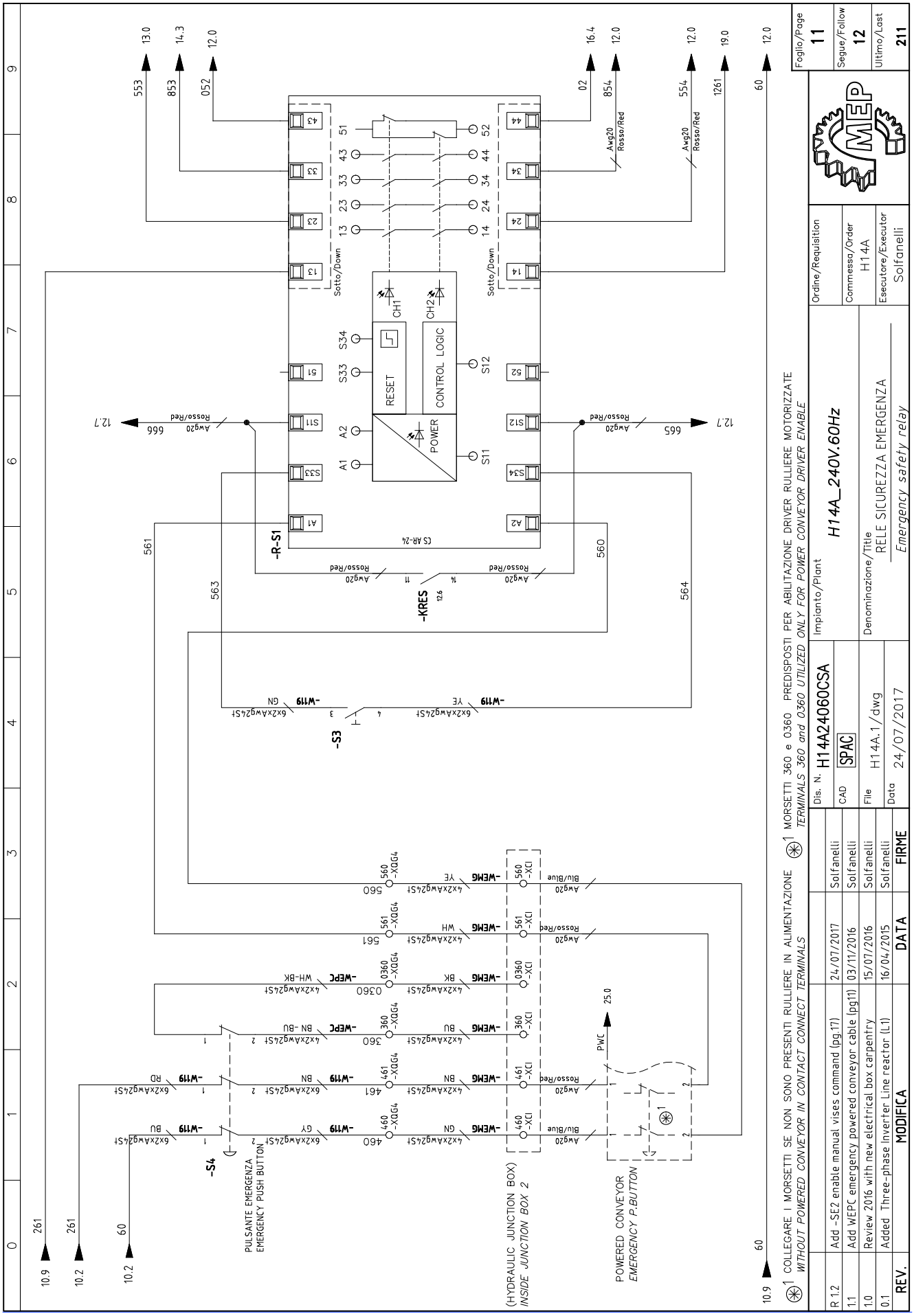
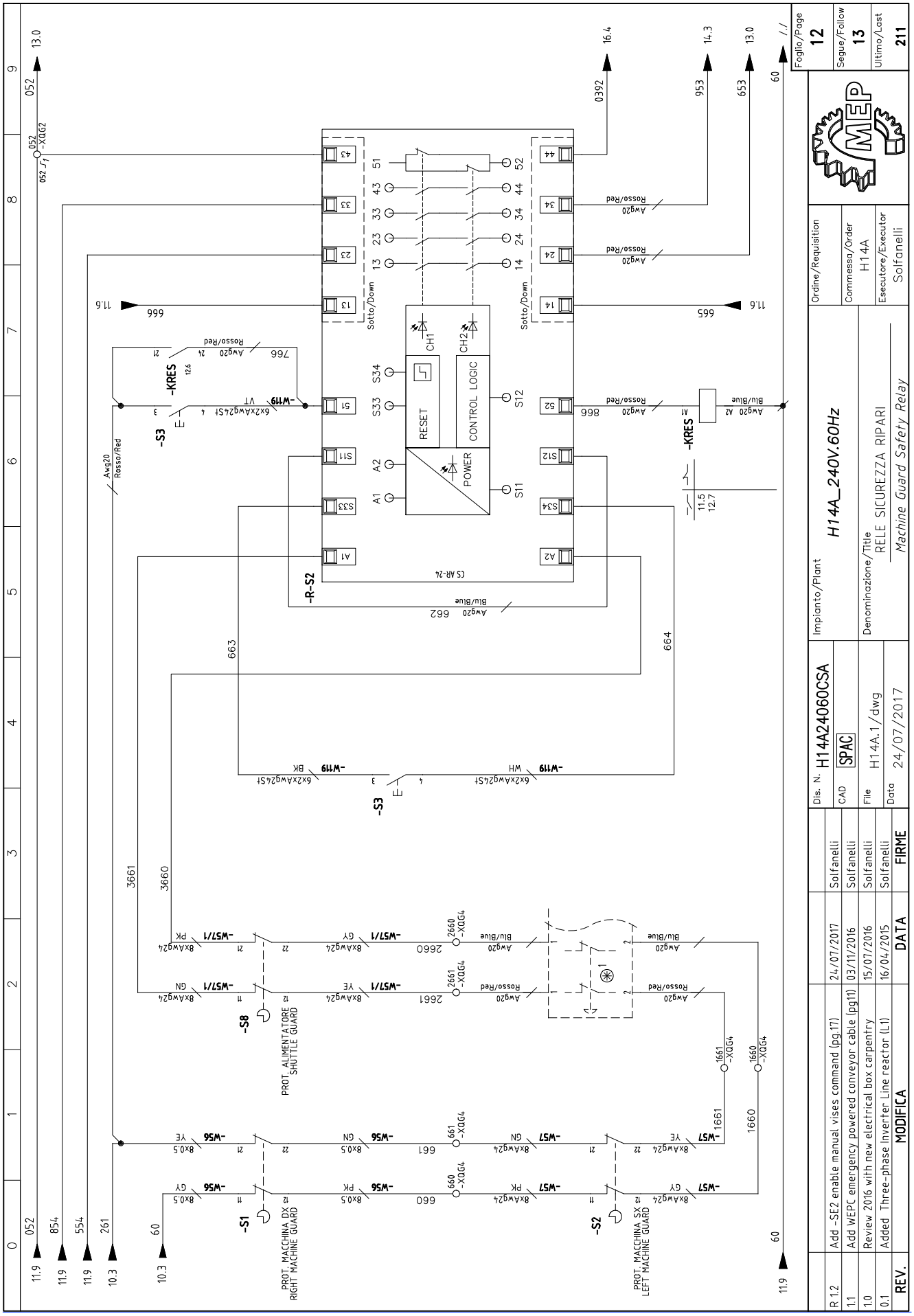
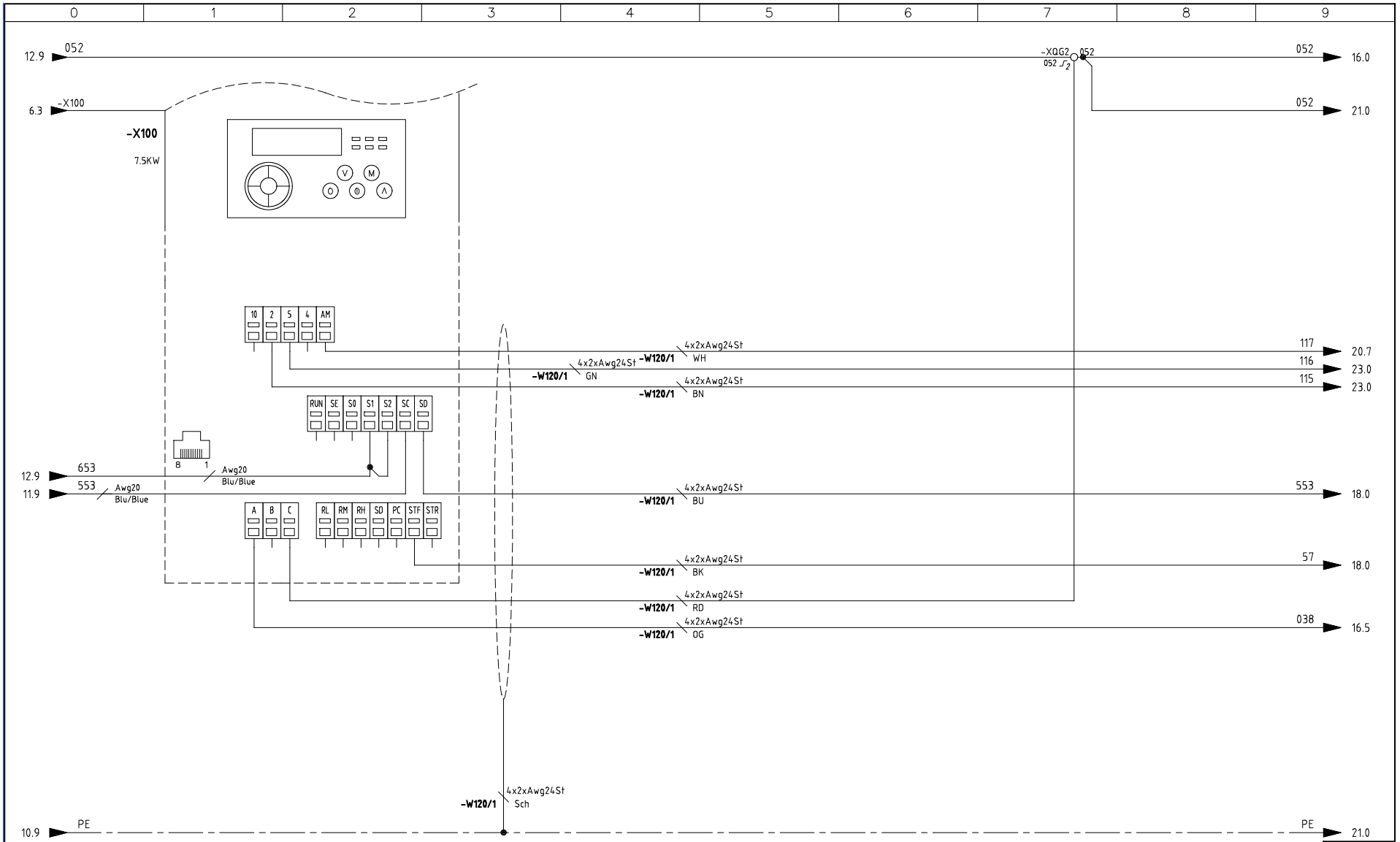
Ultimo/Last 211
REV. MODIFICA DATA FIRME
R 1.2 Add -SE2 enable manual vises command (pg 17) 24/07/2017 Solfanelli
1.1 Add WEPC emergency powered conveyor cable (pg11) 03/11/2016 Solfanelli
1.0 Review 2016 with new electrical box carpentry 15/07/2016 Solfanelli
0.1 Added Three-phase inverter Line reactor (L1) 16/04/2015 Solfanelli


-R-S1
-KRES
-S3
-S4
CONTROL LOGIC
RESET
POWER
CH1
CH2
Sotto/Down
CS AR-24
H14A_240V.60Hz
H14A24060CSA
SPAC
H14A.1/dwg
24/07/2017
RELE SICUREZZA EMERGENZA
Emergency safety relay
H14A
Solfanelli
MODIFICA
DATA
FIRME
PULSANTE EMERGENZA
EMERGENCY PUSH BUTTON
(HYDRAULIC JUNCTION BOX)
INSIDE JUNCTION BOX 2
POWERED CONVEYOR
EMERGENCY P.BUTTON
1 COLLEGARE I MORSETTI SE NON SONO PRESENTI RULLIERE IN ALIMENTAZIONE
WITHOUT POWERED CONVEYOR IN CONTACT CONNECT TERMINALS
1 MORSETTI 360 e 0360 PREDISPOSTI PER ABILITAZIONE DRIVER RULLIERE MOTORIZZATE
TERMINALS 360 and 0360 UTILIZED ONLY FOR POWER CONVEYOR DRIVER ENABLE
R 1.2 Add -SE2 enable manual vises command (pg.17) 24/07/2017 Solfanelli
1.1 Add WEPC emergency powered conveyor cable (pg11) 03/11/2016 Solfanelli
1.0 Review 2016 with new electrical box carpentry 15/07/2016 Solfanelli
0.1 Added Three-phase inverter Line reactor (L1) 16/04/2015 Solfanelli
Foglio/Page 11
Segue/Follow 12
Ultimo/Last 211


H14A_240V.60Hz
Machine Guard Safety Relay
RELE SICUREZZA RIPARI
H14A24060CSA
SPAC
H14A.1/dwg
24/07/2017
-R-S2
-S1
-S2
-S3
-S8
-KRES
-W119
-W57
-W56
-W57/1
PROT. MACCHINA DX RIGHT MACHINE GUARD
PROT. MACCHINA SX LEFT MACHINE GUARD
PROT. ALIMENTATORE SHUTTLE GUARD
RESET
CONTROL LOGIC
POWER
CH1
CH2
Sotto/Down
Add -SE2 enable manual vises command (pg.17)
Add WEPC emergency powered conveyor cable (pg11)
Review 2016 with new electrical box carpentry
Added Three-phase inverter Line reactor (L1)
MODIFICA
DATA
FIRME



REV.	MODIFICA	DATA	FIRME
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Dis. N. H14A24060CSA
CAD SPAC
File H14A.1/dwg
Data 24/07/2017

Impianto/Plant
H14A_240V.60Hz

Denominazione/Title
AUSILIARI INVERTER
Inverter Auxiliary Circuits

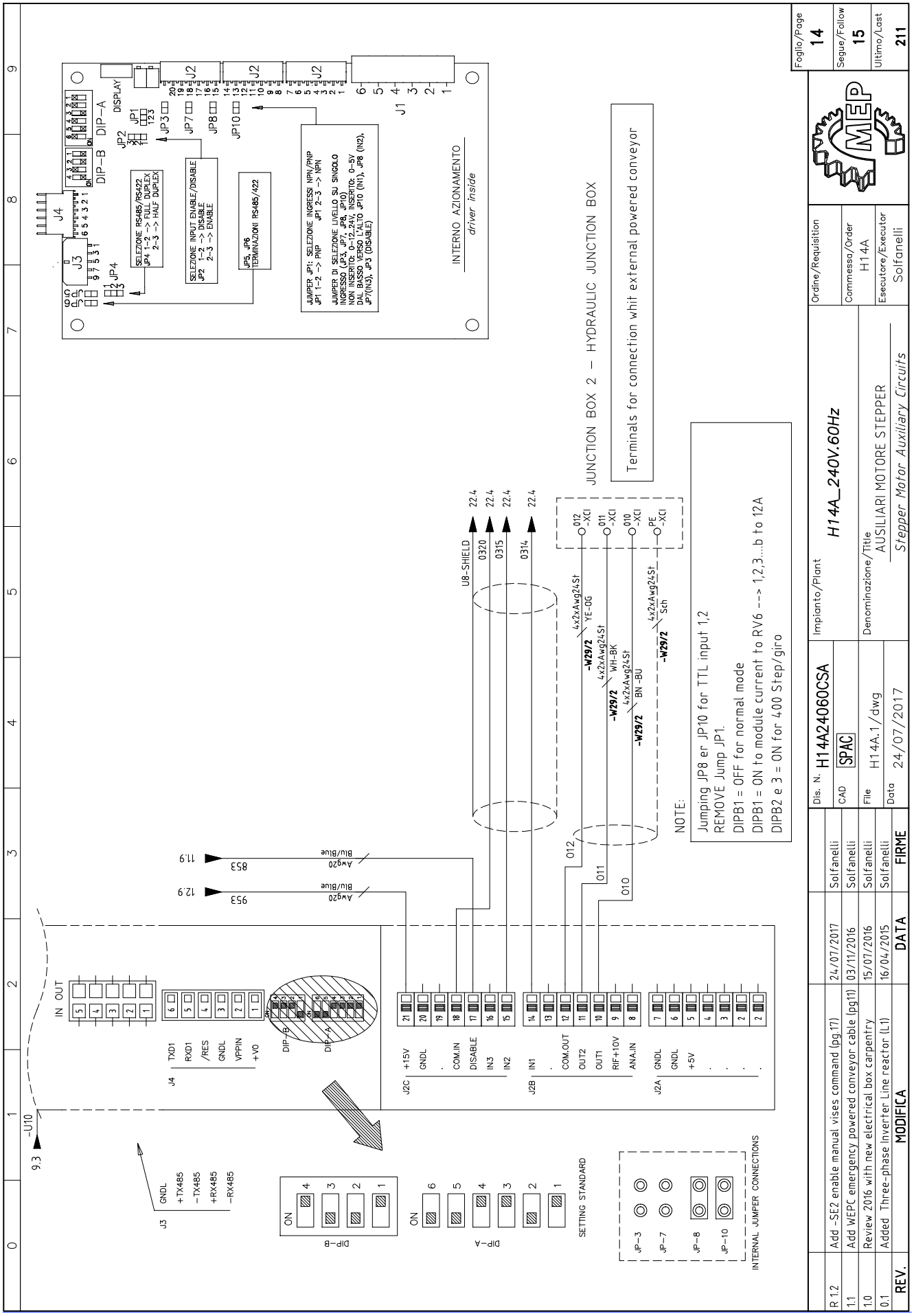
Ordine/Requisition

Commessa/Order
H14A

Esecutore/Executor
Solfanelli

MEP

Foglio/Page 13
Segue/Follow 14
Ultimo/Last 211


JUNCTION BOX 2 – HYDRAULIC JUNCTION BOX
Terminals for connection whit external powered conveyor
INTERNO AZIONAMENTO
driver inside
SELEZIONE RS485/RS422
JP4 1-2 -> FULL DUPLEX
2-3 -> HALF DUPLEX
SELEZIONE INPUT ENABLE/DISABLE
JP2 1-2 -> DISABLE
2-3 -> ENABLE
JP5, JP6
TERMINAZIONI RS485/422
JUMPER JP1: SELEZIONE INGRESSI NPN/PNP
JP1 1-2 -> PNP
JP1 2-3 -> NPN
JUMPER DI SELEZIONE LIVELLO SU SINGOLO INGRESSO (JP3, JP7, JP8, JP10)
NON INSERITO: 0-12..24V, INSERITO: 0-5V
DAL BASSO VERSO L'ALTO JP10 (IN1), JP8 (IN2), JP7(IN3), JP3 (DISABLE)
NOTE:
Jumping JP8 er JP10 for TTL input 1,2
REMOVE Jump JP1.
DIPB1 = OFF for normal mode
DIPB1 = ON to module current to RV6 --> 1,2,3...b to 12A
DIPB2 e 3 = ON for 400 Step/giro
SETTING STANDARD
INTERNAL JUMPER CONNECTIONS
H14A_240V.60Hz
Stepper Motor Auxiliary Circuits
AUSILIARI MOTORE STEPPER
H14A24060CSA
H14A.1/dwg
24/07/2017
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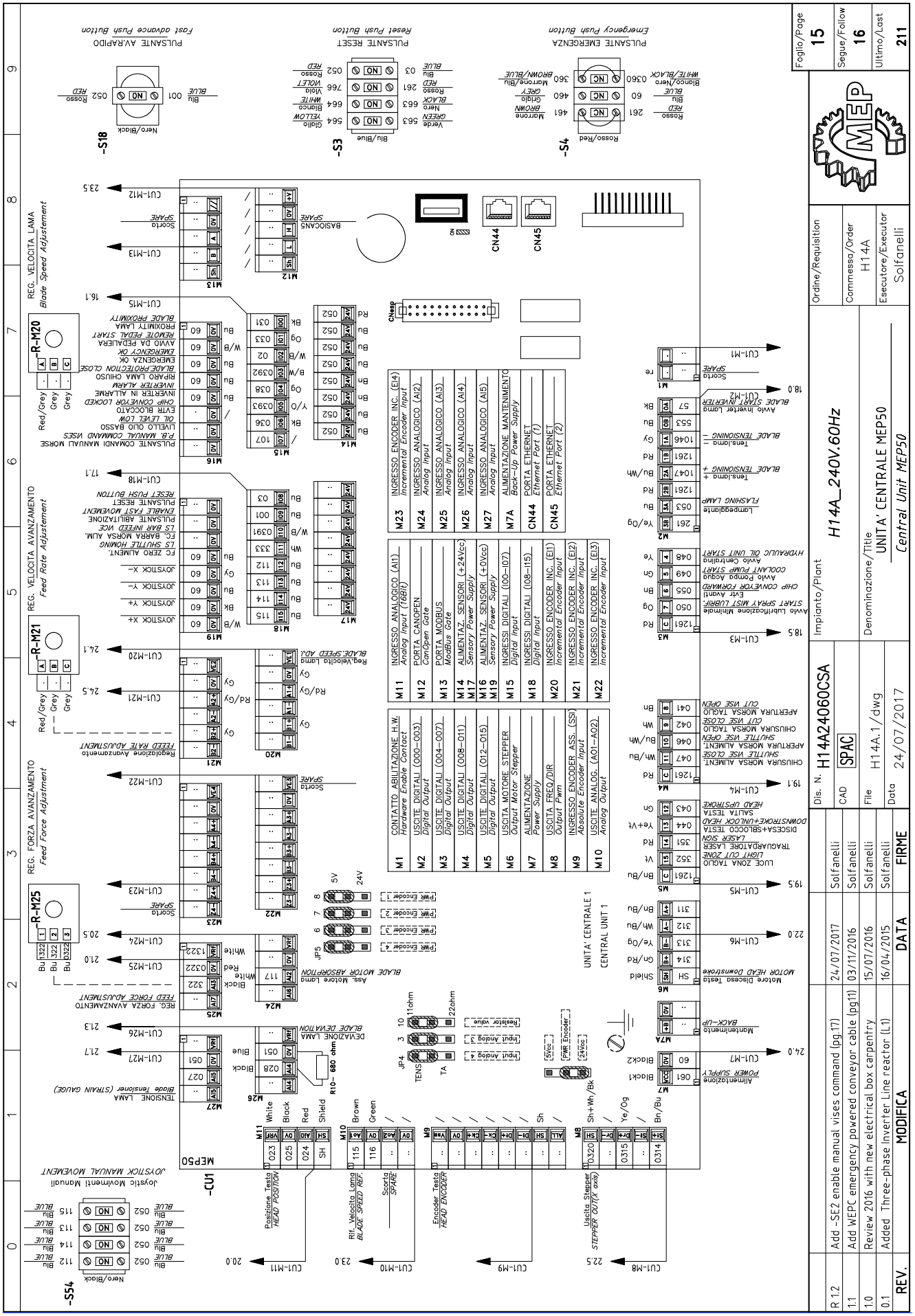
Segue/Follow 15
Ultimo/Last 211
Commessa/Order H14A
Esecutore/Executor Solfanelli
R 1.2 Add -SE2 enable manual vises command (pg 17) 24/07/2017 Solfanelli
1.1 Add WEPC emergency powered conveyor cable (pg11) 03/11/2016 Solfanelli
1.0 Review 2016 with new electrical box carpentry 15/07/2016 Solfanelli
0.1 Added Three-phase inverter Line reactor (L1) 16/04/2015 Solfanelli
REV. MODIFICA DATA FIRME


-CU1
MEP50
H14A_240V.60Hz
Impianto/Plant
Denominazione/Title
UNITA' CENTRALE MEP50
Central Unit MEP50
Dis. N. H14A24060CSA
CAD SPAC
File H14A.1/dwg
Data 24/07/2017
Ordine/Requisition
Commessa/Order H14A
Esecutore/Executor Solfanelli
Foglio/Page 15
Segue/Follow 16
Ultimo/Last 211
REV. MODIFICA DATA FIRME
0.1 Added Three-phase inverter Line reactor (L1) 16/04/2015 Solfanelli
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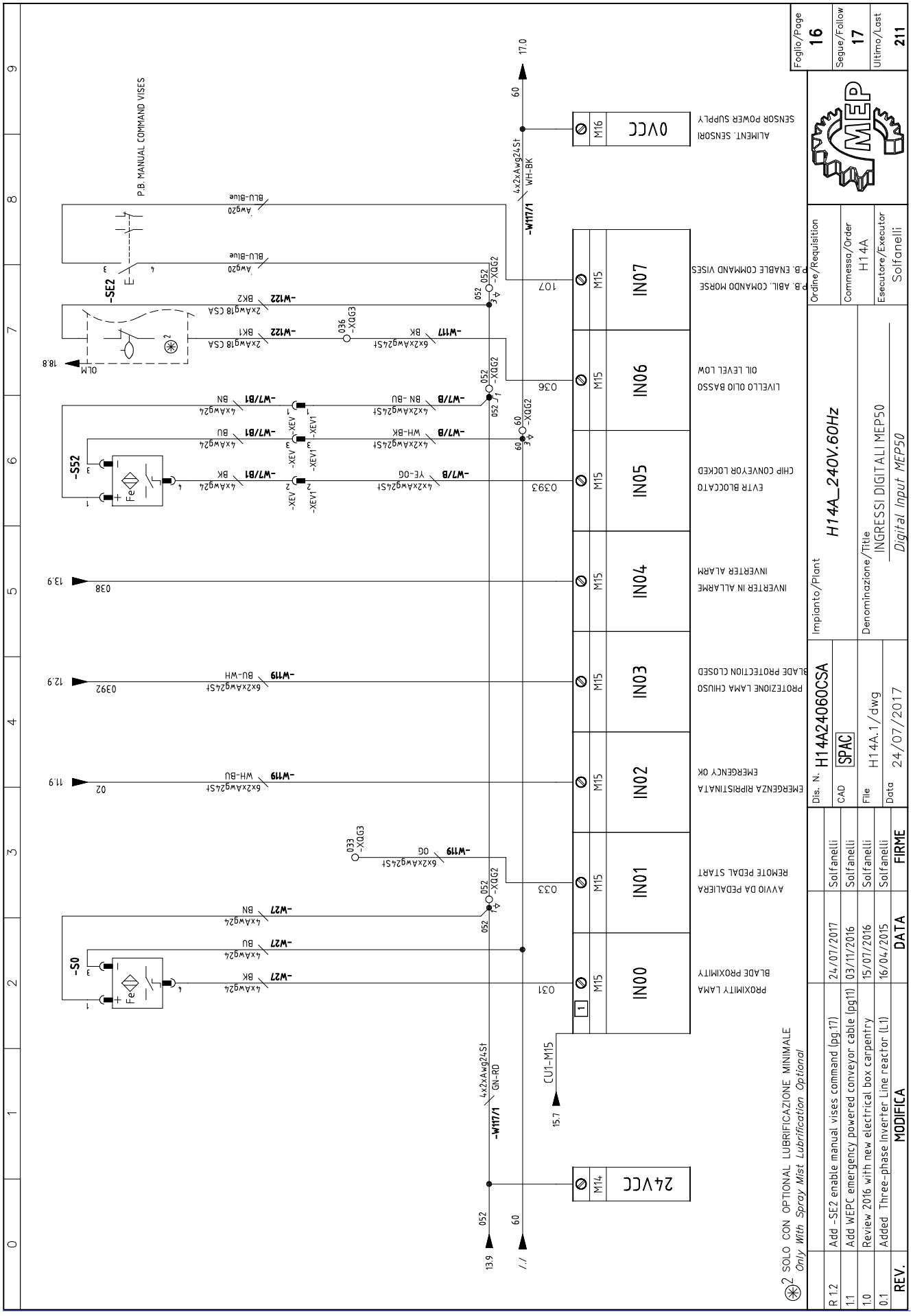
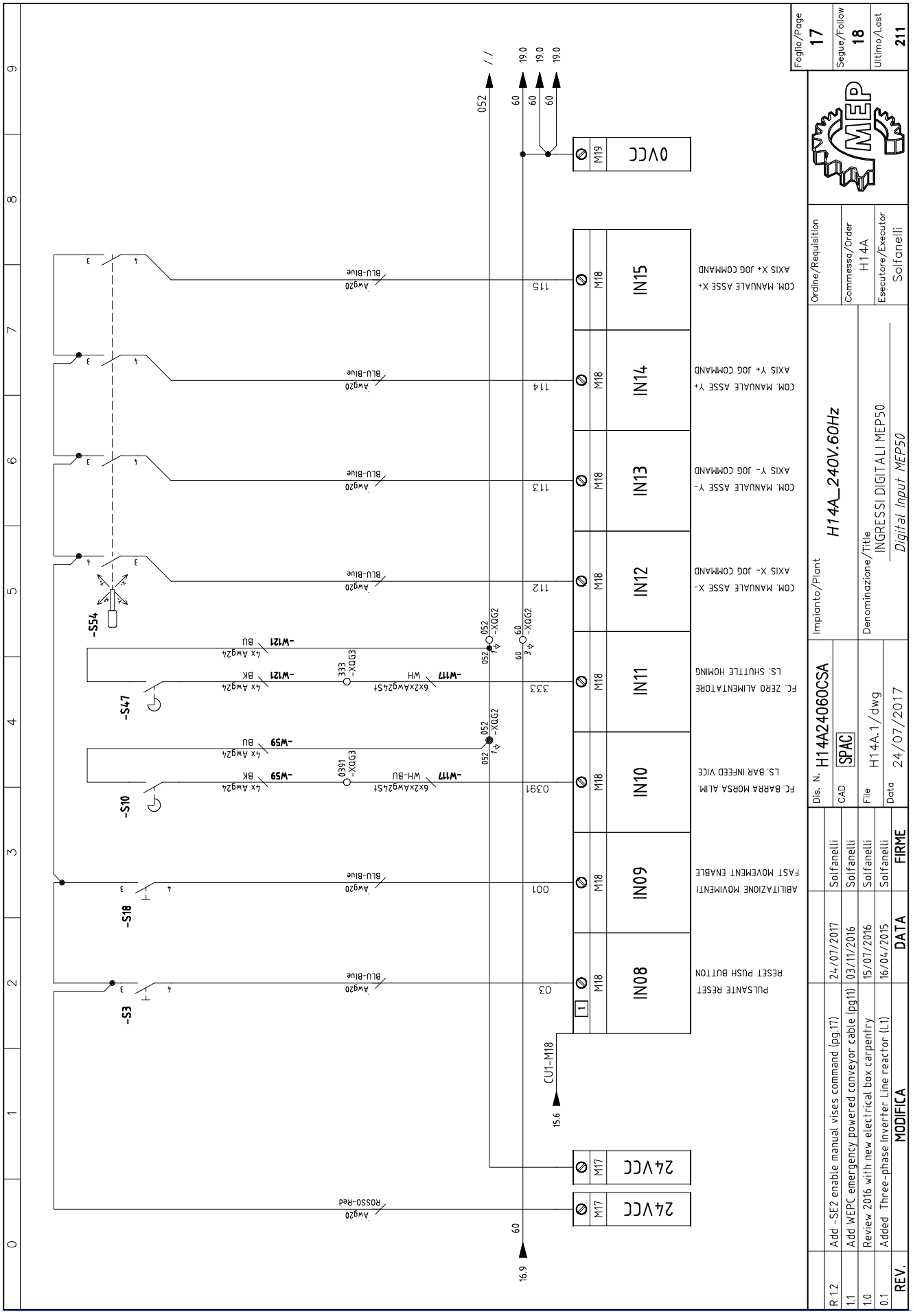
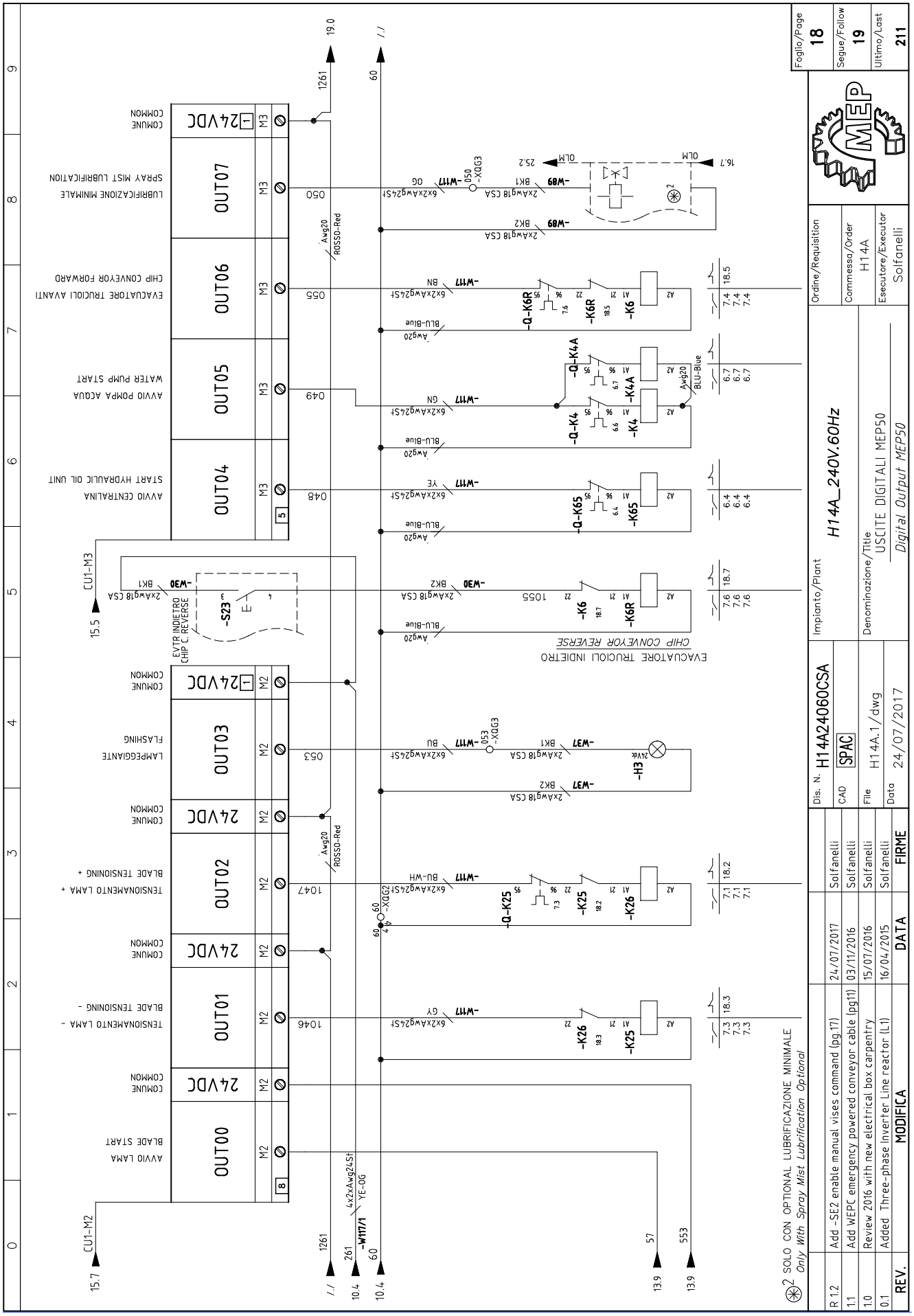
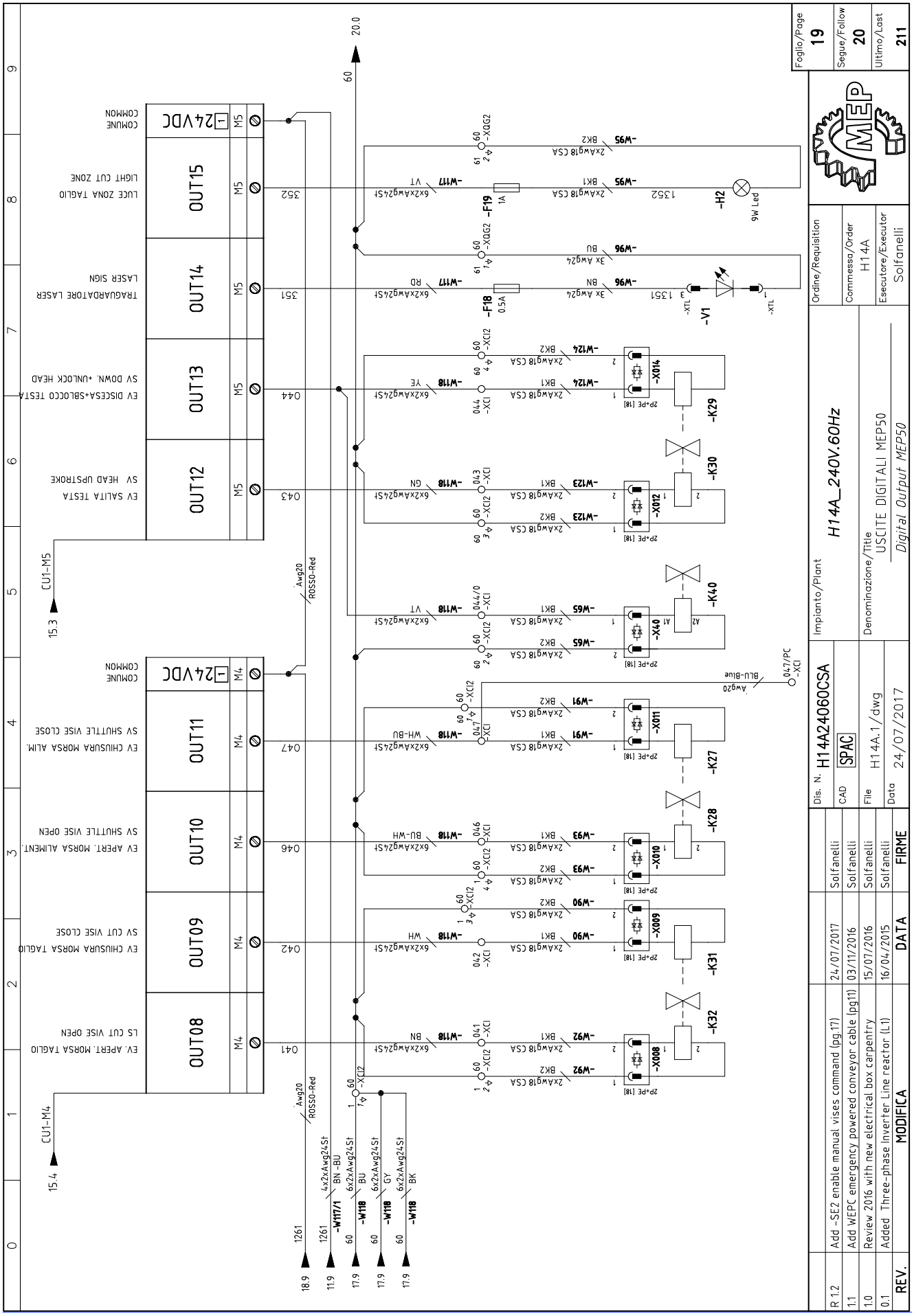
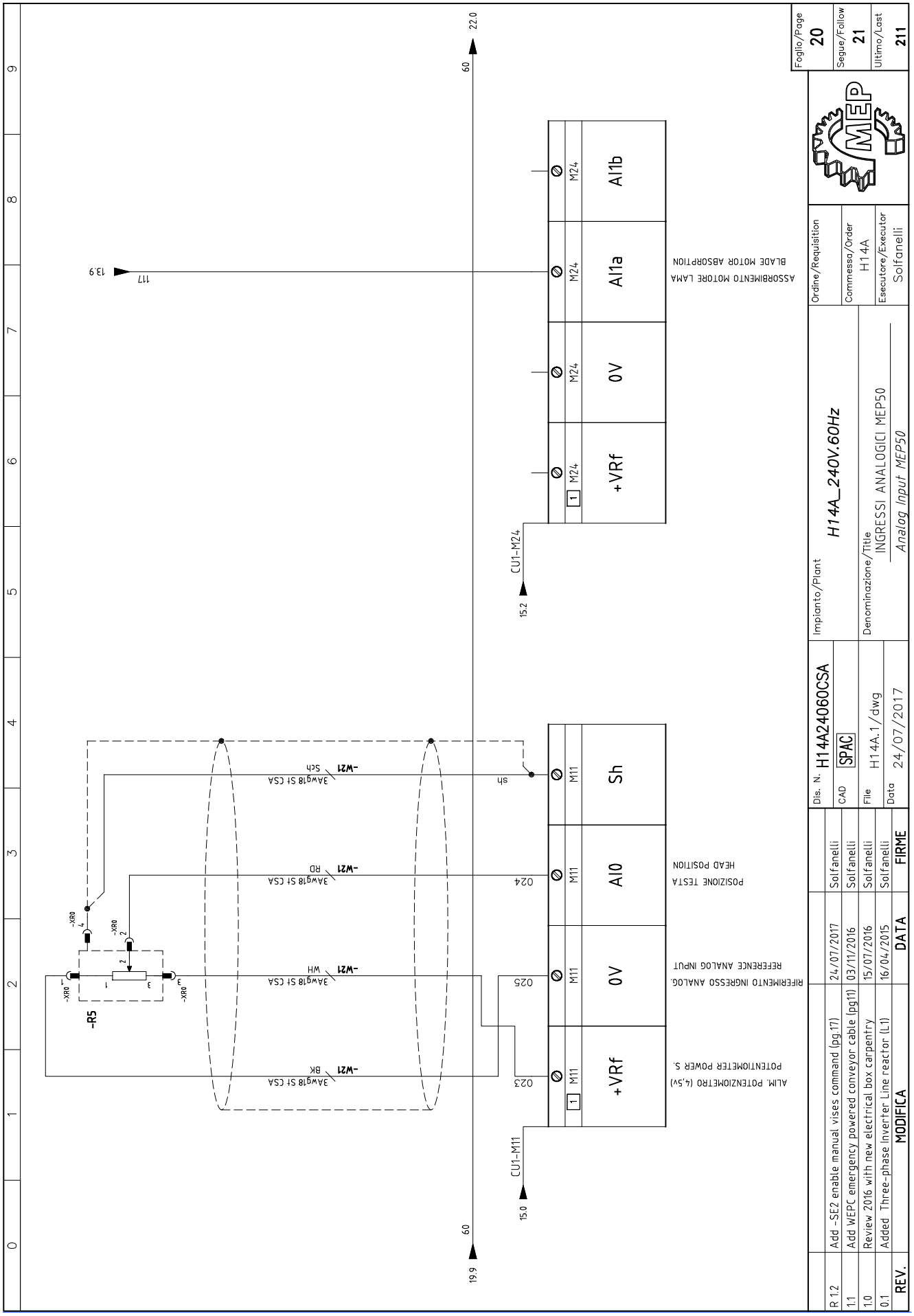
R 1.2 Add -SE2 enable manual vises command (pg17) 24/07/2017 Solfanelli
-S54 Joystic Movimenti Manuali JOYSTICK MANUAL MOVEMENT
-S18 PULSANTE AV.RAPIDO Fast advance Push Button
-S3 PULSANTE RESET Reset Push Button
-S4 PULSANTE EMERGENZA Emergency Push Button
R-M20 REG. VELOCITA LAMA Blade Speed Adjustement
R-M21 REG. VELOCITA AVANZAMENTO Feed Rate Adjustement
R-M25 REG. FORZA AVANZAMENTO Feed Force Adjustement
M1 CONTATTO ABILITAZIONE H.W. Hardware Enable Contact
M2 USCITE DIGITALI (000–003) Digital Output
M3 USCITE DIGITALI (004–007) Digital Output
M4 USCITE DIGITALI (008–011) Digital Output
M5 USCITE DIGITALI (012–015) Digital Output
M6 USCITA MOTORE STEPPER Output Motor Stepper
M7 ALIMENTAZIONE Power Supply
M8 USCITA FREQ./DIR Output Pwm
M9 INGRESSO ENCODER ASS. (SSI) Absolute Encoder Input
M10 USCITE ANALOG. (A01–A02) Analog Output
M11 INGRESSO ANALOGICO (AI1) Analog Input (16Bit)
M12 PORTA CANOPEN CanOpen Gate
M13 PORTA MODBUS ModBus Gate
M14 ALIMENTAZ. SENSORI (+24Vcc)
M17 Sensory Power Supply
M16 ALIMENTAZ. SENSORI (+0Vcc)
M19 Sensory Power Supply
M15 INGRESSI DIGITALI (100–107) Digital Input
M18 INGRESSI DIGITALI (108–115) Digital Input
M20 INGRESSO ENCODER INC. (EI1) Incremental Encoder Input
M21 INGRESSO ENCODER INC. (EI2) Incremental Encoder Input
M22 INGRESSO ENCODER INC. (EI3) Incremental Encoder Input
M23 INGRESSO ENCODER INC. (EI4) Incremental Encoder Input
M24 INGRESSO ANALOGICO (AI2) Analog Input
M25 INGRESSO ANALOGICO (AI3) Analog Input
M26 INGRESSO ANALOGICO (AI4) Analog Input
M27 INGRESSO ANALOGICO (AI5) Analog Input
M7A ALIMENTAZIONE MANTENIMENTO Back-Up Power Supply
CN44 PORTA ETHERNET Ethernet Port (1)
CN45 PORTA ETHERNET Ethernet Port (2)
UNITA' CENTRALE 1 CENTRAL UNIT 1
TENSIONE LAMA Blade Tensioner (STRAIN GAUGE)
DEVIAZIONE LAMA BLADE DEVIATION
R10– 680 ohm
JP4 TENS TA
11ohm 22ohm
Resistor value
Input Analog 3
Input Analog 4
5Vcc PWR Encoder 24Vcc
JP5 5V 24V
PWR Encoder 1
PWR Encoder 2
PWR Encoder 3
PWR Encoder 4
Posizione Testa HEAD POSITION
Rif. Velocita Lama BLADE SPEED REF.
Scorta SPARE
Encoder Testa HEAD ENCODER
Uscita Stepper STEPPER OUT(X axis)
CU1-M11 CU1-M10 CU1-M9 CU1-M8
20.0 23.0 22.5
CN44 CN45 CNesp
BASICCANS SPARE
CU1-M12 CU1-M13 CU1-M15
23.5 16.1 17.1
CU1-M18 CU1-M20 CU1-M21
24.1 24.5
CU1-M22 CU1-M23 CU1-M24
20.5 21.0
CU1-M25 CU1-M26 CU1-M27
21.3 21.7
CU1-M7 CU1-M6 CU1-M5 CU1-M4 CU1-M3 CU1-M2 CU1-M1
24.0 22.0 19.5 19.1 18.5 18.0
Alimentazione POWER SUPPLY
Mantenimento BACK-UP
Motore Disesa Testa MOTOR HEAD Downstroke
LUCE ZONA TAGLIO LIGHT CUT ZONE
TRASDUTTORE LASER LASER SIGN
DISCESA+SBLOCCO TESTA DOWNSTROKE+UNLOCK HEAD
SALITA TESTA HEAD UPSTROKE
CHIUSURA MORSA ALLMENT. SHUTTLE VISE CLOSE
APERTURA MORSA ALLMENT. SHUTTLE VISE OPEN
CHIUSURA MORSA TAGLIO CUT VISE CLOSE
APERTURA MORSA TAGLIO CUT VISE OPEN
Avvio lubrificazione Minimale START SPRAY MIST LUBRIF.
Ext. Avanti CHIP CONVEYOR FORWARD
Avvio Pompa Acqua COOLANT PUMP START
Avvio Centralina HYDRAULIC OIL UNIT START
Lampeggiante FLASHING LAMP
Avvio Inverter Lama BLADE START INVERTER
Tens.lama + BLADE TENSIONING +
Tens.lama – BLADE TENSIONING –
Scorta SPARE
PULSANTE COMANDI MANUALI MORSE P.B. MANUAL COMMAND VISES
LIVELLO OLIO BASSO OIL LEVEL LOW
EVITA BLOCCATO CHIP CONVEYOR LOCKED
INVERTER IN ALLARME INVERTER ALARM
RIPARO LAMA CHIUSO BLADE PROTECTION CLOSE
EMERGENZA OK EMERGENCY OK
AVVIO DA PEDALIERA REMOTE PEDAL START
PROSSIMITY LAMA BLADE PROXIMITY
JOYSTICK X+ JOYSTICK X– JOYSTICK Y+ JOYSTICK Y–
FC ZERO ALIMENT. FC BARRA MORSA ALM. LS SHUTTLE HOMING LS BAR INFEED VICE
ENABLE FAST MOVEMENT PULSANTE FAST ABILITAZIONE
PULSANTE RESET RESET PUSH BUTTON
Reg.Velocità Lama BLADE SPEED ADJ.
Regolazione Avanzamento FEED RATE ADJUSTMENT
REG. FORZA AVANZAMENTO FEED FORCE ADJUSTMENT
Ass. Motore Lama BLADE MOTOR ABSORPTION
Motore Lama BLADE MOTOR
Scorta SPARE
Mancanza Aria AIR MISSING
Encoder Lama BLADE ENCODER
Encoder Morsa VISE ENCODER
Encoder Testa HEAD ENCODER
Sonda Temperatura TEMPERATURE PROBE
Sonda Temperatura Motore Lama BLADE MOTOR TEMPERATURE PROBE
Sonda Temperatura Motore Testa HEAD MOTOR TEMPERATURE PROBE
Sonda Temperatura Motore Morsa VISE MOTOR TEMPERATURE PROBE
Sonda Temperatura Motore Stepper STEPPER MOTOR TEMPERATURE PROBE
Sonda Temperatura Motore Trasporto Truciolo CHIP CONVEYOR MOTOR TEMPERATURE PROBE
Sonda Temperatura Motore Trasporto Barra BAR FEEDER

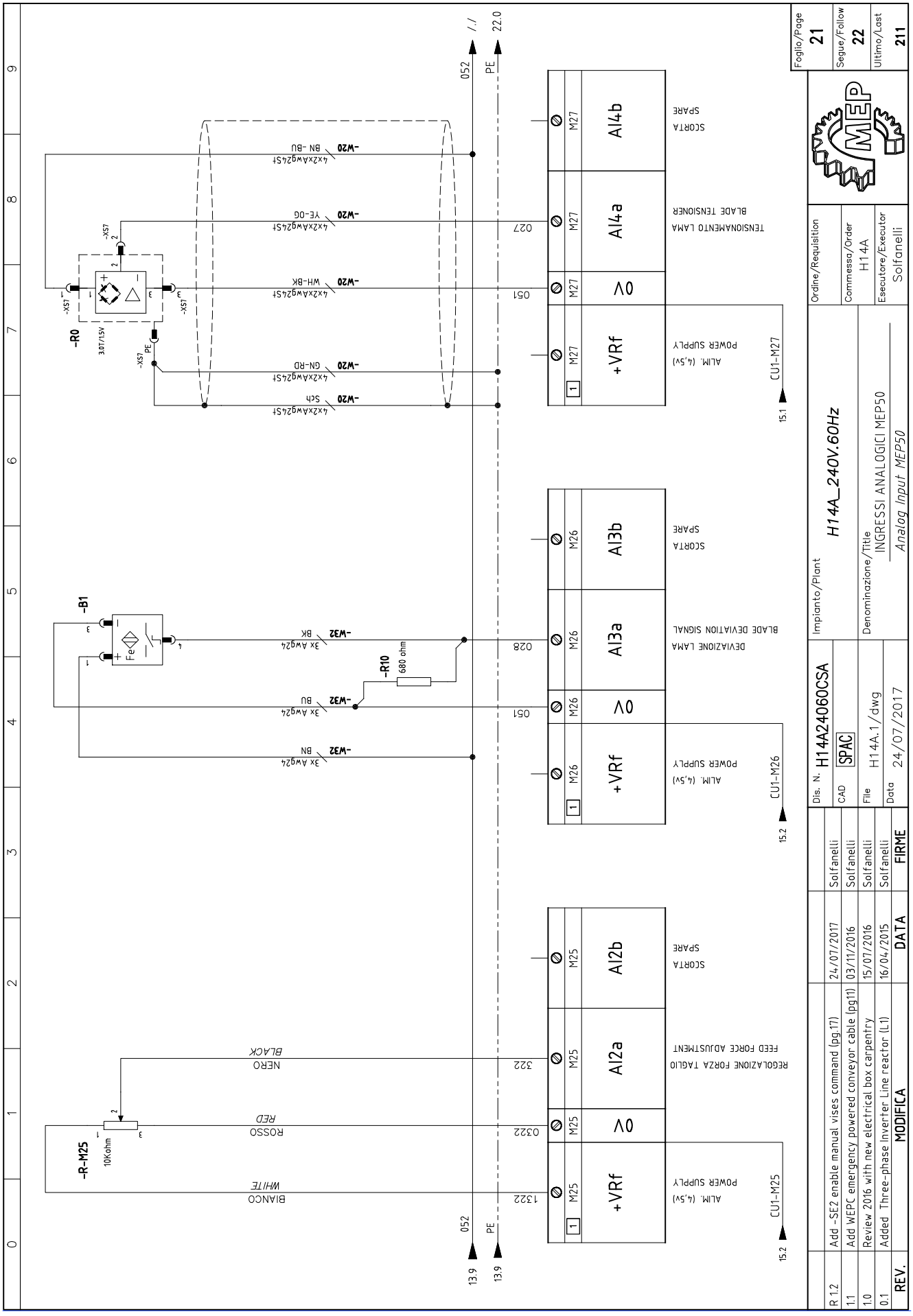

Foglio/Page 16
Segue/Follow 17
Ultimo/Last 211
Impianto/Plant
H14A_240V.60Hz
Denominazione/Title
INGRESSI DIGITALI MEP50
Digital Input MEP50
Ordine/Requisition
Commessa/Order H14A
Esecutore/Executor Solfanelli
Dis. N. H14A24060CSA
CAD SPAC
File H14A.1/dwg
Data 24/07/2017
SOLO CON OPTIONAL LUBRIFICAZIONE MINIMALE
Only With Spray Mist Lubrification Optional
REV. MODIFICA DATA FIRME
R 1.2 Add -SE2 enable manual vises command (pg 17) 24/07/2017 Solfanelli
1.1 Add WEPC emergency powered conveyor cable (pg11) 03/11/2016 Solfanelli
1.0 Review 2016 with new electrical box carpentry 15/07/2016 Solfanelli
0.1 Added Three-phase inverter Line reactor (L1) 16/04/2015 Solfanelli
IN00 PROXIMITY LAMA BLADE PROXIMITY
IN01 AVVIO DA PEDALIERA REMOTE PEDAL START
IN02 EMERGENZA RIPRISTINATA EMERGENCY OK
IN03 PROTEZIONE LAMA CHIUSO BLADE PROTECTION CLOSED
IN04 INVERTER IN ALLARME INVERTER ALARM
IN05 EVTR BLOCCATO CHIP CONVEYOR LOCKED
IN06 LIVELLO OLIO BASSO OIL LEVEL LOW
IN07 P.B. ABIL. COMANDO MORSE P.B. ENABLE COMMAND VISES
0VCC SENSOR POWER SUPPLY ALIMENT. SENSORI
24VCC
-W117/1 4x2xAwg24St WH-BK
-W117/1 4x2xAwg24St GN-RD
-W119 6x2xAwg24St WH-BU
-W119 6x2xAwg24St BU-WH
-W119 6x2xAwg24St OG
-W27 4xAwg24 BK
-W27 4xAwg24 BU
-W27 4xAwg24 BN
-W117 6x2xAwg24St BK
-W122 2xAwg18 CSA BK1
-W122 2xAwg18 CSA BK2
-W7/8 4x2xAwg24St YE-OG
-W7/8 4x2xAwg24St WH-BK
-W7/8 4x2xAwg24St BN-BU
-W7/B1 4xAwg24 BK
-W7/B1 4xAwg24 BU
-W7/B1 4xAwg24 BN
-W122 Awg20 BLU-Blue
-W122 Awg20 BLU-Blue
-SE2
-SS2
-SO
-XEV
-XEV1
-XQG2
-XQG3
P.B. MANUAL COMMAND VISES
SENSOR POWER SUPPLY
OIL LEVEL LOW
CHIP CONVEYOR LOCKED
INVERTER ALARM
BLADE PROTECTION CLOSED
EMERGENCY OK
REMOTE PEDAL START
BLADE PROXIMITY
CU1-M15

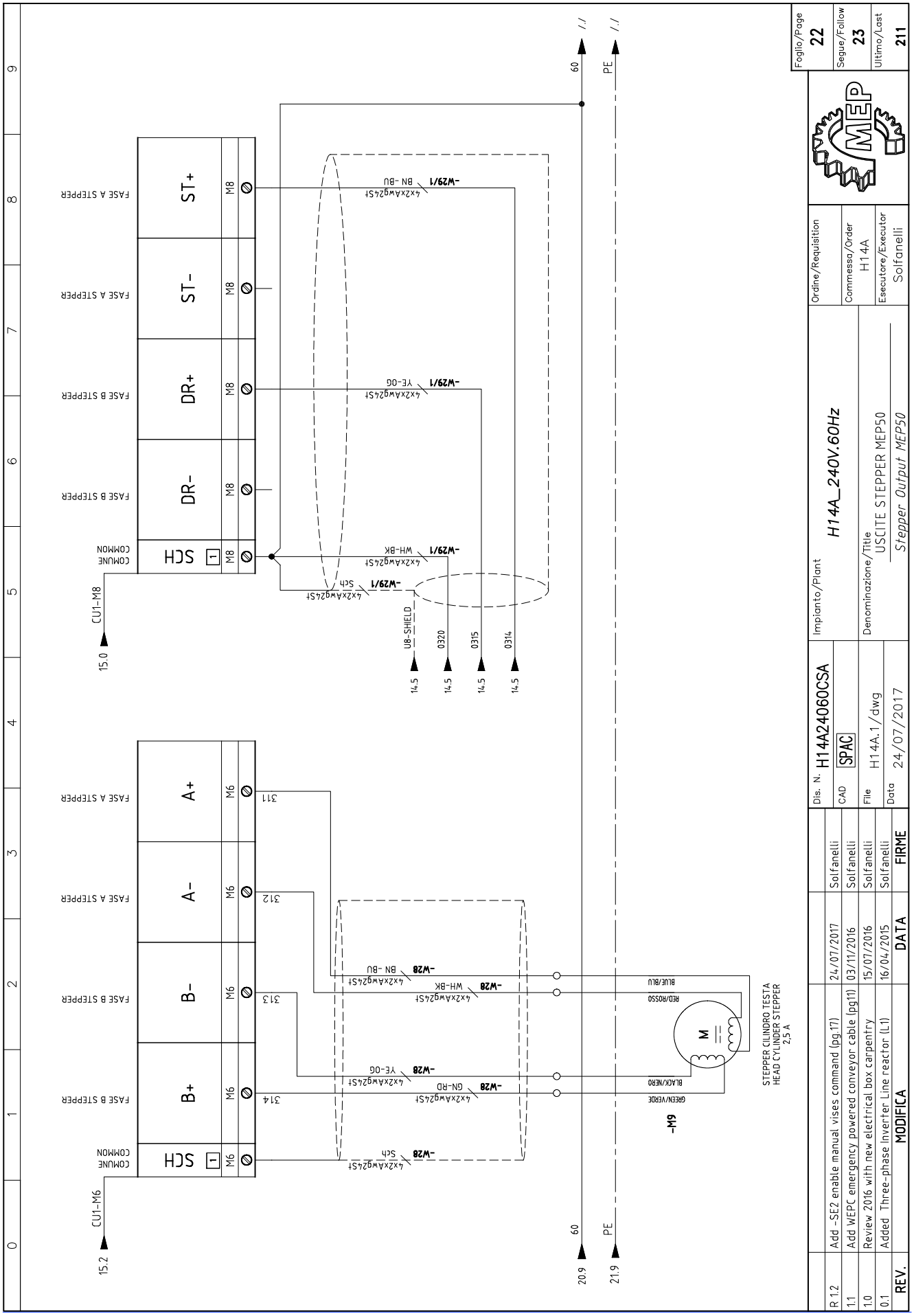

Foglio/Page 17
Segue/Follow 18
Ultimo/Last 211
Ordine/Requisition
Commessa/Order H14A
Esecutore/Executor Solfanelli
Impianto/Plant H14A_240V.60Hz
Denominazione/Title INGRESSI DIGITALI MEP50
Digital Input MEP50
Dis. N. H14A24060CSA
CAD SPAC
File H14A.1/dwg
Data 24/07/2017
R 1.2 Add -SE2 enable manual vises command (pg.17) 24/07/2017 Solfanelli
1.1 Add WEPC emergency powered conveyor cable (pg11) 03/11/2016 Solfanelli
1.0 Review 2016 with new electrical box carpentry 15/07/2016 Solfanelli
0.1 Added Three-phase inverter Line reactor (L1) 16/04/2015 Solfanelli
REV. MODIFICA DATA FIRME
0VCC
24VCC
24VCC
IN15
IN14
IN13
IN12
IN11
IN10
IN09
IN08
COM. MANUALE ASSE X+ AXIS X+ JOG COMMAND
COM. MANUALE ASSE Y+ AXIS Y+ JOG COMMAND
COM. MANUALE ASSE Y- AXIS Y- JOG COMMAND
COM. MANUALE ASSE X- AXIS X- JOG COMMAND
FC. ZERO ALIMENTATORE LS. SHUTTLE HOMING
FC. BARRA MORSA ALIM. LS. BAR INFEED VICE
ABILITAZIONE MOVIMENTI FAST MOVEMENT ENABLE
PULSANTE RESET RESET PUSH BUTTON
-S54
-S47
-S10
-S18
-S3
-W117
-W121
-W59
-XQG2
-XQG3
CU1-M18
4x Awg24
6x2xAwg24St
Awg20 BLU-Blue
Awg20 ROSSO-Red

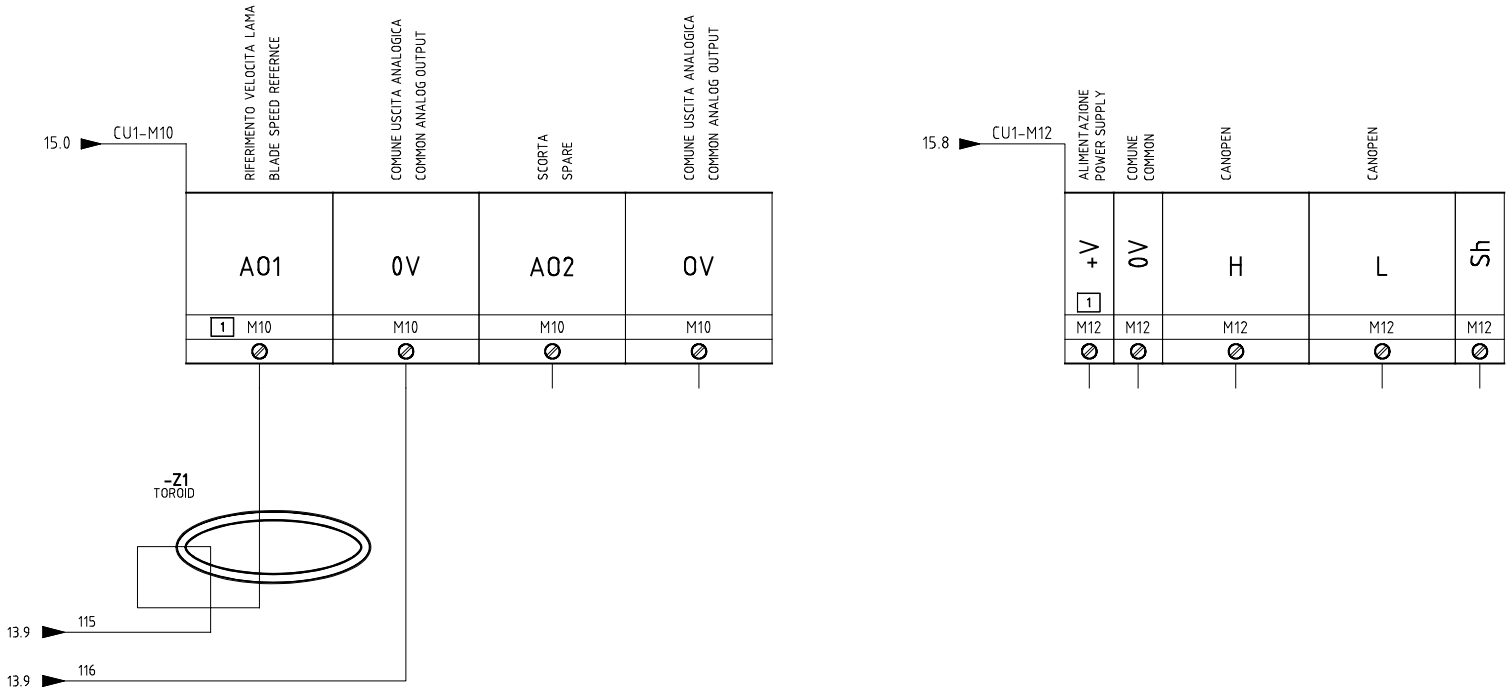

OUT00
OUT01
OUT02
OUT03
OUT04
OUT05
OUT06
OUT07
24VDC
COMMON
AVVIO LAMA
BLADE START
TENSIONAMENTO LAMA -
BLADE TENSIONING -
TENSIONAMENTO LAMA +
BLADE TENSIONING +
LAMPEGGIANTE
FLASHING
AVVIO CENTRALINA
START HYDRAULIC OIL UNIT
AVVIO POMPA ACQUA
WATER PUMP START
EVACUATORE TRUCIOLI AVANTI
CHIP CONVEYOR FORWARD
LUBRIFICAZIONE MINIMALE
SPRAY MIST LUBRIFICATION
EVACUATORE TRUCIOLI INDIETRO
CHIP CONVEYOR REVERSE
-S23
EVTR INDIETRO
CHIP C. REVERSE
-H3
-K4
-K4A
-K6
-K6R
-K25
-K26
-K65
-Q-K4
-Q-K4A
-Q-K6R
-Q-K25
-Q-K65
-W30
-W37
-W89
-W117
-XQG3
-XQG2
CU1-M2
CU1-M3
-W117/1
4x2xAwg24St
YE-OG
Awg20
ROSSO-Red
BLU-Blue
2x4Awg18 CSA
6x2xAwg24St
OLM
SOLO CON OPTIONAL LUBRIFICAZIONE MINIMALE
Only With Spray Mist Lubrification Optional
H14A_240V.60Hz
USCITE DIGITALI MEP50
Digital Output MEP50
H14A24060CSA
SPAC
H14A.1/dwg
24/07/2017
Foglio/Page 18
Segue/Follow 19
Ultimo/Last 211
Add -SE2 enable manual vises command (pg.17)
Add WEPC emergency powered conveyor cable (pg11)
Review 2016 with new electrical box carpentry
Added Three-phase inverter Line reactor (L1)
MODIFICA
DATA
FIRME


Foglio/Page 19
Segue/Follow 20
Ultimo/Last 211
Ordine/Requisition
Commessa/Order H14A
Esecutore/Executor Solfanelli
Impianto/Plant H14A_240V.60Hz
Denominazione/Title USCITE DIGITALI MEP50
Digital Output MEP50
Dis. N. H14A24060CSA
CAD SPAC
File H14A.1/dwg
Data 24/07/2017
R 1.2 Add -SE2 enable manual vises command (pg.17) 24/07/2017 Solfanelli
1.1 Add WEPC emergency powered conveyor cable (pg11) 03/11/2016 Solfanelli
1.0 Review 2016 with new electrical box carpentry 15/07/2016 Solfanelli
0.1 Added Three-phase inverter Line reactor (L1) 16/04/2015 Solfanelli
REV. MODIFICA DATA FIRME
OUT08 OUT09 OUT10 OUT11 OUT12 OUT13 OUT14 OUT15
24VDC COMUNE COMMON
EV. APERT. MORSA TAGLIO LS CUT VISE OPEN
EV CHIUSURA MORSA TAGLIO SV CUT VISE CLOSE
EV APERT. MORSA ALIMENT. SV SHUTTLE VISE OPEN
EV CHIUSURA MORSA ALIM. SV SHUTTLE VISE CLOSE
EV SALITA TESTA SV HEAD UPSTROKE
EV DISCESA+SBLOCCO TESTA SV DOWN. +UNLOCK HEAD
TRAGUARDATORE LASER LASER SIGN
LUCE ZONA TAGLIO LIGHT CUT ZONE
-K27 -K28 -K31 -K32 -K29 -K30 -K40
-X011 -X010 -X009 -X008 -X014 -X012 -X40
-W91 -W93 -W90 -W92 -W124 -W123 -W65
-W118 -W117 -W95 -W96
-F18 0.5A -F19 1A
-V1 -H2 9W Led
-W117/1 -W118
CU1-M4 CU1-M5
Awg20 ROSSO-Red
Awg20 BLU-Blue
4x2xAwg24St BN-BU
6x2xAwg24St BU
6x2xAwg24St GY
6x2xAwg24St BK
6x2xAwg24St
2x4xAwg18 CSA
3x Awg24
2P+PE (18)
20.0
15.3
15.4
18.9
11.9
17.9
17.9
17.9


Foglio/Page 20
Segue/Follow 21
Ultimo/Last 211
Impianto/Plant H14A_240V.60Hz
Ordine/Requisition
Commessa/Order H14A
Esecutore/Executor Solfanelli
Denominazione/Title INGRESSI ANALOGICI MEP50
Analog Input MEP50
Dis. N. H14A24060CSA
CAD SPAC
File H14A.1/dwg
Data 24/07/2017
REV. MODIFICA DATA FIRME
R 1.2 Add -SE2 enable manual vises command (pg 17) 24/07/2017 Solfanelli
1.1 Add WEPC emergency powered conveyor cable (pg11) 03/11/2016 Solfanelli
1.0 Review 2016 with new electrical box carpentry 15/07/2016 Solfanelli
0.1 Added Three-phase inverter Line reactor (L1) 16/04/2015 Solfanelli
ASSORBIMENTO MOTORE LAMA
BLADE MOTOR ABSORPTION
Al1a
Al1b
0V
+VRf
M24
CU1-M24
15.2
POSIZIONE TESTA
HEAD POSITION
Al0
Sh
M11
CU1-M11
15.0
RIFERIMENTO INGRESSO ANALOG.
REFERENCE ANALOG INPUT
POTENZIOMETRO POWER S.
ALIM. POTENZIOMETRO (4,5V)
-R5
-W21
3Awg18 St CSA
WH
RD
BK
Sch
-XR0
-SE2
22.0
19.9
13.9
117
60
024
025
023


Foglio/Page 21
Segue/Follow 22
Ultimo/Last 211
Ordine/Requisition
Commessa/Order H14A
Esecutore/Executor Solfanelli
Impianto/Plant H14A_240V.60Hz
Denominazione/Title INGRESSI ANALOGICI MEP50
Analog Input MEP50
Dis. N. H14A24060CSA
CAD SPAC
File H14A.1/dwg
Data 24/07/2017
R 1.2 Add -SE2 enable manual vises command (pg17) 24/07/2017 Solfanelli
1.1 Add WEPC emergency powered conveyor cable (pg11) 03/11/2016 Solfanelli
1.0 Review 2016 with new electrical box carpentry 15/07/2016 Solfanelli
0.1 Added Three-phase inverter Line reactor (L1) 16/04/2015 Solfanelli
REV. MODIFICA DATA FIRME
+VRf
POWER SUPPLY
ALIM. (4,5V)
CU1-M25
CU1-M26
CU1-M27
AI2a
AI2b
AI3a
AI3b
AI4a
AI4b
SPARE
SCORTA
REGOLAZIONE FORZA TAGLIO
FEED FORCE ADJUSTMENT
DEVIAZIONE LAMA
BLADE DEVIATION SIGNAL
TENSIONAMENTO LAMA
BLADE TENSIONER
-R-M25
10Kohm
-R10
680 ohm
-R0
-B1
-W2
-W20
-XS7
BIANCO
WHITE
ROSSO
RED
NERO
BLACK
052
PE
13.9
15.1
15.2
22.0


Foglio/Page 22
Segue/Follow 23
Ultimo/Last 211
Ordine/Requisition
Commessa/Order H14A
Esecutore/Executor Solfanelli
Impianto/Plant H14A_240V.60Hz
Denominazione/Title USCITE STEPPER MEP50
Stepper Output MEP50
Dis. N. H14A24060CSA
CAD SPAC
File H14A.1/dwg
Data 24/07/2017
REV. MODIFICA DATA FIRME
R 1.2 Add -SE2 enable manual vises command (pg 17) 24/07/2017 Solfanelli
1.1 Add WEPC emergency powered conveyor cable (pg11) 03/11/2016 Solfanelli
1.0 Review 2016 with new electrical box carpentry 15/07/2016 Solfanelli
0.1 Added Three-phase inverter Line reactor (L1) 16/04/2015 Solfanelli
SCH
A+
A-
B-
B+
DR-
DR+
ST-
ST+
M6
M8
FASE A STEPPER
FASE B STEPPER
COMUNE COMMON
CU1-M6
CU1-M8
15.2
15.0
20.9
21.9
60
PE
-W28
-W29/1
-M9
STEPPER CILINDRO TESTA
HEAD CYLINDER STEPPER
2,5 A



REV.	MODIFICA	DATA	FIRME
R 1.2	Add -SE2 enable manual vises command (pg.17)	24/07/2017	Solfanelli
1.1	Add WEPC emergency powered conveyor cable (pg11)	03/11/2016	Solfanelli
1.0	Review 2016 with new electrical box carpentry	15/07/2016	Solfanelli
0.1	Added Three-phase Inverter Line reactor (L1)	16/04/2015	Solfanelli

Dis. N. H14A24060CSA
CAD SPAC
File H14A.1/dwg
Data 24/07/2017

Impianto/Plant
H14A_240V.60Hz

Denominazione/Title
USCITA ANALOGICA E SERIALE MEP50
Analog Output and Serial MEP50

Ordine/Requisition
Commessa/Order H14A
Esecutore/Executor Solfanelli

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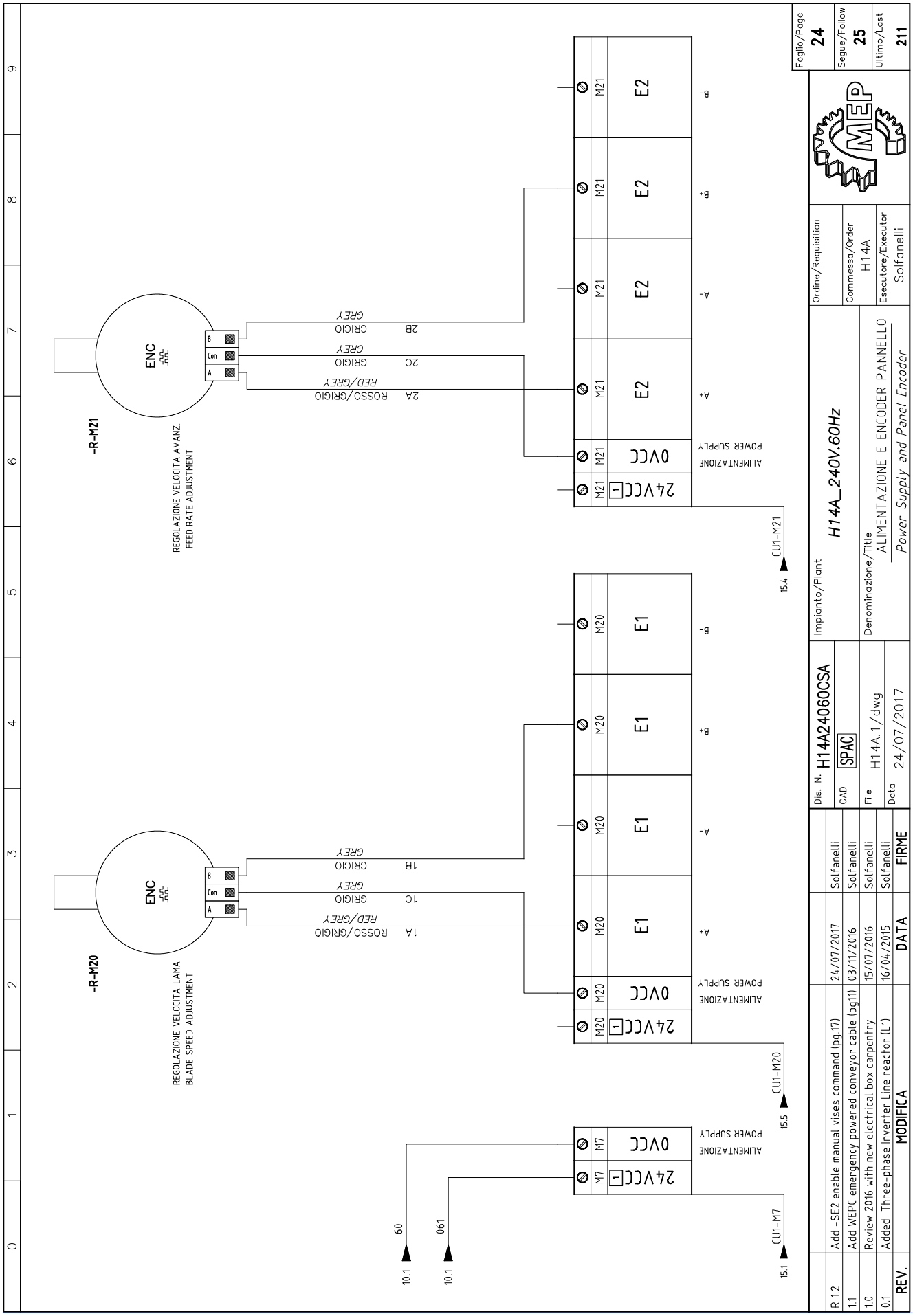
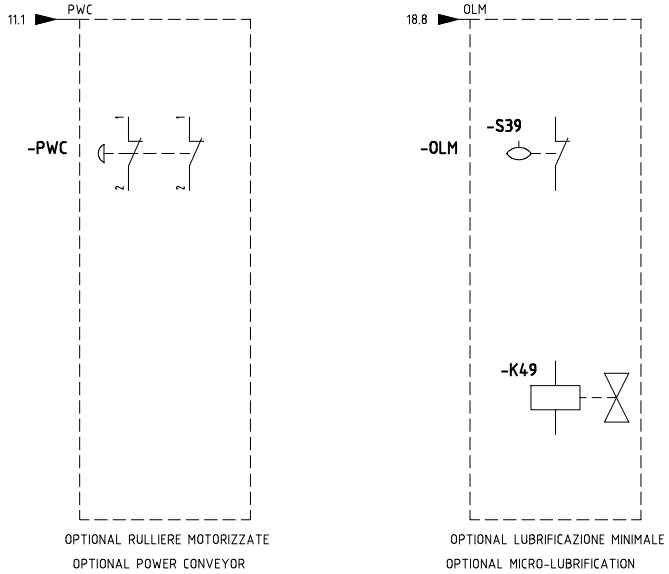
Segue/Follow 24
Ultimo/Last 211


-R-M21
ENC
REGOLAZIONE VELOCITA AVANZ.
FEED RATE ADJUSTMENT
2A ROSSO/GRIGIO RED/GREY
2C GRIGIO GREY
2B GRIGIO GREY
-R-M20
ENC
REGOLAZIONE VELOCITA LAMA
BLADE SPEED ADJUSTMENT
1A ROSSO/GRIGIO RED/GREY
1C GRIGIO GREY
1B GRIGIO GREY
ALIMENTAZIONE
POWER SUPPLY
24VCC
0VCC
M21
M20
M7
E1
E2
A+
A-
B+
B-
CU1-M21
CU1-M20
CU1-M7
15.4
15.5
15.1
10.1
60
61
Foglio/Page 24
Segue/Follow 25
Ultimo/Last 211
Ordine/Requisition
Commessa/Order H14A
Esecutore/Executor Solfanelli
Impianto/Plant
H14A_240V.60Hz
Denominazione/Title
ALIMENTAZIONE E ENCODER PANNELLO
Power Supply and Panel Encoder
Dis. N. H14A24060CSA
CAD SPAC
File H14A.1/dwg
Data 24/07/2017
REV. MODIFICA DATA FIRME
R 1.2 Add -SE2 enable manual vises command (pg 17) 24/07/2017 Solfanelli
1.1 Add WEPC emergency powered conveyor cable (pg11) 03/11/2016 Solfanelli
1.0 Review 2016 with new electrical box carpentry 15/07/2016 Solfanelli
0.1 Added Three-phase inverter Line reactor (L1) 16/04/2015 Solfanelli

0	1	2	3	4	5	6	7	8	9



OPTIONAL RULLIERE MOTORIZZATE
OPTIONAL POWER CONVEYOR

OPTIONAL LUBRIFICAZIONE MINIMALE
OPTIONAL MICRO-LUBRIFICATION

REV.	MODIFICA	DATA	FIRME
R 1.2	Add -SE2 enable manual vises command (pg.17)	24/07/2017	Solfanelli
1.1	Add WEPC emergency powered conveyor cable (pg11)	03/11/2016	Solfanelli
1.0	Review 2016 with new electrical box carpentry	15/07/2016	Solfanelli
0.1	Added Three-phase Inverter Line reactor (L1)	16/04/2015	Solfanelli

Dis. N. H14A24060CSA
CAD SPAC
File H14A.1/dwg
Data 24/07/2017

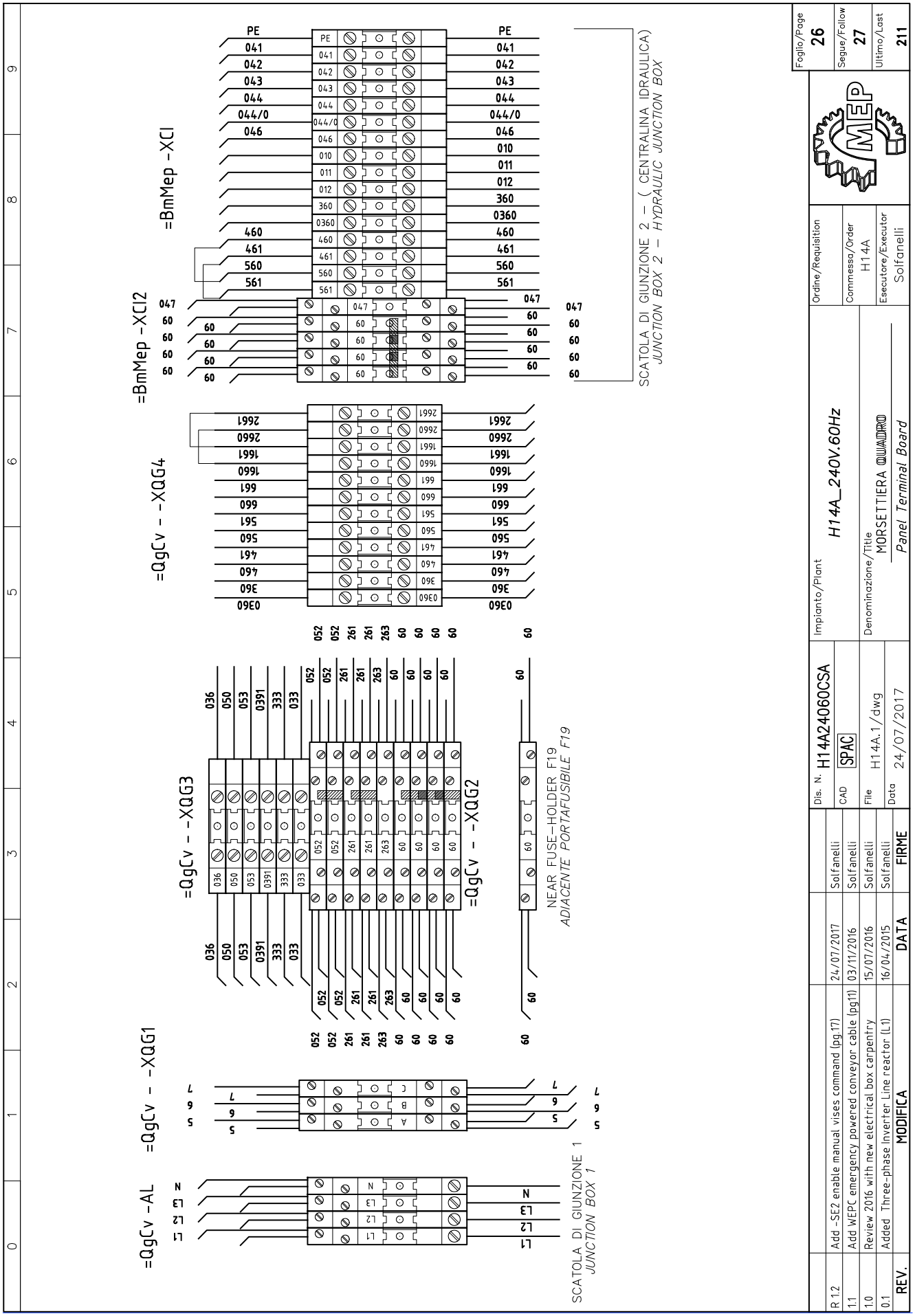
Impianto/Plant: *H14A_240V.60Hz*

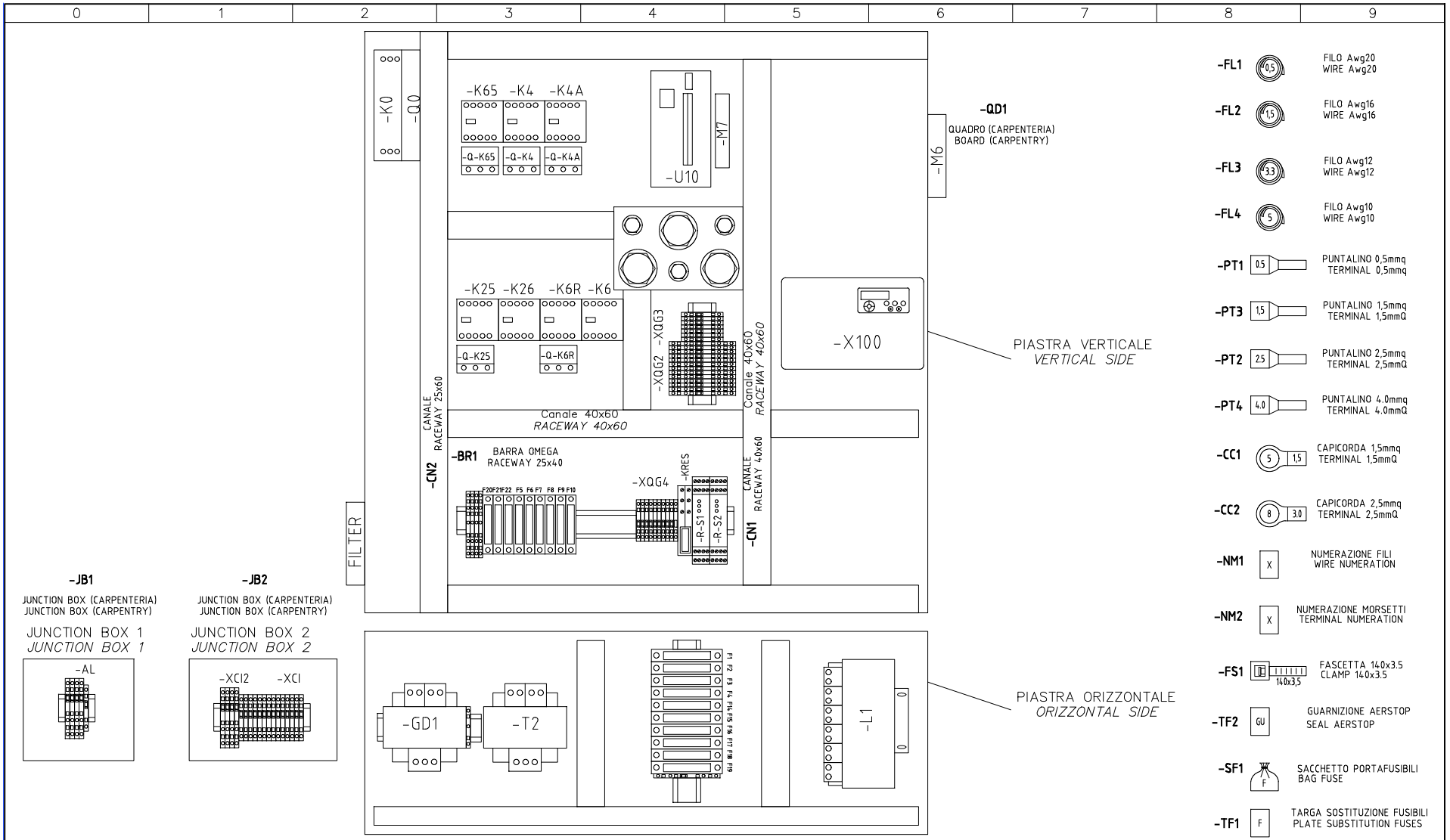
Denominazione/Title: OPTIONAL
Optional

Ordine/Requisition:
Commessa/Order: H14A
Esecutore/Executor: Solfanelli

MEP

Foglio/Page: 25
Segue/Follow: 26
Ultimo/Last: 211


=BmMep -XCI
=BmMep -XCI2
=QgCv - -XQG4
=QgCv - -XQG3
=QgCv - -XQG2
=QgCv - -XQG1
=QgCv -AL
SCATOLA DI GIUNZIONE 2 – (CENTRALINA IDRAULICA)
JUNCTION BOX 2 – HYDRAULIC JUNCTION BOX
NEAR FUSE-HOLDER F19
ADIACENTE PORTAFUSIBILE F19
SCATOLA DI GIUNZIONE 1
JUNCTION BOX 1
Foglio/Page 26
Segue/Follow 27
Ultimo/Last 211
Ordine/Requisition
Commessa/Order H14A
Esecutore/Executor Solfanelli
Impianto/Plant H14A_240V.60Hz
Denominazione/Title MORSETTIERA QUADRO
Panel Terminal Board
Dis. N. H14A24060CSA
CAD SPAC
File H14A.1/dwg
Data 24/07/2017
REV. MODIFICA DATA FIRME
R 1.2 Add -SE2 enable manual vises command (pg 17) 24/07/2017 Solfanelli
1.1 Add WEPC emergency powered conveyor cable (pg11) 03/11/2016 Solfanelli
1.0 Review 2016 with new electrical box carpentry 15/07/2016 Solfanelli
0.1 Added Three-phase inverter Line reactor (L1) 16/04/2015 Solfanelli



REV.	MODIFICA	DATA	FIRME
R 1.2	Add -SE2 enable manual vises command (pg.17)	24/07/2017	Solfanelli
1.1	Add WEPC emergency powered conveyor cable (pg11)	03/11/2016	Solfanelli
1.0	Review 2016 with new electrical box carpentry	15/07/2016	Solfanelli
0.1	Added Three-phase Inverter Line reactor (L1)	16/04/2015	Solfanelli

Dis. N. H14A24060CSA
CAD SPAC
File H14A.1/dwg
Data 24/07/2017

Impianto/Plant
H14A_240V.60Hz

Denominazione/Title
INTERNO QUADRO
Board Inside

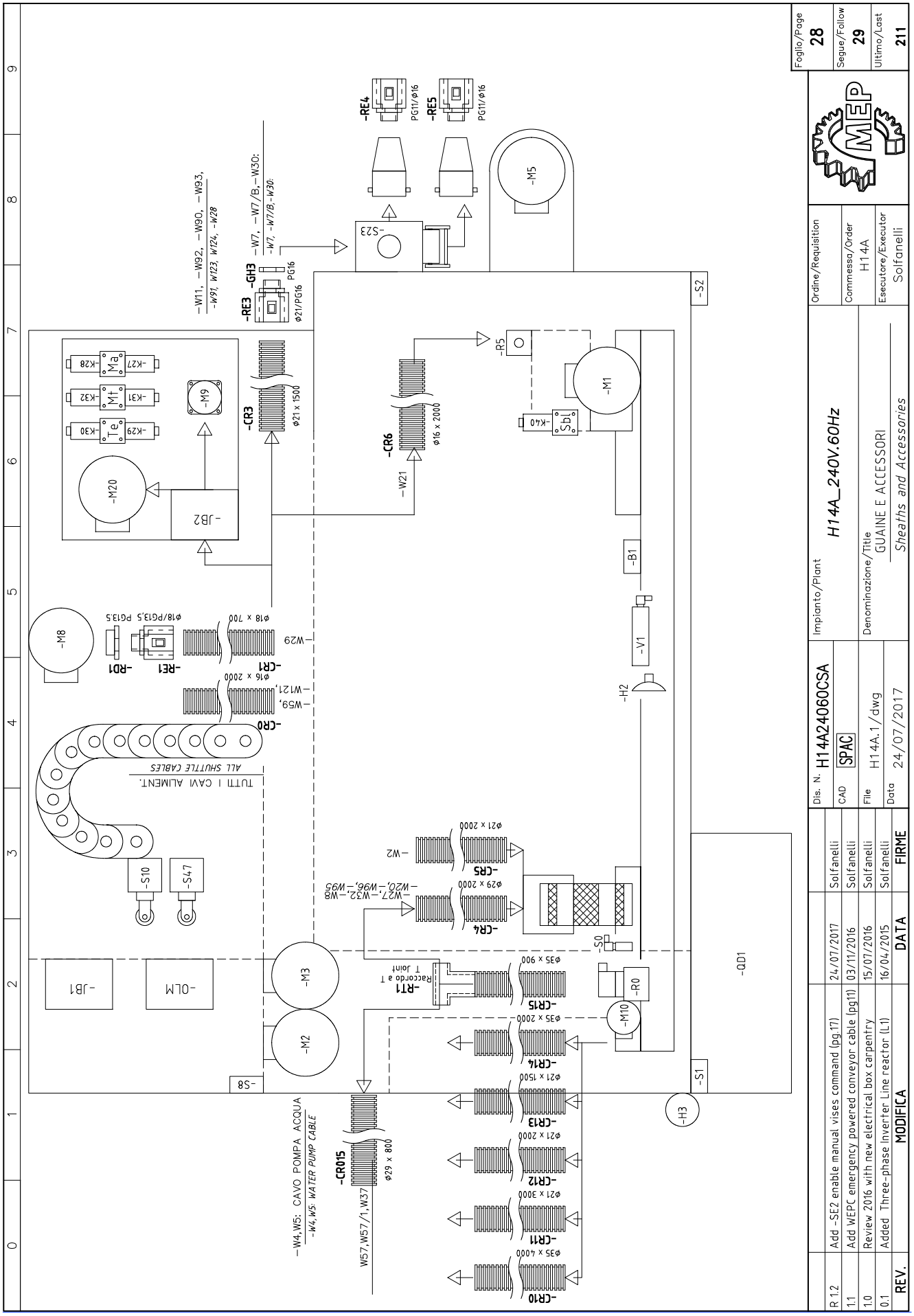
Ordine/Requisition

Commessa/Order
H14A

Esecutore/Executor
Solfanelli

MEP

Foglio/Page 27
Segue/Follow 28
Ultimo/Last 211


-W11, -W92, -W90, -W93,
-W91, W123, W124, -W28
-RE3
-GH3
-W7, -W7/B, -W30:
-W7, -W7/B, -W30:
PG16
ø21/PG16
-RE4
-RE5
PG11/ø16
-S23
-M5
-R5
-M1
-K40
Sb
-CR6
ø16 x 2000
-W21
-CR3
ø21 x 1500
-K27
Ma
-K28
-K31
Mt
-K32
-K29
Te
-K30
-M9
-M20
-JB2
-B1
-V1
-H2
-M8
ø18/PG13,5 PG13,5
-RD1
-RE1
ø18 x 700
-CR1
-W29
ø16 x 2000
-W59,
-W121,
-CR0
TUTTI I CAVI ALIMENT.
ALL SHUTTLE CABLES
-S10
-S47
-JB1
-OLM
-M3
-M2
-S8
-W2
ø21 x 2000
-CR5
-W27,-W32,-W8
-W20,-W96,-W95
ø29 x 2000
-CR4
-S0
-R1
Raccordo a T
T Joint
ø35 x 900
-CR15
ø35 x 2000
-CR14
ø21 x 1500
-CR13
ø21 x 2000
-CR12
ø21 x 3000
-CR11
ø35 x 4000
-CR10
-R0
-M10
-S2
-S1
-H3
-QD1
-W4,W5: CAVO POMPA ACQUA
-W4,W5: WATER PUMP CABLE
-CR015
ø29 x 800
W57,W57/1,W37
Foglio/Page 28
Segue/Follow 29
Ultimo/Last 211
Ordine/Requisition
Commessa/Order H14A
Esecutore/Executor Solfanelli
Impianto/Plant
H14A_240V.60Hz
Denominazione/Title
GUAINE E ACCESSORI
Sheaths and Accessories
Dis. N. H14A24060CSA
CAD SPAC
File H14A.1/dwg
Data 24/07/2017
R 1.2 Add -SE2 enable manual vises command (pg.17) 24/07/2017 Solfanelli
1.1 Add WEPC emergency powered conveyor cable (pg11) 03/11/2016 Solfanelli
1.0 Review 2016 with new electrical box carpentry 15/07/2016 Solfanelli
0.1 Added Three-phase inverter Line reactor (L1) 16/04/2015 Solfanelli
REV. MODIFICA DATA FIRME

CAVI ESTERNI \ EXTERNAL CABLES

QUADRO \ BOARD								DESTINAZIONE \ LOCATION			
QUADRO BOARD	FOGLIO SHEET	NR. MORSETTO TERMINAL NO.	NR. FILO CONDUCTOR NO.	ID SUL CAVO ID IN CABLE	CAVO CABLE	LUNGHEZZA LENGHT [mt]	DISTURBO NOISE LEVEL	ID SUL CAVO ID IN CABLE	NR. FILO CONDUCTOR NO.	NR. MORSETTO TERMINAL NO.	FOGLIO SHEET	QUADRO BOARD
			061	BK1				BK1	061			
=QgCv -F15	8/2		60	BK2	-W01 022.1980	5.00mt		BK2	60	M7	24/1	24VCC
=QgCv -XQG2	10/1	60_1 ○			Controller supply cable					M7	24/1	0VCC
			01	BK1				BK1	01			
=QgCv -FAL	5/2		02	BK2				BK2	02			
=QgCv -FAL	5/2		03	BK3	-W1 022.1983	5.00mt		BK3	03			
=QgCv -FAL	5/3		PE	GNYE	General supply cable			GNYE	PE			
=QgCv -AL	5/3	PE ○		Sch				Sch				
			018	BK1				BK1	018	T1	6/4	=QgCv -Q-K65
=BmMep -M20	6/4	U	019	BK2	-W11 022.1984	3.00mt		BK2	019	T2	6/4	=QgCv -Q-K65
=BmMep -M20	6/4	V	020	BK3	Hydraulic motor cable			BK3	020	T3	6/4	=QgCv -Q-K65
=BmMep -M20	6/4	W	PE	GNYE				GNYE	PE			
=BmMep -M20	6/5	PE								○ 5_6	6/5	=QgCv -XQGPE
			036	BK				BK	036			
=QgCv -XQG3	16/7	036 ○	055	BN				BN	055	M15	16/7	IN06
=QgCv -Q-K6R	18/7	95	1046	GY				GY	1046	M3	18/7	OUT06
=QgCv -K26	18/2	22	053	BU				BU	053	M2	18/2	OUT01
=QgCv -XQG3	18/4	053 ○	049	GN				GN	049	M2	18/4	OUT03
=QgCv -Q-K4A	18/7	95	048	YE				YE	048	M3	18/7	OUT05
=QgCv -Q-K65	18/6	95	333	WH	-W117 022.1906	2.40 mt		WH	333	M3	18/6	OUT04
=QgCv -XQG3	17/4	333 ○	352	VT	Output controller cable			VT	352	M18	17/4	IN11
OUT15	19/8	M5	351	RD				RD	351		19/8	=QgMep -F19
OUT14	19/7	M5	050	OG				OG	050		19/7	=QgMep -F18
=QgCv -XQG3	18/8	050 ○	1047	BU-WH				BU-WH	1047	M3	18/8	OUT07
=QgCv -Q-K25	18/3	95	0391	WH-BU				WH-BU	0391	M2	18/3	OUT02
=QgCv -XQG3	17/4	0391 ○		Sch				Sch		M18	17/4	IN10
			052	GN-RD				GN-RD	052			
=QgCv -XQG2	13/7	052_2 ○	1261	BN -BU				BN -BU	1261	○ 052_1	16/3	=QgCv -XQG2
=QgCv -R-S1	11/7	CS AR-24	60	WH-BK	-W117/1 022..1905	2.80 mt		WH-BK	60	M5	19/9	24VDC
=QgCv -XQG2	16/6	60_3 ○	261	YE-OG	Output controller cable			YE-OG	261	○ 60_3	17/5	=QgCv -XQG2
=QgCv -XQG2	10/3	261_1 ○		Sch				Sch		M2	18/4	24VDC

REV.	MODIFICA	DATA	FIRME
R 1.2	Add -SE2 enable manual vises command (pg.17)	24/07/2017	Solfanelli
1.1	Add WEPC emergency powered conveyor cable (pg11)	03/11/2016	Solfanelli
1.0	Review 2016 with new electrical box carpentry	15/07/2016	Solfanelli
0.1	Added Three-phase Inverter Line reactor (L1)	16/04/2015	Solfanelli

Dis. N. H14A24060CSA
CAD SPAC
File H14A.1/dwg
Data 24/07/2017

Impianto/Plant: *H14A_240V.60Hz*
Denominazione/Title: RIASSUNTIVO CAVI
Cable summary

Ordine/Requisition
Commessa/Order: H14A
Esecutore/Executor: Solfanelli

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CAVI ESTERNI \ EXTERNAL CABLES

QUADRO \ BOARD								DESTINAZIONE \ LOCATION			
QUADRO BOARD	FOGLIO SHEET	NR. MORSETTO TERMINAL NO.	NR. FILO CONDUCTOR NO.	ID SUL CAVO ID IN CABLE	CAVO CABLE	LUNGHEZZA LENGHT [mt]	DISTURBO NOISE LEVEL	ID SUL CAVO ID IN CABLE	NR. FILO CONDUCTOR NO.	NR. MORSETTO TERMINAL NO.	FOGLIO SHEET	QUADRO BOARD
			60	BK				BK	60			
=BmMep -XCI2	19/1	1_1 ○		BN				BN				
=BmMep -XCI	19/2	041 ○	60	GY				GY	60	M4	19/2	OUT08
=BmMep -XCI2	19/1	1_1 ○	60	BU				BU	60			
=BmMep -XCI2	19/1	1_1 ○		GN				GN		○ 60_3	17/5	=QgCv -XQG2
=BmMep -XCI	19/6	043 ○	044	YE				YE	044	M5	19/6	OUT12
=BmMep -XCI	19/7	044 ○		WH	-W118 022.1906	7.50 mt		WH		M5	19/7	OUT13
=BmMep -XCI	19/2	042 ○	044	VT	Input-output cable			VT	044	M4	19/2	OUT09
=BmMep -XCI	19/5	044/0 ○		RD				RD		M5	19/7	OUT13
				OG				OG				
				BU-WH				BU-WH				
=BmMep -XCI	19/3	046 ○		WH-BU				WH-BU		M4	19/3	OUT10
=BmMep -XCI	19/4	047 ○		Sch				Sch		M4	19/4	OUT11
			663	BK				BK	663	CS AR-24	12/6	=QgCv -R-S2
=QgCv -S3	12/4	3	461	BN				BN	461			
=QgCv -XQG4	11/1	461 ○	460	GY				GY	460	2	11/1	=QgCv -S4
=QgCv -XQG4	11/1	460 ○	60	BU				BU	60	1	11/1	=QgCv -S4
=QgCv -XQG2	10/1	60_1 ○	563	GN				GN	563	3	11/4	=QgCv -S3
=QgCv -R-S1	11/6	CS AR-24	564	YE				YE	564	4	11/4	=QgCv -S3
=QgCv -R-S1	11/6	CS AR-24	664	WH	-W119 022.1906	2.10 mt		WH	664	CS AR-24	12/6	=QgCv -R-S2
=QgCv -S3	12/4	4	766	VT	Junction auxiliary cable			VT	766	CS AR-24	12/6	=QgCv -R-S2
=QgCv -S3	12/6	4	261	RD				RD	261			
=QgCv -XQG2	10/3	261_1 ○	033	OG				OG	033	M15	16/3	IN01
=QgCv -XQG3	16/3	033 ○	0392	BU-WH				BU-WH	0392	M15	16/4	IN03
=QgCv -R-S2	12/8	CS AR-24	02	WH-BU				WH-BU	02	M15	16/4	IN02
=QgCv -R-S1	11/9	CS AR-24		Sch				Sch				
			116	GN				GN	116	M10	23/2	0V
=QgCv -X100	13/2	5	115	BN				BN	115	M10	23/1	AO1
=QgCv -X100	13/1	2	57	BK				BK	57	M2	18/1	OUT00
=QgCv -X100	13/2	STF	553	BU				BU	553	M2	18/1	24VDC
=QgCv -X100	13/3	SD	052	RD	-W120/1 022.1905	2.30 mt		RD	052	○ 052_2	13/7	=QgCv -XQG2
=QgCv -X100	13/2	C		YE	Inverter auxiliary signals cable			YE				
			117	WH				WH	117	M24	20/7	AI1a
=QgCv -X100	13/2	AM	038	OG				OG	038	M15	16/5	IN04
=QgCv -X100	13/1	A	PE	Sch				Sch	PE			
=QgCv -XQGPE	5/4	5_1 ○										

REV.	MODIFICA	DATA	FIRME
R 1.2	Add -SE2 enable manual vises command (pg.17)	24/07/2017	Solfanelli
1.1	Add WEPC emergency powered conveyor cable (pg11)	03/11/2016	Solfanelli
1.0	Review 2016 with new electrical box carpentry	15/07/2016	Solfanelli
0.1	Added Three-phase Inverter Line reactor (L1)	16/04/2015	Solfanelli

Dis. N. H14A24060CSA
CAD SPAC
File H14A.1/dwg
Data 24/07/2017

Impianto/Plant: H14A_240V.60Hz

Denominazione/Title: RIASSUNTIVO CAVI
Cable Summary

Ordine/Requisition
Commessa/Order: H14A
Esecutore/Executor: Solfanelli

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CAVI ESTERNI \ EXTERNAL CABLES

QUADRO \ BOARD								DESTINAZIONE \ LOCATION			
QUADRO BOARD	FOGLIO SHEET	NR. MORSETTO TERMINAL NO.	NR. FILO CONDUCTOR NO.	ID SUL CAVO ID IN CABLE	CAVO CABLE	LUNGHEZZA LENGHT [mt]	DISTURBO NOISE LEVEL	ID SUL CAVO ID IN CABLE	NR. FILO CONDUCTOR NO.	NR. MORSETTO TERMINAL NO.	FOGLIO SHEET	QUADRO BOARD
=BmMep -S47	17/4		111	BK				BK	111	○ 333	17/4	=QgCv -XQG3
=BmMep -S47	17/4		052	BU	-W121 022.0397	5.00mt		BU	052	○ 052_1	17/4	=QgCv -XQG2
				BN	Zero setting shuttle limit switch			BN				
				WH				WH				
=QgCv -XQG3	16/7	036 ○	106	BK1	-W122 022.1980	3.00mt		BK1	106			
=QgCv -XQG2	16/7	052_1 ○	052	BK2	Minimal lubrification optional cable			BK2	052			
=BmMep -XCI	19/6	043 ○	012	BK1	-W123 022.1980	3.00mt		BK1	012	2	19/6	=QgCv -X012
=BmMep -XCI2	19/6	60_3 ○	60	BK2	SV head up cable			BK2	60	1	19/6	=QgCv -X012
=BmMep -XCI	19/7	044 ○	013	BK1	-W124 022.1980	3.00mt		BK1	013	1	19/7	=QgCv -X014
=BmMep -XCI2	19/7	60_4 ○	60	BK2	SV head down cable			BK2	60	2	19/7	=QgCv -X014
=BmMep -M1	6/1	U	124	BK1				BK1	124	U	6/2	=QgCv -X100
=BmMep -M1	6/1	V	126	BK2				BK2	126	V	6/3	=QgCv -X100
=BmMep -M1	6/1	W	128	BK3	-W2 022.1977	5.00mt		BK3	128	W	6/3	=QgCv -X100
=BmMep -M1	6/2	PE	PE	GNYE	Blade motor cable			GNYE	PE	○ 5_2	6/2	=QgCv -XQGPE
=BmMep -M1	6/2	PE	PE	Sch				Sch	PE	PE	6/3	=QgCv -X100
=QgCv -XQGPE	5/4	5_1 ○	PE	GN-RD				GN-RD	PE	⟵ PE	21/7	=QgMep -XS7
=QgCv -XQG2	13/7	052_2 ○	052	BN -BU				BN -BU	052	⟵ 1	21/7	=QgMep -XS7
0V	21/7	M27	051	WH-BK	-W20 022..1905	6.50 mt		WH-BK	051	⟵ 3	21/7	=QgMep -XS7
AI4a	21/8	M27	027	YE-OG	Strain gauge cable			YE-OG	027	⟵ 2	21/8	=QgMep -XS7
=QgCv -XQGPE	5/4	5_1 ○	PE	Sch				Sch	PE	⟵ PE	21/7	=QgMep -XS7
=QgMep -XR0	20/2	1 ⟵	023	BK				BK	023	M11	20/2	0V
=QgMep -XR0	20/2	3 ⟵	025	WH	-W21 022.1982	8.00mt		WH	025	M11	20/1	+VRf
=QgMep -XR0	20/2	2 ⟵	024	RD	Head potentiometer cable			RD	024	M11	20/3	AI0
=QgMep -XR0	20/3	4 ⟵	sh	Sch				Sch	sh	M11	20/4	Sh

REV.	MODIFICA	DATA	FIRME
R 1.2	Add -SE2 enable manual vises command (pg.17)	24/07/2017	Solfanelli
1.1	Add WEPC emergency powered conveyor cable (pg11)	03/11/2016	Solfanelli
1.0	Review 2016 with new electrical box carpentry	15/07/2016	Solfanelli
0.1	Added Three-phase Inverter Line reactor (L1)	16/04/2015	Solfanelli

Dis. N. H14A24060CSA
CAD SPAC
File H14A.1/dwg
Data 24/07/2017

Impianto/Plant: *H14A_240V.60Hz*
Denominazione/Title: RIASSUNTIVO CAVI
Cable Summary

Ordine/Requisition
Commessa/Order: H14A
Esecutore/Executor: Solfanelli

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CAVI ESTERNI \ EXTERNAL CABLES

QUADRO \ BOARD								DESTINAZIONE \ LOCATION			
QUADRO BOARD	FOGLIO SHEET	NR. MORSETTO TERMINAL NO.	NR. FILO CONDUCTOR NO.	ID SUL CAVO ID IN CABLE	CAVO CABLE	LUNGHEZZA LENGHT [mt]	DISTURBO NOISE LEVEL	ID SUL CAVO ID IN CABLE	NR. FILO CONDUCTOR NO.	NR. MORSETTO TERMINAL NO.	FOGLIO SHEET	QUADRO BOARD
			052	BN				BN	052			
=BmMep -S0	16/2	1	031	BK				BK	031	○ 052_1	16/3	=QgCv -XQG2
=BmMep -S0	16/2	4	60	BU	-W27 022.0422	10.00mt		BU	60	M15	16/2	IN00
=BmMep -S0	16/2	3		WH	Blade proximity cable			WH				
			314	GN-RD				GN-RD	314			
=SaCv	22/1		311	BN -BU				BN -BU	311	M6	22/1	B+
=SaCv	22/2		312	WH-BK	-W28 022..1905	7.00 mt		WH-BK	312	M6	22/3	A+
=SaCv	22/2		313	YE-OG	Stepper head cable			YE-OG	313	M6	22/3	A-
=SaCv	22/1		SCR	Sch				Sch	SCR	M6	22/2	B-
SCH	22/1	M6										
			221	BK1				BK1	221			
=BmMep -M8	9/3	WHITE/BIANCO	222	BK2				BK2	222	A2	9/3	=QgCv -U10
=BmMep -M8	9/3	RED/ROSSO	223	BK3	-W29 022.1979	3.50mt		BK3	223	A2	9/3	=QgCv -U10
=BmMep -M8	9/4	YELLOW/GIALLO	224	BK4	Power stepper motor cable			BK4	224	B1	9/3	=QgCv -U10
=BmMep -M8	9/4	GREEN/VERDE	PE	GNYE				GNYE	PE	B2	9/3	=QgCv -U10
=BmMep -M8	9/4									○ 5_9	9/2	=QgCv -XQGPE
				GN-RD				GN-RD				
			0314	BN -BU				BN -BU	0314			
=QgCv	14/2	14	0320	WH-BK	-W29/1 022..1905	2.00 mt		WH-BK	0320	M8	22/8	ST+
=QgCv	14/2	18	0315	YE-OG	Drive step motor cable			YE-OG	0315	M8	22/5	SCH
=QgCv	14/2	15	???	Sch				Sch	???	M8	22/7	DR+
SCH	22/5	M8										
				GN-RD				GN-RD				
			010	BN -BU				BN -BU	010	10	14/2	=QgCv
=BmMep -XCI	14/5	010 ○	011	WH-BK	-W29/2 022..1905	0.60mt		WH-BK	011	11	14/2	=QgCv
=BmMep -XCI	14/5	011 ○	012	YE-OG	Powered conveyor cable			YE-OG	012	12	14/2	=QgCv
=BmMep -XCI	14/5	012 ○	13	Sch				Sch	13			
=BmMep -XCI	14/5	PE ○										
			261	BK1				BK1	261			
=QgMep -S23	18/5	3	1055	BK2	-W30 022.1980	3.00mt		BK2	1055	M2	18/4	24VDC
=QgMep -S23	18/5	4			Reverse chip conveyor cable					22	18/5	=QgCv -K6

REV.	MODIFICA	DATA	FIRME
R 1.2	Add -SE2 enable manual vises command (pg.17)	24/07/2017	Solfanelli
1.1	Add WEPC emergency powered conveyor cable (pg11)	03/11/2016	Solfanelli
1.0	Review 2016 with new electrical box carpentry	15/07/2016	Solfanelli
0.1	Added Three-phase Inverter Line reactor (L1)	16/04/2015	Solfanelli

Dis. N. H14A24060CSA
CAD SPAC
File H14A.1/dwg
Data 24/07/2017

Impianto/Plant: *H14A_240V.60Hz*
Denominazione/Title: RIASSUNTIVO CAVI
Cable Summary

Ordine/Requisition
Commessa/Order: H14A
Esecutore/Executor: Solfanelli

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CAVI ESTERNI \ EXTERNAL CABLES

QUADRO \ BOARD								DESTINAZIONE \ LOCATION			
QUADRO BOARD	FOGLIO SHEET	NR. MORSETTO TERMINAL NO.	NR. FILO CONDUCTOR NO.	ID SUL CAVO ID IN CABLE	CAVO CABLE	LUNGHEZZA LENGHT [mt]	DISTURBO NOISE LEVEL	ID SUL CAVO ID IN CABLE	NR. FILO CONDUCTOR NO.	NR. MORSETTO TERMINAL NO.	FOGLIO SHEET	QUADRO BOARD
=BmMep -B1	21/4	1	052	BN	-W32 022.0343	7.70 mt		BN	052	○ 052_2	13/7	=QgCv -XQG2
=BmMep -B1	21/5	4	028	BK	Blade deviation sensor cable			BK	028	M26	21/5	AI3a
=BmMep -B1	21/5	3	051	BU				BU	051	M26	21/4	0V
=BmMep -H3	18/4	24Vdc	001	BK1	-W37 022.1980	5.00mt		BK1	001	○ 053	18/4	=QgCv -XQG3
=BmMep -H3	18/4		60	BK2	Flashing cable			BK2	60	○ 60_4	18/3	=QgCv -XQG2
=BmMep -M2	6/6	U	015	BK1	-W4 022.1984	5.00mt		BK1	015	T1	6/6	=QgCv -Q-K4
=BmMep -M2	6/6	V	016	BK2	Coolant pump cable			BK2	016	T2	6/6	=QgCv -Q-K4
=BmMep -M2	6/6	W	017	BK3				BK3	017	T3	6/6	=QgCv -Q-K4
=BmMep -M2	6/7	PE	PE	GNYE				GNYE	PE	○ 5_4	6/7	=QgCv -XQGPE
=BmMep -M3	6/7	U	0015	BK1	-W5 022.1984	5.00mt		BK1	0015	T1	6/7	=QgCv -Q-K4A
=BmMep -M3	6/8	V	0016	BK2	Coolant pump 2 cable			BK2	0016	T2	6/8	=QgCv -Q-K4A
=BmMep -M3	6/8	W	0017	BK3				BK3	0017	T3	6/8	=QgCv -Q-K4A
=BmMep -M3	6/8	PE	PE	GNYE				GNYE	PE	○ PE	6/8	=QgCv -XQGPE
				WH	-W56 022.2056	8.00 mt		WH				
				BN	FC right front guard cable			BN				
=QgCv -XQG4	12/1	661 ○	661	GN				GN	661	22	12/1	-S1
=QgCv -S3	12/6	3	261	YE				YE	261	21	12/1	-S1
=QgCv -XQG2	10/3	60_2 ○	60	GY				GY	60	11	12/0	=QgCv -S1
=QgCv -XQG4	12/0	660 ○	660	PK				PK	660	12	12/0	=QgCv -S1
				BU				BU				
				RD				RD				
				WH	-W57 022.2053	5.00 mt		WH				
				BN	FC left guard cable			BN				
=QgCv -XQG4	12/1	661 ○	661	GN				GN	661	21	12/1	-S2
=QgCv -XQG4	12/1	1661 ○	1661	YE				YE	1661	22	12/1	-S2
=QgCv -XQG4	12/1	1660 ○	1660	GY				GY	1660	12	12/0	=QgCv -S2
=QgCv -XQG4	12/0	660 ○	660	PK				PK	660	11	12/0	=QgCv -S2
				BU				BU				
				RD				RD				

REV.	MODIFICA	DATA	FIRME
R 1.2	Add -SE2 enable manual vises command (pg.17)	24/07/2017	Solfanelli
1.1	Add WEPC emergency powered conveyor cable (pg11)	03/11/2016	Solfanelli
1.0	Review 2016 with new electrical box carpentry	15/07/2016	Solfanelli
0.1	Added Three-phase Inverter Line reactor (L1)	16/04/2015	Solfanelli

Dis. N. H14A24060CSA
CAD SPAC
File H14A.1/dwg
Data 24/07/2017

Impianto/Plant: *H14A_240V.60Hz*
Denominazione/Title: RIASSUNTIVO CAVI
Cable Summary

Ordine/Requisition
Commessa/Order: H14A
Esecutore/Executor: Solfanelli

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CAVI ESTERNI \ EXTERNAL CABLES

QUADRO \ BOARD								DESTINAZIONE \ LOCATION			
QUADRO BOARD	FOGLIO SHEET	NR. MORSETTO TERMINAL NO.	NR. FILO CONDUCTOR NO.	ID SUL CAVO ID IN CABLE	CAVO CABLE	LUNGHEZZA LENGHT [mt]	DISTURBO NOISE LEVEL	ID SUL CAVO ID IN CABLE	NR. FILO CONDUCTOR NO.	NR. MORSETTO TERMINAL NO.	FOGLIO SHEET	QUADRO BOARD
				WH				WH				
				BN				BN				
			3661	GN				GN	3661			
=QgCv -R-S2	12/5	CS AR-24	2661	YE				YE	2661	11	12/2	=QgCv -S8
=QgCv -XQG4	12/2	2661 ○	2660	GY	-W57/1 022.2053	5.00 mt		GY	2660	12	12/2	=QgCv -S8
=QgCv -XQG4	12/2	2660 ○	3660	PK	Shuttle guard cable			PK	3660	22	12/2	-S3
=QgCv -R-S2	12/5	CS AR-24		BU				BU		21	12/2	-S3
				RD				RD				
			110	BK				BK	110	○ 0391	17/4	=QgCv -XQG3
=BmMep -S10	17/4		052	BU	-W59 022.0397	5.00 mt		BU	052			
=BmMep -S10	17/4			BN	Bar in infeed vise limit switch			BN				
				WH				WH				
			54	BK1				BK1	54	1	19/5	=QgCv -X40
=BmMep -XCI	19/5	044/0 ○	60	BK2	-W65 022.1980	5.00 mt		BK2	60	2	19/5	=QgCv -X40
=BmMep -XCI2	19/5	60_2 ○			S.V Block head							
			1021	BK1				BK1	1021	T1	7/6	=QgCv -Q-K6R
=QgCv -XFET	7/6	1 ⊂	1022	BK2				BK2	1022	T2	7/7	=QgCv -Q-K6R
=QgCv -XFET	7/7	2 ⊂	1023	BK3	-W7 022.1984	5.00 mt		BK3	1023	T3	7/7	=QgCv -Q-K6R
=QgCv -XFET	7/7	3 ⊂	7	GNYE	Chip conveyour motor cable			GNYE	7	○ 5_	7/7	=QgCv -XQGPE
=QgCv -XFET	7/7	PE ⊂										
			1024	BK1				BK1	1024	⊂ 1	7/6	=QgEtMep XMET
=BmMep -M5	7/6	U	1025	BK2				BK2	1025	⊂ 2	7/7	=QgEtMep XMET
=BmMep -M5	7/7	V	1026	BK3	-W7/1 022.1984	2.00 mt		BK3	1026	⊂ 3	7/7	=QgEtMep XMET
=BmMep -M5	7/7	W	7	GNYE	Chip conveyour motor cable			GNYE	7	⊂ PE	7/7	=QgEtMep XMET
=BmMep -M5	7/7	PE										
				GN-RD				GN-RD				
			052	BN -BU				BN -BU	052	○ 052_1	16/7	=QgCv -XQG2
=BmMep -XEV1	16/6	1 ⊂	60	WH-BK	-W7/B 022..1905	6.50 mt		WH-BK	60			
=BmMep -XEV1	16/6	3 ⊂	0393	YE-OG	Proximity EVTR cable			YE-OG	0393	M15	16/6	IN05
=BmMep -XEV1	16/6	2 ⊂		Sch				Sch				

REV.	MODIFICA	DATA	FIRME
R 1.2	Add -SE2 enable manual vises command (pg.17)	24/07/2017	Solfanelli
1.1	Add WEPC emergency powered conveyor cable (pg11)	03/11/2016	Solfanelli
1.0	Review 2016 with new electrical box carpentry	15/07/2016	Solfanelli
0.1	Added Three-phase Inverter Line reactor (L1)	16/04/2015	Solfanelli

Dis. N. H14A24060CSA
CAD SPAC
File H14A.1/dwg
Data 24/07/2017

Impianto/Plant: H14A_240V.60Hz
Denominazione/Title: RIASSUNTIVO CAVI
Cable Summary

Ordine/Requisition
Commessa/Order: H14A
Esecutore/Executor: Solfanelli

Foglio/Page: 34
Segue/Follow: 35
Ultimo/Last: 211

CAVI ESTERNI \ EXTERNAL CABLES

QUADRO \ BOARD								DESTINAZIONE \ LOCATION			
QUADRO BOARD	FOGLIO SHEET	NR. MORSETTO TERMINAL NO.	NR. FILO CONDUCTOR NO.	ID SUL CAVO ID IN CABLE	CAVO CABLE	LUNGHEZZA LENGHT [mt]	DISTURBO NOISE LEVEL	ID SUL CAVO ID IN CABLE	NR. FILO CONDUCTOR NO.	NR. MORSETTO TERMINAL NO.	FOGLIO SHEET	QUADRO BOARD
=BmMep -XEV	16/6	1	052	BN				BN	052	1	16/6	=BmMep -S52
=BmMep -XEV	16/6	2	394	BK	-W7/B1 022.0424	5.00Mt		BK	394	4	16/6	=BmMep -S52
=BmMep -XEV	16/6	3	051	BU	Proximity EVTR cable			BU	051	3	16/6	=BmMep -S52
				WH				WH				
=BmMep -M10	7/3	U	1024	BK1				BK1	1024	T1	7/3	=QgCv -Q-K25
=BmMep -M10	7/3	V	1025	BK2	-W8 022.1984	6.50Mt		BK2	1025	T2	7/3	=QgCv -Q-K25
=BmMep -M10	7/3	W	1026	BK3	Blade tensioning motor cable			BK3	1026	T3	7/3	=QgCv -Q-K25
=BmMep -M10	7/3	PE	7	GNYE				GNYE	7	PE	7/4	=QgCv -XQGPE
=QgCv -XQG3	18/8	050	007	BK1	-W89 022.1980	3.00Mt		BK1	007			
=QgCv -XQG2	18/3	60_4	60	BK2	Minimal lubrification cable			BK2	60			
=BmMep -XCI	19/2	042	009	BK1	-W90 022.1980	3.00Mt		BK1	009	1	19/2	=QgCv -X009
=BmMep -XCI2	19/3	1_3	60	BK2	SV cutting vise closing cable			BK2	60	2	19/3	=QgCv -X009
=BmMep -XCI	19/4	047	011	BK1	-W91 022.1980	3.00Mt		BK1	011	1	19/4	=QgCv -X011
=BmMep -XCI2	19/4	60_1	60	BK2	SV shuttle vise closing cable			BK2	60	2	19/4	=QgCv -X011
=BmMep -XCI	19/2	041	008	BK1	-W92 022.1980	3.00Mt		BK1	008	2	19/2	=QgCv -X008
=BmMep -XCI2	19/1	1_2	60	BK2	SV cutting vise opening cable			BK2	60	1	19/1	=QgCv -X008
=BmMep -XCI	19/3	046	010	BK1	-W93 022.1980	3.00Mt		BK1	010	2	19/3	=QgCv -X010
=BmMep -XCI2	19/3	1_4	60	BK2	SV shuttle vise opening cable			BK2	60	1	19/3	=QgCv -X010
=BmMep -H2	19/8		1352	BK1	-W95 022.1980	6.00Mt		BK1	1352		19/8	=QgMep -F19
=BmMep -H2	19/8		60	BK2	Work zone lamp cable			BK2	60	61_2	19/8	=QgCv -XQG2
=QgCv -XTL	19/7	3	1351	BN				BN	1351		19/7	=QgMep -F18
				BK	-W96 022.0355	5.00Mt		BK				
=QgCv -XTL	19/7	1	60	BU	Laser cable			BU	60	61_1	19/8	=QgCv -XQG2

REV.	MODIFICA	DATA	FIRME
R 1.2	Add -SE2 enable manual vises command (pg.17)	24/07/2017	Solfanelli
1.1	Add WEPC emergency powered conveyor cable (pg11)	03/11/2016	Solfanelli
1.0	Review 2016 with new electrical box carpentry	15/07/2016	Solfanelli
0.1	Added Three-phase Inverter Line reactor (L1)	16/04/2015	Solfanelli

Dis. N. H14A24060CSA
CAD SPAC
File H14A.1/dwg
Data 24/07/2017

Impianto/Plant: *H14A_240V.60Hz*
Denominazione/Title: RIASSUNTIVO CAVI
Cable Summary

Ordine/Requisition
Commessa/Order: H14A
Esecutore/Executor: Solfanelli

MEP

Foglio/Page: 35
Segue/Follow: 36
Ultimo/Last: 211

CAVI ESTERNI \ EXTERNAL CABLES

QUADRO \ BOARD								DESTINAZIONE \ LOCATION			
QUADRO BOARD	FOGLIO SHEET	NR. MORSETTO TERMINAL NO.	NR. FILO CONDUCTOR NO.	ID SUL CAVO ID IN CABLE	CAVO CABLE	LUNGHEZZA LENGHT [mt]	DISTURBO NOISE LEVEL	ID SUL CAVO ID IN CABLE	NR. FILO CONDUCTOR NO.	NR. MORSETTO TERMINAL NO.	FOGLIO SHEET	QUADRO BOARD
=QgCv -AL	5/2	1	1	BK1				BK1	1	1	5/5	=QgCv -Q0
=QgCv -AL	5/2	2	2	BK2				BK2	2	3	5/5	=QgCv -Q0
=QgCv -AL	5/3	3	3	BK3	-WAL 022.1977	3,30 mt		BK3	3	5	5/5	=QgCv -Q0
=QgCv -AL	5/3	PE	PE	GNYE	General Board power supply cable			GNYE	PE	5_1	5/4	=QgCv -XQGPE
				Sch				Sch				
=BmMep -XCI	11/1	460	560	GN				GN	560	460	11/1	=QgCv -XQG4
=BmMep -XCI	11/1	461	561	BN				BN	561	461	11/1	=QgCv -XQG4
=BmMep -XCI	11/2	0360	0360	BK				BK	0360	0360	11/2	=QgCv -XQG4
=BmMep -XCI	11/2	360	360	BU				BU	360	360	11/2	=QgCv -XQG4
				RD	-WEMG 022.1905	7.40 mt		RD				
=BmMep -XCI	11/3	560	560	YE	Emergency roller conveyor Cable			YE	560	560	11/3	=QgCv -XQG4
=BmMep -XCI	11/2	561	561	WH				WH	561	561	11/2	=QgCv -XQG4
				OG				OG				
				Sch				Sch				
				GN-RD				GN-RD				
=QgCv -XQG4	11/2	360	360	BN -BU				BN -BU	360	2	11/2	=QgCv
=QgCv -XQG4	11/2	0360	0360	WH-BK	-WEPC 022..1905	2.0 mt		WH-BK	0360	1	11/2	=QgCv
				YE-OG	Emergency roller conveyor Cable			YE-OG				
				Sch				Sch				

REV.	MODIFICA	DATA	FIRME
R 1.2	Add -SE2 enable manual vises command (pg.17)	24/07/2017	Solfanelli
1.1	Add WEPC emergency powered conveyor cable (pg11)	03/11/2016	Solfanelli
1.0	Review 2016 with new electrical box carpentry	15/07/2016	Solfanelli
0.1	Added Three-phase Inverter Line reactor (L1)	16/04/2015	Solfanelli

Dis. N. H14A24060CSA
CAD SPAC
File H14A.1/dwg
Data 24/07/2017

Impianto/Plant: H14A_240V.60Hz
Denominazione/Title: RIASSUNTIVO CAVI / Cable Summary

Ordine/Requisition:
Commessa/Order: H14A
Esecutore/Executor: Solfanelli

Foglio/Page: 36
Segue/Follow: 37
Ultimo/Last: 211

0	1	2	3	4	5	6	7	8	9		
Nome/Name	Mep__code	Descrizione		Description EN			Catalog__code	Quadro/Board	Fg/Sh	Q.ta/Q.ty	Costruttore/Builder
-B1	022.0537	Sensore induttivo uscita 0-16mA / 1-2,5mm con M8		Inductive Sensor 0-16mA / 1-2,5mm with conn. M8			DCALX/4919B BDC	=BmMep	21	1	Mep
-CR0	022.2601	Guaina POLIFLEX Ø16		Poliflex Covering Ø16			NW 12-1200127	=BmMep	28	1	Mep
-CR1	022.2602	Guaina POLIFLEX Ø18		Poliflex Covering Ø18			NW 14-1200143	=BmMep	28	1	Mep
-CR3	022.2603	Guaina POLIFLEX Ø21		Poliflex covering Ø21			NW 17-1200178	=BmMep	28	1	Mep
-CR4	022.2604	Guaina POLIFLEX Ø29		Poliflex covering Ø29			NW 23-1200232	=BmMep	28	1	Mep
-CR5	022.2603	Guaina POLIFLEX Ø21		Poliflex covering Ø21			NW 17-1200178	=BmMep	28	1	Mep
-CR6	022.2601	Guaina POLIFLEX Ø16		Poliflex Covering Ø16			NW 12-1200127	=BmMep	28	1	Mep
-CR11	022.2603	Guaina POLIFLEX Ø21		Poliflex covering Ø21			NW 17-1200178	=BmMep	28	1	Mep
	022.0212	Raccordo rapido dritto PG16/Ø21		Rapid straight joint SEM PG16/Ø21			SEM PG16/Ø21			1	Mep
-CR12	022.2603	Guaina POLIFLEX Ø21		Poliflex covering Ø21			NW 17-1200178	=BmMep	28	1	Mep
	022.0212	Raccordo rapido dritto PG16/Ø21		Rapid straight joint SEM PG16/Ø21			SEM PG16/Ø21			1	Mep
-CR13	022.2603	Guaina POLIFLEX Ø21		Poliflex covering Ø21			NW 17-1200178	=BmMep	28	1	Mep
	022.0212	Raccordo rapido dritto PG16/Ø21		Rapid straight joint SEM PG16/Ø21			SEM PG16/Ø21			1	Mep
-CR015	022.2603	Guaina POLIFLEX Ø21		Poliflex covering Ø21			NW 17-1200178	=BmMep	28	1	Mep
-GH3	022.0239	Dado nero PG16		Black nut PG16			PG16	=BmMep	28	1	Mep
-H2	022.3253	Faro LED 9W 12/24Vcc 4000°K 750lm 70° IP66 con cavo		Led Lamp			5941662 - SICE	=BmMep	19	1	Mep
-H3	022.3254	Lampeggiante LED 24 VAC/Vdc		Flashing LED 24 VAC/Vdc			SL7-CB-IMH + SL7-BL24Y + SL7-AP24	=BmMep	18	1	Mep
-K27		Elettrovalvola aperta (in chiusura) secondo solenoide						=BmMep	19	1	
-K28	043.1002	Elettrovalvola idraulica 4/3 centri chiusi CETOP 3 24Vcc		Hydraulic electrovalve 4/3 close center CETOP3 24Vdc			MD1L- S1/10 N-D24K1 DUPLOMATIC	=BmMep	19	1	Mep
-K29		Elettrovalvola aperta (in chiusura) secondo solenoide						=BmMep	19	1	
-K30	043.1002	Elettrovalvola idraulica 4/3 centri chiusi CETOP 3 24Vcc		Hydraulic electrovalve 4/3 close center CETOP3 24Vdc			MD1L- S1/10 N-D24K1 DUPLOMATIC	=BmMep	19	1	Mep
-K31		Elettrovalvola aperta (in chiusura) secondo solenoide						=BmMep	19	1	
-K32	043.1002	Elettrovalvola idraulica 4/3 centri chiusi CETOP 3 24Vcc		Hydraulic electrovalve 4/3 close center CETOP3 24Vdc			MD1L- S1/10 N-D24K1 DUPLOMATIC	=BmMep	19	1	Mep
-M1	019.2161	Motore 5.50KW/6,6KW, 127/240V, 46.8/24.3A		Motor 5.50KW/6,6KW, 127/240V, 46.8/24.3A;			019.2161	=BmMep	6	1	Mep
-M2	028.0263	Elettropompa V.208-230/440-460__60, 180W 0.9/0.42A		Electropump V.208-230/440-460.50-60 HZ 180W				=BmMep	6	1	Mep
-M3	028.0263	Elettropompa V.208-230/440-460__60, 180W 0.9/0.42A		Electropump V.208-230/440-460.50-60 HZ 180W				=BmMep	6	1	Mep
-M5	019.4054	Motore EVTR 0.37KW, 230-280/400-480V, 2/1.15A,50/60Hz		Motor EVTR 0.37KW, 230-280/400-480V, 2/1.15A,50/60Hz			019.4054	=BmMep	7	1	Mep
-M8	019.3408	Motore stepper 21Nm 13A 1,8°		Stepper Motor 21Nm 13A 1,8° FL110STH150-1304A-H-1			FL110STH150-1304A-H-1 FULLING	=BmMep	9	1	Mep
-M9	019.3555	Motore stepper 1,9Nmt 2,8A 1,8°		Stepper motor 1,9Nmt 2,8A 1,8°			FL57STH76-2804-A-12 FULLING	=BmMep	22	1	Mep
-M10	019.3584	Motore KW 0,25, V.277/480, 1.55/0.89A B3 MB VR M63C4		Motor KW 0,25, V.274/480, 1.58/0.89A B3 MB VR M63C4			019.3584	=BmMep	7	1	Mep
-M20	019.4015	Motore centralina C80-B14, 1.1KW 115-200(9.40-5.40) 1420rpm, 1.3KW 135-240(9.40-5.40) 1700rpm		Motor oil unit 1.1KW 115-200(9.40-5.40) 1420rpm, 1.3KW 135-240(9.40-5.40) 1700rpm CSA			019.4015	=BmMep	6	1	Mep
-R0	022.2152	Tensionatore elettronico 3T		Electronic tensioner 3T			TR-S-A/3T 1,5V- 900Kg Deltateck	=BmMep	21	1	Mep
-R5	044.1352	Potenziometro lineare corsa 463mm TLH450cod.025318 NOVOTECNIK		Linear potentiometer 463mm TLH450 cod. 025318			TLH450 cod. 025318 NOVOTECNIK	=BmMep	20	1	Mep
-RD1	022.0349	Riduzione		Joint Reduction			M/F M20/PG13,5	=BmMep	28	1	Mep
-RE1	022.0211	Raccordo rapido dritto		Rapid straight joint SEM PG13,5/Ø19			SEM PG13,5/Ø19	=BmMep	28	1	Mep
-RE3	022.0212	Raccordo rapido dritto PG16/Ø21		Rapid straight joint SEM PG16/Ø21			SEM PG16/Ø21	=BmMep	28	1	Mep
-RT1	022.2756	Raccordo di derivazione a T D.29, d.23x2		Fitting Junction T, D.29, d.23x2			RTA 666944	=BmMep	28	1	Mep
-S0	022.0541	Sensore di prossimità induttivo D.18mm		Inductive proximity Sensor D.18mm			Proximity - B03188P0C5- SELET	=BmMep	16	1	Mep
-S10	022.0543	Finecorsa a rotella 1NO+1NC conn. M12 laterale		Limit Switch with roll 1NO+1NC			NB B110BB-DMK PIZZATO	=BmMep	17	1	Mep
-S47	022.0543	Finecorsa a rotella 1NO+1NC conn. M12 laterale		Limit Switch with roll 1NO+1NC			NB B110BB-DMK PIZZATO	=BmMep	17	1	Mep
-S52	022.0527	Sensore di prossimita PNP corto conn. M12		Proximity sensor PNP short with M12 connector.				=BmMep	16	1	Mep
-V1	022.1191	Traguardatore laser a riga 12x70 24Vcc 635nm 5mW e conn. M8		Laser Line Sign			MOD 50EM 24V e connettore - RLI	=BmMep	19	1	Mep
-XCI	022.0377	Morsetto 2 fili a vite 4(6)mmq__PE__PHOENIX		Terminal 4(6)mmq for 2 wires__PE__PHOENIX			USLKG5	=BmMep		1	Mep
	022.2243	Morsetto 2,5(4)mmq per 2 fili a molla - PHOENIX		Terminal 2,5(4)mmq for 2 wires - PHOENIX			ST2,5- 3031212			13	Mep
-XCI2	022.2245	Morsetto 2,5(4)mmq per 4 fili a molla - PHOENIX		Terminal 2,5(4)mmq for 4 wires - PHOENIX			ST2,5- QUATTRO__3031306	=BmMep		2	Mep

REV.	MODIFICA	DATA	FIRME
R 1.2	Add -SE2 enable manual vises command (pg.17)	24/07/2017	Solfanelli
1.1	Add WEPC emergency powered conveyor cable (pg11)	03/11/2016	Solfanelli
1.0	Review 2016 with new electrical box carpentry	15/07/2016	Solfanelli
0.1	Added Three-phase Inverter Line reactor (L1)	16/04/2015	Solfanelli

Dis. N. H14A24060CSA
CAD SPAC
File H14A.1/dwg
Data 24/07/2017

Impianto/Plant: *H14A_240V.60Hz*
Denominazione/Title: DISTINTA MATERIALI / *Material List*

Ordine/Requisition:
Commessa/Order: H14A
Esecutore/Executor: Solfanelli

MEP

Foglio/Page: 37
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Ultimo/Last: 211

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0	1	2	3	4	5	6	7	8	9	
Nome/Name	Mep_code	Descrizione			Description EN		Catalog_code	Quadro/Board	Fg/Sh	Q.ta/Q.ty	Costruttore/Builder
-XEV	022.0283 + 022.0268	Connettore volante ILME (CK03VGS leva + CKF04) 5 poli per evacuatore trucioli						=BmMep		1	Mep
-XEV1	022.0282 + 022.0267	Connettore volante ILME (CK03VS pioli + CKM04) 5 poli per evacuatore trucioli			Mobile connector ILME (CK03VS + CKM04) 5 poles		CK03VS pioli + CKM04	=BmMep		1	Mep
-AL	022.0377	Morsetto 2 fili a vite 4(6)mmq_PE_PHOENIX			Terminal 4(6)mmq for 2 wires_PE_PHOENIX		USLKG5	=QgCv		1	Mep
	022.2231	Morsetto 4(6)mmq per 2 fili a molla - PHOENIX			Terminal 4(6)mmq for 2 wires - PHOENIX		ST4- 3031364			3	Mep
-BR1	022.0900	Barra omega			Omega guide DIN			=QgCv	27	1	Mep
-CC1	022.0304	Terminale a occhiello (Rosso)			Wire Terminal Connection Red		Ø5 da 1,5mmq A5/P-B15/P	=QgCv	27	1	Mep
-CC2	022.0303	Terminale a occhiello (Blu)			Wire Terminal Connection Blue		Ø8 da 2,5mmq BM00237	=QgCv	27	1	Mep
-CN1	022.0903	Canalina portacavi in plastica			Cable holding plastic channel		40x60	=QgCv	27	2	Mep
-CN2	022.0921	Canalina portacavi in plastica			Cable holding plastic channel		25x60	=QgCv	27	2	Mep
-CR10	022.0197	Guaina POLIFLEX Ø35			Poliflex Covering Ø35		NW 29-3800296	=QgCv	28	1	Mep
	022.0209	Raccordo rapido dritto PG29/Ø35			Rapid straight Joint PG29/Ø35		SEM PG29/Ø35			1	Mep
-CR14	022.0197	Guaina POLIFLEX Ø35			Poliflex Covering Ø35		NW 29-3800296	=QgCv	28	1	Mep
	022.0209	Raccordo rapido dritto PG29/Ø35			Rapid straight Joint PG29/Ø35		SEM PG29/Ø35			1	Mep
-CR15	022.0197	Guaina POLIFLEX Ø35			Poliflex Covering Ø35		NW 29-3800296	=QgCv	28	1	Mep
	022.0209	Raccordo rapido dritto PG29/Ø35			Rapid straight Joint PG29/Ø35		SEM PG29/Ø35			1	Mep
-CU1	022.4091	Cavo USB per pannello di comando con connettore			Cable 60 cm for command panel with USB connector		M222-USB-SA ;107412 EATON	=QgCv	15	1	Mep
	022.0279	Kit morsetti volanti Mep50C			Kit mobile terminals Mep50C controller		ISAC			1	Mep
	022.0760.1	Display MEP50 TS_REV1			Display MEP50 TS_REV1		RAKIT7WIDE. TFT 7" Word WideTouch Screen +Cavo dati			1	Mep
	022.2832.1	Controllore Mep50C_REV1_senza display			Controller Mep50C_REV1_without display		Cod. UN07MEP006			1	Mep
	031.2081	Consolle di programmazione MEP50 H11A, H230A,H14A.1			Programming consolled MEP50 H11A, H230A,H14A.1					1	Mep
-F1 -F2	022.2240	Portafusibile 2 x (10,3x38) - 690V 32A			Fuse holding terminal 2 x (10,3x38) 690V 32A		2032038 BCH 32A ItalWeber	=QgCv	8	1	Mep
	054.4538	Fusibile Ritardato 10.3x38 - 5A UL/CSA			Fuse Time delay 10.3x38 - 5A UL/CSA		5A 600V ATDR5			2	Mep
-F3 -F4	022.2240	Portafusibile 2 x (10,3x38) - 690V 32A			Fuse holding terminal 2 x (10,3x38) 690V 32A		2032038 BCH 32A ItalWeber	=QgCv	8	1	Mep
	054.4538	Fusibile Ritardato 10.3x38 - 5A UL/CSA			Fuse Time delay 10.3x38 - 5A UL/CSA		5A 600V ATDR5			2	Mep
-F5 -F6 -F7	022.2239	Portafusibile 3 x (10,3x38) - 690V 32A			Fuse holding terminal 3 x (10,3x38) 690V 32A		2033038 BCH 32A ItalWeber	=QgCv	6	1	Mep
	054.4663	Fusibile Ritardato 10.3x38 - 7A UL/CSA			Fuse Time delay 10.3x38 - 7A UL/CSA		7A 600V ATDR7			3	Mep
-F8 -F9 -F10	022.2239	Portafusibile 3 x (10,3x38) - 690V 32A			Fuse holding terminal 3 x (10,3x38) 690V 32A		2033038 BCH 32A ItalWeber	=QgCv	6	1	Mep
	054.4663	Fusibile Ritardato 10.3x38 - 7A UL/CSA			Fuse Time delay 10.3x38 - 7A UL/CSA		7A 600V ATDR7			3	Mep
-F14	022.2253	Portafusibile 1 x (10,3x38) - 690V 32A			Fuse holding terminal 1 x (10,3x38) 690V 32A		2031038 BCH 32A ItalWeber	=QgCv	8	1	Mep
	054.4664	Fusibile Ritardato 10.3x38 - 7.5A UL/CSA			Fuse Time delay 10.3x38 - 7.5A UL/CSA		7.5A 600V ATDR7-1/2			1	Mep
-F15	022.2253	Portafusibile 1 x (10,3x38) - 690V 32A			Fuse holding terminal 1 x (10,3x38) 690V 32A		2031038 BCH 32A ItalWeber	=QgCv	8	1	Mep
	054.4538	Fusibile Ritardato 10.3x38 - 5A UL/CSA			Fuse Time delay 10.3x38 - 5A UL/CSA		5A 600V ATDR5			1	Mep
-F16	022.2253	Portafusibile 1 x (10,3x38) - 690V 32A			Fuse holding terminal 1 x (10,3x38) 690V 32A		2031038 BCH 32A ItalWeber	=QgCv	8	1	Mep
	054.4538	Fusibile Ritardato 10.3x38 - 5A UL/CSA			Fuse Time delay 10.3x38 - 5A UL/CSA		5A 600V ATDR5			1	Mep
-F17	022.2253	Portafusibile 1 x (10,3x38) - 690V 32A			Fuse holding terminal 1 x (10,3x38) 690V 32A		2031038 BCH 32A ItalWeber	=QgCv	8	1	Mep
	054.4673	Fusibile Ritardato 10.3x38 - 1A UL/CSA			Fuse Time delay 10.3x38- 1A UL/CSA		1A 600V ATDR1			1	Mep
-F22 -F21 -F20	054.4678	Fusibile Fast 14x51 - 50A UL/CSA			Fuse Fast acting 14x51 - 50A UL/CSA		A70QS50-14F Art: 371238	=QgCv	6	3	Mep
	022.2228	Portafusibile 3 x (14x51) - 690V 50A			Fuse holding terminal 3 x (14x51) 690V 50A		2303051- ITALWEBER 50A, 690V			1	Mep
-FAL	022.2228	Portafusibile 3 x (14x51) - 690V 50A			Fuse holding terminal 3 x (14x51) 690V 50A		2303051- ITALWEBER 50A, 690V	=QgCv	5	1	Mep
-FL1	022.0133	Filo unipolare AWG20 CSA (0.5mmq)			Single wire AWG20 CSA (0.5mmq)			=QgCv	27	38	Mep
-FL2	022.0134	Filo unipolare AWG16 CSA (1.5mmq)			Single wire AWG16 CSA (1.5mmq)			=QgCv	27	29	Mep
-FL3	022.1995	Cavo 1AWG12 NERO			Cable 1AWG12 NERO			=QgCv	27	1	Mep
	022.1996	Cavo 1AWG12 GN/YE			Cable 1AWG12 GN/YE					1	Mep
-FL4	022.1963	Cavo 1AWG10 BLACK			Cable 1Awg10 black			=QgCv	27	19	Mep
-FS1	019.5353	Fascetta in plastica 140x3,5			Plastic clamp 140x3,5		32031 Legrand	=QgCv	27	75	Mep

REV.	MODIFICA	DATA	FIRME
R 1.2	Add -SE2 enable manual vises command (pg.17)	24/07/2017	Solfanelli
1.1	Add WEPC emergency powered conveyor cable (pg11)	03/11/2016	Solfanelli
1.0	Review 2016 with new electrical box carpentry	15/07/2016	Solfanelli
0.1	Added Three-phase Inverter Line reactor (L1)	16/04/2015	Solfanelli

Dis. N. H14A24060CSA
CAD SPAC
File H14A.1/dwg
Data 24/07/2017

Impianto/Plant: *H14A_240V.60Hz*
Denominazione/Title: DISTINTA MATERIALI / *Material List*
Ordine/Requisition:
Commessa/Order: H14A
Esecutore/Executor: Solfanelli

Foglio/Page: 38
Segue/Follow: 39
Ultimo/Last: 211

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Nome/Name	Mep_code	Descrizione		Description EN			Catalog_code	Quadro/Board	Fg/Sh	Q.ta/Q.ty	Costruttore/Builder
-G1	022.0908	Alimentatore Switching Vi 230-400-500VAC Vu 24Vdc 14A		Switching power supply Vi 240-400-500VAC Vu 24Vcc 14A			FLEX28024B AdelSystem	=QgCv	8	1	Mep
-JB1	016.1272	Scatola derivazione metallica		Metal junction box?			150x150 P:100	=QgCv	27	1	Mep
-JB2	016.2257	Scatola derivazione metallica		Metal Junction Box			200x130 P:70	=QgCv	27	1	Mep
-K0	022.0553	Bobina di minima 240/60		Releaser 240/60			U-PKZ0 V.240.60 cod. 073146 - Moeller	=QgCv	5	1	Mep
-K4	022.3012	Contattore 3KW NO (24 V Dc)		Contactor 3KW NO (24 V Dc)			DILM7-10 cod.276565 Moeller	=QgCv	18	1	Mep
-K4A	022.3012	Contattore 3KW NO (24 V Dc)		Contactor 3KW NO (24 V Dc)			DILM7-10 cod.276565 Moeller	=QgCv	18	1	Mep
-K6	022.3011	Contattore 3KW - NC (24 V Dc)		Contactor 3KW NC (24 V Dc)			DILM7-01 cod.276600 Moeller	=QgCv	18	1	Mep
-K6R	022.3011	Contattore 3KW - NC (24 V Dc)		Contactor 3KW NC (24 V Dc)			DILM7-01 cod.276600 Moeller	=QgCv	18	1	Mep
	022.3924	Kit ponti potenza per teleinvertitore		Kit for contactor reversing			DILM12-XLR			1	Mep
-K25	022.3011	Contattore 3KW - NC (24 V Dc)		Contactor 3KW NC (24 V Dc)			DILM7-01 cod.276600 Moeller	=QgCv	18	1	Mep
	022.3924	Kit ponti potenza per teleinvertitore		Kit for contactor reversing			DILM12-XLR			1	Mep
-K26	022.3011	Contattore 3KW - NC (24 V Dc)		Contactor 3KW NC (24 V Dc)			DILM7-01 cod.276600 Moeller	=QgCv	18	1	Mep
-K65	022.3012	Contattore 3KW NO (24 V Dc)		Contactor 3KW NO (24 V Dc)			DILM7-10 cod.276565 Moeller	=QgCv	18	1	Mep
-KRES	022.0993 + 022.2391	Rele 24VCC - 2 contatti scambio + zoccolo		Relay 24 VCC - 2 exchange contacts + base			40.52.9.024.0000 + 95.05.SPA - FINDER	=QgCv	12	1	Mep
-M6	019.5220	Ventola raffreddamento 120x120 24Vdc		Fan cooling 120x120 24Vdc			V108MBW24DC AlfaPlastic	=QgCv	10	1	Mep
	019.5117	Griglia per ventola 120x120		Cover for fan cooler 120x120			ALFA GM120			1	Mep
	034.0431	Base per ventola 120x120 230V		Base for fan cooling 120x120			A12-7032			1	Mep
	028.0174	Filtro per ventola 120x120		Fan filter 120x120			M12R			1	Mep
	034.0414	Coperchio alettatore per ventola 120x120		Fan filter 120x120			M12C-7032			1	Mep
-M7	019.5221	Ventola raffreddamento 80x80 - 24Vdc		Fan cooling 80x80 - 24Vdc			V108 DSW24V - ALFAELECTRIC	=QgCv	10	1	Mep
	019.5123	Griglia per ventola 80x80		Cover for fan cooler 80x80			ALFA GM 80			1	Mep
	016.0624	Staffa per ventola azionamento P/P		Support for driver fan cooler						1	Mep
-NM1	022.0290	Etichetta segnafilo		Cable maker and wire				=QgCv	27	40	Mep
-NM2	022.0290	Etichetta segnafilo		Cable maker and wire				=QgCv	27	1290	Mep
-PT1	022.0311	Terminale a puntale da (Bianco)		Wire Terminal Connection White			0,5mmq DZ5CE005	=QgCv	27	1	Mep
-PT2	022.0313	Terminale a puntale da (Blu)		Wire Terminal Connection Bleu			2,5mmq	=QgCv	27	1	Mep
-PT3	022.0312	Terminale a puntale da (Nero)		Wire Terminal Connection Black			1,5mmq DZ5CE015	=QgCv	27	1	Mep
-PT4	022.0314	Terminale a puntale da (Grigio)		Wire Terminal Connection Grey			4mmq	=QgCv	27	1	Mep
-PWC								=QgCv	25	1	
-Q-K4	022.3819	Rele termico 0.6-1.0A		Termal overload 0.6-1.0A			ZB12-1.0A cod. 278435 Moeller	=QgCv	6	1	Mep
-Q-K4A	022.3819	Rele termico 0.6-1.0A		Termal overload 0.6-1.0A			ZB12-1.0A cod. 278435 Moeller	=QgCv	6	1	Mep
-Q-K6R	022.3821	Rele termico 1,6-2,4A		Termal overload 1,6-2,4A			ZB12-2,4A cod. 278437 Moeller	=QgCv	7	1	Mep
-Q-K25	022.3821	Rele termico 1,6-2,4A		Termal overload 1,6-2,4A			ZB12-2,4A cod. 278437 Moeller	=QgCv	7	1	Mep
-Q-K65	022.3813	Rele termico 4-6A		Termal overload 4-6A			ZB12-6A cod. 278439 Moeller	=QgCv	6	1	Mep
-Q0	022.1025	Comando bloccaporta PKZ0 - XRH IP65		Rotary handle door lock PKZ0 - XRH IP65			PKZ0 - XRH cod: 106133	=QgCv	5	1	Mep
	022.1291	Interruttore magnetotermico, 32-40A		Magneto-termal overload 32-40A			PKZM4-40, cod:222354			1	Mep
-QD1	010.7893	Vite TE M8x20		TE M8x20 screw				=QgCv	27	2	Mep
	010.7831	Vite M5x12 Buton		Buton M5x12 screw						16	Mep
	010.7847	Vite TCEI M4x55		TCEI M4x55 screw						4	Mep
	010.7856	Vite TCEI M4x45		TCEI M4x45 screw						4	Mep
	010.7851	Vite TCEI M4x10		TCEI M4x10 screw						2	Mep
	010.7604	Rondella D:8mm		Washer D:8mm						4	Mep
	010.7603	Rondella D:6mm		Washer D:6mm						44	Mep
	010.7201	Dado M4		M4 nut						4	Mep
	010.7204	Dado M8		M8 nut						2	Mep

REV.	MODIFICA	DATA	FIRME
R 1.2	Add -SE2 enable manual vises command (pg.17)	24/07/2017	Solfanelli
1.1	Add WEPC emergency powered conveyor cable (pg11)	03/11/2016	Solfanelli
1.0	Review 2016 with new electrical box carpentry	15/07/2016	Solfanelli
0.1	Added Three-phase Inverter Line reactor (L1)	16/04/2015	Solfanelli

Dis. N. H14A24060CSA
CAD SPAC
File H14A.1/dwg
Data 24/07/2017

Impianto/Plant: *H14A_240V.60Hz*
Denominazione/Title: DISTINTA MATERIALI / *Material List*

Ordine/Requisition:
Commessa/Order: H14A
Esecutore/Executor: Solfanelli

MEP

Foglio/Page: 39
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Nome/Name	Mep_code	Descrizione	Description EN	Catalog_code	Quadro/Board	Fg/Sh	Q.ta/Q.ty	Costruttore/Builder
-QD1	010.7803	Vite autofilettante 3.9x15	3.9x15 Screw		=QgCv	27	44	Mep
	016.2903	Quadro comandi completo di quadro elettrico SH 350NC 5.0.	Control panel plus electrical box for SH 350 NC 5.0.				1	Mep
-R-M20	025.0235	Anello di tenuta	Potentiometer 10K single turn	NI-18-25-4.5	=QgCv	24	1	Mep
	022.1322	Encoder da pannello Mep50	Panel encoder Mep 50				1	Mep
	010.3749	Manopola Alluminio Antracite e Logo HydMech	Anthracite Knob with HydMech Icon	Ø38x23mm - Albero Ø6			1	Mep
-R-M21	025.0235	Anello di tenuta	Potentiometer 10K single turn	NI-18-25-4.5	=QgCv	24	1	Mep
	022.1322	Encoder da pannello Mep50	Panel encoder Mep 50				1	Mep
	010.3749	Manopola Alluminio Antracite e Logo HydMech	Anthracite Knob with HydMech Icon	Ø38x23mm - Albero Ø6			1	Mep
-R-M25	025.0235	Anello di tenuta	Potentiometer 10K single turn	NI-18-25-4.5	=QgCv	21	1	Mep
	022.1816	Potenziometro 10Kohm	Potentiometer 10Kohm single turn				1	Mep
	010.3753	Manopola Alluminio Argento e Logo HydMech	Silver Knob with HydMech Icon	Ø38x23mm - Albero Ø6			1	Mep
-R-S1	022.3811	Rele sicurezza 4NO, 1NC cat.3	Safety relay 4NO, 1NC cat.3	CS AR-24V024 PIZZATO	=QgCv	11	1	Mep
-R-S2	022.3811	Rele sicurezza 4NO, 1NC cat.3	Safety relay 4NO, 1NC cat.3	CS AR-24V024 PIZZATO	=QgCv	12	1	Mep
-R10	022.2965	Resistenza 1W 680ohm	Resistance 1W 680ohm	131-823 RS	=QgCv	21	1	Mep
-S1	010.1897	Finecorsa a cerniera aletta stretta 2NC + 1NO+ cavo 0.70Mt +M12	Hinge limit switch 2NC + 1NO	HP AA052F-0,7PMS1 PIZZATO	=QgCv	12	1	Mep
	010.1886	Finecorsa a cerniera complementare aletta stretta	Complementary hinge	HC AA PIZZATO			1	Mep
-S2	010.1897	Finecorsa a cerniera aletta stretta 2NC + 1NO+ cavo 0.70Mt +M12	Hinge limit switch 2NC + 1NO	HP AA052F-0,7PMS1 PIZZATO	=QgCv	12	1	Mep
	010.1886	Finecorsa a cerniera complementare aletta stretta	Complementary hinge	HC AA PIZZATO			1	Mep
-S3	022.0911	Portacontatti per pulsantiera	Carrier for pushbutton	M22-A cod. 216374	=QgCv	17	1	Mep
	022.0937	Contatto pulsantiera NA	Normally open contact	M22-K10 cod. 216376 Moeller			1	Mep
	022.1408	Pulsante blu	Blue push button	M22-D-B cod. 216600			1	Mep
-S4	022.1245	Fungo emergenza	Emergency push button	M22-PVT cod.263467	=QgCv	11	1	Mep
	022.0936	Contatto pulsantiera NC	Normally close contact	M22-K01 cod. 216678 - Moeller			2	Mep
	022.0911	Portacontatti per pulsantiera	Carrier for pushbutton	M22-A cod. 216374			1	Mep
-S8	010.1897	Finecorsa a cerniera aletta stretta 2NC + 1NO+ cavo 0.70Mt +M12	Hinge limit switch 2NC + 1NO	HP AA052F-0,7PMS1 PIZZATO	=QgCv	12	1	Mep
	010.1886	Finecorsa a cerniera complementare aletta stretta	Complementary hinge	HC AA PIZZATO			1	Mep
-S18	022.0911	Portacontatti per pulsantiera	Carrier for pushbutton	M22-A cod. 216374	=QgCv	17	1	Mep
	022.0937	Contatto pulsantiera NA	Normally open contact	M22-K10 cod. 216376 Moeller			1	Mep
	022.1405	Pulsante nero	Black push button	M22-D-S cod. 216590			1	Mep
-S54	022.3920	Joystick 4 posizioni instabile con sblocco	Joystic 4 positions unstable with unlocking	MSJ12-60B cod. EL770 4 - ABB	=QgCv	17	1	Mep
	022.0932	Contatto pulsantiera NA	Normally open contact	MCB-10 cod. EO570 5 - ABB			4	Mep
-SF1	047.0182	Sacchetto portafusibili	Printed envelopes		=QgCv	27	1	Mep
-T2	022.1683	Trasformatore UL/CSA	Transformer 500VA UL/CSA	500VA P.0-240-480 S.0-55/60/65	=QgCv	8	1	Mep
-TF1	031.2622	Targa sostituzione fusibili	Replace fuse adhesive sign		=QgCv	27	1	Mep
-TF2	025.0604	Guarnizione aerstop	Control panel gasket		=QgCv	27	1	Mep
-U10	022.1330	Azionamento per motori passo-passo (60VAC +20% - 10A) + modbus	Driver for step motor (30-100V) + modbus	APSL3 E OP/S130	=QgCv	9	1	Mep
	022.2277	Ponte per driver SHS	Bridge for driver SHS	6742384 - RS			2	Mep
-X008	022.0429	Connettore EV idra. in DC con varistore (V1401)	Connector for solenoid valve DC with varistor	2 poli + PE - V1401 SHIELD	=QgCv	19	1	Mep
-X009	022.0429	Connettore EV idra. in DC con varistore (V1401)	Connector for solenoid valve DC with varistor	2 poli + PE - V1401 SHIELD	=QgCv	19	1	Mep
-X010	022.0429	Connettore EV idra. in DC con varistore (V1401)	Connector for solenoid valve DC with varistor	2 poli + PE - V1401 SHIELD	=QgCv	19	1	Mep
-X011	022.0429	Connettore EV idra. in DC con varistore (V1401)	Connector for solenoid valve DC with varistor	2 poli + PE - V1401 SHIELD	=QgCv	19	1	Mep
-X012	022.0429	Connettore EV idra. in DC con varistore (V1401)	Connector for solenoid valve DC with varistor	2 poli + PE - V1401 SHIELD	=QgCv	19	1	Mep
-X014	022.0429	Connettore EV idra. in DC con varistore (V1401)	Connector for solenoid valve DC with varistor	2 poli + PE - V1401 SHIELD	=QgCv	19	1	Mep
-X40	022.0429	Connettore EV idra. in DC con varistore (V1401)	Connector for solenoid valve DC with varistor	2 poli + PE - V1401 SHIELD	=QgCv	19	1	Mep
-X100	022.0763	Inverter 200-240V 7,5KW FR-D720-318NA MITSUBISHI	Inverter 200-240V 7,5KW FR-D720-318NA MITSUBISHI	FR-D720-318NA MITSUBISHI	=QgCv	6	1	Mep

REV.	MODIFICA	DATA	FIRME
R 1.2	Add -SE2 enable manual vises command (pg.17)	24/07/2017	Solfanelli
1.1	Add WEPC emergency powered conveyor cable (pg11)	03/11/2016	Solfanelli
1.0	Review 2016 with new electrical box carpentry	15/07/2016	Solfanelli
0.1	Added Three-phase Inverter Line reactor (L1)	16/04/2015	Solfanelli

Dis. N. H14A24060CSA
CAD SPAC
File H14A.1/dwg
Data 24/07/2017

Impianto/Plant: *H14A_240V.60Hz*

Denominazione/Title: DISTINTA MATERIALI
Material List

Ordine/Requisition:
Commessa/Order: H14A
Esecutore/Executor: Solfanelli

Foglio/Page: 40
Segue/Follow: 41
Ultimo/Last: 211

0	1	2	3	4	5	6	7	8	9

Nome/Name	Mep_code	Descrizione	Description EN	Catalog_code	Quadro/Board	Fg/Sh	Q.ta/Q.ty	Costruttore/Builder
-XFET	022.0281 + 022.0262	Connettore fisso ILME (CK03I + CKF03)	Fixed connector ILME (CK03I + CKF03)	CK03I + CKF03	=QgCv		1	Mep
-XQG1	022.2223	Morsetto 4(6)mmq per 4 fili a molla - PHOENIX	Terminal spring 4(6)mmq for 4 wires - PHOENIX	ST4-quattro- 3031445	=QgCv		3	Mep
-XQG2	022.2245	Morsetto 2,5mmq per 4 fili a molla - PHOENIX	Terminal 2,5(4)mmq for 4 wires - PHOENIX	ST2,5- QUATTRO_3031306	=QgCv		8	Mep
	022.2257	Morsetto da 2.5 mm singolo per 3 fili a molla 56.703.5055.0	Triple pole spring terminal 2,5mmq	56.703.5055.0			1	Mep
	022.2258	Morsetto da 2.5 mm singolo per 4 fili a molla	Quadruple pole spring terminal 2,5mmq	56.703.5155.0			1	Mep
-XQG3	022.2243	Morsetto 2,5(4)mmq per 2 fili a molla - PHOENIX	Terminal 2,5(4)mmq for 2 wires - PHOENIX	ST2,5- 3031212	=QgCv		6	Mep
-XQG4	022.2243	Morsetto 2,5mmq per 2 fili a molla - PHOENIX	Terminal 2,5(4)mmq for 2 wires - PHOENIX	ST2,5- 3031212	=QgCv		12	Mep
-XQGPE	022.2256	Morsetto da 2.5 mm singolo per 2 fili a molla	Single pole spring terminal 2,5mmq	56.703.0055.0	=QgCv		2	Mep
	022.2321	Barra da 15x15mm con 10 fori 6mm					1	Mep
-XTL	022.0376	Connettore F303N5000 per prossimity con 5Mt di cavo.	Connettor F303N5000 for connector with 5Mt cable.	022.0376	=QgCv		1	Mep
-Z1	022.2903	Toroide ferrite N30 r40	Ferrites Toroids N30 r40	212-0976 - RS	=QgCv	23	1	Mep
-F18	022.2253	Portafusibile 1 x (10,3x38) - 690V 32A	Fuse holding terminal 1 x (10,3x38) 690V 32A	2031038 BCH 32A ItalWeber	=QgMep	19	1	Mep
	054.4659	Fusibile Ritardato 10.3x38 - 0.5A UL/CSA	Fuse Time delay10.3x38 - 0.5A UL/CSA	0.5A 600V ATDR1/2			1	Mep
-F19	022.2253	Portafusibile 1 x (10,3x38) - 690V 32A	Fuse holding terminal 1 x (10,3x38) 690V 32A	2031038 BCH 32A ItalWeber	=QgMep	19	1	Mep
	054.4673	Fusibile Ritardato 10.3x38 - 1A UL/CSA	Fuse Time delay 10.3x38- 1A UL/CSA	1A 600V ATDR1			1	Mep
-S23	022.1405	Pulsante M22-D-N cod. 216598 + M22-A cod 216374	Black push button	M22-D-S cod. 216590	=QgMep	18	1	Mep
	022.0937	Contatto pulsantiera NA M22-K10 cod. 216376	Normally open contact	M22-K10 cod. 216376 Moeller			1	Mep
	022.0911	Portacontatti per pulsantiera	Carrier for pushbutton	M22-A cod. 216374			1	Mep
-XR0	022.0369	Connettore 3 poli per tensionatore elettronico	Connector 3-poles for strain gauge	022.0369	=QgMep		1	Mep
-XS7	022.0369	Connettore 3 poli per tensionatore elettronico	Connector 3-poles for strain gauge	022.0369	=QgMep		1	Mep

Nome/Name	Mep_code	Descrizione	Description EN	Catalog_code	Quadro/Board	Fg/Sh	Q.ta/Q.ty	Costruttore/Builder
-SE2	022.0911	Portacontatti per pulsantiera	Carrier for pushbutton	M22-A cod. 216374	=QgCv	16	1	Mep
	022.1405	Pulsante nero	Black push button	M22-D-S cod. 216590			1	Mep
	022.0937	Contatto pulsantiera NA	Normally open contact	M22-K10 cod. 216376 Moeller			1	Mep

REV.	MODIFICA	DATA	FIRME
R 1.2	Add -SE2 enable manual vises command (pg.17)	24/07/2017	Solfanelli
1.1	Add WEPC emergency powered conveyor cable (pg11)	03/11/2016	Solfanelli
1.0	Review 2016 with new electrical box carpentry	15/07/2016	Solfanelli
0.1	Added Three-phase Inverter Line reactor (L1)	16/04/2015	Solfanelli

Dis. N. H14A24060CSA
CAD SPAC
File H14A.1/dwg
Data 24/07/2017

Impianto/Plant
H14A_240V.60Hz

Denominazione/Title
DISTINTA CAVI
Cable list

Ordine/Requisition

Commessa/Order
H14A

Esecutore/Executor
Solfanelli

MEP

Foglio/Page
41
Segue/Follow
42
Ultimo/Last
211

0	1	2	3	4	5	6	7	8	9	
Nome/Name	Mep_code	Descrizione			Description EN		Catalog_code	Quadro/Board	Fg/Sh	Q.ta/Q.ty	Builder
-W1	022.1983	Cavo schermato 4G x Awg12 CSA			Cable 4G X AWG12 schielded		022.1983	=BmMep		5	MEP
-W01	022.1980	Cavo 2x Awg18 oil resistant TRAY UL-CSA			Cable 2X AWG18 OIL RESISTANT UL 2587 CSA		022.1980	=QgCv		5	MEP
-W2	022.1977	Cavo 4G Awg10 St CSA			Cable 4G X AWG10 SCHERMATO			=QgCv		5	MEP
-W4	022.1984	Cavo oil resistant 4G x Awg18 TRAY-ER UL-CSA			Cable 4G X AWG18 oil resistant UL 2587 CSA		022.1984	=QgCv		5	MEP
-W5	022.1984	Cavo oil resistant 4G x Awg18 TRAY-ER UL-CSA			Cable 4G X AWG18 oil resistant UL 2587 CSA		022.1984	=QgCv		5	MEP
-W7	022.1984	Cavo oil resistant 4G x Awg18 TRAY-ER UL-CSA			Cable 4G X AWG18 oil resistant UL 2587 CSA		022.1984	=QgCv		5	MEP
-W7/1	022.1984	Cavo oil resistant 4G x Awg18 TRAY-ER UL-CSA			Cable 4G X AWG18 oil resistant UL 2587 CSA		022.1984	=QgCv		2	MEP
-W7/B1	022.0424	Cavo pressofuso con connettore M12 90° lungo 5Mt			SAC-4P- 5,0-PUR/M12FR, M12 90° connector: lenght 5Mt		1668247	=QgCv		5	MEP
-W8	022.1984	Cavo oil resistant 4G x Awg18 TRAY-ER UL-CSA			Cable 4G X AWG18 oil resistant UL 2587 CSA		022.1984	=QgCv		6.5	MEP
-W11	022.1984	Cavo oil resistant 4G x Awg18 TRAY-ER UL-CSA			Cable 4G X AWG18 oil resistant UL 2587 CSA		022.1984	=QgCv		3	MEP
-W27	022.0422	Cavo pressofuso con connettore M12 90° lungo 10Mt			Cable with M12 90° connector; Lenght: 10Mt		1681389	=QgCv		10	MEP
-W29	022.1979	Cavo 5G Awg16 UL 2587 CSA			Cable 5G AWG16 UL 2587 CSA		022.1979	=QgCv		3.5	MEP
-W29/2	022..1905	Cavo schermato 4x2xAwg24St(0.20mmq) UL 2464 CSA						=QgCv		0.6	MEP
-W30	022.1980	Cavo 2x Awg18 oil resistant TRAY UL-CSA			Cable 2X AWG18 OIL RESISTANT UL 2587 CSA		022.1980	=QgCv		3	MEP
-W37	022.1980	Cavo 2x Awg18 oil resistant TRAY UL-CSA			Cable 2X AWG18 OIL RESISTANT UL 2587 CSA		022.1980	=QgCv		5	MEP
-W59	022.0398	Cavo 4xAwg24 per prossimity con connettore M12 dritto.10Mt			Straight connector M12 with 5MTcable 4x0.34mmq		1683002	=QgCv		5	MEP
-W65	022.1980	Cavo 2x Awg18 oil resistant TRAY UL-CSA			Cable 2X AWG18 OIL RESISTANT UL 2587 CSA		022.1980	=QgCv		5	MEP
-W89	022.1980	Cavo 2x Awg18 oil resistant TRAY UL-CSA			Cable 2X AWG18 OIL RESISTANT UL 2587 CSA		022.1980	=QgCv		3	MEP
-W90	022.1980	Cavo 2x Awg18 oil resistant TRAY UL-CSA			Cable 2X AWG18 OIL RESISTANT UL 2587 CSA		022.1980	=QgCv		3	MEP
-W91	022.1980	Cavo 2x Awg18 oil resistant TRAY UL-CSA			Cable 2X AWG18 OIL RESISTANT UL 2587 CSA		022.1980	=QgCv		3	MEP
-W92	022.1980	Cavo 2x Awg18 oil resistant TRAY UL-CSA			Cable 2X AWG18 OIL RESISTANT UL 2587 CSA		022.1980	=QgCv		3	MEP
-W93	022.1980	Cavo 2x Awg18 oil resistant TRAY UL-CSA			Cable 2X AWG18 OIL RESISTANT UL 2587 CSA		022.1980	=QgCv		3	MEP
-W95	022.1980	Cavo 2x Awg18 oil resistant TRAY UL-CSA			Cable 2X AWG18 OIL RESISTANT UL 2587 CSA		022.1980	=QgCv		6	MEP
-W96	022.0355	Cavo 3xAwg24 per proxy con connettore M8 dritto. L=5Mt			Cable with straight connector M8. L=5Mt		1669628	=QgCv		5	MEP
-W120	022.1905	Cavo schermato 4x2xAwg24St(0.20mmq) UL 2464 CSA			Cable shielded 4x2 Awg24 CSA		022.1905	=QgCv		6	MEP
-W120/1	022.1905	Cavo schermato 4x2xAwg24St(0.20mmq) UL 2464 CSA			Cable shielded 4x2 Awg24 CSA		022.1905	=QgCv			MEP
-W121	022.0397	Cavo 4xAwg24 per prossimity con connettore M12 dritto.5Mt			Straight connector M12 with 5MTcable 4x0.34mmq		1668124	=QgCv		5	MEP
-W122	022.1980	Cavo 2x Awg18 oil resistant TRAY UL-CSA			Cable 2X AWG18 OIL RESISTANT UL 2587 CSA		022.1980	=QgCv		3	MEP
-W123	022.1980	Cavo 2x Awg18 oil resistant TRAY UL-CSA			Cable 2X AWG18 OIL RESISTANT UL 2587 CSA		022.1980	=QgCv		3	MEP
-W124	022.1980	Cavo 2x Awg18 oil resistant TRAY UL-CSA			Cable 2X AWG18 OIL RESISTANT UL 2587 CSA		022.1980	=QgCv		3	MEP
-W7/B	022..1905	Cavo schermato 4x2xAwg24St(0.20mmq) UL 2464 CSA						=QgCv		6.5	MEP
-W20	022..1905	Cavo schermato 4x2xAwg24St(0.20mmq) UL 2464 CSA						=QgCv		6.5	MEP
-W21	022.1982	Cavo schermato 3x Awg18 St oil resistant UL 2587 CSA			Cable 3xAWG18ST OIL RESISTANT UL 2587 CSA		022.1982	=QgCv		8.5	MEP
-W28	022..1905	Cavo schermato 4x2xAwg24St(0.20mmq) UL 2464 CSA						=QgCv		7	MEP
-W29/1	022..1905	Cavo schermato 4x2xAwg24St(0.20mmq) UL 2464 CSA						=QgCv		2	MEP
-W32	022.0343	Cavo 3xAwg24 per proxy con connettore M8 dritto. L=10Mt			Straight connector M8 with 10Mt cable- SAC-3P-10,0-PUR/M8FS		1694101	=QgCv		7.7	MEP
-W56	022.2056	Cavo 8x0.25 lung. 10Mt con connettore M12 dritto			Connector M12 straight with 10MT cable UL/CSA 8x0.25mmq		022.2056	=QgCv		8	MEP
-W57	022.2053	Cavo SAC-8P- 5,0-PUR/M12FS con M12 diritto			Straight connector M12 with 5Mt cable UL/CSA 8x0.25mmq		1520369	=QgCv		5	MEP
-W57/1	022.2053	Cavo SAC-8P- 5,0-PUR/M12FS con M12 diritto			Straight connector M12 with 5Mt cable UL/CSA 8x0.25mmq		1520369	=QgCv		5	MEP
-W117	022.1906	Cavo schermato 6x2xAwg24St(0.20mmq) UL 2464 CSA			Cable shielded 6x2 Awg24 CSA		022.1906	=QgCv		2.4	MEP
-W117/1	022..1905	Cavo schermato 4x2xAwg24St(0.20mmq) UL 2464 CSA						=QgCv		2.8	MEP
-W118	022.1906	Cavo schermato 6x2xAwg24St(0.20mmq) UL 2464 CSA			Cable shielded 6x2 Awg24 CSA		022.1906	=QgCv		7.5	MEP
-W119	022.1906	Cavo schermato 6x2xAwg24St(0.20mmq) UL 2464 CSA			Cable shielded 6x2 Awg24 CSA		022.1906	=QgCv		2.1	MEP
-WAL	022.1977	Cavo 4G Awg10 St CSA			Cable 4G X AWG10 SCHERMATO			=QgCv		3	MEP
-WEMG	022..1905	Cavo schermato 4x2xAwg24St(0.20mmq) UL 2464 CSA						=QgCv			MEP

REV.	MODIFICA	DATA	FIRME
R 1.2	Add -SE2 enable manual vises command (pg.17)	24/07/2017	Solfanelli
1.1	Add WEPC emergency powered conveyor cable (pg11)	03/11/2016	Solfanelli
1.0	Review 2016 with new electrical box carpentry	15/07/2016	Solfanelli
0.1	Added Three-phase Inverter Line reactor (L1)	16/04/2015	Solfanelli

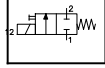
Dis. N. H14A24060CSA
CAD SPAC
File H14A.1/dwg
Data 24/07/2017

Impianto/Plant: *H14A_240V.60Hz*

Denominazione/Title: DISTINTA CAVI
Cable list

Ordine/Requisition:
Commessa/Order: H14A
Esecutore/Executor: Solfanelli

Foglio/Page: 42
Segue/Follow: 2
Ultimo/Last: 211

Sim.\Sym.	File	Descrizione\Description
ø	BLK106	Raccordo *Union*
	FFLH53	Valvola di massima *Maximum valve*
	FFLH97	Valvola direz. 4/3 centri chiusi *Maximum valve*
	FFLP40	Valvola di esclusione *Maximum valve*
	FFLP42	Manometro *Maximum valve*
	FFLP53	Motore elettrico *Maximum valve*
	FFLP54	Valvola controllo flusso *Maximum valve*
	FFLP62A	Valvola unidirezionale *Maximum valve*
	FFLP62B	Valvola apertura reg. *Maximum valve*
	FFLP75A	Cilindro a doppio effetto *Maximum valve*
	FFLP154	Elettrovalvola 2/2 ritorno a molla meccanica *Maximum valve*

Sim.\Sym.	File	Descrizione\Description
	CIL-VERT	Cilindro a doppio effetto
	FILTROID	Filtro
	POMPAID	Pompa idraulica
	REG-IDM	Blocco controllo pressione e flusso

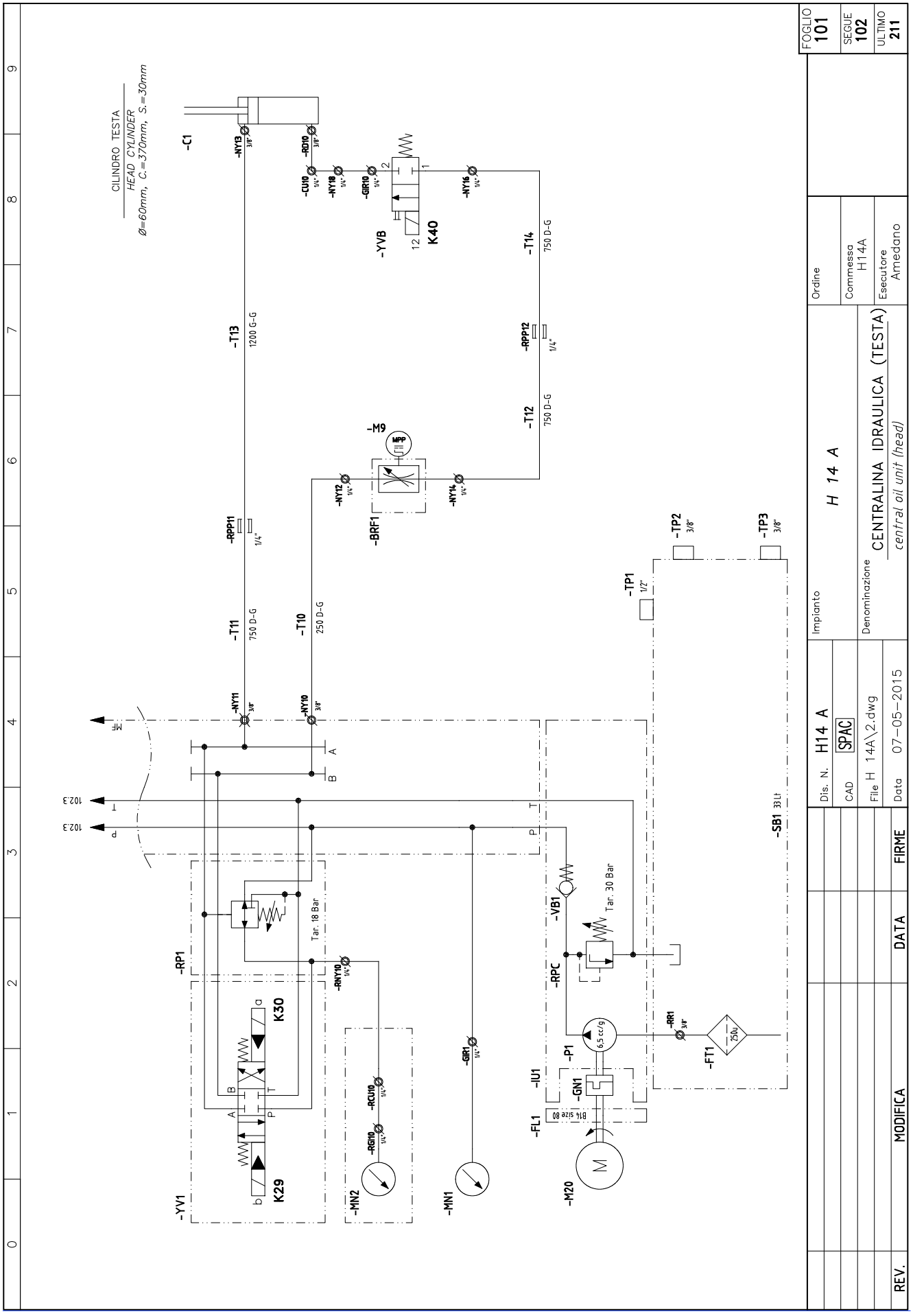
Sim.\Sym.	File	Descrizione\Description

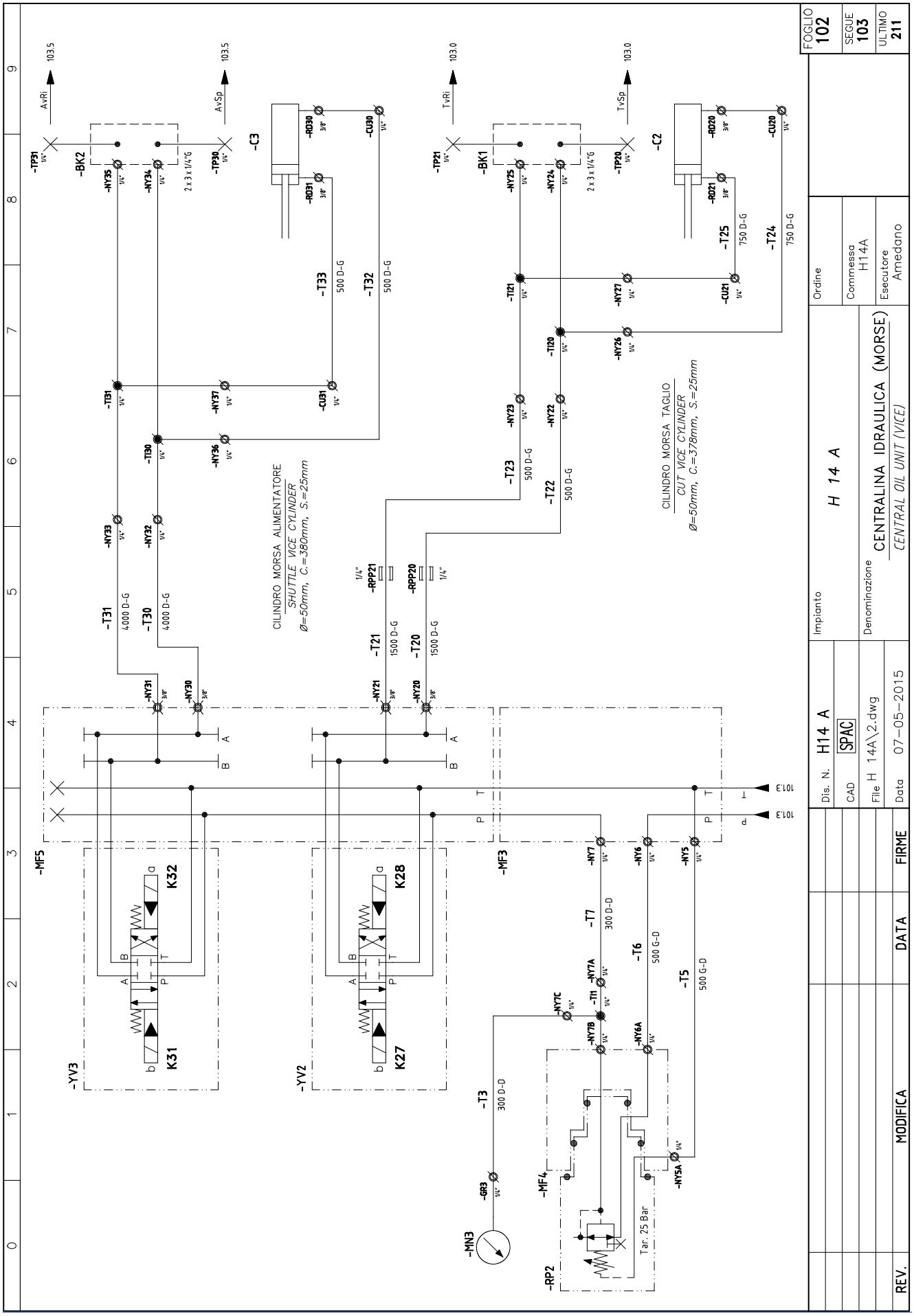
REV.	MODIFICA	DATA	FIRME

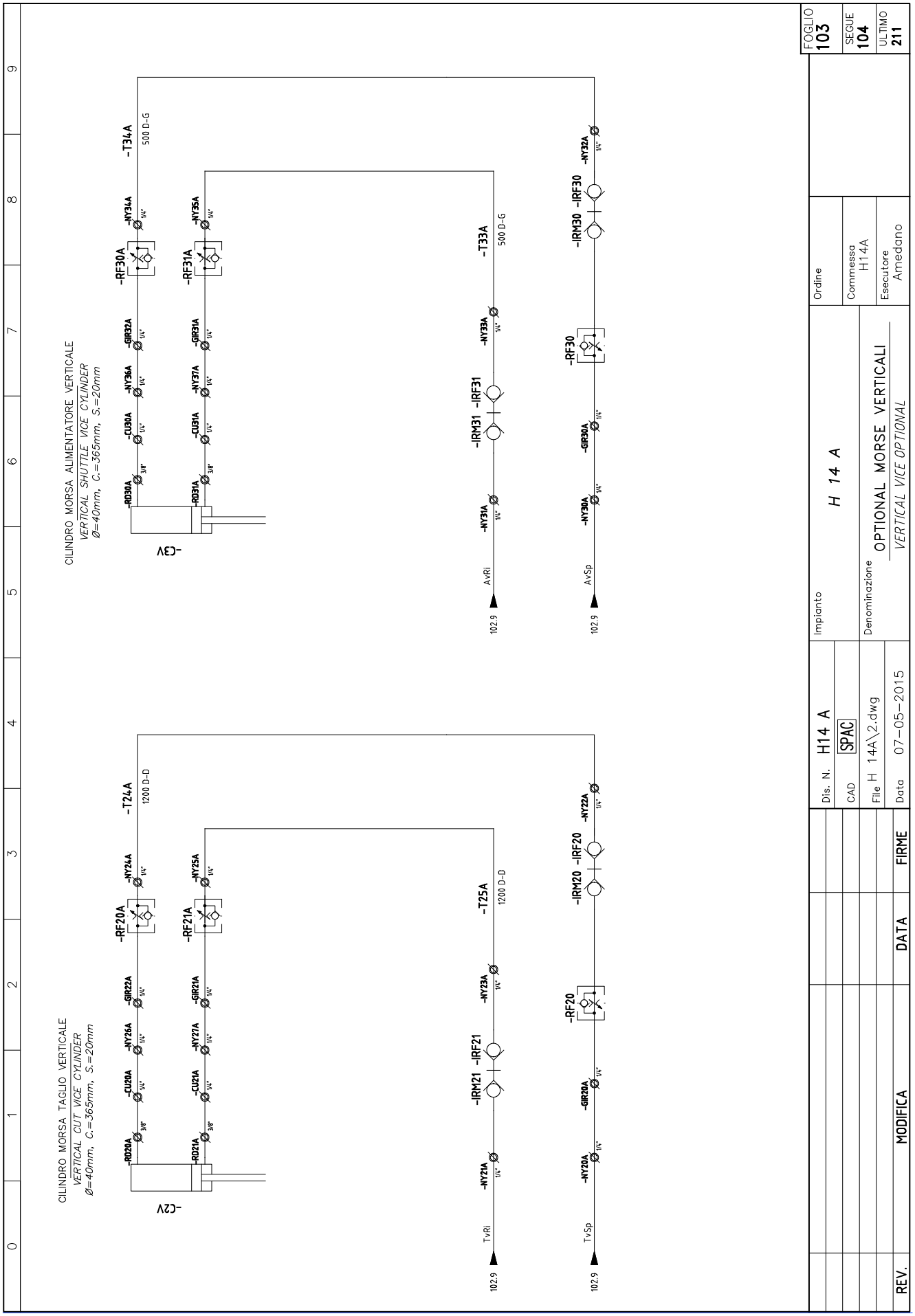
Dis. N.	H14 A
CAD	SPAC
File	H 14A\2.dwg
Data	07-05-2015

Impianto	*H 14 A*
Denominazione	LEGENDA SIMBOLI *SYMBOL KEY*
Ordine	
Commessa	H14A
Esecutore	Amedano

FOGLIO	100
SEGUE	101
ULTIMO	211


CILINDRO TESTA
HEAD CYLINDER
Ø=60mm, C.=370mm, S.=30mm
-C1
-NY13
-RD10
-CU10
-NY18
-GIR10
-NY16
-YV8
K40
-T14
750 D-G
-T13
1200 G-G
-RPP12
-T12
750 D-G
-M9
-NY12
-NY14
-BRF1
-RPP11
-T11
750 D-G
-T10
250 D-G
-NY11
-NY10
-TP1
-TP2
-TP3
-SB1
-RP1
Tar. 18 Bar
-RNY10
K30
K29
-YV1
-MN2
-RGI10
-RCU10
-MN1
-GR1
-VB1
Tar. 30 Bar
-RPC
-IU1
-FL1
-GN1
-P1
6,5 cc/g
-RR1
-FT1
-M20
Impianto
H 14 A
Denominazione
CENTRALINA IDRAULICA (TESTA)
central oil unit (head)
Ordine
Commessa
H14A
Esecutore
Amedano
FOGLIO
101
SEGUE
102
ULTIMO
211
Dis. N. H14 A
CAD SPAC
File H 14A\2.dwg
Data 07-05-2015
REV.
MODIFICA
DATA
FIRME


FOGLIO 102
SEGUE 103
ULTIMO 211
Ordine
Commessa H14A
Esecutore Amedano
Impianto
H 14 A
Denominazione
CENTRALINA IDRAULICA (MORSE)
CENTRAL OIL UNIT (VICE)
Dis. N. H14 A
CAD SPAC
File H 14A\2.dwg
Data 07-05-2015
REV. MODIFICA DATA FIRME
CILINDRO MORSA ALIMENTATORE
SHUTTLE VICE CYLINDER
Ø=50mm, C.=380mm, S.=25mm
CILINDRO MORSA TAGLIO
CUT VICE CYLINDER
Ø=50mm, C.=378mm, S.=25mm
-MF5
-MF3
-MF4
-YV3
-YV2
K32
K31
K28
K27
-BK2
-BK1
-C3
-C2
-MN3
-RP2
-GR3
-T3
-T5
-T6
-T7
-T11
-T20
-T21
-T22
-T23
-T24
-T25
-T30
-T31
-T32
-T33
-RPP20
-RPP21
-CU20
-CU21
-CU30
-CU31
-RD20
-RD21
-RD30
-RD31
-TP20
-TP21
-TP30
-TP31
-NY5
-NY5A
-NY6
-NY6A
-NY7
-NY7A
-NY7B
-NY7C
-NY20
-NY21
-NY22
-NY23
-NY24
-NY25
-NY26
-NY27
-NY30
-NY31
-NY32
-NY33
-NY34
-NY35
-NY36
-NY37
AvRi
AvSp
TvRi
TvSp
103.5
103.0
101.3
Tar. 25 Bar
2 x 3 x 1/4"G
4000 D-G
1500 D-G
500 D-G
300 D-D
750 D-G


CILINDRO MORSA TAGLIO VERTICALE
VERTICAL CUT VICE CYLINDER
Ø=40mm, C.=365mm, S.=20mm
-C2V
-RD20A
-RD21A
-CU20A
-CU21A
-NY26A
-NY27A
-GIR22A
-GIR21A
-RF20A
-RF21A
-NY24A
-NY25A
-T24A
1200 D-D
-T25A
-NY23A
-IRM21
-IRF21
-NY21A
-NY20A
-GIR20A
-RF20
-IRM20
-IRF20
-NY22A
TvRi
TvSp
102.9
CILINDRO MORSA ALIMENTATORE VERTICALE
VERTICAL SHUTTLE VICE CYLINDER
Ø=40mm, C.=365mm, S.=20mm
-C3V
-RD30A
-RD31A
-CU30A
-CU31A
-NY36A
-NY37A
-GIR32A
-GIR31A
-RF30A
-RF31A
-NY34A
-NY35A
-T34A
500 D-G
-T33A
-NY33A
-IRM31
-IRF31
-NY31A
-NY30A
-GIR30A
-RF30
-IRM30
-IRF30
-NY32A
AvRi
AvSp
REV.
MODIFICA
DATA
FIRME
Dis. N. H14 A
CAD SPAC
File H 14A\2.dwg
Data 07-05-2015
Impianto
H 14 A
Denominazione
OPTIONAL MORSE VERTICALI
VERTICAL VICE OPTIONAL
Ordine
Commessa H14A
Esecutore Amedano
FOGLIO 103
SEGUE 104
ULTIMO 211

0	1	2	3	4	5	6	7	8	9

POS.	CODICE	Q.TA	NOME
66	044.3017	1	CENTRALINA H-14A V480,60
65	044.3016	1	CENTRALINA H-14A
64	010.7639	1	VITE
63	044.1266	1	BOBINA
62	007.3225	1	DADO
61	025.0260	1	GUARNIZIONE
60	043.0557	1	MOLLA
59	044.0533	1	PISTONCINO
58	007.6599	1	VALVOLA
57	010.7495	1	VITE
56	043.0078	1	PISTONCINO
55	043.2342	1	MOLLA
54	043.0274	1	MOLLA
53	044.5532	1	PISTONCINO
52	044.5533	1	PISTONCINO
51	010.8343	1	VITE
50	010.7450	1	VITE
49	043.2259	1	MOLLA
48	044.5158	1	PISTONCINO
47	044.5001	1	PISTONCINO
46	010.1821	1	VITE
45	044.5305	1	PISTONCINO
44	044.4637	1	PISTONCINO
43	044.4636	1	PISTONCINO
42	010.7303	1	VITE
41	044.5532	1	PISTONCINO
40	010.7951	1	VITE
39	044.5566	1	PISTONCINO
38	010.7644	1	VITE
37	010.7963	1	VITE
36	044.2102	1	GUARNIZIONE
35	034.0906	1	MANOMETRO
34	044.5562	1	PISTONCINO
33	034.0900	1	MANOMETRO
32	010.7625	1	VITE
31	043.0191	1	MOLLA
30	044.0659	1	PISTONCINO
29	044.0501	1	PISTONCINO
28	010.7678	1	VITE
27	043.0582	1	MOLLA
26	025.0076	1	GUARNIZIONE
25	055.5535	1	GUARNIZIONE
24	010.7660	1	VITE
23	010.7603	1	VITE
22	010.7976	1	VITE
21	010.7625	1	VITE
20	007.6712	1	VALVOLA
19	025.0238	1	GUARNIZIONE
18	044.0121	1	TUBO
17	010.7663	1	VITE
16	043.1002	1	VALVOLA
15	043.2850	1	MOLLA
14	043.2340	1	MOLLA
13	044.0503	1	PISTONCINO
12	007.6694	1	VALVOLA
11	010.7238	1	VITE
10	010.7625	1	VITE
9	010.7976	1	VITE
8	044.0121	1	TUBO
7	025.0238	1	GUARNIZIONE
6	007.6712	1	VALVOLA
5	010.7639	1	VITE
4	043.0078	1	PISTONCINO
3	044.0533	1	PISTONCINO
2	007.6599	1	VALVOLA
1	010.7495	1	VITE
1	043.2342	1	MOLLA

MONOCENTRALINA H-14A V480,60
044.3017: Monocentralina completa H-14A completa 480,60
044.3016: Monocentralina H-14A senza motore

019.4014: V480/60 Hz
019.4015: V240/60 Hz

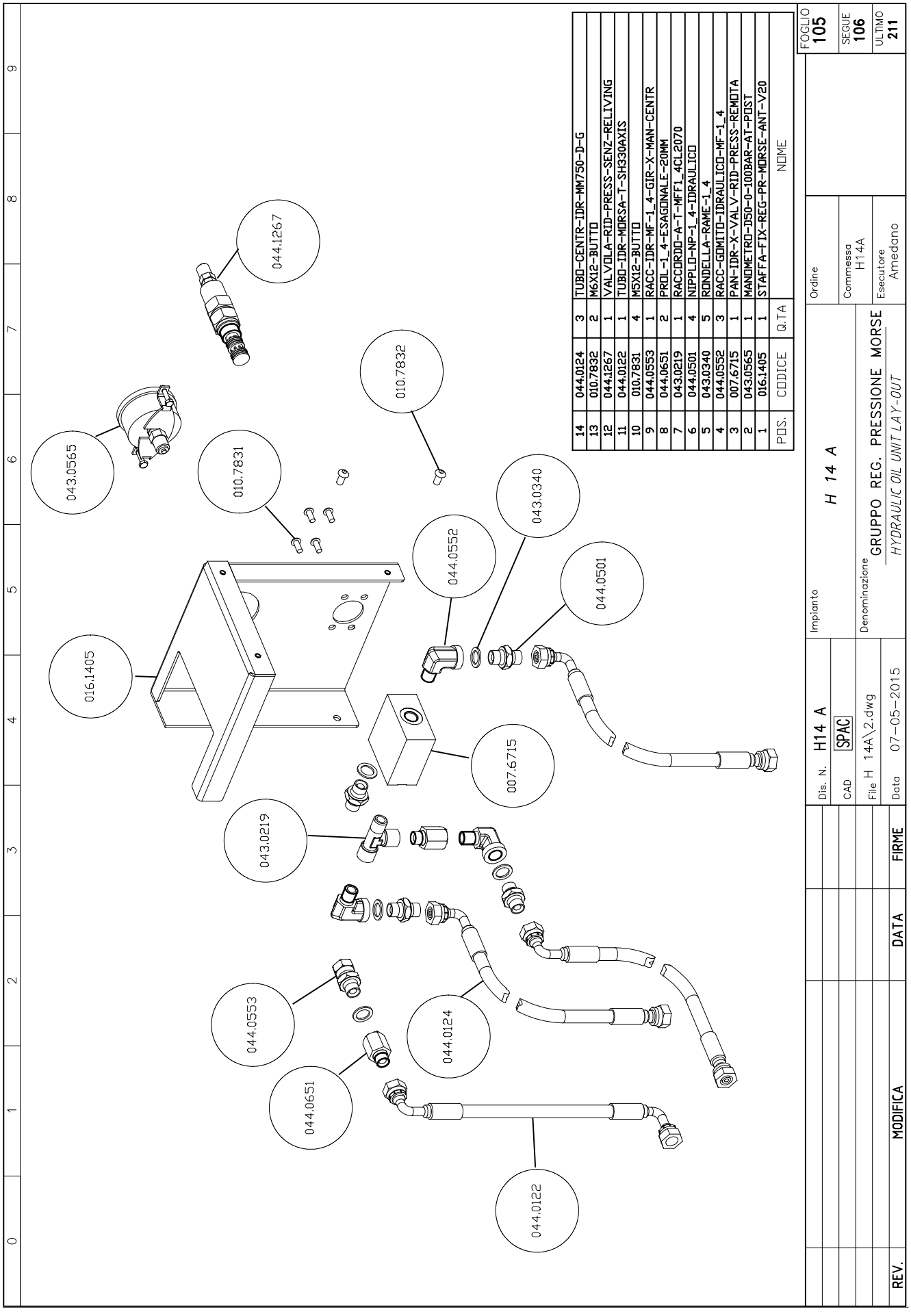
REV.	MODIFICA	DATA	FIRME

Dis. N.	H14 A
CAD	SPAC
File	H 14A\2.dwg
Data	07-05-2015

Impianto	H 14 A
Denominazione	DISPOSIZIONE CENTRALINA
	HYDRAULIC OIL UNIT LAY-OUT

Ordine	
Commessa	H14A
Esecutore	Amedano

FOGLIO	104
SEGUE	105
ULTIMO	211



POS.	CODICE	Q.TA	NOME
14	044.0124	3	TUBO-CENTR-IDR-MM750-D-G
13	010.7832	2	M6X12-BUTTO
12	044.1267	1	VALVOLA-RID-PRESS-SENZ-RELIVING
11	044.0122	1	TUBO-IDR-MORSA-T-SH330AXIS
10	010.7831	4	M5X12-BUTTO
9	044.0553	1	RACC-IDR-MF-1_4-GIR-X-MAN-CENTR
8	044.0651	2	PROL-1_4-ESAGONALE-20MM
7	043.0219	1	RACCORDO-A-T-MFF1_4CL2070
6	044.0501	4	NIPPLO-NP-1_4-IDRAULICO
5	043.0340	5	RONDELLA-RAME-1_4
4	044.0552	3	RACC-GOMITO-IDRAULICO-MF-1_4
3	007.6715	1	PAN-IDR-X-VALV-RID-PRESS-REMOTA
2	043.0565	1	MANOMETRO-D50-0-100BAR-AT-POST
1	016.1405	1	STAFFA-FIX-REG-PR-MORSE-ANT-V20

REV.	MODIFICA	DATA	FIRME
		Data 07-05-2015	

Dis. N. H14 A
CAD SPAC
File H 14A\2.dwg

Impianto
Denominazione
H 14 A
GRUPPO REG. PRESSIONE MORSE
HYDRAULIC OIL UNIT LAY-OUT

Ordine
Commessa H14A
Esecutore Amedano

FOGLIO 105
SEGUE 106
ULTIMO 211

0	1	2	3	4	5	6	7	8	9

NOME/ITEM	TIPO/TYPE	DESCRIZIONE IT (DB)	DESCRIZIONE EN (DB)	DB.CODICEINTERNO	Q.TA/Q.TY	QUADRO/BOARD	FG/SH
'-C1	'044.1058	Cilindro idraulico 60x30x370	Hydraulic cylinder 60x30x370		1	'=CiBmMep	101
'-C2	'044.1057	Cilindro idraulico 50x25x378	Hydraulic cylinder 50x25x378		1	'=CiBmMep	102
'-C3	'044.1059	Cilindro idraulico 50x25x380	Hydraulic cylinder 50x25x380		1	'=CiBmMep	102
'-CU10	'044.0552	Raccordo a gomito ID. MF-1/4"G	Hydraulic elbow coupling M/F 1/4"		1	'=CiBmMep	101
'-CU20	'044.0552	Raccordo a gomito ID. MF-1/4"G	Hydraulic elbow coupling M/F 1/4"		1	'=CiBmMep	102
'-CU21	'044.0552	Raccordo a gomito ID. MF-1/4"G	Hydraulic elbow coupling M/F 1/4"		1	'=CiBmMep	102
'-CU30	'044.0552	Raccordo a gomito ID. MF-1/4"G	Hydraulic elbow coupling M/F 1/4"		1	'=CiBmMep	102
'-CU31	'044.0552	Raccordo a gomito ID. MF-1/4"G	Hydraulic elbow coupling M/F 1/4"		1	'=CiBmMep	102
'-GIR1	'044.0502	Raccordo girevole ID. da MF-1/4"G	Hydraulic rotating coupling M/F 1/4"		1	'=CiBmMep	101
'-GIR10	'044.0502	Raccordo girevole ID. da MF-1/4"G	Hydraulic rotating coupling M/F 1/4"		1	'=CiBmMep	101
'-GR3	'044.0553	Raccordo girevole ID.per manometro MF-1/4"G	Hydraulic rotating coupling for manometer M/F 1/4"		1	'=CiBmMep	102
'-MF4	'007.6715	Manifold idraulico per reg. pressione a cartuccia cavità 08/3	Hydraulic manifold for cartridge pressure reduction	'007.6715	1	'=CiBmMep	102
'-MN3	'043.0565	Manometro ID. 0-100bar Ø50 con attacco posteriore da 1/4"G	Hydraulic manometer 0-100Bar Ø50 1/4"G	WIKA	1	'=CiBmMep	102
'-NY5A	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		1	'=CiBmMep	102
'-NY6A	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		1	'=CiBmMep	102
'-NY7A	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		1	'=CiBmMep	102
'-NY7B	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		1	'=CiBmMep	102
'-NY7C	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		1	'=CiBmMep	102
'-NY13	'044.0503	Nipplo ID. MM-3/8"G - 1/4"G	Hydraulic nipple MM-3/8"G - 1/4"G		1	'=CiBmMep	101
'-NY16	'044.0505	Nipplo ID. a flusso ridotto MM 1/4"G	Hydraulic nipple reduced flow MM 1/4"G		1	'=CiBmMep	101
'-NY18	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		1	'=CiBmMep	101
'-NY22	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		1	'=CiBmMep	102
'-NY23	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		1	'=CiBmMep	102
'-NY24	'043.0275	Nipplo da 1/4"G		'043.0275	1	'=CiBmMep	102
'-NY25	'043.0275	Nipplo da 1/4"G		'043.0275	1	'=CiBmMep	102
'-NY26	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		1	'=CiBmMep	102
'-NY27	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		1	'=CiBmMep	102
'-NY32	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		1	'=CiBmMep	102
'-NY33	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		1	'=CiBmMep	102
'-NY34	'043.0275	Nipplo da 1/4"G		'043.0275	1	'=CiBmMep	102
'-NY35	'043.0275	Nipplo da 1/4"G		'043.0275	1	'=CiBmMep	102
'-NY36	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		1	'=CiBmMep	102

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FOGLIO 106
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'-NY37	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		1	'=CiBmMep	102
'-RD10	'043.0227	Riduzione M/F da 3/8-1/4"G	Reductions M/F da 3/8-1/4"G	CL2531	1	'=CiBmMep	101
'-RD20	'043.0227	Riduzione M/F da 3/8-1/4"G	Reductions M/F da 3/8-1/4"G	CL2531	1	'=CiBmMep	102
'-RD21	'043.0227	Riduzione M/F da 3/8-1/4"G	Reductions M/F da 3/8-1/4"G	CL2531	1	'=CiBmMep	102
'-RD30	'043.0227	Riduzione M/F da 3/8-1/4"G	Reductions M/F da 3/8-1/4"G	CL2531	1	'=CiBmMep	102
'-RD31	'043.0227	Riduzione M/F da 3/8-1/4"G	Reductions M/F da 3/8-1/4"G	CL2531	1	'=CiBmMep	102
'-RP2	'044.1267	Valvola riduttice idraulica a cartuccia cavità 08/3 reg. a vite da 5-50Bar	Hydraulic pressure reduction cartridge 5-50Bar	'044.1267	1	'=CiBmMep	102
'-RPP11	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		2	'=CiBmMep	101
'-RPP11	'043.0280	Manicotto da 1/4"G		'043.0280	1	'=CiBmMep	101
'-RPP12	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		2	'=CiBmMep	101
'-RPP12	'043.0280	Manicotto da 1/4"G		'043.0280	1	'=CiBmMep	101
'-RPP20	'043.0280	Manicotto da 1/4"G		'043.0280	1	'=CiBmMep	102
'-RPP20	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		2	'=CiBmMep	102
'-RPP21	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		2	'=CiBmMep	102
'-RPP21	'043.0280	Manicotto da 1/4"G		'043.0280	1	'=CiBmMep	102
'-T3	'044.0121	Tubo idraulico 1/4"G 300 D-D	Hydraulic flex pipe 1/4"G 300 D-D		1	'=CiBmMep	102
'-T5	'044.0123	Tubo idraulico 1/4"G 500 D-G	Hydraulic pipe	'044.0123	1	'=CiBmMep	102
'-T6	'044.0123	Tubo idraulico 1/4"G 500 D-G	Hydraulic pipe	'044.0123	1	'=CiBmMep	102
'-T7	'044.0121	Tubo idraulico 1/4"G 300 D-D	Hydraulic flex pipe 1/4"G 300 D-D		1	'=CiBmMep	102
'-T11	'044.0124	Tubo idraulico 1/4"G 750 D-G		'044.0124	1	'=CiBmMep	101
'-T12	'044.0124	Tubo idraulico 1/4"G 750 D-G		'044.0124	1	'=CiBmMep	101
'-T13	'044.0131	Tubo idraulico 1/4"G 1200 G-G		'044.0131	1	'=CiBmMep	101
'-T14	'044.0124	Tubo idraulico 1/4"G 750 D-G		'044.0124	1	'=CiBmMep	101
'-T20	'044.0106	Tubo idraulico 1/4"G 1500 G-D		'044.0106	1	'=CiBmMep	102
'-T21	'044.0106	Tubo idraulico 1/4"G 1500 G-D		'044.0106	1	'=CiBmMep	102
'-T22	'044.0123	Tubo idraulico 1/4"G 500 D-G	Hydraulic pipe	'044.0123	1	'=CiBmMep	102
'-T23	'044.0123	Tubo idraulico 1/4"G 500 D-G	Hydraulic pipe	'044.0123	1	'=CiBmMep	102
'-T24	'044.0124	Tubo idraulico 1/4"G 750 D-G		'044.0124	1	'=CiBmMep	102
'-T25	'044.0124	Tubo idraulico 1/4"G 750 D-G		'044.0124	1	'=CiBmMep	102
'-T30	'044.0156	Tubo idraulico 1/4"G 4000 D-G		'044.0156	1	'=CiBmMep	102
'-T31	'044.0156	Tubo idraulico 1/4"G 4000 D-G		'044.0156	1	'=CiBmMep	102
'-T32	'044.0123	Tubo idraulico 1/4"G 500 D-G	Hydraulic pipe	'044.0123	1	'=CiBmMep	102

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'-T33	'044.0123	Tubo idraulico 1/4"G 500 D-G	Hydraulic pipe	'044.0123	1	'=CiBmMep	102
'-TI1	'043.0216	Raccordo a "T" FFF da 1/4"G	'"T" coupling FFF 1/4"G	CL2003	1	'=CiBmMep	102
'-TI20	'043.0216	Raccordo a "T" FFF da 1/4"G	'"T" coupling FFF 1/4"G	CL2003	1	'=CiBmMep	102
'-TI21	'043.0216	Raccordo a "T" FFF da 1/4"G	'"T" coupling FFF 1/4"G	CL2003	1	'=CiBmMep	102
'-TI30	'043.0216	Raccordo a "T" FFF da 1/4"G	'"T" coupling FFF 1/4"G	CL2003	1	'=CiBmMep	102
'-TI31	'043.0216	Raccordo a "T" FFF da 1/4"G	'"T" coupling FFF 1/4"G	CL2003	1	'=CiBmMep	102
'-YVB	'044.1250	Elettrovalvola idraulica 2/2 unidirezionale NC mont. in linea da 1/4"G 24Vca con connettore	Hydraulic electrovalve 2/2 NC 1/4"G 24Vac	Oil system	1	'=CiBmMep	101
'-BK1	'010.2307	Distributore tubi idraulici morse verticali sh 310 CNC-HS	Hinge limit switch 2NC + 1NO		1	'=CiCv	102
'-BK2	'010.2307	Distributore tubi idraulici morse verticali sh 310 CNC-HS	Hinge limit switch 2NC + 1NO		1	'=CiCv	102
'-BRF1	'043.0582	Regolatore idraulico di flusso per stepper baffo B da 1/4"G	Hydraulic flow regolator tipe B for stepper 1/4"G		1	'=CiCv	101
'-FL1	'044.5166	Flangia accoppiamento motore C80 B14	Power pack motor flange C80 B14	drive 131 200.6582.0043.0 Bucher	1	'=CiCv	101
'-FT1	'044.5001	Filtro aspirazione ID. Ø 80mm 250micron 3/8"G fem.	Oil filter for hydraulic unit Ø 80mm 250micron 3/8"G fem.	200.5461.12010 Bucher	1	'=CiCv	101
'-GN1	'044.4637	Giunto elas. lato pompa AP100 S309	Connecting coupling pump side	drive 131 200.6594.0033.0 Bucher	1	'=CiCv	101
'-GN1	'044.4636	Giunto elas. lato motore C80 B14	Connecting coupling motor side C80 B14	drive 131 200.6594.0019.0 Bucher	1	'=CiCv	101
'-IU1	'044.5152	Base UP100 K3P0-01	Housing UP100 K3P0-01	200.7404.1038.1 Bucher	1	'=CiCv	101
'-M9	V.d.E.	Vedi distinta elettrica	See electric BOM		1	'=CiCv	101
'-M20	V.d.E.	Vedi distinta elettrica	See electric BOM		1	'=CiCv	101
'-MF3	'007.6712	Manifold idraulico per derivazione reg. pressione, housing BUCHER	Hydraulic manifold for pressure reduction	'007.6712	1	'=CiCv	102
'-MF5	'007.6694	Manifold idraulico 2 posto CETOP 3 e uscita manomnetro per housing BUCHER	Hydraulic manifold for N°2 valve CETOP 3	'007.6694	1	'=CiCv	102
'-MN1	'043.0557	Manometro ID. 0-60bar Ø40 con attacco radiale da 1/4"G	Hydraulic manometer Ø60 1/4"G	WIKA	1	'=CiCv	101
'-MN2	'043.0557	Manometro ID. 0-60bar Ø40 con attacco radiale da 1/4"G	Hydraulic manometer Ø60 1/4"G	WIKA	1	'=CiCv	101
'-NY5	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		1	'=CiCv	102
'-NY6	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		1	'=CiCv	102
'-NY7	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		1	'=CiCv	102
'-NY10	'044.0503	Nipplo ID. MM-3/8"G - 1/4"G	Hydraulic nipple MM-3/8"G - 1/4"G		1	'=CiCv	101
'-NY11	'044.0503	Nipplo ID. MM-3/8"G - 1/4"G	Hydraulic nipple MM-3/8"G - 1/4"G		1	'=CiCv	101
'-NY12	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		1	'=CiCv	101
'-NY14	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		1	'=CiCv	101
'-NY20	'044.0503	Nipplo ID. MM-3/8"G - 1/4"G	Hydraulic nipple MM-3/8"G - 1/4"G		1	'=CiCv	102
'-NY21	'044.0503	Nipplo ID. MM-3/8"G - 1/4"G	Hydraulic nipple MM-3/8"G - 1/4"G		1	'=CiCv	102
'-NY30	'044.0503	Nipplo ID. MM-3/8"G - 1/4"G	Hydraulic nipple MM-3/8"G - 1/4"G		1	'=CiCv	102
'-NY31	'044.0503	Nipplo ID. MM-3/8"G - 1/4"G	Hydraulic nipple MM-3/8"G - 1/4"G		1	'=CiCv	102

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Ordine
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Esecutore Amedano

FOGLIO 108
SEGUE 109
ULTIMO 211

NOME/ITEM	TIPO/TYPE	DESCRIZIONE IT (DB)	DESCRIZIONE EN (DB)	DB.CODICEINTERNO	Q.TA/Q.TY	QUADRO/BOARD	FG/SH
'-P1	'044.4515	Pompa 6.5cc/giro per base	Pump 6.5cc/rev fou housings	6.5cc/Giro	1	'=CiCv	101
'-RCU10	'044.0552	Raccordo a gomito ID. MF-1/4"G	Hydraulic elbow coupling M/F 1/4"		1	'=CiCv	101
'-RGI10	'044.0553	Raccordo girevole ID.per manometro MF-1/4"G	Hydraulic rotating coupling for manometer M/F 1/4"		1	'=CiCv	101
'-RNY10	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		1	'=CiCv	101
'-RP1	'044.1266	Valvola modulare idraulica riduttice 3-35Bar	Moduler valve pressure reduction 3-35Bar	CETOP3 su "A" reg. a pomello dx M2D2/RA/M/50 Duplomatic	1	'=CiCv	101
'-RPC	'044.1267	Valvola riduttice idraulica a cartuccia cavità 08/3 reg. a vite da 5-50Bar	Hydraulic pressure reduction cartridge 5-50Bar	'044.1267	1	'=CiCv	101
'-RR1	'044.5159	Tubo pescante idraulico M-M3/8"G	Suction pipe M-M3/8"G	lung. 50mm	1	'=CiCv	101
'-SB1	'016.2102	Serbatoio centralina idraulica H14A	Oil tank for H14A		1	'=CiCv	101
'-T10	'044.0351	Tubo idraulico 1/4"G 250 D-G		'044.0351	1	'=CiCv	101
'-TP1	'034.0906	Tappo plastico da 1/2"G con sfiato	Breather plastic. cap 1/2"G		1	'=CiCv	101
'-TP2	'034.0900	Tappo livello olio 3/8"G	Oil level cap 3/8"G	SLNT 38	1	'=CiCv	101
'-TP3	'044.5162	Tappo scarico olio 3/8"G con OR	Oil drain tap 3/8"G with OR	AN612	1	'=CiCv	101
'-TP20	'043.0260	Tappo da 1/4"G	Cap 1/4"G	CL2611	1	'=CiCv	102
'-TP21	'043.0260	Tappo da 1/4"G	Cap 1/4"G	CL2611	1	'=CiCv	102
'-TP30	'043.0260	Tappo da 1/4"G	Cap 1/4"G	CL2611	1	'=CiCv	102
'-TP31	'043.0260	Tappo da 1/4"G	Cap 1/4"G	CL2611	1	'=CiCv	102
'-VB1	'044.4554	Valvola di ritegno idraulica per housing BOUCHER	Check valve for housing BOUCHER	RS3/817 - 200.7876.0141.0	1	'=CiCv	101
'-YV1	'043.1002	Elettrovalvola idraulica 4/3 centri chiusi CETOP 3 24Vcc	Hydraulic electrovalve 4/3 close center CETOP3 24Vdc	MD1L-S1/10 N-D24K1 DUPLOMATIC	1	'=CiCv	101
'-YV2	'043.1002	Elettrovalvola idraulica 4/3 centri chiusi CETOP 3 24Vcc	Hydraulic electrovalve 4/3 close center CETOP3 24Vdc	MD1L-S1/10 N-D24K1 DUPLOMATIC	1	'=CiCv	102
'-YV3	'043.1002	Elettrovalvola idraulica 4/3 centri chiusi CETOP 3 24Vcc	Hydraulic electrovalve 4/3 close center CETOP3 24Vdc	MD1L-S1/10 N-D24K1 DUPLOMATIC	1	'=CiCv	102
'-C2V	'044.1061	Cilindro idraulico 40x20x365 Morsa Verticale	Hydraulic cylinder 40x20x365		1	'=CiMvBm	103
'-C3V	'044.1061	Cilindro idraulico 40x20x365 Morsa Verticale	Hydraulic cylinder 40x20x365		1	'=CiMvBm	103
'-CU20A	'044.0552	Raccordo a gomito ID. MF-1/4"G	Hydraulic elbow coupling M/F 1/4"		1	'=CiMvBm	103
'-CU21A	'044.0552	Raccordo a gomito ID. MF-1/4"G	Hydraulic elbow coupling M/F 1/4"		1	'=CiMvBm	103
'-CU30A	'044.0552	Raccordo a gomito ID. MF-1/4"G	Hydraulic elbow coupling M/F 1/4"		1	'=CiMvBm	103
'-CU31A	'044.0552	Raccordo a gomito ID. MF-1/4"G	Hydraulic elbow coupling M/F 1/4"		1	'=CiMvBm	103
'-GIR20A	'044.0553	Raccordo girevole ID.per manometro MF-1/4"G	Hydraulic rotating coupling for manometer M/F 1/4"		1	'=CiMvBm	103
'-GIR21A	'044.0553	Raccordo girevole ID.per manometro MF-1/4"G	Hydraulic rotating coupling for manometer M/F 1/4"		1	'=CiMvBm	103
'-GIR22A	'044.0553	Raccordo girevole ID.per manometro MF-1/4"G	Hydraulic rotating coupling for manometer M/F 1/4"		1	'=CiMvBm	103
'-GIR30A	'044.0553	Raccordo girevole ID.per manometro MF-1/4"G	Hydraulic rotating coupling for manometer M/F 1/4"		1	'=CiMvBm	103
'-GIR31A	'044.0553	Raccordo girevole ID.per manometro MF-1/4"G	Hydraulic rotating coupling for manometer M/F 1/4"		1	'=CiMvBm	103
'-GIR32A	'044.0553	Raccordo girevole ID.per manometro MF-1/4"G	Hydraulic rotating coupling for manometer M/F 1/4"		1	'=CiMvBm	103

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Esecutore: Amedano

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NOME/ITEM	TIPO/TYPE	DESCRIZIONE IT (DB)	DESCRIZIONE EN (DB)	DB.CODICEINTERNO	Q.TA/Q.TY	QUADRO/BOARD	FG/SH
'-IRF20	'044.0453	Innesto rapido femmina ID. F-1/4"G	Hydraulic female quick lock coupling F-1/4"G		1	'=CiMvBm	103
'-IRF21	'044.0453	Innesto rapido femmina ID. F-1/4"G	Hydraulic female quick lock coupling F-1/4"G		1	'=CiMvBm	103
'-IRF30	'044.0453	Innesto rapido femmina ID. F-1/4"G	Hydraulic female quick lock coupling F-1/4"G		1	'=CiMvBm	103
'-IRF31	'044.0453	Innesto rapido femmina ID. F-1/4"G	Hydraulic female quick lock coupling F-1/4"G		1	'=CiMvBm	103
'-IRM20	'044.0452	Innesto rapido maschio ID. F-1/4"G	Hydraulic male quick lock coupling F-1/4"G		1	'=CiMvBm	103
'-IRM21	'044.0452	Innesto rapido maschio ID. F-1/4"G	Hydraulic male quick lock coupling F-1/4"G		1	'=CiMvBm	103
'-IRM30	'044.0452	Innesto rapido maschio ID. F-1/4"G	Hydraulic male quick lock coupling F-1/4"G		1	'=CiMvBm	103
'-IRM31	'044.0452	Innesto rapido maschio ID. F-1/4"G	Hydraulic male quick lock coupling F-1/4"G		1	'=CiMvBm	103
'-NY20A	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		1	'=CiMvBm	103
'-NY21A	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		2	'=CiMvBm	103
'-NY22A	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		1	'=CiMvBm	103
'-NY23A	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		1	'=CiMvBm	103
'-NY24A	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		1	'=CiMvBm	103
'-NY25A	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		1	'=CiMvBm	103
'-NY26A	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		1	'=CiMvBm	103
'-NY27A	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		1	'=CiMvBm	103
'-NY30A	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		1	'=CiMvBm	103
'-NY31A	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		2	'=CiMvBm	103
'-NY32A	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		1	'=CiMvBm	103
'-NY33A	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		1	'=CiMvBm	103
'-NY34A	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		1	'=CiMvBm	103
'-NY35A	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		1	'=CiMvBm	103
'-NY36A	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		1	'=CiMvBm	103
'-NY37A	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		1	'=CiMvBm	103
'-RD20A	'043.0227	Riduzione M/F da 3/8-1/4"G	Reductions M/F da 3/8-1/4"G	CL2531	1	'=CiMvBm	103
'-RD21A	'043.0227	Riduzione M/F da 3/8-1/4"G	Reductions M/F da 3/8-1/4"G	CL2531	1	'=CiMvBm	103
'-RD30A	'043.0227	Riduzione M/F da 3/8-1/4"G	Reductions M/F da 3/8-1/4"G	CL2531	1	'=CiMvBm	103
'-RD31A	'043.0227	Riduzione M/F da 3/8-1/4"G	Reductions M/F da 3/8-1/4"G	CL2531	1	'=CiMvBm	103
'-RF20	'043.0660	Rubinetto Idr. KHB-G 1/4 Morse Verticali		'043.0660	1	'=CiMvBm	103
'-RF20A	'044.1264	Regolatore idraulico di flusso unidirezionale 1/4"G	Hydraulic flow regolator 1/4"G	FT257-5 FPU 1/4	1	'=CiMvBm	103
'-RF21A	'044.1264	Regolatore idraulico di flusso unidirezionale 1/4"G	Hydraulic flow regolator 1/4"G	FT257-5 FPU 1/4	1	'=CiMvBm	103
'-RF30	'043.0660	Rubinetto Idr. KHB-G 1/4 Morse Verticali		'043.0660	1	'=CiMvBm	103

REV.	MODIFICA	DATA	FIRME

Dis. N. H14 A
CAD SPAC
File H 14A\2.dwg
Data 07-05-2015

Impianto
H 14 A

Denominazione
DISTINTA COMPONENTI
MATERIAL LIST

Ordine

Commessa
H14A

Esecutore
Amedano

FOGLIO 110
SEGUE 111
ULTIMO 211

NOME/ITEM	TIPO/TYPE	DESCRIZIONE IT (DB)	DESCRIZIONE EN (DB)	DB.CODICEINTERNO	Q.TA/Q.TY	QUADRO/BOARD	FG/SH
'-RF30A	'044.1264	Regolatore idraulico di flusso unidirezionale 1/4"G	Hydraulic flow regolator 1/4"G	FT257-5 FPU 1/4	1	'=CiMvBm	103
'-RF31A	'044.1264	Regolatore idraulico di flusso unidirezionale 1/4"G	Hydraulic flow regolator 1/4"G	FT257-5 FPU 1/4	1	'=CiMvBm	103
'-T24A	'044.0117	Tubo idraulico 1/4"G 1200 D-D	Hydraulic flex pipe 1/4"G 1200 D-D		1	'=CiMvBm	103
'-T25A	'044.0117	Tubo idraulico 1/4"G 1200 D-D	Hydraulic flex pipe 1/4"G 1200 D-D		1	'=CiMvBm	103
'-T33A	'044.0123	Tubo idraulico 1/4"G 500 D-G	Hydraulic pipe	'044.0123	1	'=CiMvBm	103
'-T34A	'044.0123	Tubo idraulico 1/4"G 500 D-G	Hydraulic pipe	'044.0123	1	'=CiMvBm	103

REV.	MODIFICA	DATA	FIRME

Dis. N. H14 A
CAD SPAC
File H 14A\2.dwg
Data 07-05-2015

Impianto
H 14 A

Denominazione
DISTINTA COMPONENTI
MATERIAL LIST

Ordine

Commessa
H14A

Esecutore
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FOGLIO 111
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ULTIMO 211

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1	INDICE CONTENUTI		14	AUSILIARI MOTORE STEPPER	
	Content Index			Stepper Motor Auxiliary Circuits	
2	INDICE CONTENUTI		15	UNITA' CENTRALE MEP50	
	Content Index			Central Unit MEP50	
3	LEGENDA SIMBOLI		16	INGRESSI DIGITALI MEP50	
	Symbol Key			Digital Input MEP50	
4	LEGENDA SIMBOLI		17	INGRESSI DIGITALI MEP50	
	Symbol Key			Digital Input MEP50	
5	ALIMENTAZIONE		18	USCITE DIGITALI MEP50	
	Power Supply			Digital Output MEP50	
6	ALIMENTAZIONE MOTORI 480V		19	USCITE DIGITALI MEP50	
	Motor Power Supply 480V			Digital Output MEP50	
7	ALIMENTAZIONE MOTORI 480V		20	INGRESSI ANALOGICI MEP50	
	Motor Power Supply 480V			Analog Input MEP50	
8	ALIMENTAZIONE TRASFORMATORI		21	INGRESSI ANALOGICI MEP50	
	Transformer Power Supply			Analog Input MEP50	
9	ALIMENTAZIONE MOTORE STEPPER		22	USCITE STEPPER MEP50	
	Stepper Motor Power Supply			Stepper Output MEP50	
10	ALIMENTAZIONE AUSILIARI		23	USCITA ANALOGICA E SERIALE MEP50	
	Auxiliary Circuit Power Supply			Analog Output and Serial MEP50	
11	RELE SICUREZZA EMERGENZA		24	ALIMENTAZIONE E ENCODER PANNELLO	
	Emergency safety relay			Power Supplay and Panel Encoder	
12	RELE SICUREZZA RIPARI		25	OPTIONAL	
	Machine Guard Safety Relay			Optional	
13	AUSILIARI INVERTER		26	MORSETTIERA QUADRO	
	Inverter Auxiliary Circuits			Panel Terminal Board	

Note :

REV.	MODIFICA	DATA	FIRME
R 1.2	Add -SE2 Enable manual vises command (pg.17)	24/07/2017	Solfanelli
1.1	Add WEPC emergency powered conveyor cable (pg.11)	03/11/2016	Solfanelli
1.0	Review 2016 with new electrical box carpentry	15/07/2016	Solfanelli
0.1	Added Three-phase Inverter Line reactor (L1)	16/04/2015	Solfanelli

Dis. N. H14A48060CSA
CAD SPAC
File H14A.1/dwg
Data 24/07/2017

Impianto/Plant: *H14A_480V.60Hz*
Denominazione/Title: INDICE CONTENUTI / *Content Index*
Ordine/Requisition:
Commessa/Order: H14A
Esecutore/Executor: Solfanelli

MEP

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Ultimo/Last: 211

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27	INTERNO QUADRO		40	DISTINTA MATERIALI	
	Board Inside			Material List	
28	GUAINE E ACCESSORI		41	DISTINTA CAVI	
	Sheaths and Accessories			Cable list	
29	RIASSUNTIVO CAVI		42	DISTINTA CAVI	
	Cable summary			Cable list	
30	RIASSUNTIVO CAVI				
	Cable Summary				
31	RIASSUNTIVO CAVI				
	Cable Summary				
32	RIASSUNTIVO CAVI				
	Cable Summary				
33	RIASSUNTIVO CAVI				
	Cable Summary				
34	RIASSUNTIVO CAVI				
	Cable Summary				
35	RIASSUNTIVO CAVI				
	Cable Summary				
36	RIASSUNTIVO CAVI				
	Cable Summary				
37	DISTINTA MATERIALI				
	Material List				
38	DISTINTA MATERIALI				
	Material List				
39	DISTINTA MATERIALI				
	Material List				

Note :

REV.	MODIFICA	DATA	FIRME
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Dis. N. H14A48060CSA
CAD SPAC
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Data 24/07/2017

Impianto/Plant: H14A_480V.60Hz
Denominazione/Title: INDICE CONTENUTI / Content Index
Ordine/Requisition:
Commessa/Order: H14A
Esecutore/Executor: Solfanelli

Foglio/Page: 2
Segue/Follow: 3
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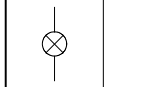
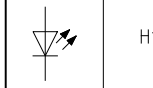
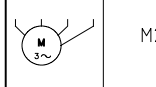
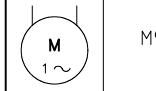
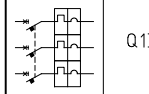
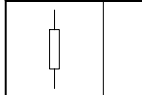
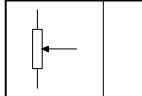
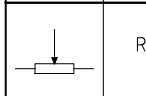
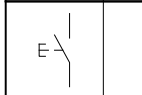
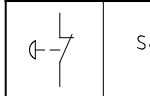
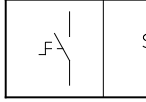
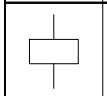
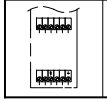
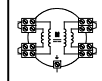
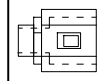
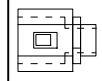
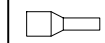
Sim.\Sym.	File	Descrizione\Description
	H5	Lampada *Lamp*
	H11	LED *Led*
	M2	Motore asincrono trifase *Three–phase inductor motor*
	M9	Motore corrente alternata monofase *Single–phase inductor motor*
	Q1360	Int. automatico magnetotermico sezionatore tripolare *Three–phase automatic switch*
	R1	Resistore *Resistor*
	R6	Potenziometro *Potentiometer*
	R60	Potenziometro *Potentiometer*
	S2	Comando a Pulsante NO *Push button NO*
	S4C	Pulsante di emergenza NC *Emergency push button NC*
	S5	Comando rotativo a due posizioni NO *Rotary selector two position*

Sim.\Sym.	File	Descrizione\Description
	S7	Comando a pedale NO *Control pedal NO*
	S13C	Fine corsa comandato a camma libero NC *Limit switch free NC*
	S14C	Fine corsa comandato a camma azionato NC *Limit switch actuated NC*
	S15C	Comandato dal livello di un fluido (livellostato) NC *Water gauge NC*
	T2	Trasformatore per ausiliari con schermo *Trasformer for auxiliary white shield*
	Y1	Elettrovalvola (A) *Solenoid valve (A)*
	Y1A	Elettrovalvola (B) *Solenoid valve (B)*
	KA1	Bobina rele' Aux *Auxiliary relay coil*
	KM1	Bobina contattore *Contactor coil*
	BLK11	Trasformatore per ausiliari con schermo *Trasformer for auxiliary white shield*
	BLK12	Inverter (potenza) *Inverter (power)*

Sim.\Sym.	File	Descrizione\Description
	BLK13	Azionamento (potenza) *Drive (power)*
	BLK14	Inverter (ausiliari) *Inverter (auxiliary)*
	BLK15	Azionamento (ausiliari) *Drive (auxiliary)*
	BLK21	Motore passo-passo *Stepper motor*
	BLK41	Raccordo SX *Connector SX*
	BLK42	Raccordo DX *Connector DX*
	BLK43	Tubo corrugato *Corrugated pipe*
	BLK44	Riduzione PG *PG adapter*
	BLK51	Dado PG *PG nut*
	BLK56	Terminale a puntale *Terminal*
	BLK57	Filo unipolare *Wire*

REV.	MODIFICA	DATA	FIRME
R 1.2	Add -SE2 Enable manual vises command (pg.17)	24/07/2017	Solfanelli
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Dis. N. H14A48060CSA
CAD SPAC
File H14A.1/dwg
Data 24/07/2017

Impianto/Plant: *H14A_480V.60Hz*

Denominazione/Title: LEGENDA SIMBOLI
Symbol Key

Ordine/Requisition
Commessa/Order: H14A
Esecutore/Executor: Solfanelli

MEP

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Sim.\Sym.	File	Descrizione\Description
	BLK58	Fascette plastiche di fissaggio *Plastic clamp*
	BLK60	Terminale a occhiello *Terminal*
	BLK66	Sacchetto portafusibile *Bag fuse*
	SPX08E	Dispositivo di prossimita' induttivo D.C. NO *Sensor of proximity fed DC NO*

Sim.\Sym.	File	Descrizione\Description

Sim.\Sym.	File	Descrizione\Description

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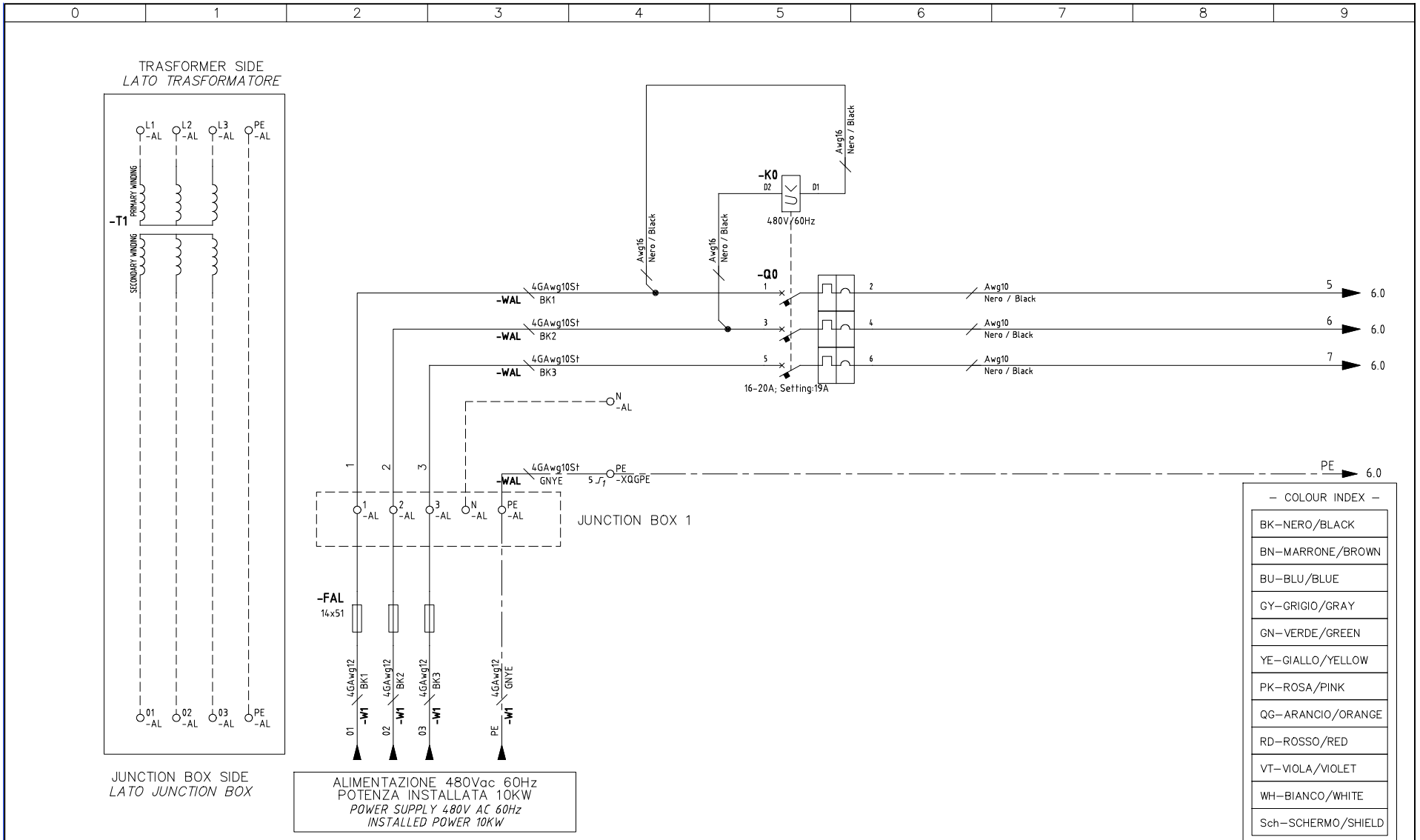
CAD SPAC
File H14A.1/dwg
Data 24/07/2017

Impianto/Plant: *H14A_480V.60Hz*

Denominazione/Title: LEGENDA SIMBOLI
Symbol Key

Ordine/Requisition
Commessa/Order: H14A
Esecutore/Executor: Solfanelli

Foglio/Page: 4
Segue/Follow: 5
Ultimo/Last: 211



REV.	MODIFICA	DATA	FIRME
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Dis. N. H14A48060CSA
CAD SPAC
File H14A.1/dwg
Data 24/07/2017

Impianto/Plant: *H14A_480V.60Hz*

Denominazione/Title: ALIMENTAZIONE
Power Supply

Ordine/Requisition
Commessa/Order: H14A
Esecutore/Executor: Solfanelli

MEP

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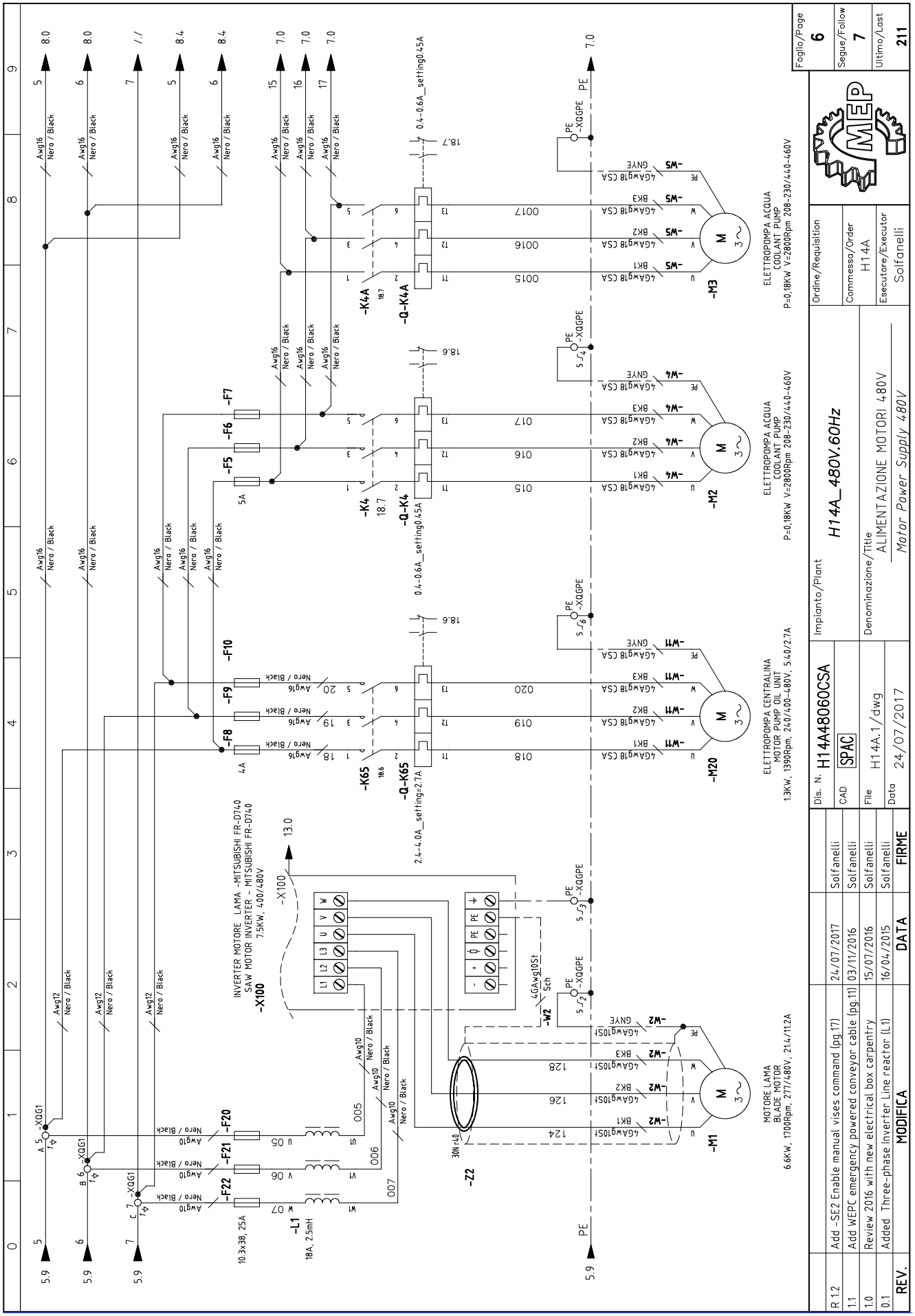
H14A_480V.60Hz
Impianto/Plant
Denominazione/Title
ALIMENTAZIONE MOTORI 480V
Motor Power Supply 480V
Dis. N. H14A48060CSA
CAD SPAC
File H14A.1/dwg
Data 24/07/2017
Ordine/Requisition
Commessa/Order H14A
Esecutore/Executor Solfanelli
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Ultimo/Last 211
REV. MODIFICA DATA FIRME
R 1.2 Add -SE2 Enable manual vises command (pg.17) 24/07/2017 Solfanelli
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1.0 Review 2016 with new electrical box carpentry 15/07/2016 Solfanelli
0.1 Added Three-phase inverter Line reactor (L1) 16/04/2015 Solfanelli
INVERTER MOTORE LAMA -MITSUBISHI FR-D740
SAW MOTOR INVERTER - MITSUBISHI FR-D740
7.5KW, 400/480V
-X100
-L1
18A, 2.5mH
-Z2
-F20
-F21
-F22
10.3x38, 25A
-F5
-F6
-F7
-F8
-F9
-F10
4A
5A
-K4
-K4A
-K65
-Q-K4
-Q-K4A
-Q-K65
0.4-0.6A_setting0.45A
2.4-4.0A_setting=2.7A
ELETTROPOMPA ACQUA
COOLANT PUMP
P=0,18KW V=2800Rpm 208-230/440-460V
-M3
-M2
ELETTROPOMPA CENTRALINA
MOTOR PUMP OIL UNIT
1.3KW, 1390Rpm, 240/400-480V, 5.40/2.7A
-M20
MOTORE LAMA
BLADE MOTOR
6.6KW, 1700Rpm, 277/480V, 21.4/11.2A
-M1
-W1
-W2
-W3
-W4
-W5
-W11
4GAwg10SJT
4GAwg18 CSA GNYE
4GAwg18 CSA BK1
4GAwg18 CSA BK2
4GAwg18 CSA BK3
Awg16 Nero / Black
Awg12 Nero / Black
Awg10 Nero / Black
-XQG1
-XQGPE
-XQ1
-XQ2
-XQ3
-XQ4
-XQ5
-XQ6
-XQ7
-XQ8
-XQ9
-XQ10
-XQ11
-XQ12
-XQ13
-XQ14
-XQ15
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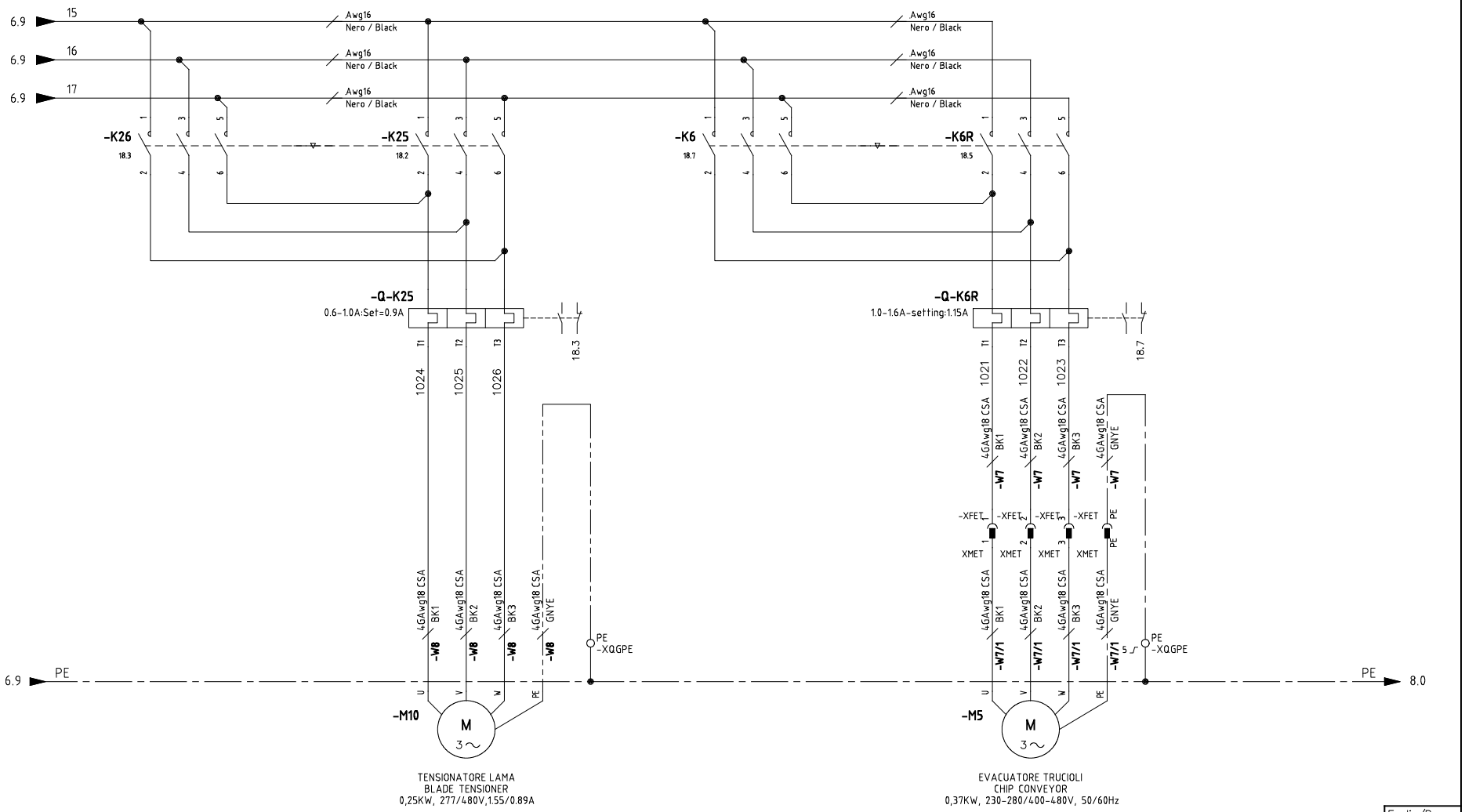
-XQ99
-XQ100



REV.	MODIFICA	DATA	FIRME
R 1.2	Add -SE2 Enable manual vises command (pg.17)	24/07/2017	Solfanelli
1.1	Add WEPC emergency powered conveyor cable (pg.11)	03/11/2016	Solfanelli
1.0	Review 2016 with new electrical box carpentry	15/07/2016	Solfanelli
0.1	Added Three-phase Inverter Line reactor (L1)	16/04/2015	Solfanelli

Dis. N. H14A48060CSA
CAD SPAC
File H14A.1/dwg
Data 24/07/2017

Impianto/Plant
H14A_480V.60Hz

Denominazione/Title
ALIMENTAZIONE MOTORI 480V
Motor Power Supply 480V

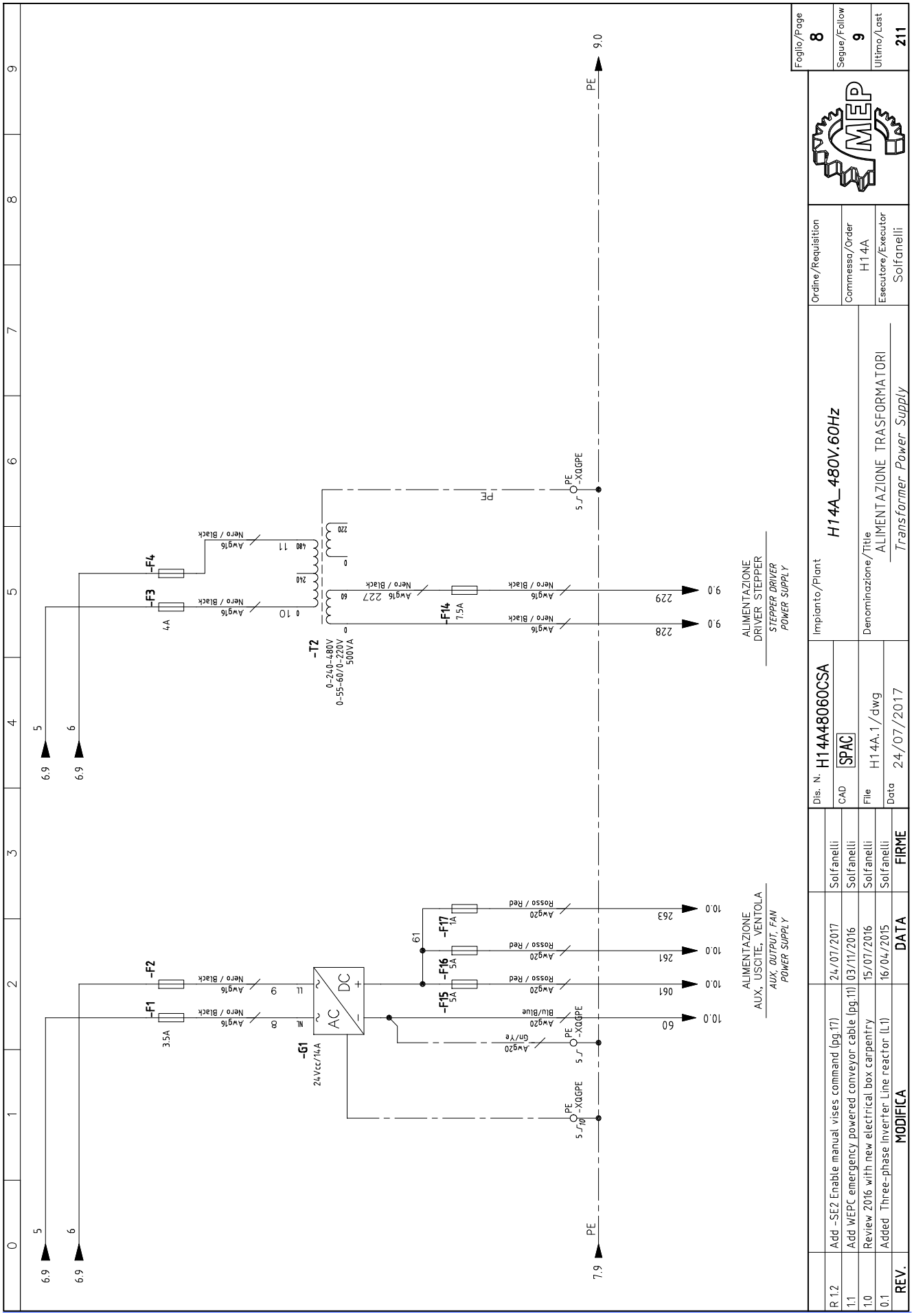
Ordine/Requisition

Commessa/Order
H14A

Esecutore/Executor
Solfanelli

MEP

Foglio/Page 7
Segue/Follow 8
Ultimo/Last 211



REV.	MODIFICA	DATA	FIRME
R 1.2	Add -SE2 Enable manual vises command (pg.17)	24/07/2017	Solfanelli
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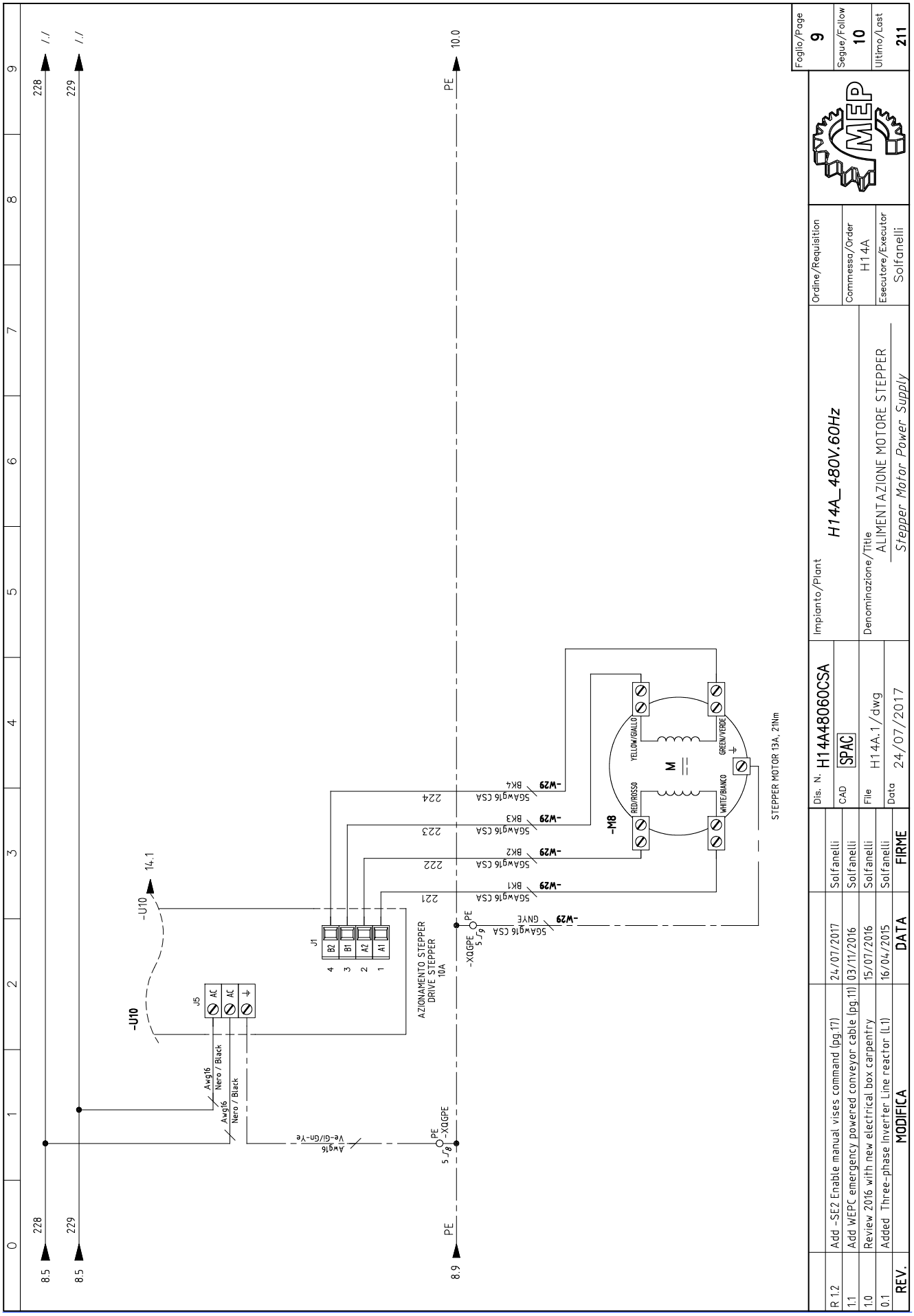
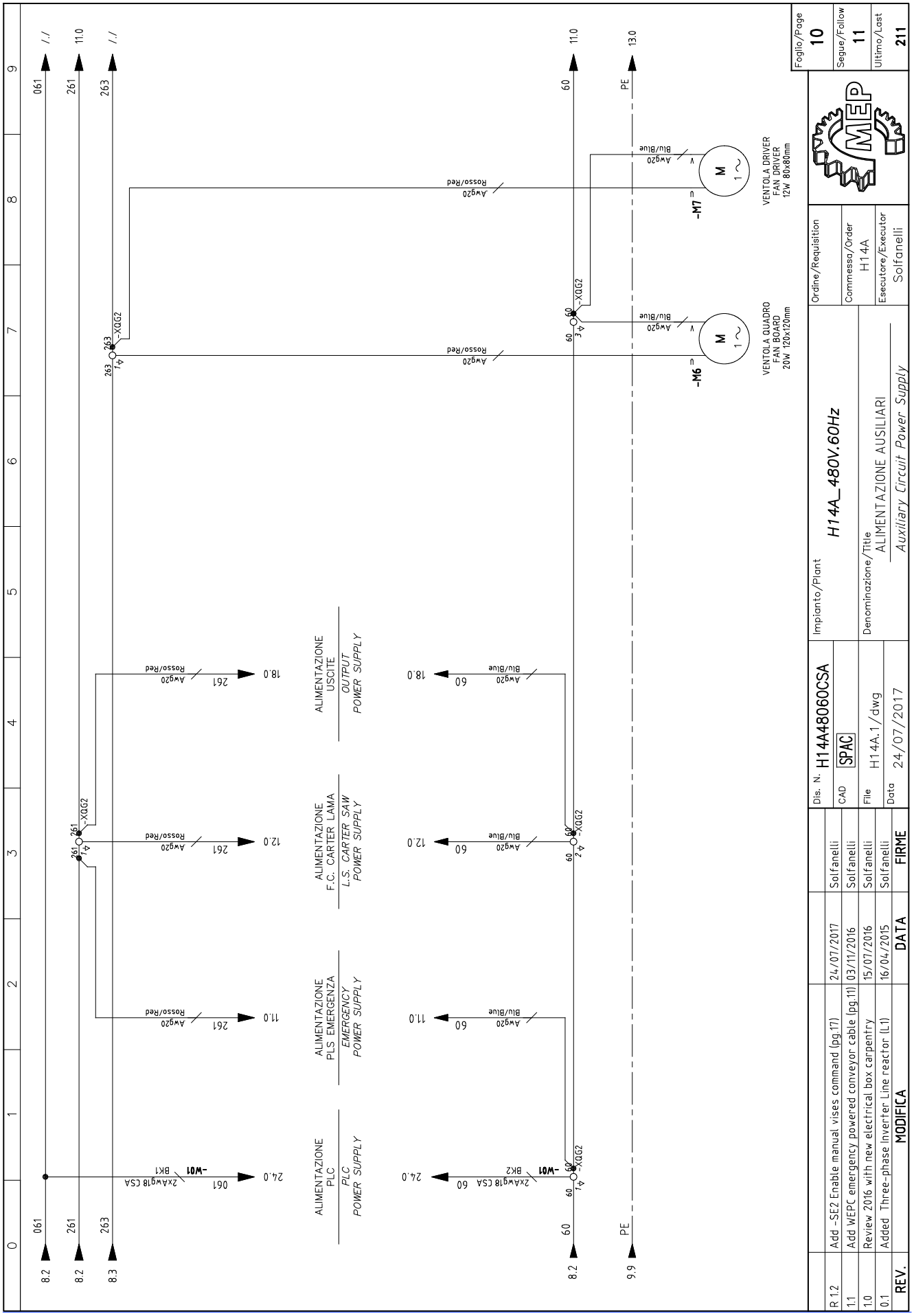
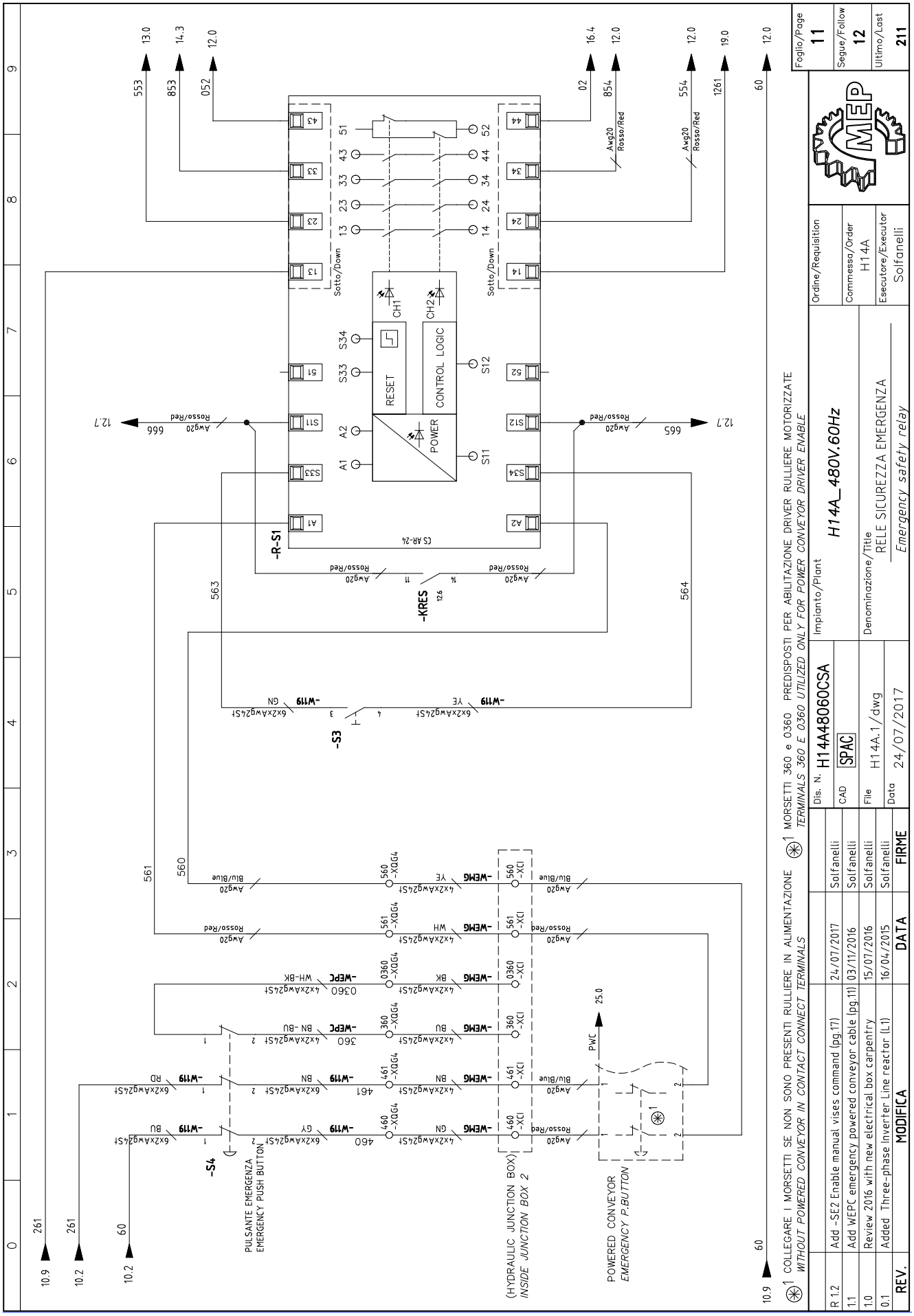
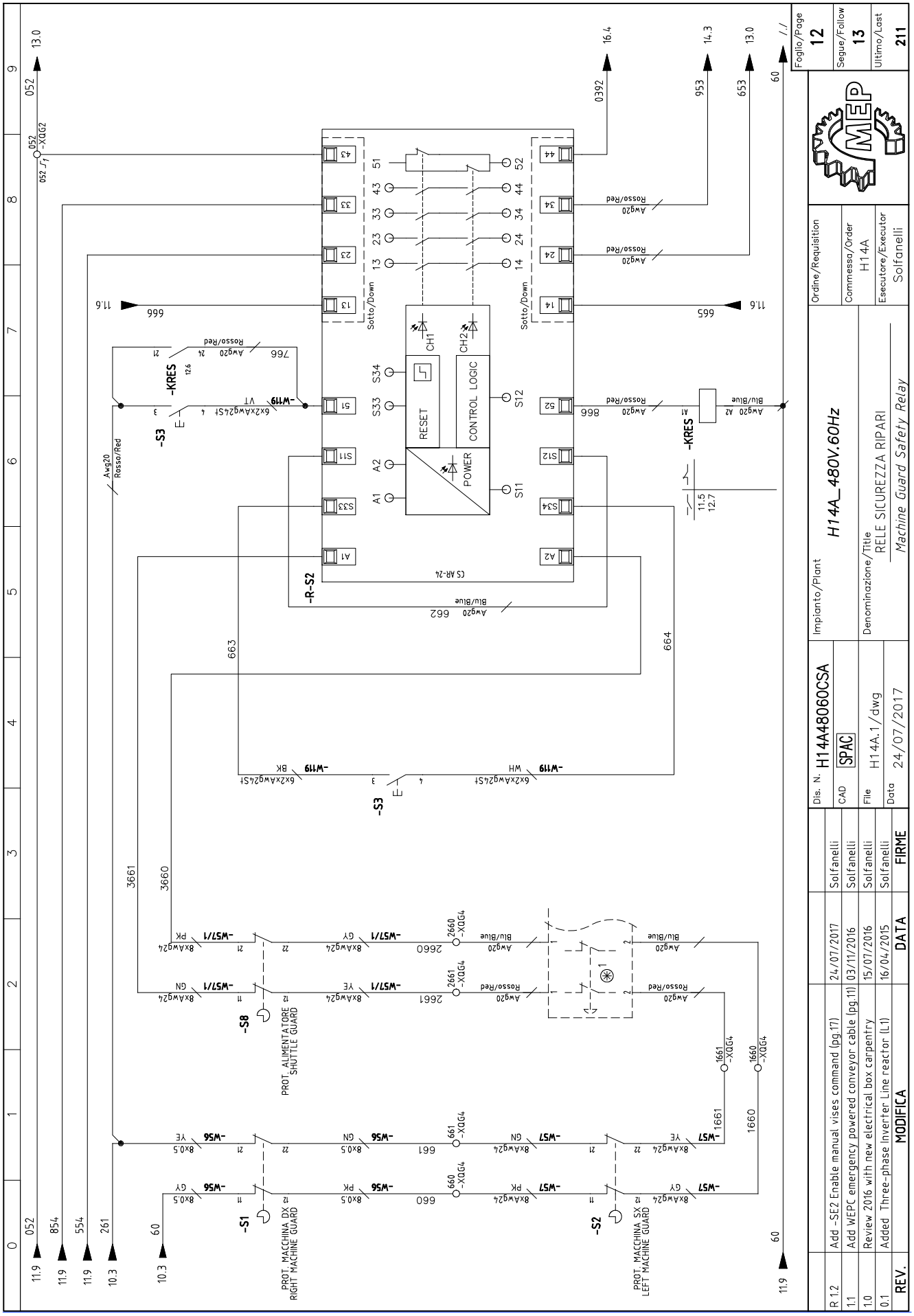
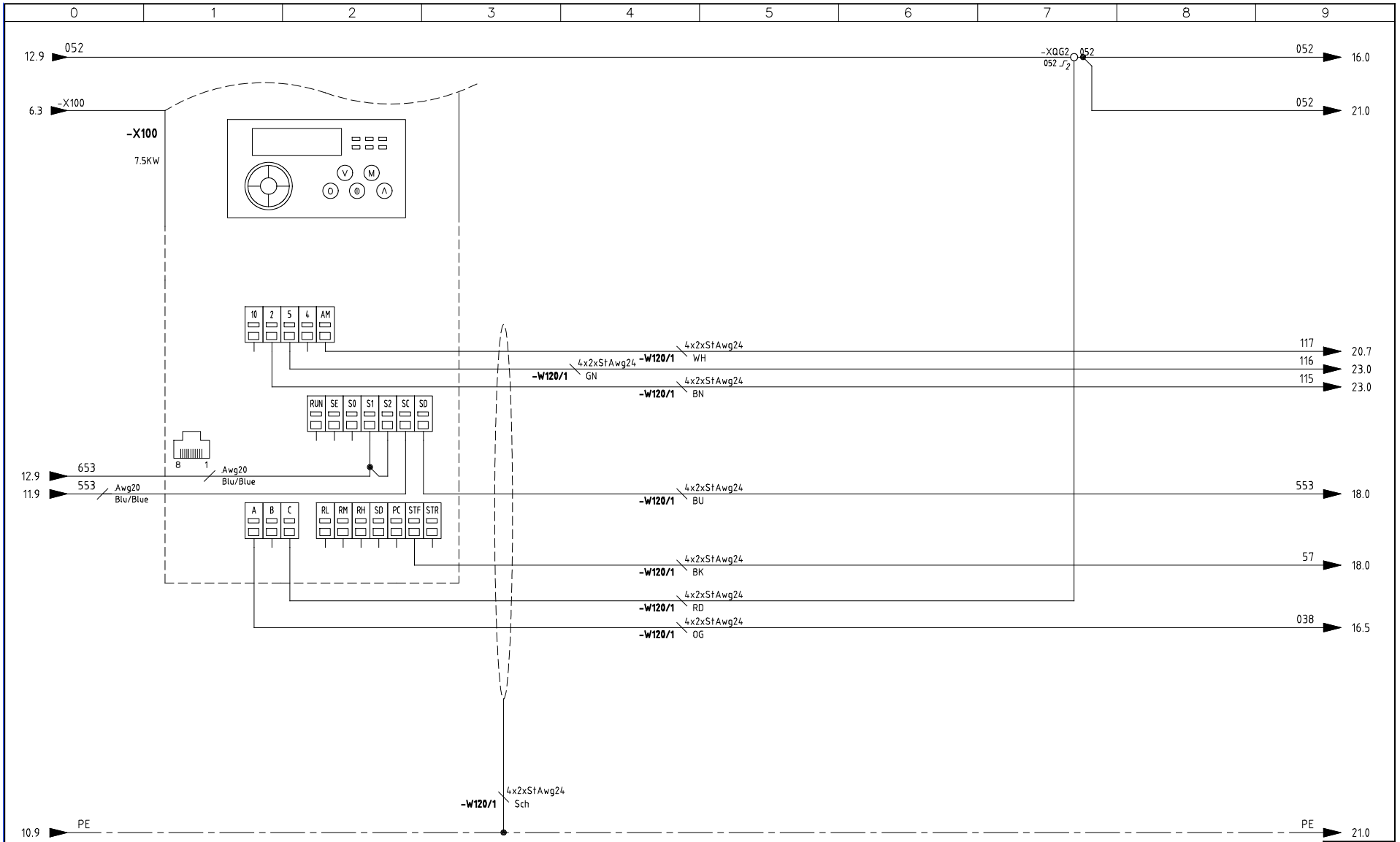
0.1	Added Three-phase inverter Line reactor (L1)	16/04/2015	Solfanelli


Foglio/Page 9
Segue/Follow 10
Ultimo/Last 211
Ordine/Requisition
Commessa/Order H14A
Esecutore/Executor Solfanelli
Impianto/Plant H14A_480V.60Hz
Denominazione/Title ALIMENTAZIONE MOTORE STEPPER
Stepper Motor Power Supply
Dis. N. H14A48060CSA
CAD SPAC
File H14A.1/dwg
Data 24/07/2017
R 1.2 Add -SE2 Enable manual vises command (pg.17) 24/07/2017 Solfanelli
1.1 Add WEPC emergency powered conveyor cable (pg.11) 03/11/2016 Solfanelli
1.0 Review 2016 with new electrical box carpentry 15/07/2016 Solfanelli
0.1 Added Three-phase inverter Line reactor (L1) 16/04/2015 Solfanelli
REV. MODIFICA DATA FIRME
-U10
AZIONAMENTO STEPPER
DRIVE STEPPER
10A
J1
J5
-M8
STEPPER MOTOR 13A, 2Nm
-W29
5GAwg16 CSA
Awg16 Nero / Black
Awg16 Ve-Gi/Gn-Ye
-XQGPE
PE
228
229
221
222
223
224
14.1
10.0
8.5
8.9


ALIMENTAZIONE PLC
POWER SUPPLY
ALIMENTAZIONE PLS EMERGENZA
EMERGENCY POWER SUPPLY
ALIMENTAZIONE F.C. CARTER LAMA
L.S. CARTER SAW POWER SUPPLY
ALIMENTAZIONE USCITE
OUTPUT POWER SUPPLY
VENTOLA QUADRO FAN BOARD 20W 120x120mm
VENTOLA DRIVER FAN DRIVER 12W 80x80mm
-M6
-M7
-W01
-XQG2
H14A_480V.60Hz
H14A4806OCSA
ALIMENTAZIONE AUSILIARI
Auxiliary Circuit Power Supply
Impianto/Plant
Denominazione/Title
Ordine/Requisition
Commessa/Order H14A
Esecutore/Executor Solfanelli
Foglio/Page 10
Segue/Follow 11
Ultimo/Last 211
Dis. N.
CAD SPAC
File H14A.1/dwg
Data 24/07/2017
FIRME
DATA
MODIFICA
REV.
R 1.2 Add -SE2 Enable manual vises command (pg.17) 24/07/2017 Solfanelli
1.1 Add WEPC emergency powered conveyor cable (pg.11) 03/11/2016 Solfanelli
1.0 Review 2016 with new electrical box carpentry 15/07/2016 Solfanelli
0.1 Added Three-phase inverter Line reactor (L1) 16/04/2015 Solfanelli


-R-S1
-KRES
-S3
-S4
CONTROL LOGIC
RESET
POWER
CH1
CH2
Sotto/Down
(HYDRAULIC JUNCTION BOX)
INSIDE JUNCTION BOX 2
POWERED CONVEYOR
EMERGENCY P.BUTTON
PULSANTE EMERGENZA
EMERGENCY PUSH BUTTON
1) COLLEGARE I MORSETTI SE NON SONO PRESENTI RULLIERE IN ALIMENTAZIONE
WITHOUT POWERED CONVEYOR IN CONTACT CONNECT TERMINALS
1) MORSETTI 360 e 0360 PREDISPOSTI PER ABILITAZIONE DRIVER RULLIERE MOTORIZZATE
TERMINALS 360 E 0360 UTILIZED ONLY FOR POWER CONVEYOR DRIVER ENABLE
REV.
MODIFICA
DATA
FIRME
R 1.2 Add -SE2 Enable manual vises command (pg.17) 24/07/2017 Solfanelli
1.1 Add WEPC emergency powered conveyor cable (pg.11) 03/11/2016 Solfanelli
1.0 Review 2016 with new electrical box carpentry 15/07/2016 Solfanelli
0.1 Added Three-phase inverter Line reactor (L1) 16/04/2015 Solfanelli
Dis. N. H114A8060CSA
CAD SPAC
File H114A.1/dwg
Data 24/07/2017
Impianto/Plant
H14A_480V.60Hz
Denominazione/Title
RELE SICUREZZA EMERGENZA
Emergency safety relay
Ordine/Requisition
Commessa/Order H14A
Esecutore/Executor Solfanelli
Foglio/Page 11
Segue/Follow 12
Ultimo/Last 211


H14A_480V.60Hz
H14A48060CSA
RELE SICUREZZA RIPARI
Machine Guard Safety Relay
Solfanelli
24/07/2017
H14A.1/dwg
SPAC
-KRES
-R-S2
-S1
-S2
-S3
-S8
-WS7
-WS7/1
-WS6
-W119
-XQG2
-XQG4
RESET
CONTROL LOGIC
POWER
CH1
CH2
Sotto/Down
PROT. ALIMENTATORE SHUTTLE GUARD
PROT. MACCHINA DX RIGHT MACHINE GUARD
PROT. MACCHINA SX LEFT MACHINE GUARD
Add -SE2 Enable manual vises command (pg.17)
Add WEPC emergency powered conveyor cable (pg.11)
Review 2016 with new electrical box carpentry
Added Three-phase inverter Line reactor (L1)



REV.	MODIFICA	DATA	FIRME
R 1.2	Add -SE2 Enable manual vises command (pg.17)	24/07/2017	Solfanelli
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0.1	Added Three-phase Inverter Line reactor (L1)	16/04/2015	Solfanelli

Dis. N. H14A48060CSA
CAD SPAC
File H14A.1/dwg
Data 24/07/2017

Impianto/Plant
H14A_480V.60Hz

Denominazione/Title
AUSILIARI INVERTER
Inverter Auxiliary Circuits

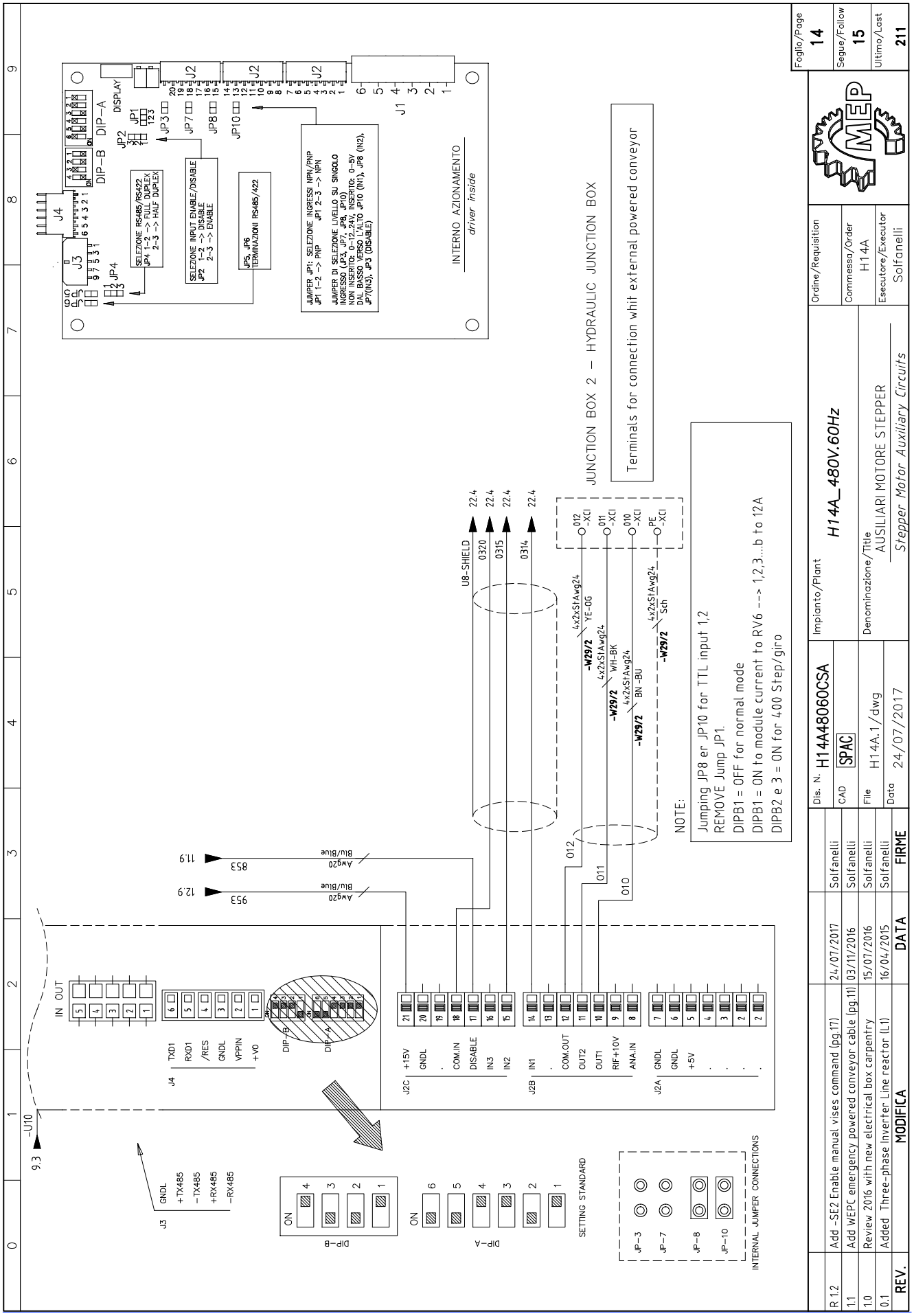
Ordine/Requisition

Commessa/Order
H14A

Esecutore/Executor
Solfanelli

MEP

Foglio/Page 13
Segue/Follow 14
Ultimo/Last 211



REV.	MODIFICA	DATA	FIRME
R 1.2	Add -SE2 Enable manual vises command (pg.17)	24/07/2017	Solfanelli
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1.0	Review 2016 with new electrical box carpentry	15/07/2016	Solfanelli
0.1	Added Three-phase inverter Line reactor (L1)	16/04/2015	Solfanelli

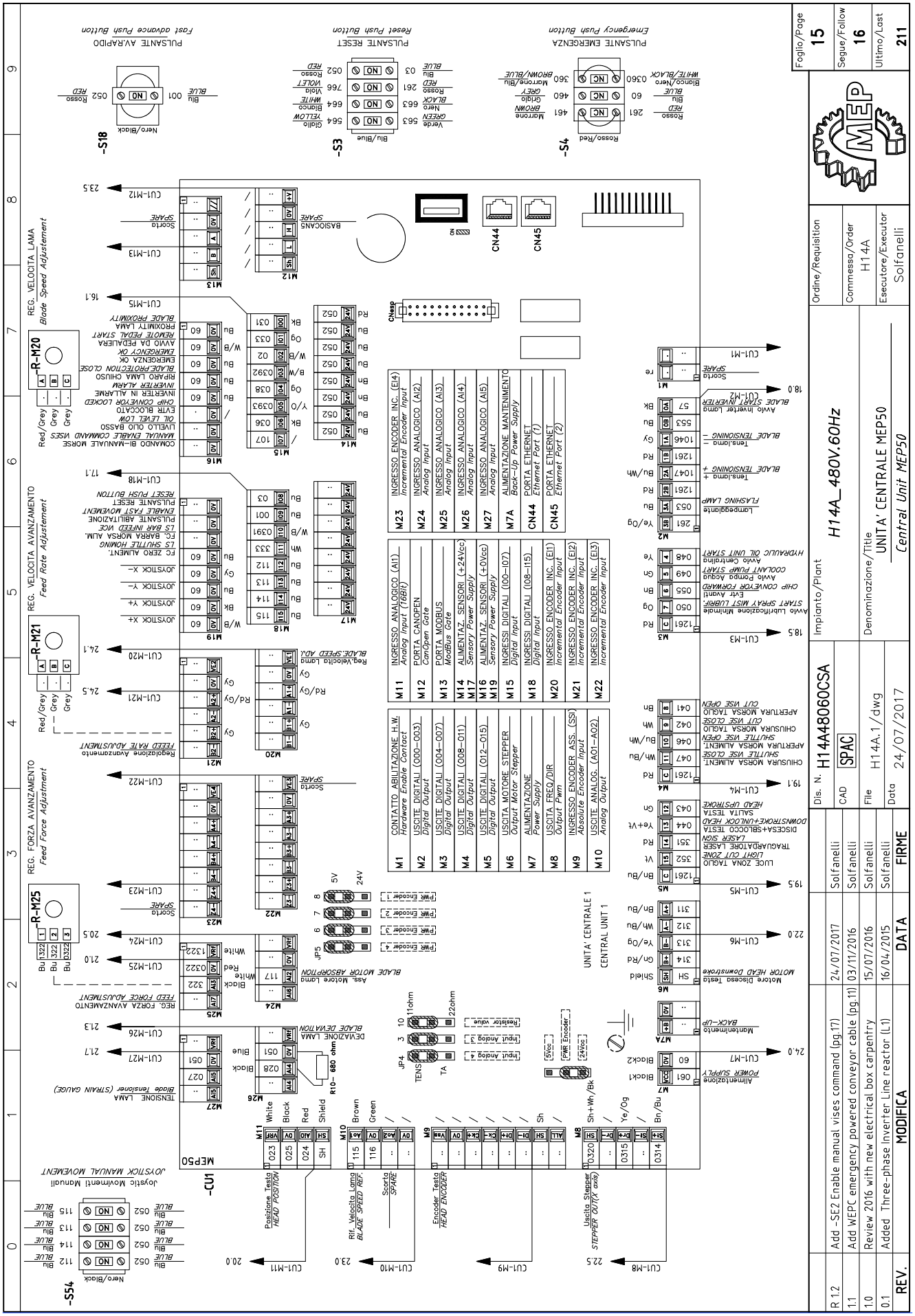
Dis. N. H14A48060CSA
CAD SPAC
File H14A.1/dwg
Data 24/07/2017

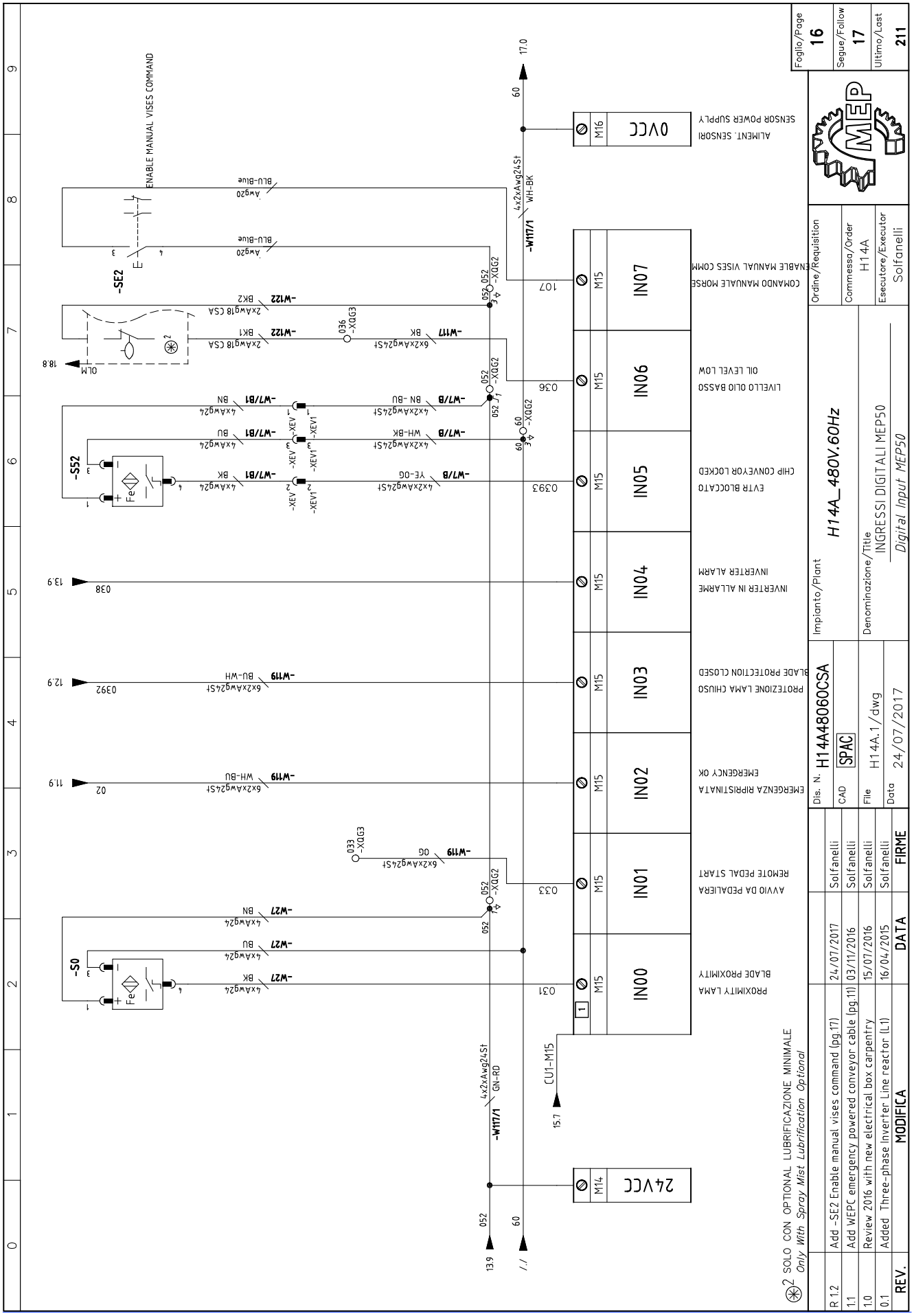
Impianto/Plant
H14A_480V.60Hz

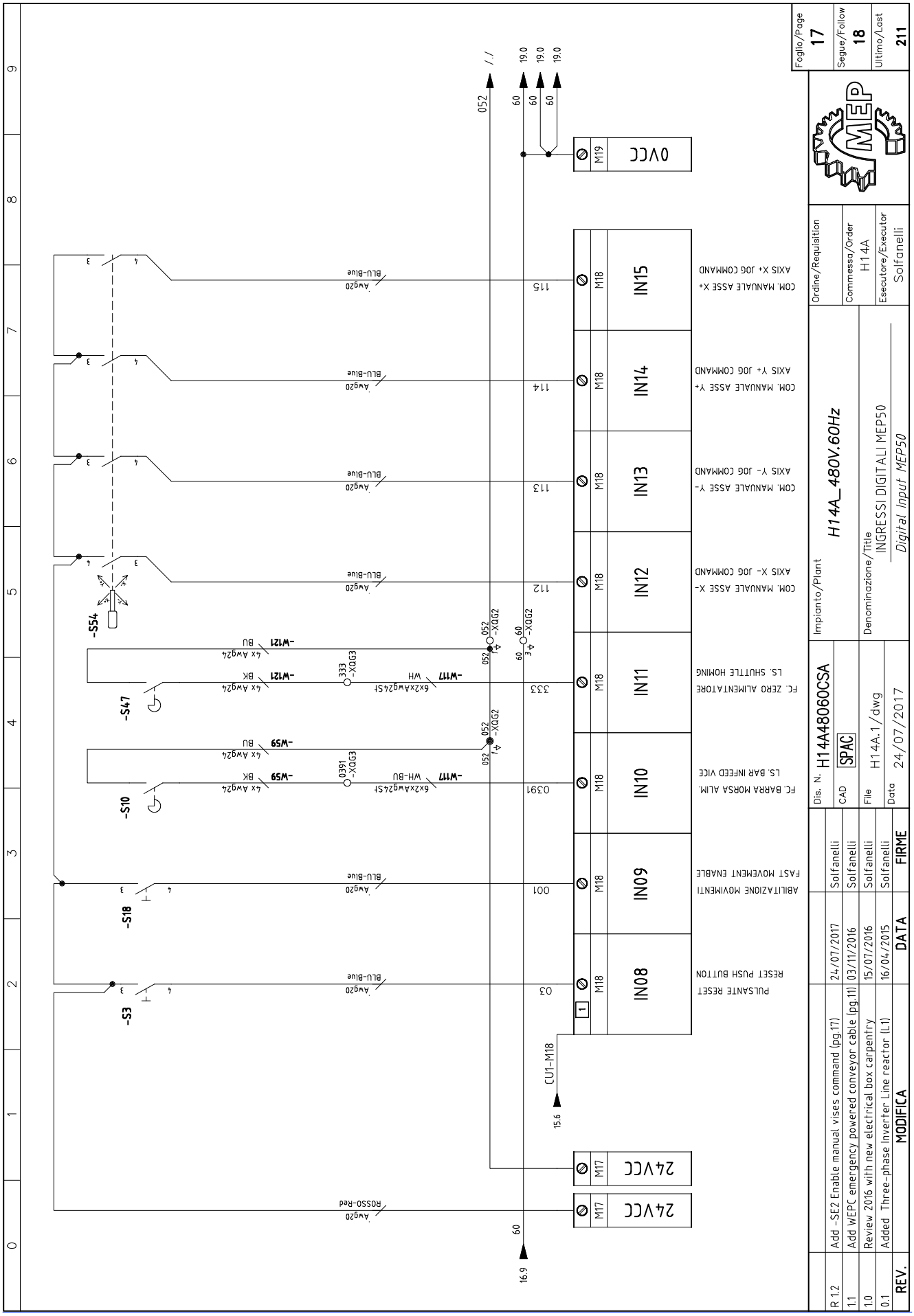
Denominazione/Title
AUSILIARI MOTORE STEPPER
Stepper Motor Auxiliary Circuits

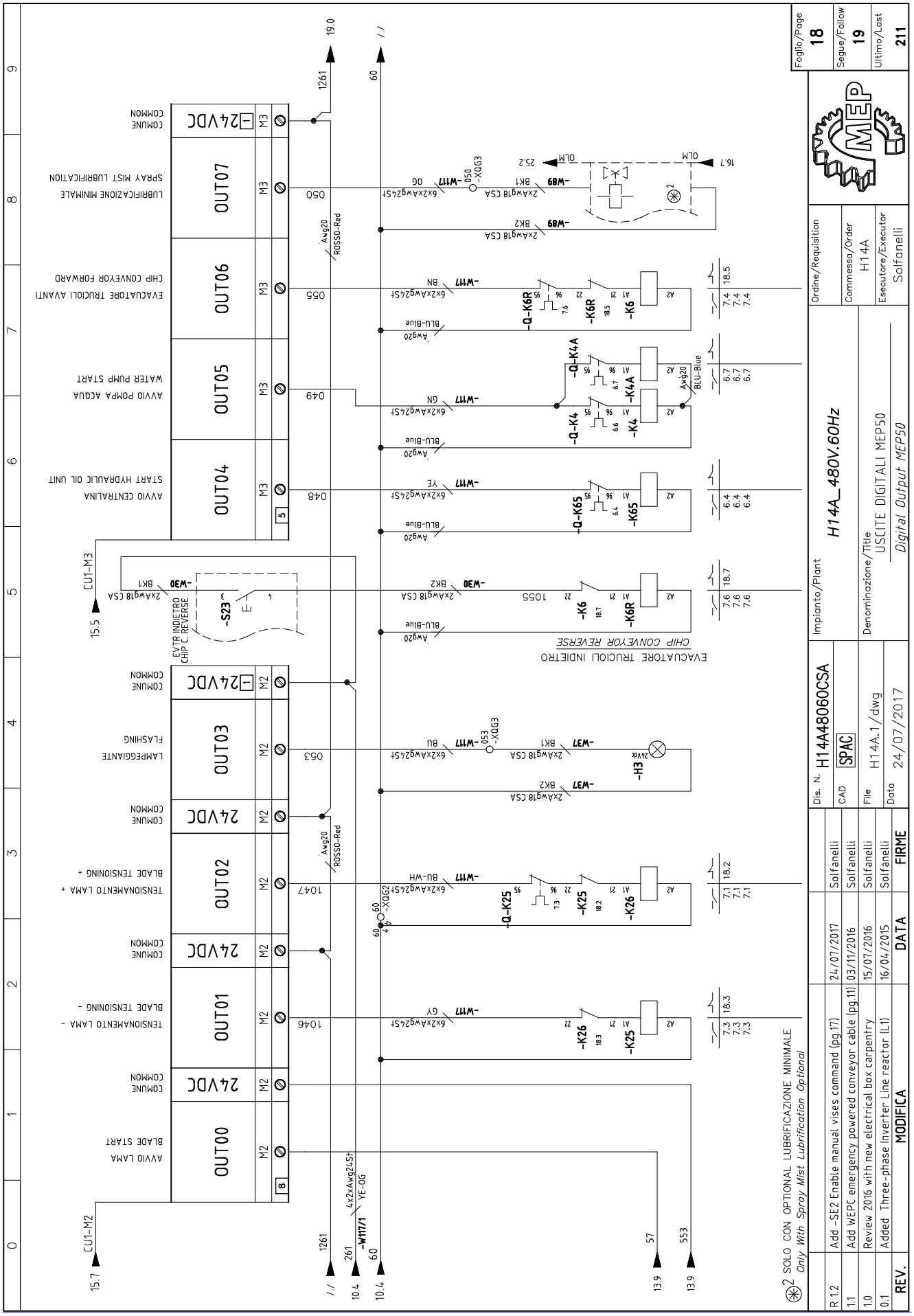
Ordine/Requisition
Commessa/Order H14A
Esecutore/Executor Solfanelli

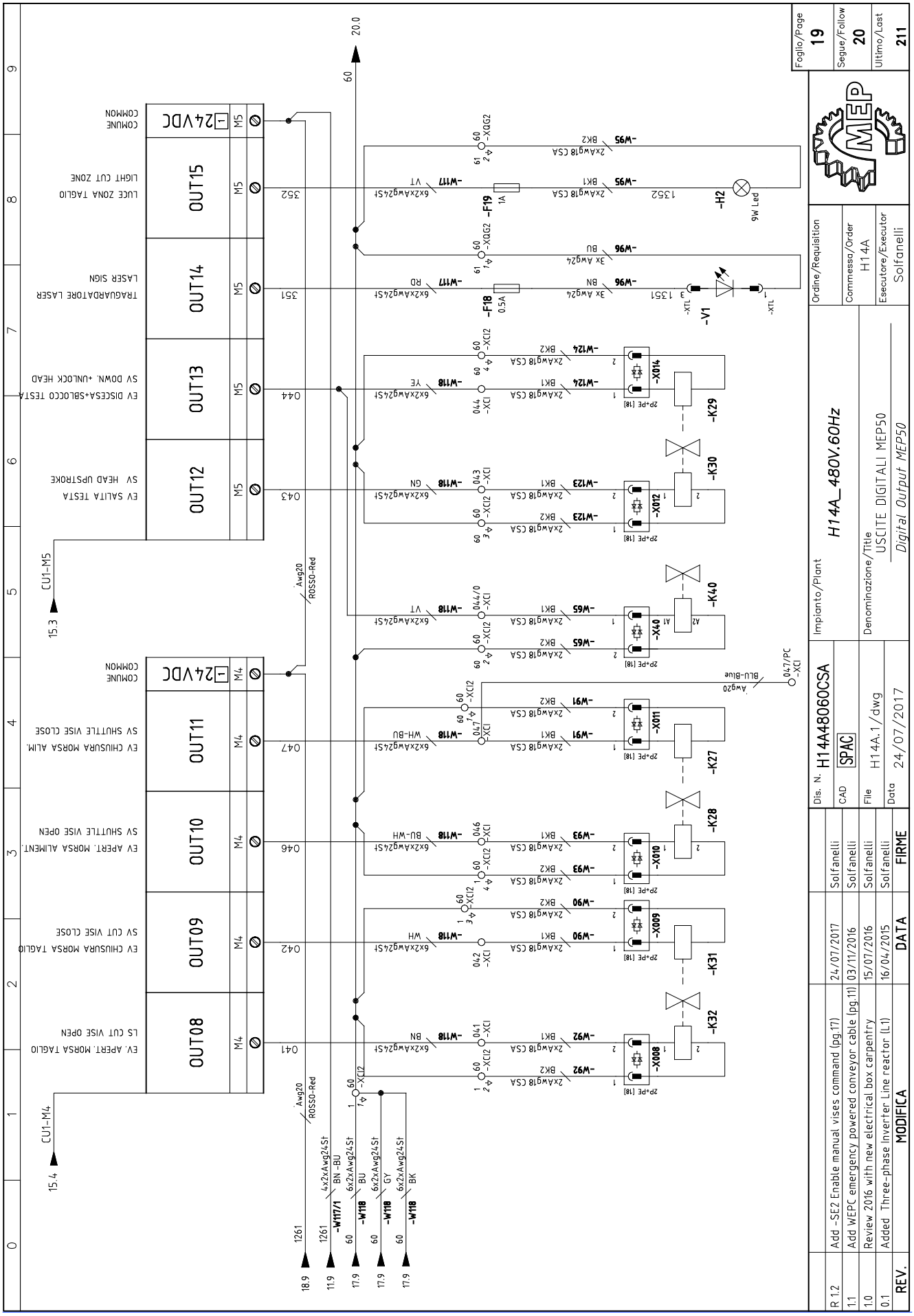
Foglio/Page 14
Segue/Follow 15
Ultimo/Last 211

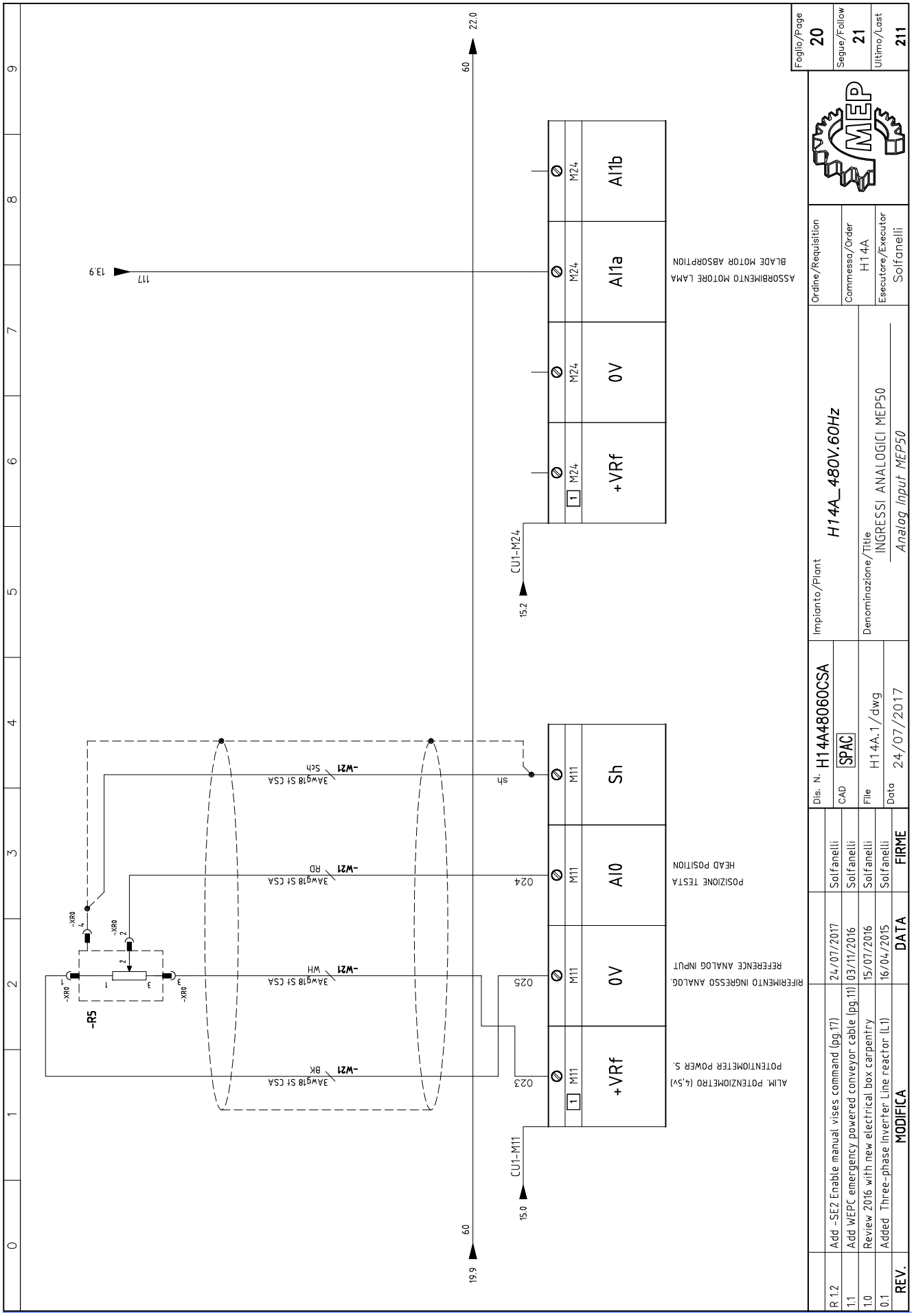

-CU1
ME50
-S54
-S18
-S3
-S4
-R-M20
-R-M21
-R-M25
REG. VELOCITA LAMA
Blade Speed Adjustement
REG. VELOCITA AVANZAMENTO
Feed Rate Adjustement
REG. FORZA AVANZAMENTO
Feed Force Adjustment
Joystic Movimenti Manuali
JOYSTICK MANUAL MOVEMENT
PULSANTE AV.RAPIDO
Fast advance Push Button
PULSANTE RESET
Reset Push Button
PULSANTE EMERGENZA
Emergency Push Button
M11 INGRESSO ANALOGICO (AI1) Analog Input (16Bit)
M12 PORTA CANOPEN CanOpen Gate
M13 PORTA MODBUS ModBus Gate
M14 M17 ALIMENTAZ. SENSORI (+24Vcc) Sensory Power Supply
M16 M19 ALIMENTAZ. SENSORI (+0Vcc) Sensory Power Supply
M15 INGRESSI DIGITALI (I00–I07) Digital Input
M18 INGRESSI DIGITALI (I08–I15) Digital Input
M20 INGRESSO ENCODER INC. (EI1) Incremental Encoder Input
M21 INGRESSO ENCODER INC. (EI2) Incremental Encoder Input
M22 INGRESSO ENCODER INC. (EI3) Incremental Encoder Input
M23 INGRESSO ENCODER INC. (EI4) Incremental Encoder Input
M24 INGRESSO ANALOGICO (AI2) Analog Input
M25 INGRESSO ANALOGICO (AI3) Analog Input
M26 INGRESSO ANALOGICO (AI4) Analog Input
M27 INGRESSO ANALOGICO (AI5) Analog Input
M7A ALIMENTAZIONE MANTENIMENTO Back-Up Power Supply
CN44 PORTA ETHERNET Ethernet Port (1)
CN45 PORTA ETHERNET Ethernet Port (2)
M1 CONTATTO ABILITAZIONE H.W. Hardware Enable Contact
M2 USCITE DIGITALI (O00–O03) Digital Output
M3 USCITE DIGITALI (O04–O07) Digital Output
M4 USCITE DIGITALI (O08–O11) Digital Output
M5 USCITE DIGITALI (O12–O15) Digital Output
M6 USCITA MOTORE STEPPER Output Motor Stepper
M7 ALIMENTAZIONE Power Supply
M8 USCITA FREQ./DIR Output Pwm
M9 INGRESSO ENCODER ASS. (SSI) Absolute Encoder Input
M10 USCITE ANALOG. (AO1–AO2) Analog Output
UNITA' CENTRALE 1
CENTRAL UNIT 1
BLADE MOTOR ABSORPTION
BLADE DEVIATION
TENSIONE LAMA
Blade Tensioner (STRAIN GAUGE)
REG. FORZA AVANZAMENTO
FEED FORCE ADJUSTMENT
Regolazione Avanzamento
FEED RATE ADJUSTMENT
Reg.Velocità Lama
BLADE SPEED ADJ.
COMANDO BI-MANUALE MORSE
MANUAL ENABLE COMMAND VISES
LIVELLO OLIO BASSO
OIL LEVEL LOW
EVITE BLOCCATO
CHIP CONVEYOR LOCKED
INVERTER IN ALLARME
INVERTER ALARM
RIPARO LAMA CHIUSO
BLADE PROTECTION CLOSE
EMERGENCY OK
REMOTE FEDAL START
AVVIO DA PEDALIERA
PROXIMITY LAMA
BLADE PROXIMITY
MANUAL MOVEMENT
FC ZERO ALIMENT.
LS SHUTTLE HOMING
LS BAR INFEED VICE
FC BARRA MORSA ALIM.
ENABLE FAST MOVEMENT
PULSANTE RESET
RESET PUSH BUTTON
joystick X+
joystick X-
joystick Y+
joystick Y-
Avvio Lubrificazione Minimale
START SPRAY MIST LUBRIF.
Exit Avanti
CHIP CONVEYOR FORWARD
Avvio Pompa Acqua
COOLANT PUMP START
Avvio Centralina
HYDRAULIC OIL UNIT START
CHIUSURA MORSA ALIMENT.
SHUTTLE VISE CLOSE
APERTURA MORSA ALIMENT.
SHUTTLE VISE OPEN
CHIUSURA MORSA TAGLIO
CUT VISE CLOSE
APERTURA MORSA TAGLIO
CUT VISE OPEN
DISCESA+SBLOCCO TESTA
LASER SIGN
SALITA TESTA
HEAD UPSTROKE
TRASUARDATORE LASER
LIGHT CUT ZONE
LUCE ZONA TAGLIO
Motore Discesa Testa
MOTOR HEAD Downstroke
Alimentazione
POWER SUPPLY
Mantenimento
BACK-UP
Avvio Inverter Lama
BLADE START INVERTER
Tens.lama +
BLADE TENSIONING +
Tens.lama -
BLADE TENSIONING -
LAMPADA FLASHING LAMP
Scorta
SPARE
Impianto/Plant
H14A_480V.60Hz
Denominazione/Title
UNITA' CENTRALE MEP50
Central Unit MEP50
Dis. N. H14A48060CSA
CAD SPAC
File H14A.1/dwg
Data 24/07/2017
Ordine/Requisition
Commessa/Order H14A
Esecutore/Executor Solfanelli
Foglio/Page 15
Segue/Follow 16
Ultimo/Last 211
REV. MODIFICA DATA FIRME
R 1.2 Add -SE2 Enable manual vises command (pg.17) 24/07/2017 Solfanelli
1.1 Add WEPC emergency powered conveyor cable (pg.11) 03/11/2016 Solfanelli
1.0 Review 2016 with new electrical box carpentry 15/07/2016 Solfanelli
0.1 Added Three-phase inverter Line reactor (L1) 16/04/2015 Solfanelli

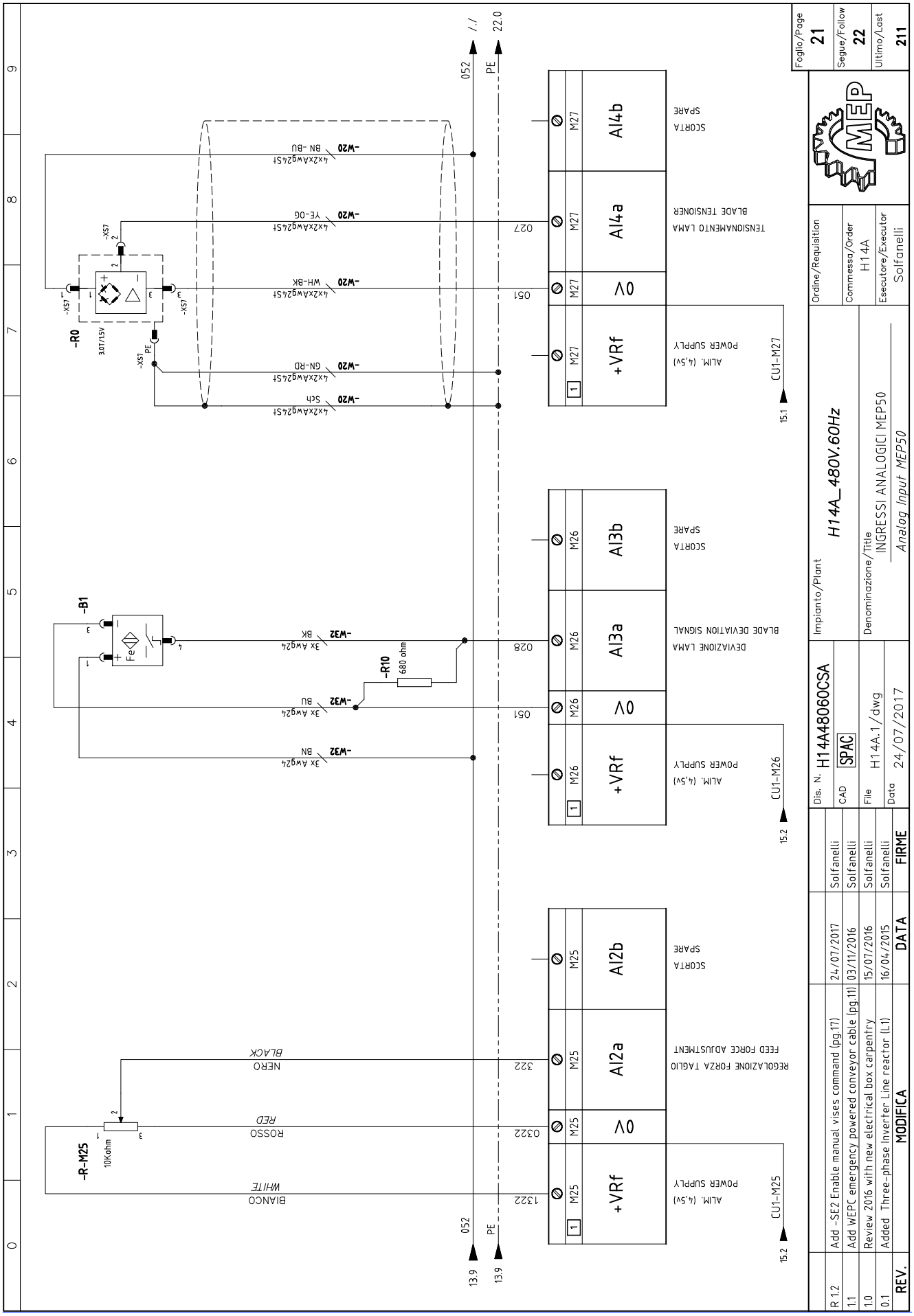

0VCC
24VCC
IN00
IN01
IN02
IN03
IN04
IN05
IN06
IN07
PROXIMITY LAMA
BLADE PROXIMITY
AVVIO DA PEDALIERA
REMOTE PEDAL START
EMERGENCY OK
EMERGENZA RIPRISTINATA
BLADE PROTECTION CLOSED
PROTEZIONE LAMA CHIUSO
INVERTER ALARM
INVERTER IN ALLARME
CHIP CONVEYOR LOCKED
EVTR BLOCCATO
OIL LEVEL LOW
LIVELLO OLIO BASSO
ENABLE MANUAL VISES COMM
COMANDO MANUALE MORSE
SENSOR POWER SUPPLY
ALIMENT. SENSORI
-SE2
-SS2
-S0
ENABLE MANUAL VISES COMMAND
H14A_480V.60Hz
Digital Input MEP50
INGRESSI DIGITALI MEP50
H14A48060CSA
H14A.1/dwg
24/07/2017
SOLO CON OPTIONAL LUBRIFICAZIONE MINIMALE
Only With Spray Mist Lubrification Optional
Add -SE2 Enable manual vises command (pg.17)
Add WEPC emergency powered conveyor cable (pg.11)
Review 2016 with new electrical box carpentry
Added Three-phase inverter Line reactor (L1)
Foglio/Page 16
Segue/Follow 17
Ultimo/Last 211
Ordine/Requisition
Commessa/Order H14A
Esecutore/Executor Solfanelli

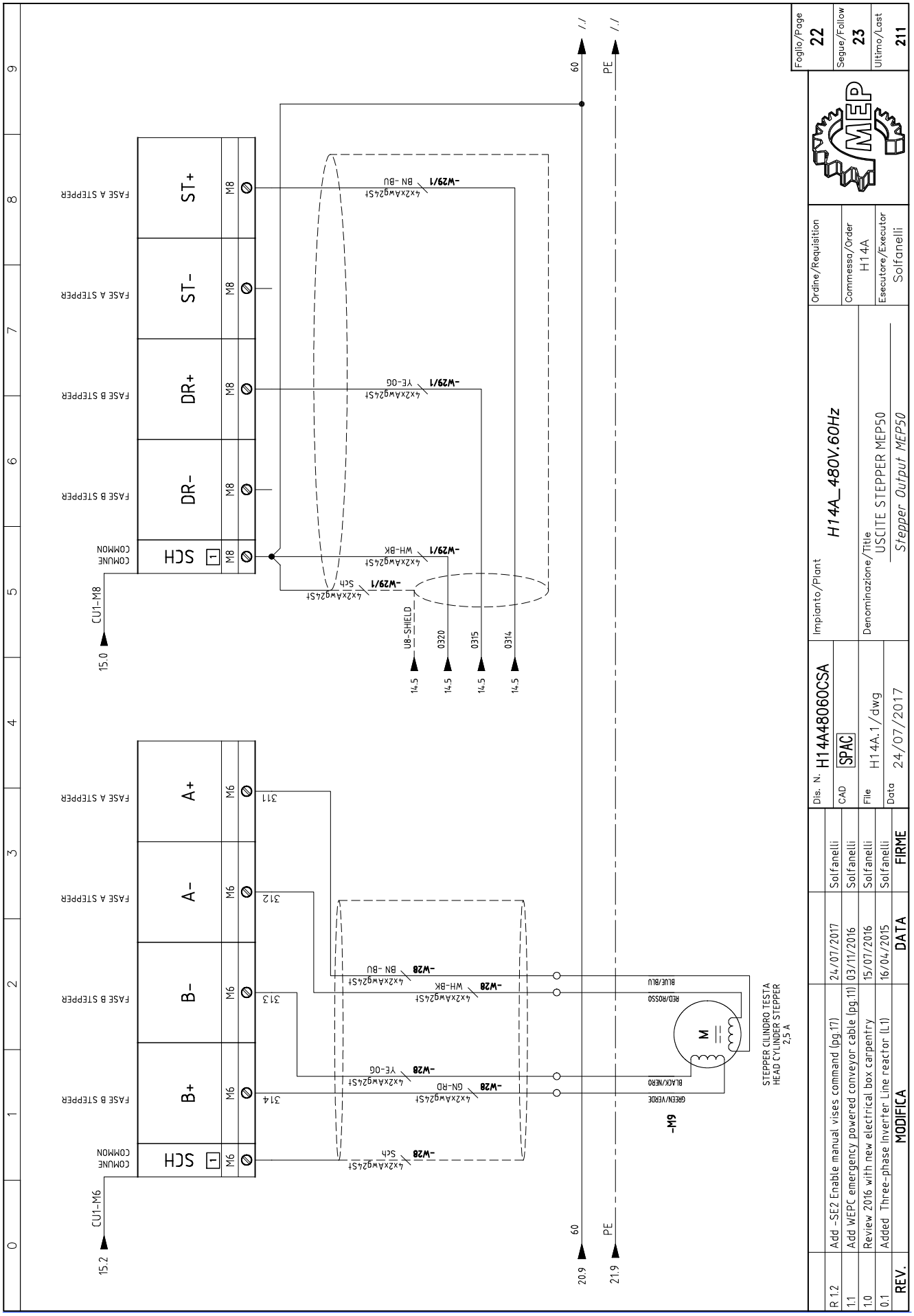

Foglio/Page 17
Segue/Follow 18
Ultimo/Last 211
Ordine/Requisition
Commessa/Order H14A
Esecutore/Executor Solfanelli
Impianto/Plant H14A_480V.60Hz
Denominazione/Title INGRESSI DIGITALI MEP50
Digital Input MEP50
Dis. N. H14A48060CSA
CAD SPAC
File H14A.1/dwg
Data 24/07/2017
R 1.2 Add -SE2 Enable manual vises command (pg.17) 24/07/2017 Solfanelli
1.1 Add WEPC emergency powered conveyor cable (pg.11) 03/11/2016 Solfanelli
1.0 Review 2016 with new electrical box carpentry 15/07/2016 Solfanelli
0.1 Added Three-phase inverter Line reactor (L1) 16/04/2015 Solfanelli
REV. MODIFICA DATA FIRME
0VCC
24VCC
24VCC
IN15
IN14
IN13
IN12
IN11
IN10
IN09
IN08
COM. MANUALE ASSE X+ AXIS X+ JOG COMMAND
COM. MANUALE ASSE Y+ AXIS Y+ JOG COMMAND
COM. MANUALE ASSE Y- AXIS Y- JOG COMMAND
COM. MANUALE ASSE X- AXIS X- JOG COMMAND
FC. ZERO ALIMENTATORE LS. SHUTTLE HOMING
FC. BARRA MORSA ALIM. LS. BAR INFEED VICE
ABILITAZIONE MOVIMENTI FAST MOVEMENT ENABLE
PULSANTE RESET RESET PUSH BUTTON
-S54
-S47
-S10
-S18
-S3
-W121
-W117
-W59
-XQG2
-XQG3
CU1-M18
4x Awg24
6x2xAwg24St
Awg20 BLU-Blue
Awg20 ROSSO-Red

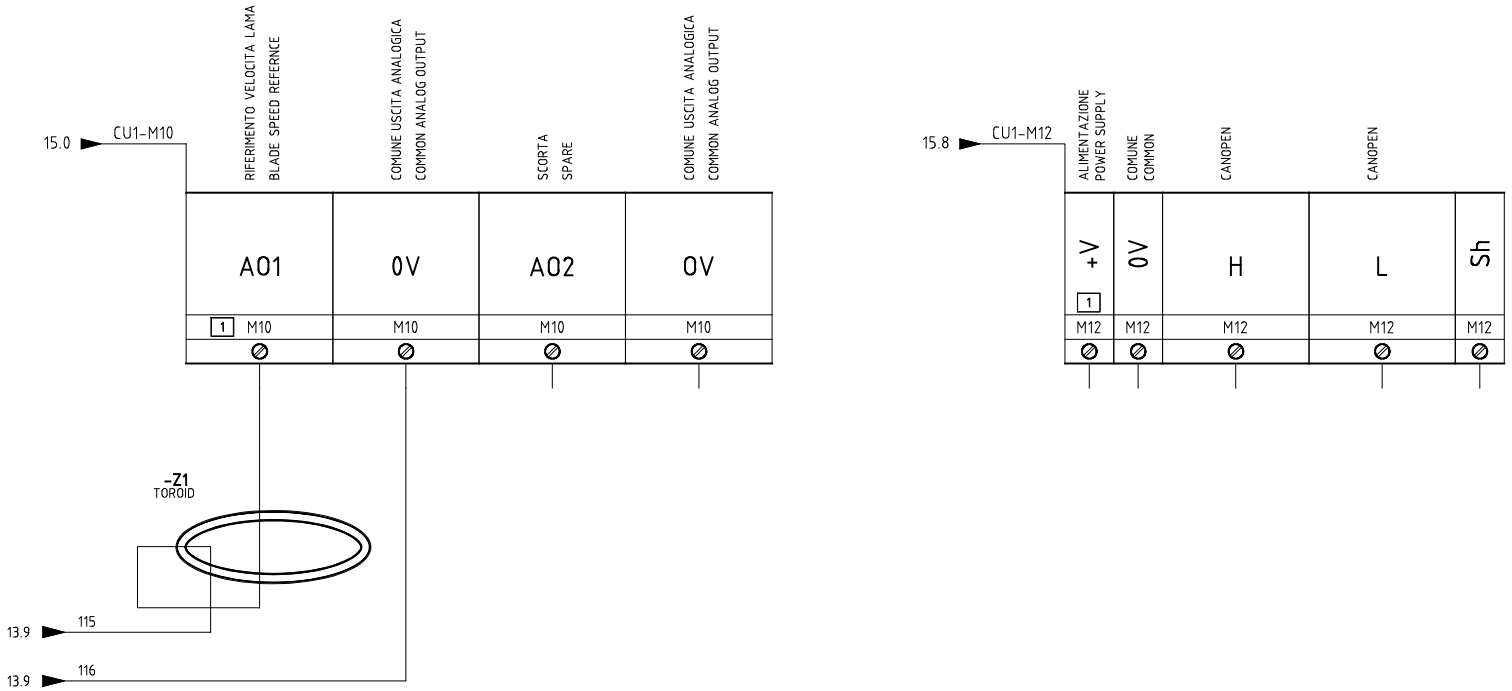

H14A_480V.60Hz
Digital Output MEP50
USCITE DIGITALI MEP50
H14A4806OCSA
H14A4.1/dwg
24/07/2017
SPAC
Solfanelli
Foglio/Page 18
Segue/Follow 19
Ultimo/Last 211
Commessa/Order H14A
Esecutore/Executor Solfanelli
Impianto/Plant
Denominazione/Title
Dis. N.
CAD
File
Data
OUT00 AVVIO LAMA BLADE START
OUT01 TENSIONAMENTO LAMA - BLADE TENSIONING -
OUT02 TENSIONAMENTO LAMA + BLADE TENSIONING +
OUT03 LAMPEGGIANTE FLASHING
OUT04 AVVIO CENTRALINA START HYDRAULIC OIL UNIT
OUT05 AVVIO POMPA ACQUA WATER PUMP START
OUT06 EVACUATORE TRUCIOLI AVANTI CHIP CONVEYOR FORWARD
OUT07 LUBRIFICAZIONE MINIMALE SPRAY MIST LUBRIFICATION
24VDC COMUNE COMMON
CHIP CONVEYOR REVERSE EVACUATORE TRUCIOLI INDIETRO
EVTR INDIETRO CHIP C. REVERSE
SOLO CON OPTIONAL LUBRIFICAZIONE MINIMALE
Only With Spray Mist Lubrification Optional
REV. MODIFICA DATA FIRME
R 1.2 Add -SE2 Enable manual vises command (pg.17) 24/07/2017 Solfanelli
1.1 Add WEPC emergency powered conveyor cable (pg.11) 03/11/2016 Solfanelli
1.0 Review 2016 with new electrical box carpentry 15/07/2016 Solfanelli
0.1 Added Three-phase inverter Line reactor (L1) 16/04/2015 Solfanelli


Foglio/Page 19
Segue/Follow 20
Ultimo/Last 211
Ordine/Requisition
Commessa/Order H14A
Esecutore/Executor Solfanelli
Impianto/Plant H14A_480V.60Hz
Denominazione/Title USCITE DIGITALI MEP50
Digital Output MEP50
Dis. N. H14A48060CSA
CAD SPAC
File H14A.1/dwg
Data 24/07/2017
R 1.2 Add -SE2 Enable manual vises command (pg.17) 24/07/2017 Solfanelli
1.1 Add WEPC emergency powered conveyor cable (pg.11) 03/11/2016 Solfanelli
1.0 Review 2016 with new electrical box carpentry 15/07/2016 Solfanelli
0.1 Added Three-phase inverter Line reactor (L1) 16/04/2015 Solfanelli
REV. MODIFICA DATA FIRME
OUT08 OUT09 OUT10 OUT11 OUT12 OUT13 OUT14 OUT15
24VDC COMUNE COMMON
EV. APERT. MORSA TAGLIO LS CUT VISE OPEN
EV CHIUSURA MORSA TAGLIO SV CUT VISE CLOSE
EV APERT. MORSA ALIMENT. SV SHUTTLE VISE OPEN
EV CHIUSURA MORSA ALIM. SV SHUTTLE VISE CLOSE
EV SALITA TESTA SV HEAD UPSTROKE
EV DISCESA+SBLOCCO TESTA SV DOWN. +UNLOCK HEAD
TRAGUARDATORE LASER LASER SIGN
LUCE ZONA TAGLIO LIGHT CUT ZONE
CU1-M4
CU1-M5
-W117/1
-W118
-W117
-W124
-W123
-W65
-W91
-W93
-W90
-W92
-W96
-W95
-F18 0.5A
-F19 1A
-H2 9W Led
-V1
-K27
-K28
-K29
-K30
-K31
-K32
-K40
-X011
-X010
-X009
-X008
-X012
-X014
-X40
-XCI2
-XCI
-XQG2
-XQG1
4x2xAwg24St BN-BU
6x2xAwg24St BU
6x2xAwg24St GY
6x2xAwg24St BK
2xAwg18 CSA
6x2xAwg24St
3x Awg24
Awg20 ROSSO-Red
Awg20 BLU-Blue
ZP+PE (18)


Foglio/Page 20
Segue/Follow 21
Ultimo/Last 211
Impianto/Plant H14A_480V.60Hz
Ordine/Requisition
Commessa/Order H14A
Esecutore/Executor Solfanelli
Denominazione/Title INGRESSI ANALOGICI MEP50
Analog Input MEP50
Dis. N. H14A48060CSA
CAD SPAC
File H14A.1/dwg
Data 24/07/2017
REV. DATA FIRME
R 1.2 Add -SE2 Enable manual vises command (pg.17) 24/07/2017 Solfanelli
1.1 Add WEPC emergency powered conveyor cable (pg.11) 03/11/2016 Solfanelli
1.0 Review 2016 with new electrical box carpentry 15/07/2016 Solfanelli
0.1 Added Three-phase inverter Line reactor (L1) 16/04/2015 Solfanelli
MODIFICA
ASSORBIMENTO MOTORE LAMA
BLADE MOTOR ABSORPTION
POSIZIONE TESTA
HEAD POSITION
RIFERIMENTO INGRESSO ANALOG.
REFERENCE ANALOG INPUT
ALIM. POTENZIOMETRO (4,5V)
POTENTIOMETER POWER S.
+VRf
0V
AI0
Sh
AI1a
AI1b
M24
M11
CU1-M24
CU1-M11
-W21
3Awg18 St CSA
-R5
-XR0
22.0
19.9
13.9
15.2
15.0
117
024
025
023


Foglio/Page 21
Segue/Follow 22
Ultimo/Last 211
Ordine/Requisition
Commessa/Order H14A
Esecutore/Executor Solfanelli
Impianto/Plant H14A_480V.60Hz
Denominazione/Title INGRESSI ANALOGICI MEP50
Analog Input MEP50
Dis. N. H14A48060CSA
CAD SPAC
File H14A.1/dwg
Data 24/07/2017
REV. MODIFICA DATA FIRME
R 1.2 Add -SE2 Enable manual vises command (pg.17) 24/07/2017 Solfanelli
1.1 Add WEPC emergency powered conveyor cable (pg.11) 03/11/2016 Solfanelli
1.0 Review 2016 with new electrical box carpentry 15/07/2016 Solfanelli
0.1 Added Three-phase inverter Line reactor (L1) 16/04/2015 Solfanelli
AI4b SCORTA SPARE
AI4a TENSIONAMENTO LAMA BLADE TENSIONER
AI3b SCORTA SPARE
AI3a DEVIAZIONE LAMA BLADE DEVIATION SIGNAL
AI2b SCORTA SPARE
AI2a REGOLAZIONE FORZA TAGLIO FEED FORCE ADJUSTMENT
+VRf POWER SUPPLY ALIM. (4,5V)
CU1-M27
CU1-M26
CU1-M25
-W20 4x2x Awg24S+
-W32 3x Awg24
-R0
-B1
-R10 680 ohm
-R-M25 10Kohm
BIANCO WHITE
ROSSO RED
NERO BLACK
052
PE
13.9
15.1
15.2
22.0


Foglio/Page 22
Segue/Follow 23
Ultimo/Last 211
Ordine/Requisition
Commessa/Order H14A
Esecutore/Executor Solfanelli
Impianto/Plant H14A_480V.60Hz
Denominazione/Title USCITE STEPPER MEP50
Stepper Output MEP50
Dis. N. H14A48060CSA
CAD SPAC
File H14A.1/dwg
Data 24/07/2017
REV. MODIFICA DATA FIRME
R 1.2 Add -SE2 Enable manual vises command (pg.17) 24/07/2017 Solfanelli
1.1 Add WEPC emergency powered conveyor cable (pg.11) 03/11/2016 Solfanelli
1.0 Review 2016 with new electrical box carpentry 15/07/2016 Solfanelli
0.1 Added Three-phase inverter Line reactor (L1) 16/04/2015 Solfanelli
SCH
A+
A-
B+
B-
DR+
DR-
ST+
ST-
M6
M8
FASE A STEPPER
FASE B STEPPER
COMUNE COMMON
CU1-M6
CU1-M8
15.0
15.2
20.9
21.9
60
PE
-W28
-W29/1
4x2xAwg24St
STEPPER CILINDRO TESTA
HEAD CYLINDER STEPPER
2,5 A
-M9
U8-SHIELD
0320
0315
0314
14.5



REV.	MODIFICA	DATA	FIRME
R 1.2	Add -SE2 Enable manual vises command (pg.17)	24/07/2017	Solfanelli
1.1	Add WEPC emergency powered conveyor cable (pg.11)	03/11/2016	Solfanelli
1.0	Review 2016 with new electrical box carpentry	15/07/2016	Solfanelli
0.1	Added Three-phase Inverter Line reactor (L1)	16/04/2015	Solfanelli

Dis. N. H14A48060CSA
CAD SPAC
File H14A.1/dwg
Data 24/07/2017

Impianto/Plant
H14A_480V.60Hz

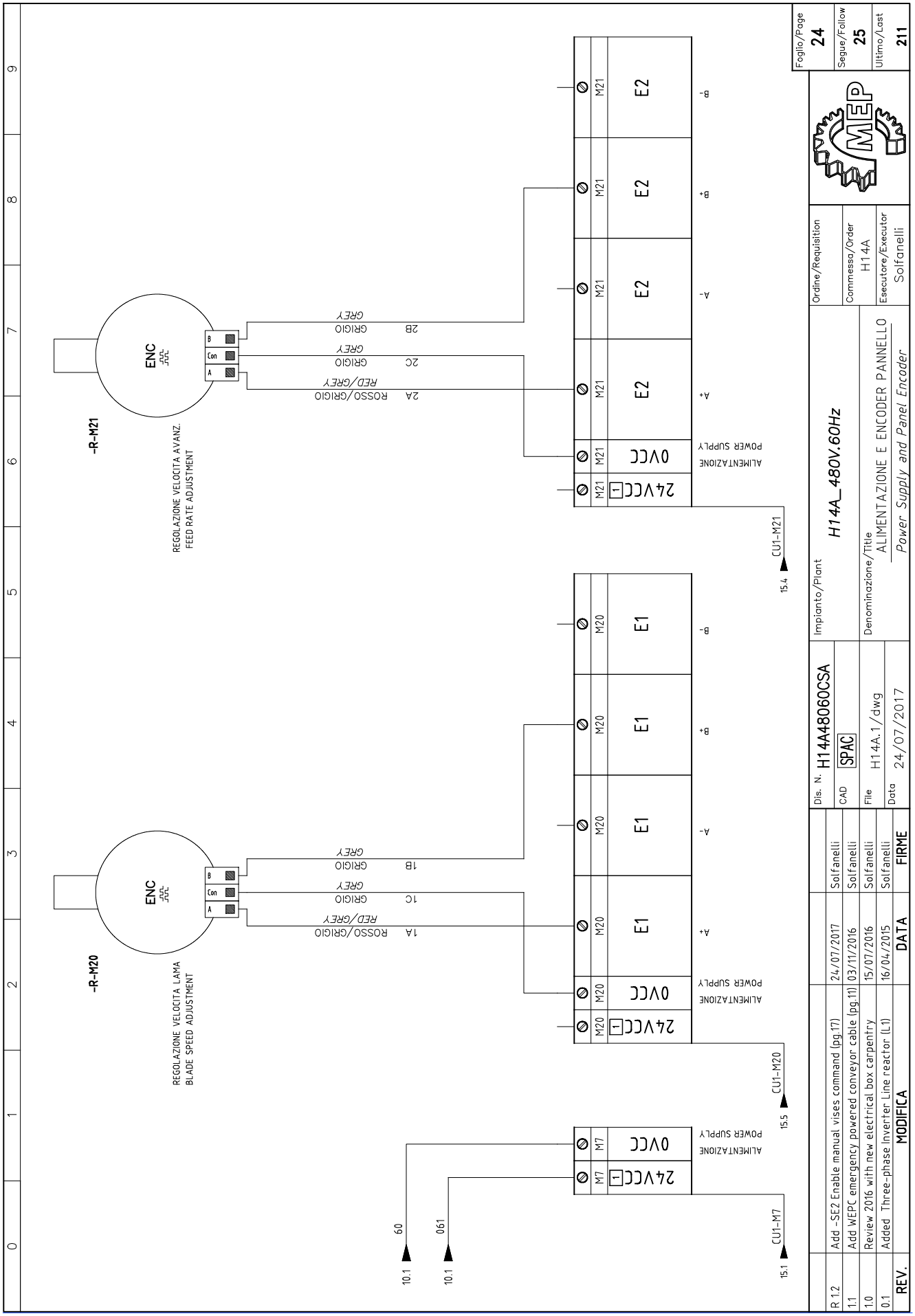
Denominazione/Title
USCITA ANALOGICA E SERIALE MEP50
Analog Output and Serial MEP50

Ordine/Requisition

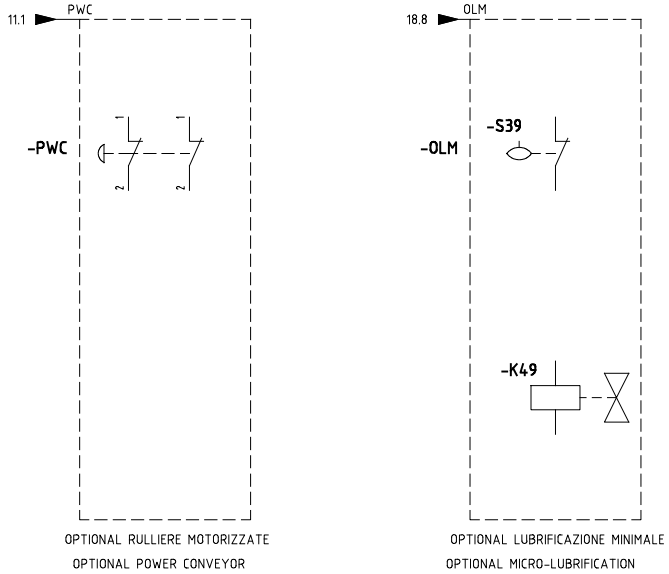
Commessa/Order
H14A

Esecutore/Executor
Solfanelli

Foglio/Page
23
Segue/Follow
24
Ultimo/Last
211


-R-M21
ENC
REGOLAZIONE VELOCITA AVANZ.
FEED RATE ADJUSTMENT
2A ROSSO/GRIGIO RED/GREY
2C GRIGIO GREY
2B GRIGIO GREY
-R-M20
ENC
REGOLAZIONE VELOCITA LAMA
BLADE SPEED ADJUSTMENT
1A ROSSO/GRIGIO RED/GREY
1C GRIGIO GREY
1B GRIGIO GREY
ALIMENTAZIONE
POWER SUPPLY
24VCC
0VCC
M21
M20
M7
E1
E2
A+
A-
B+
B-
CU1-M21
CU1-M20
CU1-M7
15.4
15.5
15.1
10.1
60
061
Foglio/Page 24
Segue/Follow 25
Ultimo/Last 211
Ordine/Requisition
Commessa/Order H14A
Esecutore/Executor Solfanelli
Impianto/Plant H14A_480V.60Hz
Denominazione/Title ALIMENTAZIONE E ENCODER PANNELLO
Power Supply and Panel Encoder
Dis. N. H14A48060CSA
CAD SPAC
File H14A.1/dwg
Data 24/07/2017
R 1.2 Add -SE2 Enable manual vises command (pg.17) 24/07/2017 Solfanelli
1.1 Add WEPC emergency powered conveyor cable (pg.11) 03/11/2016 Solfanelli
1.0 Review 2016 with new electrical box carpentry 15/07/2016 Solfanelli
0.1 Added Three-phase inverter Line reactor (L1) 16/04/2015 Solfanelli
REV. MODIFICA DATA FIRME

0	1	2	3	4	5	6	7	8	9



OPTIONAL RULLIERE MOTORIZZATE
OPTIONAL POWER CONVEYOR

OPTIONAL LUBRIFICAZIONE MINIMALE
OPTIONAL MICRO-LUBRIFICATION

REV.	MODIFICA	DATA	FIRME
R 1.2	Add -SE2 Enable manual vises command (pg.17)	24/07/2017	Solfanelli
1.1	Add WEPC emergency powered conveyor cable (pg.11)	03/11/2016	Solfanelli
1.0	Review 2016 with new electrical box carpentry	15/07/2016	Solfanelli
0.1	Added Three-phase Inverter Line reactor (L1)	16/04/2015	Solfanelli

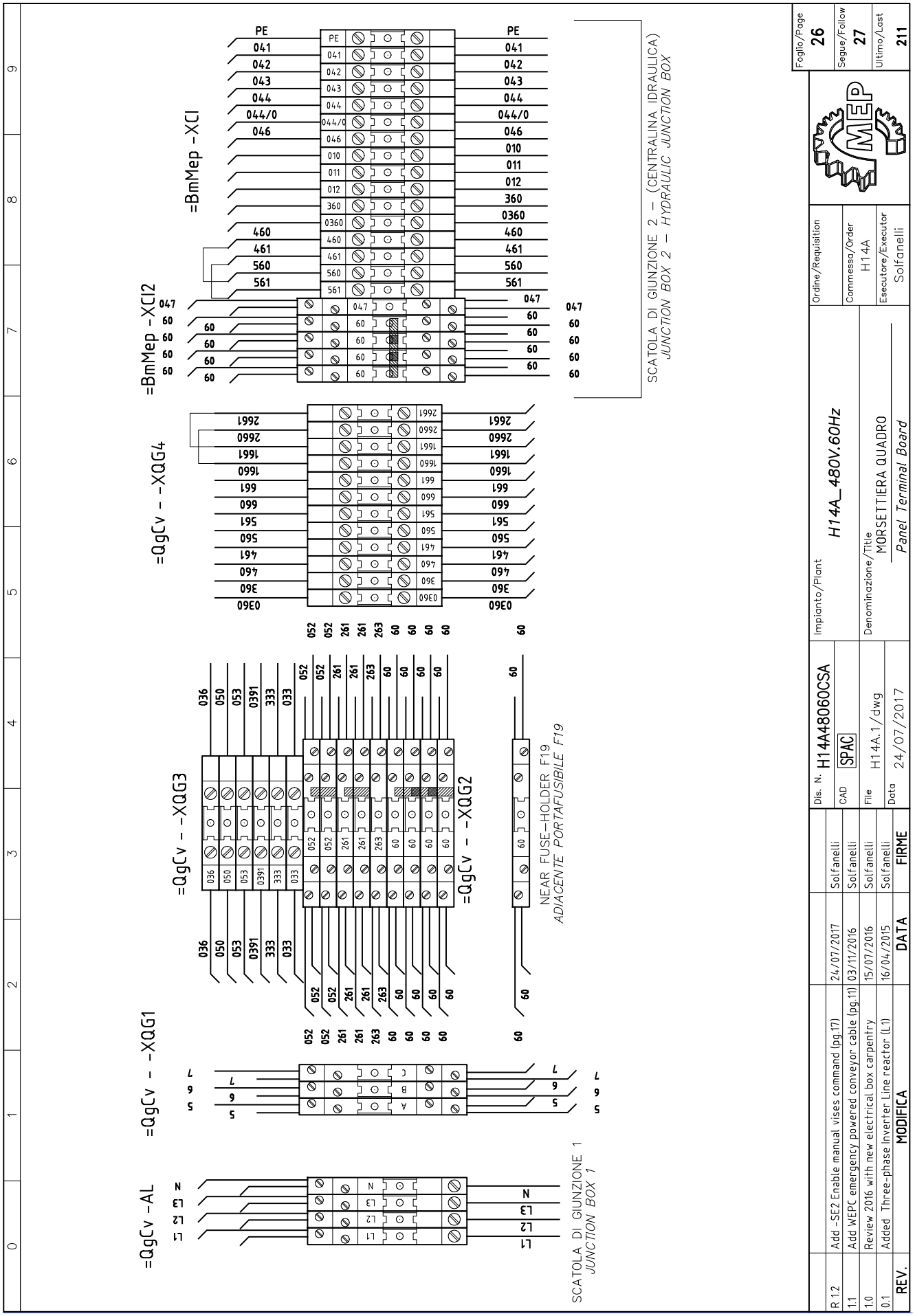
Dis. N. H14A48060CSA
CAD SPAC
File H14A.1/dwg
Data 24/07/2017

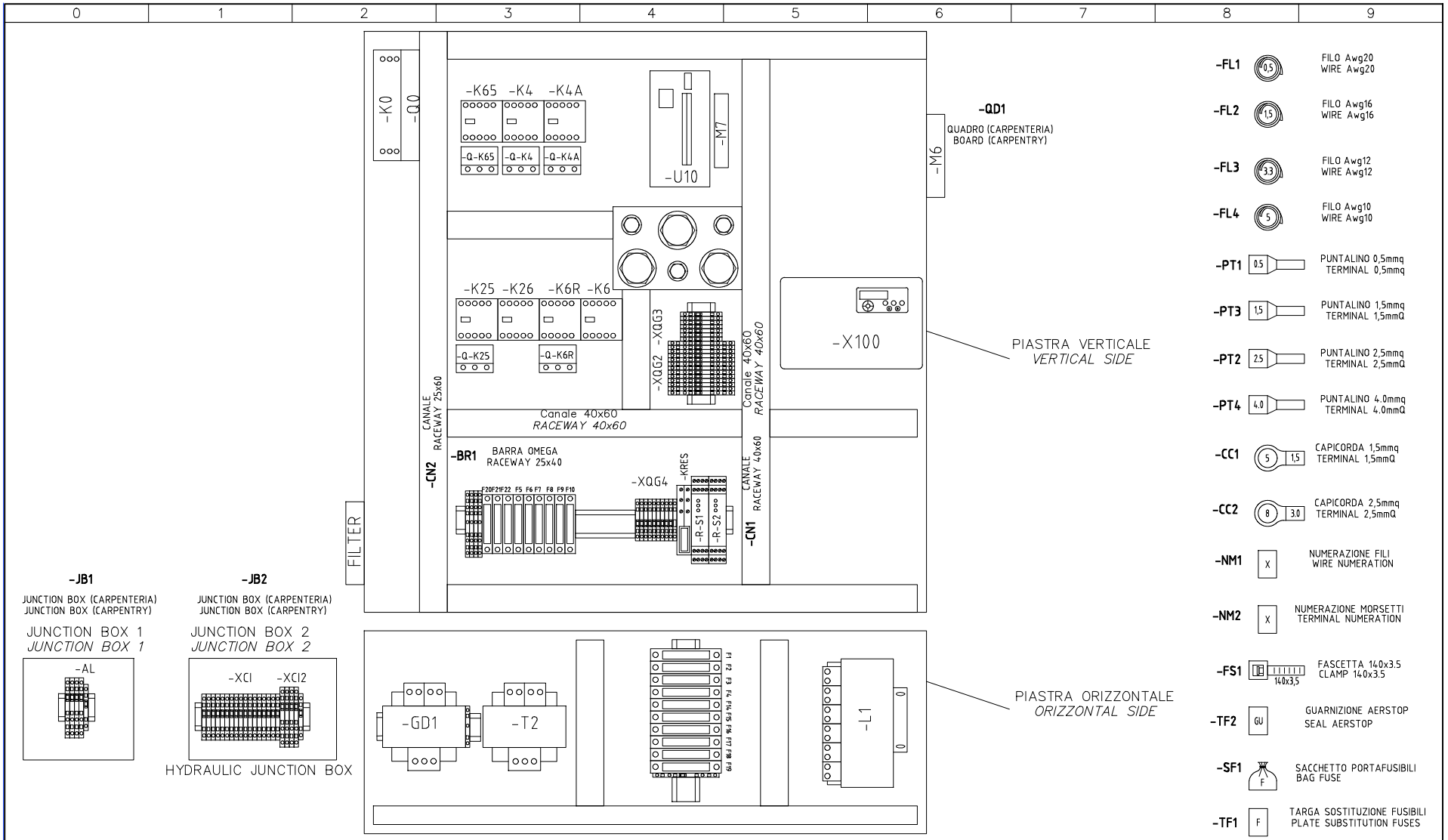
Impianto/Plant: *H14A_480V.60Hz*
Denominazione/Title: OPTIONAL
Optional

Ordine/Requisition:
Commessa/Order: H14A
Esecutore/Executor: Solfanelli

MEP

Foglio/Page: 25
Segue/Follow: 26
Ultimo/Last: 211


=BmMep -XCl
=BmMep -XCl2
=QgCv - -XQG4
=QgCv - -XQG3
=QgCv - -XQG2
=QgCv - -XQG1
=QgCv -AL
SCATOLA DI GIUNZIONE 2 – (CENTRALINA IDRAULICA)
JUNCTION BOX 2 – HYDRAULIC JUNCTION BOX
NEAR FUSE-HOLDER F19
ADIACENTE PORTAFUSIBILE F19
SCATOLA DI GIUNZIONE 1
JUNCTION BOX 1
Foglio/Page 26
Segue/Follow 27
Ultimo/Last 211
Ordine/Requisition
Commessa/Order H14A
Esecutore/Executor Solfanelli
Impianto/Plant H14A_480V.60Hz
Denominazione/Title MORSETTIERA QUADRO
Panel Terminal Board
Dis. N. H14A48060CSA
CAD SPAC
File H14A.1/dwg
Data 24/07/2017
REV. MODIFICA DATA FIRME
R 1.2 Add -SE2 Enable manual vises command (pg.17) 24/07/2017 Solfanelli
1.1 Add WEPC emergency powered conveyor cable (pg.11) 03/11/2016 Solfanelli
1.0 Review 2016 with new electrical box carpentry 15/07/2016 Solfanelli
0.1 Added Three-phase inverter Line reactor (L1) 16/04/2015 Solfanelli



REV.	MODIFICA	DATA	FIRME
R 1.2	Add -SE2 Enable manual vises command (pg.17)	24/07/2017	Solfanelli
1.1	Add WEPC emergency powered conveyor cable (pg.11)	03/11/2016	Solfanelli
1.0	Review 2016 with new electrical box carpentry	15/07/2016	Solfanelli
0.1	Added Three-phase Inverter Line reactor (L1)	16/04/2015	Solfanelli

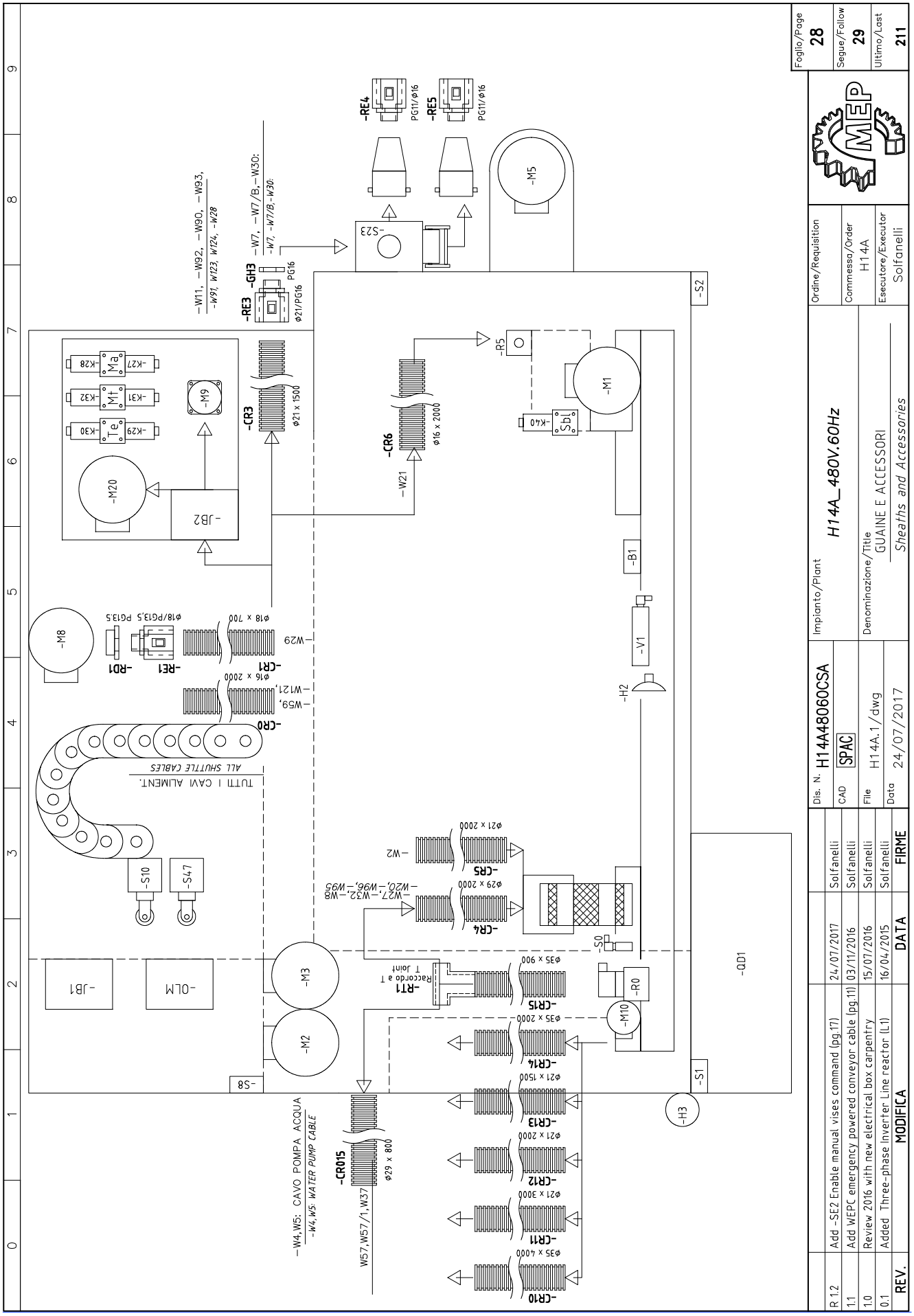
Dis. N. H14A48060CSA
CAD SPAC
File H14A.1/dwg
Data 24/07/2017

Impianto/Plant: *H14A_480V.60Hz*
Denominazione/Title: INTERNO QUADRO / *Board Inside*

Ordine/Requisition
Commessa/Order: H14A
Esecutore/Executor: Solfanelli

MEP

Foglio/Page: 27
Segue/Follow: 28
Ultimo/Last: 211


-W11, -W92, -W90, -W93,
-W91, W123, W124, -W28
-RE3
-GH3
-W7, -W7/B, -W30:
-W7, -W7/B, -W30:
PG16
ø21/PG16
-RE4
-RE5
PG11/ø16
-S23
-M5
-R5
-M1
-K40
-CR6
ø16 x 2000
-W21
-CR3
ø21 x 1500
-K27
-K28
-K31
-K32
-K29
-K30
-M9
-M20
-JB2
-B1
-V1
-H2
-S2
-M8
ø18/PG13,5 PG13,5
-RD1
-RE1
-CR1
ø18 x 700
-W29
-W59,
-W121,
ø16 x 2000
-CR0
TUTTI I CAVI ALIMENT.
ALL SHUTTLE CABLES
-S10
-S47
-JB1
-OLM
-M3
-M2
-S8
-W2
ø21 x 2000
-CR5
-W27,-W32,-W8
-W20,-W96,-W95
ø29 x 2000
-CR4
-S0
-R0
-M10
-R11
Raccordo a T
T Joint
ø35 x 900
-CR15
ø35 x 2000
-CR14
ø21 x 1500
-CR13
ø21 x 2000
-CR12
ø21 x 3000
-CR11
ø35 x 4000
-CR10
-CR015
ø29 x 800
W57,W57/1,W37
-W4,W5: CAVO POMPA ACQUA
-W4,W5: WATER PUMP CABLE
-S1
-H3
-QD1
Foglio/Page 28
Segue/Follow 29
Ultimo/Last 211
Ordine/Requisition
Commessa/Order H14A
Esecutore/Executor Solfanelli
Impianto/Plant
H14A_480V.60Hz
Denominazione/Title
GUAINE E ACCESSORI
Sheaths and Accessories
Dis. N. H14A48060CSA
CAD SPAC
File H14A.1/dwg
Data 24/07/2017
R 1.2 Add -SE2 Enable manual vises command (pg.17) 24/07/2017 Solfanelli
1.1 Add WEPC emergency powered conveyor cable (pg.11) 03/11/2016 Solfanelli
1.0 Review 2016 with new electrical box carpentry 15/07/2016 Solfanelli
0.1 Added Three-phase inverter Line reactor (L1) 16/04/2015 Solfanelli
REV. MODIFICA DATA FIRME

CAVI ESTERNI \ EXTERNAL CABLES

QUADRO \ BOARD								DESTINAZIONE \ LOCATION			
QUADRO BOARD	FOGLIO SHEET	NR. MORSETTO TERMINAL NO.	NR. FILO CONDUCTOR NO.	ID SUL CAVO ID IN CABLE	CAVO CABLE	LUNGHEZZA LENGHT [mt]	DISTURBO NOISE LEVEL	ID SUL CAVO ID IN CABLE	NR. FILO CONDUCTOR NO.	NR. MORSETTO TERMINAL NO.	FOGLIO SHEET	QUADRO BOARD
=QgCv -F15	8/2		061	BK1	-W01 022.1980	2.70 m		BK1	061	M7	24/1	24VCC
=QgCv -XQG2	10/1	60_1 ○	60	BK2	Controller supply cable			BK2	60	M7	24/1	0VCC
=QgCv -FAL	5/2		01	BK1				BK1	01			
=QgCv -FAL	5/2		02	BK2				BK2	02			
=QgCv -FAL	5/3		03	BK3	-W1 022.1983	3.50 m		BK3	03			
=QgCv -AL	5/3	PE ○	PE	GNYE	General supply cable			GNYE	PE			
				Sch				Sch				
=BmMep -M20	6/4	U	018	BK1				BK1	018	T1	6/4	=QgCv -Q-K65
=BmMep -M20	6/4	V	019	BK2	-W11 022.1984	6.60 m		BK2	019	T2	6/4	=QgCv -Q-K65
=BmMep -M20	6/4	W	020	BK3	Hydraulic motor cable			BK3	020	T3	6/4	=QgCv -Q-K65
=BmMep -M20	6/5	PE	PE	GNYE				GNYE	PE	○ 5_6	6/5	=QgCv -XQGPE
=QgCv -X100	13/2	5	116	GN				GN	116	M10	23/2	0V
=QgCv -X100	13/1	2	115	BN				BN	115	M10	23/1	AO1
=QgCv -X100	13/2	STF	57	BK				BK	57	M2	18/1	OUT00
=QgCv -X100	13/3	SD	553	BU				BU	553	M2	18/1	24VDC
=QgCv -X100	13/2	C	052	RD	-W120/1 022.1905	2.40 m		RD	052	○ 052_2	13/7	=QgCv -XQG2
				YE	Auxiliary inverter Cable			YE				
=QgCv -X100	13/2	AM	117	WH				WH	117	M24	20/7	AI1a
=QgCv -X100	13/1	A	038	OG				OG	038	M15	16/5	IN04
=QgCv -XQGPE	5/4	5_1 ○	PE	Sch				Sch	PE			
=BmMep -S47	17/4		111	BK				BK	111	○ 333	17/4	=QgCv -XQG3
=BmMep -S47	17/4		052	BU	-W121 022.0397	5.00 m		BU	052	○ 052_1	17/4	=QgCv -XQG2
				BN	Zero setting shuttle limit switch			BN				
				WH				WH				
=QgCv -XQG3	16/7	036 ○	036	BK1				BK1	036			
=QgCv -XQG2	16/7	052_1 ○	052	BK2	-W122 022.1980	5.30 m		BK2	052			
					Minimal lubrification optional cable							
=BmMep -XCI	19/6	043 ○	043	BK1				BK1	043	2	19/6	=QgCv -X012
=BmMep -XCI2	19/6	60_3 ○	60	BK2	-W123 022.1980	1.80 m		BK2	60	1	19/6	=QgCv -X012
					SV head up cable							

REV.	MODIFICA	DATA	FIRME
R 1.2	Add -SE2 Enable manual vises command (pg.17)	24/07/2017	Solfanelli
1.1	Add WEPC emergency powered conveyor cable (pg.11)	03/11/2016	Solfanelli
1.0	Review 2016 with new electrical box carpentry	15/07/2016	Solfanelli
0.1	Added Three-phase Inverter Line reactor (L1)	16/04/2015	Solfanelli

Dis. N. H14A48060CSA
CAD SPAC
File H14A.1/dwg
Data 24/07/2017

Impianto/Plant: *H14A_480V.60Hz*
Denominazione/Title: RIASSUNTIVO CAVI
Cable summary

Ordine/Requisition
Commessa/Order: H14A
Esecutore/Executor: Solfanelli

MEP

Foglio/Page: 29
Segue/Follow: 30
Ultimo/Last: 211

CAVI ESTERNI \ EXTERNAL CABLES

QUADRO \ BOARD								DESTINAZIONE \ LOCATION			
QUADRO BOARD	FOGLIO SHEET	NR. MORSETTO TERMINAL NO.	NR. FILO CONDUCTOR NO.	ID SUL CAVO ID IN CABLE	CAVO CABLE	LUNGHEZZA LENGHT [mt]	DISTURBO NOISE LEVEL	ID SUL CAVO ID IN CABLE	NR. FILO CONDUCTOR NO.	NR. MORSETTO TERMINAL NO.	FOGLIO SHEET	QUADRO BOARD
=BmMep -XCI	19/7	044 ○	044	BK1	-W124 022.1980	1.80 m		BK1	044	1	19/7	=QgCv -X014
=BmMep -XCI2	19/7	60_4 ○	60	BK2	SV head down cable			BK2	60	2	19/7	=QgCv -X014
=BmMep -M1	6/1	U	124	BK1				BK1	124	U	6/2	=QgCv -X100
=BmMep -M1	6/1	V	126	BK2				BK2	126	V	6/3	=QgCv -X100
=BmMep -M1	6/1	W	128	BK3	-W2 022.1977	7.00 m		BK3	128	W	6/3	=QgCv -X100
=BmMep -M1	6/2	PE	PE	GNYE	Blade motor cable			GNYE	PE	5_2 ○	6/2	=QgCv -XQGPE
=BmMep -M1	6/2	PE	PE	Sch				Sch	PE	PE	6/3	=QgCv -X100
=BmMep -S0	16/2	1	052	BN				BN	052	052_1 ○	16/3	=QgCv -XQG2
=BmMep -S0	16/2	4	031	BK	-W27 022.0422	7.00 m		BK	031	M15	16/2	IN00
=BmMep -S0	16/2	3	60	BU	Blade proximity cable			BU	60			
				WH				WH				
=BmMep -M8	9/3	WHITE/BIANCO	221	BK1				BK1	221	A1	9/3	=QgCv -U10
=BmMep -M8	9/3	RED/ROSSO	222	BK2				BK2	222	A1	9/3	=QgCv -U10
=BmMep -M8	9/4	YELLOW/GIALLO	223	BK3	-W29 022.1979	5.40 m		BK3	223	B1	9/3	=QgCv -U10
=BmMep -M8	9/4	GREEN/VERDE	224	BK4	Power stepper motor cable			BK4	224	B2	9/3	=QgCv -U10
=BmMep -M8	9/4		PE	GNYE				GNYE	PE	5_9 ○	9/2	=QgCv -XQGPE
				GN-RD				GN-RD				
=BmMep -XCI	14/5	010 ○	010	BN -BU				BN -BU	010	10	14/2	=QgCv
=BmMep -XCI	14/5	011 ○	011	WH-BK	-W29/2 022..1905	6.50 m		WH-BK	011	11	14/2	=QgCv
=BmMep -XCI	14/5	012 ○	012	YE-OG	Powered conveyor cable			YE-OG	012	12	14/2	=QgCv
=BmMep -XCI	14/5	PE ○	13	Sch				Sch	13			
=QgMep -S23	18/5	3	261	BK1	-W30 022.1980	7.00 m		BK1	261	M2	18/4	24VDC
=QgMep -S23	18/5	4	1055	BK2	Reverse chip conveyor cable			BK2	1055	22	18/5	=QgCv -K6
=BmMep -H3	18/4	24Vdc	053	BK1	-W37 022.1980	6.30 m		BK1	053	053 ○	18/4	=QgCv -XQG3
=BmMep -H3	18/4		60	BK2	Flashing cable			BK2	60	60_4 ○	18/3	=QgCv -XQG2

REV.	MODIFICA	DATA	FIRME
R 1.2	Add -SE2 Enable manual vises command (pg.17)	24/07/2017	Solfanelli
1.1	Add WEPC emergency powered conveyor cable (pg.11)	03/11/2016	Solfanelli
1.0	Review 2016 with new electrical box carpentry	15/07/2016	Solfanelli
0.1	Added Three-phase Inverter Line reactor (L1)	16/04/2015	Solfanelli

Dis. N. H14A48060CSA
CAD SPAC
File H14A.1/dwg
Data 24/07/2017

Impianto/Plant: *H14A_480V.60Hz*
Denominazione/Title: RIASSUNTIVO CAVI
Cable Summary

Ordine/Requisition
Commessa/Order: H14A
Esecutore/Executor: Solfanelli

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CAVI ESTERNI \ EXTERNAL CABLES

QUADRO \ BOARD								DESTINAZIONE \ LOCATION			
QUADRO BOARD	FOGLIO SHEET	NR. MORSETTO TERMINAL NO.	NR. FILO CONDUCTOR NO.	ID SUL CAVO ID IN CABLE	CAVO CABLE	LUNGHEZZA LENGHT [mt]	DISTURBO NOISE LEVEL	ID SUL CAVO ID IN CABLE	NR. FILO CONDUCTOR NO.	NR. MORSETTO TERMINAL NO.	FOGLIO SHEET	QUADRO BOARD
=BmMep -M2	6/6	U	015	BK1				BK1	015	T1	6/6	=QgCv -Q-K4
=BmMep -M2	6/6	V	016	BK2				BK2	016	T2	6/6	=QgCv -Q-K4
=BmMep -M2	6/6	W	017	BK3	-W4 022.1984	2.20 m		BK3	017	T3	6/6	=QgCv -Q-K4
=BmMep -M2	6/7	PE	PE	GNYE	Coolant pump cable			GNYE	PE	○ 5_4	6/7	=QgCv -XQGPE
=BmMep -M3	6/7	U	0015	BK1				BK1	0015	T1	6/7	=QgCv -Q-K4A
=BmMep -M3	6/8	V	0016	BK2				BK2	0016	T2	6/8	=QgCv -Q-K4A
=BmMep -M3	6/8	W	0017	BK3	-W5 022.1984	2.20 m		BK3	0017	T3	6/8	=QgCv -Q-K4A
=BmMep -M3	6/8	PE	PE	GNYE	Coolant pump 2 cable			GNYE	PE	○ PE	6/8	=QgCv -XQGPE
=BmMep -S10	17/4		0391	BK				BK	0391	○ 0391	17/4	=QgCv -XQG3
=BmMep -S10	17/4		052	BU	-W59 022.0398	8.00 m		BU	052			
				BN	Bar in infeed vise limit switch			BN				
				WH				WH				
=BmMep -XCI	19/5	044/0 ○	044	BK1	-W65 022.1980	2.20 m		BK1	044	1	19/5	=QgCv -X40
=BmMep -XCI2	19/5	60_2 ○	60	BK2	S.V Block head			BK2	60	2	19/5	=QgCv -X40
=QgCv -XFET	7/6	1 ⊂	1021	BK1				BK1	1021	T1	7/6	=QgCv -Q-K6R
=QgCv -XFET	7/7	2 ⊂	1022	BK2	-W7 022.1984	5.50 m		BK2	1022	T2	7/7	=QgCv -Q-K6R
=QgCv -XFET	7/7	3 ⊂	1023	BK3	Chip conveyour motor cable			BK3	1023	T3	7/7	=QgCv -Q-K6R
=QgCv -XFET	7/7	PE ⊂	7	GNYE				GNYE	7	○ 5_	7/7	=QgCv -XQGPE
=BmMep -M5	7/6	U	1024	BK1				BK1	1024	⊂ 1	7/6	=QgEtMep XMET
=BmMep -M5	7/7	V	1025	BK2	-W7/1 022.1984	2.00 m		BK2	1025	⊂ 2	7/7	=QgEtMep XMET
=BmMep -M5	7/7	W	1026	BK3	Chip conveyour motor cable			BK3	1026	⊂ 3	7/7	=QgEtMep XMET
=BmMep -M5	7/7	PE	7	GNYE				GNYE	7	⊂ PE	7/7	=QgEtMep XMET
=BmMep -XEV	16/6	1 ⊂	052	BN				BN	052	1	16/6	=BmMep -S52
=BmMep -XEV	16/6	2 ⊂	394	BK	-W7/B1 022.0424	2.00 m		BK	394	4	16/6	=BmMep -S52
=BmMep -XEV	16/6	3 ⊂	051	BU	Proximity EVTR cable			BU	051	3	16/6	=BmMep -S52
				WH				WH				

REV.	MODIFICA	DATA	FIRME
R 1.2	Add -SE2 Enable manual vises command (pg.17)	24/07/2017	Solfanelli
1.1	Add WEPC emergency powered conveyor cable (pg.11)	03/11/2016	Solfanelli
1.0	Review 2016 with new electrical box carpentry	15/07/2016	Solfanelli
0.1	Added Three-phase Inverter Line reactor (L1)	16/04/2015	Solfanelli

Dis. N. H14A48060CSA
CAD SPAC
File H14A.1/dwg
Data 24/07/2017

Impianto/Plant: *H14A_480V.60Hz*
Denominazione/Title: RIASSUNTIVO CAVI
Cable Summary

Ordine/Requisition
Commessa/Order: H14A
Esecutore/Executor: Solfanelli

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CAVI ESTERNI \ EXTERNAL CABLES

QUADRO \ BOARD								DESTINAZIONE \ LOCATION			
QUADRO BOARD	FOGLIO SHEET	NR. MORSETTO TERMINAL NO.	NR. FILO CONDUCTOR NO.	ID SUL CAVO ID IN CABLE	CAVO CABLE	LUNGHEZZA LENGHT [mt]	DISTURBO NOISE LEVEL	ID SUL CAVO ID IN CABLE	NR. FILO CONDUCTOR NO.	NR. MORSETTO TERMINAL NO.	FOGLIO SHEET	QUADRO BOARD
=BmMep -M10	7/3	U	1024	BK1				BK1	1024	T1	7/3	=QgCv -Q-K25
=BmMep -M10	7/3	V	1025	BK2	-W8 022.1984	5.50 m		BK2	1025	T2	7/3	=QgCv -Q-K25
=BmMep -M10	7/3	W	1026	BK3				BK3	1026	T3	7/3	=QgCv -Q-K25
=BmMep -M10	7/3	PE	7	GNYE	Blade tensioning motor cable			GNYE	7	○ PE	7/4	=QgCv -XQGPE
=QgCv -XQG3	18/8	050 ○	050	BK1	-W89 022.1980	5.50 m		BK1	050			
=QgCv -XQG2	18/3	60_4 ○	60	BK2	Minimal lubrification cable			BK2	60			
=BmMep -XCI	19/2	042 ○	042	BK1	-W90 022.1980	1.80 m		BK1	042	1	19/2	=QgCv -X009
=BmMep -XCI2	19/3	1_3 ○	60	BK2	SV cutting vise closing cable			BK2	60	2	19/3	=QgCv -X009
=BmMep -XCI	19/4	047 ○	047	BK1	-W91 022.1980	1.80 m		BK1	047	1	19/4	=QgCv -X011
=BmMep -XCI2	19/4	60_1 ○	60	BK2	SV shuttle vise closing cable			BK2	60	2	19/4	=QgCv -X011
=BmMep -XCI	19/2	041 ○	041	BK1	-W92 022.1980	1.80 m		BK1	041	2	19/2	=QgCv -X008
=BmMep -XCI2	19/1	1_2 ○	60	BK2	SV cutting vise opening cable			BK2	60	1	19/1	=QgCv -X008
=BmMep -XCI	19/3	046 ○	046	BK1	-W93 022.1980	1.80 m		BK1	046	2	19/3	=QgCv -X010
=BmMep -XCI2	19/3	1_4 ○	60	BK2	SV shuttle vise opening cable			BK2	60	1	19/3	=QgCv -X010
=BmMep -H2	19/8		1352	BK1	-W95 022.1980	7.40 m		BK1	1352		19/8	=QgMep -F19
=BmMep -H2	19/8		60	BK2	Work zone lamp cable			BK2	60	○ 61_2	19/8	=QgCv -XQG2
=QgCv -XTL	19/7	3 ⊂	1351	BN	-W96 022.0355	7.20 m		BN	1351		19/7	=QgMep -F18
				BK				BK				
=QgCv -XTL	19/7	1 ⊂	60	BU	Laser cable			BU	60	○ 61_1	19/8	=QgCv -XQG2
=QgCv -AL	5/2	1 ○	1	BK1				BK1	1	1	5/5	=QgCv -Q0
=QgCv -AL	5/2	2 ○	2	BK2				BK2	2	3	5/5	=QgCv -Q0
=QgCv -AL	5/3	3 ○	3	BK3	-WAL 022.1977	3,30 m		BK3	3	5	5/5	=QgCv -Q0
=QgCv -AL	5/3	PE ○	PE	GNYE	General Board power supply cable			GNYE	PE	○ 5_1	5/4	=QgCv -XQGPE
				Sch				Sch				

REV.	MODIFICA	DATA	FIRME
R 1.2	Add -SE2 Enable manual vises command (pg.17)	24/07/2017	Solfanelli
1.1	Add WEPC emergency powered conveyor cable (pg.11)	03/11/2016	Solfanelli
1.0	Review 2016 with new electrical box carpentry	15/07/2016	Solfanelli
0.1	Added Three-phase Inverter Line reactor (L1)	16/04/2015	Solfanelli

Dis. N. H14A48060CSA
CAD SPAC
File H14A.1/dwg
Data 24/07/2017

Impianto/Plant: H14A_480V.60Hz
Denominazione/Title: RIASSUNTIVO CAVI
Cable Summary

Ordine/Requisition:
Commessa/Order: H14A
Esecutore/Executor: Solfanelli

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CAVI ESTERNI \ EXTERNAL CABLES

QUADRO \ BOARD				ID SUL CAVO ID IN CABLE	CAVO CABLE	LUNGHEZZA LENGHT [mt]	DISTURBO NOISE LEVEL	ID SUL CAVO ID IN CABLE	DESTINAZIONE \ LOCATION			
QUADRO BOARD	FOGLIO SHEET	NR. MORSETTO TERMINAL NO.	NR. FILO CONDUCTOR NO.						NR. FILO CONDUCTOR NO.	NR. MORSETTO TERMINAL NO.	FOGLIO SHEET	QUADRO BOARD
				GN-RD				GN-RD				
=BmMep -XCI	11/1	360	360	BN -BU				BN -BU	360	2	11/1	=QgCv
=BmMep -XCI	11/2	0360	0360	WH-BK	-WEPC 022..1905	7.40 m		WH-BK	0360	1	11/1	=QgCv
				YE-OG	Emergency roller conveyor Cable			YE-OG				
				Sch				Sch				
=QgCv -XQG3	16/7	036	036	BK				BK	036	M15	16/7	IN06
OUT06	18/7	M3	055	BN				BN	055	95	18/7	=QgCv -Q-K6R
OUT01	18/2	M2	1046	GY				GY	1046	22	18/2	=QgCv -K26
=QgCv -XQG3	18/4	053	053	BU				BU	053	M2	18/4	OUT03
=QgCv -Q-K4A	18/7	95	049	GN				GN	049	M3	18/7	OUT05
OUT04	18/6	M3	048	YE				YE	048	95	18/6	=QgCv -Q-K65
=QgCv -XQG3	17/4	333	333	WH	-W117 022.1906	2.40 m		WH	333	M18	17/4	IN11
OUT15	19/8	M5	352	VT	Output controller cable			VT	352		19/8	=QgMep -F19
OUT14	19/7	M5	351	RD				RD	351		19/7	=QgMep -F18
=QgCv -XQG3	18/8	050	050	OG				OG	050	M3	18/8	OUT07
OUT02	18/3	M2	1047	BU-WH				BU-WH	1047	95	18/3	=QgCv -Q-K25
=QgCv -XQG3	17/4	0391	0391	WH-BU				WH-BU	0391	M18	17/4	IN10
				Sch				Sch				
=QgCv -XQG2	13/7	052_2	052	GN-RD				GN-RD	052	052_1	16/3	=QgCv -XQG2
=QgCv -R-S1	11/7	CS AR-24	1261	BN -BU				BN -BU	1261	M5	19/9	24VDC
=QgCv -XQG2	16/6	60_3	60	WH-BK	-W117/1 022..1905	2.80 m		WH-BK	60	60_3	17/5	=QgCv -XQG2
=QgCv -XQG2	10/3	261_1	261	YE-OG	Output controller cable			YE-OG	261	M2	18/4	24VDC
				Sch				Sch				

REV.	MODIFICA	DATA	FIRME
R 1.2	Add -SE2 Enable manual vises command (pg.17)	24/07/2017	Solfanelli
1.1	Add WEPC emergency powered conveyor cable (pg.11)	03/11/2016	Solfanelli
1.0	Review 2016 with new electrical box carpentry	15/07/2016	Solfanelli
0.1	Added Three-phase Inverter Line reactor (L1)	16/04/2015	Solfanelli

Dis. N. H14A48060CSA
CAD SPAC
File H14A.1/dwg
Data 24/07/2017

Impianto/Plant: *H14A_480V.60Hz*
Denominazione/Title: RIASSUNTIVO CAVI
Cable Summary

Ordine/Requisition
Commessa/Order: H14A
Esecutore/Executor: Solfanelli

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CAVI ESTERNI \ EXTERNAL CABLES

QUADRO \ BOARD								DESTINAZIONE \ LOCATION			
QUADRO BOARD	FOGLIO SHEET	NR. MORSETTO TERMINAL NO.	NR. FILO CONDUCTOR NO.	ID SUL CAVO ID IN CABLE	CAVO CABLE	LUNGHEZZA LENGHT [mt]	DISTURBO NOISE LEVEL	ID SUL CAVO ID IN CABLE	NR. FILO CONDUCTOR NO.	NR. MORSETTO TERMINAL NO.	FOGLIO SHEET	QUADRO BOARD
			60	BK				BK	60			
=BmMep -XCI2	19/1	1_1 ○		BN				BN				
=BmMep -XCI	19/2	041 ○	60	GY				GY	60	M4	19/2	OUT08
=BmMep -XCI2	19/1	1_1 ○	60	BU				BU	60			
=BmMep -XCI2	19/1	1_1 ○		GN				GN		○ 60_3	17/5	=QgCv -XQG2
=BmMep -XCI	19/6	043 ○	044	YE				YE	044	M5	19/6	OUT12
=BmMep -XCI	19/7	044 ○		WH	-W118 022.1906	7.50 m		WH		M5	19/7	OUT13
=BmMep -XCI	19/2	042 ○	044	VT	Input-output cable			VT	044	M4	19/2	OUT09
=BmMep -XCI	19/5	044/0 ○		RD				RD		M5	19/7	OUT13
				OG				OG				
				BU-WH				BU-WH				
=BmMep -XCI	19/3	046 ○		WH-BU				WH-BU		M4	19/3	OUT10
=BmMep -XCI	19/4	047 ○		Sch				Sch		M4	19/4	OUT11
			663	BK				BK	663			
=QgCv -S3	12/4	3	461	BN				BN	461	CS AR-24	12/6	=QgCv -R-S2
=QgCv -XQG4	11/1	461 ○	460	GY				GY	460			
=QgCv -XQG4	11/1	460 ○	60	BU				BU	60	2	11/1	=QgCv -S4
=QgCv -XQG2	10/1	60_1 ○	563	GN				GN	563	1	11/1	=QgCv -S4
=QgCv -R-S1	11/6	CS AR-24	564	YE				YE	564	3	11/4	=QgCv -S3
=QgCv -R-S1	11/6	CS AR-24	664	WH	-W119 022.1906	2.10 m		WH	664	4	11/4	=QgCv -S3
=QgCv -S3	12/4	4	766	VT	Junction cable			VT	766	CS AR-24	12/6	=QgCv -R-S2
=QgCv -S3	12/6	4	261	RD				RD	261	CS AR-24	12/6	=QgCv -R-S2
=QgCv -XQG2	10/3	261_1 ○	033	OG				OG	033			
=QgCv -XQG3	16/3	033 ○	0392	BU-WH				BU-WH	0392	M15	16/3	IN01
=QgCv -R-S2	12/8	CS AR-24	02	WH-BU				WH-BU	02	M15	16/4	IN03
=QgCv -R-S1	11/9	CS AR-24		Sch				Sch		M15	16/4	IN02
				GN-RD				GN-RD				
				BN -BU				BN -BU				
				WH-BK	-W20 022..1905	6.50 m		WH-BK				
				YE-OG	Strain gauge cable			YE-OG				
				Sch				Sch				

REV.	MODIFICA	DATA	FIRME
R 1.2	Add -SE2 Enable manual vises command (pg.17)	24/07/2017	Solfanelli
1.1	Add WEPC emergency powered conveyor cable (pg.11)	03/11/2016	Solfanelli
1.0	Review 2016 with new electrical box carpentry	15/07/2016	Solfanelli
0.1	Added Three-phase Inverter Line reactor (L1)	16/04/2015	Solfanelli

Dis. N. H14A48060CSA
CAD SPAC
File H14A.1/dwg
Data 24/07/2017

Impianto/Plant: *H14A_480V.60Hz*

Denominazione/Title: RIASSUNTIVO CAVI
Cable Summary

Ordine/Requisition:
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CAVI ESTERNI \ EXTERNAL CABLES

QUADRO \ BOARD								DESTINAZIONE \ LOCATION			
QUADRO BOARD	FOGLIO SHEET	NR. MORSETTO TERMINAL NO.	NR. FILO CONDUCTOR NO.	ID SUL CAVO ID IN CABLE	CAVO CABLE	LUNGHEZZA LENGHT [mt]	DISTURBO NOISE LEVEL	ID SUL CAVO ID IN CABLE	NR. FILO CONDUCTOR NO.	NR. MORSETTO TERMINAL NO.	FOGLIO SHEET	QUADRO BOARD
			023	BK				BK	023			
=QgMep -XR0	20/2	1 C	025	WH				WH	025	M11	20/2	0V
=QgMep -XR0	20/2	3 C	024	RD	-W21 022.1982	8.50 m		RD	024	M11	20/1	+VRf
=QgMep -XR0	20/2	2 C	sh	Sch	Head potentiometer cable			Sch	sh	M11	20/3	AI0
=QgMep -XR0	20/3	4 C								M11	20/4	Sh
				GN-RD				GN-RD				
				BN -BU				BN -BU				
				WH-BK	-W28 022..1905	7.00 m		WH-BK				
				YE-OG	Stepper head cable			YE-OG				
				Sch				Sch				
				GN-RD				GN-RD				
				BN -BU				BN -BU				
				WH-BK	-W29/1 022..1905	2.00 m		WH-BK				
				YE-OG	Drive step motor cable			YE-OG				
				Sch				Sch				
			052	BN				BN	052			
=BmMep -B1	21/4	1	028	BK	-W32 022.0343	7.70 m		BK	028	O 052_2	13/7	=QgCv -XQG2
=BmMep -B1	21/5	4	051	BU	Blade deviation sensor cable			BU	051	M26	21/5	AI3a
=BmMep -B1	21/5	3								M26	21/4	0V
				WH				WH				
				BN				BN				
			661	GN				GN	661			
=QgCv -XQG4	12/1	661 O	261	YE				YE	261	22	12/1	-S1
=QgCv -S3	12/6	3	60	GY	-W56 022.2056	8.00 m		GY	60	21	12/1	-S1
=QgCv -XQG2	10/3	60_2 O	660	PK	FC right front guard cable			PK	660	11	12/0	=QgCv -S1
=QgCv -XQG4	12/0	660 O		BU				BU		12	12/0	=QgCv -S1
				RD				RD				

REV.	MODIFICA	DATA	FIRME
R 1.2	Add -SE2 Enable manual vises command (pg.17)	24/07/2017	Solfanelli
1.1	Add WEPC emergency powered conveyor cable (pg.11)	03/11/2016	Solfanelli
1.0	Review 2016 with new electrical box carpentry	15/07/2016	Solfanelli
0.1	Added Three-phase Inverter Line reactor (L1)	16/04/2015	Solfanelli

Dis. N. H14A48060CSA
CAD SPAC
File H14A.1/dwg
Data 24/07/2017

Impianto/Plant: *H14A_480V.60Hz*
Denominazione/Title: RIASSUNTIVO CAVI
Cable Summary

Ordine/Requisition
Commessa/Order: H14A
Esecutore/Executor: Solfanelli

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CAVI ESTERNI \ EXTERNAL CABLES

QUADRO \ BOARD								DESTINAZIONE \ LOCATION			
QUADRO BOARD	FOGLIO SHEET	NR. MORSETTO TERMINAL NO.	NR. FILO CONDUCTOR NO.	ID SUL CAVO ID IN CABLE	CAVO CABLE	LUNGHEZZA LENGHT [mt]	DISTURBO NOISE LEVEL	ID SUL CAVO ID IN CABLE	NR. FILO CONDUCTOR NO.	NR. MORSETTO TERMINAL NO.	FOGLIO SHEET	QUADRO BOARD
				WH				WH				
				BN				BN				
			661	GN				GN	661			
=QgCv -XQG4	12/1	661	1661	YE				YE	1661	21	12/1	-S2
=QgCv -XQG4	12/1	1661	1660	GY	-W57 022.2053	5.00 m		GY	1660	22	12/1	-S2
=QgCv -XQG4	12/1	1660	660	PK	FC left guard cable			PK	660	12	12/0	=QgCv -S2
=QgCv -XQG4	12/0	660		BU				BU		11	12/0	=QgCv -S2
				RD				RD				
				WH				WH				
				BN				BN				
			3661	GN				GN	3661			
=QgCv -R-S2	12/5	CS AR-24	2661	YE				YE	2661	11	12/2	=QgCv -S8
=QgCv -XQG4	12/2	2661	2660	GY	-W57/1 022.2053	5.00 m		GY	2660	12	12/2	=QgCv -S8
=QgCv -XQG4	12/2	2660	3660	PK	Shuttle guard cable			PK	3660	22	12/2	-S3
=QgCv -R-S2	12/5	CS AR-24		BU				BU		21	12/2	-S3
				RD				RD				
				GN-RD				GN-RD				
			052	BN -BU				BN -BU	052	052_1	16/7	=QgCv -XQG2
=BmMep -XEV1	16/6	1	60	WH-BK	-W7/B 022..1905	6.50 m		WH-BK	60			
=BmMep -XEV1	16/6	3	0393	YE-OG	Proximity EVTR cable			YE-OG	0393	M15	16/6	IN05
=BmMep -XEV1	16/6	2		Sch				Sch				
			560	GN-RD				GN-RD	560			
=BmMep -XCI	11/1	460	561	BN -BU				BN -BU	561	460	11/1	=QgCv -XQG4
=BmMep -XCI	11/1	461	561	WH-BK	-WEMG 022..1905	6,00 mt		WH-BK	561	461	11/1	=QgCv -XQG4
=BmMep -XCI	11/2	561	560	YE-OG	Emergency powered conveyor cable			YE-OG	560	561	11/2	=QgCv -XQG4
=BmMep -XCI	11/3	560		Sch				Sch		560	11/3	=QgCv -XQG4
			560	GN				GN	560			
=QgCv -XQG4	11/1	460	561	BN				BN	561	460	11/1	=BmMep -XCI
=QgCv -XQG4	11/1	461	561	WH				WH	561	461	11/1	=BmMep -XCI
=QgCv -XQG4	11/2	561	360	BU				BU	360	561	11/2	=BmMep -XCI
=QgCv -XQG4	11/2	360		RD	-WEMG 022.1905	L=7,40 mt		RD		360	11/2	=BmMep -XCI
			560	YE	Emergency roller conveyor Cable			YE	560			
=QgCv -XQG4	11/3	560	0360	BK				BK	0360	560	11/3	=BmMep -XCI
=QgCv -XQG4	11/2	0360		OG				OG		0360	11/2	=BmMep -XCI
				Sch				Sch				

REV.	MODIFICA	DATA	FIRME
R 1.2	Add -SE2 Enable manual vises command (pg.17)	24/07/2017	Solfanelli
1.1	Add WEPC emergency powered conveyor cable (pg.11)	03/11/2016	Solfanelli
1.0	Review 2016 with new electrical box carpentry	15/07/2016	Solfanelli
0.1	Added Three-phase Inverter Line reactor (L1)	16/04/2015	Solfanelli

Dis. N. H14A48060CSA
CAD SPAC
File H14A.1/dwg
Data 24/07/2017

Impianto/Plant: H14A_480V.60Hz
Denominazione/Title: RIASSUNTIVO CAVI / Cable Summary

Ordine/Requisition:
Commessa/Order: H14A
Esecutore/Executor: Solfanelli

Foglio/Page: 36
Segue/Follow: 37
Ultimo/Last: 211

0	1	2	3	4	5	6	7	8	9		
Nome/Name	Mep__code	Descrizione			Description EN		Catalog__code	Quadro/Board	Fg/Sh	Q.ta/Q.ty	Builder
-OLM	090.1615	Gruppo lubrificazione minimale in DC SH310, SH420, H14A			Spray mist oil system DC voltage for SH310, SH420, H14A			=BmLmCv	25	1	Mep
-B1	022.0537	Sensore induttivo uscita 0-16mA / 1-2,5mm con M8			Inductive Sensor 0-16mA / 1-2,5mm with conn. M8		DCALX/4919B BDC	=BmMep	21	1	Mep
-CR0	022.2601	Guaina POLIFLEX Ø16			Poliflex Covering Ø16		NW 12-1200127	=BmMep	28	1	Mep
-CR1	022.2602	Guaina POLIFLEX Ø18			Poliflex Covering Ø18		NW 14-1200143	=BmMep	28	1	Mep
-CR3	022.2603	Guaina POLIFLEX Ø21			Poliflex covering Ø21		NW 17-1200178	=BmMep	28	1	Mep
-CR4	022.2604	Guaina POLIFLEX Ø29			Poliflex covering Ø29		NW 23-1200232	=BmMep	28	1	Mep
-CR5	022.2603	Guaina POLIFLEX Ø21			Poliflex covering Ø21		NW 17-1200178	=BmMep	28	1	Mep
-CR6	022.2601	Guaina POLIFLEX Ø16			Poliflex Covering Ø16		NW 12-1200127	=BmMep	28	1	Mep
-CR11	022.2603	Guaina POLIFLEX Ø21			Poliflex covering Ø21		NW 17-1200178	=BmMep	28	1	Mep
	022.0212	Raccordo rapido dritto PG16/Ø21			Rapid straight joint SEM PG16/Ø21		SEM PG16/Ø21			1	Mep
-CR12	022.2603	Guaina POLIFLEX Ø21			Poliflex covering Ø21		NW 17-1200178	=BmMep	28	1	Mep
	022.0212	Raccordo rapido dritto PG16/Ø21			Rapid straight joint SEM PG16/Ø21		SEM PG16/Ø21			1	Mep
-CR13	022.2603	Guaina POLIFLEX Ø21			Poliflex covering Ø21		NW 17-1200178	=BmMep	28	1	Mep
	022.0212	Raccordo rapido dritto PG16/Ø21			Rapid straight joint SEM PG16/Ø21		SEM PG16/Ø21			1	Mep
-CR015	022.2603	Guaina POLIFLEX Ø21			Poliflex covering Ø21		NW 17-1200178	=BmMep	28	1	Mep
-GH3	022.0239	Dado nero PG16			Black nut PG16		PG16	=BmMep	28	1	Mep
-H2	022.3253	Faro LED 9W 12/24Vcc 4000°K 750lm 70° IP66 con cavo			Led Lamp		5941662 - SICE	=BmMep	19	1	Mep
-H3	022.3254	Lampeggiante LED 24 VAC/Vdc			Flashing LED 24 VAC/Vdc		SL7-CB-IMH + SL7-BL24Y + SL7-AP24	=BmMep	18	1	Mep
-K27		Elettrovalvola aperta (in chiusura) secondo solenoide						=BmMep	19	1	
-K28	043.1002	Elettrovalvola idraulica 4/3 centri chiusi CETOP 3 24Vcc			Hydraulic electrovalve 4/3 close center CETOP3 24Vdc		MD1L- S1/10 N-D24K1 DUPLOMATIC	=BmMep	19	1	Mep
-K29		Elettrovalvola aperta (in chiusura) secondo solenoide						=BmMep	19	1	
-K30	043.1002	Elettrovalvola idraulica 4/3 centri chiusi CETOP 3 24Vcc			Hydraulic electrovalve 4/3 close center CETOP3 24Vdc		MD1L- S1/10 N-D24K1 DUPLOMATIC	=BmMep	19	1	Mep
-K31		Elettrovalvola aperta (in chiusura) secondo solenoide						=BmMep	19	1	
-K32	043.1002	Elettrovalvola idraulica 4/3 centri chiusi CETOP 3 24Vcc			Hydraulic electrovalve 4/3 close center CETOP3 24Vdc		MD1L- S1/10 N-D24K1 DUPLOMATIC	=BmMep	19	1	Mep
-M1	019.2162	Motore 5.50KW/6,6KW, 230-277/400-480V, 21.5/12.5A;			Motor 5.50KW/6,6KW, 230-277/400-480V, 21.5/12.5A;		019.2162	=BmMep	6	1	Mep
-M2	028.0263	Elettropompa V.208-230/440-460__60, 180W 0.9/0.42A			Electropump V.208-230/440-460.50-60 HZ 180W			=BmMep	6	1	Mep
-M3	028.0263	Elettropompa V.208-230/440-460__60, 180W 0.9/0.42A			Electropump V.208-230/440-460.50-60 HZ 180W			=BmMep	6	1	Mep
-M5	019.4054	Motore EVTR 0.37KW, 230-280/400-480V, 2/1.15A,50/60Hz			Motor EVTR 0.37KW, 230-280/400-480V, 2/1.15A,50/60Hz		019.4054	=BmMep	7	1	Mep
-M8	019.3408	Motore stepper 21Nm 13A 1,8°			Stepper Motor 21Nm 13A 1,8° FL110STH150-1304A-H-1		FL110STH150-1304A-H-1 FULLING	=BmMep	9	1	Mep
-M9	019.3555	Motore stepper 1,9Nmt 2,8A 1,8°			Stepper motor 1,9Nmt 2,8A 1,8°		FL57STH76-2804-A-12 FULLING	=BmMep	22	1	Mep
-M10	019.3584	Motore KW 0,25, V.277/480, 1.55/0.89A B3 MB VR M63C4			Motor KW 0,25, V.274/480, 1.58/0.89A B3 MB VR M63C4		019.3584	=BmMep	7	1	Mep
-M20	019.4014	Motore centralina 1.1KW 230-400(4.70-2.70) 1420rpm, 1.3KW 277-480(4.70-2.70) 1700rpm CSA			Motor oil unit 1.1KW 230-400(4.70-2.70) 1420rpm, 1.3KW 277-480(4.70-2.70) 1700rpm CSA		019.4014	=BmMep	6	1	Mep
-R0	022.2152	Tensionatore elettronico 3T			Electronic tensioner 3T		TR-S-A/3T 1,5V- 900Kg Deltateck	=BmMep	21	1	Mep
-R5	044.1352	Potenziometro lineare corsa 463mm TLH450 cod. 025318 NOVOTECNIK			Linear potentiometer 463mm TLH450 cod. 025318		TLH450 cod. 025318 NOVOTECNIK	=BmMep	20	1	Mep
-RD1	022.0349	Riduzione			Joint Reduction		M/F M20/PG13,5	=BmMep	28	1	Mep
-RE1	022.0211	Raccordo rapido dritto			Rapid straight joint SEM PG13,5/Ø19		SEM PG13,5/Ø19	=BmMep	28	1	Mep
-RE3	022.0212	Raccordo rapido dritto PG16/Ø21			Rapid straight joint SEM PG16/Ø21		SEM PG16/Ø21	=BmMep	28	1	Mep
-RT1	022.2756	Raccordo di derivazione a T D.29, d.23x2			Fitting Junction T, D.29, d.23x2		RTA 666944	=BmMep	28	1	Mep
-S0	022.0541	Sensore di prossimità induttivo D.18mm			Inductive proximity Sensor D.18mm		Proximity - B03188P0C5- SELET	=BmMep	16	1	Mep
-S10	022.0543	Finecorsa a rotella 1NO+1NC conn. M12 laterale			Limit Switch with roll 1NO+1NC		NB B110BB-DMK PIZZATO	=BmMep	17	1	Mep
-S47	022.0543	Finecorsa a rotella 1NO+1NC conn. M12 laterale			Limit Switch with roll 1NO+1NC		NB B110BB-DMK PIZZATO	=BmMep	17	1	Mep
-S52	022.0527	Sensore di prossimita PNP corto conn. M12			Proximity sensor PNP short with M12 connector.			=BmMep	16	1	Mep
-V1	022.1191	Traguardatore laser a riga 12x70 24Vcc 635nm 5mW e conn. M8			Laser Line Sign		MOD 50EM 24V e connettore - RLI	=BmMep	19	1	Mep
-XCI	022.0377	Morsetto 2 fili a vite 4(6)mmq__PE__PHOENIX			Terminal 4(6)mmq for 2 wires__PE__PHOENIX		USLKG5	=BmMep		1	Mep
	022.2243	Morsetto 2,5(4)mmq per 2 fili a molla - PHOENIX			Terminal 2,5(4)mmq for 2 wires - PHOENIX		ST2,5- 3031212			13	Mep

REV.	MODIFICA	DATA	FIRME
R 1.2	Add -SE2 Enable manual vises command (pg.17)	24/07/2017	Solfanelli
1.1	Add WEPC emergency powered conveyor cable (pg.11)	03/11/2016	Solfanelli
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0.1	Added Three-phase Inverter Line reactor (L1)	16/04/2015	Solfanelli

Dis. N. H14A48060CSA
CAD SPAC
File H14A.1/dwg
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Impianto/Plant: *H14A_480V.60Hz*
Denominazione/Title: DISTINTA MATERIALI / *Material List*

Ordine/Requisition:
Commessa/Order: H14A
Esecutore/Executor: Solfanelli

MEP

Foglio/Page: 37
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0	1	2	3	4	5	6	7	8	9		
Nome/Name	Mep_code	Descrizione			Description EN		Catalog_code	Quadro/Board	Fg/Sh	Q.ta/Q.ty	Builder
-XCI2	022.2245	Morsetto 2,5(4)mmq per 4 fili a molla - PHOENIX			Terminal 2,5(4)mmq for 4 wires - PHOENIX		ST2,5- QUATTRO_3031306	=BmMep		2	Mep
-XEV	022.0283 + 022.0268	Connettore volante ILME (CK03VGS leva + CKF04) 5 poli per evacuatore trucioli						=BmMep		1	Mep
-XEV1	022.0282 + 022.0267	Connettore volante ILME (CK03VS pioli + CKM04) 5 poli per evacuatore trucioli			Mobile connector ILME (CK03VS + CKM04) 5 poles		CK03VS pioli + CKM04	=BmMep		1	Mep
-AL	022.0377	Morsetto 2 fili a vite 4(6)mmq_PE_PHOENIX			Terminal 4(6)mmq for 2 wires_PE_PHOENIX		USLKG5	=QgCv		1	Mep
	022.2231	Morsetto 4(6)mmq per 2 fili a molla - PHOENIX			Terminal 4(6)mmq for 2 wires - PHOENIX		ST4- 3031364			3	Mep
-BR1	022.0900	Barra omega			Omega guide DIN			=QgCv	27	1	Mep
-CC1	022.0304	Terminale a occhiello (Rosso)			Wire Terminal Connection Red		Ø5 da 1,5mmq A5/P-B15/P	=QgCv	27	1	Mep
-CC2	022.0303	Terminale a occhiello (Blu)			Wire Terminal Connection Blue		Ø8 da 2,5mmq BM00237	=QgCv	27	1	Mep
-CN1	022.0903	Canalina portacavi in plastica			Cable holding plastic channel		40x60	=QgCv	27	2	Mep
-CN2	022.0921	Canalina portacavi in plastica			Cable holding plastic channel		25x60	=QgCv	27	2	Mep
-CR10	022.0197	Guaina POLIFLEX Ø35			Poliflex Covering Ø35		NW 29-3800296	=QgCv	28	1	Mep
	022.0209	Raccordo rapido dritto PG29/Ø35			Rapid straight Joint PG29/Ø35		SEM PG29/Ø35			1	Mep
-CR14	022.0197	Guaina POLIFLEX Ø35			Poliflex Covering Ø35		NW 29-3800296	=QgCv	28	1	Mep
	022.0209	Raccordo rapido dritto PG29/Ø35			Rapid straight Joint PG29/Ø35		SEM PG29/Ø35			1	Mep
-CR15	022.0197	Guaina POLIFLEX Ø35			Poliflex Covering Ø35		NW 29-3800296	=QgCv	28	1	Mep
	022.0209	Raccordo rapido dritto PG29/Ø35			Rapid straight Joint PG29/Ø35		SEM PG29/Ø35			1	Mep
-CU1	022.4091	Cavo USB per pannello di comando con connettore			Cable 60 cm for command panel with USB connector		M222-USB-SA ;107412 EATON	=QgCv	15	1	Mep
	022.0279	Kit morsetti volanti Mep50C			Kit mobile terminals Mep50C controller		ISAC			1	Mep
	022.0760.1	Display MEP50 TS_REV1			Display MEP50 TS_REV1		RAKIT7WIDE. TFT 7" Word WideTouch Screen +Cavo dati			1	Mep
	022.2832.1	Controllore Mep50C_REV1_senza display			Controller Mep50C_REV1_without display		Cod. UN07MEP006			1	Mep
	031.2081	Consolle di programmazione MEP50 H11A, H230A,H14A.1			Programming consolled MEP50 H11A, H230A,H14A.1					1	Mep
-F1 -F2	022.2240	Portafusibile 2 x (10,3x38) - 690V 32A			Fuse holding terminal 2 x (10,3x38) 690V 32A		2032038 BCH 32A ItalWeber	=QgCv	8	1	Mep
	054.4676	Fusibile Ritardato 10.3x38 - 3.5A UL/CSA			Fuse Time delay 10.3x38 - 3.5A UL/CSA		3.5A 600V ATDR3-1/2			2	Mep
-F3 -F4	022.2240	Portafusibile 2 x (10,3x38) - 690V 32A			Fuse holding terminal 2 x (10,3x38) 690V 32A		2032038 BCH 32A ItalWeber	=QgCv	8	1	Mep
	054.4662	Fusibile Ritardato 10.3x38 - 4A UL/CSA			Fuse Time delay 10.3x38 - 4A UL/CSA		4A 600V ATDR4			2	Mep
-F5 -F6 -F7	022.2239	Portafusibile 3 x (10,3x38) - 690V 32A			Fuse holding terminal 3 x (10,3x38) 690V 32A		2033038 BCH 32A ItalWeber	=QgCv	6	1	Mep
	054.4538	Fusibile Ritardato 10.3x38 - 5A UL/CSA			Fuse Time delay 10.3x38 - 5A UL/CSA		5A 600V ATDR5			3	Mep
-F8 -F9 -F10	022.2239	Portafusibile 3 x (10,3x38) - 690V 32A			Fuse holding terminal 3 x (10,3x38) 690V 32A		2033038 BCH 32A ItalWeber	=QgCv	6	1	Mep
	054.4662	Fusibile Ritardato 10.3x38 - 4A UL/CSA			Fuse Time delay 10.3x38 - 4A UL/CSA		4A 600V ATDR4			3	Mep
-F14	022.2253	Portafusibile 1 x (10,3x38) - 690V 32A			Fuse holding terminal 1 x (10,3x38) 690V 32A		2031038 BCH 32A ItalWeber	=QgCv	8	1	Mep
	054.4664	Fusibile Ritardato 10.3x38 - 7.5A UL/CSA			Fuse Time delay 10.3x38 - 7.5A UL/CSA		7.5A 600V ATDR7-1/2			1	Mep
-F15	022.2253	Portafusibile 1 x (10,3x38) - 690V 32A			Fuse holding terminal 1 x (10,3x38) 690V 32A		2031038 BCH 32A ItalWeber	=QgCv	8	1	Mep
	054.4538	Fusibile Ritardato 10.3x38 - 5A UL/CSA			Fuse Time delay 10.3x38 - 5A UL/CSA		5A 600V ATDR5			1	Mep
-F16	022.2253	Portafusibile 1 x (10,3x38) - 690V 32A			Fuse holding terminal 1 x (10,3x38) 690V 32A		2031038 BCH 32A ItalWeber	=QgCv	8	1	Mep
	054.4538	Fusibile Ritardato 10.3x38 - 5A UL/CSA			Fuse Time delay 10.3x38 - 5A UL/CSA		5A 600V ATDR5			1	Mep
-F17	022.2253	Portafusibile 1 x (10,3x38) - 690V 32A			Fuse holding terminal 1 x (10,3x38) 690V 32A		2031038 BCH 32A ItalWeber	=QgCv	8	1	Mep
	054.4673	Fusibile Ritardato 10.3x38 - 1A UL/CSA			Fuse Time delay 10.3x38- 1A UL/CSA		1A 600V ATDR1			1	Mep
-F22 -F21 -F20	054.4586	Fusibile Ritardato 10.3x38 - 25A UL/CSA			Fuse Time delay 10.3x38 - 25A UL/CSA		25A 600V ATDR25	=QgCv	6	3	Mep
	022.2239	Portafusibile 3 x (10,3x38) - 690V 32A			Fuse holding terminal 3 x (10,3x38) 690V 32A		2033038 BCH 32A ItalWeber			1	Mep
-FAL	022.2228	Portafusibile 3 x (14x51) - 690V 50A			Fuse holding terminal 3 x (14x51) 690V 50A		2303051- ITALWEBER 50A, 690V	=QgCv	5	1	Mep
-FL1	022.0133	Filo unipolare AWG20 CSA (0.5mmq)			Single wire AWG20 CSA (0.5mmq)			=QgCv	27	38	Mep
-FL2	022.0134	Filo unipolare AWG16 CSA (1.5mmq)			Single wire AWG16 CSA (1.5mmq)			=QgCv	27	29	Mep
-FL3	022.1995	Cavo 1AWG12 NERO			Cable 1AWG12 NERO			=QgCv	27	1	Mep
	022.1996	Cavo 1AWG12 GN/YE			Cable 1AWG12 GN/YE					1	Mep
-FL4	022.1963	Cavo 1AWG10 BLACK			Cable 1Awg10 black			=QgCv	27	19	Mep

REV.	MODIFICA	DATA	FIRME
R 1.2	Add -SE2 Enable manual vises command (pg.17)	24/07/2017	Solfanelli
1.1	Add WEPC emergency powered conveyor cable (pg.11)	03/11/2016	Solfanelli
1.0	Review 2016 with new electrical box carpentry	15/07/2016	Solfanelli
0.1	Added Three-phase Inverter Line reactor (L1)	16/04/2015	Solfanelli

Dis. N. H14A48060CSA
CAD SPAC
File H14A.1/dwg
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Impianto/Plant: *H14A_480V.60Hz*

Denominazione/Title: DISTINTA MATERIALI
Material List

Ordine/Requisition:
Commessa/Order: H14A
Esecutore/Executor: Solfanelli

Foglio/Page: 38
Segue/Follow: 39
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0	1	2	3	4	5	6	7	8	9		
Nome/Name	Mep_code	Descrizione		Description EN			Catalog_code	Quadro/Board	Fg/Sh	Q.ta/Q.ty	Builder
-FS1	019.5353	Fascetta in plastica 140x3,5		Plastic clamp 140x3,5			32031 Legrand	=QgCv	27	75	Mep
-G1	022.0908	Alimentatore Switching Vi 230-400-500VAC Vu 24Vdc 14A		Switching power supply Vi 240-400-500VAC Vu 24Vcc 14A			FLEX28024B AdelSystem	=QgCv	8	1	Mep
-JB1	016.1272	Scatola derivazione metallica		Metal junction box?			150x150 P:100	=QgCv	27	1	Mep
-JB2	016.2257	Scatola derivazione metallica		Metal Junction Box			200x130 P:70	=QgCv	27	1	Mep
-K0	022.0556	Bobina di minima 480/60		Releaser 480/60			U-PKZ0 V.480.60 cod. 073147 - Moeller	=QgCv	5	1	Mep
-K4	022.3012	Contattore 3KW NO (24 V Dc)		Contactor 3KW NO (24 V Dc)			DILM7-10 cod.276565 Moeller	=QgCv	18	1	Mep
-K4A	022.3012	Contattore 3KW NO (24 V Dc)		Contactor 3KW NO (24 V Dc)			DILM7-10 cod.276565 Moeller	=QgCv	18	1	Mep
-K6	022.3011	Contattore 3KW - NC (24 V Dc)		Contactor 3KW NC (24 V Dc)			DILM7-01 cod.276600 Moeller	=QgCv	18	1	Mep
-K6R	022.3011	Contattore 3KW - NC (24 V Dc)		Contactor 3KW NC (24 V Dc)			DILM7-01 cod.276600 Moeller	=QgCv	18	1	Mep
	022.3924	Kit ponti potenza per teleinvertitore		Kit for contactor reversing			DILM12-XLR			1	Mep
-K25	022.3011	Contattore 3KW - NC (24 V Dc)		Contactor 3KW NC (24 V Dc)			DILM7-01 cod.276600 Moeller	=QgCv	18	1	Mep
	022.3924	Kit ponti potenza per teleinvertitore		Kit for contactor reversing			DILM12-XLR			1	Mep
-K26	022.3011	Contattore 3KW - NC (24 V Dc)		Contactor 3KW NC (24 V Dc)			DILM7-01 cod.276600 Moeller	=QgCv	18	1	Mep
-K65	022.3012	Contattore 3KW NO (24 V Dc)		Contactor 3KW NO (24 V Dc)			DILM7-10 cod.276565 Moeller	=QgCv	18	1	Mep
-KRES	022.0993 + 022.2391	Rele 24VCC - 2 contatti scambio + zoccolo		Relay 24 VCC - 2 exchange contacts + base			40.52.9.024.0000 + 95.05.SPA - FINDER	=QgCv	12	1	Mep
-L1	022.1451	Induttanza trifase di linea 480V 60Hz UL/CSA		Three-phase line reactor 480V 60Hz UL/CSA			18A, 2,5mH	=QgCv	6	1	Mep
-M6	019.5220	Ventola raffreddamento 120x120 24Vdc		Fan cooling 120x120 24Vdc			V108MBW24DC AlfaPlastic	=QgCv	10	1	Mep
	019.5117	Griglia per ventola 120x120		Cover for fan cooler 120x120			ALFA GM120			1	Mep
	034.0431	Base per ventola 120x120 230V		Base for fan cooling 120x120			A12-7032			1	Mep
	028.0174	Filtro per ventola 120x120		Fan filter 120x120			M12R			1	Mep
	034.0414	Coperchio alettatore per ventola 120x120		Fan filter 120x120			M12C-7032			1	Mep
-M7	019.5221	Ventola raffreddamento 80x80 - 24Vdc		Fan cooling 80x80 - 24Vdc			V108 DSW24V - ALFAELECTRIC	=QgCv	10	1	Mep
	019.5123	Griglia per ventola 80x80		Cover for fan cooler 80x80			ALFA GM 80			1	Mep
	016.0624	Staffa per ventola azionamento P/P		Support for driver fan cooler						1	Mep
-NM1	022.0290	Etichetta segnafilo		Cable maker and wire				=QgCv	27	40	Mep
-NM2	022.0290	Etichetta segnafilo		Cable maker and wire				=QgCv	27	1290	Mep
-PT1	022.0311	Terminale a puntale da (Bianco)		Wire Terminal Connection White			0,5mmq DZ5CE005	=QgCv	27	1	Mep
-PT2	022.0313	Terminale a puntale da (Blu)		Wire Terminal Connection Bleu			2,5mmq	=QgCv	27	1	Mep
-PT3	022.0312	Terminale a puntale da (Nero)		Wire Terminal Connection Black			1,5mmq DZ5CE015	=QgCv	27	1	Mep
-PT4	022.0314	Terminale a puntale da (Grigio)		Wire Terminal Connection Grey			4mmq	=QgCv	27	1	Mep
-PWC								=QgCv	25	1	
-Q-K4	022.3824	Rele termico 0.4 - 0.6A		Termal overload 0.4-0.6A			ZB12-0.6A cod. 278434 Moeller	=QgCv	6	1	Mep
-Q-K4A	022.3824	Rele termico 0.4 - 0.6A		Termal overload 0.4-0.6A			ZB12-0.6A cod. 278434 Moeller	=QgCv	6	1	Mep
-Q-K6R	022.3820	Rele termico 1-1,6A		Termal overload 1-1,6A			ZB12-1,6A cod. 278436Moeller	=QgCv	7	1	Mep
-Q-K25	022.3819	Rele termico 0.6-1.0A		Termal overload 0.6-1.0A			ZB12-1.0A cod. 278435 Moeller	=QgCv	7	1	Mep
-Q-K65	022.3812	Rele termico 2,4-4A		Termal overload 2,4-4A			ZB12-4A cod. 278438Moeller	=QgCv	6	1	Mep
-Q0	022.1289	Magnetotermico 16-20A		Magneto-termal overload 16-20A			PKZM0-20 cod. 46988 Moeller	=QgCv	5	1	Mep
	022.1025	Comando bloccaporta PKZ0 - XRH IP65		Rotary handle door lock PKZ0 - XRH IP65			PKZ0 - XRH cod: 106133			1	Mep
-QD1	010.7893	Vite TE M8x20		TE M8x20 screw				=QgCv	27	2	Mep
	010.7831	Vite M5x12 Buton		Buton M5x12 screw						16	Mep
	010.7847	Vite TCEI M4x55		TCEI M4x55 screw						4	Mep
	010.7856	Vite TCEI M4x45		TCEI M4x45 screw						4	Mep
	010.7851	Vite TCEI M4x10		TCEI M4x10 screw						2	Mep
	010.7604	Rondella D:8mm		Washer D:8mm						4	Mep
	010.7603	Rondella D:6mm		Washer D:6mm						44	Mep

REV.	MODIFICA	DATA	FIRME
R 1.2	Add -SE2 Enable manual vises command (pg.17)	24/07/2017	Solfanelli
1.1	Add WEPC emergency powered conveyor cable (pg.11)	03/11/2016	Solfanelli
1.0	Review 2016 with new electrical box carpentry	15/07/2016	Solfanelli
0.1	Added Three-phase Inverter Line reactor (L1)	16/04/2015	Solfanelli

Dis. N. H14A48060CSA
CAD SPAC
File H14A.1/dwg
Data 24/07/2017

Impianto/Plant: *H14A_480V.60Hz*
Denominazione/Title: DISTINTA MATERIALI
Material List

Ordine/Requisition
Commessa/Order: H14A
Esecutore/Executor: Solfanelli

MEP

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Ultimo/Last: 211

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Nome/Name	Mep_code	Descrizione			Description EN		Catalog_code	Quadro/Board	Fg/Sh	Q.ta/Q.ty	Builder
-QD1	010.7201	Dado M4			M4 nut			=QgCv	27	4	Mep
	010.7204	Dado M8			M8 nut					2	Mep
	010.7803	Vite autofilettante 3.9x15			3.9x15 Screw					44	Mep
	016.2903	Quadro comandi completo di quadro elettrico SH 350NC 5.0.			Control panel plus electrical box for SH 350 NC 5.0.					1	Mep
-R-M20	025.0235	Anello di tenuta			Potentiometer 10K single turn		NI-18-25-4.5	=QgCv	24	1	Mep
	022.1322	Encoder da pannello Mep50			Panel encoder Mep 50					1	Mep
	010.3749	Manopola Alluminio Antracite e Logo HydMech			Anthracite Knob with HydMech Icon		Ø38x23mm - Albero Ø6			1	Mep
-R-M21	025.0235	Anello di tenuta			Potentiometer 10K single turn		NI-18-25-4.5	=QgCv	24	1	Mep
	022.1322	Encoder da pannello Mep50			Panel encoder Mep 50					1	Mep
	010.3749	Manopola Alluminio Antracite e Logo HydMech			Anthracite Knob with HydMech Icon		Ø38x23mm - Albero Ø6			1	Mep
-R-M25	025.0235	Anello di tenuta			Potentiometer 10K single turn		NI-18-25-4.5	=QgCv	21	1	Mep
	022.1816	Potenziometro 10Kohm			Potentiometer 10Kohm single turn					1	Mep
	010.3753	Manopola Alluminio Argento e Logo HydMech			Silver Knob with HydMech Icon		Ø38x23mm - Albero Ø6			1	Mep
-R-S1	022.3811	Rele sicurezza 4NO, 1NC cat.3			Safety relay 4NO, 1NC cat.3		CS AR-24V024 PIZZATO	=QgCv	11	1	Mep
-R-S2	022.3811	Rele sicurezza 4NO, 1NC cat.3			Safety relay 4NO, 1NC cat.3		CS AR-24V024 PIZZATO	=QgCv	12	1	Mep
-R10	022.2965	Resistenza 1W 680ohm			Resistance 1W 680ohm		131-823 RS	=QgCv	21	1	Mep
-S1	010.1897	Finecorsa a cerniera aletta stretta 2NC + 1NO+ cavo 0.70Mt +M12			Hinge limit switch 2NC + 1NO		HP AA052F-0,7PMS1 PIZZATO	=QgCv	12	1	Mep
	010.1886	Finecorsa a cerniera complementare aletta stretta			Complementary hinge		HC AA PIZZATO			1	Mep
-S2	010.1897	Finecorsa a cerniera aletta stretta 2NC + 1NO+ cavo 0.70Mt +M12			Hinge limit switch 2NC + 1NO		HP AA052F-0,7PMS1 PIZZATO	=QgCv	12	1	Mep
	010.1886	Finecorsa a cerniera complementare aletta stretta			Complementary hinge		HC AA PIZZATO			1	Mep
-S3	022.0911	Portacontatti per pulsantiera			Carrier for pushbutton		M22-A cod. 216374	=QgCv	17	1	Mep
	022.0937	Contatto pulsantiera NA			Normally open contact		M22-K10 cod. 216376 Moeller			1	Mep
	022.1408	Pulsante blu			Blue push button		M22-D-B cod. 216600			1	Mep
-S4	022.1245	Fungo emergenza			Emergency push button		M22-PVT cod.263467	=QgCv	11	1	Mep
	022.0936	Contatto pulsantiera NC			Normally close contact		M22-K01 cod. 216678 - Moeller			2	Mep
	022.0911	Portacontatti per pulsantiera			Carrier for pushbutton		M22-A cod. 216374			1	Mep
-S8	010.1897	Finecorsa a cerniera aletta stretta 2NC + 1NO+ cavo 0.70Mt +M12			Hinge limit switch 2NC + 1NO		HP AA052F-0,7PMS1 PIZZATO	=QgCv	12	1	Mep
	010.1886	Finecorsa a cerniera complementare aletta stretta			Complementary hinge		HC AA PIZZATO			1	Mep
-S18	022.0911	Portacontatti per pulsantiera			Carrier for pushbutton		M22-A cod. 216374	=QgCv	17	1	Mep
	022.0937	Contatto pulsantiera NA			Normally open contact		M22-K10 cod. 216376 Moeller			1	Mep
	022.1405	Pulsante nero			Black push button		M22-D-S cod. 216590			1	Mep
-S54	022.3920	Joystick 4 posizioni instabile con sblocco			Joystic 4 positions unstable with unlocking		MSJ12-60B cod. EL770 4 - ABB	=QgCv	17	1	Mep
	022.0932	Contatto pulsantiera NA			Normally open contact		MCB-10 cod. E0570 5 - ABB			4	Mep
-SF1	047.0182	Sacchetto portafusibili			Printed envelopes			=QgCv	27	1	Mep
-T2	022.1683	Trasformatore UL/CSA			Transformer 500VA UL/CSA		500VA P.0-240-480 S.0-55/60/65 (450VA)/0-220 (50VA)	=QgCv	8	1	Mep
-TF1	031.2622	Targa sostituzione fusibili			Replace fuse adhesive sign			=QgCv	27	1	Mep
-TF2	025.0604	Guarnizione aerstop			Control panel gasket			=QgCv	27	1	Mep
-U10	022.1330	Azionamento per motori passo-passo (60VAC +20% - 10A) + modbus			Driver for step motor (30-100V) + modbus		APSL3 E OP/S130	=QgCv	9	1	Mep
	022.2277	Ponte per driver SHS			Bridge for driver SHS		6742384 - RS			2	Mep
-X008	022.0429	Connettore EV idra. in DC con varistore (V1401)			Connector for solenoid valve DC with varistor		2 poli + PE - V1401 SHIELD	=QgCv	19	1	Mep
-X009	022.0429	Connettore EV idra. in DC con varistore (V1401)			Connector for solenoid valve DC with varistor		2 poli + PE - V1401 SHIELD	=QgCv	19	1	Mep
-X010	022.0429	Connettore EV idra. in DC con varistore (V1401)			Connector for solenoid valve DC with varistor		2 poli + PE - V1401 SHIELD	=QgCv	19	1	Mep
-X011	022.0429	Connettore EV idra. in DC con varistore (V1401)			Connector for solenoid valve DC with varistor		2 poli + PE - V1401 SHIELD	=QgCv	19	1	Mep
-X012	022.0429	Connettore EV idra. in DC con varistore (V1401)			Connector for solenoid valve DC with varistor		2 poli + PE - V1401 SHIELD	=QgCv	19	1	Mep
-X014	022.0429	Connettore EV idra. in DC con varistore (V1401)			Connector for solenoid valve DC with varistor		2 poli + PE - V1401 SHIELD	=QgCv	19	1	Mep

REV.	MODIFICA	DATA	FIRME
R 1.2	Add -SE2 Enable manual vises command (pg.17)	24/07/2017	Solfanelli
1.1	Add WEPC emergency powered conveyor cable (pg.11)	03/11/2016	Solfanelli
1.0	Review 2016 with new electrical box carpentry	15/07/2016	Solfanelli
0.1	Added Three-phase Inverter Line reactor (L1)	16/04/2015	Solfanelli

Dis. N. H14A48060CSA
CAD SPAC
File H14A.1/dwg
Data 24/07/2017

Impianto/Plant: *H14A_480V.60Hz*

Denominazione/Title: DISTINTA MATERIALI / *Material List*

Ordine/Requisition:
Commessa/Order: H14A
Esecutore/Executor: Solfanelli

Foglio/Page: 40
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Nome/Name	Mep__code	Descrizione	Description EN	Catalog__code	Quadro/Board	Fg/Sh	Q.ta/Q.ty	Builder
-X40	022.0429	Connettore EV idra. in DC con varistore (V1401)	Connector for solenoid valve DC with varistor	2 poli + PE - V1401 SHIELD	=QgCv	19	1	Mep
-X100	022.0764	Inverter 380-480V 7,5KW FR-D740-160SC MITSUBISHI	Inverter 380-480V 7,5KW FR-D740-160SC	FR-D740-160SC MITSUBISHI	=QgCv	6	1	Mep
-XFET	022.0281 + 022.0262	Connettore fisso ILME (CK03I + CKF03)	Fixed connector ILME (CK03I + CKF03)	CK03I + CKF03	=QgCv		1	Mep
-XQG1	022.2223	Morsetto 4(6)mmq per 4 fili a molla - PHOENIX	Terminal spring 4(6)mmq for 4 wires - PHOENIX	ST4-quattro- 3031445	=QgCv		3	Mep
-XQG2	022.2245	Morsetto 2,5mmq per 4 fili a molla - PHOENIX	Terminal 2,5(4)mmq for 4 wires - PHOENIX	ST2,5- QUATTRO__3031306	=QgCv		8	Mep
	022.2257	Morsetto da 2.5 mm singolo per 3 fili a molla 56.703.5055.0	Triple pole spring terminal 2,5mmq	56.703.5055.0			1	Mep
	022.2258	Morsetto da 2.5 mm singolo per 4 fili a molla	Quadruple pole spring terminal 2,5mmq	56.703.5155.0			1	Mep
-XQG3	022.2243	Morsetto 2,5(4)mmq per 2 fili a molla - PHOENIX	Terminal 2,5(4)mmq for 2 wires - PHOENIX	ST2,5- 3031212	=QgCv		6	Mep
-XQG4	022.2243	Morsetto 2,5mmq per 2 fili a molla - PHOENIX	Terminal 2,5(4)mmq for 2 wires - PHOENIX	ST2,5- 3031212	=QgCv		12	Mep
-XQGPE	022.2256	Morsetto da 2.5 mm singolo per 2 fili a molla	Single pole spring terminal 2,5mmq	56.703.0055.0	=QgCv		2	Mep
	022.2321	Barra da 15x15mm con 10 fori 6mm					1	Mep
-XTL	022.0376	Connettore F303N5000 per prossimity con 5Mt di cavo.	Connettor F303N5000 for connector with 5Mt cable.	022.0376	=QgCv		1	Mep
-Z1	022.2903	Toroide ferrite N30 r40	Ferrites Toroids N30 r40	212-0976 - RS	=QgCv	23	1	Mep
-RE4	022.0210	Raccordo rapido dritto	Rapid straight Joint PG11/Ø16	SEM PG11/Ø16	=QgEtMep	28	1	Mep
	022.0281	Custodia plastica da incasso 1 leva Gr 21.21	Plastic Case Embedding One Lever Gr 21.21	CK 03 I- ILME			1	Mep
	022.0282	Custodia plastica mobile PG11 con pioli Gr 21.21	Plastic Case Embedding PG11 Gr 21.21	CK 03 VS - ILME			1	Mep
-RE5	022.0210	Raccordo rapido dritto	Rapid straight Joint PG11/Ø16	SEM PG11/Ø16	=QgEtMep	28	1	Mep
	022.0281	Custodia plastica da incasso 1 leva Gr 21.21	Plastic Case Embedding One Lever Gr 21.21	CK 03 I- ILME			1	Mep
	022.0282	Custodia plastica mobile PG11 con pioli Gr 21.21	Plastic Case Embedding PG11 Gr 21.21	CK 03 VS - ILME			1	Mep
XMET	022.0282 + 022.0261	Connettore volante ILME (CK03VS pioli + CKM03)	Mobile connector ILME (CK03VS + CKM03) 4 poles	CK03VS + CKM03	=QgEtMep		1	Mep
-F18	022.2253	Portafusibile 1 x (10,3x38) - 690V 32A	Fuse holding terminal 1 x (10,3x38) 690V 32A	2031038 BCH 32A ItalWeber	=QgMep	19	1	Mep
	054.4659	Fusibile Ritardato 10.3x38 - 0.5A UL/CSA	Fuse Time delay10.3x38 - 0.5A UL/CSA	0.5A 600V ATDR1/2			1	Mep
-F19	022.2253	Portafusibile 1 x (10,3x38) - 690V 32A	Fuse holding terminal 1 x (10,3x38) 690V 32A	2031038 BCH 32A ItalWeber	=QgMep	19	1	Mep
	054.4673	Fusibile Ritardato 10.3x38 - 1A UL/CSA	Fuse Time delay 10.3x38- 1A UL/CSA	1A 600V ATDR1			1	Mep
-S23	022.1405	Pulsante M22-D-N cod. 216598 + M22-A cod 216374	Black push button	M22-D-S cod. 216590	=QgMep	18	1	Mep
	022.0937	Contatto pulsantiera NA M22-K10 cod. 216376	Normally open contact	M22-K10 cod. 216376 Moeller			1	Mep
	022.0911	Portacontatti per pulsantiera	Carrier for pushbutton	M22-A cod. 216374			1	Mep
-XR0	022.0369	Connettore 3 poli per tensionatore elettronico	Connector 3-poles for strain gauge	022.0369	=QgMep		1	Mep
-XS7	022.0369	Connettore 3 poli per tensionatore elettronico	Connector 3-poles for strain gauge	022.0369	=QgMep		1	Mep

Nome/Name	Mep__code	Descrizione	Description EN	Catalog__code	Quadro/Board	Fg/Sh	Q.ta/Q.ty	Costruttore/Builder
-SE2	022.1405	Pulsante nero	Black push button	M22-D-S cod. 216590	=QgCv	16	1	Mep
	022.0937	Contatto pulsantiera NA	Normally open contact	M22-K10 cod. 216376 Moeller			1	Mep
	022.0911	Portacontatti per pulsantiera	Carrier for pushbutton	M22-A cod. 216374			1	Mep

REV.	MODIFICA	DATA	FIRME
R 1.2	Add -SE2 Enable manual vises command (pg.17)	24/07/2017	Solfanelli
1.1	Add WEPC emergency powered conveyor cable (pg.11)	03/11/2016	Solfanelli
1.0	Review 2016 with new electrical box carpentry	15/07/2016	Solfanelli
0.1	Added Three-phase Inverter Line reactor (L1)	16/04/2015	Solfanelli

Dis. N. H14A48060CSA
CAD SPAC
File H14A.1/dwg
Data 24/07/2017

Impianto/Plant: *H14A_480V.60Hz*
Denominazione/Title: DISTINTA CAVI
Cable list

Ordine/Requisition
Commessa/Order: H14A
Esecutore/Executor: Solfanelli

MEP

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Nome/Name	Mep_code	Descrizione			Description EN		Catalog_code	Quadro/Board	Fg/Sh	Q.ta/Q.ty	Builder
-W1	022.1983	Cavo schermato 4G x Awg12 CSA			Cable 4G X AWG12 schielded		022.1983	=BmMep		5	MEP
-W01	022.1980	Cavo 2x Awg18 oil resistant TRAY UL-CSA			Cable 2X AWG18 OIL RESISTANT UL 2587 CSA		022.1980	=QgCv		5	MEP
-W2	022.1977	Cavo 4G Awg10 St CSA			Cable 4G X AWG10 SCHERMATO			=QgCv		5	MEP
-W4	022.1984	Cavo oil resistant 4G x Awg18 TRAY-ER UL-CSA			Cable 4G X AWG18 oil resistant UL 2587 CSA		022.1984	=QgCv		5	MEP
-W5	022.1984	Cavo oil resistant 4G x Awg18 TRAY-ER UL-CSA			Cable 4G X AWG18 oil resistant UL 2587 CSA		022.1984	=QgCv		5	MEP
-W7	022.1984	Cavo oil resistant 4G x Awg18 TRAY-ER UL-CSA			Cable 4G X AWG18 oil resistant UL 2587 CSA		022.1984	=QgCv		5	MEP
-W7/1	022.1984	Cavo oil resistant 4G x Awg18 TRAY-ER UL-CSA			Cable 4G X AWG18 oil resistant UL 2587 CSA		022.1984	=QgCv		2	MEP
-W7/B1	022.0424	Cavo pressofuso con connettore M12 90° lungo 5Mt			SAC-4P- 5,0-PUR/M12FR, M12 90° connector: lenght 5Mt		1668247	=QgCv		5	MEP
-W8	022.1984	Cavo oil resistant 4G x Awg18 TRAY-ER UL-CSA			Cable 4G X AWG18 oil resistant UL 2587 CSA		022.1984	=QgCv		6.5	MEP
-W11	022.1984	Cavo oil resistant 4G x Awg18 TRAY-ER UL-CSA			Cable 4G X AWG18 oil resistant UL 2587 CSA		022.1984	=QgCv		3	MEP
-W27	022.0422	Cavo pressofuso con connettore M12 90° lungo 10Mt			Cable with M12 90° connector; Lenght: 10Mt		1681389	=QgCv		10	MEP
-W29	022.1979	Cavo 5G Awg16 UL 2587 CSA			Cable 5G AWG16 UL 2587 CSA		022.1979	=QgCv		3.5	MEP
-W29/2	022..1905	Cavo schermato 4x2xAwg24St(0.20mmq) UL 2464 CSA						=QgCv		0.6	MEP
-W30	022.1980	Cavo 2x Awg18 oil resistant TRAY UL-CSA			Cable 2X AWG18 OIL RESISTANT UL 2587 CSA		022.1980	=QgCv		3	MEP
-W37	022.1980	Cavo 2x Awg18 oil resistant TRAY UL-CSA			Cable 2X AWG18 OIL RESISTANT UL 2587 CSA		022.1980	=QgCv		5	MEP
-W59	022.0398	Cavo 4xAwg24 per prossimity con connettore M12 dritto.10Mt			Straight connector M12 with 5MTcable 4x0.34mmq		1683002	=QgCv		5	MEP
-W65	022.1980	Cavo 2x Awg18 oil resistant TRAY UL-CSA			Cable 2X AWG18 OIL RESISTANT UL 2587 CSA		022.1980	=QgCv		5	MEP
-W89	022.1980	Cavo 2x Awg18 oil resistant TRAY UL-CSA			Cable 2X AWG18 OIL RESISTANT UL 2587 CSA		022.1980	=QgCv		3	MEP
-W90	022.1980	Cavo 2x Awg18 oil resistant TRAY UL-CSA			Cable 2X AWG18 OIL RESISTANT UL 2587 CSA		022.1980	=QgCv		3	MEP
-W91	022.1980	Cavo 2x Awg18 oil resistant TRAY UL-CSA			Cable 2X AWG18 OIL RESISTANT UL 2587 CSA		022.1980	=QgCv		3	MEP
-W92	022.1980	Cavo 2x Awg18 oil resistant TRAY UL-CSA			Cable 2X AWG18 OIL RESISTANT UL 2587 CSA		022.1980	=QgCv		3	MEP
-W93	022.1980	Cavo 2x Awg18 oil resistant TRAY UL-CSA			Cable 2X AWG18 OIL RESISTANT UL 2587 CSA		022.1980	=QgCv		3	MEP
-W95	022.1980	Cavo 2x Awg18 oil resistant TRAY UL-CSA			Cable 2X AWG18 OIL RESISTANT UL 2587 CSA		022.1980	=QgCv		6	MEP
-W96	022.0355	Cavo 3xAwg24 per proxy con connettore M8 dritto. L=5Mt			Cable with straight connector M8. L=5Mt		1669628	=QgCv		5	MEP
-W120	022.1905	Cavo schermato 4x2xAwg24St(0.20mmq) UL 2464 CSA			Cable shielded 4x2 Awg24 CSA		022.1905	=QgCv		6	MEP
-W120/1	022.1905	Cavo schermato 4x2xAwg24St(0.20mmq) UL 2464 CSA			Cable shielded 4x2 Awg24 CSA		022.1905	=QgCv			MEP
-W121	022.0397	Cavo 4xAwg24 per prossimity con connettore M12 dritto.5Mt			Straight connector M12 with 5MTcable 4x0.34mmq		1668124	=QgCv		5	MEP
-W122	022.1980	Cavo 2x Awg18 oil resistant TRAY UL-CSA			Cable 2X AWG18 OIL RESISTANT UL 2587 CSA		022.1980	=QgCv		3	MEP
-W123	022.1980	Cavo 2x Awg18 oil resistant TRAY UL-CSA			Cable 2X AWG18 OIL RESISTANT UL 2587 CSA		022.1980	=QgCv		3	MEP
-W124	022.1980	Cavo 2x Awg18 oil resistant TRAY UL-CSA			Cable 2X AWG18 OIL RESISTANT UL 2587 CSA		022.1980	=QgCv		3	MEP
-W7/B	022..1905	Cavo schermato 4x2xAwg24St(0.20mmq) UL 2464 CSA						=QgCv		6.5	MEP
-W20	022..1905	Cavo schermato 4x2xAwg24St(0.20mmq) UL 2464 CSA						=QgCv		6.5	MEP
-W21	022.1982	Cavo schermato 3x Awg18 St oil resistant UL 2587 CSA			Cable 3xAWG18ST OIL RESISTANT UL 2587 CSA		022.1982	=QgCv		8.5	MEP
-W28	022..1905	Cavo schermato 4x2xAwg24St(0.20mmq) UL 2464 CSA						=QgCv		7	MEP
-W29/1	022..1905	Cavo schermato 4x2xAwg24St(0.20mmq) UL 2464 CSA						=QgCv		2	MEP
-W32	022.0343	Cavo 3xAwg24 per proxy con connettore M8 dritto. L=10Mt			Straight connector M8 with 10Mt cable- SAC-3P-10,0-PUR/M8FS		1694101	=QgCv		7.7	MEP
-W56	022.2056	Cavo 8x0.25 lung. 10Mt con connettore M12 dritto			Connector M12 straight with 10MT cable UL/CSA 8x0.25mmq		022.2056	=QgCv		8	MEP
-W57	022.2053	Cavo SAC-8P- 5,0-PUR/M12FS con M12 diritto			Straight connector M12 with 5Mt cable UL/CSA 8x0.25mmq		1520369	=QgCv		5	MEP
-W57/1	022.2053	Cavo SAC-8P- 5,0-PUR/M12FS con M12 diritto			Straight connector M12 with 5Mt cable UL/CSA 8x0.25mmq		1520369	=QgCv		5	MEP
-W117	022.1906	Cavo schermato 6x2xAwg24St(0.20mmq) UL 2464 CSA			Cable shielded 6x2 Awg24 CSA		022.1906	=QgCv		2.4	MEP
-W117/1	022..1905	Cavo schermato 4x2xAwg24St(0.20mmq) UL 2464 CSA						=QgCv		2.8	MEP
-W118	022.1906	Cavo schermato 6x2xAwg24St(0.20mmq) UL 2464 CSA			Cable shielded 6x2 Awg24 CSA		022.1906	=QgCv		7.5	MEP
-W119	022.1906	Cavo schermato 6x2xAwg24St(0.20mmq) UL 2464 CSA			Cable shielded 6x2 Awg24 CSA		022.1906	=QgCv		2.1	MEP
-WAL	022.1977	Cavo 4G Awg10 St CSA			Cable 4G X AWG10 SCHERMATO			=QgCv		3	MEP
-WEMG	022..1905	Cavo schermato 4x2xAwg24St(0.20mmq) UL 2464 CSA						=QgCv			MEP

REV.	MODIFICA	DATA	FIRME
R 1.2	Add -SE2 Enable manual vises command (pg.17)	24/07/2017	Solfanelli
1.1	Add WEPC emergency powered conveyor cable (pg.11)	03/11/2016	Solfanelli
1.0	Review 2016 with new electrical box carpentry	15/07/2016	Solfanelli
0.1	Added Three-phase Inverter Line reactor (L1)	16/04/2015	Solfanelli

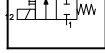
Dis. N. H14A48060CSA
CAD SPAC
File H14A.1/dwg
Data 24/07/2017

Impianto/Plant: *H14A_480V.60Hz*

Denominazione/Title: DISTINTA CAVI
Cable list

Ordine/Requisition:
Commessa/Order: H14A
Esecutore/Executor: Solfanelli

Foglio/Page: 42
Segue/Follow: 2
Ultimo/Last: 211

Sim.\Sym.	File	Descrizione\Description
ø	BLK106	Raccordo *Union*
	FFLH53	Valvola di massima *Maximum valve*
	FFLH97	Valvola direz. 4/3 centri chiusi *Maximum valve*
	FFLP40	Valvola di esclusione *Maximum valve*
	FFLP42	Manometro *Maximum valve*
	FFLP53	Motore elettrico *Maximum valve*
	FFLP54	Valvola controllo flusso *Maximum valve*
	FFLP62A	Valvola unidirezionale *Maximum valve*
	FFLP62B	Valvola apertura reg. *Maximum valve*
	FFLP75A	Cilindro a doppio effetto *Maximum valve*
	FFLP154	Elettrovalvola 2/2 ritorno a molla meccanica *Maximum valve*

Sim.\Sym.	File	Descrizione\Description
	CIL-VERT	Cilindro a doppio effetto
	FILTROID	Filtro
	POMPAID	Pompa idraulica
	REG-IDM	Blocco controllo pressione e flusso

Sim.\Sym.	File	Descrizione\Description

REV.	MODIFICA	DATA	FIRME

Dis. N. H14 A
CAD SPAC
File H 14A\2.dwg
Data 07-05-2015

Impianto
H 14 A

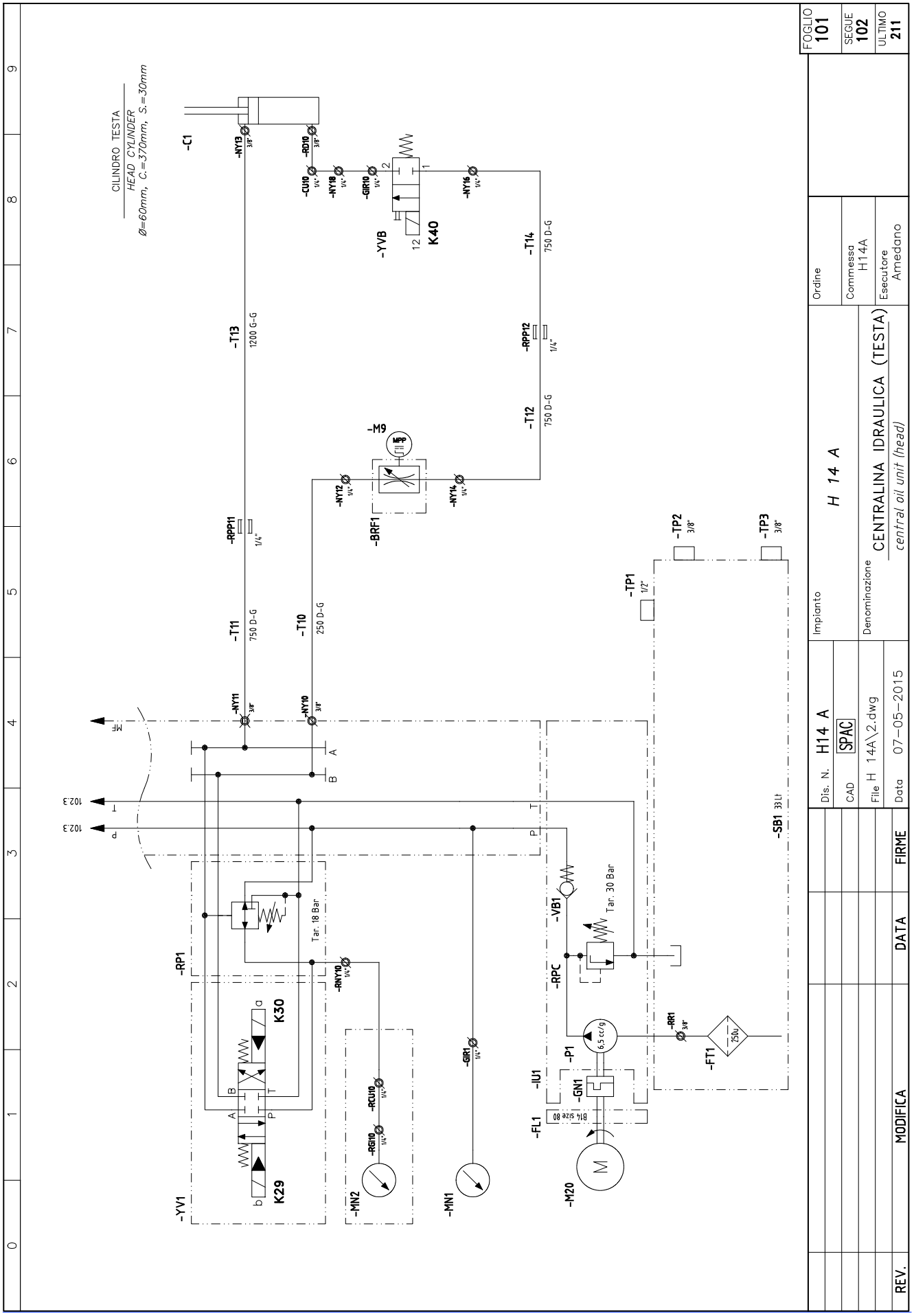
Denominazione
LEGENDA SIMBOLI
SYMBOL KEY

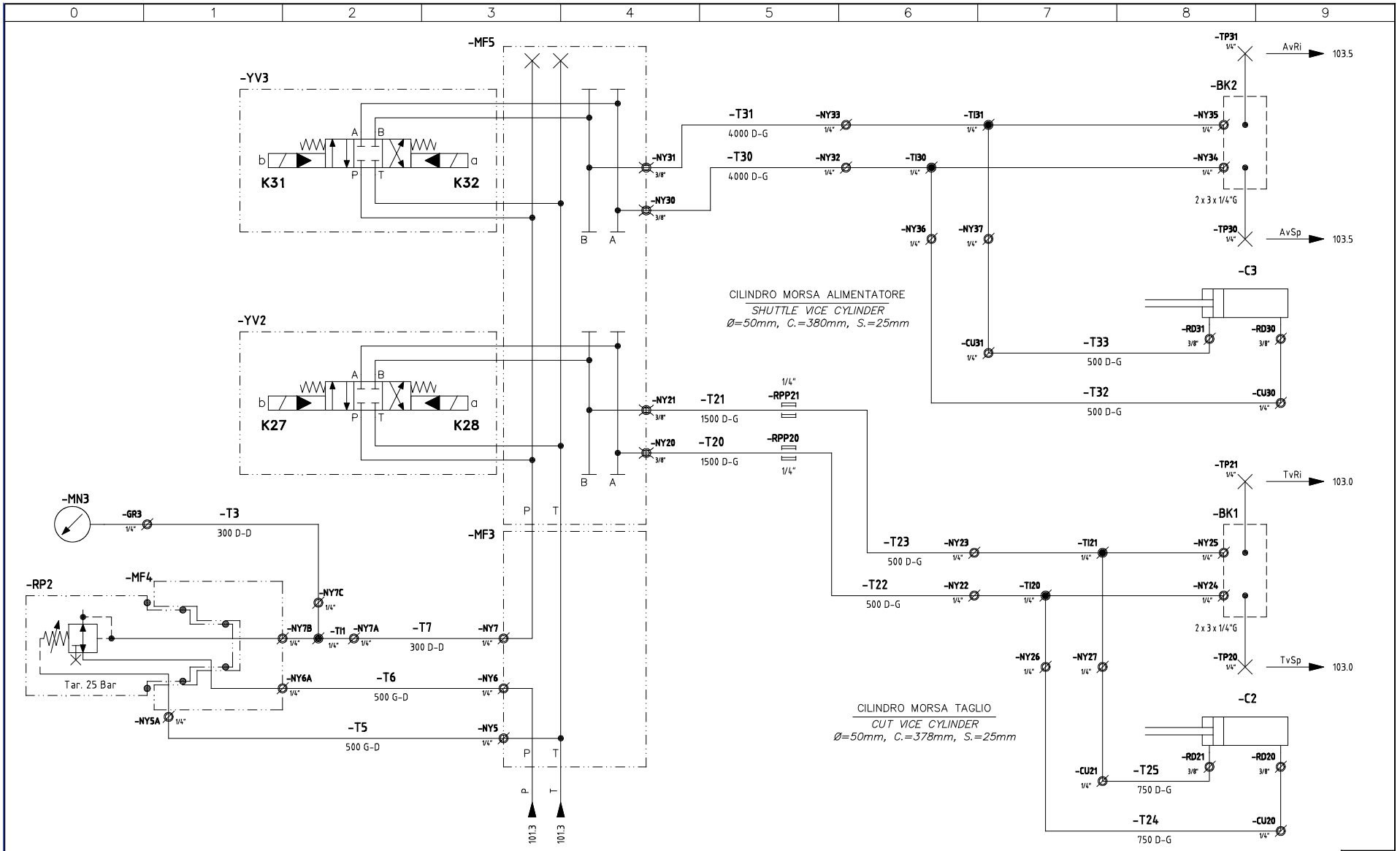
Ordine

Commessa
H14A

Esecutore
Amedano

FOGLIO
100
SEGUE
101
ULTIMO
211

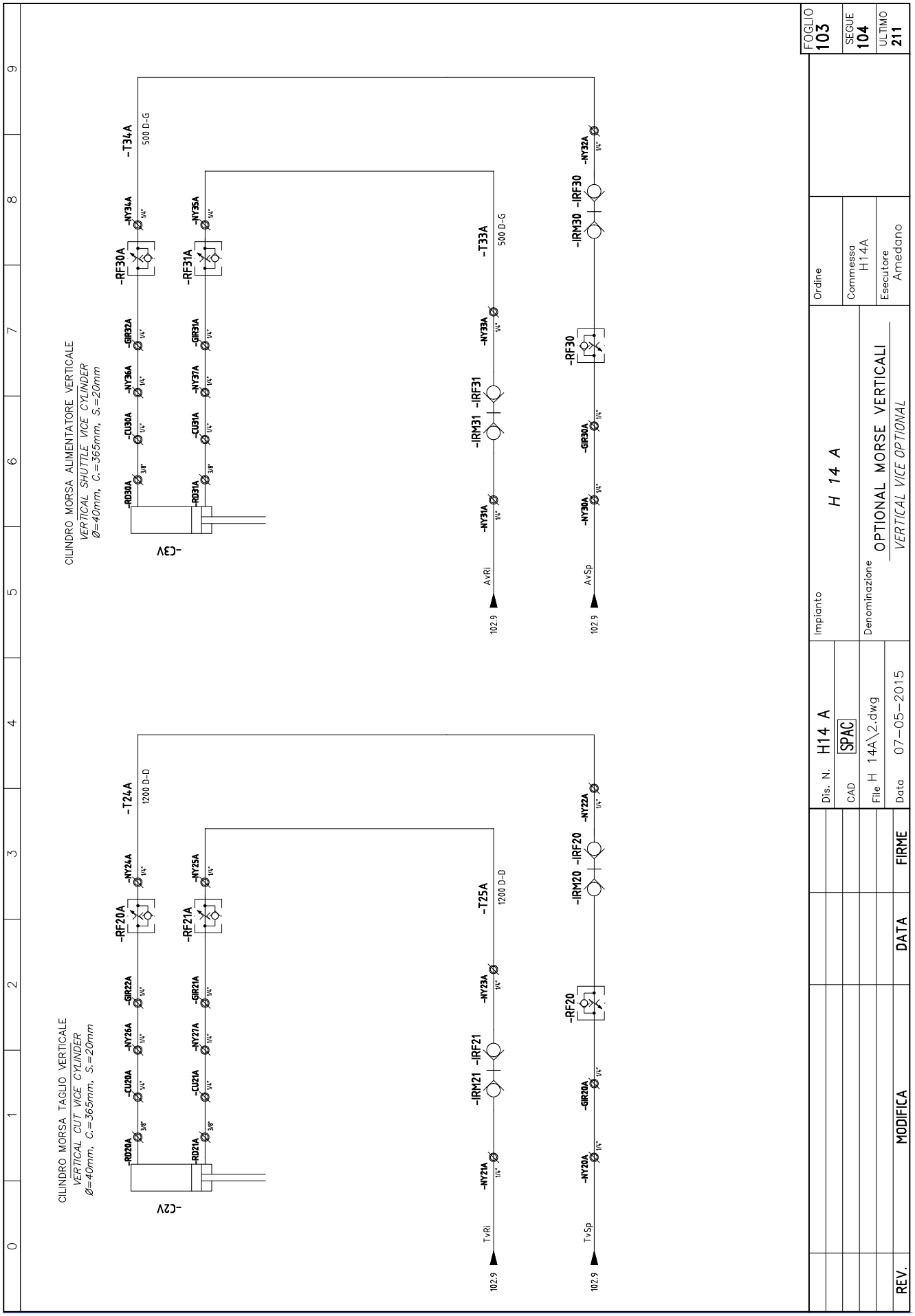

CILINDRO TESTA
HEAD CYLINDER
Ø=60mm, C.=370mm, S.=30mm
-C1
-NY13
-RD10
-CU10
-NY18
-GIR10
-NY16
-YVB
K40
-T14
750 D-G
-T13
1200 G-G
-RPP12
-T12
750 D-G
-M9
-NY12
-NY14
-BRF1
-RPP11
-T11
750 D-G
-T10
250 D-G
-TP2
-TP3
-TP1
-NY11
-NY10
-SB1
-RP1
Tar. 18 Bar
-RNY10
K30
K29
-YV1
-MN2
-RCU10
-RGI10
-GIR1
-MN1
-VB1
Tar. 30 Bar
-RPC
-IU1
-P1
-GN1
-FL1
-M20
-RR1
-FT1
FOGLIO 101
SEGUE 102
ULTIMO 211
Ordine
Commessa H14A
Esecutore Amedano
Impianto
H 14 A
Denominazione
CENTRALINA IDRAULICA (TESTA)
central oil unit (head)
Dis. N. H14 A
CAD SPAC
File H 14A\2.dwg
Data 07-05-2015
REV.
MODIFICA
DATA
FIRME



REV.	MODIFICA	DATA	FIRME

Dis. N.	H14 A
CAD	SPAC
File	H 14A\2.dwg
Data	07-05-2015
Impianto	*H 14 A*
Denominazione	CENTRALINA IDRAULICA (MORSE)
	CENTRAL OIL UNIT (VICE)
Ordine	
Commessa	H14A
Esecutore	Amedano

FOGLIO	102
SEGUE	103
ULTIMO	211


CILINDRO MORSA TAGLIO VERTICALE
VERTICAL CUT VICE CYLINDER
Ø=40mm, C.=365mm, S.=20mm
-C2V
-RD20A
-RD21A
-CU20A
-CU21A
-NY26A
-NY27A
-GIR22A
-GIR21A
-RF20A
-RF21A
-NY24A
-NY25A
-T24A
1200 D-D
-T25A
1200 D-D
-NY21A
-NY20A
-GIR20A
-IRM21
-IRF21
-NY23A
-RF20
-IRM20
-IRF20
-NY22A
TvRi
TvSp
102.9
CILINDRO MORSA ALIMENTATORE VERTICALE
VERTICAL SHUTTLE VICE CYLINDER
Ø=40mm, C.=365mm, S.=20mm
-C3V
-RD30A
-RD31A
-CU30A
-CU31A
-NY36A
-NY37A
-GIR32A
-GIR31A
-RF30A
-RF31A
-NY34A
-NY35A
-T34A
500 D-G
-T33A
500 D-G
-NY31A
-NY30A
-GIR30A
-IRM31
-IRF31
-NY33A
-RF30
-IRM30
-IRF30
-NY32A
AvRi
AvSp
102.9
0
1
2
3
4
5
6
7
8
9
REV.
MODIFICA
DATA
FIRME
Dis. N. H14 A
CAD SPAC
File H 14A\2.dwg
Data 07-05-2015
Impianto
H 14 A
Denominazione
OPTIONAL MORSE VERTICALI
VERTICAL VICE OPTIONAL
Ordine
Commessa H14A
Esecutore Amedano
FOGLIO 103
SEGUE 104
ULTIMO 211

POS.	CODICE	Q.TA	NOME
66	044.4000	1	TUBO GOM. 200 10-1 4000MM
65	044.4001	1	TUBO GOM. 10-1 L=0,45MM
64	010.7639	1	RACC. 1/4
63	010.7640	1	RACC. 1/4
62	010.7641	1	RACC. 1/4
61	044.4002	1	TUBO GOM. 10-1
60	044.4003	1	TUBO GOM. 10-1 L=0,45MM
59	044.4004	1	TUBO GOM. 10-1 L=0,45MM
58	044.4005	1	TUBO GOM. 10-1 L=0,45MM
57	044.4006	1	TUBO GOM. 10-1 L=0,45MM
56	044.4007	1	TUBO GOM. 10-1 L=0,45MM
55	044.4008	1	TUBO GOM. 10-1 L=0,45MM
54	044.4009	1	TUBO GOM. 10-1 L=0,45MM
53	044.4010	1	TUBO GOM. 10-1 L=0,45MM
52	044.4011	1	TUBO GOM. 10-1 L=0,45MM
51	044.4012	1	TUBO GOM. 10-1 L=0,45MM
50	044.4013	1	TUBO GOM. 10-1 L=0,45MM
49	044.4014	1	TUBO GOM. 10-1 L=0,45MM
48	044.4015	1	TUBO GOM. 10-1 L=0,45MM
47	044.4016	1	TUBO GOM. 10-1 L=0,45MM
46	044.4017	1	TUBO GOM. 10-1 L=0,45MM
45	044.4018	1	TUBO GOM. 10-1 L=0,45MM
44	044.4019	1	TUBO GOM. 10-1 L=0,45MM
43	044.4020	1	TUBO GOM. 10-1 L=0,45MM
42	044.4021	1	TUBO GOM. 10-1 L=0,45MM
41	044.4022	1	TUBO GOM. 10-1 L=0,45MM
40	044.4023	1	TUBO GOM. 10-1 L=0,45MM
39	044.4024	1	TUBO GOM. 10-1 L=0,45MM
38	044.4025	1	TUBO GOM. 10-1 L=0,45MM
37	044.4026	1	TUBO GOM. 10-1 L=0,45MM
36	044.4027	1	TUBO GOM. 10-1 L=0,45MM
35	044.4028	1	TUBO GOM. 10-1 L=0,45MM
34	044.4029	1	TUBO GOM. 10-1 L=0,45MM
33	044.4030	1	TUBO GOM. 10-1 L=0,45MM
32	044.4031	1	TUBO GOM. 10-1 L=0,45MM
31	044.4032	1	TUBO GOM. 10-1 L=0,45MM
30	044.4033	1	TUBO GOM. 10-1 L=0,45MM
29	044.4034	1	TUBO GOM. 10-1 L=0,45MM
28	044.4035	1	TUBO GOM. 10-1 L=0,45MM
27	044.4036	1	TUBO GOM. 10-1 L=0,45MM
26	044.4037	1	TUBO GOM. 10-1 L=0,45MM
25	044.4038	1	TUBO GOM. 10-1 L=0,45MM
24	044.4039	1	TUBO GOM. 10-1 L=0,45MM
23	044.4040	1	TUBO GOM. 10-1 L=0,45MM
22	044.4041	1	TUBO GOM. 10-1 L=0,45MM
21	044.4042	1	TUBO GOM. 10-1 L=0,45MM
20	044.4043	1	TUBO GOM. 10-1 L=0,45MM
19	044.4044	1	TUBO GOM. 10-1 L=0,45MM
18	044.4045	1	TUBO GOM. 10-1 L=0,45MM
17	044.4046	1	TUBO GOM. 10-1 L=0,45MM
16	044.4047	1	TUBO GOM. 10-1 L=0,45MM
15	044.4048	1	TUBO GOM. 10-1 L=0,45MM
14	044.4049	1	TUBO GOM. 10-1 L=0,45MM
13	044.4050	1	TUBO GOM. 10-1 L=0,45MM
12	044.4051	1	TUBO GOM. 10-1 L=0,45MM
11	044.4052	1	TUBO GOM. 10-1 L=0,45MM
10	044.4053	1	TUBO GOM. 10-1 L=0,45MM
9	044.4054	1	TUBO GOM. 10-1 L=0,45MM
8	044.4055	1	TUBO GOM. 10-1 L=0,45MM
7	044.4056	1	TUBO GOM. 10-1 L=0,45MM
6	044.4057	1	TUBO GOM. 10-1 L=0,45MM
5	044.4058	1	TUBO GOM. 10-1 L=0,45MM
4	044.4059	1	TUBO GOM. 10-1 L=0,45MM
3	044.4060	1	TUBO GOM. 10-1 L=0,45MM
2	044.4061	1	TUBO GOM. 10-1 L=0,45MM
1	044.4062	1	TUBO GOM. 10-1 L=0,45MM

MONOCENTRALINA H-14A V480,60

044.3017: Monocentralina completa H-14A completa 480,60

044.3016: Monocentralina H-14A senza motore

019.4014: V480/60 Hz

019.4015: V240/60 Hz

REV.	MODIFICA	DATA	FIRME

Dis. N. H14 A

CAD SPAC

File H 14A\2.dwg

Data 07-05-2015

Impianto *H 14 A*

Denominazione DISPOSIZIONE CENTRALINA

HYDRAULIC OIL UNIT LAY-OUT

Ordine

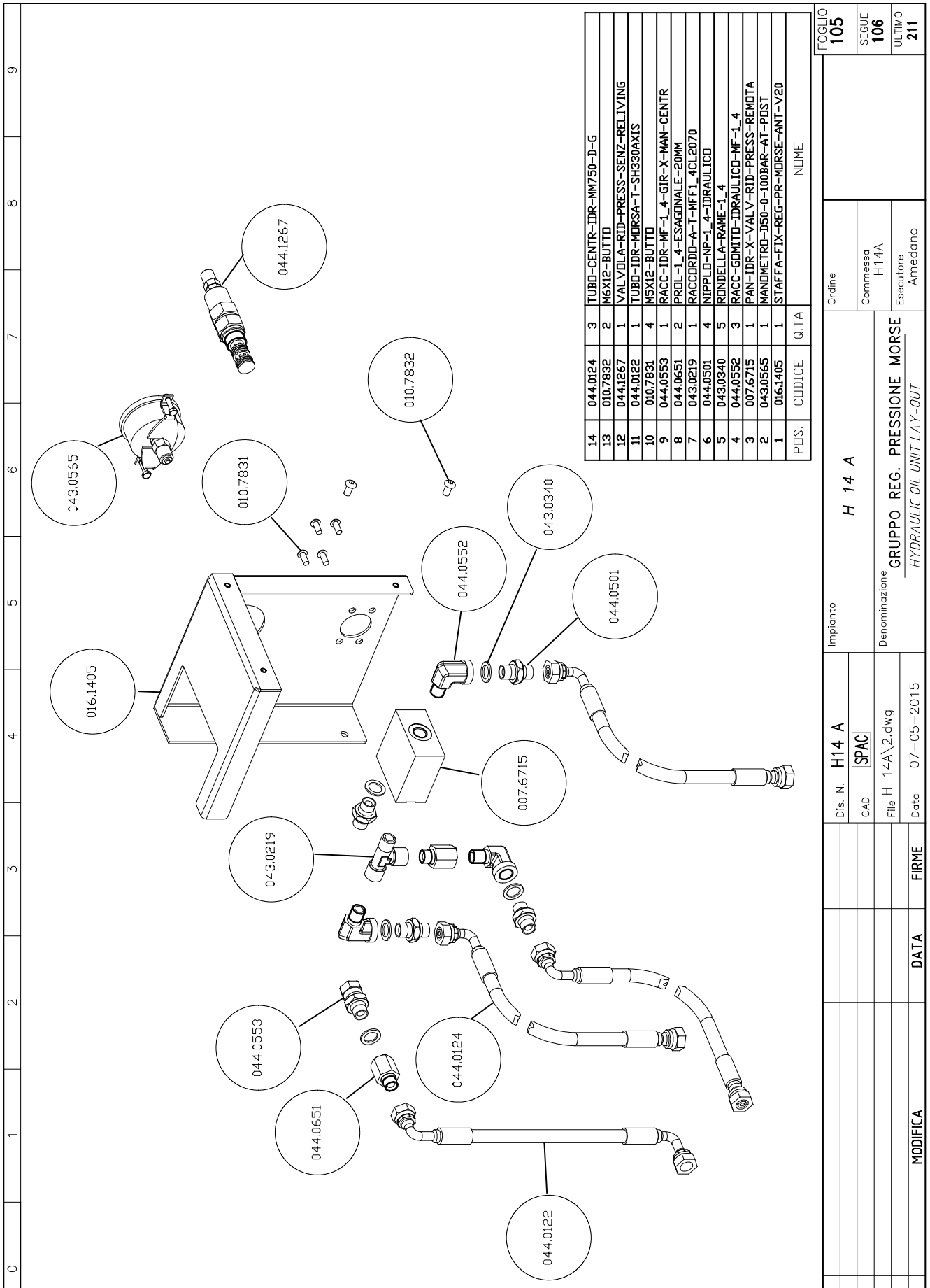
Commessa H14A

Esecutore Amedano

FOGLIO 104

SEGUE 105

ULTIMO 211



POS.	CODICE	Q.TA	NOME
14	044.0124	3	TUBO-CENTR-IDR-MM750-D-G
13	010.7832	2	M6X12-BUTTO
12	044.1267	1	VALVOLA-RID-PRESS-SENZ-RELIVING
11	044.0122	1	TUBO-IDR-MORSA-T-SH330AXIS
10	010.7831	4	M5X12-BUTTO
9	044.0553	1	RACC-IDR-MF-1_4-GIR-X-MAN-CENTR
8	044.0651	2	PROL-1_4-ESAGONALE-20MM
7	043.0219	1	RACCORDO-A-T-MFF1_4CL2070
6	044.0501	4	NIPPLO-NP-1_4-IDRAULICO
5	043.0340	5	RONDELLA-RAME-1_4
4	044.0552	3	RACC-GOMITO-IDRAULICO-MF-1_4
3	007.6715	1	PAN-IDR-X-VALV-RID-PRESS-REMOTA
2	043.0565	1	MANOMETRO-D50-0-100BAR-AT-POST
1	016.1405	1	STAFFA-FIX-REG-PR-MORSE-ANT-V20

REV.	MODIFICA	DATA	FIRME
		Data 07-05-2015	

Dis. N. H14 A
CAD SPAC
File H 14A\2.dwg

Impianto
Denominazione
H 14 A
GRUPPO REG. PRESSIONE MORSE
HYDRAULIC OIL UNIT LAY-OUT

Ordine
Commessa H14A
Esecutore Amedano

FOGLIO 105
SEGUE 106
ULTIMO 211

NOME/ITEM	TIPO/TYPE	DESCRIZIONE IT (DB)	DESCRIZIONE EN (DB)	DB.CODICEINTERNO	Q.TA/Q.TY	QUADRO/BOARD	FG/SH
'-C1	'044.1058	Cilindro idraulico 60x30x370	Hydraulic cylinder 60x30x370		1	'=CiBmMep	101
'-C2	'044.1057	Cilindro idraulico 50x25x378	Hydraulic cylinder 50x25x378		1	'=CiBmMep	102
'-C3	'044.1059	Cilindro idraulico 50x25x380	Hydraulic cylinder 50x25x380		1	'=CiBmMep	102
'-CU10	'044.0552	Raccordo a gomito ID. MF-1/4"G	Hydraulic elbow coupling M/F 1/4"		1	'=CiBmMep	101
'-CU20	'044.0552	Raccordo a gomito ID. MF-1/4"G	Hydraulic elbow coupling M/F 1/4"		1	'=CiBmMep	102
'-CU21	'044.0552	Raccordo a gomito ID. MF-1/4"G	Hydraulic elbow coupling M/F 1/4"		1	'=CiBmMep	102
'-CU30	'044.0552	Raccordo a gomito ID. MF-1/4"G	Hydraulic elbow coupling M/F 1/4"		1	'=CiBmMep	102
'-CU31	'044.0552	Raccordo a gomito ID. MF-1/4"G	Hydraulic elbow coupling M/F 1/4"		1	'=CiBmMep	102
'-GIR1	'044.0502	Raccordo girevole ID. da MF-1/4"G	Hydraulic rotating coupling M/F 1/4"		1	'=CiBmMep	101
'-GIR10	'044.0502	Raccordo girevole ID. da MF-1/4"G	Hydraulic rotating coupling M/F 1/4"		1	'=CiBmMep	101
'-GR3	'044.0553	Raccordo girevole ID.per manometro MF-1/4"G	Hydraulic rotating coupling for manometer M/F 1/4"		1	'=CiBmMep	102
'-MF4	'007.6715	Manifold idraulico per reg. pressione a cartuccia cavità 08/3	Hydraulic manifold for cartridge pressure reduction	'007.6715	1	'=CiBmMep	102
'-MN3	'043.0565	Manometro ID. 0-100bar Ø50 con attacco posteriore da 1/4"G	Hydraulic manometer 0-100Bar Ø50 1/4"G	WIKA	1	'=CiBmMep	102
'-NY5A	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		1	'=CiBmMep	102
'-NY6A	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		1	'=CiBmMep	102
'-NY7A	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		1	'=CiBmMep	102
'-NY7B	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		1	'=CiBmMep	102
'-NY7C	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		1	'=CiBmMep	102
'-NY13	'044.0503	Nipplo ID. MM-3/8"G - 1/4"G	Hydraulic nipple MM-3/8"G - 1/4"G		1	'=CiBmMep	101
'-NY16	'044.0505	Nipplo ID. a flusso ridotto MM 1/4"G	Hydraulic nipple reduced flow MM 1/4"G		1	'=CiBmMep	101
'-NY18	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		1	'=CiBmMep	101
'-NY22	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		1	'=CiBmMep	102
'-NY23	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		1	'=CiBmMep	102
'-NY24	'043.0275	Nipplo da 1/4"G		'043.0275	1	'=CiBmMep	102
'-NY25	'043.0275	Nipplo da 1/4"G		'043.0275	1	'=CiBmMep	102
'-NY26	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		1	'=CiBmMep	102
'-NY27	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		1	'=CiBmMep	102
'-NY32	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		1	'=CiBmMep	102
'-NY33	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		1	'=CiBmMep	102
'-NY34	'043.0275	Nipplo da 1/4"G		'043.0275	1	'=CiBmMep	102
'-NY35	'043.0275	Nipplo da 1/4"G		'043.0275	1	'=CiBmMep	102
'-NY36	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		1	'=CiBmMep	102

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FOGLIO 106
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NOME/ITEM	TIPO/TYPE	DESCRIZIONE IT (DB)	DESCRIZIONE EN (DB)	DB.CODICEINTERNO	Q.TA/Q.TY	QUADRO/BOARD	FG/SH
'-NY37	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		1	'=CiBmMep	102
'-RD10	'043.0227	Riduzione M/F da 3/8-1/4"G	Reductions M/F da 3/8-1/4"G	CL2531	1	'=CiBmMep	101
'-RD20	'043.0227	Riduzione M/F da 3/8-1/4"G	Reductions M/F da 3/8-1/4"G	CL2531	1	'=CiBmMep	102
'-RD21	'043.0227	Riduzione M/F da 3/8-1/4"G	Reductions M/F da 3/8-1/4"G	CL2531	1	'=CiBmMep	102
'-RD30	'043.0227	Riduzione M/F da 3/8-1/4"G	Reductions M/F da 3/8-1/4"G	CL2531	1	'=CiBmMep	102
'-RD31	'043.0227	Riduzione M/F da 3/8-1/4"G	Reductions M/F da 3/8-1/4"G	CL2531	1	'=CiBmMep	102
'-RP2	'044.1267	Valvola riduttice idraulica a cartuccia cavità 08/3 reg. a vite da 5-50Bar	Hydraulic pressure reduction cartridge 5-50Bar	'044.1267	1	'=CiBmMep	102
'-RPP11	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		2	'=CiBmMep	101
'-RPP11	'043.0280	Manicotto da 1/4"G		'043.0280	1	'=CiBmMep	101
'-RPP12	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		2	'=CiBmMep	101
'-RPP12	'043.0280	Manicotto da 1/4"G		'043.0280	1	'=CiBmMep	101
'-RPP20	'043.0280	Manicotto da 1/4"G		'043.0280	1	'=CiBmMep	102
'-RPP20	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		2	'=CiBmMep	102
'-RPP21	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		2	'=CiBmMep	102
'-RPP21	'043.0280	Manicotto da 1/4"G		'043.0280	1	'=CiBmMep	102
'-T3	'044.0121	Tubo idraulico 1/4"G 300 D-D	Hydraulic flex pipe 1/4"G 300 D-D		1	'=CiBmMep	102
'-T5	'044.0123	Tubo idraulico 1/4"G 500 D-G	Hydraulic pipe	'044.0123	1	'=CiBmMep	102
'-T6	'044.0123	Tubo idraulico 1/4"G 500 D-G	Hydraulic pipe	'044.0123	1	'=CiBmMep	102
'-T7	'044.0121	Tubo idraulico 1/4"G 300 D-D	Hydraulic flex pipe 1/4"G 300 D-D		1	'=CiBmMep	102
'-T11	'044.0124	Tubo idraulico 1/4"G 750 D-G		'044.0124	1	'=CiBmMep	101
'-T12	'044.0124	Tubo idraulico 1/4"G 750 D-G		'044.0124	1	'=CiBmMep	101
'-T13	'044.0131	Tubo idraulico 1/4"G 1200 G-G		'044.0131	1	'=CiBmMep	101
'-T14	'044.0124	Tubo idraulico 1/4"G 750 D-G		'044.0124	1	'=CiBmMep	101
'-T20	'044.0106	Tubo idraulico 1/4"G 1500 G-D		'044.0106	1	'=CiBmMep	102
'-T21	'044.0106	Tubo idraulico 1/4"G 1500 G-D		'044.0106	1	'=CiBmMep	102
'-T22	'044.0123	Tubo idraulico 1/4"G 500 D-G	Hydraulic pipe	'044.0123	1	'=CiBmMep	102
'-T23	'044.0123	Tubo idraulico 1/4"G 500 D-G	Hydraulic pipe	'044.0123	1	'=CiBmMep	102
'-T24	'044.0124	Tubo idraulico 1/4"G 750 D-G		'044.0124	1	'=CiBmMep	102
'-T25	'044.0124	Tubo idraulico 1/4"G 750 D-G		'044.0124	1	'=CiBmMep	102
'-T30	'044.0156	Tubo idraulico 1/4"G 4000 D-G		'044.0156	1	'=CiBmMep	102
'-T31	'044.0156	Tubo idraulico 1/4"G 4000 D-G		'044.0156	1	'=CiBmMep	102
'-T32	'044.0123	Tubo idraulico 1/4"G 500 D-G	Hydraulic pipe	'044.0123	1	'=CiBmMep	102

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'-T33	'044.0123	Tubo idraulico 1/4"G 500 D-G	Hydraulic pipe	'044.0123	1	'=CiBmMep	102
'-TI1	'043.0216	Raccordo a "T" FFF da 1/4"G	'"T" coupling FFF 1/4"G	CL2003	1	'=CiBmMep	102
'-TI20	'043.0216	Raccordo a "T" FFF da 1/4"G	'"T" coupling FFF 1/4"G	CL2003	1	'=CiBmMep	102
'-TI21	'043.0216	Raccordo a "T" FFF da 1/4"G	'"T" coupling FFF 1/4"G	CL2003	1	'=CiBmMep	102
'-TI30	'043.0216	Raccordo a "T" FFF da 1/4"G	'"T" coupling FFF 1/4"G	CL2003	1	'=CiBmMep	102
'-TI31	'043.0216	Raccordo a "T" FFF da 1/4"G	'"T" coupling FFF 1/4"G	CL2003	1	'=CiBmMep	102
'-YVB	'044.1250	Elettrovalvola idraulica 2/2 unidirezionale NC mont. in linea da 1/4"G 24Vca con connettore	Hydraulic electrovalve 2/2 NC 1/4"G 24Vac	Oil system	1	'=CiBmMep	101
'-BK1	'010.2307	Distributore tubi idraulici morse verticali sh 310 CNC-HS	Hinge limit switch 2NC + 1NO		1	'=CiCv	102
'-BK2	'010.2307	Distributore tubi idraulici morse verticali sh 310 CNC-HS	Hinge limit switch 2NC + 1NO		1	'=CiCv	102
'-BRF1	'043.0582	Regolatore idraulico di flusso per stepper baffo B da 1/4"G	Hydraulic flow regolator tipe B for stepper 1/4"G		1	'=CiCv	101
'-FL1	'044.5166	Flangia accoppiamento motore C80 B14	Power pack motor flange C80 B14	drive 131 200.6582.0043.0 Bucher	1	'=CiCv	101
'-FT1	'044.5001	Filtro aspirazione ID. Ø 80mm 250micron 3/8"G fem.	Oil filter for hydraulic unit Ø 80mm 250micron 3/8"G fem.	200.5461.12010 Bucher	1	'=CiCv	101
'-GN1	'044.4637	Giunto elas. lato pompa AP100 S309	Connecting coupling pump side	drive 131 200.6594.0033.0 Bucher	1	'=CiCv	101
'-GN1	'044.4636	Giunto elas. lato motore C80 B14	Connecting coupling motor side C80 B14	drive 131 200.6594.0019.0 Bucher	1	'=CiCv	101
'-IU1	'044.5152	Base UP100 K3P0-01	Housing UP100 K3P0-01	200.7404.1038.1 Bucher	1	'=CiCv	101
'-M9	V.d.E.	Vedi distinta elettrica	See electric BOM		1	'=CiCv	101
'-M20	V.d.E.	Vedi distinta elettrica	See electric BOM		1	'=CiCv	101
'-MF3	'007.6712	Manifold idraulico per derivazione reg. pressione, housing BUCHER	Hydraulic manifold for pressure reduction	'007.6712	1	'=CiCv	102
'-MF5	'007.6694	Manifold idraulico 2 posto CETOP 3 e uscita manomnetro per housing BUCHER	Hydraulic manifold for N°2 valve CETOP 3	'007.6694	1	'=CiCv	102
'-MN1	'043.0557	Manometro ID. 0-60bar Ø40 con attacco radiale da 1/4"G	Hydraulic manometer Ø60 1/4"G	WIKA	1	'=CiCv	101
'-MN2	'043.0557	Manometro ID. 0-60bar Ø40 con attacco radiale da 1/4"G	Hydraulic manometer Ø60 1/4"G	WIKA	1	'=CiCv	101
'-NY5	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		1	'=CiCv	102
'-NY6	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		1	'=CiCv	102
'-NY7	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		1	'=CiCv	102
'-NY10	'044.0503	Nipplo ID. MM-3/8"G - 1/4"G	Hydraulic nipple MM-3/8"G - 1/4"G		1	'=CiCv	101
'-NY11	'044.0503	Nipplo ID. MM-3/8"G - 1/4"G	Hydraulic nipple MM-3/8"G - 1/4"G		1	'=CiCv	101
'-NY12	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		1	'=CiCv	101
'-NY14	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		1	'=CiCv	101
'-NY20	'044.0503	Nipplo ID. MM-3/8"G - 1/4"G	Hydraulic nipple MM-3/8"G - 1/4"G		1	'=CiCv	102
'-NY21	'044.0503	Nipplo ID. MM-3/8"G - 1/4"G	Hydraulic nipple MM-3/8"G - 1/4"G		1	'=CiCv	102
'-NY30	'044.0503	Nipplo ID. MM-3/8"G - 1/4"G	Hydraulic nipple MM-3/8"G - 1/4"G		1	'=CiCv	102
'-NY31	'044.0503	Nipplo ID. MM-3/8"G - 1/4"G	Hydraulic nipple MM-3/8"G - 1/4"G		1	'=CiCv	102

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Esecutore Amedano

FOGLIO 108
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NOME/ITEM	TIPO/TYPE	DESCRIZIONE IT (DB)	DESCRIZIONE EN (DB)	DB.CODICEINTERNO	Q.TA/Q.TY	QUADRO/BOARD	FG/SH
'-P1	'044.4515	Pompa 6.5cc/giro per base	Pump 6.5cc/rev fou housings	6.5cc/Giro	1	'=CiCv	101
'-RCU10	'044.0552	Raccordo a gomito ID. MF-1/4"G	Hydraulic elbow coupling M/F 1/4"		1	'=CiCv	101
'-RGI10	'044.0553	Raccordo girevole ID.per manometro MF-1/4"G	Hydraulic rotating coupling for manometer M/F 1/4"		1	'=CiCv	101
'-RNY10	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		1	'=CiCv	101
'-RP1	'044.1266	Valvola modulare idraulica riduttice 3-35Bar	Moduler valve pressure reduction 3-35Bar	CETOP3 su "A" reg. a pomello ctr MTD2/RA/M/50 Duplomatic	1	'=CiCv	101
'-RPC	'044.1267	Valvola riduttice idraulica a cartuccia cavità 08/3 reg. a vite da 5-50Bar	Hydraulic pressure reduction cartridge 5-50Bar	'044.1267	1	'=CiCv	101
'-RR1	'044.5159	Tubo pescante idraulico M-M3/8"G	Suction pipe M-M3/8"G	lung. 50mm	1	'=CiCv	101
'-SB1	'016.2102	Serbatoio centralina idraulica H14A	Oil tank for H14A		1	'=CiCv	101
'-T10	'044.0351	Tubo idraulico 1/4"G 250 D-G		'044.0351	1	'=CiCv	101
'-TP1	'034.0906	Tappo plastico da 1/2"G con sfiato	Breather plastic. cap 1/2"G		1	'=CiCv	101
'-TP2	'034.0900	Tappo livello olio 3/8"G	Oil level cap 3/8"G	SLNT 38	1	'=CiCv	101
'-TP3	'044.5162	Tappo scarico olio 3/8"G con OR	Oil drain tap 3/8"G with OR	AN612	1	'=CiCv	101
'-TP20	'043.0260	Tappo da 1/4"G	Cap 1/4"G	CL2611	1	'=CiCv	102
'-TP21	'043.0260	Tappo da 1/4"G	Cap 1/4"G	CL2611	1	'=CiCv	102
'-TP30	'043.0260	Tappo da 1/4"G	Cap 1/4"G	CL2611	1	'=CiCv	102
'-TP31	'043.0260	Tappo da 1/4"G	Cap 1/4"G	CL2611	1	'=CiCv	102
'-VB1	'044.4554	Valvola di ritegno idraulica per housing BOUCHER	Check valve for housing BOUCHER	RS3/817 - 200.7876.0141.0	1	'=CiCv	101
'-YV1	'043.1002	Elettrovalvola idraulica 4/3 centri chiusi CETOP 3 24Vcc	Hydraulic electrovalve 4/3 close center CETOP3 24Vdc	MD1L-S1/10 N-D24K1 DUPLOMATIC	1	'=CiCv	101
'-YV2	'043.1002	Elettrovalvola idraulica 4/3 centri chiusi CETOP 3 24Vcc	Hydraulic electrovalve 4/3 close center CETOP3 24Vdc	MD1L-S1/10 N-D24K1 DUPLOMATIC	1	'=CiCv	102
'-YV3	'043.1002	Elettrovalvola idraulica 4/3 centri chiusi CETOP 3 24Vcc	Hydraulic electrovalve 4/3 close center CETOP3 24Vdc	MD1L-S1/10 N-D24K1 DUPLOMATIC	1	'=CiCv	102
'-C2V	'044.1061	Cilindro idraulico 40x20x365 Morsa Verticale	Hydraulic cylinder 40x20x365		1	'=CiMvBm	103
'-C3V	'044.1061	Cilindro idraulico 40x20x365 Morsa Verticale	Hydraulic cylinder 40x20x365		1	'=CiMvBm	103
'-CU20A	'044.0552	Raccordo a gomito ID. MF-1/4"G	Hydraulic elbow coupling M/F 1/4"		1	'=CiMvBm	103
'-CU21A	'044.0552	Raccordo a gomito ID. MF-1/4"G	Hydraulic elbow coupling M/F 1/4"		1	'=CiMvBm	103
'-CU30A	'044.0552	Raccordo a gomito ID. MF-1/4"G	Hydraulic elbow coupling M/F 1/4"		1	'=CiMvBm	103
'-CU31A	'044.0552	Raccordo a gomito ID. MF-1/4"G	Hydraulic elbow coupling M/F 1/4"		1	'=CiMvBm	103
'-GIR20A	'044.0553	Raccordo girevole ID.per manometro MF-1/4"G	Hydraulic rotating coupling for manometer M/F 1/4"		1	'=CiMvBm	103
'-GIR21A	'044.0553	Raccordo girevole ID.per manometro MF-1/4"G	Hydraulic rotating coupling for manometer M/F 1/4"		1	'=CiMvBm	103
'-GIR22A	'044.0553	Raccordo girevole ID.per manometro MF-1/4"G	Hydraulic rotating coupling for manometer M/F 1/4"		1	'=CiMvBm	103
'-GIR30A	'044.0553	Raccordo girevole ID.per manometro MF-1/4"G	Hydraulic rotating coupling for manometer M/F 1/4"		1	'=CiMvBm	103
'-GIR31A	'044.0553	Raccordo girevole ID.per manometro MF-1/4"G	Hydraulic rotating coupling for manometer M/F 1/4"		1	'=CiMvBm	103
'-GIR32A	'044.0553	Raccordo girevole ID.per manometro MF-1/4"G	Hydraulic rotating coupling for manometer M/F 1/4"		1	'=CiMvBm	103

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NOME/ITEM	TIPO/TYPE	DESCRIZIONE IT (DB)	DESCRIZIONE EN (DB)	DB.CODICEINTERNO	Q.TA/Q.TY	QUADRO/BOARD	FG/SH
'-IRF20	'044.0453	Innesto rapido femmina ID. F-1/4"G	Hydraulic female quick lock coupling F-1/4"G		1	'=CiMvBm	103
'-IRF21	'044.0453	Innesto rapido femmina ID. F-1/4"G	Hydraulic female quick lock coupling F-1/4"G		1	'=CiMvBm	103
'-IRF30	'044.0453	Innesto rapido femmina ID. F-1/4"G	Hydraulic female quick lock coupling F-1/4"G		1	'=CiMvBm	103
'-IRF31	'044.0453	Innesto rapido femmina ID. F-1/4"G	Hydraulic female quick lock coupling F-1/4"G		1	'=CiMvBm	103
'-IRM20	'044.0452	Innesto rapido maschio ID. F-1/4"G	Hydraulic male quick lock coupling F-1/4"G		1	'=CiMvBm	103
'-IRM21	'044.0452	Innesto rapido maschio ID. F-1/4"G	Hydraulic male quick lock coupling F-1/4"G		1	'=CiMvBm	103
'-IRM30	'044.0452	Innesto rapido maschio ID. F-1/4"G	Hydraulic male quick lock coupling F-1/4"G		1	'=CiMvBm	103
'-IRM31	'044.0452	Innesto rapido maschio ID. F-1/4"G	Hydraulic male quick lock coupling F-1/4"G		1	'=CiMvBm	103
'-NY20A	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		1	'=CiMvBm	103
'-NY21A	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		2	'=CiMvBm	103
'-NY22A	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		1	'=CiMvBm	103
'-NY23A	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		1	'=CiMvBm	103
'-NY24A	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		1	'=CiMvBm	103
'-NY25A	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		1	'=CiMvBm	103
'-NY26A	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		1	'=CiMvBm	103
'-NY27A	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		1	'=CiMvBm	103
'-NY30A	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		1	'=CiMvBm	103
'-NY31A	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		2	'=CiMvBm	103
'-NY32A	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		1	'=CiMvBm	103
'-NY33A	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		1	'=CiMvBm	103
'-NY34A	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		1	'=CiMvBm	103
'-NY35A	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		1	'=CiMvBm	103
'-NY36A	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		1	'=CiMvBm	103
'-NY37A	'044.0501	Nipplo ID. MM-1/4"G	Hydraulic nipple MM-1/4"G		1	'=CiMvBm	103
'-RD20A	'043.0227	Riduzione M/F da 3/8-1/4"G	Reductions M/F da 3/8-1/4"G	CL2531	1	'=CiMvBm	103
'-RD21A	'043.0227	Riduzione M/F da 3/8-1/4"G	Reductions M/F da 3/8-1/4"G	CL2531	1	'=CiMvBm	103
'-RD30A	'043.0227	Riduzione M/F da 3/8-1/4"G	Reductions M/F da 3/8-1/4"G	CL2531	1	'=CiMvBm	103
'-RD31A	'043.0227	Riduzione M/F da 3/8-1/4"G	Reductions M/F da 3/8-1/4"G	CL2531	1	'=CiMvBm	103
'-RF20	'043.0660	Rubinetto Idr. KHB-G 1/4 Morse Verticali		'043.0660	1	'=CiMvBm	103
'-RF20A	'044.1264	Regolatore idraulico di flusso unidirezionale 1/4"G	Hydraulic flow regolator 1/4"G	FT257-5 FPU 1/4	1	'=CiMvBm	103
'-RF21A	'044.1264	Regolatore idraulico di flusso unidirezionale 1/4"G	Hydraulic flow regolator 1/4"G	FT257-5 FPU 1/4	1	'=CiMvBm	103
'-RF30	'043.0660	Rubinetto Idr. KHB-G 1/4 Morse Verticali		'043.0660	1	'=CiMvBm	103

REV.	MODIFICA	DATA	FIRME

Dis. N. H14 A
CAD SPAC
File H 14A\2.dwg
Data 07-05-2015

Impianto *H 14 A*
Denominazione DISTINTA COMPONENTI
MATERIAL LIST

Ordine
Commessa H14A
Esecutore Amedano

FOGLIO 110
SEGUE 111
ULTIMO 211

NOME/ITEM	TIPO/TYPE	DESCRIZIONE IT (DB)	DESCRIZIONE EN (DB)	DB.CODICEINTERNO	Q.TA/Q.TY	QUADRO/BOARD	FG/SH
'-RF30A	'044.1264	Regolatore idraulico di flusso unidirezionale 1/4"G	Hydraulic flow regolator 1/4"G	FT257-5 FPU 1/4	1	'=CiMvBm	103
'-RF31A	'044.1264	Regolatore idraulico di flusso unidirezionale 1/4"G	Hydraulic flow regolator 1/4"G	FT257-5 FPU 1/4	1	'=CiMvBm	103
'-T24A	'044.0117	Tubo idraulico 1/4"G 1200 D-D	Hydraulic flex pipe 1/4"G 1200 D-D		1	'=CiMvBm	103
'-T25A	'044.0117	Tubo idraulico 1/4"G 1200 D-D	Hydraulic flex pipe 1/4"G 1200 D-D		1	'=CiMvBm	103
'-T33A	'044.0123	Tubo idraulico 1/4"G 500 D-G	Hydraulic pipe	'044.0123	1	'=CiMvBm	103
'-T34A	'044.0123	Tubo idraulico 1/4"G 500 D-G	Hydraulic pipe	'044.0123	1	'=CiMvBm	103

REV.	MODIFICA	DATA	FIRME

Dis. N. H14 A
CAD SPAC
File H 14A\2.dwg
Data 07-05-2015

Impianto
H 14 A

Denominazione
DISTINTA COMPONENTI
MATERIAL LIST

Ordine

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H14A

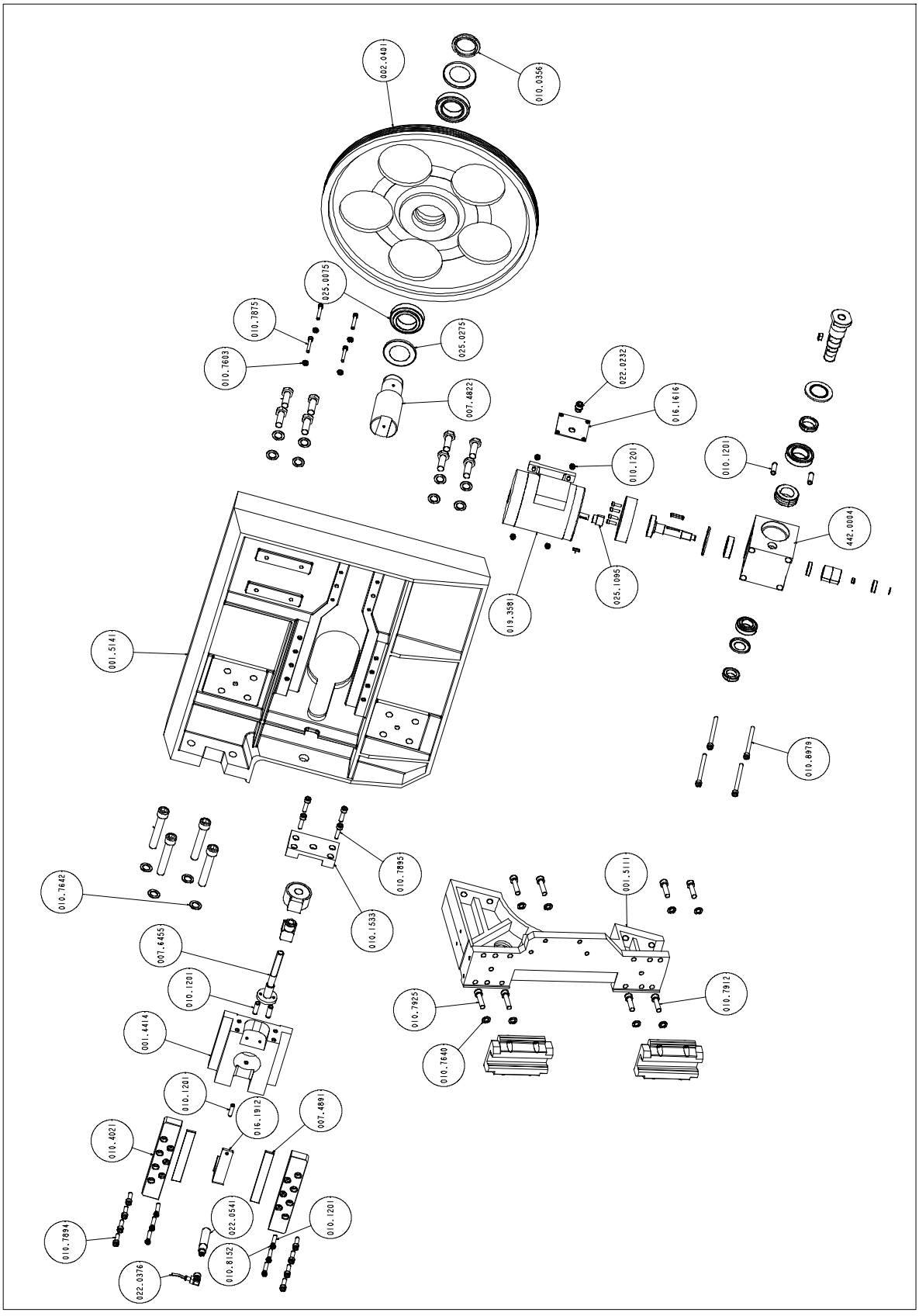
Esecutore
Amedano

FOGLIO 111
SEGUE
ULTIMO 211

Exploded views

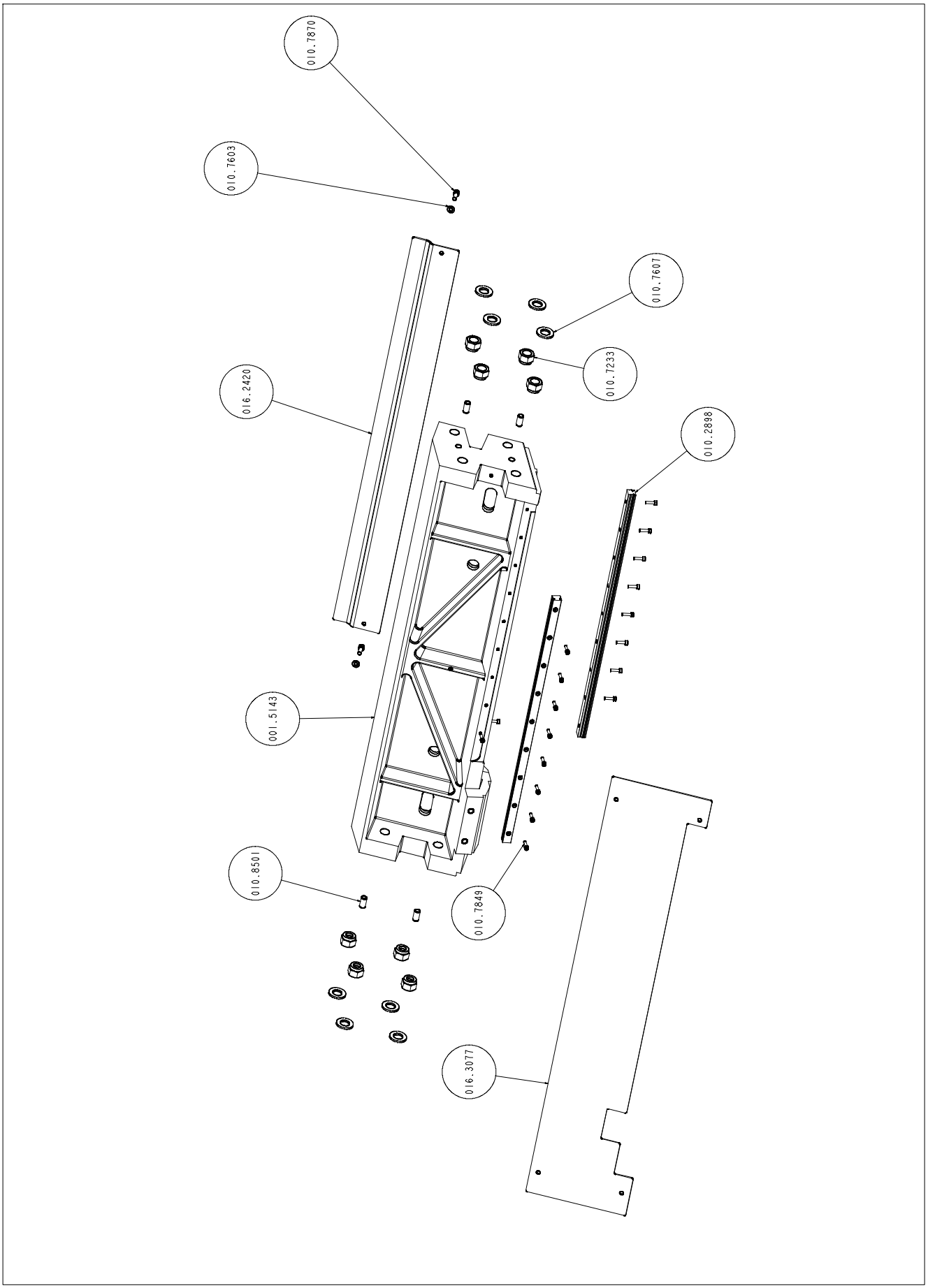
This part of the manual contains detailed exploded views of the machine which can help to gain a deeper knowledge of how it is made.

Idler pulley unit



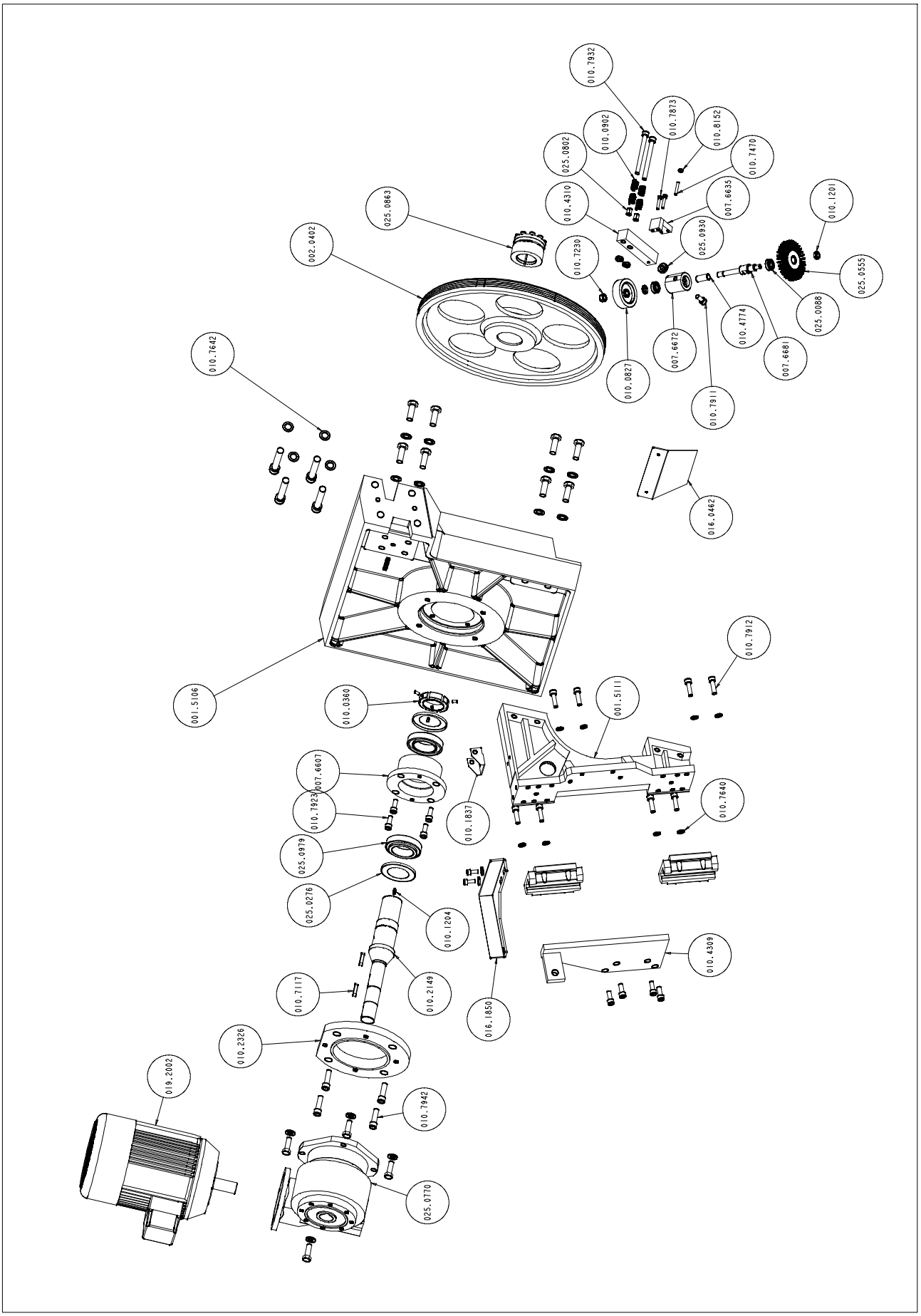
Code	Description	Description	Quantity
022.0376	CONNETTORE F303N5000 X PROSSIMITI	CONNECTOR FOR PROXIMITY	1.000
016.1616	COPERCHIO SCATOLA MOTORE TESATO-RE ELETTROMECCANICO	VPRA/125 MR HANDWHEEL SH 320- 330	1.000
010.8152	DADO M6 BASSO	M16 NUT	6.000
010.0356	GHIERA AUTOBLOCCANTE 45X1,5 SH	SELF- LOCKING RING NUT 45X1,5 SH	1.000
007.4891	LARDONE SLITTA TENDILAMA E SUPPOR-TO TESTINA ANTERIORE SH	SLIDE GIB SH 400 / H- 14A	2.000
010.7912	VITE TCEI 10 X 35	TCEI 10 X 35 SCREW	4.000
010.7925	VITE TCEI 10 X 40	TCEI 10 X 40 SCREW	4.000
010.7875	VITE TCEI 6 X 40	TCEI 6 X 40 SCREW (010.7875)	4.000
010.7894	VITE TCEI 8 X 25	TCEI 8 X 25 SCREW (010.7894)	8.000
010.7895	VITE TCEI 8 X 30	TCEI 8 X 30 SCREW	4.000
010.8979	VITE TCEI 8 X 95	8X95 TCEI SCREW	4.000
019.3581	MOTORE KW 0,26 V.230- 400 B3 MB VR M63C4TESATORE ELETTROMEC	MOTOR KW 0,26 V.230- 400 B3 MB VR M63C4	1.000
025.0275	ANELLO DI PROTEZIONE NILOS 32009X	NILOS GUARD RING 32009X	2.000
007.4822	PERNO PULEGGIA FOLLE SH 400	IDLER WHEEL PIN SH 400 / H- 14A	1.000
007.6455	PERNO TESATURA LAMA TESATORE ELET- TROMECCANICO SH 500	BLADE TENSIONER PIN	1.000
010.4021	PIASTRA REGOLAZIONE SLITTA LARDONE SH 320- 330- 332	GIB SLIDE ADJUSTMENT PLATE SH 320- 330-	2.000
025.1095	PIGNONE TENSIONATORE LAMA SH 500	BLADE TENSIONER PINION SH 500 / H- 14A	1.000
022.0232	PRESSACAVO IN OTTONE 1/4 BM 2450	BRASS CABLE PRESSER 1/4 BM 2450	1.000
022.0541	SENSORE DI PROSSIMITA' INDUTTIVO DIAM18	PROXIMITY	1.000
002.0401	PULEGGIA FOLLE SH 310 CNC- HS	IDLER WHEEL SH CNC - HS	1.000
010.7603	RONDELLA 0 6	0 6 WASHER (010.7603)	4.000
010.7640	RONDELLA GROOVER M10	WASHER GROOVER M10	8.000
010.7642	RONDELLA GROOVER M16	WASHER GROOVER M16	12.000
001.4414	SLITTA TENDILAMA SH 400 T.E.- 410	SLIDE BLADE TENSIONER SH 400 T.E- 410	1.000
010.1533	STAFFA AGGANCIO PERNO TESATORE ELETTROMECCANICO SH 500	BRACKET, POWERED BLADE TENSIONER	1.000
016.1912	STAFFA FISSAGGIO PROSSIMITI SH310 CNC- HS	PROXIMITY FIXING BRACKET SH310 CNC- HS	1.000
001.5111	STAFFA AGG. ARCHETTO SH310CNC- HS	BOW COUPLER BRACKET SH 310 CNC- HS / H- 14	1.000
001.5141	ARCHETTO SPF H- 14A MOD.1645	BOW WITH OUT IDLER WHEEL H- 14A	1.000
025.0075	CUSCINETTO 32009X	BEARING 32009X	1.000
010.1201	VITERIA E BULLONERIA	SCREWS AND BOLTS	5.000
442.0004	GRUPPO TESATORE ELETTROMECC.SH 400- 422	ELECTROMAC.TENSIONER GROUP SH 400	1.000

Cross bar group bow



Code	Description	Description	Quantity
010.8501	SPINA CILINDRICA DIAM. 10 X 20	PARALLEL PIN DIAM.10 X 20	4,000
001.5143	TRAVE ARCHETTO	HEAD BOW BEAM	1,000
010.7849	VITE TCEI 4 X 16	TCEI 4 X 16 SCREW	8,000
010.2898	GUIDA PATTINO HGH15- CA- 2- E20 R0520 ZBH	SIDE GUIDE HGH15- CA- 2- E20 R0520 ZBH	1,000
016.2420	PROTEZIONE NASTRO TRAVE AR-CHETTO	BOW BEAM BAND PROTECTION	1,000
016.3077	CARTER POSTERIORE TRAVE AR-CHETTO	REAR BOW BEAM PROTECTION	1,000
010.7603	RONDELLA 0 6	0 6 WASHER	1,000
010.7870	VITE TCEI 6 X 16	TCEI 6 X 16 SCREW	1,000
010.7607	RONDELLA 0 16	0 16 WASHER	1,000
010.7233	DADO AUTOBLOCCANTE M16	M16 SELF- LOCKING SCREW NUT	1,000
016.3077	CARTER POST. TRAVI ARCHETTO SH350- H14	REAR CARTER HEAD BOW BEAM	1,000

Driving pulley unit

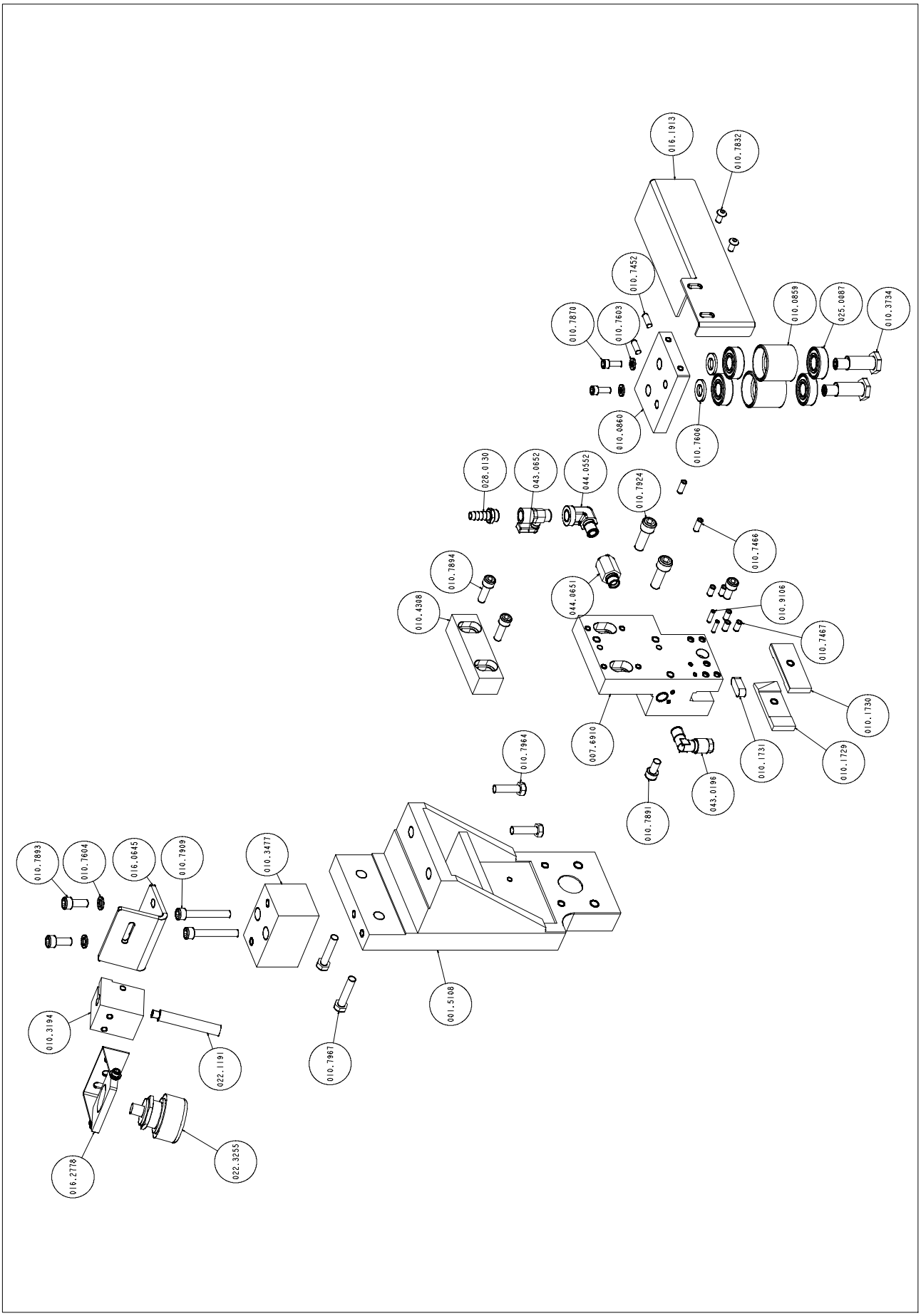


Code	Description	Description	Quantity
025.0863	CALETTATORE TLK 130 50X80 SH 400	LOCKING SET TLK 130 50X80 SH 400 / H- 14A	1.000
007.6635	PIASTRINO REGISTRAZIONE SPAZZOLA PULILAMA SHARK 452	BRUSH REGULATING PLATE	1.000
025.0770	RIDUTTORE FCPDKO 85 FC IEC 112B14SH 310 CNC- HS	GEARBOX	1.000
010.0827	RUOTA IN GOMMA X SPAZZOLA PULILAMA SH452	RUBBER WHEEL F. CHIP BRUSH	1.000
025.0979	CUSCINETTO 32011 CEMENTATO	TAPERED ROLLER BEARING 32011	2.000
025.0930	CUSCINETTO 51100	BEARING 51100	1.000
025.0088	CUSCINETTO 6001 2Z PH 100	BEARING 6001 2Z PH 100	2.000
007.6681	ALBERO SPAZZOLA PULILAMA SHARK 452	BRUSH SHAFT SHARK 452 H- 14A	1.000
010.2149	ALBERO RIDUTTORE SH 310 CNC- HS	DRIVE SHAFT	1.000
001.5106	ARCHETTO SPM SH 310 CNC- HS MOD.1633	BOW WITH OUT MOTOR WHEEL SH 310 CNC- HS	1.000
025.0802	BOCCOLA GRAFITATA L. 15 DIAM. 10	GRAPHITIZED BUSHING L. 15 DIA M. 10	1.000
016.0462	CARTER SPAZZOLA PULILAMA SH 310 CNC- HS	BAND BRUSH COVER SH310CNCHS	1.000
010.2326	FLANGIA AGGANCIO RIDUTTOREFCD-PK85 FIXED STAR	REDUC.FLANGE COUPLE FCDPK85 FIX.-STAR SH	1.000
010.0360	GHIERA BLOCC.ALBERO RIDUTTORE SH500	DRIVE SHAFT LOCKNUT	1.000
010.0902	MOLLA PUNTO FISSO TESTA MOD. 95	HEAD FIXED POINT SPRING	2.000
025.0276	ANELLO DI PROTEZIONE NILOS 32011	NILOS GUARD RING 32011	2.000
010.1204	INGRASSATORE M 6	M 6 LUBRICATOR	1.000
002.0402	PULEGGIA MOTRICE SH 310 CNC- HS	MOTOR WHEEL SH 310 CNC HS / H- 14A	1.000
010.7640	RONDELLA GROOVER M10	WASHER GROOVER M10	8.000
010.7642	RONDELLA GROOVER M16	WASHER GROOVER M16	12.000
010.1837	SET ATTACCHI 905.010- 905.011 AX- CNC	ATTACHMENTS SET AX- CNC	1.000
025.0555	SPAZZOLA PULILAMA 3103 0 100 SH 400	BAND BRUSH 3103 0 100 SH 400 / H- 14A	1.000
016.1850	STAFFA COLLEGAMENTO PROXIMITY COLONNA	COLUMN PROXIMITYCONNEC.BRACKET SH 420	1.000
010.4309	STAFFA AGGAN. CILIN. DIS. TESTA ARCHETT0SPM SH 310 CNC- HS	DOWN STROKE M.P.S.CYL.COUPLER BRACKET	1.000
010.4310	STAFFA FISSAGGIO ALBERO PULILAMA-SH 310 CNC- HS	BAND BRUSH SHAFT FIX BRACKET SH310CNCHS	1.000
007.6672	SUPPORTO ALBERO SPAZZOLA PULILAMA SHARK452	BRUSH SHAFT SUPPORT	1.000
007.6607	TAMPONE RIDUTTORE SHARK 500	BUFFER REDUCTER SH 500 S23 H- 14A	1.000
001.5111	STAFFA AGG. ARCHETTO SH310CNC- HS	BOW COUPLER BRACKET SH 310 CNC-HS / H- 14	1.000
010.4774	DISTANZIALE CUSCINETTO PULILAMA	BEARING PUSH BAND LOWER SPACER	1.000
010.1201	VITERIA E BULLONERIA	SCREWS AND BOLTS	3.000
019.2002	KW 4 4P.B.14 GR112 S6 60% V.230- 400/240- 415/265- 460.60/277- 480.60	KW 4 4P.B.14 GR112 S6 60% V.230- 400/240-	1.000
010.7942	VITE TCEI 12 X 40	TCEI 12 X 40 SCREW	1.000
010.7923	VITE TCEI 10 X 25	TCEI 10 X 25 SCREW (010.7923)	1.000
010.7912	VITE TCEI 10 X 35	TCEI 10 X 35 SCREW	1.000
010.7911	VITE TCEI 10 X 20	TCEI 10 X 20 SCREW (010.7911)	1.000
010.7932	VITE TCEI 10 X 110	TCEI 10 X 110 SCREW (010.7932)	1.000
010.7873	VITE TCEI 6 X 30	TCEI 6 X 30 SCREW (010.7873)	1.000
010.8152	DADO M6 BASSO	M16 NUT	1.000
010.7230	DADO AUTOBLOCCANTE M10	M10 SELF- LOCKING SCREW NUT	1.000
010.7470	GRANO VCE PUNTA PIANA 6 X 35	6X35 FLAT POINT VCE GRUB SCREW	1.000
010.7117	CHIAVETTA 10 X 8 X 35	10 X 8 X 35 KEY	1.000

Cutting mobile head group

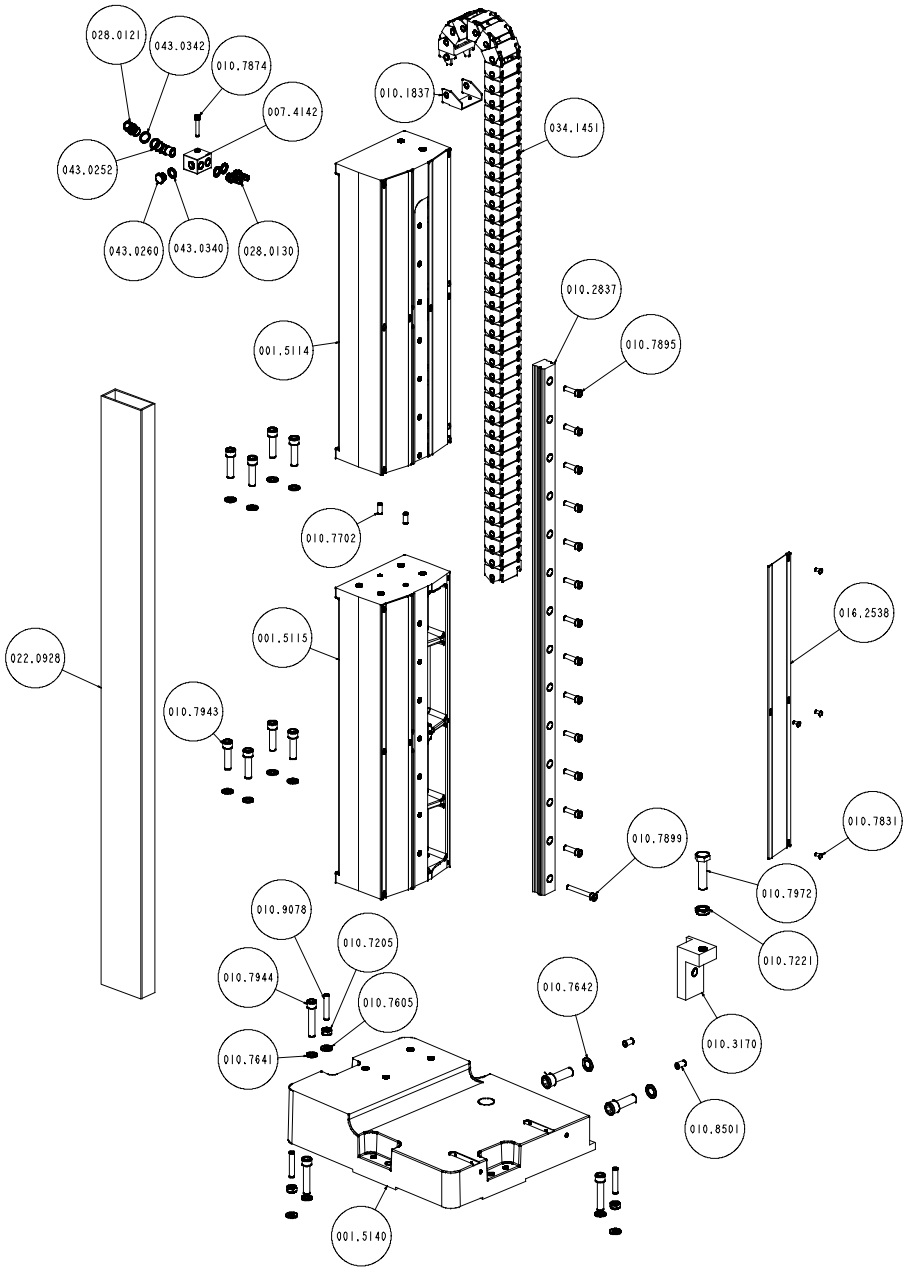
Code	Description	Description	Quantity
016.1898	CARTER LAMA ANTERIORE SH420CNC- HS N.T.	FRONT BAND COVER SH 420 CNC- HS / H- 14A	1.000
025.0087	CUSCINETTO 6202 2Z	BEARING 6202 2Z PH 100	4.000
025.0963	CUSCINETTO 6204 2Z	BEARING 6204 2Z	1.000
010.2148	ALBERO TRASCINAMENTO TESTINA GUIDALAMAANTERIORE	FRONT BAND GUIDE DRAG. SHAFT SH310CNC- HS	1.000
010.1731	CHIAVETTA PREMILAMA TESTINA SH 500	CARBIDE PAD KEY SH 500- 310- H- 14A	1.000
010.7924	VITE TCEI 10 X 30	TCEI 10 X 30 SCREW (010.7924)	2.000
010.7853	VITE TCEI 4 X 20	TCEI 4 X 20 SCREW (010.7853)	8.000
010.7855	VITE TCEI 4 X 30	TCEI 4 X 30 SCREW (010.7855)	8.000
010.7861	VITE TCEI 5 X 20	TCEI 5 X 20 SCREW (010.7861)	3.000
010.7891	VITE TCEI 8 X 16	TCEI 8 X 16 SCREW (010.7891)	2.000
010.7894	VITE TCEI 8 X 25	TCEI 8 X 25 SCREW (010.7894)	2.000
010.3734	PERNO ECCENTRICO CUSCINETTI PREMILAMA	BLADEPUSHER BEARING ECCENTRIC PIN SH420	2.000
044.0651	PROLUNGA 1/4' M.F. ESAGONALE 25MM.	"1/4"" M.F. EXTENSION 20 MM"	1.000
044.0552	RACCORDO A GOMITO IDRAULICO MF 1/4 ALTAPRESSIONE	HYDR. ELBOW JOINT M/F 1/4 HIGH PRESSURE	1.000
028.0130	RACCORDO 1/4- 9 CL 2601	JOINT 1/4- 9 CL 2601	1.000
043.0196	RACCORDO A GOMITO MF 8X1/4 CL 1020	MF 8X1/4 CL 1020 ELBOW JOINT	1.000
043.0652	RUBINETTO 1/4 F.M.	1/4 F. M. TAP	1.000
010.0859	RULLO PREMILAMA SH 420 CNC- HS	BAND PUSHER ROLLER SH 420 CNC- HS / H- 14A	2.000
010.4308	STAFFA REGOLAZIONE TESTINE GUIDALAMASH 310 CNC- HS	BANDGUIDE REGUL.BRACKETSH310CNCHS /H- 14A	1.000
001.5107	STAFFA TESTINA GUID.ANT.SH310CNCHS	FRONT HEAD GUIDING BLADE BRACKET SH310	1.000
010.0860	SUPPORTO PERNI ECCENTRICI TESTINA GUID.	ECCENTRIC PIN HEAD BAND GUIDE SUP.SH420	1.000
010.7832	VITE BUTON 6 X 12	BUTON SCREW 6 X 12	1.000
010.7603	RONDELLA 0 6	0 6 WASHER (010.7603)	1.000
010.7870	VITE TCEI 6 X 16	TCEI 6 X 16 SCREW (010.7870)	1.000
010.7452	GRANO VCE PUNTA CONICA 6 X 16	6 X 16 CONICAL POINT VCE GRUB SCREW	1.000
010.1728	GUIDALAMA DUE INSERTI ANTERIORE MOBILE	MOVING FRONT BAND GUIDE H- 14A	1.000
010.1727	GUIDALAMA DUE INSERTI ANTERIORE FISSA	2 INSERTS FIXING FRONT BAND GUIDE H- 14A	1.000
010.7674	RONDELLA SPESSORE DIAM. 10,5 X 30	THICKNESS WASHER DIAM. 10,5 X 30	1.000
025.1155	PATTINO HGH 15 CA ZO C X MORSE VERTICALI	SLIDE HGH 15 CA ZO C F. VERTICAL VICE	1.000
010.7466	GRANO VCE PUNTA PIANA 6 X	6 X 16 FLAT POINT VCE GRUB SCREW	1.000
010.7606	RONDELLA 0 12	0 12 WASHER	1.000
010.9106	GRANO VCE PUNTA PIANA 4 X 16	4X 16 FLAT POINT GRUB SCREW	1.000
010.7467	GRANO VCE PUNTA PIANA 6 X 12	6 X 12 FLAT POINT VCE GRUB SCREW	1.000
010.7992	VITE TSPEI 8 X 16	TSPEI 8 X 16 SCREW	1.000

Cutting fixed head group



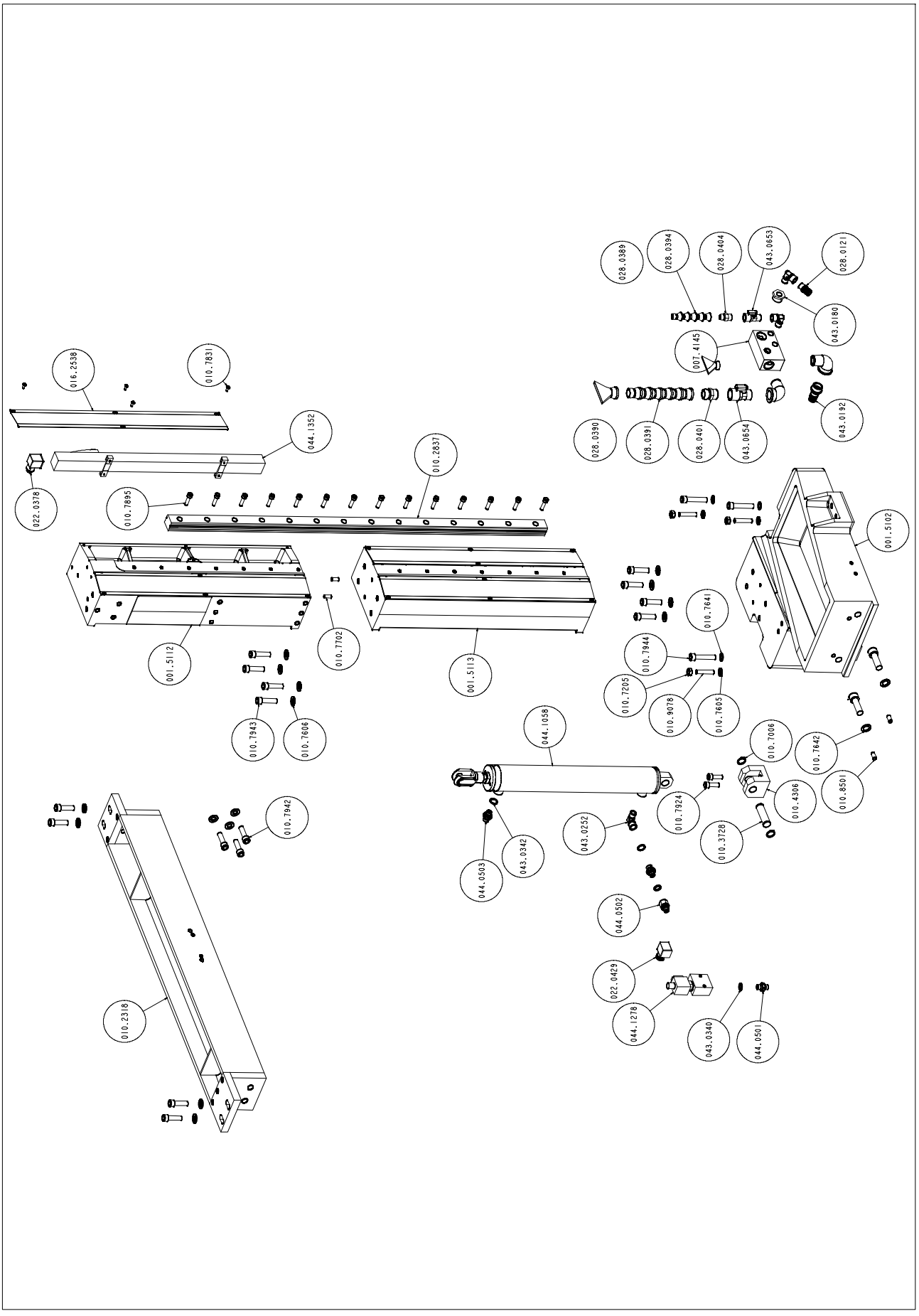
Code	Description	Description	Quantity
001.5108	STAFFA TESTINA GUID.POST.	REAR HEAD GUIDING BLADE BRACKET SH310	1.000
007.6910	TESTINA GUIDALAMA ANTERIORE	FRONT HEAD GUIDE BLADE S23A	1.000
010.0859	RULLO PREMILAMA	BAND PUSHER ROLLER SH 420 CNC-HS / H- 14A	2.000
010.0860	SUPPORTO PERNI ECCENTRICI TESTI-NA GUID.	ECCENTRIC PIN HEAD BAND GUIDE SUP.SH420	1.000
010.1729	GUIDALAMA DUE INSERTI POSTE-RIORE FISSACON SMUSSO	2 INSERTS FIXING RAER BAND GUIDE H- 14A	1.000
010.1730	GUIDALAMA DUE INSERTI POSTE-RIORE MOBILECON SMUSSO	MOVING REAR BAND GUIDE H- 14A	1.000
010.1731	CHIAVETTA PREMILAMA TESTINA	CARBIDE PAD KEY SH 500- 310- H- 14A	1.000
010.3194	SOSTEGNO LASER LUCE N.T.	LIGHT AND LASER SUPPORTING N.T.	1.000
010.3477	DISTANZIALE SUPPORTO LASER TESTI-NAFISSA	BAND GUIDE LASER SUP.SPACER SH310CNCHS	1.000
010.3734	PERNO ECCENTRICO CUSCINETTI PREMILAMA	BLADEPUSHER BEARING ECCENTRIC PIN SH420	2.000
010.4308	STAFFA REGOLAZIONE TESTINE GUI-DALAMA	BANDGUIDE REGUL.BRACKE-TSH310CNCHS /H- 14A	1.000
010.7452	GRANO VCE PUNTA CONICA 6 X 16	6 X 16 CONICAL POINT VCE GRUB SC-REW	2.000
010.7603	RONDELLA 0 6 (010.7603)	0 6 WASHER (010.7603)	2.000
010.7604	RONDELLA 0 8 (010.7604)	0 8 WASHER (010.7604)	2.000
010.7832	VITE BUTON 6 X 12	BUTON SCREW 6 X 12	2.000
010.7870	VITE TCEI 6 X 16 (010.7870)	TCEI 6 X 16 SCREW (010.7870)	2.000
010.7891	VITE TCEI 8 X 16 (010.7891)	TCEI 8 X 16 SCREW (010.7891)	2.000
010.7893	VITE TCEI 8 X 20 (010.7893)	TCEI 8 X 20 SCREW (010.7893)	2.000
010.7894	VITE TCEI 8 X 25 (010.7894)	TCEI 8 X 25 SCREW (010.7894)	2.000
010.7909	VITE TCEI 8 X 55	TCEI 8 X 55 SCREW	2.000
010.7924	VITE TCEI 10 X 30 (010.7924)	TCEI 10 X 30 SCREW (010.7924)	2.000
010.7964	VITE TE 8 X 30	TE 8 X 30 SCREW	2.000
010.7967	VITE TE 8 X 40	TE 8 X 40 SCREW	2.000
016.0645	STAFFA SOSTEGNO LASER H14A	LASER SUP.BRACKET H14A	1.000
016.1913	PROTEZIONE LAMA POSTERIORE TE-STINAFISSA	FIX.BAND GUIDE REAR BAND PROTEC.-SH310	1.000
022.3255	HTP LAMP LED 50- 12MD	HTP LAMP LED 50- 12MD	1.000
016.2778	STAFFA LAMPADA HTP	LAMP HTP BRACKET	1.000
022.1191	DISPOSITIVO LASER MOD.5OEM 24V	LASER MOD.5OEM 24V	1.000
025.0087	CUSCINETTO 6202 2Z PER PH 100 E	BEARING 6202 2Z PH 100	4.000
028.0130	RACCORDO 1/4- 9 CL 2601	JOINT 1/4- 9 CL 2601	1.000
043.0196	RACCORDO A GOMITO MF 8X1/4 CL 1020	MF 8X1/4 CL 1020 ELBOW JOINT	1.000
043.0652	RUBINETTO 1/4 F.M.	1/4 F. M. TAP	1.000
044.0552	RACCORDO A GOMITO IDRAULICO MF 1/4 ALTAPRESSIONE	HYDR. ELBOW JOINT M/F 1/4 HIGH PRE-SSURE	1.000
044.0651	PROLUNGA 1/4’ M.F. ESAGONALE 25MM.	”1/4”” M.F. EXTENSION 20 MM”	1.000
010.7606	RONDELLA 0 12	0 12 WASHER	1.000
010.7466	GRANO VCE PUNTA PIANA 6 X 16	6 X 16 FLAT POINT VCE GRUB SCREW	1.000
010.9106	GRANO VCE PUNTA PIANA 4 X 16	4X 16 FLAT POINT GRUB SCREW	1.000
010.7467	GRANO VCE PUNTA PIANA 6 X 12	6 X 12 FLAT POINT VCE GRUB SCREW	1.000

Spf cradle unit



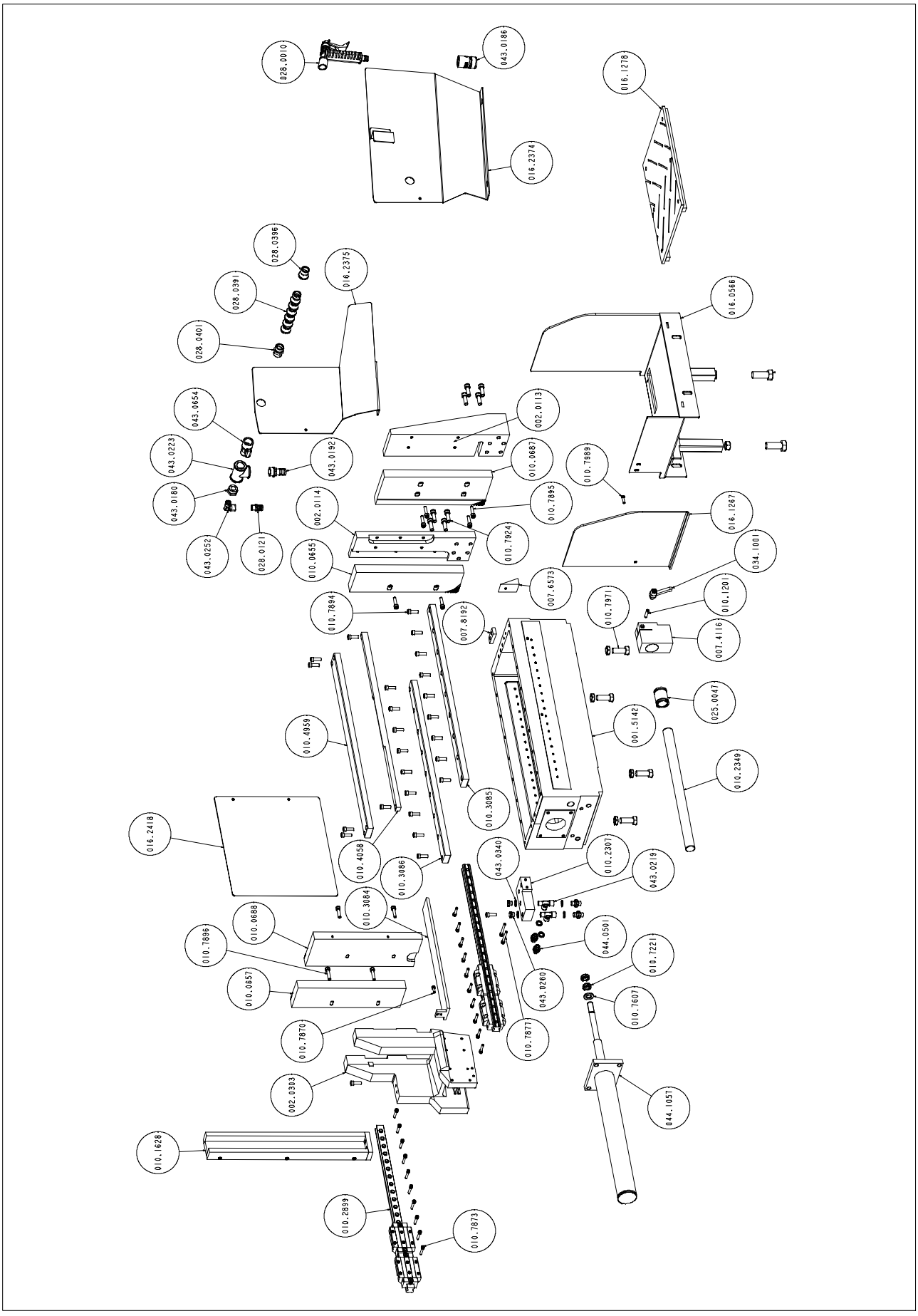
Code	Description	Description	Quantity
010.7205	DADO M10	M10 SCREW NUT (010.7205)	3.000
010.7221	DADO M16 BASSO	M16 LOW SCREW NUT (010.7221)	1.000
010.3170	FINECORSA MECCANICO TESTA IN BASSO	HEAD BACK STOP LIMIT SWITCH SH310CNC- HS	1.000
010.2837	GUIDA PATTINO HGW35- HC- 2- E30 R1100 ZBH	SIDE GUIDE HGW35- HC- 2- E30 R1100 ZBH	1.000
010.9078	GRANO VCE PUNTA PIANA 10 X 50	10X50 FLAT POINT GRUB SCREW (010.9078)	3.000
010.7943	VITE TCEI 12 X 45	TCEI 12 X 45 SCREW (010.7943)	4.000
010.7944	VITE TCEI 12 X 60	TCEI 12 X 60 SCREW	3.000
010.7972	VITE TE 16X60	TE 16 X 60 SCREW	1.000
010.7831	VITE BUTTON 5 X 12	5 X 12 BUTON SCREW (010.7831)	24.000
010.7895	VITE TCEI 8 X 30	TCEI 8 X 30 SCREW	13.000
010.7899	VITE TCEI 8 X 60	TCEI 8 X 60 SCREW	1.000
010.7605	RONDELLA 0 10	0 10 WASHER (010.7605)	3.000
010.7641	RONDELLA GROOVER M12	GROOVER WASHER M12	11.000
010.7642	RONDELLA GROOVER M16	WASHER GROOVER M16	2.000
010.8501	SPINA CILINDRICA DIAM. 10 X 20	PARALLEL PIN DIAM.10 X 20	2.000
010.7702	SPINA CILINDRICA DIAM. 8 X 20	CYLINDRICAL PIN DIAM. 8 X 20	2.000
001.5140	CULLA SEZ.PULEGGIA FOLLE H- 14A M.1630	CRADLE IDLER WHEEL SESSION H- 14A	1.000
028.0121	RACCORDO 3/8- 17 CL 2601	JOINT 3/8- 17 CL 2601	1.000
043.0342	RONDELLA RAME 17X23X1,5- 3/8	3/8 COPPER WASHER	1.000
010.7874	VITE TCEI 6 X 35	TCEI 6 X 35 SCREW	1.000
043.0252	GOMITO MF 3/8 CL 2020	MF 3/8 CL 2020 ELBOW	1.000
043.0260	TAPPO TTE4 1/4 - CL 2611	1/4 TAP TTE4	1.000
043.0340	RONDELLA RAME 13X19X1,5- 1/4	13X19X1,5- 1/4 COPPER WASHER	1.000
028.0130	RACCORDO 1/4- 9 CL 2601	JOINT 1/4- 9 CL 2601	1.000
007.4142	SQUADRETTO PER LIQUIDO SH 282- 292- 320- 3	PLATE SH 320- 330- H- 14A	1.000
010.1837	SET ATTACCHI 905.010- 905.011 AX- CNC	ATTACHMENTS SET AX- CNC	1.000
001.5114	COLONNA SUPERIORE CULLA SPF	UPPER COLUMN CRADLE SPF	1.000
001.5115	COLONNA INFERIORE CULLA SPF	LOWER COLUMN CRADLE SPF	1.000
022.0928	CANALINA PORTACAVI 40 X 100	CABLES CHAIN 40 X 101	1.000
034.1451	CATENA PORTACAVI 17.04.63.0 AX- CNC	CABLES CHAIN	1.000
016.2538	CARTER COLONNE SH 350/H- 14A		1.000

Spm cradle unit



Code	Description	Description	Quantity
001.5102	CULLA SEZ.PULEG.MOTRICE	CRADLE MOTOR WHEEL SESSION SH310CNC HS	1.000
010.7205	DADO M10	M10 SCREW NUT (010.7205)	3.000
043.0252	GOMITO MF 3/8 CL 2020	MF 3/8 CL 2020 ELBOW	5.000
010.7924	VITE TCEI 10 X 30	TCEI 10 X 30 SCREW (010.7924)	2.000
010.9078	GRANO VCE PUNTA PIANA 10 X 50	10X50 FLAT POINT GRUB SCREW (010.9078)	3.000
010.7943	VITE TCEI 12 X 45	TCEI 12 X 45 SCREW (010.7943)	4.000
010.7944	VITE TCEI 12 X 60	TCEI 12 X 60 SCREW	3.000
010.7895	VITE TCEI 8 X 30	TCEI 8 X 30 SCREW	14.000
044.0502	NIPPLO IDRAULICO GIREVOLE GMF 1/4	GMF 1/4 ROTATING HYDRAULIC NIPPLE	1.000
044.0503	NIPPLO IDRAULICO M 3/8- M 1/4	HYDRAULIC FITTING M 3/8 M 1/4	2.000
044.0501	NIPPLO NP 1/4 IDRAULICO	NP 1/4 HYDRAULIC NIPPLE	1.000
010.3728	PERNO SNODO CILINDRO DISCESA TE-STAARCHETTO	CYL.DOWN STROKE BOW ARTIC.PIN SH310CNCHS	1.000
028.0121	RACCORDO 3/8- 17 CL 2601	JOINT 3/8- 17 CL 2601	3.000
043.0192	RACCORDO RB 9889 3/4X20	RB 9889 JOINT 3/4X20	2.000
028.0404	RACCORDO 3/8 NPT LOOC LINE 1/2 ART. 59864	FITTING 3/8 NPT	1.000
043.0340	RONDELLA RAME 13X19X1,5- 1/4	13X19X1,5- 1/4 COPPER WASHER	3.000
043.0342	RONDELLA RAME 3/8	3/8 COPPER WASHER	3.000
010.7605	RONDELLA 0 10	0 10 WASHER (010.7605)	3.000
010.7606	RONDELLA 0 12	0 12 WASHER (010.7606)	8.000
010.7641	RONDELLA GROOVER M12	GROOVER WASHER M12	3.000
010.7642	RONDELLA GROOVER M16	WASHER GROOVER M16	2.000
043.0654	RUBINETTO M/F 3/4 CL 6310	M/F 3/4 CL 6310 TAP	2.000
043.0653	RUBINETTO M/F 3/8 CL 6310	M/F 3/8 CL 6310 TAP	1.000
010.7006	ANELLO SEEGER 0 20	0 20 SEEGER RING	2.000
010.8501	SPINA CILINDRICA DIAM. 10 X 20	PARALLEL PIN DIAM.10 X 20	2.000
007.4145	SQUADRETTO X LIQUIDO PIANO GIREVO-LE	PLATE F.ROTATING TABLE SH 330 CNC 60	1.000
010.4306	STAFFA AGGAN. CILIN. DISCESA TESTA CULLASPM	DOWN STROKE M.P.S.CYL.COUPLER BRACKET	1.000
028.0394	TUBO LOOC LINE 1/2 ART. 59861	LOOC LINE HOSE 1/2	1.000
010.7831	VITE BUTON 5X12	5 X 12 BUTON SCREW (010.7831)	12.000
044.1278	VALVOLA BLOCCAGGIO PIANO GIREVOLE V3 DC	ROTATING TABLE LOCKING VALVE V. 24 DC	1.000
022.0429	CONNETTORE ELETTROVALVOLA IN DC+LED+FILTRO V1401	ELECTROVALVE CONNECTOR IN DC+LED+FILTER	1.000
010.2837	GUIDA PATTINO HGW35- HC- 2- E30 R1100 ZBH	SIDE GUIDE HGW35- HC- 2- E30 R1100 ZBH	1.000
028.0391	TUBO LOOC LINE SPD ART.69540 3/4	LOOC LINE HOSE SPD ART.69540 3/4	1.000
028.0401	RACCORDO 3/4 SPD FP50.17A20	FITTING 3/4 SPD FP50.17A20	1.000
043.0180	RIDUZIONE M 3/4- F 3/8	REDUCTION M 3/4- F 3/8	1.000
010.7942	VITE TCEI 12 X 40	TCEI 12 X 40 SCREW	1.000
010.7702	SPINA CILINDRICA DIAM. 8 X 20	CYLINDRICAL PIN DIAM. 8 X 20	1.000
044.1058	CILINDRO IDRAULICO 0 60X30X370	DOWN STROKE HYDR.CYL.0 60X30X370	1.000
044.1352	TRASDUTTORE LINEARE TLH450 025318	LINEAR POTENTIOMETER TLH450 025318 X SH	1.000
010.2318	TRAVE QUADRO COMANDI	CONSOLE BEAM	1.000
001.5112	COLONNA SUPERIORE CULLA SPM	CRADLE UPPER COLUMN SPM	1.000
001.5113	COLONNA INFERIORE CULLA SPM	CRADLE LOWER COLUMN SPM	1.000
022.0378	CONNETTORE V.1406 X BOBINA RAC VAL-VOLA	CONNECTOR F.REGENERATOR VALVE COIL	1.000
016.2538	CARTER COLONNE	COLUMNS GUARD	1.000
028.0390	UGELLO DA 3/4 75X5	NOZZLE 3/4 75X5	1.000
028.0389	UGELLO DA 1/2 60X3	NOZZLE 1/2 60X3	1.000

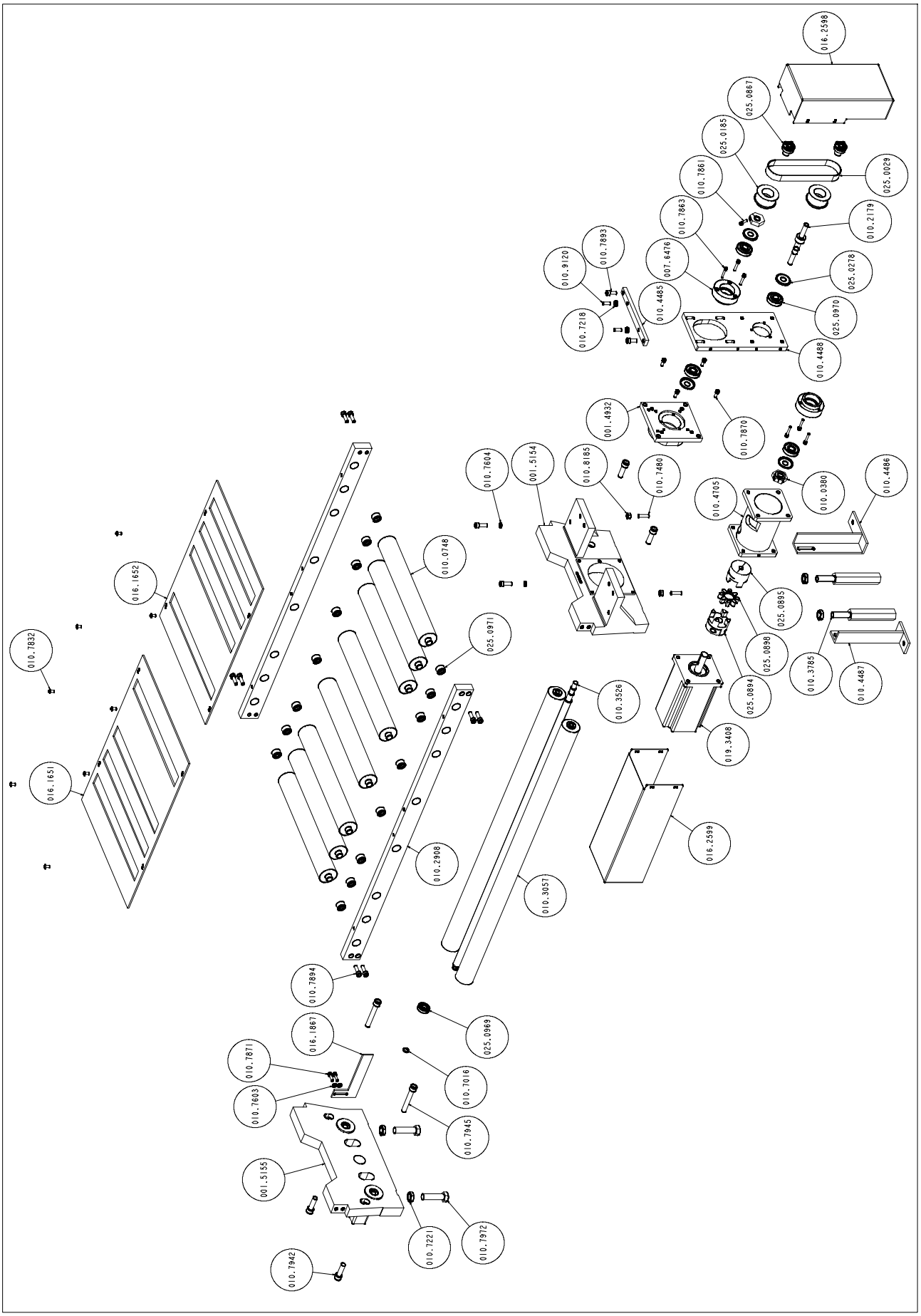
Cutting plane unit



Code	Description	Description	Quantity
010.7221	DADO M16 BASSO	M16 LOW SCREW NUT (010.7221)	8.000
010.2307	DISTRIBUTORE TUBI IDRAULICI MORSE VERT.	VERT.VICE HYDR.TUBE DISTRIBU.- SH310CNCHS	1.000
034.1001	LEVA A SCATTO 8 MA PK55	LEVER 8 MA PK55	1.000
010.7971	VITE TE 16 X 40	TE 16 X 40 SCREW	4.000
025.0047	MANICOTTO A SFERA 0658.030.00 AL.TI	BALL SLEEVE 0658.030.00 AL. TI	1.000
044.0503	NIPPLO IDRAULICO M 3/8- M 1/4	HYDRAULIC FITTING M 3/8 M 1/4	2.000
044.0501	NIPPLO NP 1/4 IDRAULICO	NP 1/4 HYDRAULIC NIPPLE	2.000
043.0340	RONDELLA RAME 13X19X1,5- 1/4	13X19X1,5- 1/4 COPPER WASHER	4.000
002.0114	SQUADRO MORSA SINISTRO SH 310 CN-CHS M.1639	LEFT VICE BACK STOP SH 310 CNC HS / H14	1.000
043.0260	TAPPO TTE4 1/4 - CL 2611	1/4 TAP TTE4	2.000
002.0303	SCORREVOLE MORSA SH 310 CNC- HS M.1637	UPPER VICE SH 310 CNC- HS / H14A MOD.1637	1.000
007.4116	SUPPORTO GUIDA SCARICA PEZZI SH 310CNCHS	GUIDE SUPPORT SH 310 CNC HS	1.000
043.0186	RACCORDO FEMMINA 1/2 ACQUASTOP	1/2 WATERASTOP FEMALE JOINT	1.000
028.0010	PISTOLA SH- TI ART. 8966	COOLANT PISTOL SH- TI 8966	1.000
016.2374	CARTER ANTERIORE SCARICO TRUCIOLI SH310	FRONT COVER UNLOAD CHIP SH 310 CN-CHS	1.000
016.2375	CARTER POSTERIORE SCARICO TRUCIOLI SH310	REAR COVER UNLOAD CHIP SH 310 CN-CHS /H14	1.000
028.0396	UGELLO 0 20 SPD FP50.11B50	NOZZLE 0 20 SPD FP50.11B50	1.000
028.0391	TUBO LOOC LINE SPD ART.69540 3/4	LOOC LINE HOSE SPD ART.69540 3/4	1.000
028.0401	RACCORDO 3/4 SPD FP50.17A20	FITTING 3/4 SPD FP50.17A20	1.000
043.0192	RACCORDO RB 9889 3/4X20	RB 9889 JOINT 3/4X20	1.000
043.0654	RUBINETTO M/F 3/4 CL 6310	M/F 3/4 CL 6310 TAP	1.000
007.6573	TASSELLO SCARICO TRUCIOLI MORSA SH 310	CHIP UNLOADING VICE INSERT SH 310 CNC HS	1.000
028.0121	RACCORDO 3/8- 17 CL 2601	JOINT 3/8- 17 CL 2601	1.000
043.0252	GOMITO MF 3/8 CL 2020	MF 3/8 CL 2020 ELBOW	1.000
043.0180	RIDUZIONE M 3/4- F 3/8	REDUCTION M 3/4- F 3/8	1.000
043.0223	RACCORDO TE FFF ZINCATO 3/4	TE FFF GALVANISED 3/4 JOINT	1.000
010.1628	STAFFA TRASCINAMENTO TESTINA GUI-DALAMA	FRONT BAND GUIDE DRAG.BRACKET NT H14A	1.000
010.2899	GUIDA PATTINO RGW25- HC- 2- R0640- E20- ZA- H	CUT VICE RUNNER BLOCK SH 310 CNC-HS	1.000
010.7873	VITE TCEI 6 X 30	TCEI 6 X 30 SCREW (010.7873)	1.000
010.7896	VITE TCEI 8 X 35	TCEI 8 X 35 SCREW	1.000
010.0688	GANASCIA MOB. DX MORSA CON SCARI-CO	RIGHT MOVABLE VICE JAW WITH DI-SCHARGE	1.000
010.0657	GANASCIA MORSA MOBILE SINISTRA	LEFT MOVABLE VICE JAW	1.000
010.7870	VITE TCEI 6 X 16	TCEI 6 X 16 SCREW (010.7870)	1.000
010.7877	VITE TCEI 6 X 45	TCEI 6 X 45 SCREW	1.000
044.1057	CILINDRO IDRAULICO 0 50X25X378	CUT.VICE HYDR.CYL 0 50X25X378 SH310CNCHS	1.000
010.7607	RONDELLA 0 16	0 16 WASHER (010.7607)	1.000
016.2418	PROTEZIONE GANASCIA MOB. L. SCARICO H14A	MOV.JAW PROTEC.UNLOADER SIDE H14A	1.000
010.4058	PIASTRA APPOGGIA PEZZI H14A	WORKING TABLE PLATE H14A	1.000
010.3084	GUIDA APPOGGIA PEZZI H- 14A	WORKING TABLE GUIDE H- 14A	1.000
010.3086	GUIDA SCORREVOLE MORSA H14A	UPPER VICE GUIDE H14A	1.000
010.4959	PIANO DI TAGLIO H14A	CUTTING TABLE H14A	1.000
010.3085	GUIDA SCORREVOLE MORSA LATO SCARI-CO H14A	UNLOADING UPPER VICE GUIDE H14A	1.000
001.5142	MORSA H- 14A MOD. 1647	VICE H- 14A MOD. 1647	1.000
010.2349	ASTA PER GUIDA SCARICA PEZZI H14A	UNLOADER GUIDE ROD H14A	1.000
010.7894	VITE TCEI 8 X 25	TCEI 8 X 25 SCREW (010.7894)	1.000
010.0655	GANASCIA MORSA FISSA SINISTRA	LEFT FIX. VICE JAW H14A	1.000
007.8192	SPESSORE GUIDA APPOGGIA PEZZI	GUIDE SPACER PIECES SUPPORTS	1.000
010.7924	VITE TCEI 10 X 30	TCEI 10 X 30 SCREW (010.7924)	1.000
016.1267	PIASTRA GUIDA SCARICA PEZZI	UNLOADER GUIDE PLATE H14A	1.000
010.7989	VITE TSPEI 6 X 20	TSPEI 6 X 20 SCREW	1.000
010.7895	VITE TCEI 8 X 30	TCEI 8 X 30 SCREW	1.000
010.0687	GANASCIA FISSA DX MORSA CON SCARI-CO	FIXED RIGHT JAW VICE WITH DISCHARGE	1.000
016.0566	GUIDA SCARICA PEZZI	UNLOADER GUIDE H14A	1.000
043.0219	RACCORDO A - T- MFF 1/4' CL- 2070 310I	MFF 1/4" CL- 2070 310I T JOINT	1.000

Code	Description	Description	Quantity
010.1201	VITERIA E BULLONERIA	SCREWS AND BOLTS	1.000
002.0113	SQUADRO MORSA DESTRO	RIGHT VICE BACK STOP SH 310 CNC - HS	1.000
016.1278	PIANO SCARICAPEZZI	DISCHARGE PIECES CUTTING PLANE	1.000

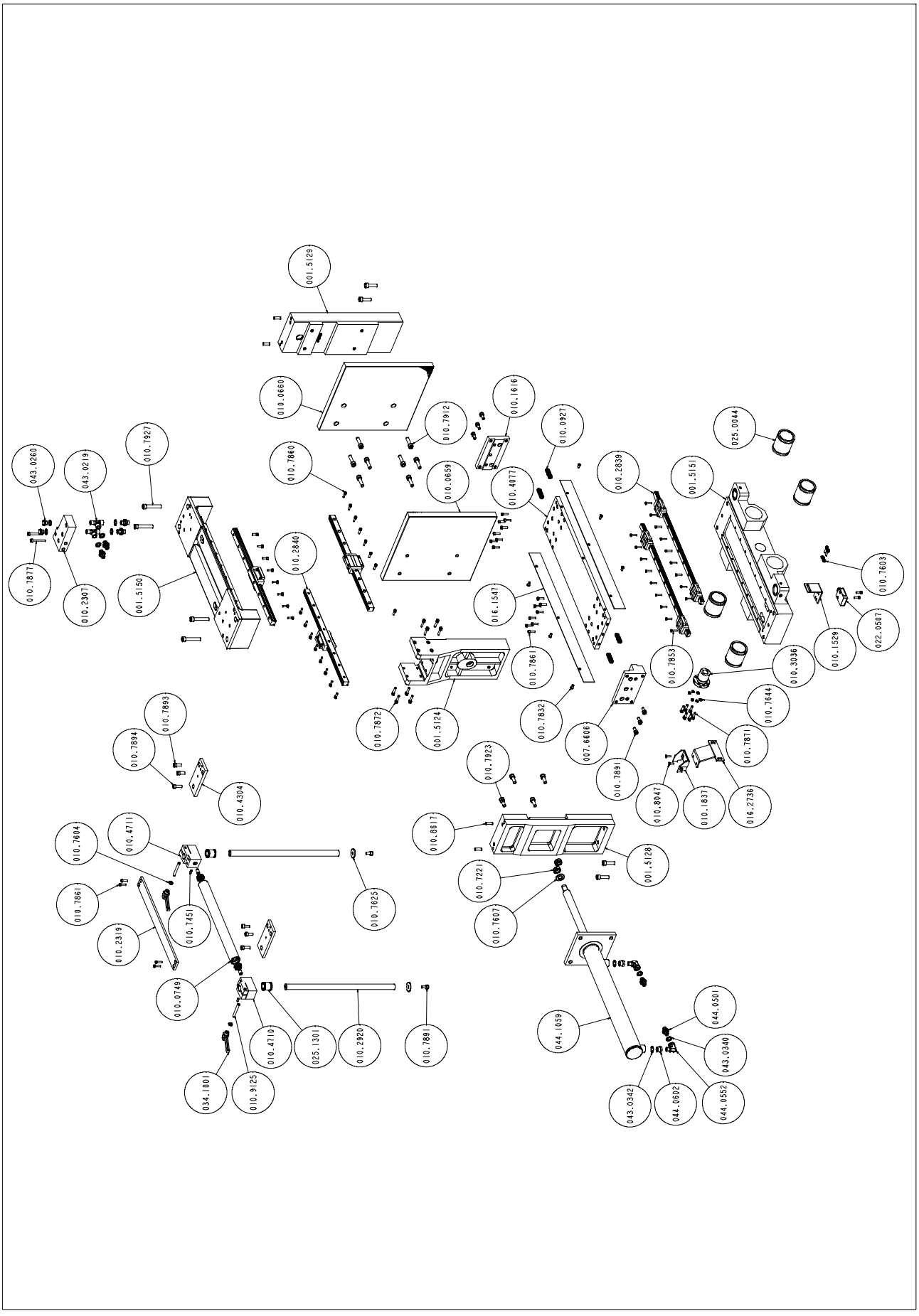
Feeder roller conveyor group



Code	Description	Description	Quantity
025.0970	CUSCINETTO 30302J2	BEARING	2.000
025.0969	CUSCINETTO 6002 2Z	BEARING	1.000
025.0971	CUSCINETTO 1 RULLINO HK 1712	BEARING 1 RULLER HK 1712	16.000
010.7221	DADO M16 BASSO	M16 LOW SCREW NUT (010.7221)	4.000
010.8185	DADO M8 ALTO	M8 HIGH NUT	2.000
010.0380	GHIERA FISSAGGIO VITE RICIRCOLO ALIMENTATORE SH N.T.	FIXING RING NUT FOR FEEDER	1.000
010.3057	GUIDA CARRELLO 0 50 L.956,5 S10A SH 500- SH 400	CARRIAGE GUIDE 0 50	2.000
010.2908	GUIDA RULLI ALIMENTATORE SH 310 CNC-HS	FEEDER ROLLER GUIDE SH 310 CNC- HS	2.000
010.7942	VITE TCEI 12 X 40	TCEI 12 X 40 SCREW	4.000
010.7945	VITE TCEI 12 X 80	TCEI 12 X 80 SCREW	2.000
010.7972	VITE TE 16X60	TE 16 X 60 SCREW	4.000
010.7861	VITE TCEI 5 X 20	TCEI 5 X 20 SCREW (010.7861)	1.000
010.7863	VITE TCEI 5 X 30	TCEI 5 X 30 SCREW	3.000
010.7832	VITE BUTON 6 X 12	BUTON SCREW 6 X 12	8.000
010.7870	VITE TCEI 6 X 16	TCEI 6 X 16 SCREW (010.7870)	4.000
010.7871	VITE TCEI 6 X 20	TCEI 6 X 20 SCREW (010.7871)	2.000
010.7894	VITE TCEI 8 X 25	TCEI 8 X 25 SCREW (010.7894)	20.000
010.7480	GRANO VCE PUNTA PIANA 8 X 30	8 X 30 FLAT POINT VCE GRUB SCREW	2.000
007.6476	MANICOTTO VITE RICIRCOLO ALIMENTATORE SH 500- 420	SLEEVE FOR RECIRCULATING BALLSCREW	1.000
025.0895	MOZZO 1A RTX 24 AL- H12 ALIMENTATORE-SH 310 CNC- HS	HUB 1A RTX 24 AL- H- 12- FEEDER	1.000
025.0894	MOZZO 1A RTX 24 AL- H- 19- 2,6- ALIMEN.S20A	HUB 1A RTX 24 AL- H- 19- 2,6- S20A FEEDER	1.000
010.7603	RONDELLA 0 6	0 6 WASHER (010.7603)	2.000
010.7604	RONDELLA 0 8	0 8 WASHER (010.7604)	2.000
010.7016	ANELLO SEEGER DIAM. 12	0 12 SEEGER RING	1.000
016.1867	STAFFA COMANDO FINECORSA ALIMENTATORESH 310 CNC- HS	FEEDER LIMIT SWITCH COM.BRACKET SH310CNC	1.000
025.0898	STELLA RTX 24 98 GS - ALIMENTATORE S20A	STAR COUPLING RTX 24 98 GS- S20A FEEDER	1.000
001.4932	SUPPORTO VITE A RICIRCOLO DI SFERE SH 500- 420	RECIRCULATING BALL SCREW SUPPORT	1.000
010.4705	SUPPORTO MOTORE P/P X ALIMENTORE S20ASH 410 - SH 420	STEP MOTOR HOLDER, S20A FEEDER SH310	1.000
025.0278	ANELLO DI PROTEZIONE NILOS 30302 AV	NILOS SEAL RING 30302 AV	2.000
001.5155	STAFFA ANTERIORE ALIMENTATORE H- 14A	FEEDER FRONT BRACKET H- 14A M.1650	1.000
016.1651	COPERCHIO ANTERIORE ALIMENTATORE H14A	FEEDER FRONT COVER H14A	1.000
016.1652	COPERCHIO POSTERIORE ALIMENTATORE H14A	FEEDER REAR COVER H14A	1.000
010.0748	RULLO ALIMENTATORE 0 50 H14A MM 366	FEEDER ROLLER 0 50 H14A	1.000
001.5154	STAFFA POSTERIORE ALIMENTATORE H- 14A	FEEDER REAR BRACKET H- 14A M.1649	1.000
019.3408	MOTORE P/P FL110STH150- 1304A- H- 1 X ALIM.	STEP MOTOR SHUTTLE VICE SH 410- S20- H14A	1.000
016.2599	PROTEZIONE MOTORE ALIMENTATORE SH 350	FEEDER MOTOR GUARD	1.000
010.3785	PERNO DI REGISTRO ALIMENTATORE SH 350	PIN FEEDER REGISTRY	1.000
010.4487	SUPPORTO SINISTRO STAFFA POSTERIORE ALIM	SUPPORT LEFT BRACKET REAR FEEDER	1.000
010.4486	SUPPORTO DESTRO STAFFA POSTERIORE ALIM.	SUPPORT RIGHT BRACKET REAR FEEDER	1.000
010.4488	SUPPORTO MOTORE P/P X ALIMENTORE SH 350	MOTOR P/P SUPPORT	1.000
010.2179	ALBERO CUSCINETTI RINVIO MOTORE PP SH350	SHAFT BEARING TRANSMISSION MOTOR PP	1.000
025.0029	CINGHIA DENTATA METRICA PASSO 8 LARGH.20	TOOTHED BELT METRIC PITCH 8 WIDTH.21	1.000
016.2598	CARTER CINGHIA ALIMENTATORE SH 350	FEEDER BELT PROTECTION	1.000

Code	Description	Description	Quantity
025.0867	CALETTATORE TLK 110 12X18 SH 652 SXI EVO	KEY TLK 110	1.000
025.0185	PULEGGIA DENTATA METR. PASSO 8 22 DENTI	WHEEL 22 8M 20	1.000
010.7218	DADO M8 BASSO	M8 LOW SCREW NUT	1.000
010.4485	STAFFA TENSIONAM. CINGHIA ALIMENTA-TORE	TENSIONING BRACKET FEEDER BELT	1.000
010.9120	GRANO VCE PUNTA PIANA 8 X 20	8X20 FLAT POINT GRUB SCREW	1.000
010.7893	VITE TCEI 8 X 20	TCEI 8 X 20 SCREW	1.000
010.3526	VITE A RICIRCOLO DI SFERE R20- 10K3- FSCEW	FEEDER SCREW + SCREW NUT ASSEM-BLED	1.000

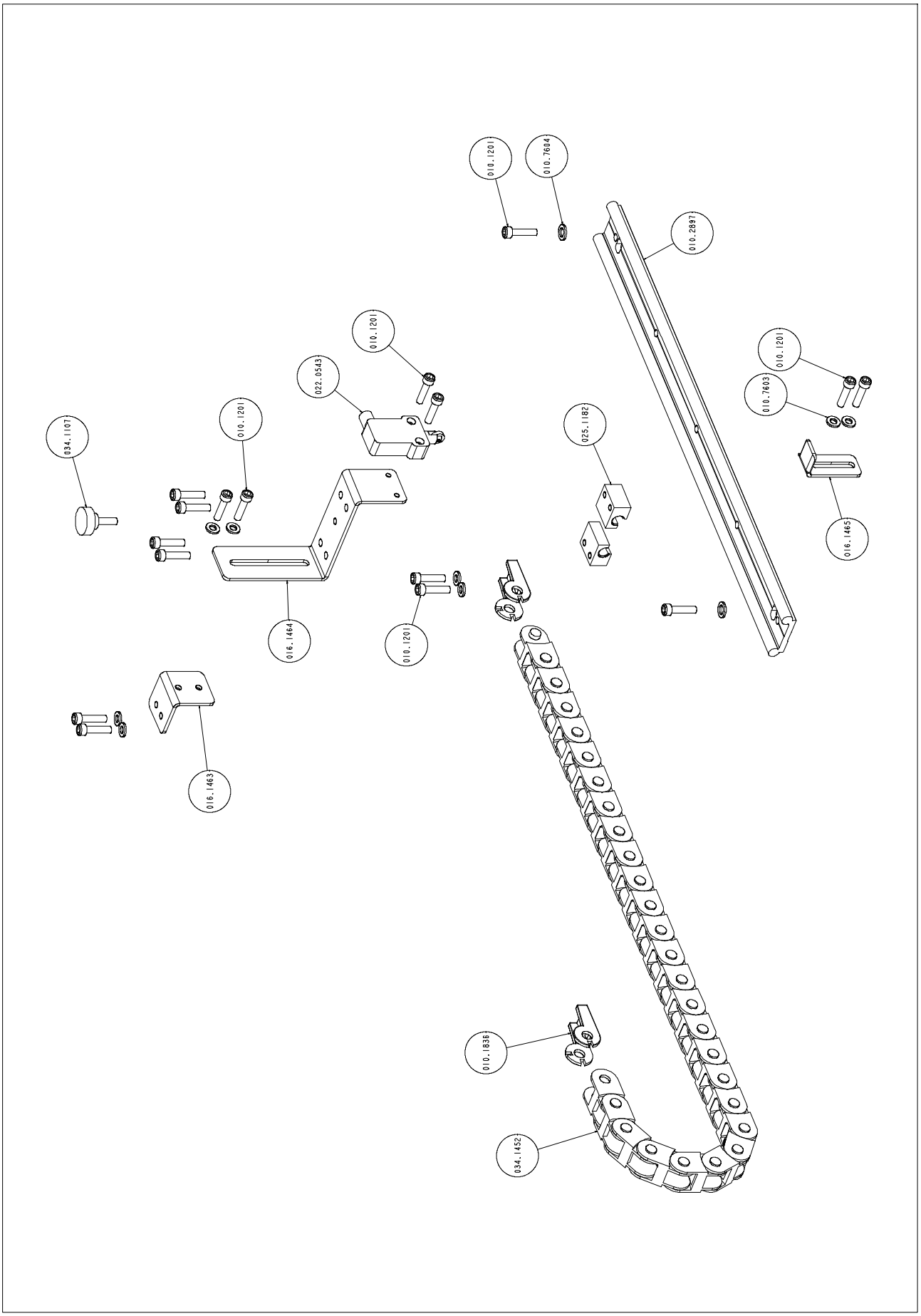
Feed carriage unit



Code	Description	Description	Quantity
010.2840	GUIDA PATTINO HGW20 CC1 R0465 E20 Z0C	SIDE GUIDE HGW20 CC1 R0465 E20 Z0C	3.000
010.3036	CHIOCCIOLA R2010T2FSI C7A10UC1A1 X ALIMENTATORI SH NC	FE. SCREW R2010T2FSI C7A10UC1A1 X FEEDER	1.000
010.7221	DADO M16 BASSO	M16 LOW SCREW NUT (010.7221)	2.000
010.2307	DISTRIBUTORE TUBI IDRAULICI MORSE VERT.SH 310 CNC HS	VERT.VICE HYDR.TUBE DISTRIBU.- SH310CNCHS	1.000
022.0507	FINECORSA D4C- 1902 2M ALIM. CNCFE	LIMIT SWITCH F.FEEDER CNCFE NC EVO	1.000
010.2839	GUIDA PATTINO HGW- 15 CC2 R0550 E20 Z0C	SIDE GUIDE HGW- 15 CC2 R0550 E20 Z0C	2.000
034.1001	LEVA A SCATTO 8 MA PK55	LEVER 8 MA PK55	2.000
010.7923	VITE TCEI 10 X 25	TCEI 10 X 25 SCREW (010.7923)	4.000
010.7912	VITE TCEI 10 X 35	TCEI 10 X 35 SCREW	12.000
010.7927	VITE TCEI 10 X 60	TCEI 10 X 60 SCREW (010.7927)	4.000
010.7853	VITE TCEI 4 X 20	TCEI 4 X 20 SCREW (010.7853)	18.000
010.7860	VITE TCEI 5 X 15	TCEI 5 X 15 SCREW (010.7860)	18.000
010.8047	VITE TSPEI 5 X 16	TCIC M5 X 16 SCREW	2.000
010.7861	VITE TCEI 5 X 20	TCEI 5 X 20 SCREW (010.7861)	20.000
010.7832	VITE BUTON 6 X 12	BUTON SCREW 6 X 12	8.000
010.7451	GRANO VCE PUNTA CONICA 6 X 12	6 X 12 CONICAL POINT VCE GRUB SCREW	2.000
010.7871	VITE TCEI 6 X 20	TCEI 6 X 20 SCREW (010.7871)	8.000
010.7872	VITE TCEI 6 X 25	TCEI 6 X 25 SCREW (010.7872)	8.000
010.7877	VITE TCEI 6 X 45	TCEI 6 X 45 SCREW	2.000
010.7891	VITE TCEI 8 X 16	TCEI 8 X 16 SCREW (010.7891)	2.000
010.7893	VITE TCEI 8 X 20	TCEI 8 X 20 SCREW (010.7893)	4.000
010.7894	VITE TCEI 8 X 25	TCEI 8 X 25 SCREW (010.7894)	2.000
010.9125	GRANO VCE PUNTA PIANA 8 X 60	8X60 FLAT POINT GRUB SCREW	2.000
025.1301	MANICOTTO A SFERA KH2030PP ALIM.SH 31010	FEEDER SPHERE SLEEVE KH 2030PP SH 310	2.000
025.0044	MANICOTTO A RICIRCOLO DI SFERE KH 5070 PP SH 400	RECIRCULATING BALL SLEEVE SH400	4.000
010.0927	MOLLA CARRELLO ALIMENTATORE CNCFE	FEEDER CARRIAGE SPRING CNCFE	4.000
044.0501	NIPPLO NP 1/4 IDRAULICO	NP 1/4 HYDRAULIC NIPPLE	2.000
043.0340	RONDELLA RAME 13X19X1,5- 1/4	13X19X1,5- 1/4 COPPER WASHER	4.000
043.0342	RONDELLA RAME 3/8	3/8 COPPER WASHER	2.000
010.7607	RONDELLA 0 16	0 16 WASHER (010.7607)	2.000
010.7603	RONDELLA 0 6	0 6 WASHER (010.7603)	2.000
010.7604	RONDELLA 0 8	0 8 WASHER (010.7604)	2.000
010.7625	RONDELLA 0 8 X 32	0 8 X 32 WASHER	2.000
010.7644	RONDELLA GROOVER M6	WASHER GROOVER M6	6.000
001.5124	SCORREVOLE MORSA ALIMENTATORE	FEEDER SLIDING VICE	1.000
010.1837	SET ATTACCHI 905.010- 905.011 AX- CNC	ATTACHMENTS SET AX- CNC	1.000
010.4304	STAFFA FISSAGGIO PREMIBARRA ALIMENTAT.SH 310 CNC- HS	FEEDER PUSH BAR FIX BRACKET	2.000
010.1529	STAFFA FISSAGGIO FINECORSA AZZERAMENTOALIMENTATORE	FEEDER ZEROING FIX BRACKET	1.000
010.4710	SUPPORTO RULLO PREMIBARRA ANTERIORE	FRONT ROLLER PUSH BAR SUP.	1.000
010.4711	SUPPORTO RULLO PREMIBARRA POSTERIORE	REAR ROLLER PUSH BAR SUP.	1.000
043.0260	TAPPO TTE4 1/4 - CL 2611	1/4 TAP TTE4	2.000
010.1616	TASSELLO PIASTRA BASCULANTE	BALANCING INSERT PLATE	2.000
010.2319	ASTA COLLEGAMENTO SUPPORTO PREMIBARRA	FEEDER PUSHBAR SUP.ROD JOINT	1.000
010.0749	RULLO PREMIBARRA COMPLETO ALIM.	BAR PUSH ROLLER COMP.FEEDER	1.000
010.2920	GUIDA SCORRIMENTO RULLO PREMIBARRA	FEEDER PUSH BAR ROLLER GUIDE	1.000
044.1059	CILINDRO IDRAULICO 0 50X25X380 ALIM H14A	FEEDER HYDR.CYL.0 50X25X380	1.000
044.0552	RACCORDO A GOMITO IDRAULICO MF 1/4 ALTA	HYDR. ELBOW JOINT M/F 1/4 HIGH PRESSURE	1.000
044.0602	RIDUZIONE 3/8 - 1/4 MF IDRAULICA	MF 3/8 - 1/4 HYDRAULIC REDUCTION	1.000
016.2736	STAFFA FIX. CATENA ALMENTATORE	FIX BRACKET FEEDER CHAIN	1.000
007.6606	TASSELLO PIASTRA BASCULANTE ALIM.	SPRING SUPPORT OF FEEDER TROLLEY BALANCE	1.000

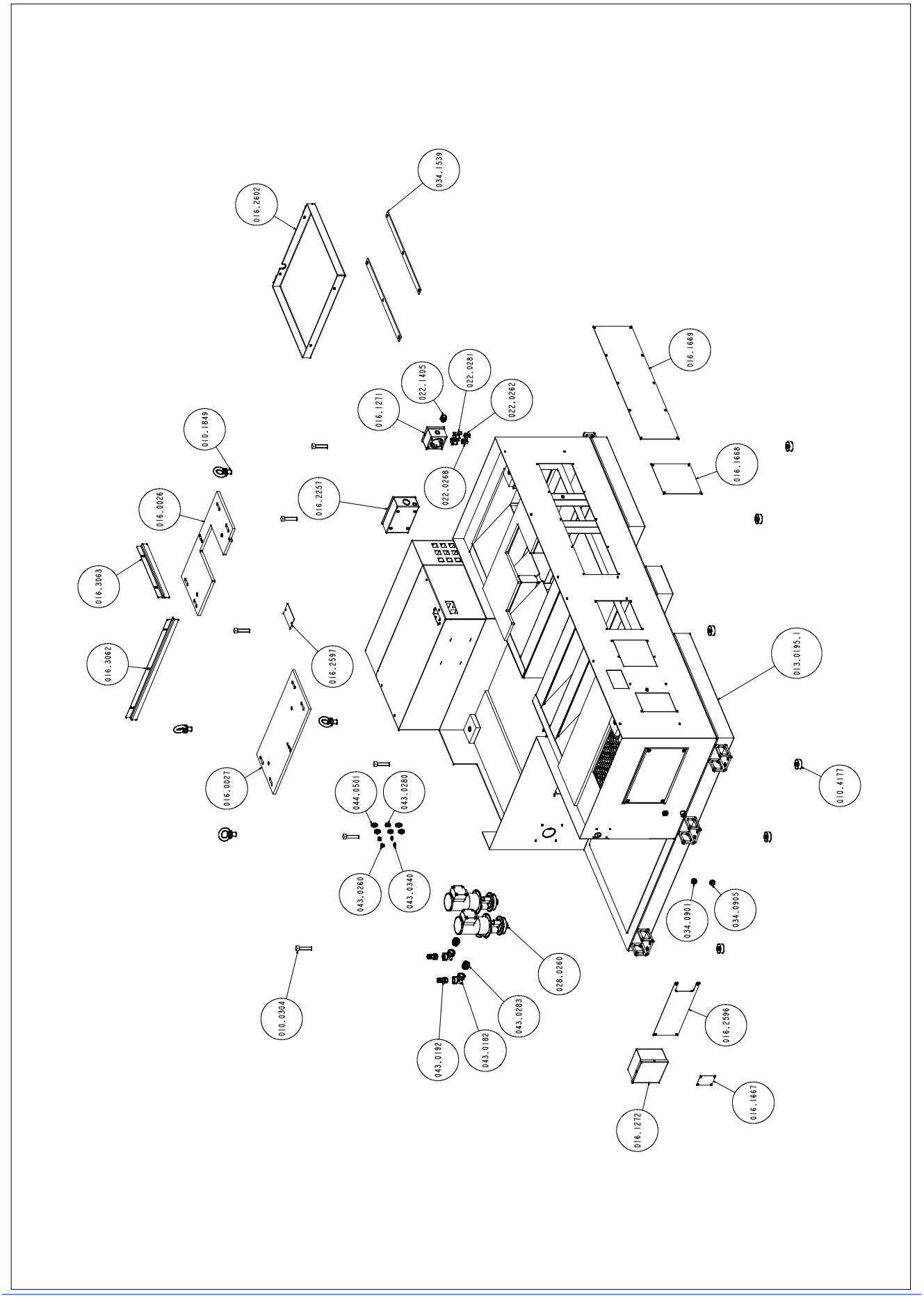
Code	Description	Description	Quantity
010.0659	GANASCIA MOBILE ALIMENTATORE H14A	FEEDER MOV. JAW H14A	1.000
010.4077	PIASTRA BASCULANTE CARRELLO ALI-MENT H14A	FEEDER TROLLEY BALANCE. PLATE H14A	1.000
001.5151	CARRELLO ALIMENTATORE H- 14A MOD. 1625	FEEDER CARRIGE H- 14A MOD. 1625	1.000
016.1547	COPERTURA PATTINI SLITTA BASCULANTE	FEEDER BALANCE RUNNER BLOCK SLIDE COVER	1.000
010.0660	GANASCIA FISSA ALIMENTATORE H14A	FEEDER FIX. JAW H14A	1.000
010.8617	SPINA CILINDRICA DIAM. 8 X 25	PARALLEL PIN DIAM.8 X 25	1.000
001.5150	TRAVE CARRELLO ALIMENTATORE H- 14A	FEEDER CARRIGE BEAM H- 14A M.1648	1.000
001.5128	COLONNA ANTERIORE ALIMENTATORE SH 350	FRONT FEEDER COLUMN	1.000
010.7891	VITE TCEI 8 X 16	TCEI 8 X 16 SCREW (010.7891)	1.000
043.0219	RACCORDO A - T- MFF 1/4’ CL- 2070 310I	MFF 1/4” CL- 2070 310I T JOINT	1.000
001.5129	COLONNA POSTERIORE ALIMENTATORE SH 350	REAR FEEDER COLUMN	1.000

Limit switch device presence bar in feeder



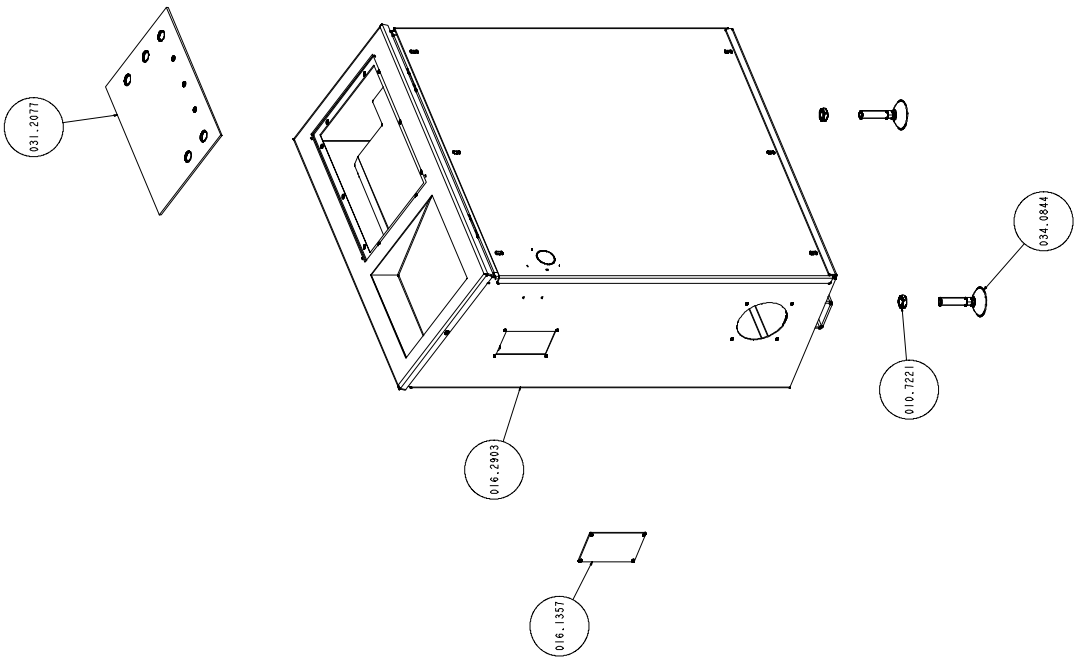
Code	Description	Description	U. of M.	Quantity
034.1452	CATENA PORTACAVI E14.1.048.0 SMV	CABLES CHAIN SMV	PZ	1
010.1836	SET ATTACCHI 114.1.12.P SMV	ATTACHMENTS SET SMV	PZ	1
016.1463	STAFFA FISSAGGIO CATENA PORTA-CAVI	CABLE CHAIN FIXING BRACKET FEEDER S20A	PZ	1
034.1107	VOLANTINO O 30 M6 X 20	O 30 M6 X 20 HANDWHEEL	PZ	1
016.1464	STAFFA FISSAGGIO FINECORSA PRESENZA	BAR FEEDER LIMIT SWITCH FIXING BRAKET	PZ	1
010.7867	VITE TCEI 6 X 10	TCEI 6 X 10 SCREW	PZ	1
010.7868	VITE TCEI 6 X 12	TCEI 6 X 12 SCREW	PZ	1
022.0543	FINECORSA A ROTELLA X SH 230	LIMIT SWITCH	PZ	1
010.7860	VITE TCEI 5 X 15	TCEI 5 X 15 SCREW	PZ	1
010.7895	VITE TCEI 8 X 30	TCEI 8 X 30 SCREW	PZ	1
010.7604	RONDELLA 0 8	0 8 WASHER	PZ	1
010.2897	GUIDA DRYLIN W WS- 10- 40 MM.495 X DISPOS.	DRYLIN GUIDE W WS- 10- 40 MM495	PZ	1
025.1182	PATTINO DRYLIN W 'WSUM- 01- 10'X K40R	SLIDE DRYLIN K40	PZ	1
010.7871	VITE TCEI 6 X 20	TCEI 6 X 20 SCREW	PZ	1
010.7603	RONDELLA 0 6	0 6 WASHER	PZ	1
016.1465	STAFFA COMANDO FINECORSA PRESENZA BARRA	BAR FEEDER LIMIT SWITCH FIXING BRAKET	PZ	1

Base assembly



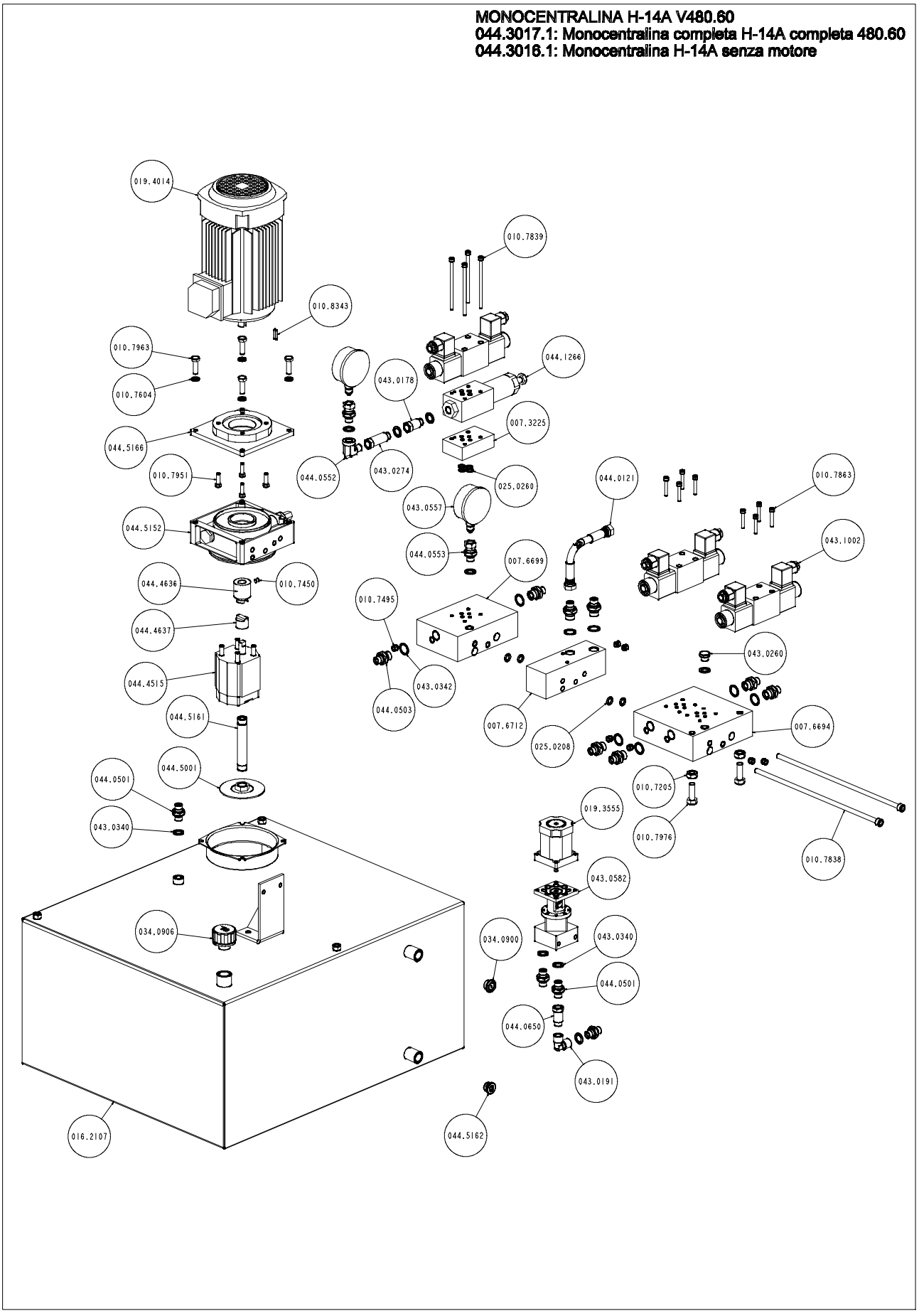
Code	Description	Description	Quantity
028.0260	ELETTROPOMPA V.220- 240/380- 415.50HZ SPV33 &T63SVAAA120- 028	ELECTROPUMP 230- 400.50 HZ SPV33	2.000
043.0283	MANICOTTO 3/4	3/4 SLEEVE	2.000
016.0026	PIASTRA APPOGGIO CULLA SUPERIORE DXSH 310 CNC- HS	RIGHT TOP CRADLE SUP.PLATE SH310CNCHS	1.000
016.0027	PIASTRA APPOGGIO CULLA SUPERIORE SXSH 310 CNC- HS	LEFT TOP CRADLE SUP.PLATE SH310CNCHS	1.000
034.0901	TAPPO LIVELLO OLIO 1/2 'GAS.	1/2" GAS. OIL LEVEL CAP	1.000
034.0905	TAPPO OLIO TAO/3 1/2' NERO	TAO/3 1/2" BLACK OIL CAP	1.000
043.0182	RACCORDO A GOMITO FF ZINCATO 3/4	3/4 ELBOW ZINKED JOINT	1.000
043.0192	RACCORDO RB 9889 3/4X20	RB 9889 JOINT 3/4X20	1.000
044.0501	NIPPLO NP 1/4 IDRAULICO	NP 1/4 HYDRAULIC NIPPLE	1.000
043.0280	MANICOTTO 1/4 M 4/4 - CL 2543	1/4 M 4/4 - CL 2543 SLEEVE	1.000
016.1272	SCATOLA DI GIUNZIONE GRANDE 155X155X100	JUNCTION BOX 155X155X100	1.000
016.1667	COPERCHIO FORO PRED. EV. TRUCIOLI	COVER HOLE PREDISPOSITION CHIP CONVEYOR	1.000
043.0260	TAPPO TTE4 1/4 - CL 2611	1/4 TAP TTE4	1.000
016.2596	CARTER CAVI ALIMENTATORE SH 350	FEEDER CABLES PROTECTION	1.000
043.0340	RONDELLA RAME 13X19X1,5- 1/4	13X19X1,5- 1/4 COPPER WAS-HER	1.000
016.2597	CARTER CASSETTO CENTRALINA	HYDRAULIC UNIT DRAWER COVER	1.000
016.2257	SCATOLA DI DERIVAZIONE CENTRALINA HCH- 18	HYD.UNIT BRANCH BOX HCH- 18/25	1.000
016.1271	SCATOLA DI GIUNZIONE PICCOLA 95X95X70	JUNCTION BOX 95X95X70	1.000
022.0268	FRUTTO PRESA 5P. 10A. CKF04	YIELD SOCKET 5P. 10A. CKF04	1.000
022.1405	PULSANTE M22- D- S NERO COD.216590 + PORTA	BUTTON + CONTACT HOLDER	1.000
022.0281	CUSTODIA PRESA A PARETE 4P. CK03I	SOCKET HOUSING 4P. CK03I	1.000
022.0262	FRUTTO PRESA 4P. 10A. CKF03	YIELD SOCKET 4P. 10A. CKF03	1.000
013.0195.1	PIEDISTALLO SH 350 CNC- HS / H- 14A	BASEMENT	1.000
016.1668	COPERCHIO VASCA ANT. CORTO SH 350	FRONT SHORT COVER TANK	1.000
016.2602	CASSETTO CENTRALINA SH 350	HYD. UNIT DRAWER	1.000
034.1539	POLIZENE X SCORRIMENTO CASSETTO CENTR.	POLIZENE FOR HYD. UNIT DRA-WER	1.000
016.1669	COPERCHIO VASCA ANT. LUNGO SH 350	FRONT LONG COVER TANK	1.000
016.3062	CARTER LIQUIDO BASAMENTO LUNGO SH350- H14	CARTER LIQUID LONG BASE	1.000
016.3063	CARTER LIQUIDO BASAMENTO CORTO SH350- H14	CARTER LIQUID SHORT BASE	1.000
010.4177	PIASTRA LIVELLAMENTO PIEDISTALLO SERIE H	LEVELING PLATE BASAMENT	6.000
010.0304	VITE TESTA QUADRA 19X19 M16X90 MM.	SCREW 19X19 M16X90 MM.	6.000

Control panel



Code	Description	Description	Quantity
010.7221	DADO M16 BASSO	M16 LOW SCREW NUT (010.7221)	1.000
016.2903	QUADRO COMANDI COMPLETO DI QUADRO ELET.	CONSOLE COMPLETE WITH ELECTRICAL PANEL	1.000
031.2077	CONSOLLE DI PROGRAMMAZIONE MEP 50 TOU-CH- SCREEN 7 INCH X NC EVO - SH 230 NC HS	PROGRAMMING CONSOLLE MEP50 TS 7INCH NC	1.000
016.1357	TAPPO CHIUSURA QUADRO COMANDI H- 14A	CAP CLOSING PANEL H14A	1.000
034.0844	PIEDINO COMPLETO DI DADO X PIANALE K60 IR	FOOT WITH NUT FOR K 60 IR	1.000

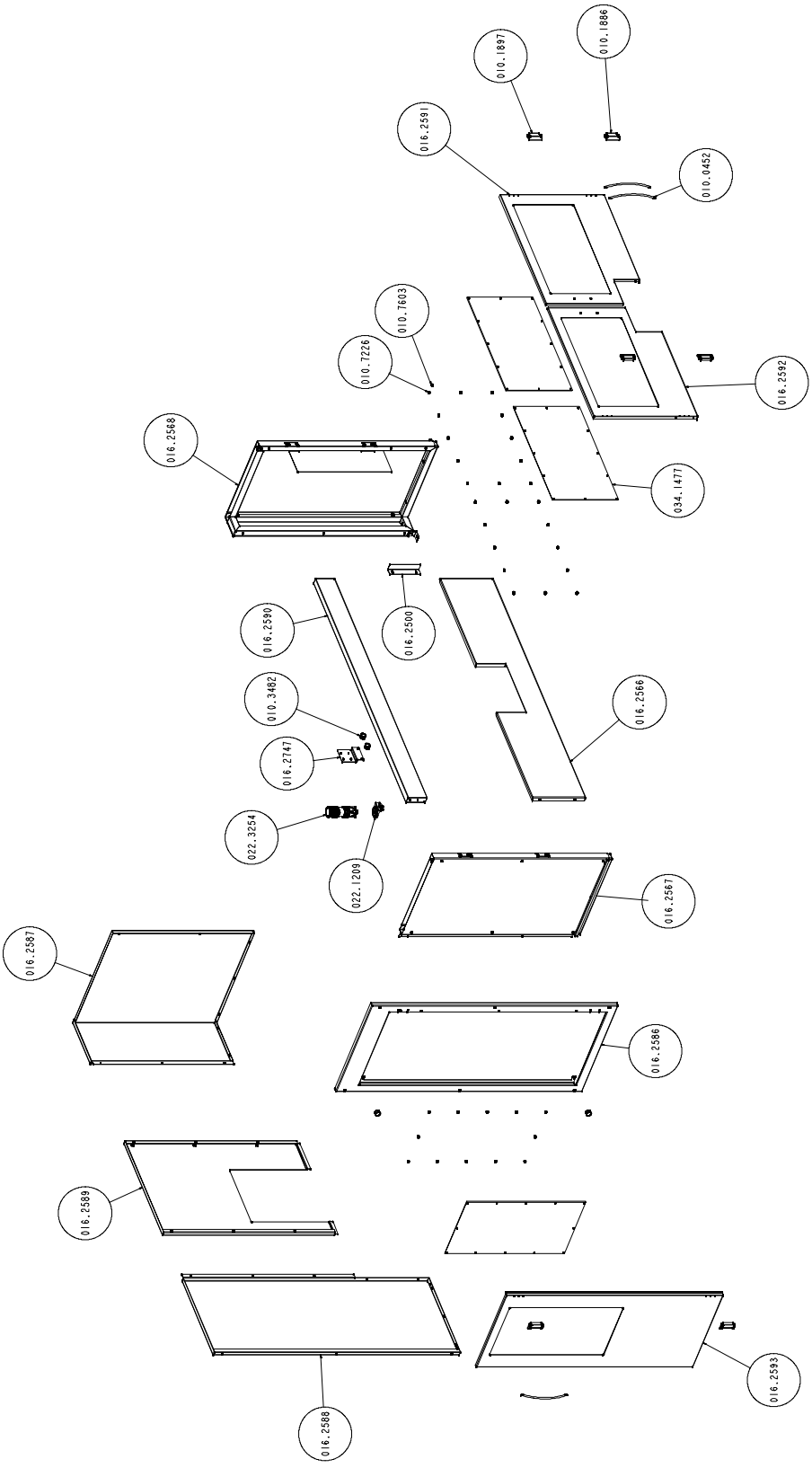
Hydraulic group



Code	Description	U. of M.	Quantity
043.1002	ELETTROVALVOLA MD 1L- S1/10N- D24K1 CON BOBINA X CENTRALINA SXI- EVO	ELECTROVALVE FOR HYDRAULIC UNIT SXI EVO	3.000
044.5152	COLLETTORE PER POMPA DA 5 X NC- EVO	SQUARE FOR PUMP SUPPORT	1.000
043.0582	REGOLATORE DISCESA TESTA MOTORIZZ. X H 14- A (BAFFO B)	POWERED HEAD DOWN STROKE REGULATOR H14A	1.000
025.0208	ANELLO TENUTA OR 109- 9,13	O RING 109- 9,13	22.000
025.0260	ANELLO DI TENUTA OR 20379,25 X 1,78 - 90 SHOREE	O RING 2037	4.000
007.3225	DISTANZIALE VALVOLA REGOLATRICE DIPRESSIONE SH 310 CNC- HS	REGU.PRES.VALVE SPACER SH 310 CNC- HS H14	1.000
044.5001	FILTRO OLIO X CENTRALINA IDRAULICA	OIL FILTER FOR HYDRAULIC UNIT	1.000
044.4636	GIUNTO COLLEGAMENTO LATO MOT. X MONOCENTRALINA SH NC- EVO	CONNECTING COUPLING FOR CENTRAL UNIT	1.000
044.4637	GIUNTO COLLEGAMENTO LATO POMPA X MONOCENTRALINA SH NC- EVO	PUMP CONNECTING COUPLING FOR CENTRALUNIT	1.000
010.8343	CHIAVETTA 5 X 5 X 20	KEY 5 X 5 X 20	1.000
010.7863	VITE TCEI 5 X 30	TCEI 5 X 30 SCREW	8.000
010.7839	VITE TCEI M5 X 95 TCEI	TCEI 5 X 95 SCREW	4.000
010.7951	VITE TE 6 X 20	TE 6 X 20 SCREW (010.7951)	4.000
010.7450	GRANO VCE PUNTA CONICA 6 X 6	6 X 6 CYLINDRICAL POINT VCE GRUB	1.000
010.7838	VITE TCEI M8 X 305 TCEI	TCEI 8 X 305 SCREW	2.000
043.0557	MANOMETRO 0- 60 WIKA P.1275 PER CENTRALINA IDRAULICA	WIKA 0 60 MANOMETER SH 310 SXI	3.000
019.3555	MOTORE F257STH76- 2804 X CILINDRO NC	MOTOR F257STH76- 2804 FOR CYLINDER	1.000
044.0503	NIPPLO IDRAULICO M 3/8- M 1/4	HYDRAULIC FITTING M 3/8 M 1/4	6.000
044.0501	NIPPLO NP 1/4 IDRAULICO	NP 1/4 HYDRAULIC NIPPLE	8.000
007.6699	PANNELLO IDRAULICO 1 POSTOMONOCENTRALINE SH 310 CNC- HS	1POS.HYDR.PANEL MONOUNIT SH310CNC- HS	1.000
007.6694	PANNELLO IDRAULICO 2 POSTIMONOCENTRALINE SH 310 CNC- HS	2POS.HYDR.PANEL MONOUNIT SH310CNC- HS	1.000
044.0650	PROLUNGA 1/4 MF ESAGONALE 36 MM. SH 310SXI	1/4 MF HEX EXTENSION SH310SXI 36 MM	1.000
044.0553	RACCORDO IDRAULICO MF 1/4 GIREVOLE X MANOMETRO CENTRALINA	HYDRAULIC COUPLING FOR POWER PACK MANOM.	3.000
043.0340	RONDELLA RAME 13X19X1,5- 1/4	13X19X1,5- 1/4 COPPER WASHER	11.000
043.0342	RONDELLA RAME 3/8	3/8 COPPER WASHER	6.000
034.0900	TAPPO LIVELLO OLIO SLNT 38 3/8 PH 211 - POS. 210	SLNT 38 3/8 OIL LEVEL CAP	1.000
034.0906	TAPPO OLIO CENTRALINA IDRAULICA SH 310 SXI	HYDRAULIC UNIT OIL CAP SH 310 SXI	1.000
044.5162	TAPPO SCARICO OLIO ”A”AN 612 - 3/8 OR	OIL DRAIN TAP - A- AN 612 - 3/8 OR”	1.000
044.5166	FLANGIA MONOCENTRALINA NC- EVO X MOTORE	POWER PACK MOTOR FLANGE	1.000
043.0274	RACCORDO MF 1/4- 43 CL 2525 SH 330	MF 1/4- 43 CL 2525 SH 330 JOINT	1.000
044.0552	RACCORDO A GOMITO IDRAULICO MF 1/4 ALTA	HYDR. ELBOW JOINT M/F 1/4 HIGH PRESSURE	1.000
010.7976	VITE TE 10 X 30	TE 10 X 30 SCREW (010.7976)	1.000
010.7205	DADO M10	M10 SCREW NUT (010.7205)	1.000
019.4014	MOTORE CENTR.KW 1,1/1,3 C80 4PB14 S6 60%	MOTOR KW 1,1/1,3 C80 4PB14 S6 60%UL- CSA	1.000
010.7963	VITE TE 8 X 25	TE 8 X 25 SCREW (010.7963)	1.000
010.7604	RONDELLA 0 8	0 8 WASHER (010.7604)	1.000
016.2107	SERBATOIO CENTRALINA SH 350 5.0	HYDRAULIC UNIT TANK	1.000
010.7495	GRANO VCE PUNTA PIANA 1/8 GAS	1/8”X9 FLAT POINT VCE GRUB SCREW	1.000
007.6712	PANNELLO IDRAUL. X REGOLATORE PRESSIONE	HYDR.PANEL X REMOTE REGU.- PRES.FUTURO420	1.000
043.0340	RONDELLA RAME 13X19X1,5- 1/4	13X19X1,5- 1/4 COPPER WASHER	1.000
043.0260	TAPPO TTE4 1/4 - CL 2611	1/4 TAP TTE4	1.000
043.0191	RACCORDO A GOMITO CL 2013 FF 1/4	ELBOW JOINT FF 1/4 CL 2013	1.000
044.4515	POMPA IDR. MONOCEN. CC 6,5 VW18APC- H10A-	POWERPACK HYDRAULIC PUMP - A-	1.000

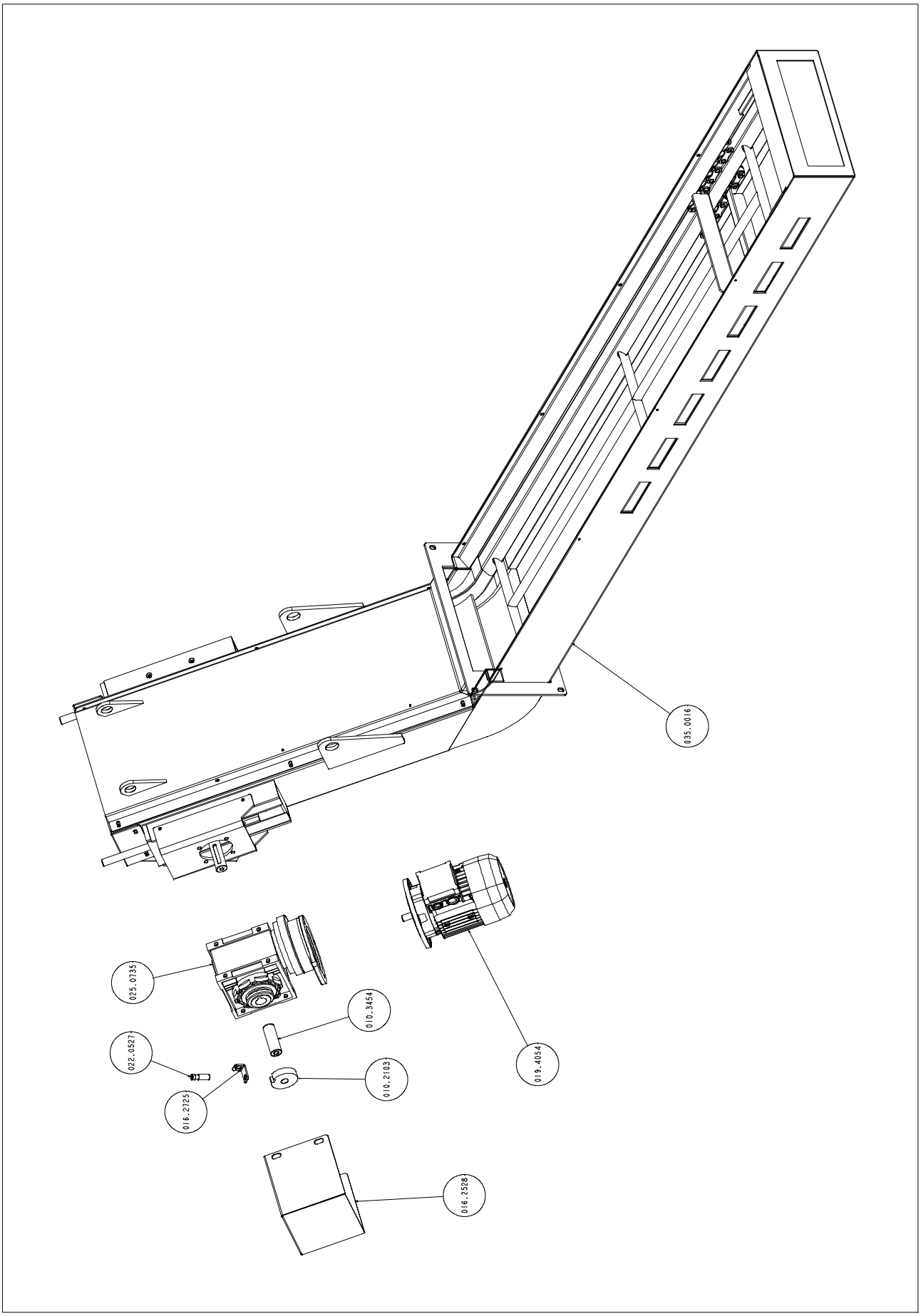
Code	Description	U. of M.	Quantity
044.5161	ASTA PESCANTE VW18P - - A- -	SUCTION ROD VW18P - - A- - L100 2X3/8GAS	1.000
043.0178	RACCORDO MF 1/4- 27 CL 2525	M.F. CONNECTER 1/4- 27 CL 2525	1.000
044.1266	VALVOLA MODULARE RIDUTTRICE DI PRESSIONE	MODULER VALVE PRESS.- REDUC.SH310CNCHS A	1.000
044.0121	TUBO CENTRALINA IDRAULICA R7 1/4 DD 300	HYDR.UNIT HOSE R7 1/4 MM 300	1.000
044.0501	NIPPLO NP 1/4 IDRAULICO	NP 1/4 HYDRAULIC NIPPLE	1.000

Protection group



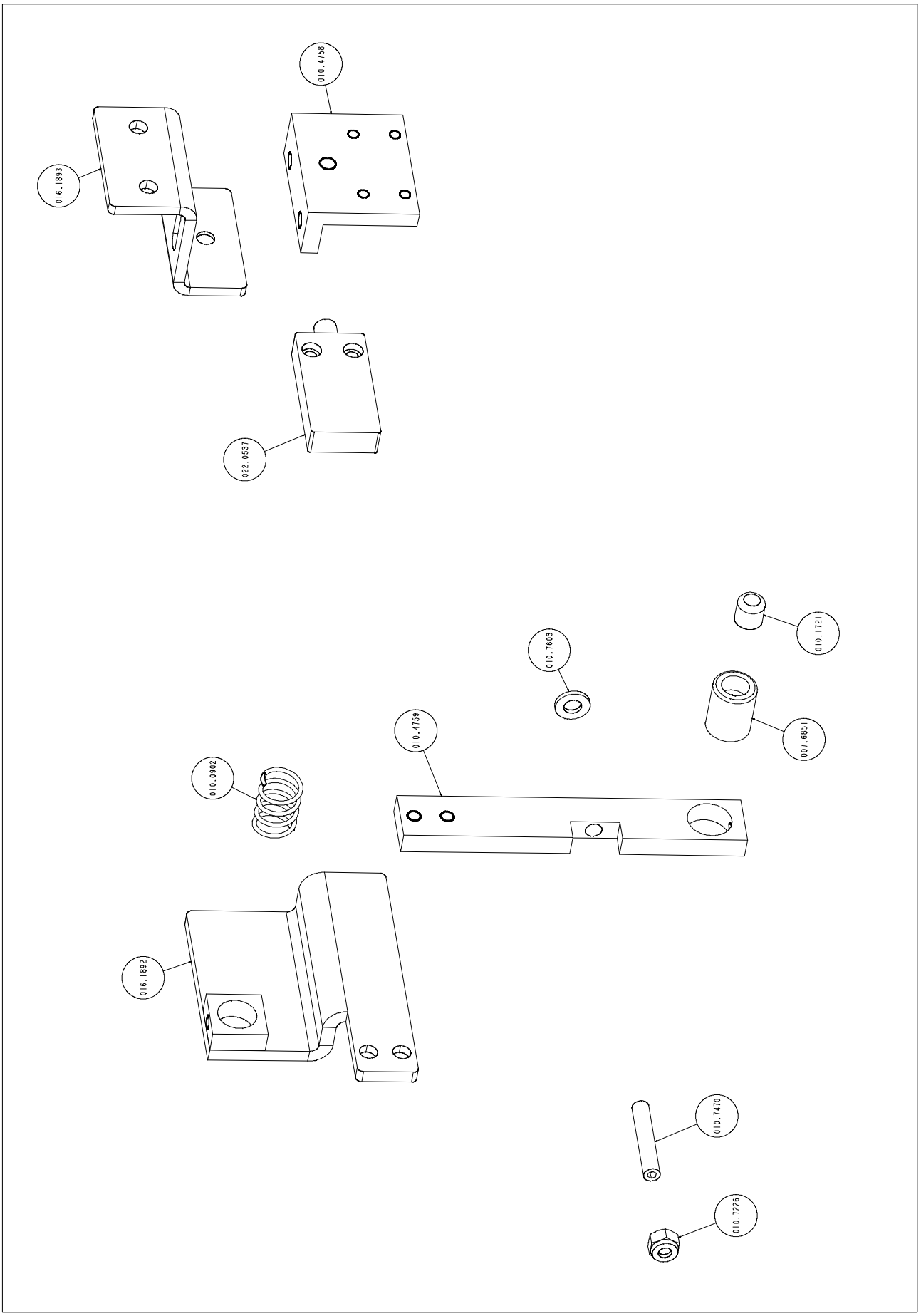
Code	Description	Description	Quantity
010.3482	MAGNETE 20X35 M 6 X PROTEZIONI SH NC	MAGNET 20X35 M 6 FOR FENCES SH NC	2.000
022.3254	LAMPEGGIANTE LED 24 VAC SL7- CB- IMH +	FLASHING LIGHT 24 VAC SL7- CB- IMH +	1.000
022.1209	SUPPORTO A SQUADRO X LAMPEGGIANTE LED	SQUARE SUPPORT FOR FIX. LED FLASHING LED	1.000
016.2588	PROTEZIONE POSTERIORE LATERALE ALIM.	REAR- LATERAL FEEDER COVER	1.000
016.2593	SPORTELLO ALIMENTATORE SH 350 CNC- HS	FEEDER DOOR	1.000
016.2589	PROTEZIONE POSTERIORE ALIM. SH 350 CNC	REAR FEEDER COVER	1.000
016.2587	PROTEZIONE LATO DX ALIMENTATORE SH 350	RIGHT SIDE FEEDER PROTECTION	1.000
016.2586	PROTEZIONE LATO SX ALIMENTATORE SH 350	LEFT SIDE FEEDER PROTECTION	1.000
016.2567	PROTEZIONE LATERALE SINISTRA SH 350 CNC	LEFT- SIDE COVER	1.000
016.2747	STAFFA FIX. MAGNETI SH 350 CNC- HS 5.0	FIX BRACKET MAGNETS	1.000
016.2566	PROTEZIONE ANTERIORE BASSA 350 CNC HS	LOWER- FRONT COVER	1.000
016.2590	PROTEZIONE ANTER. ALTA SH 350 CNC- HS 5.0	UPPER- FRONT COVER	1.000
016.2500	CARTER LATERALE CENTRALINA SH 350 5.0	HYD.UNIT SIDE COVER	1.000
016.2568	PROTEZIONE LATERALE DESTRA SH 350 CNC HS	RIGHT- SIDE COVER	1.000
034.1477	PROTEZIONE ANT. LEXAN SH 350 CNC- HS 5.0	LEXAN FRONT PROTECTION	3.000
010.7226	DADO AUTOBLOCCANTE M6	M6 SELF- LOCKING SCREW NUT	1.000
010.7603	RONDELLA 0 6	0 6 WASHER (010.7603)	1.000
016.2592	SPORTELLO ANTERIORE SX SH 350 CNC- HS 5.0	FRONT- LEFT DOOR	1.000
016.2591	SPORTELLO ANTERIORE DX SH 350 CNC- HS 5.0	FRONT- RIGHT DOOR	1.000
010.1897	CERNIERA X INT. DI SICUREZZA H=100 L.49+	SAFETY SWITCH HINGE SH420CNCHS SH230NCHS	1.000
010.1886	CERNIERA COMPLEMENTARE H=100 L.49 PROTEZ	ADITI.HINGE H=100 L.49 PROTEC. SH 410 DC	1.000
010.0452	MANIGLIA INOX SATINATO SH 310 CNC- HS	HANDLE SH 310 CNC- HS	1.000

Motor- driven chip ejector



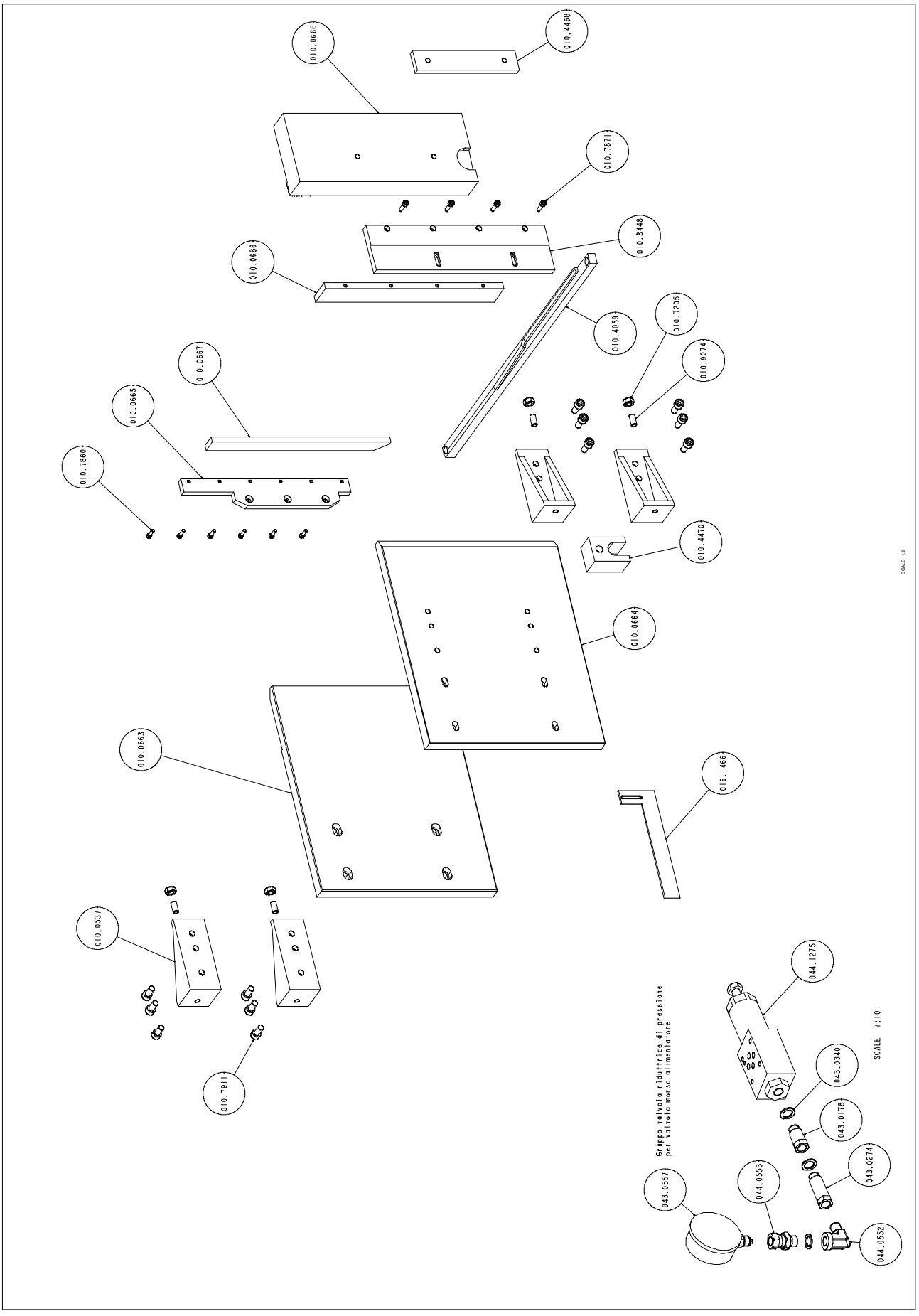
Code	Description	Description	Q.ty
019.4054	MOTORE HP 0,5 C71 B5 V.230 400- 415.50/	MOTOR HP 0,5 C71 B5 - CHIP CONVEYOR	1.000
025.0735	RIDUTTORE CON FRIZIONE 71 B5 I=300	REDUCTOR WITH CLUTCH 71 B5 I=301	1.000
010.2103	RUOTA FONICA X EVACUATORE TRUCIOLI CON	CHIP CONV. PHONIC WHEEL	1.000
016.2725	STAFFA FISSAGGIO PROXIMITY X EVACUATORE	CHIP EVAC. BRACKET FIXING PROXIMITY	1.000
016.2528	PROTEZIONE MOTORE EVACUATORE TRUCIOLI	CHIP EVAC. MOTOR GUARD	1.000
022.0527	SENSORE DI PROSSIMITA' PNP- NO (M12X1- 27	PROXIMITY PNP- NO (M12X1- 27)	1.000
010.3454	DISTANZIALE RIDUTTORE CON FRIZIONE X EV.	SPACER GEAR WITH CLUTCH FOR CHIP	1.000
035.0016	CONVOGLIATORE TRUCIOLI DRAGANTE X SERIE HS - - C- -	CHIP DREDGING CONVEYOR - - C- -	1.000

Group blade deviation



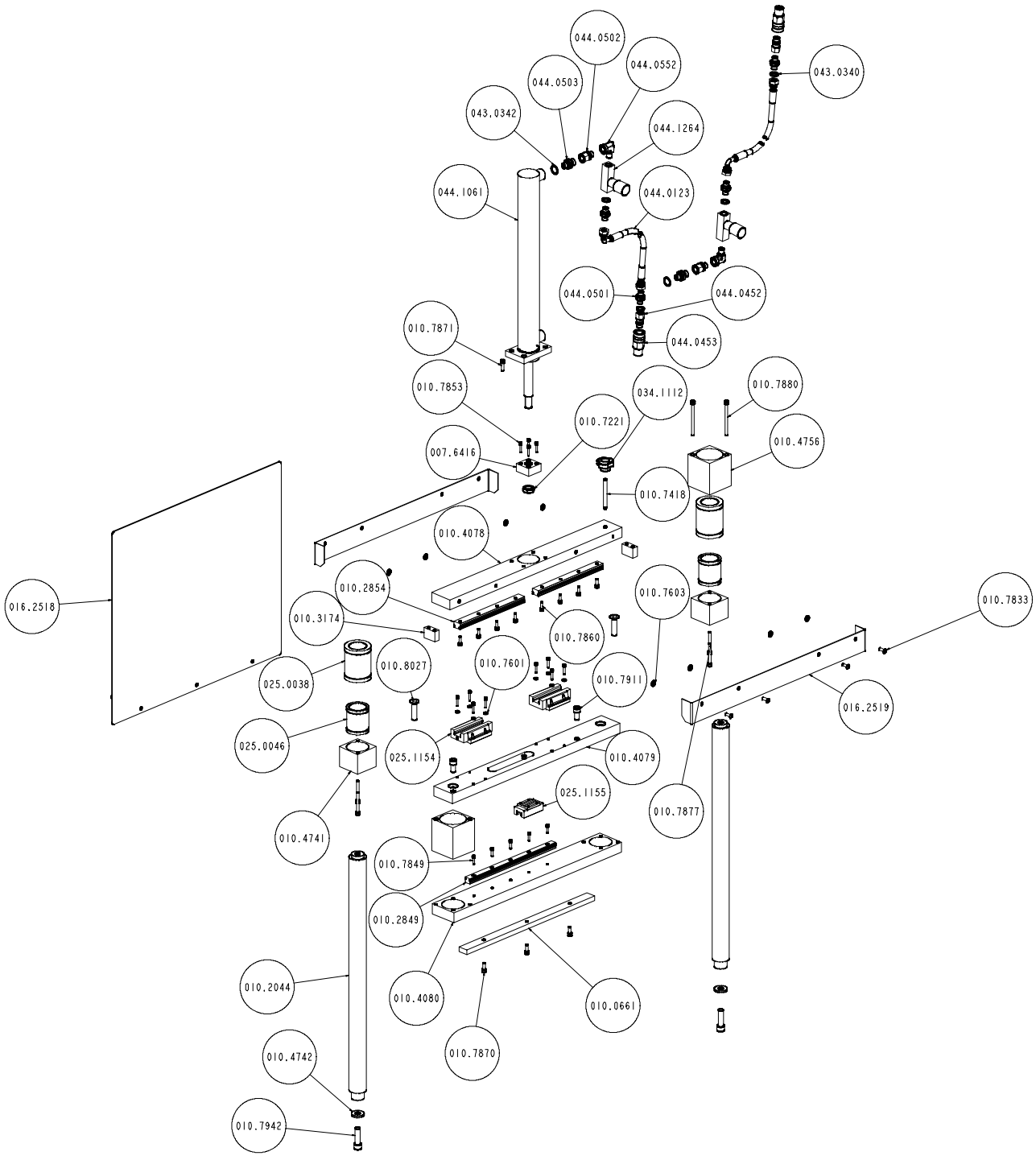
Code	Description	Description	Q.ty
010.7226	DADO AUTOBLOCCANTE M6	M6 SELF- LOCKING SCREW NUT	1.000
010.7470	GRANO VCE PUNTA PIANA 6 X 35	6X35 FLAT POINT VCE GRUB SCREW	1.000
016.1892	STAFFA MOLLA SENSORE DEVIAZIONE LAMA	DEFLECTION BAND SENSOR SPRING BRACKT	1.000
010.0902	MOLLA PUNTO FISSO TESTA MOD. 95	HEAD FIXED POINT SPRING	1.000
010.4759	STAFFA FISSAGGIO PREMILAMA SH 420 CNC- HS	BAND PRESSER FIX BRACKET SH420 CNC HS	1.000
010.7603	RONDELLA 0 6	0 6 WASHER	1.000
007.6851	PERNO TASTATORE PREMILAMA SH 420 CNCHS	BAND PUSHER TENSIO. PIN SH 420 CNC / H14	1.000
010.1721	PREMILAMA SHARK	TOP CARBIDE SHARK	1.000
022.0537	SENSORE INDUTTIVO DCALX/4919B SHARK420	INDUCTVE SENSOR DCALX/4919B SH420CNC HS	1.000
016.1893	SUPPORTO SENSORE DEVIAZIONE LAMA SH 420	DEFLECTION BAND SENSOR SUP-PORTSH420CNCHS	1.000
010.4758	STAFFA FISSAGGIO SENSORE DEVIAZIONE LAMA	DEFLECTION BAND SENSOR FIX BRACKT	1.000

Optional scrap reduction vices



Code	Description	Description	Quantity
016.1466	STAFFA COMANDO FINECORSA AZIONAMENTO ALIMENTATORE	FEED.ZERO LIMITSWITCH BRAC.X R.PICE REDU	4.000
010.0537	RINFORZO GANASCIA RIDUZIONE SFRIDO	FEEDER REINFORCE REST-PI.JAW SH 310CNC- HS	1.000
043.0557	MANOMETRO 0- 60 WIKA P.1275 PER	WIKA 0 60 MANOMETER SH 310 SXI	1.000
043.0553	MANOMETRO STAFFA O 40	BRACKET MANOMETER 0 40	1.000
044.0552	MANOMETRO O 40	HYDR. ELBOW JOINT M/F 1/4 HIGH PRESSURE	1.000
043.0178	RACCORDO MF 1/4- 27 CL 2525	M.F. CONNECTER 1/4- 27 CL 2525	1.000
043.0274	RACCORDO MF 1/4- 43 CL 2525 SH 330	MF 1/4- 43 CL 2525 SH 330 JOINT	1.000
043.0340	RONDELLA RAME 13X19X1,5- 1/4	13X19X1,5- 1/4 COPPER WAS-HER	1.000
044.1275	VALVOLA MODULARE RIDUTTRICE DI PRES-SIONE	MODULER VALVE PRESS.- REDUC. MBRV- 02A	1.000
010.7911	VITE TCEI 10 X 20	TCEI 10 X 20 SCREW (010.7911)	1.000
010.0663	GANASCIA FISSA ALIMENTATORE SFRIDO 0	FEEDER 20 MM.FIX.REST.PICE REDU.JAW	1.000
010.0664	GANASCIA MOBILE ALIMENTATORE SFRIDO 0	FEEDER 20 MM.MOV.REST.PICE REDU.JAW	1.000
010.4470	BATTUTA MORSA ALIMENTATORE X RID. SFRI-DO	STOP FEEDER VICE	1.000
010.7860	VITE TCEI 5 X 15	TCEI 5 X 15 SCREW (010.7860)	1.000
010.0665	SUPPORTO GANASCIA MORSA DI TAGLIO FISSA	CUT VICE LEFT FIX JAW SUP.X R.P REDU.JAW	1.000
010.0667	GANASCIA MORSA DI TAGLIO FISSA SX PER RIDUZIONE SFRIDO 20MM H14A	CUT VICE LE FIX JAW X 20MM.R.P REDU.JAW	1.000
010.0686	GAN. MOBILE LATO CARICO X RID. SFRIDO	LOAD SIDE JAW MOBILE FOR R.P REDUCT	1.000
010.4059	PIASTRA APPOGGIA PEZZI X RID SFRIDO H14A	WORKING TABLE PLATE FOR R.P REDUCT	1.000
010.9047	GRANO VCE PUNTA CONICA 8 X 25	CONIC POITED VCE DOWEL 8 X 25	1.000
010.7205	DADO M10	M10 SCREW NUT (010.7205)	1.000
010.3448	SUPPORTO GANASCIA MOBILE LATO CARICO X RID. SFRIDO H- 14A	LOAD SIDE VICE MOBILE JAW SUP.X R.P REDU.	1.000
010.0666	GANASCIA MORSA DI TAGLIO MOBILE DX PER RIDUZIONE SFRIDO 20MM H14A	CUT VICE RI. MOV.JAW X 20MM.R.P.REDU.	1.000
010.4468	SPESSORE GANASCIA MOBILE LATO SCARICO X RID. SFRIDO H- 14A	THICKNESS UNLOAD SIDE VI-CE MOBILE JAW SUP.X R.P REDU.	1.000
010.7871	VITE TCEI 6 X 20	TCEI 6 X 20 SCREW (010.7871)	1.000

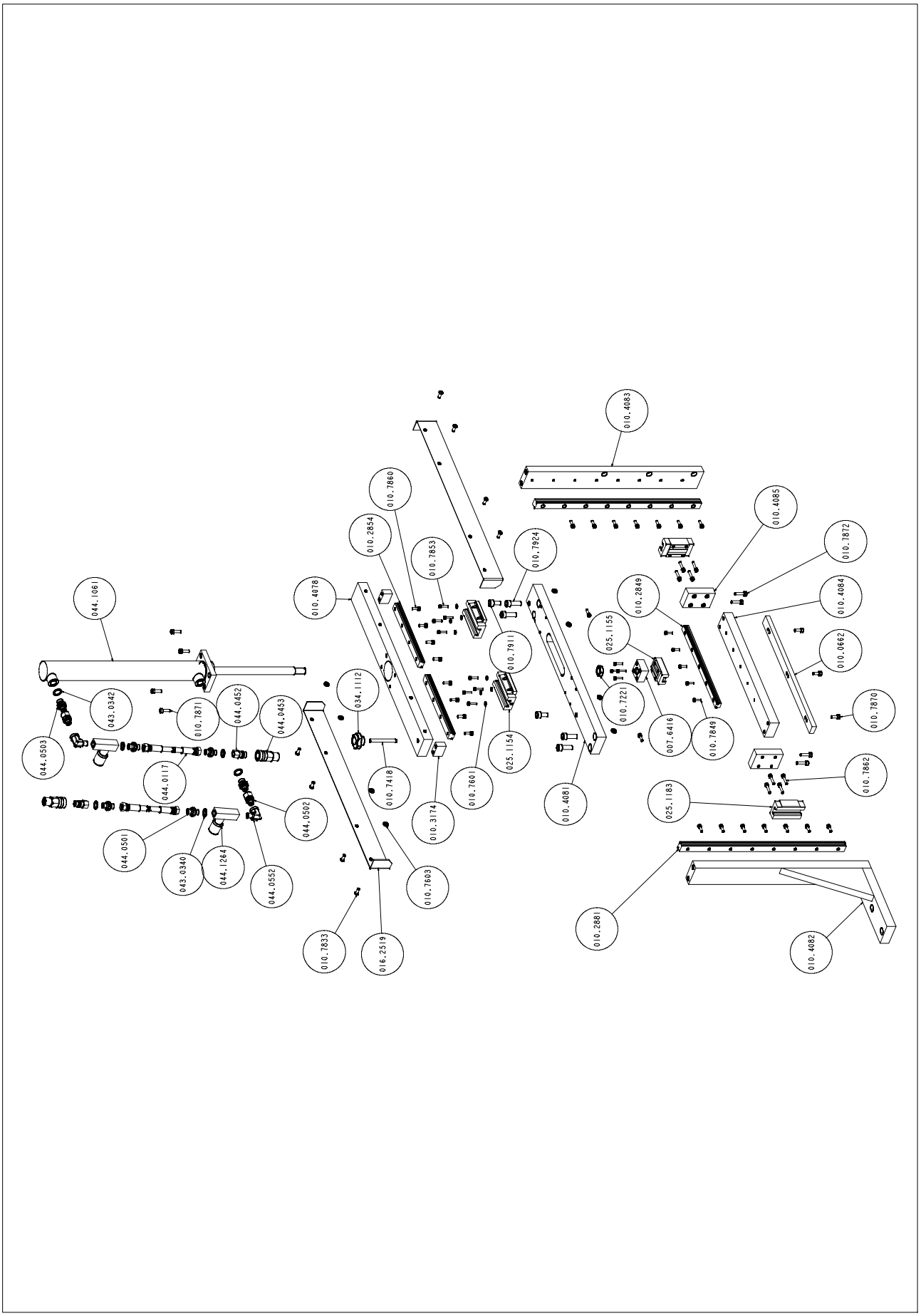
Optional: Hydraulic vertical vice (feeder)



Code	Description	Description	Quantity
010.4741	SUPPORTO INFERIORE MANICOTTO A	FEEDER VERT.VICE RECICU.- BALL SLEEVE SUP.	2,000
010.4742	RONDELLA GUIDE MORSA VERTICALE ALI-MENT.	FEEDER VERT.VICE GUIDE WASHER SH310CNCHS	2,000
010.2849	GUIDA PATTINO HGR 15 R 0280 C	LINE GUIDE LEN.15	1,000
010.2854	GUIDA LINEARE DA 20 LUNG. 210	SLIDE GUIDE HGR- 20- R- 210 E20C	2,000
025.0046	MANICOTTO A SFERA 0658.040.00 AL.SH	BALL SLEEVE 0658.040.00 AL. SH	2,000
025.1154	PATTINO HGW 20 HC ZO C	SLIDE HGW 20 HA ZO C	2,000
025.1155	PATTINO HGH 15 CA ZO C X MORSE VERTICALI	SLIDE HGH 15 CA ZO C F. VER-TICAL VICE	1,000
034.1112	VOLANTINO O 40 M8 X PIEDISTALLO SH- CB 33	O 40 M8 HANDWHEEL X STEEL BASE SH	1,000
043.0340	RONDELLA RAME 13X19X1,5- 1/4	13X19X1,5- 1/4 COPPER WAS-HER	2,000
043.0342	RONDELLA RAME 3/8	3/8 COPPER WASHER	2,000
044.0123	TUBO CENTRALINA IDRAULICA MM.500 1X90? R	HYDR.UNIT HOSE MM 500 1X90 R7 1/4	2,000
044.0452	INNESTO RAPIDO FLEX.MASCHIO X IR 1/4C IR	QUICK LOCK COUPLING	2,000
044.0453	INNESTO RAPIDO FLEX.FEMM.1/4 IRI4CF	1/4 IRI4CF FI. FLEX. QUICK COUPLING	2,000
044.0501	NIPPLO NP 1/4 IDRAULICO	NP 1/4 HYDRAULIC NIPPLE	2,000
044.0503	NIPPLO IDRAULICO M 3/8- M 1/4	HYDRAULIC FITTING M 3/8 M 1/4	2,000
010.3174	BATTUTA FINECORSA MORSE VERTICALISH 310	VERT.VICE LIMIT SWICTH 310 CNC- HS / H- 14	2,000
010.4756	SUPPORTO SUPERIORE MANICOTTO ARICIR-COLO	TOP SLEEVE SUPPORT SH 310 CNCHS / H- 14A	2,000
007.6416	STAFFA FISSAGGIO PATTINO CILINDRO MOR-SAV	HYDRAULIC VERTICAL VICES SH 310 CNC HS	1,000
044.1061	CILINDRO IDRAULICO 0 40X20X365 MORSA VER	CUT.TABLE VERT.VICE HYDR.-CYL. H14A	1,000
010.7871	VITE TCEI 6 X 20	TCEI 6 X 20 SCREW (010.7871)	1,000
016.2519	CARTER PIASTRA FISSAGGIO CILINDRO	VERT. VICE HYDR.CYLI. COVER	1,000
010.7833	VITE BUTON 6 X 16	BUTON SCREW 6 X 12	1,000
010.7603	RONDELLA 0 6	0 6 WASHER (010.7603)	1,000
016.2518	CARTER MORSE VERTICALI ALIMENTATORE H14A	FEEDER VERT. VICE COVER H14A	1,000
010.4078	PIASTRA FISSAGGIO CILINDRO MORSE	VERT.VICE CYL.FIX.PLATE H14A	1,000
010.7911	VITE TCEI 10 X 20	TCEI 10 X 20 SCREW (010.7911)	1,000
010.7221	DADO M16 BASSO	M16 LOW SCREW NUT (010.7221)	1,000
010.7853	VITE TCEI 4 X 20	TCEI 4 X 20 SCREW (010.7853)	1,000
010.7849	VITE TCEI 4 X 16	TCEI 4 X 16 SCREW	1,000
010.4080	PRESSORE MORSA VERTICALE ALIMENTATORE	FEEDER VERT VICE JAW SUP. H14A	1,000
010.7870	VITE TCEI 6 X 16	TCEI 6 X 16 SCREW (010.7870)	1,000
010.7877	VITE TCEI 6 X 45	TCEI 6 X 45 SCREW	1,000
010.2044	GUIDA CARRELLO 0 40 MORSE VERTICALI	TROLLEY GUIDE 0 40 FEEDER VERT.VICE	1,000
010.7942	VITE TCEI 12 X 40	TCEI 12 X 40 SCREW	1,000
010.0661	GANASCIA MORSA VERTICALE ALIM. H14A	FEEDER VERT VICE JAW H14A	1,000
010.7601	RONDELLA 0 4	0 4 WASHER (010.7601)	1,000
010.4079	PIASTRA SUPERIORE MORSA VERTICALE	FEEDER TOP VERT.VICE PLATE	1,000
010.7418	GRANO VCE PUNTA CILINDRICA 8 X 70	8 X 70 CYLIND.POINT VCE GRUB SCREW	1,000
010.7860	VITE TCEI 5 X 15	TCEI 5 X 15 SCREW (010.7860)	1,000
010.8027	VITE TSPEI 12 X 40	TCIC M12 X40 SCREW	1,000
010.7880	VITE TCEI M8 X 115	TCEI 8 X 115 SCREW	1,000
025.0038	MANICOTTO KB4080PP X MORSE VERTICALI	HYDR VERT.VICE SLEEVE KB4080PP	1,000

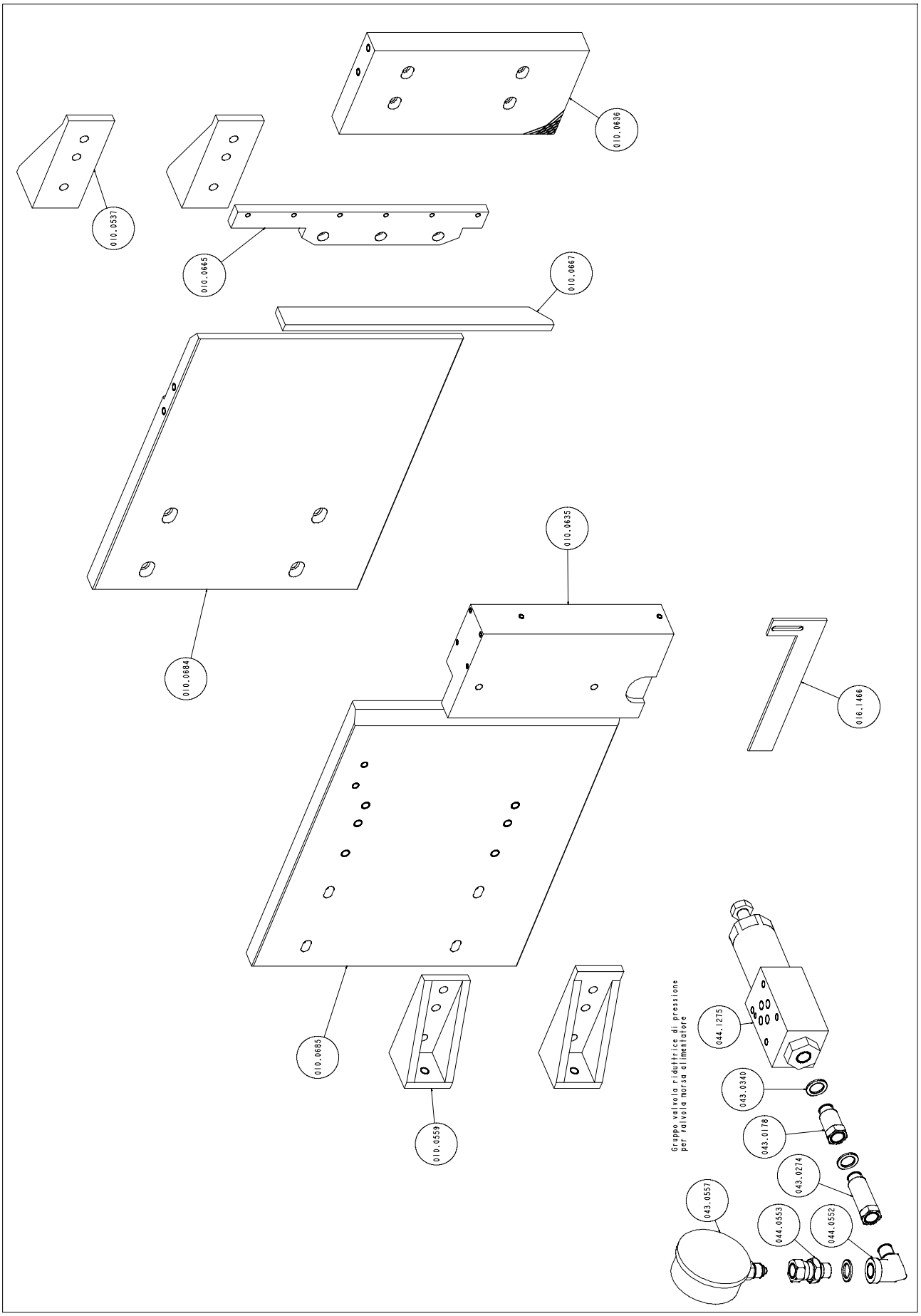
Code	Description	Description	Quantity
044.0502	NIPPLO IDRAULICO GIREVOLE GMF 1/4	GMF 1/4 ROTATING HYDRAULIC NIPPLE	1,000
044.0552	RACCORDO A GOMITO IDRAULICO MF 1/4 ALTA	HYDR. ELBOW JOINT M/F 1/4 HIGH PRESSURE	1,000

Optional: Hydraulic vertical vice (cutting plane unit)



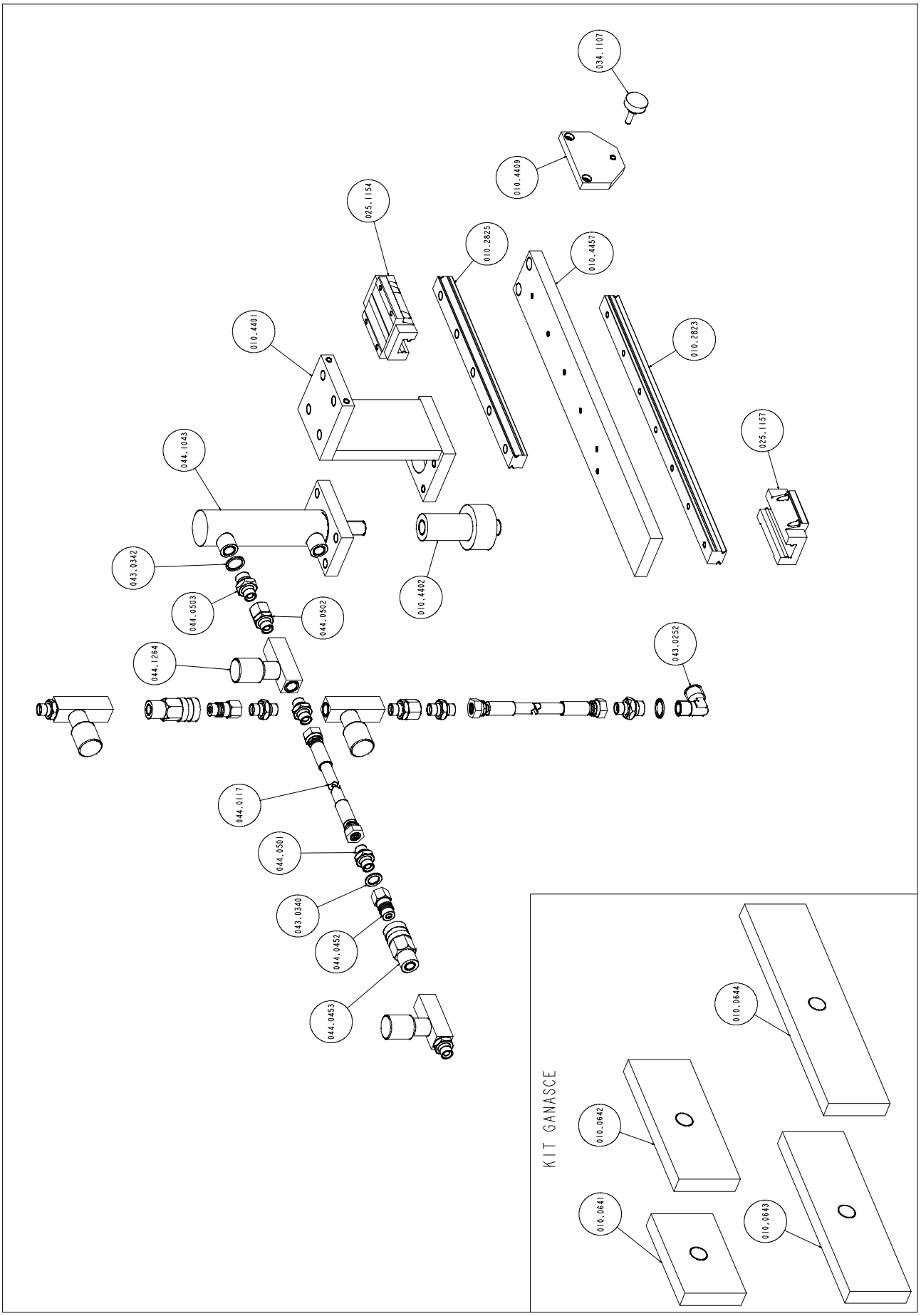
Code	Description	Description	Quantity
010.2849	GUIDA PATTINO HGR 15 R 0280 C	LINE GUIDE LEN.15	1,000
010.2854	GUIDA LINEARE DA 20 LUNG. 210	SLIDE GUIDE HGR- 20- R- 210 E20C	2,000
025.1154	PATTINO HGW 20 HC ZO C	SLIDE HGW 20 HA ZO C	2,000
025.1155	PATTINO HGH 15 CA ZO C X MORSE VERTICALI	SLIDE HGH 15 CA ZO C F. VERTICAL VICE	1,000
034.1112	VOLANTINO O 40 M8 X PIEDISTALLO SH- CB 33	O 40 M8 HANDWHEEL X STEEL BASE SH	1,000
043.0340	RONDELLA RAME 13X19X1,5- 1/4	13X19X1,5- 1/4 COPPER WASHER	2,000
043.0342	RONDELLA RAME 3/8	3/8 COPPER WASHER	2,000
044.0452	INNESTO RAPIDO FLEX.MASCHIO X IR 1/4C IR	QUICK LOCK COUPLING	2,000
044.0453	INNESTO RAPIDO FLEX.FEMM.1/4 IRI4CF	1/4 IRI4CF FI. FLEX. QUICK COUPLING	2,000
044.0501	NIPPLO NP 1/4 IDRAULICO	NP 1/4 HYDRAULIC NIPPLE	2,000
044.0503	NIPPLO IDRAULICO M 3/8- M 1/4	HYDRAULIC FITTING M 3/8 M 1/4	2,000
010.3174	BATTUTA FINECORSA MORSE VERTICALISH 310	VERT.VICE LIMIT SWICTH 310 CNC- HS / H- 14	2,000
007.6416	STAFFA FISSAGGIO PATTINO CILINDRO MOR-SAV	HYDRAULIC VERTICAL VICES SH 310 CNC HS	1,000
044.1061	CILINDRO IDRAULICO 0 40X20X365 MORSA VER	CUT.TABLE VERT.VICE HYDR.-CYL. H14A	1,000
010.7871	VITE TCEI 6 X 20	TCEI 6 X 20 SCREW (010.7871)	1,000
016.2519	CARTER PIASTRA FISSAGGIO CILINDRO	VERT. VICE HYDR.CYLI. COVER	1,000
010.7833	VITE BUTON 6 X 16	BUTON SCREW 6 X 12	1,000
010.7603	RONDELLA 0 6	0 6 WASHER (010.7603)	1,000
010.4078	PIASTRA FISSAGGIO CILINDRO MORSE	VERT.VICE CYL.FIX.PLATE H14A	1,000
010.7911	VITE TCEI 10 X 20	TCEI 10 X 20 SCREW (010.7911)	1,000
010.7221	DADO M16 BASSO	M16 LOW SCREW NUT (010.7221)	1,000
010.7853	VITE TCEI 4 X 20	TCEI 4 X 20 SCREW (010.7853)	1,000
010.7849	VITE TCEI 4 X 16	TCEI 4 X 16 SCREW	1,000
010.7870	VITE TCEI 6 X 16	TCEI 6 X 16 SCREW (010.7870)	1,000
010.7418	GRANO VCE PUNTA CILINDRICA 8 X 70	8 X 70 CYLIND.POINT VCE GRUB SCREW	1,000
010.7860	VITE TCEI 5 X 15	TCEI 5 X 15 SCREW (010.7860)	1,000
010.7924	VITE TCEI 10 X 30	TCEI 10 X 30 SCREW (010.7924)	1,000
010.4081	PIASTRA SUPERIORE MORSA VERTICALE PIANO	CUT TABLE TOP VERT.VICE PLATE H14A	1,000
010.2881	GUIDA PATTINO HGR 20 R 0460 C	SLIDE GUIDE HGR 20 R 0460 C	1,000
010.7862	VITE TCEI 5 X 25	TCEI 5 X 25 SCREW	1,000
010.4082	SUPPORTO ANTERIORE MORSA VERTICALE PIANO	CUT TABLE FRONT VERT.VICE SUP. H14A	1,000
025.1183	PATTINO HGH 20 CA Z0C	PLATE 20HGH 20 CA ZO C	1,000
010.4083	SUPPORTO POSTERIORE MORSA VERTICALE	CUT TABLE REAR VERT.VICE SUP. H14A	1,000
010.4085	PIASTRINO FIX PATTINO MORSA VERTICALE	CUT TABLE VERT.VICE PLATE FIX.PLATE	1,000
010.7872	VITE TCEI 6 X 25	TCEI 6 X 25 SCREW (010.7872)	1,000
010.4084	PRESSORE MORSA VERTICALE PIANO DI TAGLIO	CUT TABLE VERT VICE JAW SUP. H14A	1,000
010.0662	GANASCIA MORSA VERTICALE PIANO DI TAGLIO	CUT TABLE VERT.VICE JAW H14A	1,000
044.1264	VALVOLA CONTROLLO PORTATA UNIDIREZ. FT 2	ONE WAY RANGE CONTROL VALVE FT 257- 5	1,000
044.0552	RACCORDO A GOMITO IDRAULICO MF 1/4 ALTA	HYDR. ELBOW JOINT M/F 1/4 HIGH PRESSURE	1,000
044.0502	NIPPLO IDRAULICO GIREVOLE GMF 1/4	GMF 1/4 ROTATING HYDRAULIC NIPPLE	1,000
044.0117	TUBO CENTRALINA IDRAULICA 0 10,5 D.D. MM	HYDR.UNIT HOSE 0 10,5 MM 1200 SH270SXI	1,000
010.7601	RONDELLA 0 4	0 4 WASHER (010.7601)	1,000

Optional: Jaws reducing scrap (vertical hydraulic vices)



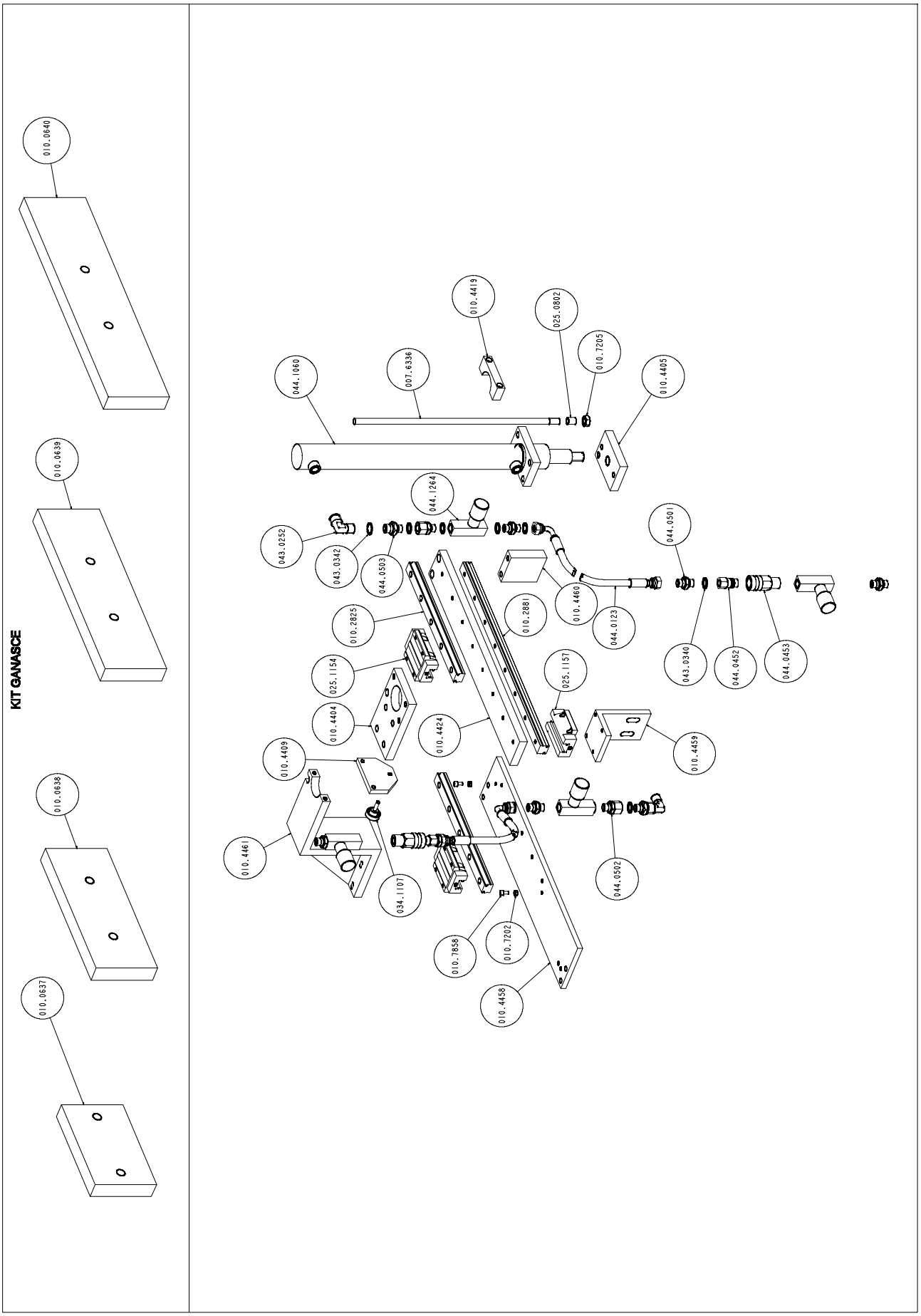
Code	Description	Description	Quantity
043.0557	MANOMETRO 0- 60 WIKA P.1275 PER	WIKA 0 60 MANOMETER SH 310 SXI	1,000
044.0553	RACCORDO IDRAULICO MF 1/4 GIREVOLE X	HYDRAULIC COUPLING FOR POWER PACK MANOM.	1,000
044.0552	RACCORDO A GOMITO IDRAULICO MF 1/4 ALTA	HYDR. ELBOW JOINT M/F 1/4 HIGH PRESSURE	1,000
043.0274	RACCORDO MF 1/4- 43 CL 2525	MF 1/4- 43 CL 2525 SH 330 JOINT	1,000
043.0178	RACCORDO MF 1/4- 27 CL 2525	M.F. CONNECTER 1/4- 27 CL 2525	1,000
043.0340	RONDELLA RAME 13X19X1,5- 1/4	COPPER WASHER 13X19X1,5- 1/4	1,000
044.1275	VALVOLA MODULARE RIDUTTRICE DI PRES-SIONE	MODULER VALVE PRESS.- REDUC. MBRV- 02A	1,000
010.0559	RINFORZO GAN. SFRIDO 0 X MORSE VERTICALI	REINF.JAW FOR. VERT. VICES SH 310CNC HS	1,000
010.0685	GANASCIA MOBILE ALIMENTATORE RID. SFRI-DO	MOV.JAW FEEDER VICE RED.- REST. VERT.VICE	1,000
016.1466	STAFFA COMANDO FINECORSA AZZERAMENTO	FEED.ZERO LIMITSWITCH BRAC.X R.PICE REDU	1,000
010.0635	GANASCIA MORSA DI TAGLIO MOBILE PER RID.	MOV.VICE JAW FOR VERT.VICE SHARK 310 CNC	1,000
010.0684	GANASCIA FISSA ALIMENTATORE RID. SFRIDO	FIXED VICE FEED.SHUTTLE JAW VERT.VIC.	1,000
010.0667	GANASCIA MORSA DI TAGLIO FISSA SX PER	CUT VICE LE FIX JAW X 20MM.R.P REDU.JAW	1,000
010.0665	SUPPORTO GANASCIA MORSA DI TAGLIO FISSA	CUT VICE LEFT FIX JAW SUP.X R.P REDU.JAW	1,000
010.0537	RINFORZO GANASCIA SFRIDO 0 X ALIMENTA-TORE SH 310 CNC- HS	FEEDER REINFORCE REST-PI.JAW SH 310CNC- HS	1,000
010.0636	GANASCIA MORSA FISSA DESTRA PER RID.	RIGHT FIX. VICE JAW VERT.VI-CE SH310 CNC	1,000

Optional: Jaws reducing scrap (cutting plane)



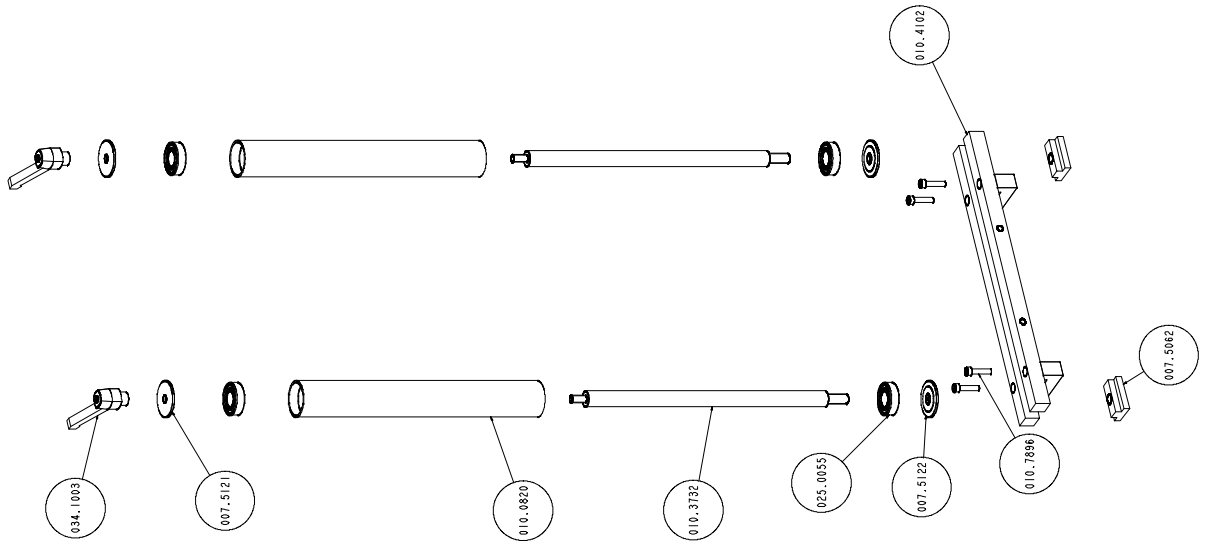
Code	Description	Description	Quantity
043.0340	RONDELLA RAME 13X19X1,5- 1/4	COPPER WASHER 13X19X1,5- 1/4	1,000
010.0641	GANASCIA MORSA VERTICALE PIANO DI TAGLIO	VERT.VICE JAW CUT TABLE SH310 CNC HS	1,000
010.0642	GANASCIA MORSA VERTICALE PIANO DI TAGLIO	VERT.VICE JAW CUT TABLE SH310 CNC HS	1,000
010.0643	GANASCIA MORSA VERTICALE PIANO DI TAGLIO	VERT.VICE JAW CUT TABLE SH310 CNC HS	1,000
010.0644	GANASCIA MORSA VERTICALE PIANO DI TAGLIO	VERT.VICE JAW CUT TABLE L.250MM	1,000
044.0453	INNESTO RAPIDO FLEX.FEMM.1/4 IRI4CF	1/4 IRI4CF FI. FLEX. QUICK COUPLING	1,000
044.0452	INNESTO RAPIDO FLEX.MASCHIO X IR 1/4C IR	QUICK LOCK COUPLING	1,000
044.0501	NIPPLO NP 1/4 IDRAULICO	NP 1/4 HYDRAULIC NIPPLE	1,000
044.0117	TUBO CENTRALINA IDRAULICA 0 10,5 D.D. MM	HYDR.UNIT HOSE 0 10,5 MM 1200	1,000
044.1264	VALVOLA CONTROLLO PORTATA UNIDIREZ. CON BYPASS	ONE WAY RANGE CONTROL VALVE FT 257- 5	1,000
043.0252	GOMITO MF 3/8 CL 2020	MF 3/8 CL 2020 ELBOW	1,000
044.0503	NIPPLO IDRAULICO M 3/8- M 1/4	HYDRAULIC FITTING M 3/8 M 1/4	1,000
044.0502	NIPPLO IDRAULICO GIREVOLE GMF 1/4	GMF 1/4 ROTATING HYDRAULIC NIPPLE	1,000
010.4402	PROLUNGA CILINDRO MORSA VERTICALE X GAN.	VERT. VICE CYL. EXTENSION SH 310 CNC HS	1,000
043.0342	RONDELLA RAME 17X23X1,5- 3/8	COPPER WASHER 17X23X1,5- 3/8	1,000
044.1043	CILINDRO IDRAULICO 0 30X16X88 MORSE VERT	HYDRAULIC CYLINDER 0 30X16X88	1,000
025.1157	PATTINO HGW 20 CC Z0 C	SLIDE HGW 20 CC Z0 C	1,000
010.4401	SUPPORTO CILINDRO MORSA VERTICALE X RID.	VERT.CYL.SUP.FOR SH310CN-CHS RES.P.RED.	1,000
010.2823	GUIDA PATTINO HGR 20 R 0400 C	LINEAR GUIDES HGR20R400C	1,000
010.2825	GUIDA PATTINO HGR 20 R 0280 C	SLIDE GUIDEHGR 20 R 0280 C	1,000
010.4457	PIASTRA FIX CILINDRO MORSA VERT. X RID.	VERT.VICE CYL. FIX PLATE FOR H- 14A	1,000
025.1154	PATTINO HGW 20 HC ZO C	SLIDE HGW 20 HA ZO C	1,000
010.4409	PIASTRA BLOCCAGGIO MORSA VERTICALE X RIDUZIONE SFRIDO SHARK 310 CNC HS	VERT.VICE BLOCK.PLATE SH 310 CNC HS	1,000
034.1107	VOLANTINO O 30 M6 X 20	O 30 M6 X 20 HANDWHEEL	1,000

Optional: Jaws reducing scrap (feeder)



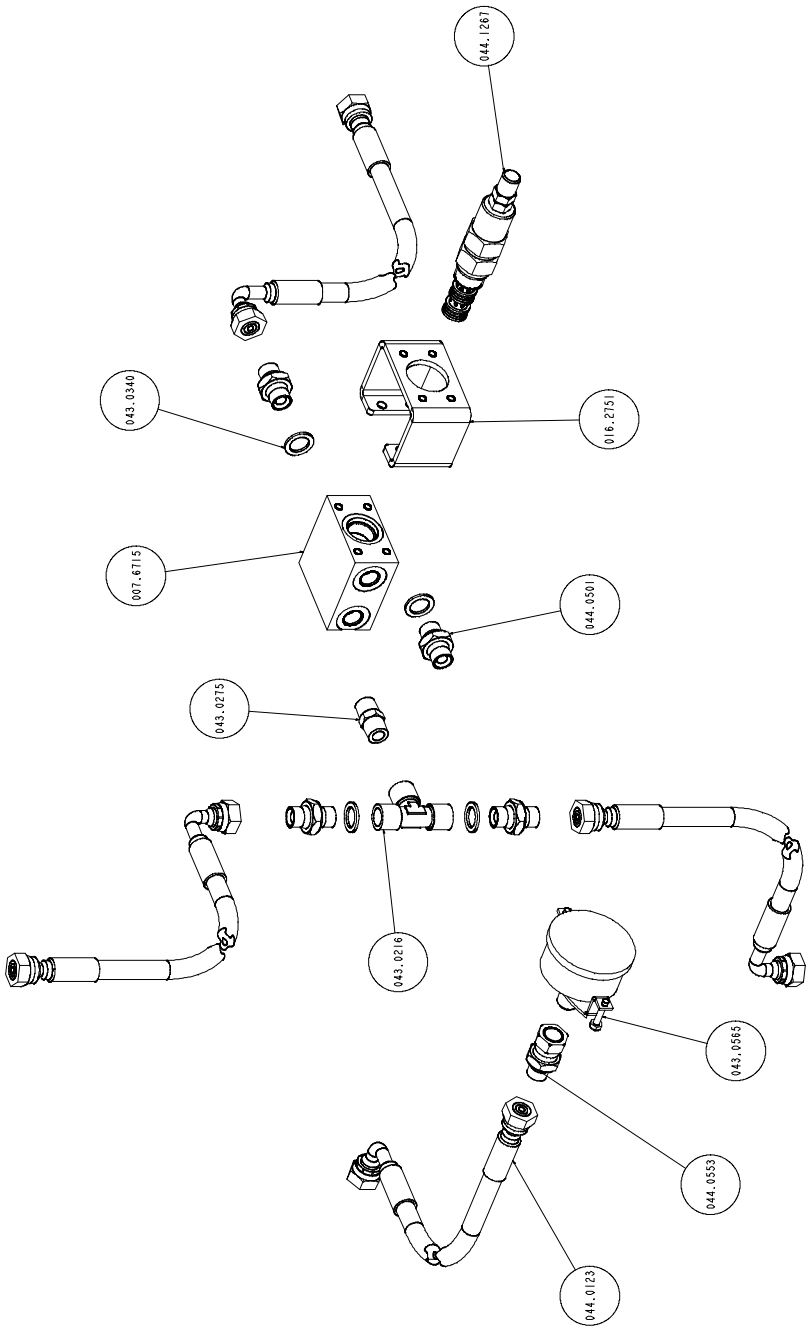
Code	Description	Description	Quantity
043.0340	RONDELLA RAME 13X19X1,5- 1/4	COPPER WASHER 13X19X1,5- 1/4	1,000
044.0453	INNESTO RAPIDO FLEX.FEMM.1/4 IRI4CF	1/4 IRI4CF FI. FLEX. QUICK COUPLING	1,000
044.0452	INNESTO RAPIDO FLEX.MASCHIO X IR 1/4C IR	QUICK LOCK COUPLING	1,000
044.0501	NIPPLO NP 1/4 IDRAULICO	NP 1/4 HYDRAULIC NIPPLE	1,000
044.1264	VALVOLA CONTROLLO PORTATA UNIDIREZ. CON BYPASS	ONE WAY RANGE CONTROL VALVE FT 257- 5	1,000
043.0252	GOMITO MF 3/8 CL 2020	MF 3/8 CL 2020 ELBOW	1,000
044.0503	NIPPLO IDRAULICO M 3/8- M 1/4	HYDRAULIC FITTING M 3/8 M 1/4	1,000
044.0502	NIPPLO IDRAULICO GIREVOLE GMF 1/4	GMF 1/4 ROTATING HYDRAULIC NIPPLE	1,000
043.0342	RONDELLA RAME 17X23X1,5- 3/8	COPPER WASHER 17X23X1,5- 3/8	1,000
025.1157	PATTINO HGW 20 CC Z0 C	SLIDE HGW 20 CC Z0 C	1,000
010.2825	GUIDA PATTINO HGR 20 R 0280 C	SLIDE GUIDEHGR 20 R 0280 C	1,000
025.1154	PATTINO HGW 20 HC ZO C	SLIDE HGW 20 HA ZO C	1,000
010.4409	PIASTRA BLOCCAGGIO MORSA VERTICALE X RIDUZIONE SFRIDO SHARK 310 CNC HS	VERT.VICE BLOCK.PLATE SH 310 CNC HS	1,000
034.1107	VOLANTINO O 30 M6 X 20	O 30 M6 X 20 HANDWHEEL	1,000
010.0637	GANASCIA MORSA VERTICALE ALIMENTATORE	VERT.FEED.VICE JAW L.100MM SH 310 CNC HS	1,000
010.0638	GANASCIA MORSA VERTICALE ALIMENTATORE	VERT.FEED.VICE JAW L.150MM SH 310 CNC HS	1,000
010.0639	GANASCIA MORSA VERTICALE ALIMENTATORE	VERT.FEED.VICE JAW L.200MM SH 310 CNC HS	1,000
010.0640	GANASCIA MORSA VERTICALE ALIMENTATORE	VERT.FEED.VICE JAW L.250MM SH 310 CNC HS	1,000
010.4458	SUPPORTO X GUIDA SOSTEGNO CILINDRO MORSE	SUPPORT FOR GUIDE SUP-PORT VICES CYLINDER	1,000
010.7858	VITE TCEI 5 X 10	TCEI 5 X 10 SCREW	1,000
010.7202	DADO M5	M5 SCREW NUT	1,000
010.4461	STAFFA SOSTEGNO CILINDRO MORSE VERTI-CALI	SUPPORT BRACKET CYLINDER VICES VERTICAL	1,000
010.4404	SUPPORTO CILINDRO MORSA VERTICALE ALIM.	VERT.FEED.VICE CYL. SUP-PORT SH310 CNCHS	1,000
010.4424	PIASTRA FIX CILINDRO MORSA VERT. ALIM.	VERT.FEED.VICE CYL.FIX SUPP. SH 310CNCHS	1,000
010.4459	STAFFA FIX PATTINO MORSA VERT. ALIM.	VERT.FEED.VICE.CYL.FIX SLIDE BRACKET	1,000
010.2881	GUIDA PATTINO HGR 20 R 0460 C	SLIDE GUIDE HGR 20 R 0460 C	1,000
010.4460	BATTUTA MORSA VERTICALE ALIMENTATORE	VERT.FEED.VICE.CYL.MECHA-NICAL STOP H- 14A	1,000
044.0123	TUBO CENTRALINA IDRAULICA MM.500 1X90 R7 1/4	HYDR.UNIT HOSE MM 500 1X90 R7 1/4	1,000
044.1060	CILINDRO IDRAULICO 0 35X25X365 MORSE	HYDRAULIC CYLINDER 0 35X25X365	1,000
007.6336	PERNO ANTIROTAZ. MORSE VERT. ALIM. SH310	LOCK PIN FEEDER VERTICAL VICES SH310	1,000
010.7205	DADO M10	M10 SCREW NUT	1,000
010.4405	PIASTRA FIX GANASCE X MORSA VERT. ALIM.	VERT.FEED.VICE CYL.FIX SUPP. SH 310CNCHS	1,000
010.4419	CHIUSURA STAFFA SOSTEGNO CILINDRO MOR-SE	PLATE F.O.BUND. CYL.SUP-PORT SH 310 W.RES	1,000
025.0802	BOCCOLA GRAFITATA L. 15 DIAM. 10	GRAPHITIZED BUSHING L. 15 DIA M. 10	1,000

Optional: Vertical rollers



Code	Description	Description	Quantity
034.1003	LEVA A SCATTO 12 MA	LEVER 12 MA	1,000
007.5121	RONDELLA SUPERIORE X RULLO VERTICALE	UPPER WASHER SH 400	1,000
010.0820	RULLO VERTICALE ALIMENTATORE SH420CNC-HS	FEEDER VERTICAL ROLLER SH420CNC- HS	1,000
010.3732	PERNO RULLI VERTICALI SH 420 CNC- HS	VERTICAL ROLLER PIN SH420 CNC HS	1,000
025.0055	CUSCINETTO 62.05 2Z C3	BEARING 62.05 2Z C3	1,000
007.5122	RONDELLA INFERIORE X RULLO VERTICALE	LOWER WASHER SH 400	1,000
010.7896	VITE TCEI 8 X 35	TCEI 8 X 35 SCREW	1,000
007.5062	TASSELLO FISSAGGIO RULLO VERTICALE ALIMENTATORE	FIXING PLATE F.VERT.ROLLER SH 400- 410	1,000
010.4102	SUPPORTO PER RULLO VERTICALE ALIM. H14A	FEEDER VERT.ROLLER SUP. H14A	1,000

Optional: Pressure regulator vices



Code	Description	Description	Quantity
044.0123	TUBO CENTRALINA IDRAULICA MM.500 1X90 GRADI	HYDR.UNIT HOSE MM 500 1X90 R7 1/4	1,000
044.0553	RACCORDO IDRAULICO MF 1/4 GIREVOLE X MANOMETRO CENTRALINA	HYDRAULIC COUPLING FOR POWER PACK MANOM.	1,000
043.0565	MANOMETRO+ STAFFA 0 50 0- 100 BAR ATTAC-CO	MANOMETER+BRACKET 0 50 0- 100	1,000
043.0216	RACCORDO A - T- FFF 1/4 CL 2003	FFF 1/4 CL 2003 T JOINT	1,000
043.0275	NIPPLO CONICO A2- 1/4 - CL 2500	A2- 1/4 - CL 2500 CONICAL NIP-PLE	1,000
044.0501	NIPPLO NP 1/4 IDRAULICO	NP 1/4 HYDRAULIC NIPPLE	1,000
007.6715	PANNELLO IDRAULICO X VALVOLA RIDUTTRICE	HYDR.PANNEL F.REMOTE REDU.PRES.VALVE	1,000
016.2751	STAFFA FIX. VALVOLA REG. PRESS. MORSE	BRACKET VALVE FOR PRESSU-RE REGULATOR VICES	1,000
043.0340	RONDELLA RAME 13X19X1,5- 1/4	COPPER WASHER 13X19X1,5- 1/4	1,000
044.1267	VALVOLA RIDUTTRICE PRESS. DIRETTA SH 310 CNC- HS	DIRECT PRESSURE RI-DUC.VALVE SH310CNCHS	1,000

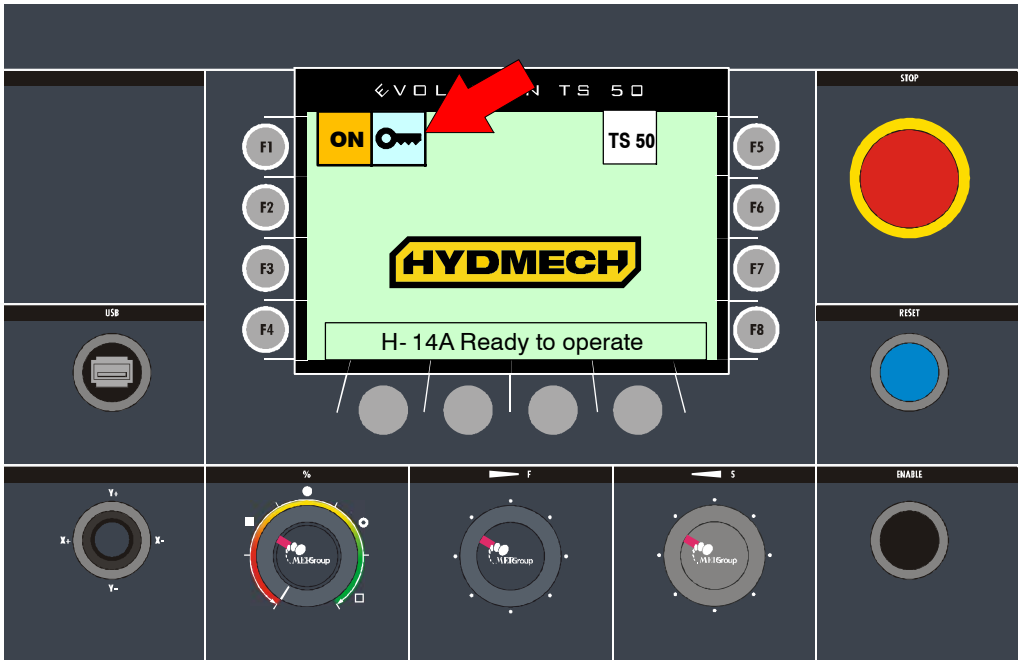
Adjustments

This chapter describes the operations required to adjust the electronic, mechanical and the hydraulic systems. By following these instructions, you can "customise" your machine to suit the type of cut required, thereby optimising cutting times.

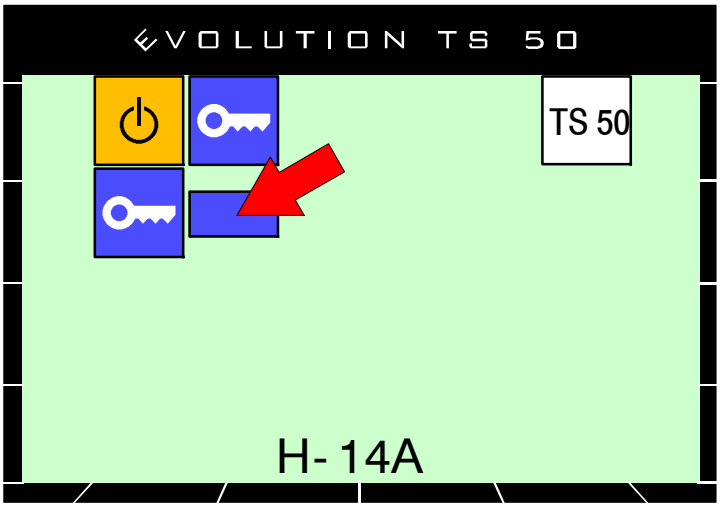
Displaying and editing the set- up parameters

The machine set- up parameters may be programmed directly from the control console.

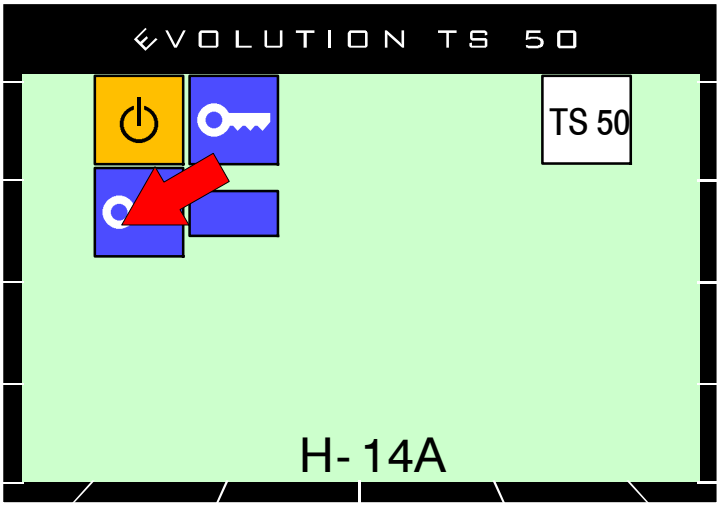
- ▶ Power the machine by turning the main switch on the left of the control board.
- ▶ Tap on the box on the touchscreen shown in the figure.



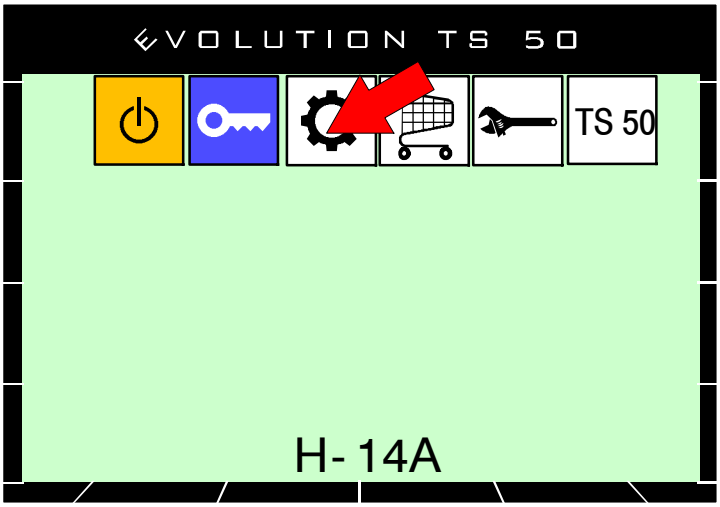
▶ The password entry box will open. Tap the box to open the keypad. Enter 734533.



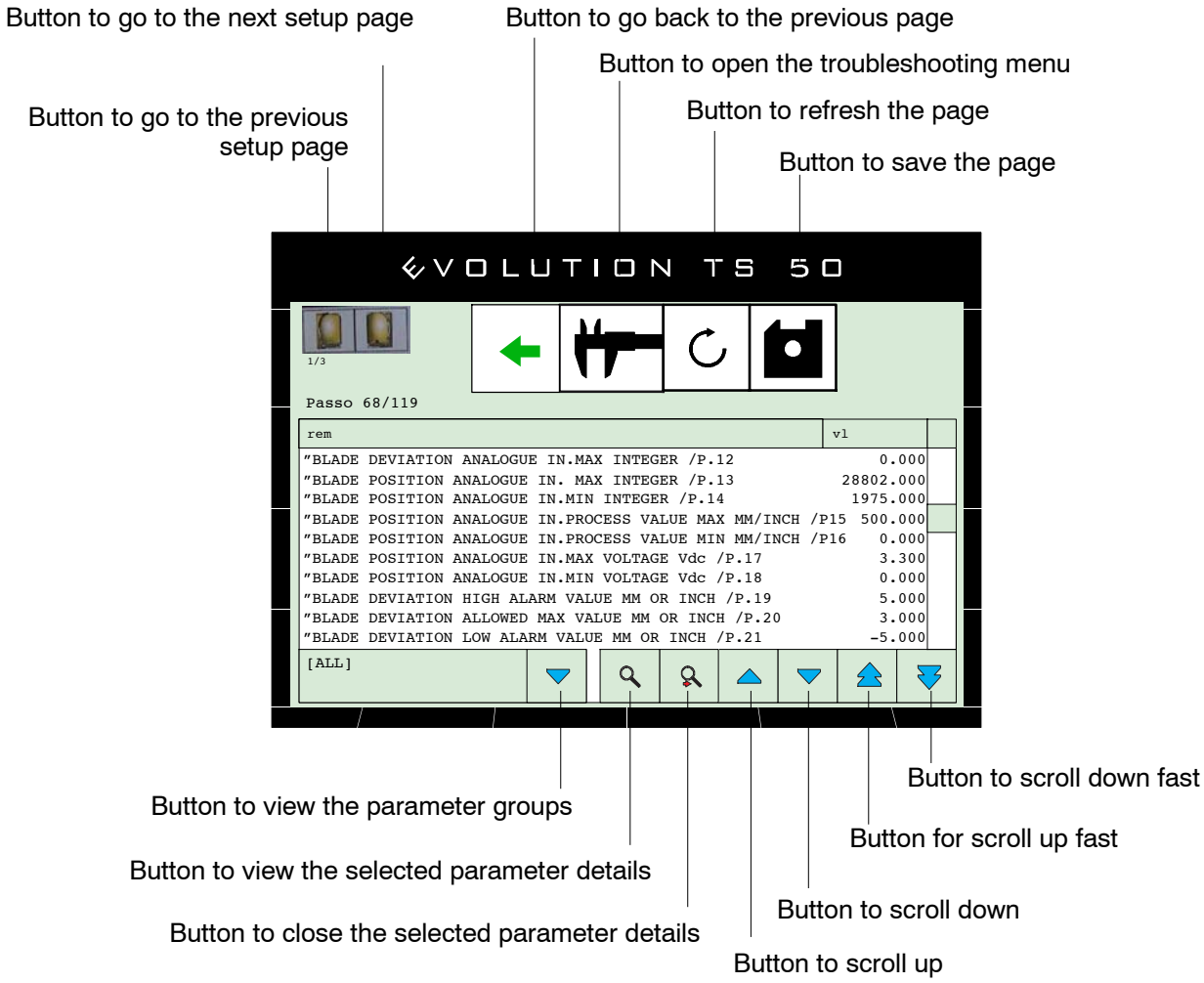
▶ Tap on the box shown in the figure.



▶ Tap on the box shown in the figure.



▶ Once inside the SET- UP menu, use the following three keys to navigate through the different menu screens:



Setup parameters

The machine setup parameters divided by topic are shown below.

BLADE MOTOR:

- **Blade Ampere Analogue In Max Integer/P0:** Analogue input counter value corresponding to the maximum ampere**(10400.0000).**
- **Blade Ampere Analogue In Min Integer/P1:** Analogue input counter value corresponding to the minimum ampere **(11584.0000).**
- **Blade Ampere Analogue In Process Value Max Ampere/P2:** Ampere corresponding to maximum analogue input value **(8.0000).**
- **Blade Ampere Analogue In Process Value Min Ampere/P3:** Ampere corresponding to minimum analogue input value **(0.0000).**
- **Blade Ampere Analogue In Max Voltage/P4:** Voltage corresponding to maximum analogue input value **(10.0).**
- **Blade Ampere Analogue In Min Voltage/P5:** Voltage corresponding to minimum analogue input value **(0.0).**
- **Blade Ampere Control Check Time Period sec/P23:** Control execution time (sec) **(0.150).**
- **Blade Ampere Control Before Enabling On Delay sec/P24:** Activation delay in seconds (if 0 is off) **(3.000).**

- **Blade Ampere Control Feed Reduction Step M/min/P25:** Correction step **(82.0209).**
- **Blade Ampere Control Max Allowed Ampere/P26:** Maximum allowed current **(27).**
- **Blade Ampere Control Max Ampere Alarm On Delay sec/P27:** Maximum motor current alarm filter (sec) **(1.0).**
- **Blade Speed Control Max Allowed M/min/P29:** Speed set point maximum value **(377.2965).**
- **Blade Speed Control Min Allowed M/min/P30:** Speed set point minimum value **(49.2125).**
- **Blade Speed Control An In Max Integer Value/P31:** Speed reference maximum value (analogue input maximum value) **(32767.0).**
- **Blade Speed Control An In Min Integer Value/P32:** Speed reference minimum value (analogue input minimum value) **(0.0).**
- **Blade Speed Control Before Stopping On Delay sec/P33:** Stop delay for cleaning cut (sec) **(1.000).**
- **Blade Speed Encoder Counting Direction Inverting/P34:** Blade speed encoder counter inversion **(1.0000).**
- **Blade Speed Encoder Max Counter Valve M/min/P35:** Blade speed maximum value **(377.2965).**
- **Blade Speed Encoder Min Counter Valve M/min/P36:** Blade speed minimum value **(49.2125).**
- **Blade Speed Encoder Pulse Scaling Resolution MM or INCH/Pulse:** Blade speed encoder resolution scale factor **(1.0000).**
- **Blade Motor Status On Man Cycle End Motor On = 1.0 /P97:** Blade motor on time at end of manual cycle **(1.000).**
- **Current treshold for max feed correction/P113:** Max. correction threshold when the blade motor overcurrent intervenes during the cut **(3.000)**.
- **Speed encoder type/P139** (0 = Linear; 1 = logarithmic): Setting the encoder speed as linear or logarithmic (0 = linear; 1 = logarithmic) **(0.0000)**.
- **Speed encoder logarithmic X1 threshold (count)/P140:** X1 correction factor for managing the band speed encoder in logarithmic mode **(4.0000)**.
- **Speed encoder logarithmic X2 threshold (count)/P141:** X2 correction factor for managing the band speed encoder in logarithmic mode **(8.0000)**.
- **Speed encoder logarithmic X1 multiplier/P142:** X1 correction multiplier for managing the band speed encoder in logarithmic mode **(10.0000)**.
- **Speed encoder logarithmic X2 multiplier/P143:** X2 correction multiplier for managing the band speed encoder in logarithmic mode **(1000.0000)**.

SHUTTLE AXIS:

- **Blade speed monitoring before enabling on delay/P43:** Delay in controlling the min. Speed (8.000).
- **Blade speed monitoring wheel diameter mm or inch/P44:** Pulley diameter (189370).
- **Blade speed monitoring number of pick- up pulses per round/P45:** Number of impulses/pulley turn (5.0000).
- **Blade speed monitoring watch dog on delay/P46:** Delay in controlling single impulses (0.500).

- **Blade speed monitoring min speed watch dog value m or ft/min:** Min. speed in m/min or ft/min (39.3700).
- **X positive software limit (mm - inch)/P116:** Feeder max. Stroke (24).
- **X negative software limit (mm - inch)/P117:** Feeder min. Stroke (0.0000).
- **X joystick feed slow (mm/min or inch/min)/P118:** Slow feeding (19.6850).
- **X joystick feed fast (mm/min or inch/min)/P119:** Fast feeding (59.0551).
- **Over stroke x/P120:** Zeroing offset (0.3938).
- **Micro engagement speed mm or in/min/P121:** Speed of search for microswitch while the trolley is zeroed (78.7401).
- **Micro disegngagement speed mm or in/min/P122:** Speed of release from the search while the trolley is zeroed (11.8110).
- **Speed X on cycle mm/min or inch/min/p133: (157.4804).**

BLADE DEVIATION:

- **Blade Deviation Enable/P9** (1 = Enabled): Blade deviation enabling (1 = enabled) (1).
- **Blade Deviation count at zero position/P10:** Levels at zero blade deviation **(16416.0000).**
- **Blade Deviation count for division/P11:** Levels for dividing the blade deviation bar **(500.0000).**
- **Blade Deviation for scan time/P12:** Blade deviation reading time **(0.5000).**

HEAD ENCODER:

- **Blade Position Analogue In. Max Integer/P13:** Maximum counter value **(28900.0000).**
- **Blade Position Analogue In. Min Integer/P14:** Minimum counter value **(2476.0000).**
- **Blade Position Analogue In. Process Value Max MM or INCH/P15:** Maximum value in mm or inch **(14.4400).**
- **Blade Position Analogue In. Process Value Min MM or INCH/P16:** Minimum value in mm or inch **(0.0000).**
- **Blade Position Analogue In. Max Voltage Vdc/P17:** Voltage value corresponding to maximum counter value **(8.700).**
- **Blade Position Analogue In. Min Voltage Vdc/P18:** Voltage value corresponding to minimum counter value **(0.0).**

BLADE TENSION:

- **Blade tension control large pulse width sec./P48: (20.0000).**
- **Blade tension control off between pulses awaiting sec./P49 (0.7000).**
- **Blade tension control small pulse width sec./P50: (0.0250).**
- **Blade Tension Control Max Alarm Tension KN/P51:** Maximum voltage allowed to apply adjustment **(4400.0000).**
- **Blade Tension Control Min Alarm Tension KN/P52:** Minimum voltage allowed to apply adjustment **(1320.0000).**
- **Blade tension control error large to small pulse changeover/P53: (100.0000).**
- **Blade tension control max error tolerance kn/P54: (50.0000).**
- **Blade tension control min error tolerance kn/P55: (-50.0000).**

- **Blade tension control setpoint kn/P56: (3700.0000)**
- **Blade Tension Control An. In. Load Cell Max Integer Value/P57:** Maximum counter value from load cell analogue input **(4928.000).**
- **Blade Tension Control An. In. Load Cell Min Integer Value/P58:** Minimum counter value from load cell analogue input **(0.0000).**
- **Blade Tension Control An. In. Load Cell Process Value Max KN/P59:** Load cell analogue input maximum value allowed for acquisition **(1984.000).**
- **Blade Tension Control An. In. Load Cell Process Value Min KN/P60:** Load cell analogue input minimum value allowed for acquisition **(0.0000).**
- **Blade Tension Control Enabling/P61:** Automatic blade tension adjustment enable **(1.000).**
- **Blade Tension Control An. In. Load Cell Voltage Value Max Vdc:** Load cell analogue input voltage maximum value **(10.0000).**
- **Blade Tension Control An. In. Load Cell Voltage Value Min Vdc:** Load cell analogue input voltage minimum value **(0.0000).**

CLAMPS ENCODER:

- **Clamps Locking Status Rises After Specified Secs From Command:** Time needed to allow clamp closed **(2.0000).**
- **Clamps Unlocking Status Rises After Specified Secs From Command:** Time needed to allow clamp open **(0.7000).**
- **Time shuttle vise position setting (short remnant) sec.: (6.0000).**

VARIUS:

- **MKS Imperial Unit System Switchover Enabling:** Imperial = 0.0: sets measuring system MKS (0) or IMPERIAL (1) **(0.000).**
- **Type machine (0=H14-A; 1=H11-A; 2=H230-A)/P101: (0).**
- **Type logo (0=HYDMECH; 1= ZEPH; 2=S&F)/P146: (0).**

CUT HEAD:

- **Feed Encoder Counting Direction Inverting/P67 = 1.0: (0.0000).**
- **Feed Encoder Max Counter Value M/Min or Inch/Min/P68: (20.0000).**
- **Feed Encoder Min Counter Value M/Min or Inch/Min/P69: (0.0000).**
- **Feed Encoder Pulses Scaling Resolution MM or Inch/Pulse/P70: (0.1000).**
- **Feed Encoder Speed to Pulse Adding Enabling = 1.0/P75: (1.000).**
- **U Y Feed Axis Full Stroke Width MM or Inch/P82:** U axis maximum stroke (mm or inch) **(300.0000).**
- **Y Cutting Axis Maximum Position MM or Inch/P86:** Y axis maximum limit switch (mm or inch) **(14.37).**
- **Y Cutting Axis Minimum Position MM or Inch/P87:** Y axis minimum limit switch (mm or inch) **(0.0000).**
- **Y Cutting Axis Auto Cycling Slow Down From Target MM or Inch:** Deceleration space (mm or inch): distance from target position at which slow descent is set **(0.7875).**
- **Y Cutting Axis Cutting Feed PID Control Error MM or Inch/P90: (0.1969).**
- **Y Cutting Axis Jog Mode Downgoing Feed MM or Inch/P92:** Y descent speed in jog mode (mm/min or inch/min) **(78.7401).**

- **Y Cutting Axis ½ Auto Cycling Slow Down Feed MM or Inch/P93:** Slow Y position speed (mm/min or inch/min) **(15.0000).**
- **Y Cutting Axis All Mode Upgoing Feed MM or Inch/P94:** Y upward speed (mm/min or inch/min) **(122.0473).**
- **Y Cutting Axis U Opening Y Feed Curve Bypass/P95 = 1.0:** Descent speed linearizing curve enable (F) **(0.0000).**
- **Y Cutting Axis Cutting Feed PID Control Increase Correction (degree):** F correction factor **(1.5000).**
- **Y Cutting Axis Cutting Feed PID Control Time (sec)/P114:** Time between one correction and the next **(0.100).**
- **H encoder max counter value %/P123:** Max. displayed value of H **(27.0000)**.
- **H encoder min counter value %/P124:** Min. displayed value of H **(8.0000)**.
- **H potentiometer analogue input fs max/P125:** Max. levels of the H potentiometer **(32512.0000)**.
- **H potentiometer analogue input fs min/P126:** Min. levels of the H potentiometer **(16.0000)**.
- **Feed force current control max (Ampere)/P127:** Max. set current of blade motor **(27)**.
- **Feed force current control min (Ampere)/P128:** Min. set current of blade motor **(7.0000)**.
- **Y joystick feed slow (mm/min or inch/min)/P130:** Slow manual head lowering **(33.4646)**.
- **Y joystick feed fast (mm/min or inch/min)/P131:** Fast manual head lowering **(80.0000)**.
- **Offset fcti mm or inch/P132:** Offset for rear head limit switch **(0.0552)**.
- **Feed encoder type (0 = linear; 1 = logarithmic) /P134**: Setting the encoder feeding as linear or logarithmic (0 = linear; 1 = logarithmic) .**(0.0000)**
- **Feed encoder logarithmic X1 threshold (count)/P135:** X1 correction factor for managing the head lowering speed encoder in logarithmic mode **(4.0000)**.
- **Feed encoder logarithmic X2 threshold (count)/P136:** X2 correction factor for managing the head lowering speed encoder in logarithmic mode **(0.0000)**.
- **Feed encoder logarithmic X1 mulitplier/P137:** X1 correction multiplier for managing the head lowering speed encoder in logarithmic mode **(1000.0000)**.
- **Feed encoder logarithmic X2 mulitplier/P138:** X2 correction multiplier for managing the head lowering speed encoder in logarithmic mode **(0.0000)**.

OPTIONAL:

- **Minimal Lubrification Enabling/P78 = 1.0:** Minimum lubrication enable **(1.000).**
- **Y Raise Up On Manual Cycle (1=Enabled)/P103:** Y axis upward stroke enabled at end of manual cycle (1=enabled; 0=disabled). Y axis returns to RHLS at the end of the manual cycle **(1.0000).**
- **Chip Conveyor Enabled (1=Enabled)/P105:** Chip ejector enable **(1.000).**
- **Enable blade minimun speed control (1 = Enabled)/P104:** Enabling the blade speed control (1 = enabled) **(1.0000).**
- **Type of blade tensioning** (1 = automatic, 0 = manual): Setting the automatic or manual blade tensioning (1= automatic; 0 = manual) **(2.0000)**.
- **Open front vise at manual cycle end** (1 = enabled): Setting the vice opening at cutting cycle end (1 = enabled) **(1.0000)**.

- **Type chipconveyor (0=micro; 1=phonic whell)/P161: (1.0000).**
- **Enabling debug (1=enabled)**: (0.0000).

TIMER:

- **Hydraulic Pump Off Delay Awaited Before Stopping Sec/P96:** Hydraulic pump off delay before stopping (seconds) **(50.000).**
- **Chip Conveyor Time On In Auto (M in)/P107: (0.5000).**
- **Chip Conveyor Time Off In Auto (M in)/P108: (0.5000).**
- **Period microchip conveyor (sec) (phonic whell)/P151:** (1).

PASSWORD:

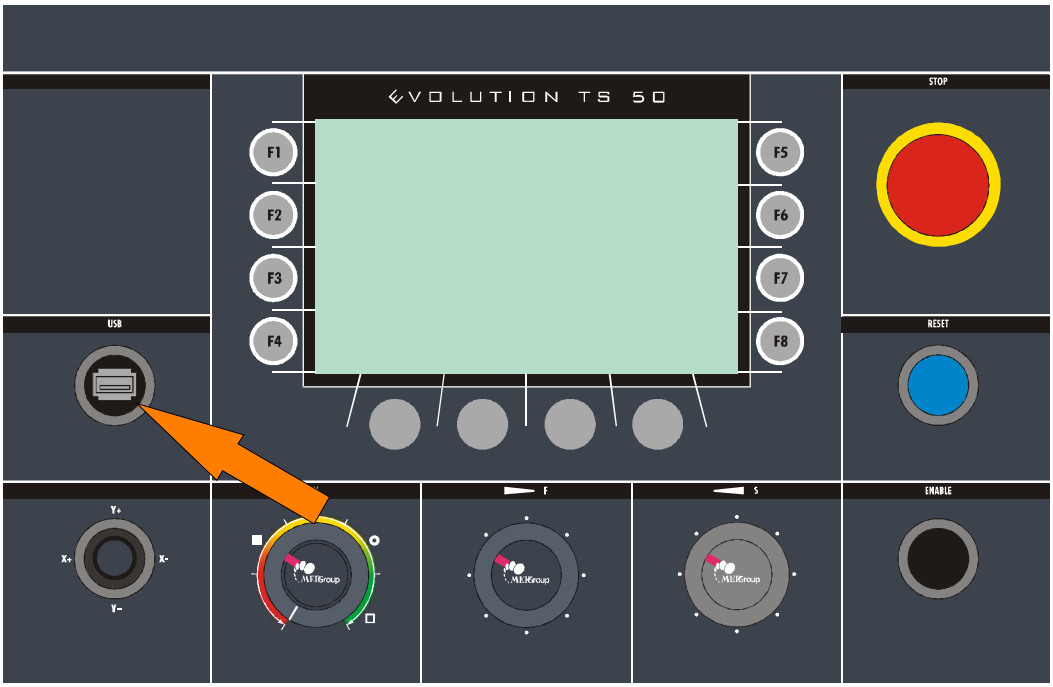
- **User password value/P99:** Password value setting **(7210721.000)**.

Software update procedure through USB - H-14A

The operations to update the software through a memory card are described here below.

Attention The operations described below will delete all data of the cutting programs and of the customized settings.

▶ Take the sawing machine off and insert the USB stick containing the update in the port shown in the figure.

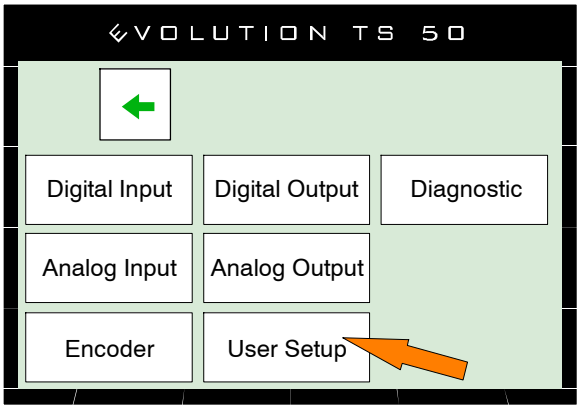


▶ Switch the machine on and wait for the message informing that the update has been completed. Then switch the machine off and on again to run the update.

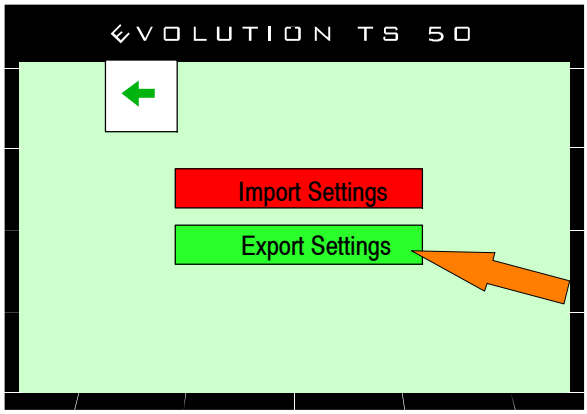
N.B. If the operator wants to keep the customized settings, he needs to make a backup following the operations described below before running the update.

The operations needed for the backup are listed below.

▶ From the Set- Up main menu select the box “User Setup” shown in the figure.

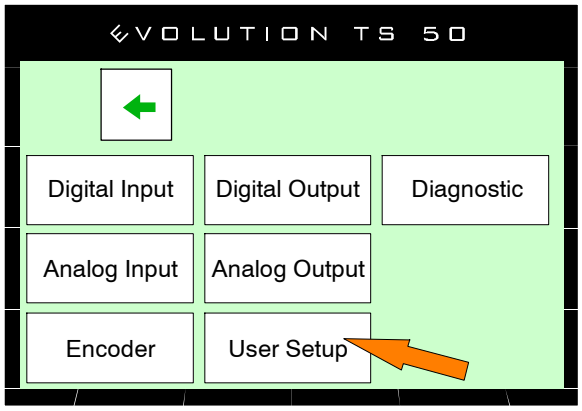


▶ Then, insert an empty USB stick in the suitable port: the box “Export settings” becomes green, press to save the settings.

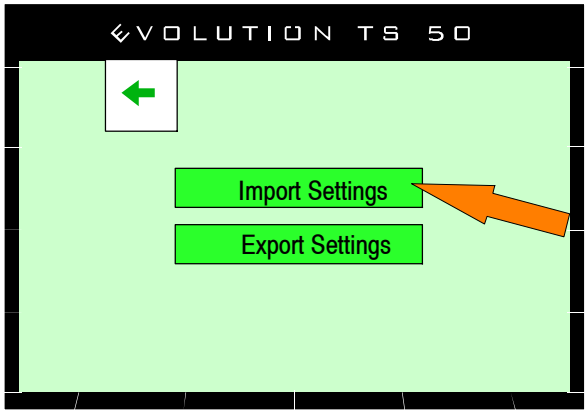


The operations needed for the restore are listed below.

▶ To restore the settings saved in the backup, after the update access the screen “User Set- Up” from the Set- up menu.



▶ Insert the USB stick in the suitable port, the boxes “Import Settings” and “Export Settings” become green. Press the box “Import Settings” to import the previously saved settings.



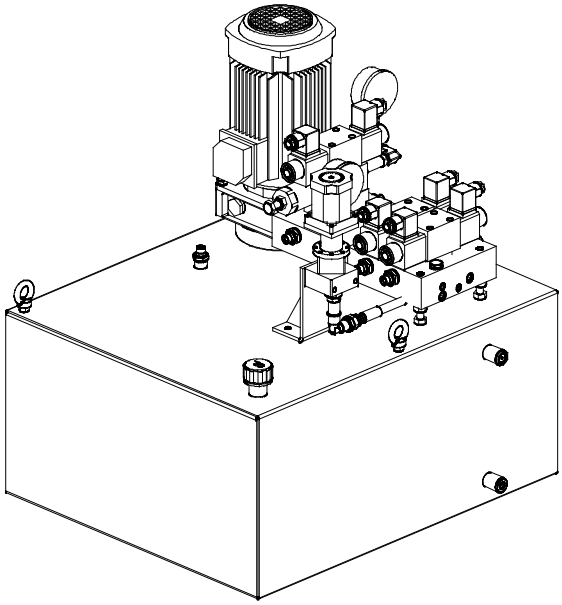
Now the customized settings and the data are again available and the machine is operational.

Machine working pressures

This section describes the procedures to change the vice and head operating pressures. Both adjustments strongly depend on the material type being processed.
The vice locking pressure can be set if the material could be strained or could be quite unstable while cutting.
The head lowering speed can be set by a flow adjuster on the control console.

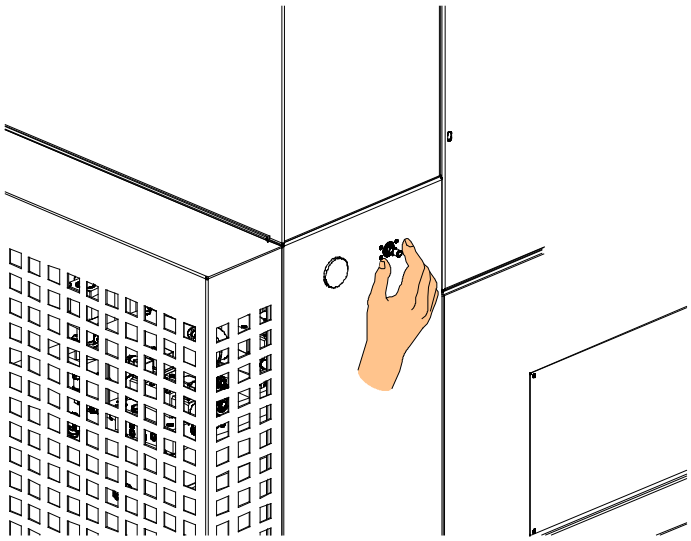
Machine working pressures

This section describes the procedures for vice tightening pressures by operating on the hydraulic power pack.



N.B. The vice working pressure is tightly bound to the type of material being worked and can be set if the material could be deformed or results unstable during cutting.
Both pressures can be adjusted by intervening on the relief valves of the power pack as indicated in the procedure described here below.

▶ Loosen the hex locknut on the maximum pressure regulator valve and using a socket wrench increase (clockwise or decrease (anti- clockwise) thepressure displayed on the pressure gauge.



▶ This done, tighten the lock nut and return the hydraulic power pack back inside the base.

Warning The power pack pressure gauges are installed on the delivery only; thus, to display the pressure on the return an additional pressure gauge must be connected in the monitoring fitting.

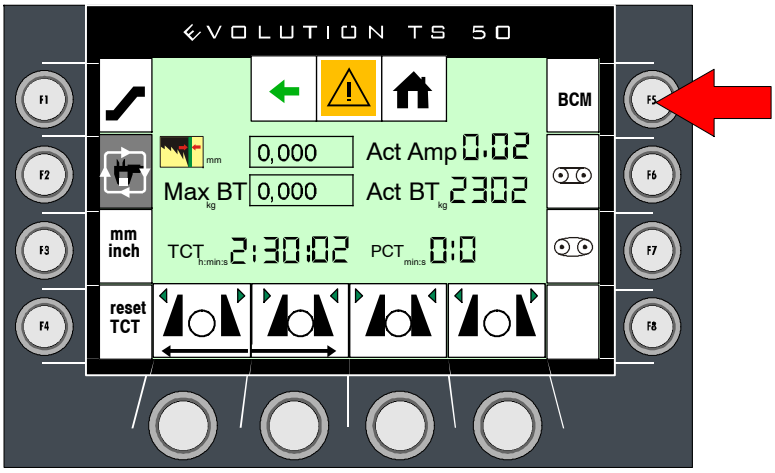
Cutting head

Blade tensioner slide play adjustment

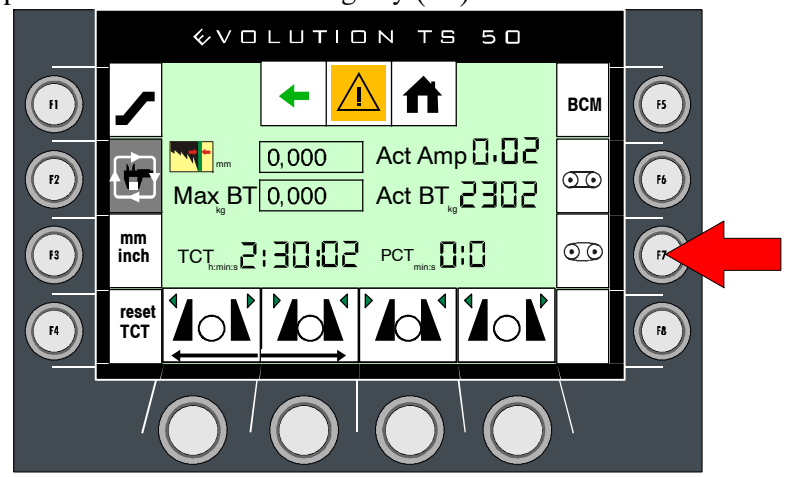
To reduce the play which may develop over time between the blade tensioner slide and slide gibs, adjust the grub screws between the gibs and slide as follows:

▶ Take the head completely up to the mechanical stop.

▶ Press the key indicated in figure F5 (its box lights up), to activate the Blade Change Mode. The keys for tensioning and detensioning the band F6- F7 are thus activated.



▶ Then press the band detensioning key (F7).

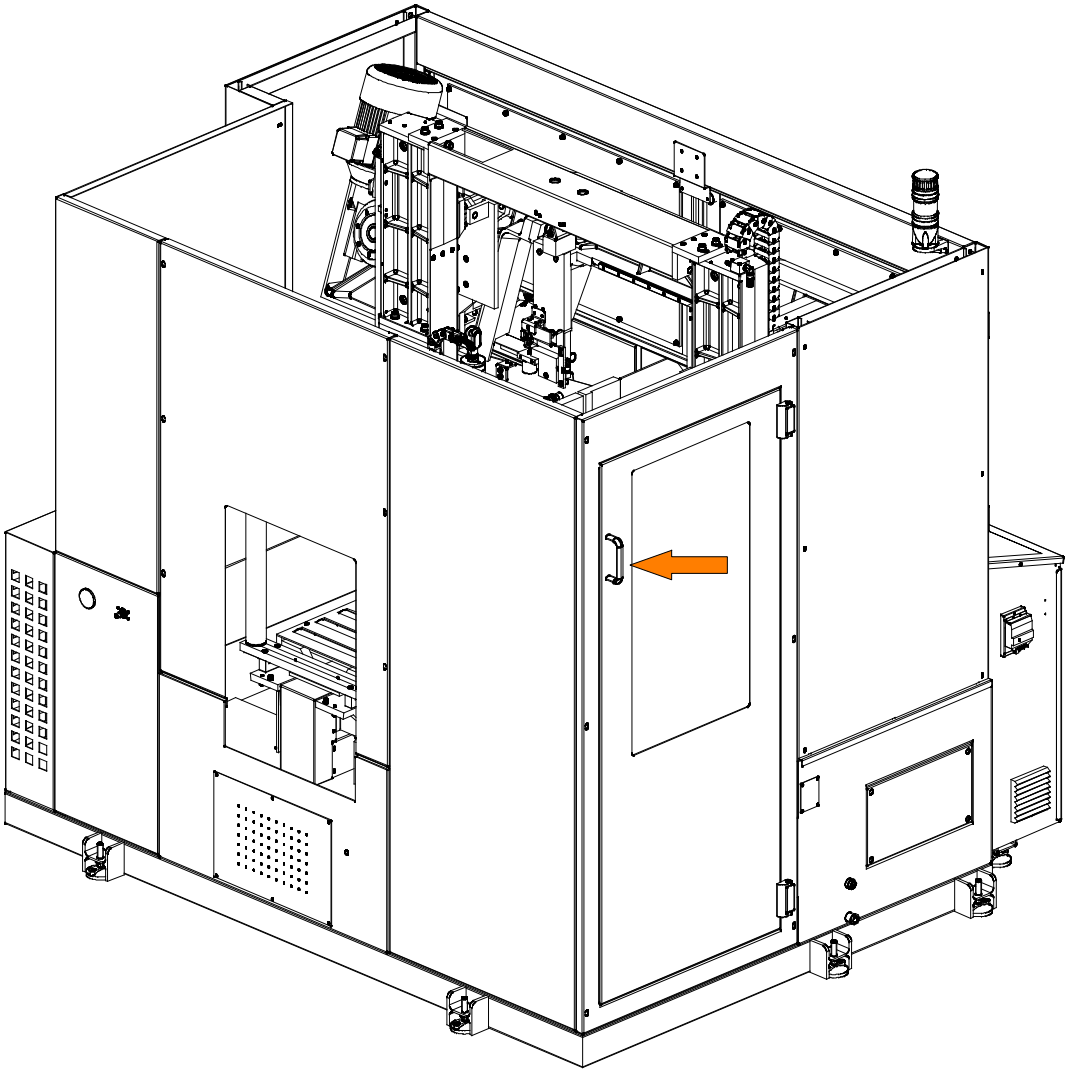


▶ Cut the machine off.

▶ Open the front protection cover.

▶ Remove the blade from the flywheels;

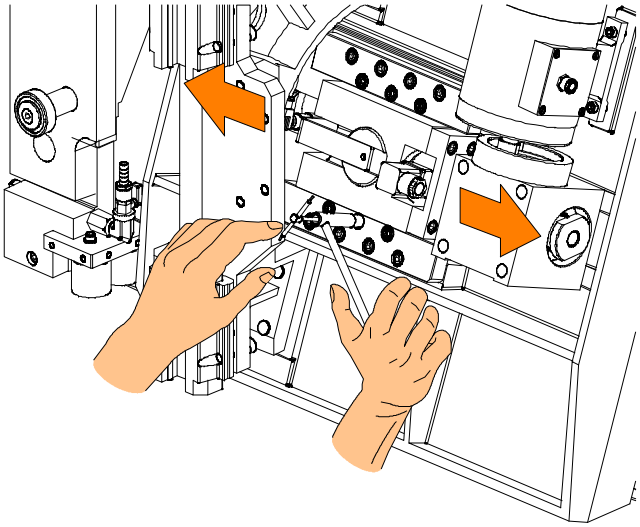
▶ Open the door to access the blade- tensioning slide on the back of the cutting bow.



▶ remove the plug connecting the slideway to the cylinder rod;

▶ Move the slide back and forwards to locate any friction or excessive play;

▶ Slacken the nuts, using a tubular nut driver to hold the grub screws firm;

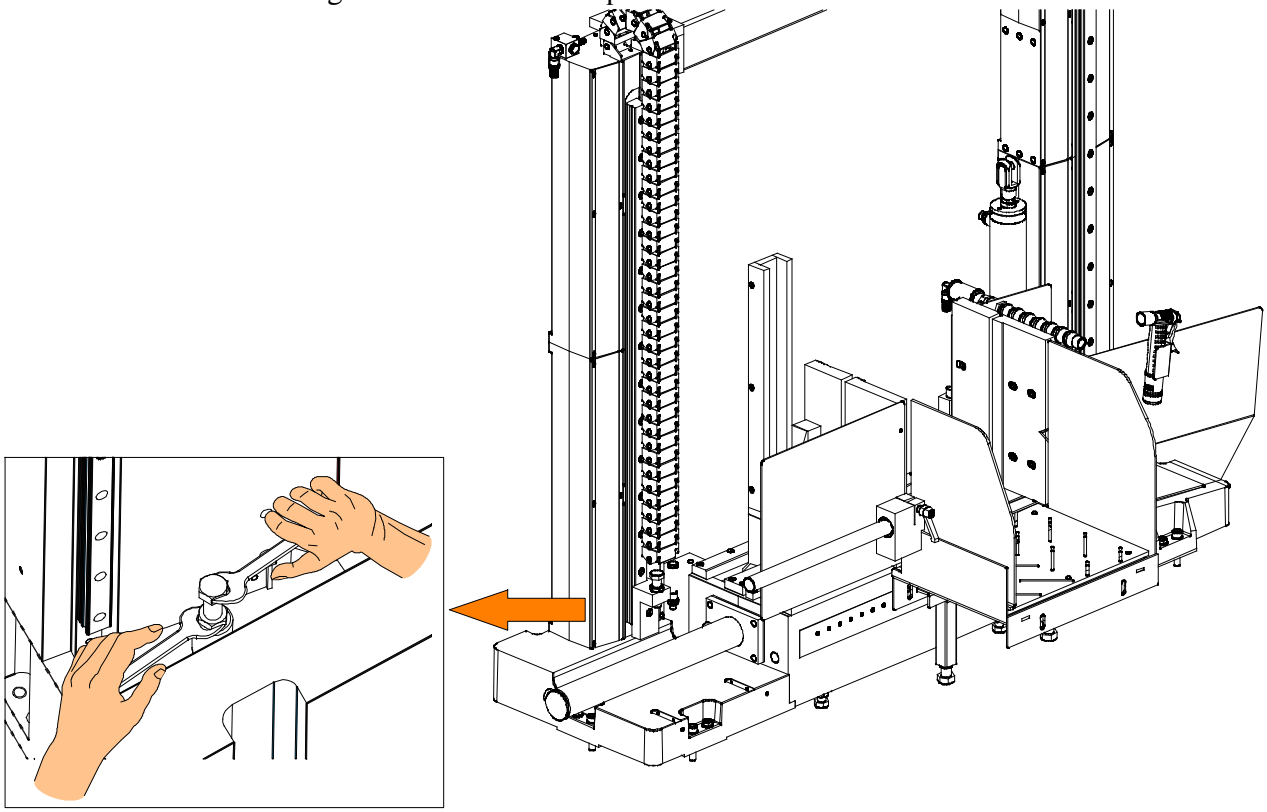


▶ Finally, tighten the grub screws to take up any play or otherwise, slacken them to reduce any friction.

Cutting head stroke

The stroke of the operating head during the cutting cycle depends on the RHLS (rear head limit switch) and FHLS (forward head limit switch) points set electronically from the control console. The operating head is anyway equipped with a mechanical limit switch determining the stroke lower limit:

▶ To adjust this stop, use two hex wrenches, one to lock the nut and the other to tighten or slacken the stop screw.



Blade guide components

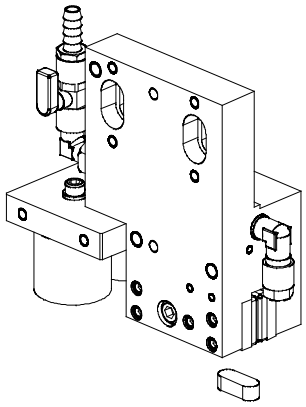
Band saw blades offer enormous advantages to cutting applications, without requiring any special skills by the operator. A description follows of the blade guide adjustments required to ensure correct operation of the saw.

Blade guide heads

The first blade adjustment involves adjustment of the heads. The blade guide heads comprise the blade guide plates which ensure correct longitudinal alignment, the blade steady buttons which control vertical blade flexure and the coolant delivery cocks.

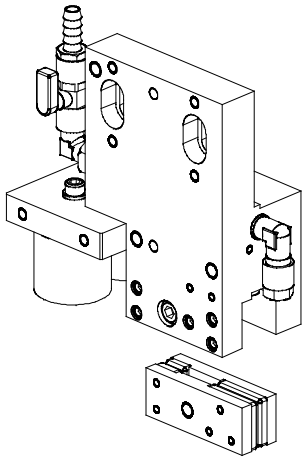
Blade- pressing tang

The blade- pressing tang prevents the blade from bending upwards due to the vertical component of the cutting force. This device is a component of the front and rear heads and needs no adjustment.



Blade guide plates

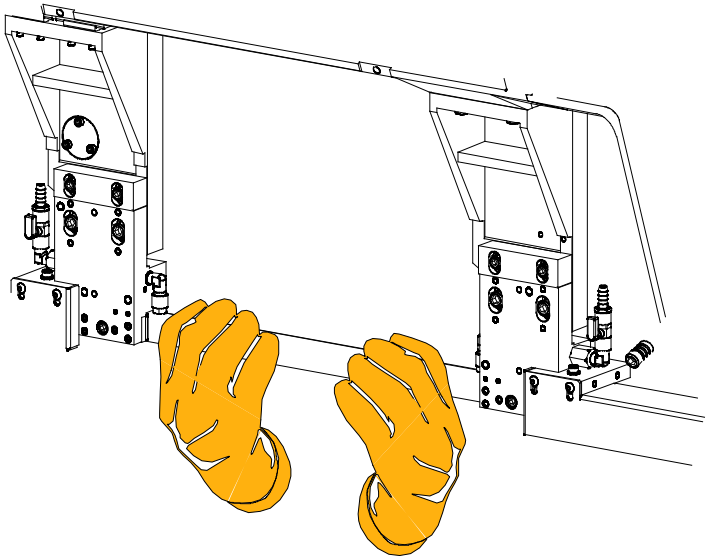
The plate contact points feature widia inserts which guide the blade longitudinally. A small amount of play must exist between the plates and blade to ensure that the blade runs smoothly and perpendicular to the work table.



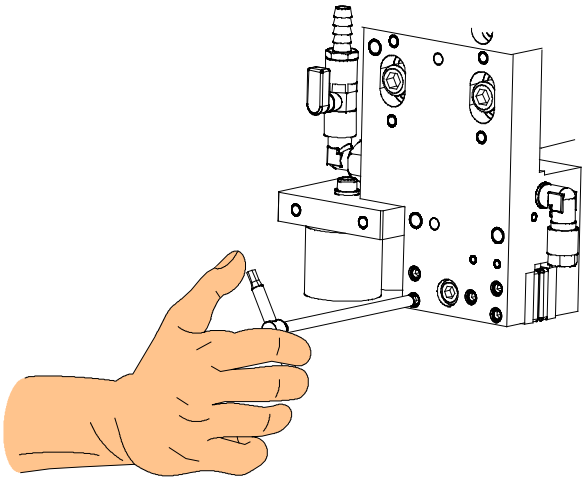
Thanks to the widia inserts, the working life of the guide plates is practically the same as that of the machine itself. However, if due to wear or the assembly of a new blade with a different thickness, the following adjustments must be made:

▶ Take the head completely up to the mechanical stop.

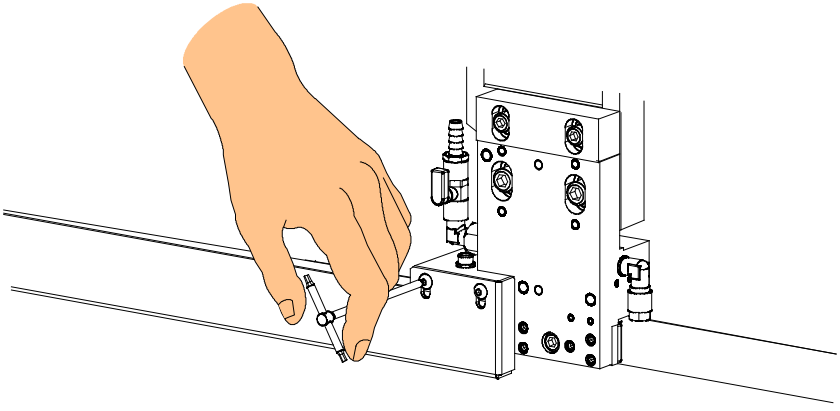
- Detensioning blade as explained in the previous section.
- Open the front protection cover.
- Cut the machine off.
- Wear protective gloves when changing the blade;
- Make sure there is a small amount of play between the blade and guide plate inserts.



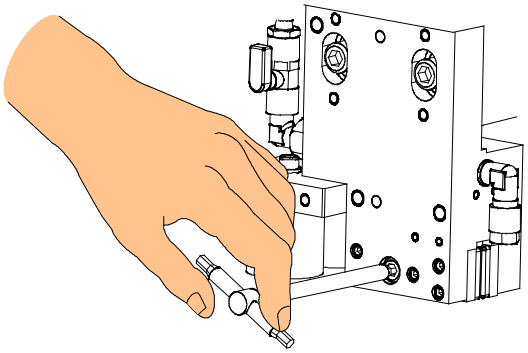
- Remove the blade protections from the heads by loosening the fastening screws.



- If the amount of play is not sufficient for the blade to run smoothly, adjust the locking torque of the two grub screws with a hex wrench.



- Replace any worn plates by replacing the plate fixing screw.



- Repeat the above sequence on the front blade guide head;
- Restore the blade protections of the front and rear heads.
- Close the blade cover and power the machine again.

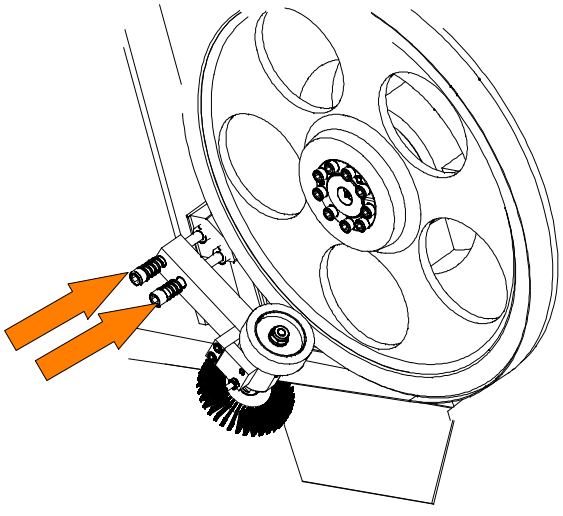
Blade

The adjustments required to ensure correct operation of the blade are described below. For further information regarding band saw blades, refer to Chapter 9 which provides a more detailed description of the different types of blade.

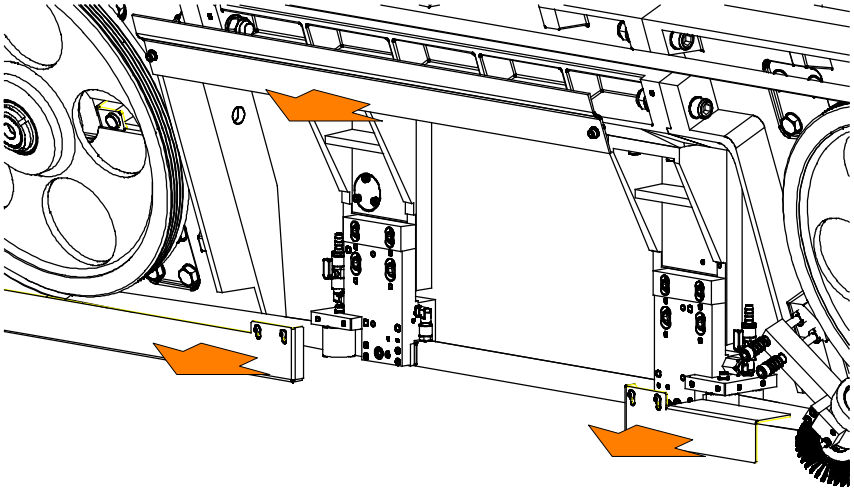
Tool changeover

Optimum working conditions both enhance operator safety and extend the tool service life. The cutting tool should in any case be replaced when poor cutting performance starts to affect productivity. The tool changeover procedure is described as follows:

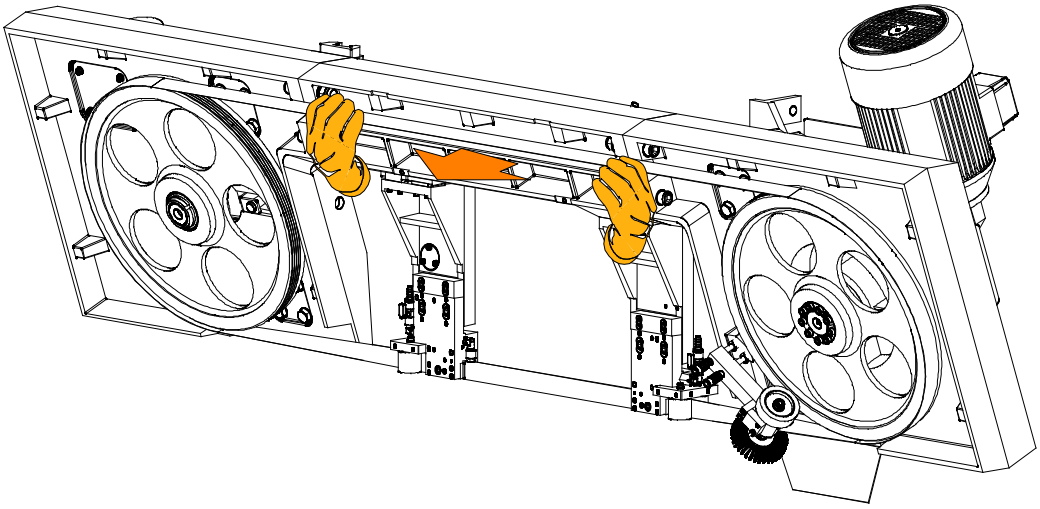
- Take the head completely up to the mechanical stop.
- De- tension the band as explained in the previous section.
- open the front protection cover.
- Cut the machine off.
- Wear protective gloves when changing the blade;
- move the blade cleaning brush away by loosening the screws and pulling it outwards;



▶ remove the blade protections from the heads by loosening the fastening screws.



▶ Remove the worn blade by sliding it off the flywheels and front and rear heads;



▶ fit the new blade into the blade guide heads and make sure there is a minimum amount of play between the blade and the plates;

▶ restore the blade protections of the front and rear heads and position again the blade- cleaning brush correctly.

▶ Close the blade cover and power the machine again.

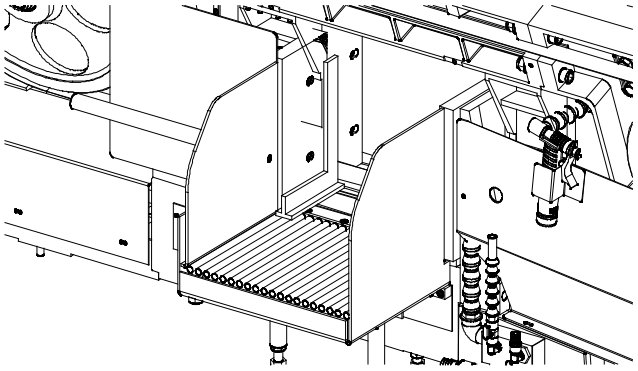
Blade perpendicularity

The perpendicularity of the blade to the work surface plus the blade tension are vital for achieving straight cuts. This adjustment is carried out with the help of a goniometer and a workshop square which should be placed adjacent to the blade resting on the work surface.

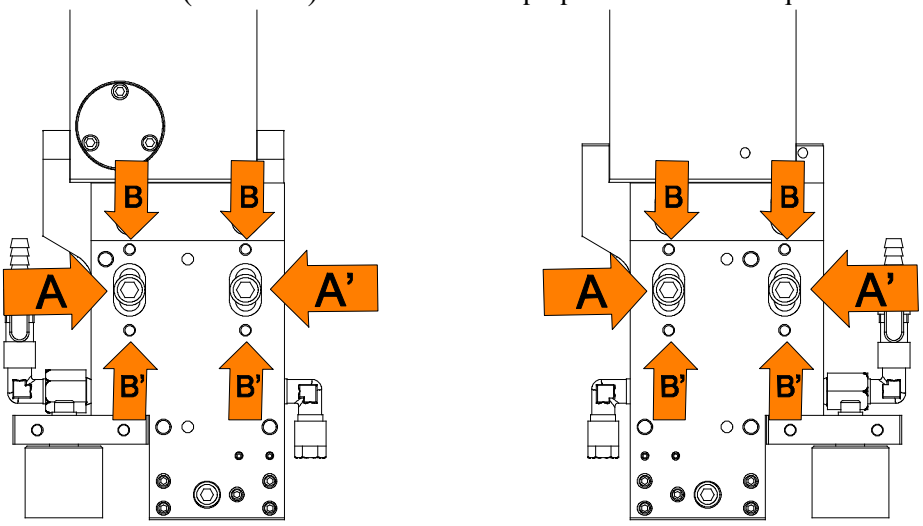
▶ Open the cutting vice;

▶ position the head so that the band is above the vice jaws;

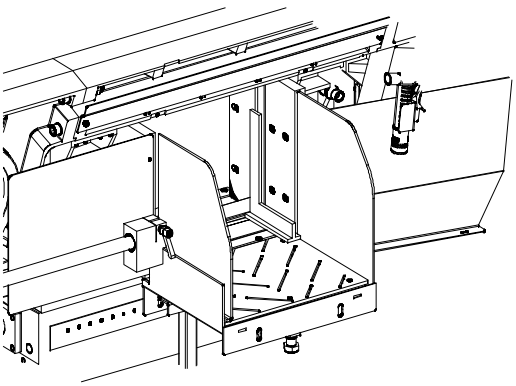
▶ position the square on the well cleaned reference plane and rest it on the blade, close to the movable vice square and head, in a position where teeth do not hinder the contact.



▶ If the band has the contact point in the upper part of the square: loosen the socket head screws (A and A') fastening the head, loosen the two dowels (B' and B') and tighten the two dowels (B and B). If instead the contact point is in the lower part, loosen the socket head screws (A and A'), loosen the two dowels (B and B) and tighten the dowels (B' and B') until the band is perpendicular to the square.



▶ Position the square on the working table close to the fixed vice square and head.

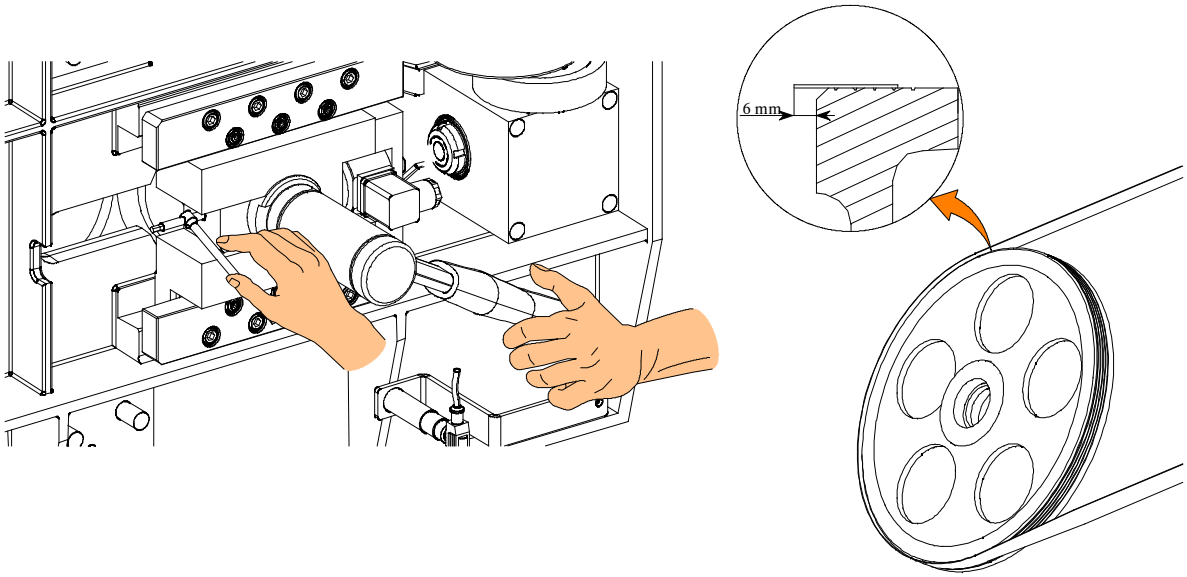


▶ Repeat the squaring operations as for the rear head.

Rotation axis control

Pulleys must be adjusted in their coplanarity. The adjustment is aimed at ensuring the belt rotation, keeping approx. 6 mm of distance from the point of the belt teeth to the pulley machined surface. This prevents an early wear of the belt.

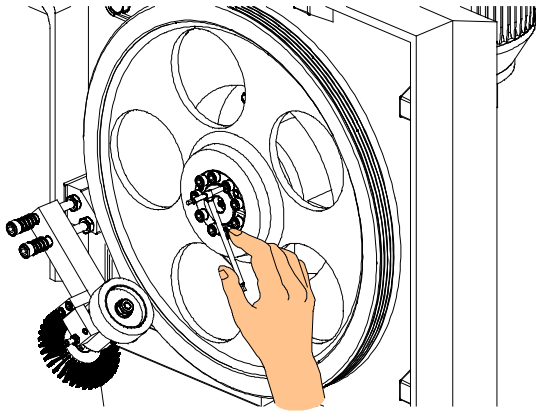
- ▶ De-tension the band and remove the blade protection;
- ▶ slacken the grub screw and, using a mallet, tap the shaft in or out;
- ▶ Position again the blade protection and make the blade turn;
- ▶ check the distance, as shown in the picture;



- ▶ if necessary, repeat the operation till getting the correct position.

Rear flywheel alignment is closely linked to adjustment of the front flywheel.

- ▶ Adjust by loosening all pulley locking screws and moving the pulley manually inwards or outwards according to the distance of the blade from the pulley machined surface. Tighten the screws again and check the coplanarity making the belt turn a few times.

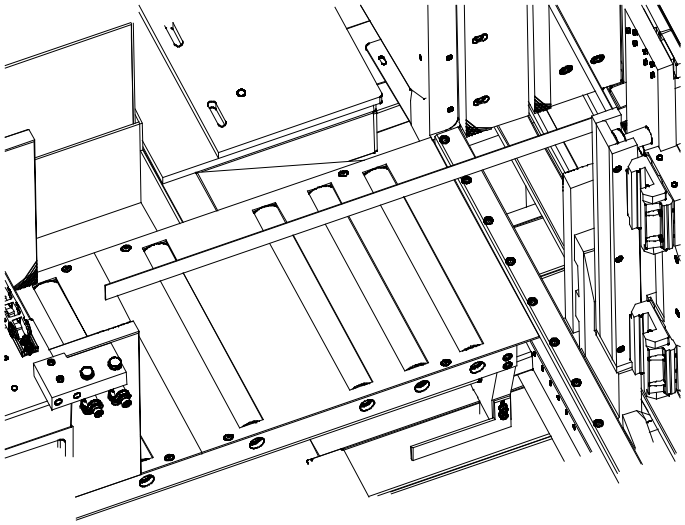


Feeder

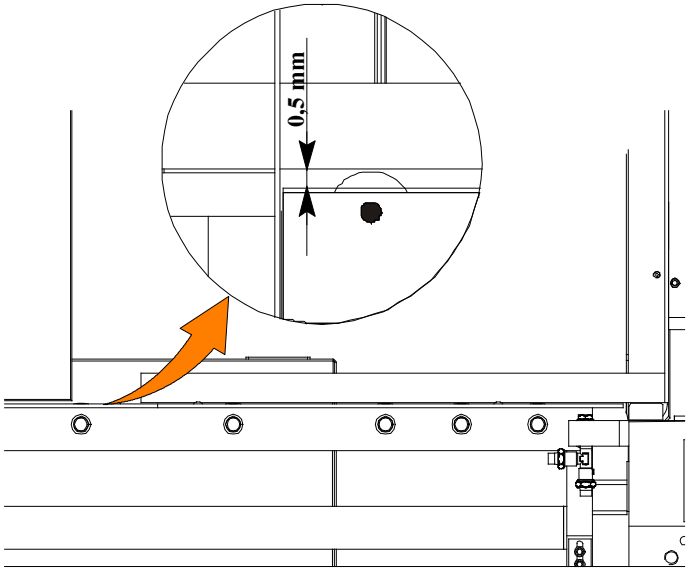
Should the feeder at a later stage in time become misaligned with the cutting table, then use the levelling devices located on the side of the machine and the loading table to restore. Misalignment can be measured using a workshop standard ruler or a straight bar section.

- ▶ Open the blade cover.

▶ Place the ruler on top of the feeder to check that the feeder is parallel to the cutting table.

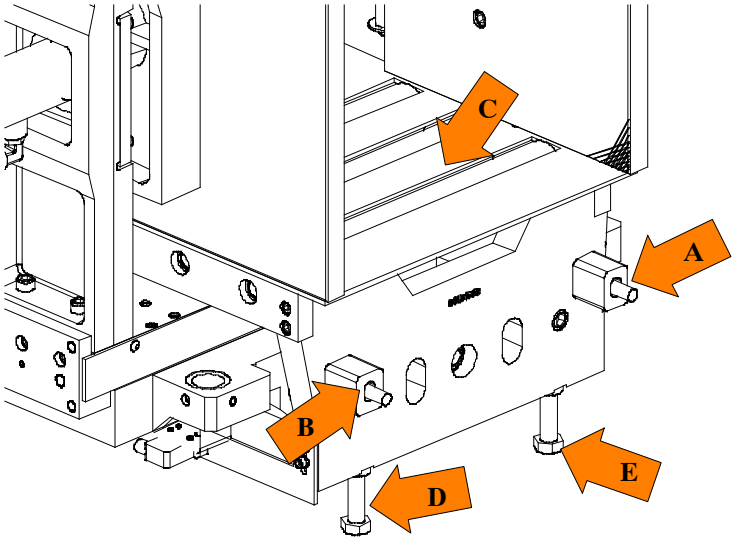


▶ The material to be cut should touch and not rub along the machine work table, make sure that the height of the feeder is at least 0,5 1 mm above the cutting table.

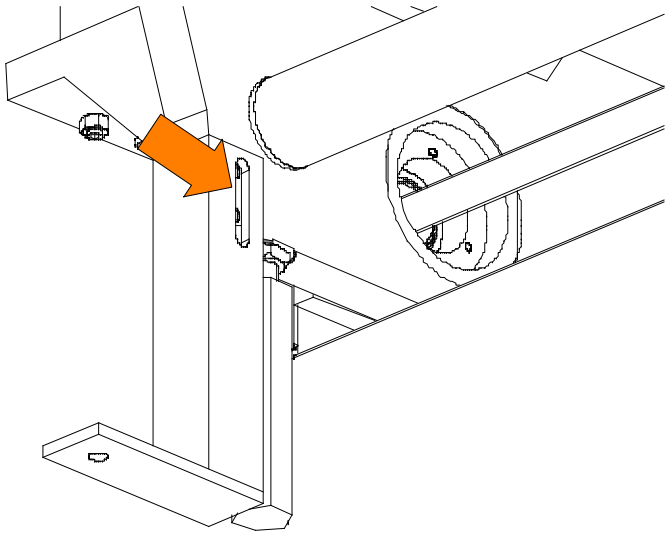


▶ If the feed table is not parallel to the cutting table, move the feed carriage away from the platform, then loosen the fixing TCEI screws on the feeder (A- B) and gain access by removing the cover indicated by the arrow C.

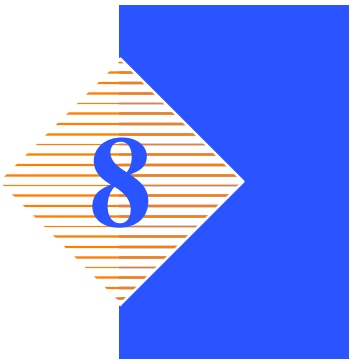
▶ Adjust the foot height (D- E), according to the measurement read on the ruler on the cutting table so as to obtain a difference in level of 0.5 mm between the two tables.



▶ After having set the height next to the fixed platform, always with the ground ruler, adapt the rest of the feeder adjusting the height of the supporting brackets by the suitable slots.



Maintenance and choice of consumables



H- 14A is built to be sturdy and long- lasting It has no need of any special maintenance, though, like all other tools, it needs adjusting from time to time, especially if not regularly looked over or used without due care.

This chapter, therefore, is intended as a guide for those who want to look after the machine and get the most out of it for as long as possible.

The role of the operator

The person operating and maintaining the machine must follow these instructions for his own safety, as well as for the safety of other personnel, and in the interests of machine productivity:

- check that his own work and that of the other operators of the machine always complies with the relevant safety standards. Therefore, check that the safety devices are in position and work perfectly and that personal safety requirements are complied with.
- Ensure that the working cycle is efficient and guarantees maximum productivity, checking:
  - the functions of the main components of the machine;
  - the sharpness of the blade and coolant flow;
  - the optimum working parameters for the type of material.
- Check that the quality of the cut is that required and that the final product does not have any machining defects.

Maintenance requirements

- All ordinary and extraordinary maintenance must be carried out with the power switched off and the machine in emergency condition.
- To guarantee perfect operation, all spare parts must be Hyd- Mech originals.
- On completion of maintenance works, ensure that the replaced parts or any tools used have been removed from the machine before starting it up.
- Any behaviour not in accordance with the instructions for using the machine may create risks for the operator.
- Therefore, read and follow all the instructions for use and maintenance of the machine and those on the product itself.

General maintenance

Daily

The daily maintenance operations to carry out on the machine are as follows:

- remove all swarf from the machine (preferably with a non- fibrous cloth);
- empty the swarf drawer (this is located on the right side of the base);
- top up the lubricant/coolant level;

- check state of blade wear and replace if necessary;
- check the blade cleaning brush, clean and relocate; if worn, replace;
- at the end of the working day, slacken the blade to 5 Bar (70 Kg) tension to prevent unnecessary and damaging stress on the machine.

Weekly

The weekly maintenance operations are as follows:

- remove all swarf;
- clean the vice and lubricate all joints and sliding surfaces with a good quality oil;
- Control the blade tension that should be 900 Kg (70 Bar) for the machine to work efficiently.
- clean the air intake vents of the electrical panel: remove the fan and clean the air filter by blasting with compressed air.

- Control the oil level of the hydraulic unit and top up whenever necessary. Check for oil leaks in the hydraulic couplings and that no pipes have been badly bent by accident.

Monthly

This section lists the operations to be carried out for the monthly maintenance of the machine:

- check the perpendicularity of the blade to the work surface; if it is necessary to adjust the blade setting, follow the instructions set out in Chapter 7;
- check the state of the widia inserts and the blade steady button; replace if worn or chipped; check their positions and adjust if necessary (see Chapter 7);
- thoroughly clean the bottom of the water tank and the electropump filter.

Maintenance of working parts

During maintenance work on the **H- 14A**, special attention should be paid to the operating parts described in Chapter 7. The worm reduction gear filted on the machine requires no maintenance.

Hydraulic powerpack

Maintenance of the hydraulic powerpacks:

- after the first 100 working hours it is advisable to clean the tank and the circuit completely, using washing oil, and filter the initial oil used.
- Every 3000 working hours, on completing normal work clean the tank and change the oil.

To clean this power pack, it is advisable to follow these instructions:

- never use cotton or stringy rags;
- empty the system, clean or change the filters and clean the tank;
- fill the system with washing oil;
- run the machine without any load for 30 minutes, making sure that the oil circulates through all its parts;
- drain the washing oil carefully, check the state of cleanliness of the filters and the tank;
- fill using the prescribed oil.

Consumable materials

It is essential to use specific oils for the pneumatic and lubricant/coolant circuits. The oils suitable for each of these circuits are listed below.

Oil for transmission box

The machine can be equipped with a worm gear which is permanently lubricated and therefore maintenance- free.
Otherwise, the machine can be equipped with a worm gear having filler cap, level

checker and drain to top the oil up if necessary. Below, there is a short list of synthetic oils for permanent lubrication:

BP Energol SG XP220 - KLUBER Syntheso D220EP - ESSO Glycolube Range 220 - IP CT614 - FINA Girans.

- transmission box capacity Lt. 0.320

Oils for hydraulic circuit

The machine's hydraulic system is supplied with FOX YE 32 oil. This oil is used by the head cylinder, vice cylinders, blade tensioning cylinder, and the hydraulic power packs. The following oils may also be regarded as compatible or having equivalent specifications:

API Cis 32 - ARAL Vitam GF 32 - CASTROL Hyspin AWS 32
ESSO Nuto H 32 / HP 32 - IP Hydrus oil 32 - TOTAL Azolla ZS 32
VALVOLINE Hydraulic HLP 32 - MOBIL DTE 24 / 25 / 26
MOBIL Vacuoline Oil 1405 - FIAT HTF 32 - Q8 Haydn 32
SHELL Tellus oil 32 - BP Energol HLP 32

Hydraulic power pack:
- reservoir capacity litres 70

Oil for lubricant/coolant fluid

The oil used for the machine lubricant/coolant fluid is CASTROL Syntolin TFX. Though there are no specific standards for these types of oils, Hyd- Mech considers that the above product has the best price/quality rapport. The following oils can also be said to have similar characteristics and are therefore compatible:

AGIP NB 200 - SHELL Lutem TT - IP Utens Fluid- F

Finally, a lubricant/coolant guaranteed and distributed by a band saw manufacturer (LENOX) is BAND- ADE SAWING FLUID LENOX.

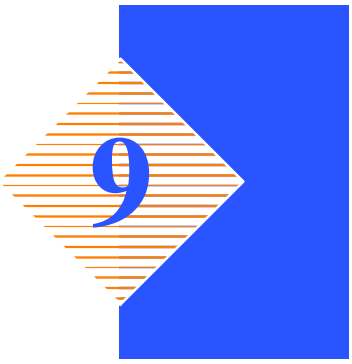
- tank capacity Lt. 200
- oil concentration 5- 6 %

Oils for spray mist system (optional)

The oil type used for the machine spray mist system is the cutting oil: Blaser Vascomill F 22.
Though there are no specific standards for these types of oils, Hyd- Mech considers that the above product has the best price/quality rapport. The following oils can also be said to have similar characteristics and are therefore compatible:

SHELL MACROM 401 F22 - AGIP ESTRAMET F20

Cutting speed and choice of tools



The cutting speed is determined by the blade speed and the head feed speed. While the head speed is provided by the downstroke movement of the head, the blade rotation speed can either be fixed or variable. This chapter describes the cutting speeds the machine can operate at in the standard version, as well as the speeds for which the optional electronic speed controller (inverter) is necessary. When using the **H- 14A**, it is important to select the correct type of blade for the material to be cut. This chapter explains the limitations and specific applications of the different types of blades.

Cutting speed

Standard machine

The standard version with 4- pole motor, has a speed range from 15 to 100 m/min. The inverter is an electronic instrument installed on the **H- 14A**, to control the rpm of the spindle motor. This instrument simplifies special cutting jobs by adjusting the blade rotation speed to suit the kind of material being cut. It thus optimises blade usage, since you can adapt a blade not designed for a specific type of material and avoid premature blade wear.
The inverter's specifications are set out below as listed earlier in the *"Machine specifications"* table in Chapter 1.

Inverter technical specifications	
Protection rating	IP 31
Vibration and shock resistance (EN50178)	0.6 gn from 10 to 50 Hz 2 gn from 50 to 150 Hz
Max. relative humidity	93% without condensation or drop- forming
Acceptable Temperature Range (EN 50178)	For warehouse storing: from - 25° C to +65° C For operating purposes: from - 10° C to +40° C
Max. altitude	1000mt. with no derating
Supply	- single phase: 200V - 15% to 240V + 10%
	- three phase: 200V - 15% to 230V + 10% 380V - 15% to 460V + 10%
Frequency	50/60 Hz ± 5%
Output voltage	Maximum voltage equal to the supply voltage
Output frequency range	0,5 a 320 Hz
Max. transients	150% of electronic speed control rated current for 60 secs.
Frequency resolution	- Display: 0.1 Hz - Analog inputs: 0.1 Hz per 100 Hz max.

Inverter technical specifications	
Switching frequency	Adjustable from 2.2 to 12 Hz max.
Electronic speed control protection and safety devices	Galvanic insulation between power and control panel
	Short circuit protection: - of available internal supplies; - between U- V- W output phases between phase and earth for calibres from 5.5 to 15Kw
Motor protections	Thermal protection against overheating and overcurrents
Motor protections	Protection integrated in the electronic speed control with 1^2t calculation
	Protection integrated in the electronic speed control with 1^2t calculation
Motor protections	Protection integrated in the electronic speed control with 1^2t calculation

Choice of blade

When using band saws to cut metals, an important factor is the choice of pitch, i.e. the number of teeth per inch (25.4 mm.), which must be suitable for the workpiece material. The following recommendations may be taken as general guidelines:

- thin- walled materials, such as sheet steel, tubes and profiles require a fine pitch frequency. 3 to 6 teeth should be engaged in the breadth of the material at any one time;
- large section cutting requires a coarse pitch to cope with the higher volume of swarf and optimal tooth penetration;
- soft materials (aluminium alloys, soft bronze etc.) also require a coarse tooth pitch.

Saw tooth pitch

The choice of teeth per inch, therefore, depends on various factors:

- the size of the section;
- the hardness of the material;
- workpiece wall breadth.

Very large dimensions require coarse teeth, while small dimensions require finer teeth. Whatever the case, ensure that there are always at least six teeth engaged in the cut, with reference to the thinnest vertical walls positioned transversally to the blade.
Concerning the type of Shark machine, a first broad distinction can be made according to the hardness of materials:

	Mild steels < 61 HRB < 55 kg/mm^2	Hard steels > 65 HRB > 65 kg/mm^2
	NR. TEETH/INCH	**NR. TEETH/INCH**
MINIMUM	3 / 4	5 / 8
OPTIMUM	4 / 6	6 / 10
MAXIMUM	8 / 12	10 / 14

Cutting speed and downstroke speed

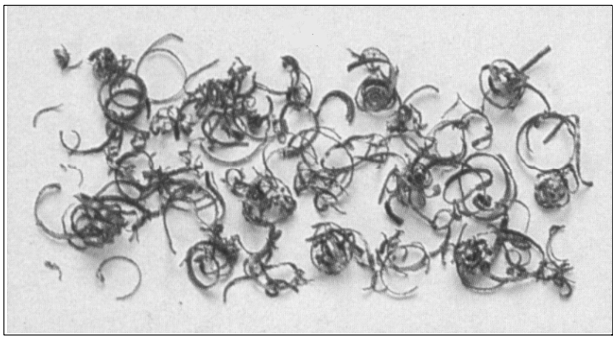
The cutting speed (m/min) and the downstroke speed (cm^2/min) are limited by the heat generated around the points of the teeth. If the downstroke speed is too high, the cut will not be straight, either vertically or horizontally.

The cutting speed depends, as indicated above, on the tensile strength of the material (kg/mm^2), its hardness (HRB) and the thickness of largest sections. The downstroke speed depends on the material thickness. Therefore, large- section, solid or thick- walled materials (s > 5 mm), can be cut at high speeds, providing there is sufficient swarf removal from the blade; thin- walled materials, such as slim piping or profiles, must be cut using low and especially constant downstroke speeds.

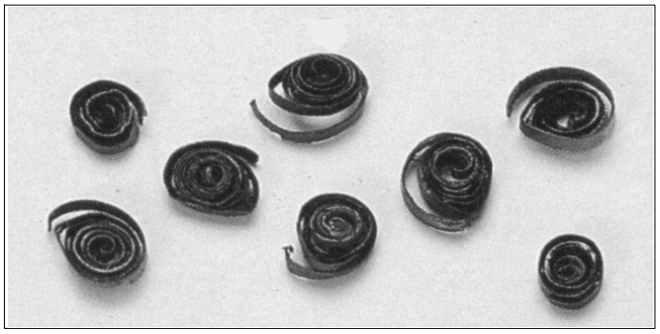
A new blade must be worn in, which in effect means lowering the downstroke speed to about half that of normal (from 60 to 70 cm^2/min on normal steels), equal to a removed surface area of about 300 - 600 cm^2.

Types of swarf:

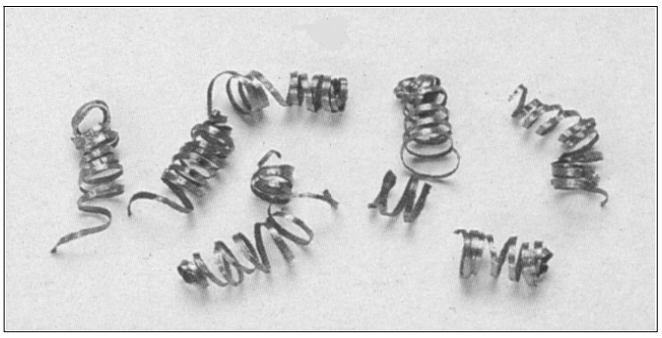
- Very fine or fragmented swarf indicates that the downstroke speed and/or cutting pressure is too low.



- Thick and/or blue swarf indicates that the blade is overloaded.

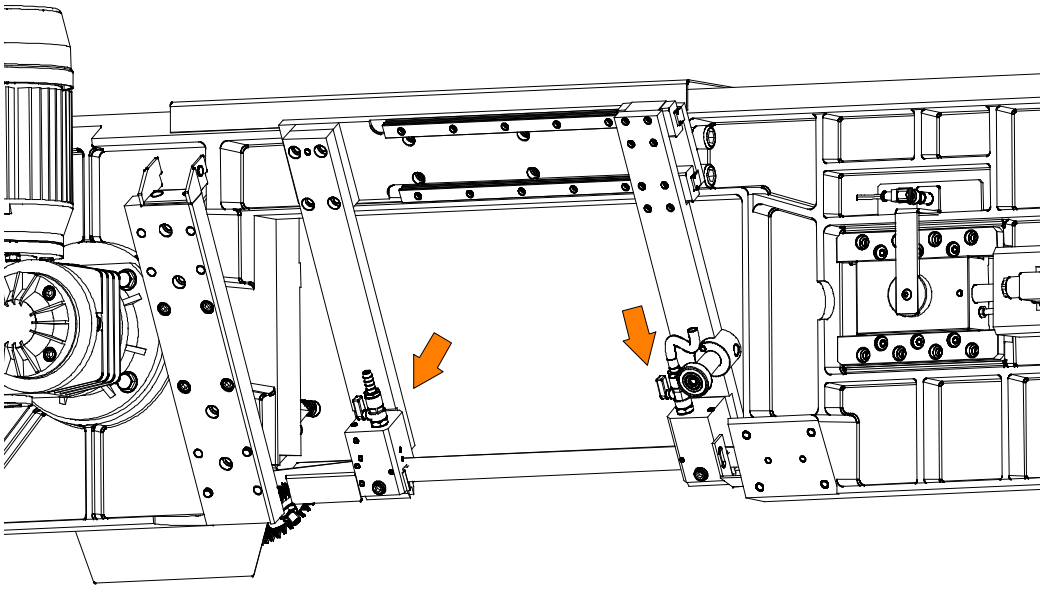


- Long coils of swarf indicate ideal cutting conditions.



Lubricant/coolant fluid

The lubricant/coolant fluid must ensure so that neither the saw teeth nor the work piece material in the cutting zone overheat. Furthermore, there must be a sufficient quantity and pressure of lubricant/coolant to remove swarf from the cutting zone. The lubricant/coolant fluid must be of the highest quality in order to prevent tooth abrasion and welding of swarf to the teeth themselves (seizing).



Blade structure

The most commonly used blades are the bimetal types, i.e. manufactured with a silicon steel body and having a high fatigue strength, and super high- speed steel teeth; the two parts are welded by electronic or laser- welding.
Standardised teeth types are termed M2 and M42; the difference being that M42 teeth are harder due to the addition of cobalt to the steel used to make the teeth.

Key									
Mo	Molybdenum	Ni	Nickel	Si	Silicon	V	Vanadium	W	Tungsten
Al	Aluminium	C	Carbon	Co	Cobalt	Cr	Chromium	Mn	Manganese

TYPE OF BLADE	*C*	*Mn*	*Si*	*Cr*	*W*	*Mo*	*V*	*Ni*	*Co*	*Al*	*HRC*
	0,47	0,75	0,22	1,00		1,00	0,12	0,52		0,08	45- 50
HSS M2 HRC 65- 66 / HRC 45- 50	0,85	0,25	0,30	4,15	6,37	5,00	1,92				64- 66
HSS M42 HRC 67- 68 / HRC 45- 50	1,07	0,25	0,20	3,75	1,50	9,50	1,15		8,00		67- 69

N.B. The numbers in the columns indicate the % content of the element in the steel.

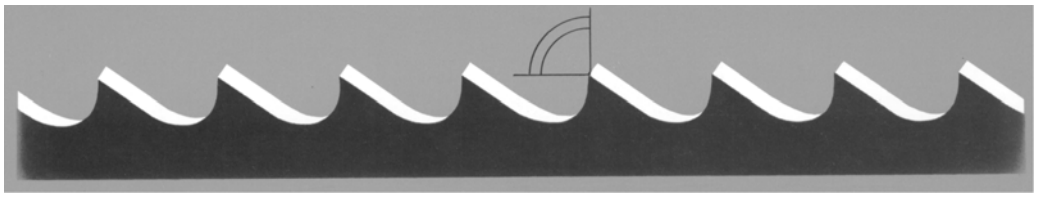
Blade types

The blades mounted on the **H- 14A** are 4640x34x1,1 mm.; the length can vary between 4665 mm. and 4615 mm., thanks to the blade tensioner device. The blades, however, apart from size and tooth pitch, are differentiated by other geometrical characteristics which determine their specialised uses:

- tooth cutting angle (rake), can be 0 or positive;
- the tooth pitch can be constant or variable;
- the set, i.e. the various teeth alignments, have many possible configurations.

Conventional rake

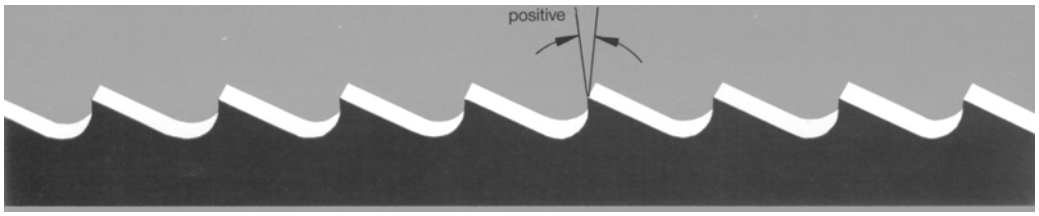
Cutting angle 0°, constant pitch.



In general use, for small or medium section cast iron or steels and rolled materials, for straight or angled cuts.

Positive rake

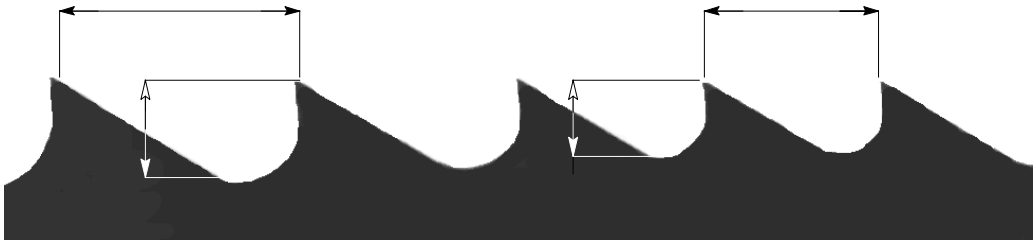
Positive cutting angle 9- 10°, constant pitch.



Can be used for cutting all types of materials, and is particularly suited to low- carbon and non- ferrous steels. Used for cutting very large sections and diameters.

Variable pitch

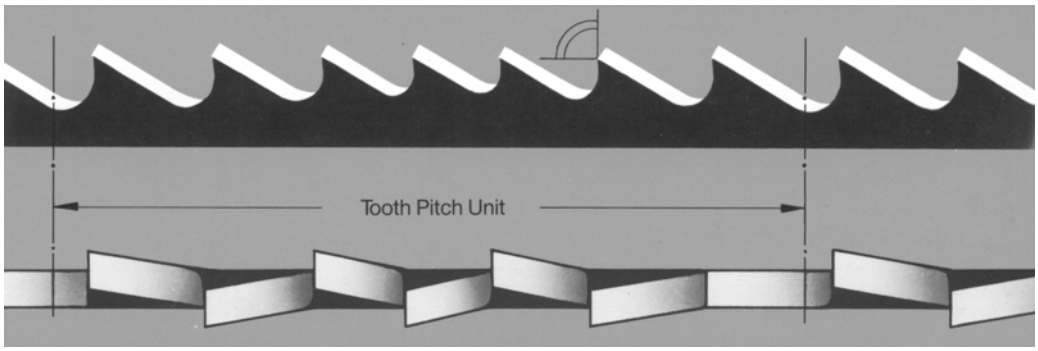
These blades have groups of teeth having different pitches and, as a consequence, have various tooth dimensions and differing relief angles. These are also available in M2 and M42 types with zero and positive rakes. The alternation of the different types of teeth helps to prevent vibration and noise. Elimination of vibration increases the useful life of the tool and improves the cut surface finish.



A further advantage in using these types of blades lies in the fact that a wide range of different material types and dimensions can be cut with the same blade.

Variable pitch blades with 0° cutting angle

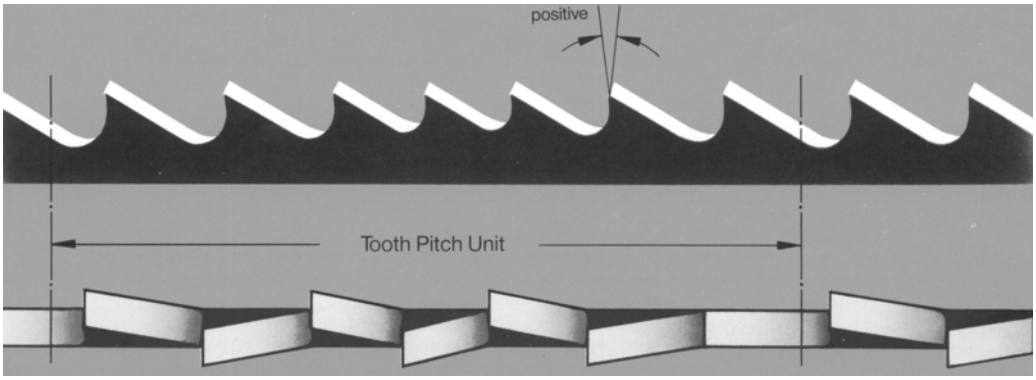
This type of tooth formation is ideal for cutting single pipes or medium size bundles, in accordance with the capacity of the machine.



Pitches available: 3- 4 / 4- 6 / 5- 7 / 5- 8 / 6- 10 / 8- 12 / 10- 14.

Variable pitch with positive rake (from 9 to 10 degrees)

This toothing type is the most suitable for cutting large dimension pipes and profiles, including large sections, as well as for cutting solid sections up to the machine capacity limit.



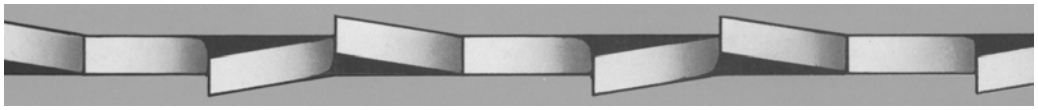
Pitches available: 3- 4 / 4- 6.

Set:

The term set refers to the section of material removed by the blade during the cutting operation, i.e. relating to width of cut and the offset position of the teeth with respect to the blade back.

Standard or splayed set

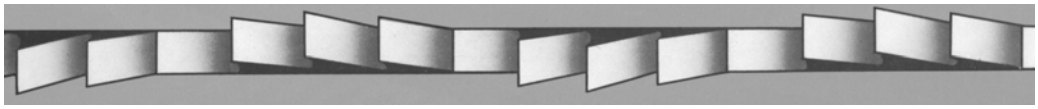
This term is used to describe an alternated angling of the teeth: one to the right, one to the left and one straight.



For general use on materials over 5 mm. thick. Suitable for cutting steels, castings and non- ferrous hard materials.

Undulated set

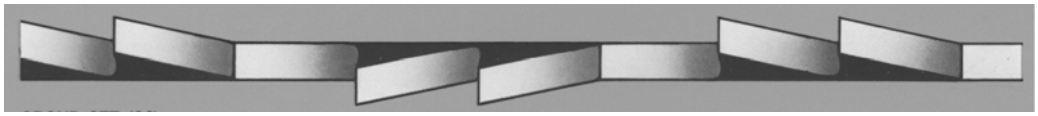
Used to describe groups of teeth undulating alternatively to the right and left.



This type of set is used with very fine teeth for cutting thin pipe walls and small- section profiles (from 1 to 3 mm).

Alternating grouped sets

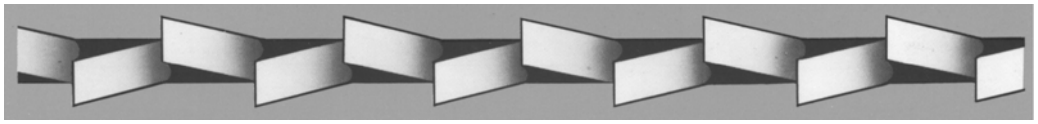
These are groups of teeth angled to the right, one straight tooth, then a further group angled to the left.



This set is used for very fine teeth for cutting very thin sections (less than 1 mm).

Alternating set

This set is one tooth to the right followed by one to the left.



This set is used for soft non- ferrous materials, plastics and wood.

Blade selection table relating to cutting speed and downstroke speed

Cutting material	Cutting speed mt./min	Dimensions of the cutting section S (mm)												Lubrication	sq. mt./min. cut
		S10		10S30		30S50		50S80		80S120		120S230			
Structural steel Casehardened steel Steel for turning Mild steel	50 / 70	14	10 / 14	10	10 / 14	8	6 / 10	6	5 / 8	4	4 / 6	3	3 / 4	Emulsible oil Cutting fluid	60 - 70
High- duty cast iron Rolled steel Spring steel	40 / 50	14	10 / 14	10	10 / 14	8	6 / 10	6	5 / 8	4	4 / 6	3	3 / 4	Emulsible oil	50 - 60
Alloy steel Tool steel Valve steel	30 / 40	14	10 / 14	10	10 / 14	8	6 / 10	6	5 / 8	4	4 / 6	3	3 / 4	Emulsible oil Cutting fluid	15 - 20
Stainless steel Nodular cast iron	30 / 40	14	10 / 14	10	10 / 14	8	6 / 10	6	5 / 8	4	4 / 6	3	3 / 4	Emulsible oil	15 - 20
Copper Soft bronze	90 / 150	14	10 / 14	10	10 / 14	6	5 / 8	4	4 / 6	3	3 / 4	3	3 / 4	Emulsible oil	75 - 90
Brass	90 / 300	14	10 / 14	10	10 / 14	6	5 / 8	4	4 / 6	3	3 / 4	3	3 / 4	Emulsible oil	80 - 90
Hard bronze	20 / 40	14	10 / 14	10	10 / 14	6	5 / 8	4	4 / 6	3	3 / 4	3	3 / 4	Emulsible oil	25 - 40
Aluminium	80 / 800	14	10 / 14	6	10 / 14	4	4 / 6	3	3 / 4	3	3 / 4	3	3 / 4	Emulsible oil	70 - 80
Plastics	90 / 400	14	10 / 14	6	10 / 14	4	4 / 6	4	4 / 6	3	3 / 4	3	3 / 4	Emulsible oil	80 - 90

Blade pitch **Number of teeth per inch**

Classification of steels

This page provides a table giving the user specific information on the cutting materials, in order that they can be classified on the basis of their hardness, and thus the correct tool can be selected for the task in hand.

Types of steel				Hardness		
UNI	DIN	BS	AISI	Brinell HB	HRB	Kg/mmq
C 22 - C 35	CK 22 - CK 3	En 2 C - En 6	1022 - 1035	160 - 170	34 - 87	55 - 59
C 45	CK 45	En 8	1040	160 - 180	84 - 89	55 - 61
C 10 - C 15	CK 10 - CK 15	En 32 C - En 328	1010 - 1015	150 - 175	81 - 87	51 - 59
C 60	CK 60	En 9	1060	160 - 180	84 - 89	55 - 61
		4360 - 50 A		160 - 180	84 - 89	55 - 61
	17100	3706 - 1.2.3.	ASTMA - 36/68	160 - 180	84 - 89	55 - 61
45 Cr Si 9	17115	4360		160 - 180	84 - 89	55 - 61
		En 20 A		190 - 215	91 - 97	64 - 73
34 Cr Mo 5	17221	970 - 1955	1065	180 - 205	89 - 94	61 - 69
		En 18 B	5135 - 5145	180 - 200	89 - 93	61 - 67
35 Cr Mo 4	34 Cr Mo	En 19 B	4135	200 - 230	93 - 99	67 - 77
	36 Ni Cr 6	En 111	3135	190 - 230	91 - 99	64 - 77
		En 36	3310 - 3315	200 - 230	93 - 99	67 - 77
20 Nc Cr Mo 2		En 362	4315	200 - 225	93 - 98	67 - 75
		En 100 D	8645	190 - 220	91 - 97	64 - 74
	1880 X C 95	DX	W 1	150 - 190	80 - 91	51 - 64
100 Cr 6	100 Cr 6	En 31	52100	210 - 230	96 - 99	71 - 77
		B 2	L 6	190 - 230	91 - 99	64 - 77
52 Nc Cr Mo KU	56 Ni Cr Mo V 7			217 - 248	97 - 102	73 - 83
	2750 (280W18)	18 % W	T 1	217 - 248	97 - 102	73 - 83
		1507 - 825	1310	160 - 220	84 - 91	55 - 64
		A 2	M 13	200 - 230	93 - 99	67 - 77
	210 Cr 46	A 1	D 3	215 - 240	97 - 101	73 - 81
	4845	En 58 G	309 S	150 - 200	80 - 93	51 - 67
X 12 Cr 13	4001	En 56 A	410	150 - 200	80 - 93	51 - 67
X 6 Cr Ni 1810	4301	En 58 E	304	130 - 170	74 - 86	45 - 58
X Cr Ni 1910						
X 8 Cr Ni Mo 1713	4401	1501 - 845	316	160 - 200	84 - 93	55 - 67
Phosphor bronze				60 - 100	56,5	36
Aluminium bronze				70 - 90	49	32
Manganese bronze				95 - 120	51 - 69	34 - 42
Silicon bronze				70 - 100	56,5	36

Classification of steels

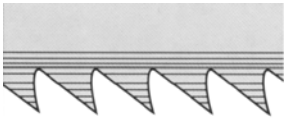
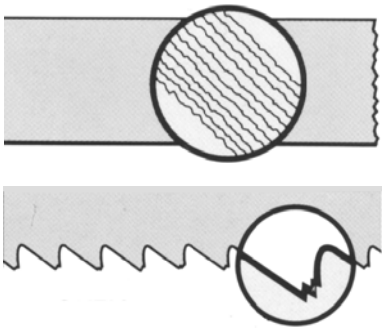
Material	SS Svezia	AISI U.S.A.	DIN Germania	BS Inghilterra	UNI Italia	AFNOR Francia
Carbon steels	1311 1572	1015 - 1035	C 22 - C 35 20 Mn 5 - 28 Mn 6 CK 22 - CK 50	050 A 20 080 M 46 - 50 120 M 19 150 M 28	C 15 - C 35 C 22 Mn C 28 Mn	XC 18 XC 38 H 1 20 M 5
Carbon steels	1650 1880	1040 - 1064 1770 - 1880	CK 60 - CK 101 36 Mn 5 Cm 45 - Cm 55	060 A 40 - 060 A 96 070 M 55 080 A 40 - 080 A 62	C 45 - C 60	XC 60 - XC 75 40 M 5 XC 42 H 1 XC 55 H 1
Alloy steel	2120 2255	1335 - 1345 4130 - 4140	25 Cr Mo 4 - 42 Cr Mo 4	1717 CDS 110 708 A 37 708 M 40	25 Cr Mo 4 - 42 Cr Mo 4	25 CD 4 42 CD 4
Alloy steels	2541 2230 2258	4337 - 4340 50100 - 52100 6145 - 6152 8630 - 8645	40 Ni Cr Mo 6 40 Ni Cr Mo 73 34 Cr Ni Mo 6, 100 Cr 6	735 A 50, 534 A 99 817 M 40 311 rodzaj 6, 7	40 Ni Cr Mo 2 - 40 Ni Cr Mo 7 30 Ni Cr Mo 8 - 35 Ni Cr Mo 6 KB 50 Cr V 4, 100 Cr 6	35 NCD 6 50 CV 4 100 C 6
Tool steels	2310 - 12 2754 - 55	D - 2, D - 3	X 210 Cr 12 X 155 Cr V Mo 121	BD 2, BD 3	X 205 Cr 12 KU X 155 Cr V Mo 121 KU	Z 160 CVD 12 Z 200 C 12
Tool steel	2550 2710	S - 1	60 W Cr V 7 55 Ni Cr Mo V 6	BS 1	55 W Cr V 8 Ku 55 Ni Cr Mo V 6	55 NCVD 7
Stainless steels	2324 2333	201, 202 302, 304	X 2 Cr Ni 189 X 5 Cr Ni 189 G - X 2 Cr Ni 189	304 S 15 304 C 12 304 S 12	X 2 Cr Ni 18.11 X 5 Cr Ni 18.10 G - X 2 Cr Ni 19.10	Z 2 CN 18.10 Z 6 CN 18.09 Z 3 CN 19.10
Stainless steel	2343 2353	314, 316 317	X 15 Cr Ni Si 2520 X 5 Cr Ni Mo 1812 X 5 Cr Ni Mo 1713	316 S 16 317 S 16	X 16 Cr Ni Si 2520 X 5 Cr Ni Mo 1713 X 5 Cr Ni Mo 1815	Z 12 CNS 25.20 Z 6 CND 17.12

Troubleshooting

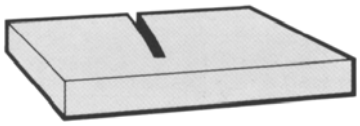
10

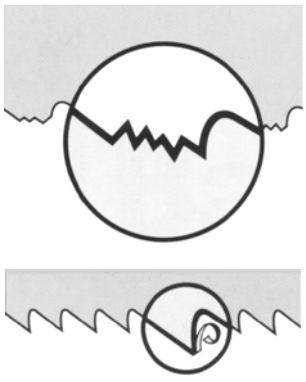
This chapter describes the inspection and troubleshooting procedures for the **H- 14A**. Regular inspections and efficient maintenance are essential to ensure your machine gives you a long, trouble- free service life. The chapter is divided into two sections: the first being dedicated specifically to TROUBLESHOOTING BLADE AND CUTTING PROBLEMS, while the second TROUBLESHOOTING section concerns troubleshooting general machine operating faults. Taken together they form a comprehensive troubleshooting guide which will enable you to follow a methodical procedure for solving any problem.

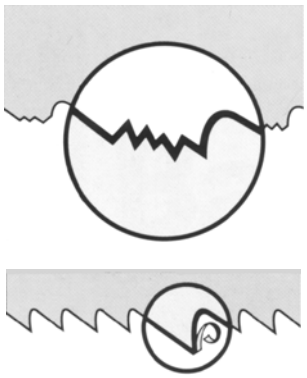
Troubleshooting blade and cutting problems

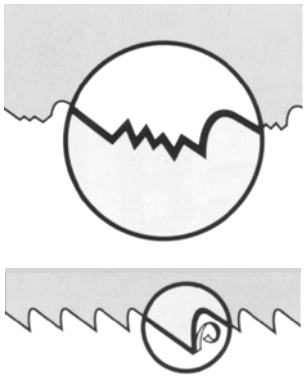
PROBLEM	PROBABLE CAUSE	SOLUTION
Blade scored or scratched 	◗ Widia inserts chipped or worn	☞Replace
	◗ Widia inserts loose or tight	☞Adjust
	◗ Widia inserts dirty	☞Clean and re- adjust correctly
Cutting surfaces scored 	◗ Blade teeth worn	☞Replace blade
	◗ Head downstroke speed too fast	☞Reduce downstroke speed
	◗ Cutting speed too slow	☞Increase cutting speed
	◗ Blade teeth too wide	☞Change for wider teeth
	◗ Free blade guide head too far away	☞Move blade guide head closer so as to leave only that part of the blade free which is needed to effect the cut
	◗ Blade tension low	☞Reset tension to rated tension
	◗ Broken teeth on blade	☞Check and replace blade

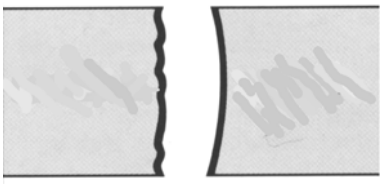
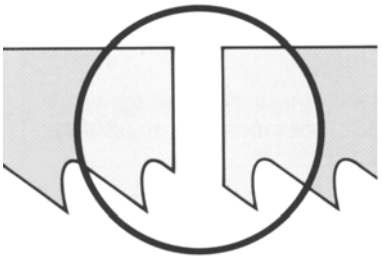
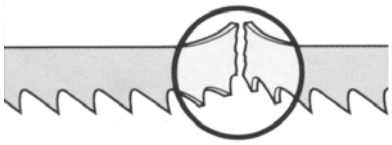
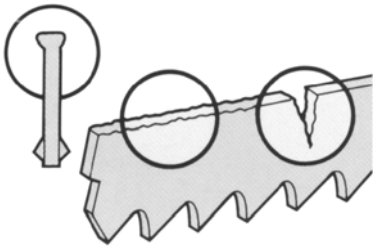
PROBLEM	PROBABLE CAUSE	SOLUTION
Rapid tooth wear	◗ Teeth pointing in the wrong direction	☞Set teeth in correct direction
	◗ Blade worn in wrongly	☞With a new blade cutting should be done at half- speed and with downstroke speed also at half normal speed. After the blade has been worn in (about 300 cm^2 of work for hard cutting materials and about 1000 cm^2 for soft cutting materials) the cutting and downstroke speeds can be brought up to rated levels
	◗ Material too hard	☞Check cutting speed, downstroke speed and blade pressure, as well as type of band saw being used
	◗ Material defective	☞Surface defects: oxides, sand, surface hardening. Hardened inclusions in section. Reduce cutting and downstroke speeds or clean surface.
	◗ Cutting speed too high	☞The teeth slide on the material without cutting: reduce cutting speed
	◗ Head downstroke speed too slow	☞The band saw runs over the material without removing it: increase downstroke speed
	◗ Insufficient coolant	☞Check coolant level and clean pipes and jets
	◗ Incorrect fluid concentration	☞Check and use the correct concentration
	◗ New blade inserted into a partially- made cut	☞The cutting surface might have been subject to a localised heat- induced alteration, making it harder: recommence cut using a slower cutting and downstroke speed. There may be a broken tooth from the old blade lodged in the cut: check and remove before recommencing work
	◗ Flutter	☞Blade tension too low: tighten. Tooth shape or pitch unacceptable: change type of blade used. Widia blade steady buttons too far from the blade back: adjust guide heads, rotating them slightly to bring them closer to the blade back.

PROBLEM	PROBABLE CAUSE	SOLUTION
Cuts not orthogonal or inclined 	◗ Head downstroke speed too fast	☞Reduce head downstroke speed
	◗ Widia inserts worn	☞Replace
	◗ Inserts loose	☞Adjust width
	◗ Blade guide head positioned wrongly	☞Move mobile head up to the workpiece using the guide plate to leave free only that part of the blade actually needed to make the cut
	◗ Orthogonality of blade to workpiece rest shoulder	☞Check and realign the blade guide heads, then reset the blade orthogonality with the shoulder using the adjustment pin at 0°; then set the stops at 45° right and left by means of the appropriate screws
	◗ Perpendicularity of the blade to the work surface	☞Check and realign the blade guide heads then adjust the blade using the appropriate screws so that it is perpendicular to the work surface
	◗ Blade tension incorrect	☞Bring pressure up to 60 Bar
	◗ Blade worn	☞Replace blade
	◗ Tooth pitch unsuitable	☞Probably a blade with too many teeth per inch is being used; change for a coarser blade
	◗ Cutting speed too slow	☞Increase the cutting speed
	◗ Wrong coolant	☞Check the water and oil emulsion; check that none of the holes or hoses are blocked; direct the jets correctly
	◗ Broken teeth	☞Check the hardness of the material being cut

Broken teeth 	◗ Cutting speed too high	☞Reduce cutting speed
	◗ Downstroke speed too high	☞Reduce downstroke speed

PROBLEM	PROBABLE CAUSE	SOLUTION
Broken teeth 	◗ Cutting pressure too high	☞Check and set to correct pressure
	◗ Tooth pitch unsuitable	☞Teeth too close together: change blade for one with a coarser tooth pitch
	◗ Swarf welded to teeth and gullets	☞Check blade- cleaning coolant jets. Check the blade-cleaning brush. If the swarf is not removed from the blade it will be drawn back into the cut and weld to the teeth, causing tooth breakage
	◗ Swarf welded to teeth and gullets	☞Check blade- cleaning fluid jets. Check blade- cleaning brush. If the swarf is not removed from the blade it will be drawn back into the cut and weld to the teeth, causing the teeth to break.
	◗ Material defects	☞The material may have altered surface areas, such as oxides or sand, or subcooled inclusions in the section. These areas are much harder than the blade and will cause the teeth to break: scrap or clean these materials.
	◗ Workpiece not clamped	☞The blade may break if the workpiece moves during cutting: check the vice, jaws and clamping pressure
	◗ The blade stops in the cut	☞Cutting pressure too high: check and restore to rated pressure. Downstroke speed too fast: reduce speed. Cutting speed too slow: increase. The blade slips on the flywheels: either the wheels are worn and need to be replaced or the blade tension is incorrect (too low) and must be re- adjusted.
	◗ New blade inserted in a partially made cut	☞The cutting surface may have been subjected to a localised heat- induced alteration, making it harder: recommence cut using a slower cutting and downstroke speed. A tooth from the old blade may be left in the cut: check and remove before restarting work.

PROBLEM	PROBABLE CAUSE	SOLUTION
Broken teeth 	◗ Widia inserts positioned incorrectly	☞Adjust the position of the inserts, especially the width, since blade thicknesses can exceed the manufacturer's declared tolerance ratings
	◗ Widia blade steady buttons	☞Two widia blade steady buttons are located in the top of the blade guide heads which press on the back of the blade to transmit cutting pressure. If these buttons are too far from the blade, the blade may be prone to an up and down undulating action or abnormal vibrations, liable to cause the teeth to break: adjust the position of the heads by rotating them downwards so as to bring the blade steady buttons up against the back of the blade
	◗ Sections with large thickness variations	☞The cutting speed and downstroke speed must be chosen to suit the most critical part of the cut
	◗ Teeth angled in the wrong direction	☞Fit blade so that teeth point in the right direction
	◗ Blade run in wrongly	☞When using a new blade, the cutting and downstroke speeds must be reduced to half the normal operating speed. After the blade has been worn in (about 300 cm2 for hard materials and about 1000 cm2 for soft materials) the cutting and downstroke speeds may be returned to their rated levels
	◗ Insufficient coolant	☞Check coolant level and clean fluid lines and jets
	◗ Incorrect fluid concentration	☞Check and use the correct concentration
	◗ Blade tension too high or too low	☞Check and reset to rated tension

PROBLEM	PROBABLE CAUSE	SOLUTION
Blade path fault 	◗ Front flywheel position incorrect	☞Check that the band saw is correctly positioned on the flywheel. Adjust the position of the flywheel under the blade, moving the shaft of the flywheel
	◗ Flywheels worn	☞Replace
	◗ Gaps full of swarf	☞Clean inside machine using blown air.
	◗ Blade guide head alignment	☞Check and adjust
Blade broken   	◗ Cutting speed too high	☞Reduce cutting speed
	◗ Head downstroke too fast	☞Reduce head downstroke speed
	◗ Cutting pressure too high	☞Check and set to correct pressure
	◗ Tooth pitch unsuitable	☞Teeth too close together: change the blade for one with coarser tooth spacings
	◗ Workpiece not clamped properly	☞The blade may break if the workpiece moves during cutting: check the vice, jaws and clamping pressure.
	◗ Widia inserts positioned incorrectly	☞Adjust inserts position, especially the width, since blade thickness can exceed the manufacturer's declared tolerance ratings
	◗ Widia blade steady buttons	☞Can have a milling action on the back of the blade if worn or chipped, causing cracks from the back towards the teeth.
	◗ Position of blade on flywheels incorrect	☞The blade may be scraping on the edges of the flywheels: this problem is generally caused by blades which are deformed or wrongly welded (conical) Adjust the position of the front flywheel by moving the pin, or change the blade
	◗ Blade tension incorrect	☞If the blade tension is too high or too low, the blade will be subjected to abnormal stress: set the tension back to the rated value.

PROBLEM	PROBABLE CAUSE	SOLUTION
	◗ Blade weld fault	☞The point at which a blade is welded is its most critical point; problems could be caused by welds which are not aligned perfectly or have inclusions or blowholes
	◗ Free blade guide head	☞The head is too far away from the workpiece: move the head closer, leaving free only that part of the blade actually needed to make the cut
	◗ Teeth in contact with the material before starting the cut	☞Always check the position of the blade before starting a new job, especially for the semi- automatic cycle
	◗ Widia inserts	☞If worn, the inserts can score the blade, weakening it even to breaking point. If the inserts are too far apart, the blade will whip, striking both the inserts and the material. Replace or adjust
	◗ Insufficient coolant	☞Check coolant fluid level; clean pipes and jets
	◗ Incorrect fluid concentration	☞Check and use the correct concentration
	◗ The blade stops in the cut	☞Cutting pressure too high: check pressure and reset to rated pressure. Head downstroke speed too fast: reduce. Head downstroke speed too slow: increase. The blade slips on the flywheels: incorrect or low blade tension; readjust or increase.

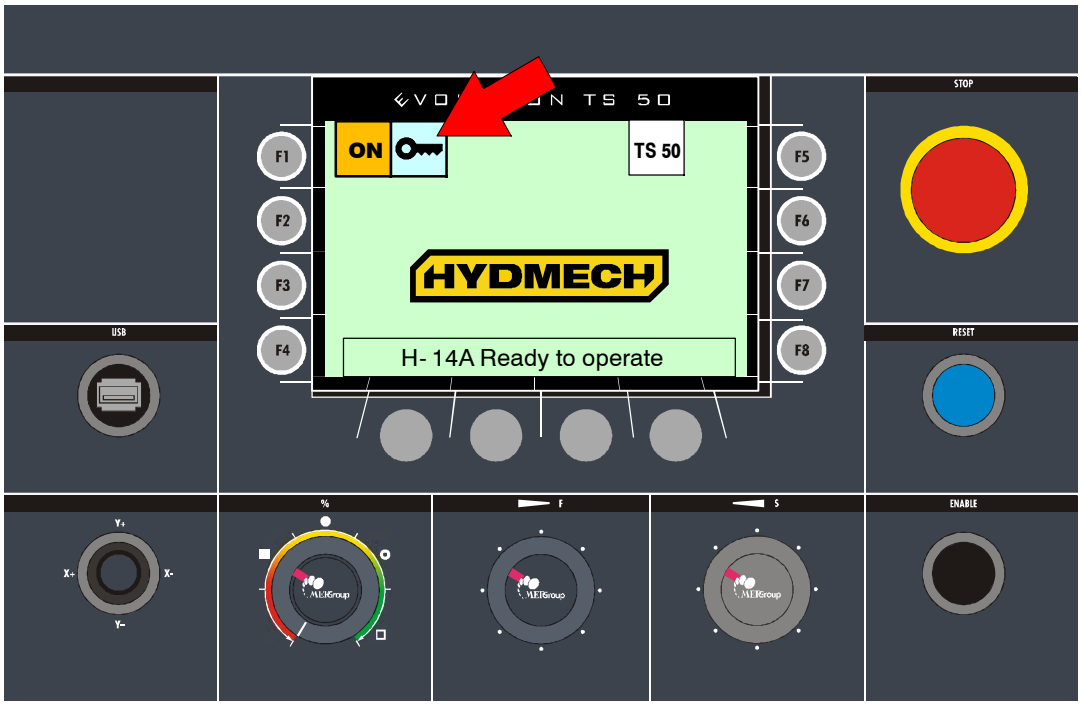
Troubleshooting

This section deals with the problems which may occur during machine operation. The M50 controller allows you to test all the machine's electric and electronic devices by checking the status of the input and output signals on the IUD/IUV card (see Chapter 6).
The board IUD/IUV is inside the electric board.

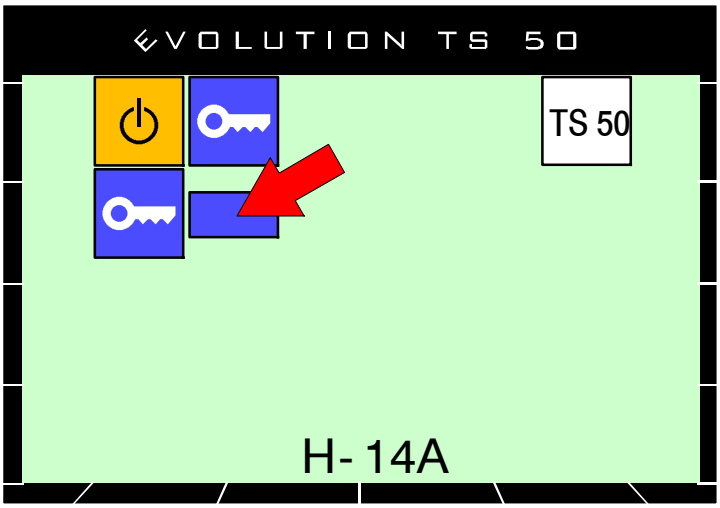
Displaying the diagnostics menu

▶ Power the machine by turning the main switch on the left of the control board.

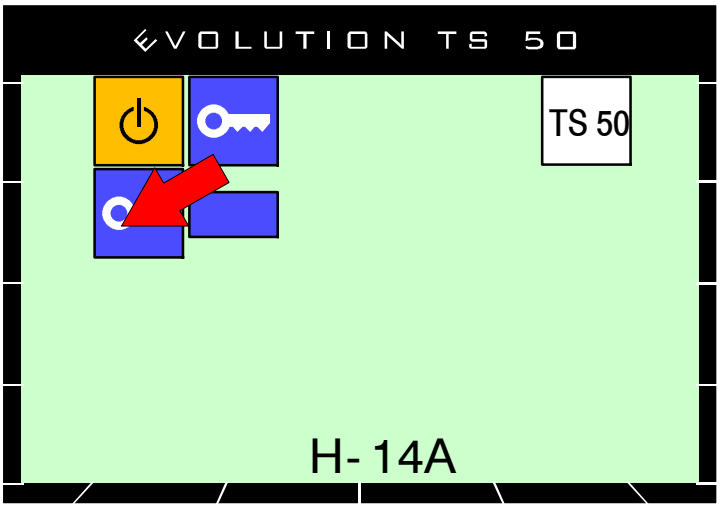
▶ Tap on the box on the touchscreen shown in the figure.



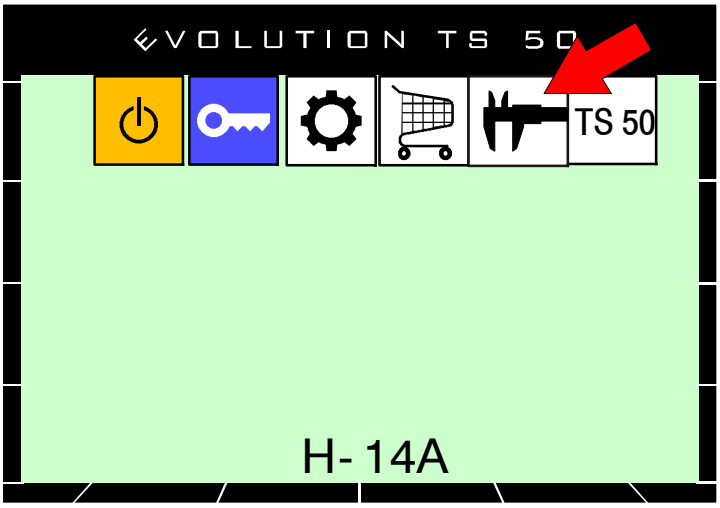
▶ The password entry box will open. Tap the box to open the keypad. Enter 734533.



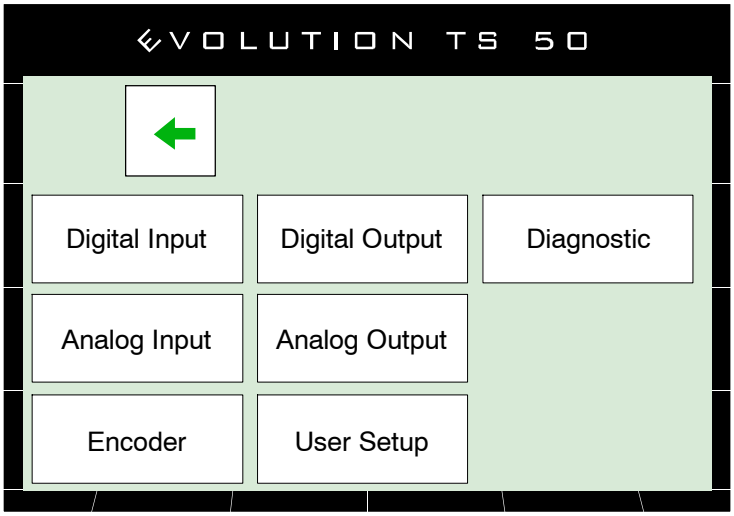
▶ Tap on the box shown in the figure.



▶ Tap on the box shown in the figure.



▶ In the Troubleshooting menu, select the type of input/output to be checked by tapping on the corresponding box:

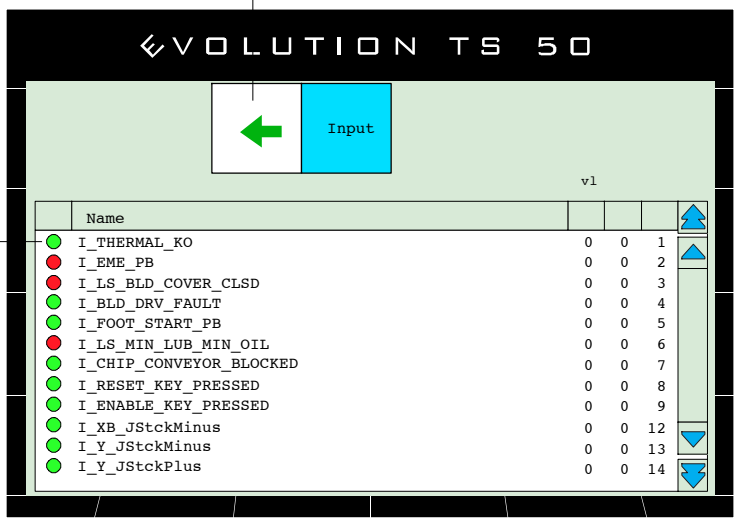


Digital Input

This page can be used to check the state of digital inputs. Information is organised in a table:

Box to go back to the initial list of all inputs and outputs

The icon indicates whether the respective output is on (green) or off (red)



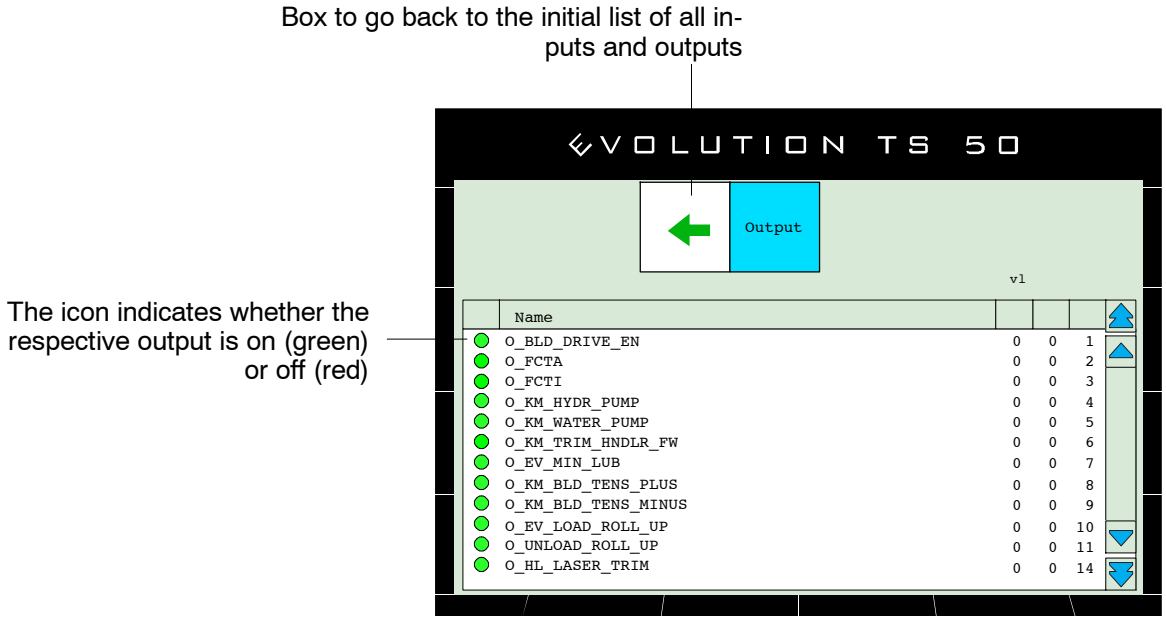
Digital INPUT list

CN13- ALL	**+ 24 VDC**
CN15- ALL	**0 VDC**
CN14- 1 INP 0	**SPARE**
CN14- 2 INP 1	**THERMAL SWITCHES TRIPPED**
CN14- 3 INP 2	**EMERGENCY STOP BUTTON OK**
CN14- 4 INP 3	**BLADE GUARD CLOSED LIMIT SWITCH**
CN14- 5 INP 4	**ALARM INVERTER**
CN14- 6 INP 5	**START FROM PEDAL BOARD**
CN14- 7 INP 6	**LOW OIL LEVEL**
CN14- 8 INP 7	**EVTR BLOCKED**
CN16- ALL	**+ 24 VDC**

CN19- ALL	**0 VDC**
CN17- 1 INP 8	**RESET BUTTON**
CN17- 2 INP 9	**ENABLE BUTTON**
CN17- 3 INP 10	**SPARE**
CN17- 4 INP 11	**SPARE**
CN17- 5 INP 12	**JOYSTICK X-**
CN17- 6 INP 13	**JOYSTICK Y-**
CN17- 7 INP 14	**JOYSTICK Y+**
CN17- 8 INP 15	**OYSTICK Y+**

Digital Output

This page can be used to check the state of digital outputs. Information is organised in a table:



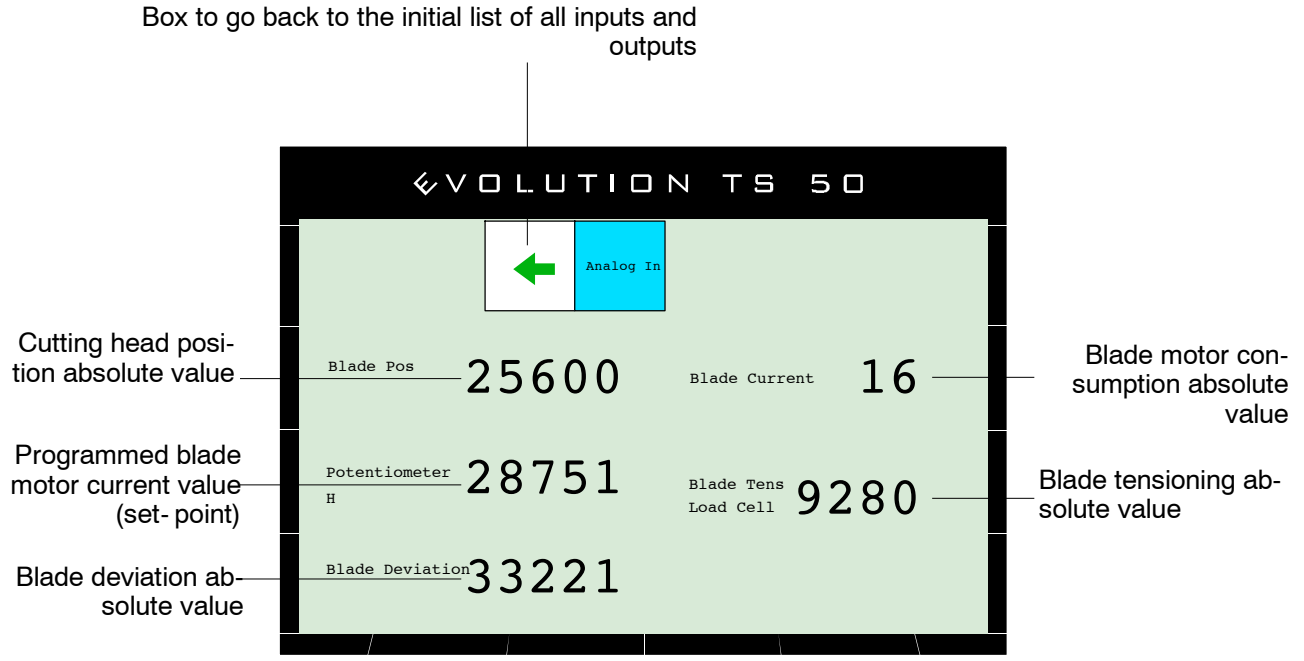
Digital OUTPUT list

CN21- 1 OUT 0	**START INVERTER**
CN21- 2 COM	**+24 VDC**
CN21- 3 OUT 1	**RHLS**
CN21- 4 COM	**+24 VDC**
CN21- 5 OUT 2	**FHLS**
CN21- 6 COM	**+24 VDC**
CN21- 7 OUT 3	**SPARE**
CN21- 8 COM	**+24 VDC**
CN22- 1 OUT 4	**UNIT START KM**
CN22- 2 OUT 5	**WATER PUMP START KM**
CN22- 3 OUT 6	**EVTR FORWARD KM**
CN22- 4 OUT 7	**LOW LUBRICATION SOLENOID VALVE**
CN22- 5 COM	**+24 VDC**
CN23- 1 OUT 8	**TENSIONING + KM**
CN23- 2 OUT 9	**TENSIONING - KM**
CN23- 3 OUT 10	**LOADING ROLLER UP SOLENOID VALVE**
CN23- 4 OUT 11	**UNLOADING ROLLER UP SOLENOID VALVE**

CN23- 5 COM	**+24 VDC**
CN24- 1 OUT 12	**SPARE**
CN24- 2 OUT 13	**SPARE**
CN24- 3 OUT 14	**LASER PROJECTOR**
CN24- 4 OUT 15	**CUTTING ZONE LIGHT**
CN24- 5 COM	**+24 VDC**

Analog Input

This page can be used to check the state of analogue inputs. Information is organised in a table:

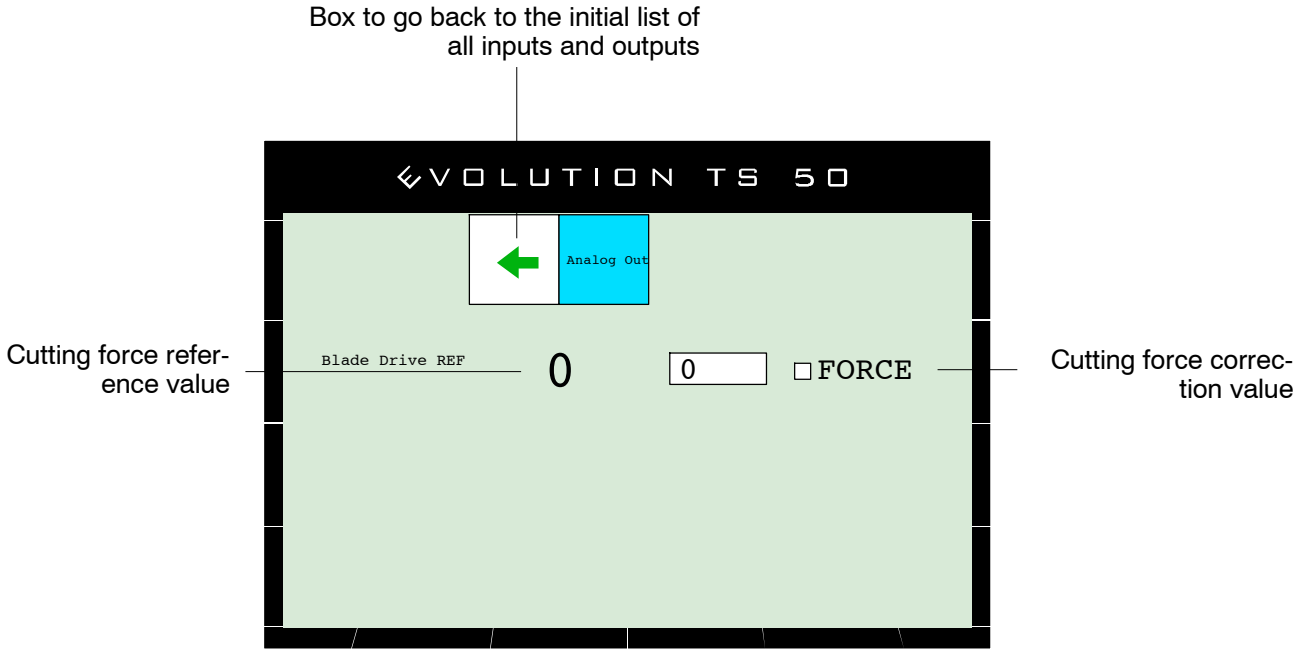


Analog INPUT list

CN26 INP 1 (16B)	**HEAD POSITIONING POTENTIOMETER**
CN27 INP 2	**BLADE MOTOR CONSUMPTION**
CN28 INP 3	**SPARE**
CN29 INP 4	**SPARE**
CN30 INP 5	**SPARE**

Analog Output

This page can be used to check the state of analogue outputs. Information is organised in a table:



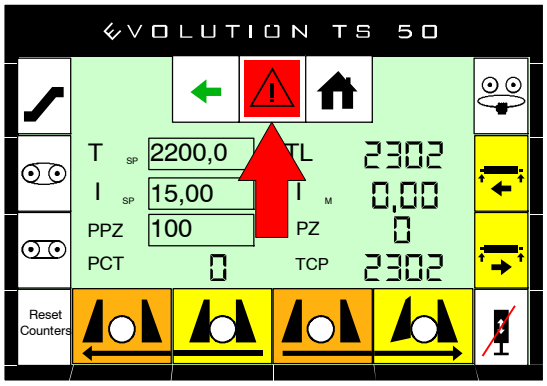
Analogue output list

CN25 OUT 1	**BLADE SPEED REFERENCE**
CN25 OUT 2	**SPARE**

Machine alarms and warning messages

Alarms

The machine's controller notifies the operator of any alarm or emergency condition which may occur during production by way of acoustic and visual signals. This section lists the messages shown on the display.



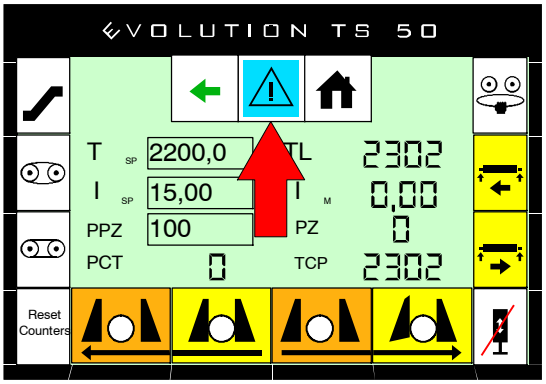
AL1: EMERGENCY: ONE OR MORE ALARMS HAVE TRIPPED	This appears in case of a generic emergency. A specific message follows
AL2: BLADE TENSIONING OUT OF MIN-MAX LIMITS	It is displayed when a mechanical problem occurs in the blade tensioning

AL3: BLADE MOTOR OVERCURRENT	It is displayed during the cutting when the value of the motor absorption is too high
AL4: INSUFFICIENT BLADE REVOLUTION SPEED	This appears when the blade jams in the cut or breaks ▶ Check blade integrity ▶ Check cutting parameters
AL5: HMI EMERGENCY - LOGO OR RESERVED PAGE	This appears in case of controller malfunction
AL6: EMERGENCY STOP BUTTON OR UNIT OPERATED	It is displayed when the emergency mushroom button is pressed
AL7: U AXIS NOT AVAILABLE OR FAULTY OR NOT REFERENCED: CLOSE THE LOGO PAGE AND GO BACK TO THE OPERATIVE PAGE	This appears when the head descent speed adjustment valve is not reset
AL8: XB AXIS NOT AVAILABLE OR FAULTY	This is shown when the pop- up rollers interfere with head revolution ▶ Position the pop- up rollers correctly as shown in Chapter 5
AL9: U AXIS DRIVE FAULTY	This appears in case of head descent adjustment valve malfunction
AL10: XB AXIS DRIVE FAULTY	This appears when there is a head revolution drive malfunction
AL11: LOW MINIMUM LUBRICATION	It is displayed when the oil level in the min. lubrication system lowers. ▶ Top the oil up in the tray till restoring the level.
AL12: BLADE GUARD OPEN @ BLADE CHANGE SEQUENCE DEACTIVATED	This message is displayed if the blade guard is opened, for example, to change the blade. ▶ Make sure the blade guard is closed. ▶ Check the safety limit switch. ▶ Check the connections.
AL13: XB AXIS ENCODER REVOLUTION BLOCKED	This appears in case of head revolution problem
AL14: BLADE DRIVE OR MOTOR FAULTY	This is shown when the blade motor inverter does not work correctly
AL15: CUTTING HEAD VICE VERTICAL INTERFERENCE LIMIT SWITCH	This appears when an attempt is made to close the vice must be head is not all up ▶ Take the head all up This appears when an attempt is made to move the head down and the vice is not all up ▶ Open the vices completely

AL16: FORWARD SOFTWARE LIMIT SWITCH UNDER STARTING POSITION (RHLS < YPOS)	This message is displayed when the cutting start position is lower than the previous position saved for the cutting end position. ▶ Save both the RHLS and FHLS positions again.
AL17: PARAMETER LOADING FAILED: RESTART THE MACHINE	This appears when the parameter reading procedure is not successful
AL18: BLADE POSITION ERROR: CHECK ANALOGUE INPUT	This appears when the potentiometer is broken or sends a message which is not compatible with the machine
AL19: LASER ENGAGED AT START OF CYCLE	This is shown when the cutting cycle is started and the fast approach laser is busy

Warning messages

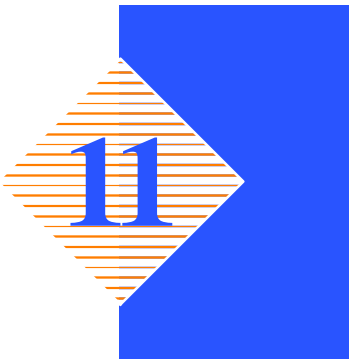
Tap on the box shown on the figure to see warning messages:



WR1: MANUAL CUTTING UNDERWAY	This appears when the manual cycle is underway
WR2: SEMI-AUTOMATIC CUTTING UNDERWAY	This appears when the semi- automatic cycle is underway
WR3: POSITIONING UNDERWAY	This appears when the head positioning is underway
WR4: MINIMUM LUBRICATION: MINIMUM OIL LEVEL REACHED	This appears when there is no oil for minimum lubrication
WR5: SOFTWARE LIMIT SWITCH FORWARD UNDER REVERSE POSITION (RHLS > RHLS)	This appears when the RHLS and RHLS are not coherent
WR6: HYDRAULIC PUMP AUTO-OFF	This appears when the machine switches to power save mode after a given time

WR7: COMMAND INHIBITED	This appears when an incorrect operation is attempted
WR8: CHECK START CUT CONDITIONS: NO ALARMS, BLADE ENABLED, BENCH BRAKED, VICES CLOSED, RHLS < RHLS	This appears when an attempt is made to start the cutting cycle without having checked that the cutting conditions are correct
WR9: AUTOMATIC DESCENT SPEED REDUCTION FOR HIGH CURRENT	This appears when the blade motor current exceeds the setting and correction is applied
WR10: BLADE AT ZERO CUTTING FEED SPEED: CANNOT CUT	This appears when the blade setting is too low
WR11: THERMAL SWITCHES NOK	This appears when a thermal switch trips in the control panel
WR12: CHIP EJECTOR BLOCKED	This appears when the chip ejector is blocked

Accessory Installation



This chapter provides a list of the available accessories that can be fitted to this machine, along with assembly instructions.

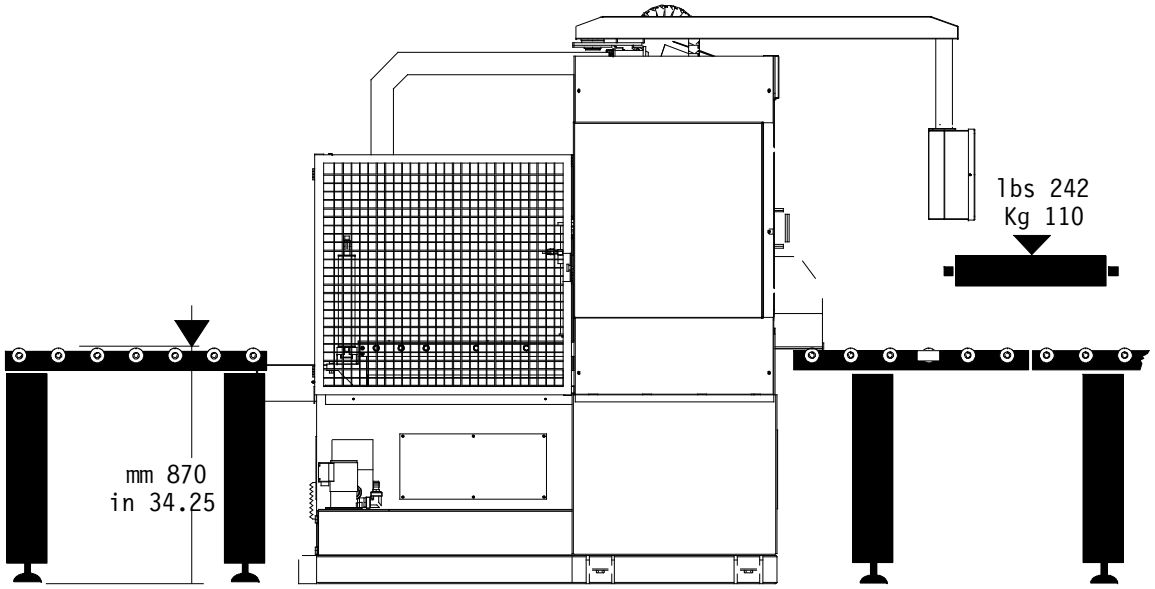
Blade

The blades that can be used on this machine include:

- 15’ 2” 43/64 x 1” 21/64 x 1/32 in bimetal blade M42 for solid and section materials;
- Blade with electro-welded hard metal teeth 15’ 2” 43/64 x 1” 21/64 x 1/32 in.

Roller table

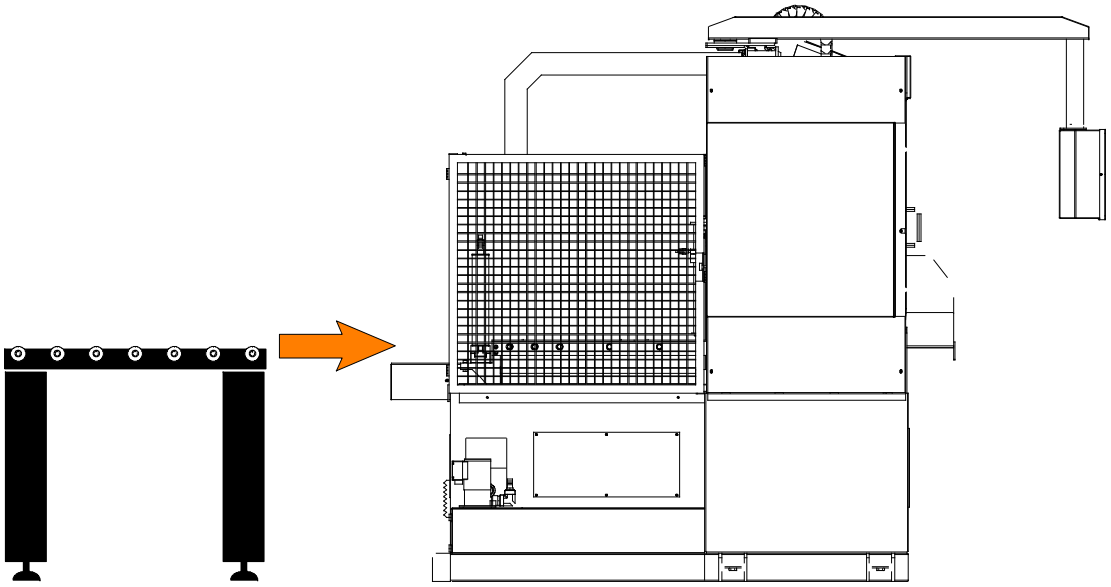
- K110HD roller table module for feed/discharge side, 4’ 11” 3/64 in;



Installation of the roller plane, loading side

To fit the roller table on the loading side, carry out the following operations:

- ▶ put the roller table close to the unloading adapter.

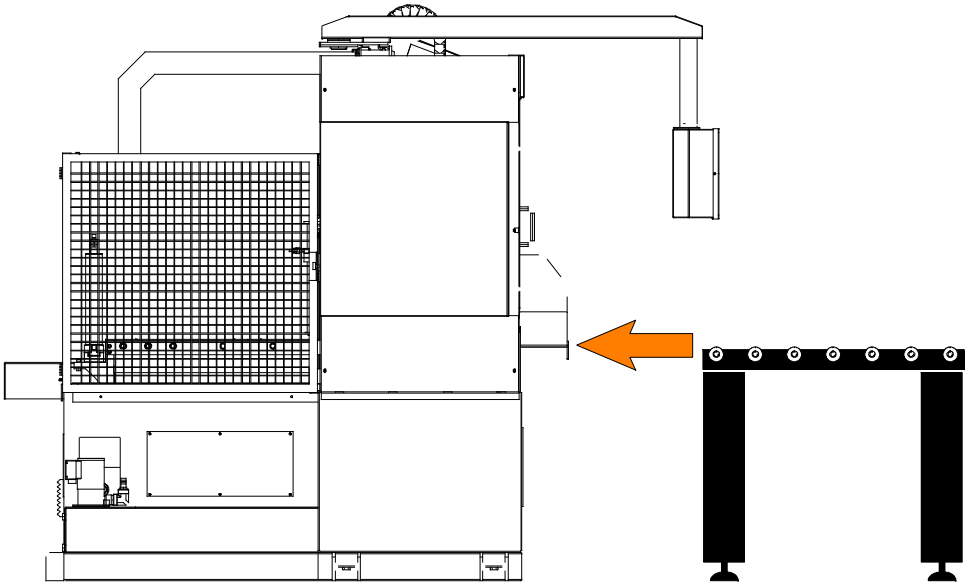


- ▶ Position the roller table making the fixing holes coincide with the adapter slots.
- ▶ Align the roller table with the machine working table using the supporting feet of the roller table.
- ▶ Fit the screws in the slots and tighten the nuts to lock the roller table in the obtained position.

Installation of the roller plane, unloading side

The installation operations are given below:

- put the roller table close to the unloading adapter.



- Position the roller table making the fixing holes coincide with the adapter slots.
- Align the roller table with the machine working table using the supporting feet of the roller table.
- Fit the screws in the slots and tighten the nuts to lock the roller table in the obtained position.

Installation of couple of vertical rollers for roller plane

For installing the vertical rollers operate as follows:

- Remove the shaped sheet covering the plane by removing the 4 fastening screws.
- Fit the couple of vertical rollers in the arranged slots and fasten them with the supplied socket head screws.
- Adjust the distance of the vertical rollers according to the dimensions of the material being machined.

Installation of the hydraulic vertical vices

For installing the hydraulic vertical vices follow the instructions enclosed to the installation kit.

For installing the hydraulic vertical vices follow the instructions enclosed to the installation kit.

Can of emulsible oil

5 l can of emulsible oil.

Minimal lubrication system

This device was designed to improve lubrication of the tool during cutting.

▶ An instruction book is supplied with the kit to explain how to install this optional unit.

Warranty

Hydmech Group warrants each new sawing machine to be free from failure resulting from defective material and workmanship under proper use and service for a period of two years following the date of shipment to the user. Hydmech's sole obligation under this warranty is limited to the repair or replacement without charge, at Hydmech's factory, warehouse, or approved repair shop, of any part or parts which Hydmech's inspection shall disclose to be defective. Return freight must be prepaid by the user.

This warranty, in its entirety, does not cover maintenance items, including but not limited to lubricating grease and oils, filters, V- belts, saw blades, etc, nor any items herein which show sign of neglect, overloading, abuse, accident, inadequate maintenance or unauthorized altering.

Liability or obligation on the part of Hydmech for damages, whether general, special or for negligence and expressly including any incidental and consequential damages is hereby disclaimed. Hydmech's obligation to repair or replace shall be the limit of its liability under this warranty and the sole and exclusive right and remedy of the user.

THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, WRITTEN OR ORAL, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

This warranty may be not changed, altered, or modified in any way except in writing by Hydmech Group.

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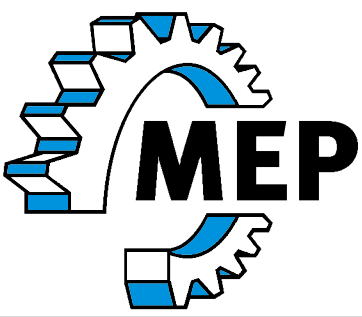
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