



INSTRUCTIONS BOOK

HYDRAULIC PUNCHING MACHINE

MX340G CNC

NS: 2025/1860



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Our whole range of machines and accessories is manufactured entirely in Nargesa. We have a constant stock of 400 machines, and we have more than 21.300 machines sold all over the world.



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Ring Roller Bender and Pipe Bender
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Twisting / Scroll Bending Machines
Horizontal Press Brakes
End Wrought Iron Machines
Gas Forges

Iron Embossing Machines
Hydraulic Shear Machines
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Presses for Locks
Broaching Machines
Power Hammers

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Prada Nargesa has several certifications that backup both, the design and manufacturing processes, as well as the journey through exporting our products around the world and the quality of the manufacturing components we use for our machines. These facts turn into real advantages for our customers:



AUTHORIZED EXPORTER

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- Reduction of tariff documentation
- Tariff preferences according to geographical location



INNOVATIVE SME

- Development in innovation, design and manufacturing technologies
- Certification and audit of efficiency in product and service
- Ability to foresee customer needs

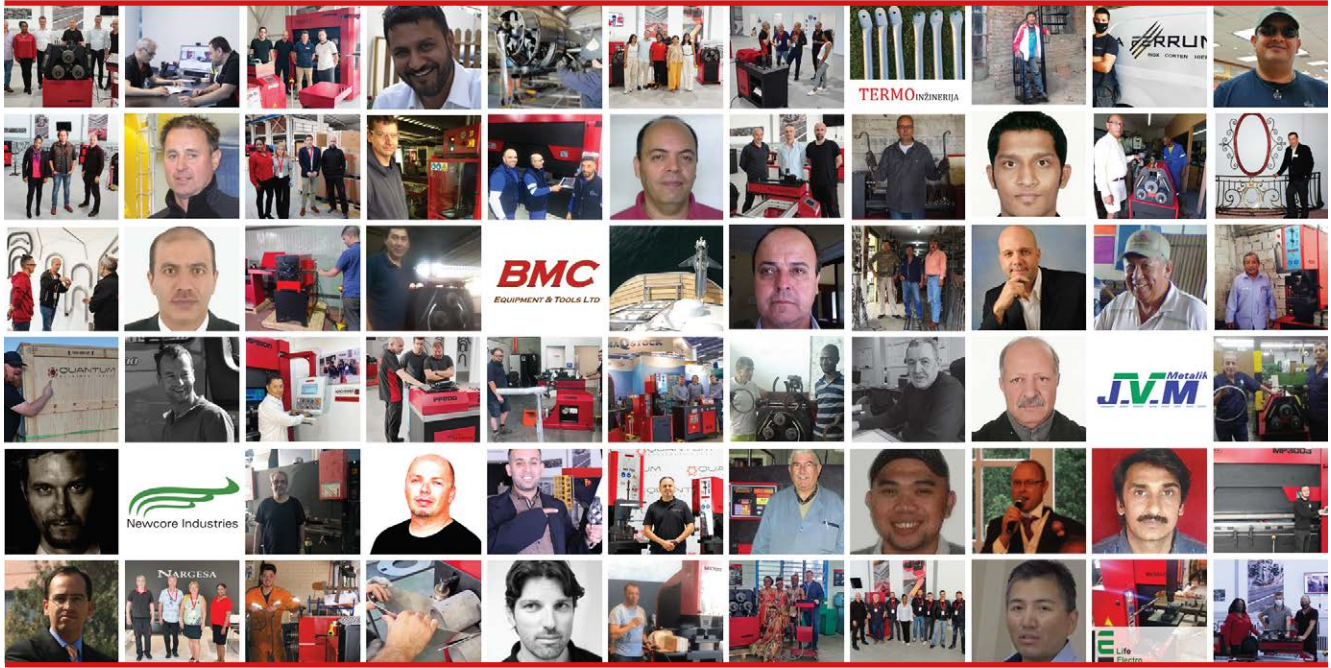


R+D+I MANAGEMENT

- Manufacturing based on the R+D+I process
- Technological surveillance system

SUCCESS STORIES

At Prada Nargesa we believe that the testimony of our clients is our best guarantee, and that is why we like to expose some of the success stories that we have witnessed around the world:



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- Company name
- Testimonial name
- Post in the Company
- Country
- Descriptive text
- Photography with the machine

CONTENTS

1. MACHINE CHARACTERISTICS	8
1.1. General Dimensions	8
1.2. Machine Description	8
1.3. Machine Parts	9
1.4. General Characteristics	10
1.5. Description of the Guards	10
2. TRANSPORTATION AND STORAGE	11
2.1. Transportation	11
2.2. Storage Conditions	11
3. MAINTENANCE	12
3.1. General Maintenance	12
4. INSTALLATION AND START-UP	14
4.1. Machine Location.....	14
4.2. Dimensions and Work Area	14
4.3. Acceptable External Conditions	15
4.4. Connection to a Power Source	15
5. OPERATING MANUAL	16
5.1. Introduction.....	16
5.2. Home Menu	16
5.3. Punch	17
5.4. Bend.....	20
5.4.1. Bending Correction	23
5.4.2. Automatic Mode and Manual Mode	23
5.5. Cut	24
5.6. Manual Positioning Mode	26
6. SAVING PROGRAMS	28
7. MENU	31
7.1. Remote Service.....	31
7.2. Import/Export Parameters, Materials and Programs	32
7.3. Tool Management.....	33
7.3.1. Punching Tools	34
7.3.2. Bending Tools	36
7.3.3. Cutting Tools.....	39
8. WARNINGS	41
9. TROUBLESHOOTING	42
10. ACCESSORIES	43
TECHNICAL ANNEX	

1. MACHINE CHARACTERISTICS

Make	Nargesa
Type	Punching machine
Model	MX340G CNC

1.1. General Dimensions

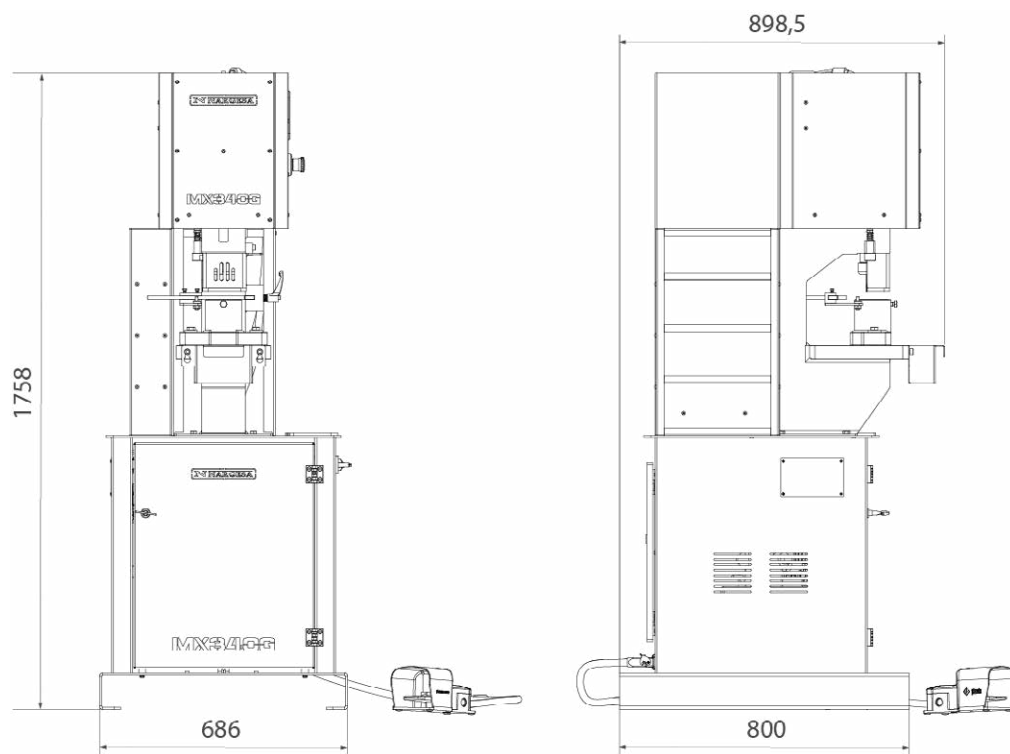


Figure 1. External dimensions of the MX340G CNC punching machine

1.2. Machine Description

The MX340G CNC punching machine is specifically designed to punch metal parts with different shapes depending on the type of punch.

Various accessories may be added for other uses. It can be used for other services but always follow the manufacturer's instructions. The manufacturer will supply all accessories that may be coupled to the machine.

The MX340G CNC is adapted to European machinery manufacturing standards and directives.

1.3. Identifying the Machine Parts

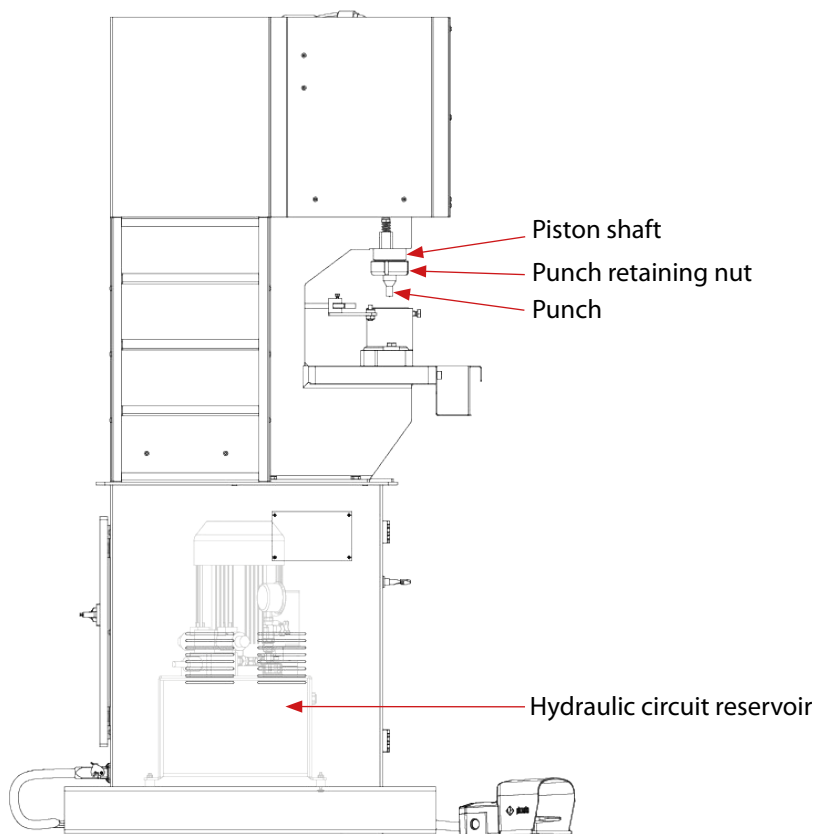
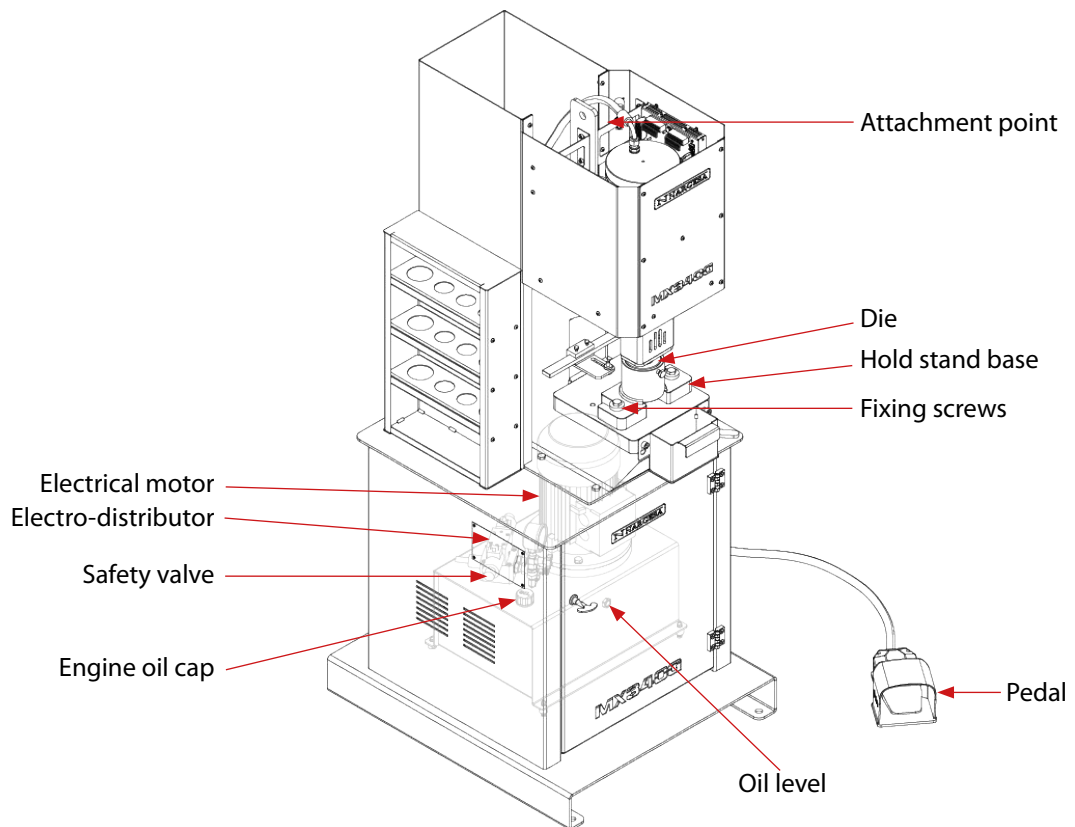


Figure 2. Machine nomenclature and components



Figure 3. Nameplate

1.4. General Characteristics

Motor power	2.2 kW/3 CV at 1460 rpm
Voltage	230/400 V, three-phase 230 V, single-phase
Intensity	9/5 A
Pump	7.5 l/m
Grease	27 liters
Double rotor	40 Tn
Hydraulic pressure	200 kg/cm ² (20 MPa)
Structure material	Sheet metal
Total weight	628 kg

1.5. Description of the Guards

The guards on the MX340G CNC punching machine are the extractor located on the front of the machine to retain the material and prevent putting your hands between the punch and the workpiece.

2. MOVEMENT AND STORAGE

2.1. Movement

Movement without hoisting shall be done using a pallet jack. If hoisting is necessary, it shall be done using a crane connected to the anchoring point intended for such purpose. To prevent overtipping, it should never be hoisted more than 300 mm.

The handrails attached to the base are only for transportation; once the machine is in place, they must be removed so that the punching machine sits properly on the floor.

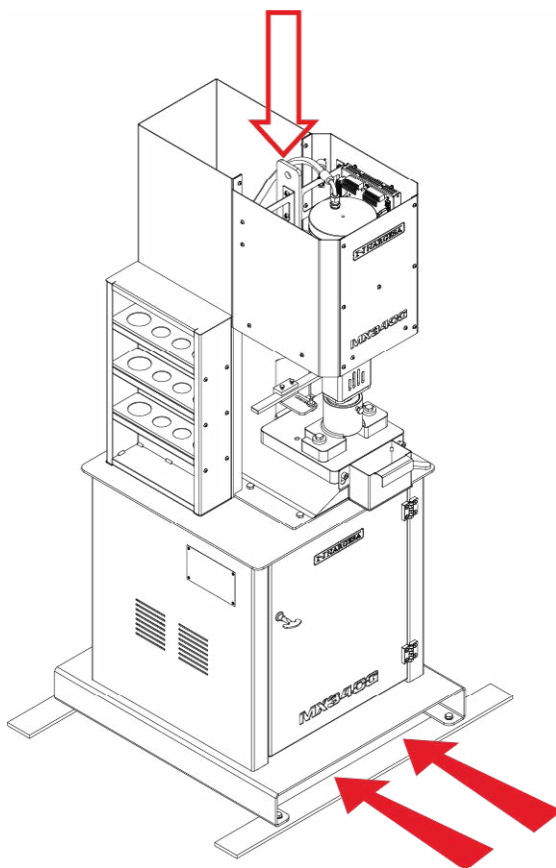


Figure 4. Moving the machine

2.2. Storage Conditions

The punching machine may not be stored anywhere that does not meet the following requirements:

- * Moisture between 30 and 95% without condensation.
- * A temperature of -25°C to 55°C or 75°C over periods not to exceed 24 hours (please remember these temperatures are for storage conditions)
- * Do not pile machines or place any heavy objects on top.
- * Do not dismantle for storage.

3. MAINTENANCE

3.1. General Maintenance

- Check the oil level in the tank every 500 hours of operation.

The oil cap is at the front of the tank. If the oil level is low, fill until 3/4 full in the sight glass. (Figure 5)

Once the oil has been changed, start the machine and press the pedal intermittently to gradually increase the pressure time until the circuit fills. You'll see how the machine engages in the normal operation run.

- Replace the hydraulic oil in the tank every 6000 operating hours or every 5 years.

Type: CEPESA HYDRAULIC HM 68

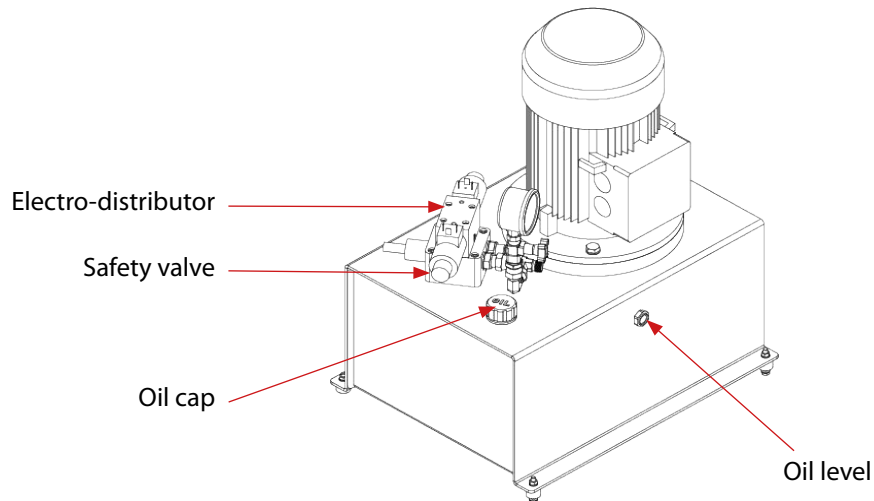


Figure 5. Identifying the hydraulic tank components

The punches should be greased periodically depending on use:

- Grease every day if used daily and continuously.
- Grease every week if used daily yet sporadically.
- Grease once a month if used sporadically.

ATTENTION:

Stop the machine and press the emergency stop button for maintenance. (Figure 6)

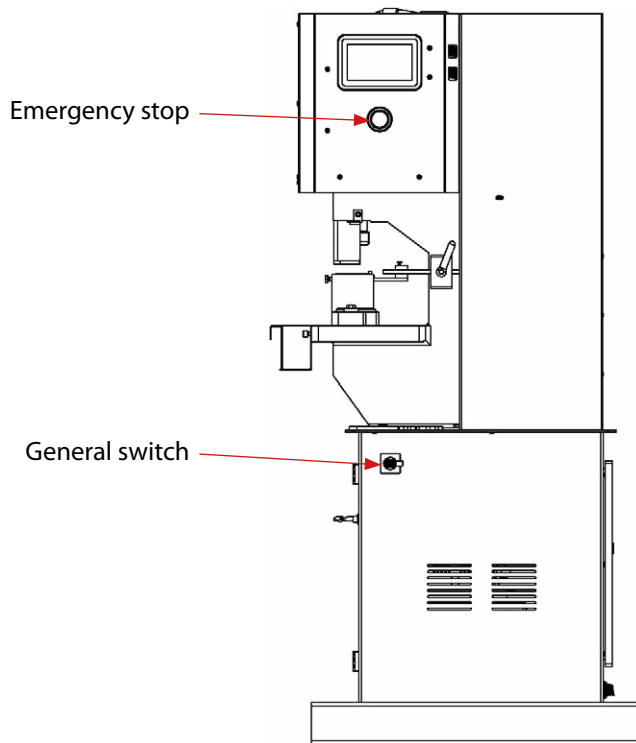


Figure 6. Stopping the Machine

4. INSTALLATION AND START-UP

4.1. Machine Location

Try to position the machine in the proper location so that it does not have to be moved; otherwise, follow the steps described in section 2 Transportation. It should be placed on a smooth, level surface to avoid vibrations and movements during punching. The machine can be secured with bolts as it comes with a base or pedestal on the bottom with four holes as shown in figure 8.

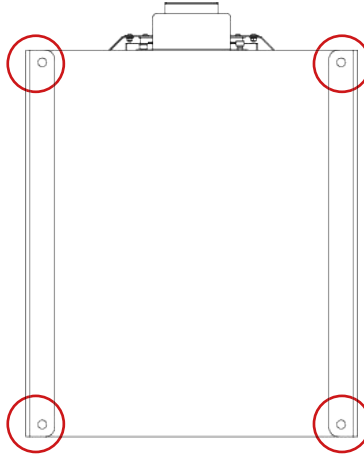


Figure 8. Location of the holes used to secure the machine

4.2. Dimensions and Work Area

Take the dimensions, operator work area and the lengths of any pieces to be worked into consideration when positioning the machine.

The punching machine may be used by a single operator, who must stand facing the machine—never to the side—as the operator must control the entire machine, not to mention the fact the main protective mechanisms are designed for frontal use.

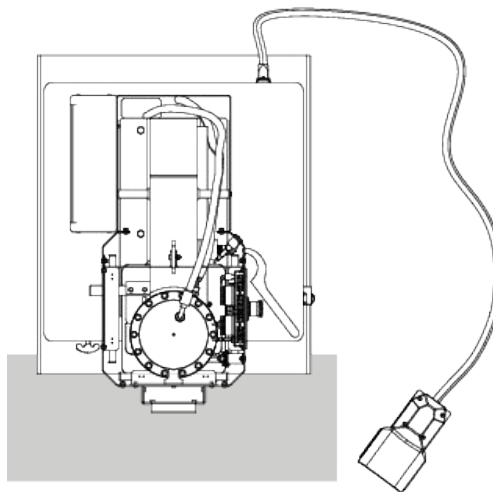


Figure 9. Operator's work area

4.3. Acceptable External Conditions

- A room temperature of between +5°C and +40°C without exceeding an average temperature of +35°C over 24 hours.
- Moisture between 30 and 90% without water condensation.

4.4 Connection to a Power Source

IMPORTANT: This machine must be connected to a grounded socket.

The MX340G CNC is equipped with a three-phase 230 V/400 V 2.2 kW wye-wired motor to be connected to a 400 V power source. It must be connected to a single power source and to the socket type indicated. The motor coil connection shall be changed if the voltage is not as indicated:

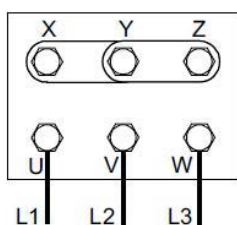


Figure 10. Star configuration for 400 V voltage (default)

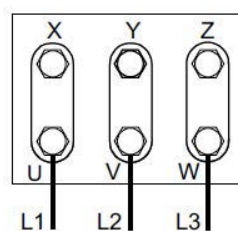


Figure 11. Delta configuration for 230 V voltage

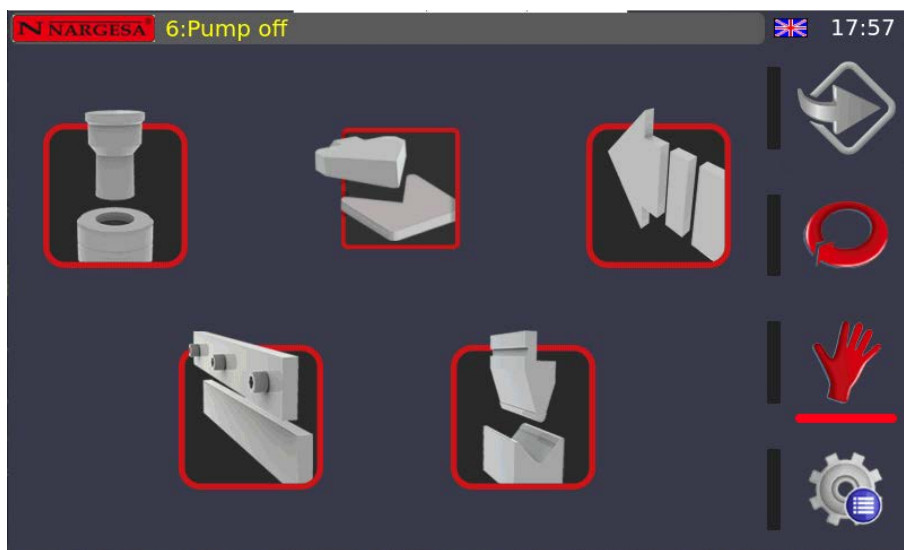
5. OPERATION MANUAL

5.1. Introduction






This manual was designed to help those using the MX340G CNC punching machine as it has important information on the use and unique characteristics of this machine. For this reason, following all the items detailed in this manual step-by-step is recommended in order to understand how the machine operates properly.

5.2. Home Menu

To power the machine, you must put the power switch in the on position. The initial interface or home menu appears on the screen:



The machine is currently in standby mode, meaning it is activated but remains at rest waiting to perform any function:

-  Punch
-  Blunt
-  Bend
-  Cut
-  Manual positioning mode

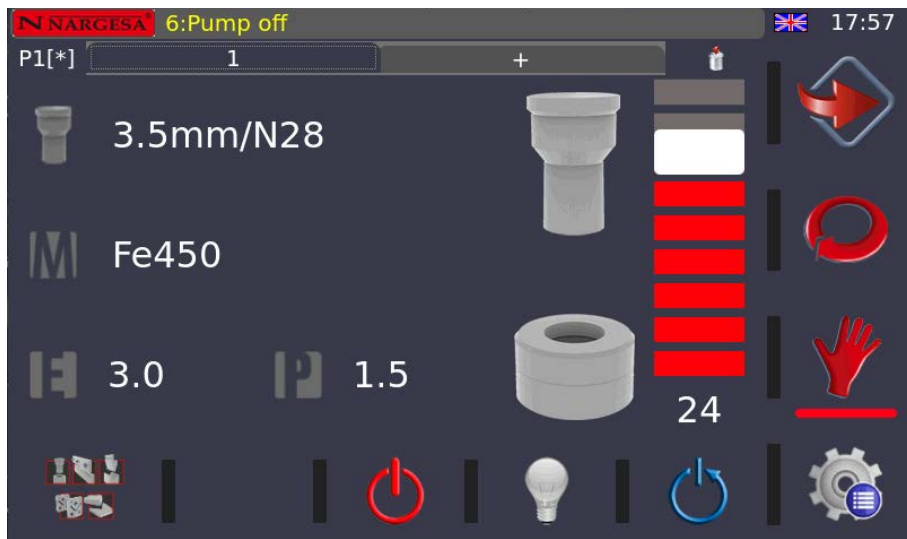
It is of utmost importance to remember at this point that the MX340 Punching Machine is delivered in “eco” mode. Why is this so important? Well, the reason is that the machine features an energy saving mode which firstly allows us to align ourselves with the necessary measures to slow down irreversible climate change (we’re an environmentally-aware company). And, secondly but not least importantly, it allows you as the customer to save the most energy when working so your end product is more price-competitive.


This “eco” mode basically turns off all tasks that consume the most energy if it detects a relatively long period of inactivity. Nonetheless and in order to avoid having to re-enable all the tasks you wish to work with, they will automatically turn on when you simply press the pedal.

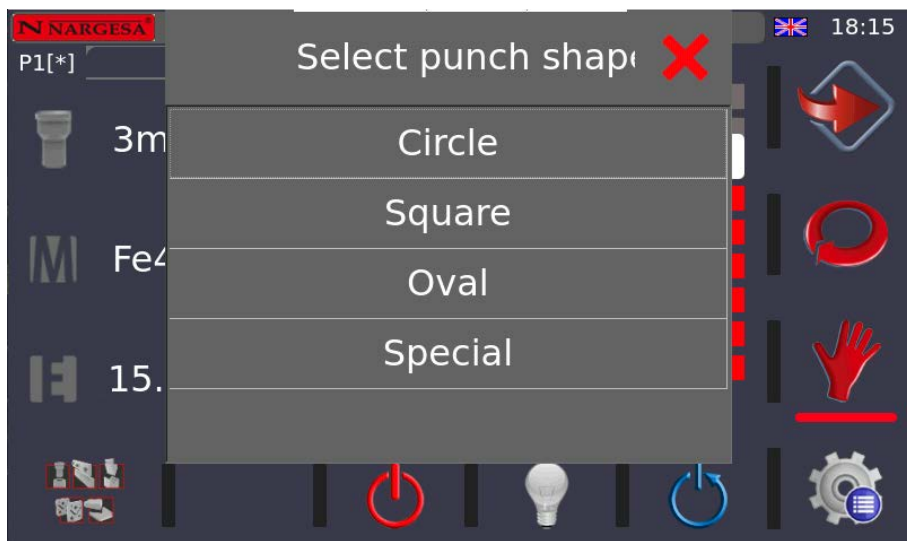
5.3. Punch

When you access the Punch function, this screen appears:

To perform the punching function, you must enter the following parameters into the CNC. To do this, click on each of the following icons to select each parameter:




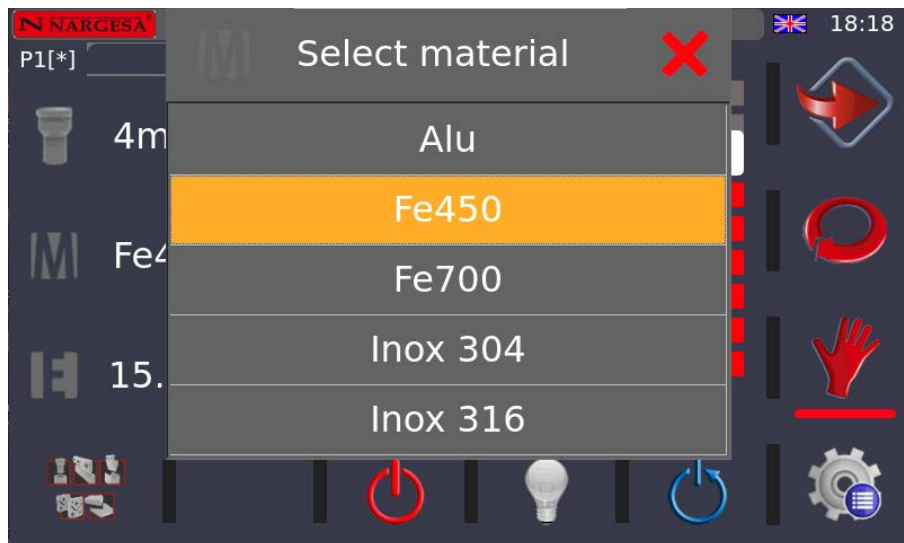
Press the  key to select the punch from the library:






You can see how the CNC automatically selects one or the other based on your choice. In other words, when you select a punch, the CNC selects the appropriate die for that punch.


Press the  key to select material:



Press the  key to insert the material thickness in millimeters or inches depending on the settings:



Once the numerical value has been entered, press the **SET** key to confirm.


To the right of the  icon is the value of power required for punching. This value does not usually need to be changed. However, it can be done to reduce or increase the power you wish to use for work operations.

Finally, use the progress bar or the numeric field at the bottom of it to regulate the punch limit.

Note: It is important to regulate the piston stroke so that it does not travel further than necessary, unnecessarily increasing the time of each punch.

Once these parameters are completed, press the  button to start the machine. Insert the material into the punching zone and press the pedal to perform the operation.



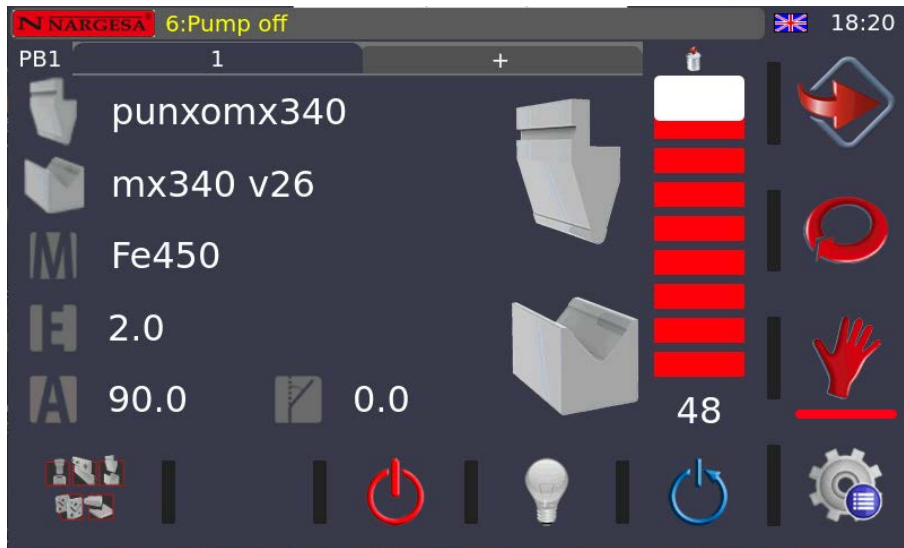
If you look at the vertical menu at the right side of the screen, you'll see the  icon is selected. This indicates you're in manual mode; in other words, the piston is moved forward with the forward pedal but you need to switch pedals and press the reverse pedal in order to reverse the piston.


You can switch to automatic mode by pressing the  icon. In this mode, reversing the piston does not require operator intervention.

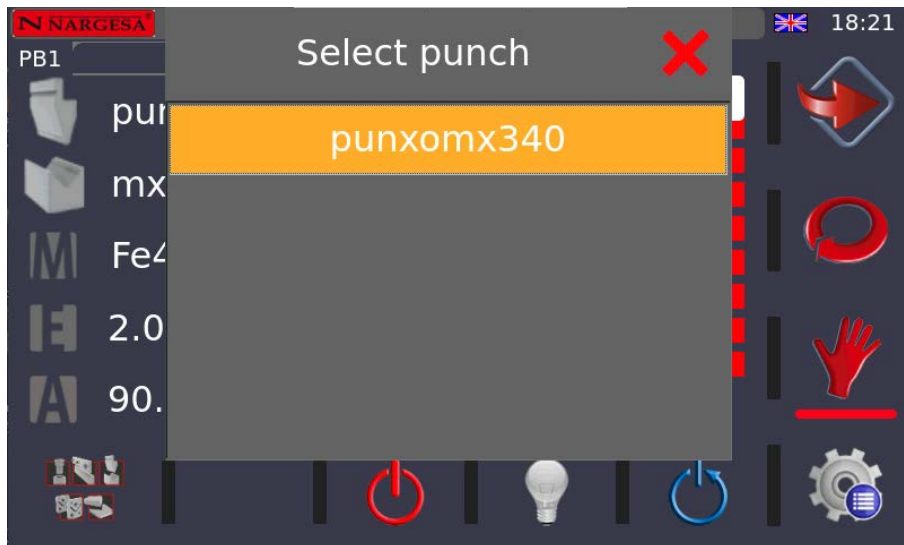
It is important to remember that you can alternate between these sub-modes whenever necessary just by pressing the corresponding icon.


5.4. Bend

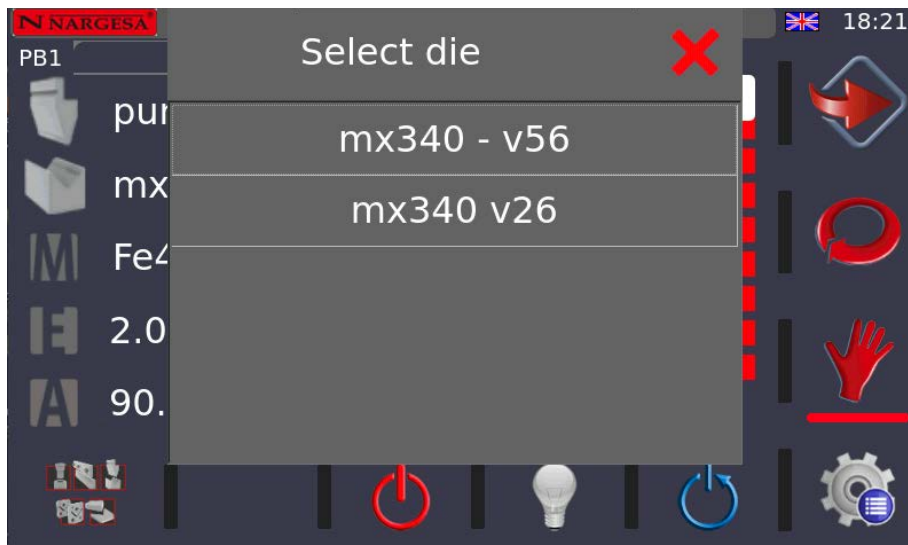
When you access the Bend function, this screen appears:




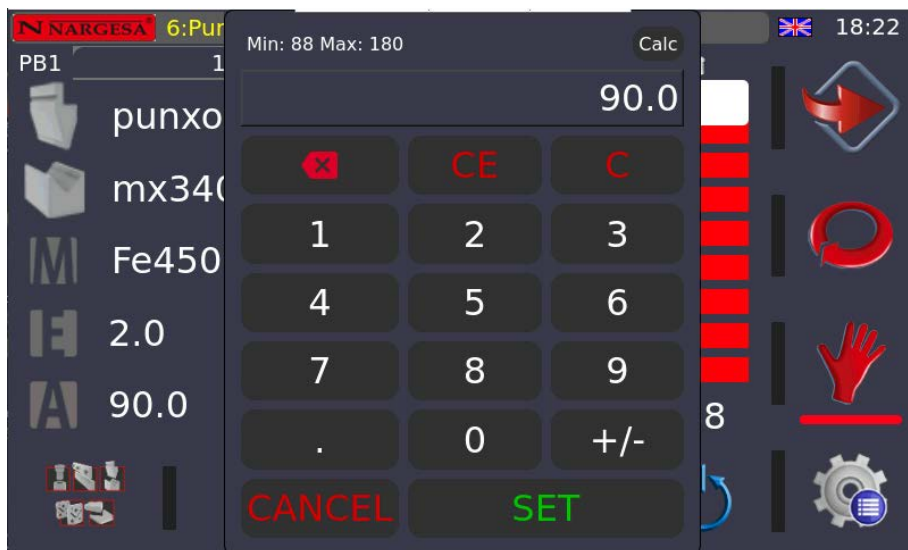
To perform the bending function, you must enter the following parameters into the CNC. Press the  key to select the punch from the library:



Press the  key to select the matrix from the library:

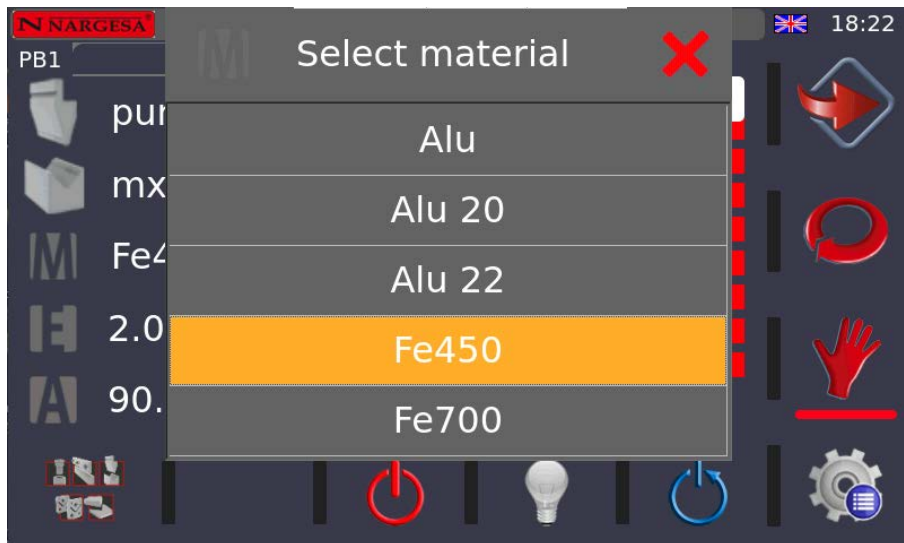


Press the  key to insert the bending angle:

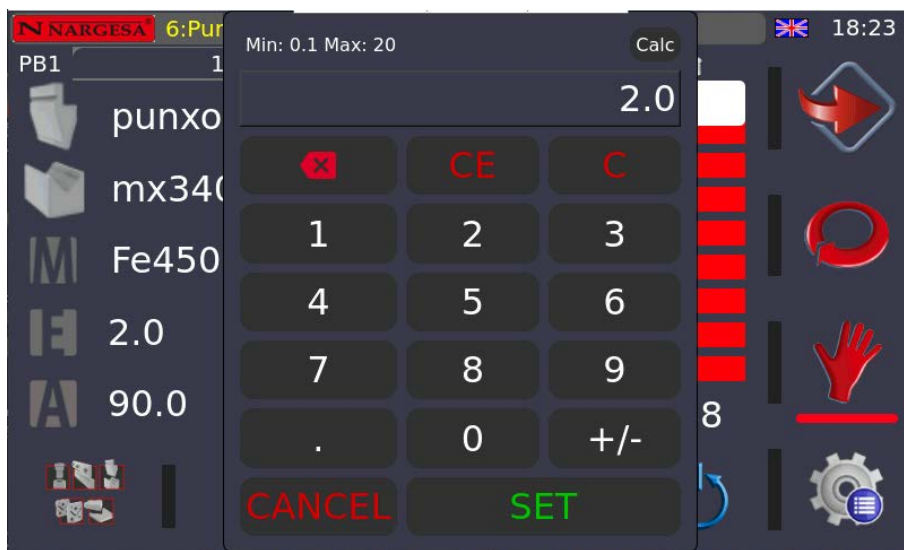


Once the numerical value has been entered, press the **SET** key to confirm.

Press the **M** key to select material from the library:



Press the **H** key to select material from the library:




Press the **SET** key to confirm the data.


Finally, use the progress bar or the numeric field at the bottom of it to regulate the punch limit.

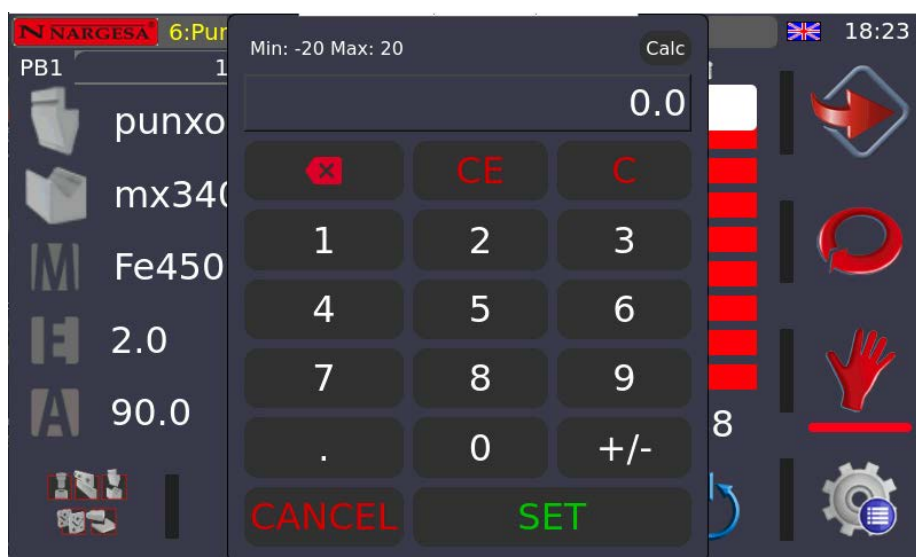


Note: It is important to regulate the piston stroke so that it does not travel further than necessary, unnecessarily increasing the time of each bend.

Once these parameters are completed, press the  button to start the machine. Insert the material in the bending area and press the pedal to perform the operation.


5.4.1. Bending correction


If a correction to the bending angle is needed, you must stop the bending process and indicate the necessary correction. Press the  icon and enter the number of degrees to correct.



Press the **SET** key to confirm and proceed with another bend.

5.4.2. Automatic mode and manual mode

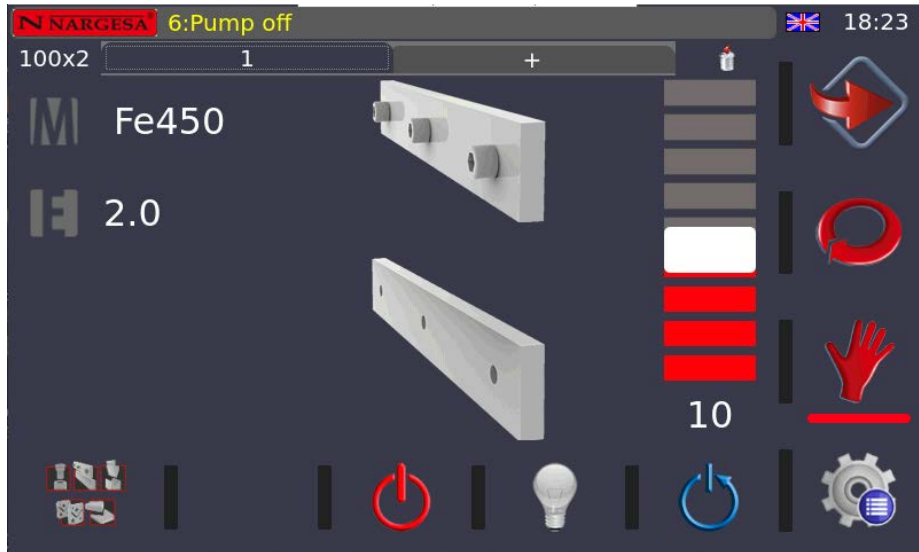
Up to now, all bending operations have been done in manual mode (the mode indicated on the vertical menu at the right with the  icon). In this mode, the machine only lowers the piston by pressing the corresponding pedal, which means that both forward and backward movement require action from the operator.

However, when creating many parts, it may be uncomfortable to have to constantly switch pedals. If this is the case, you can use the automatic bending mode. To select it, you simply need to press the  icon located to the right of the screen.

Now, after finishing each bend, look at how the piston automatically reverses to the position indicated along the vertical bar. Upon pressing the bend pedal again, the piston will move forward and backward again after finishing the operation. Thus, the operator does not need to constantly switch pedals which speeds up and simplifies the work.

5.5. Cut

When you access the Cut function, this screen appears:



To perform the cutting function, you must enter the following parameters into the CNC.

Press the **M** key to select material:



Press the **H** key to insert the material thickness in millimeters or inches depending on the settings:




Once the numerical value has been entered, press the **SET** key to confirm.

Finally, use the progress bar or the numeric field at the bottom of it to regulate the blade limit.

Note: It is important to regulate the piston stroke so that it does not travel further than necessary, unnecessarily increasing the time of each cut.



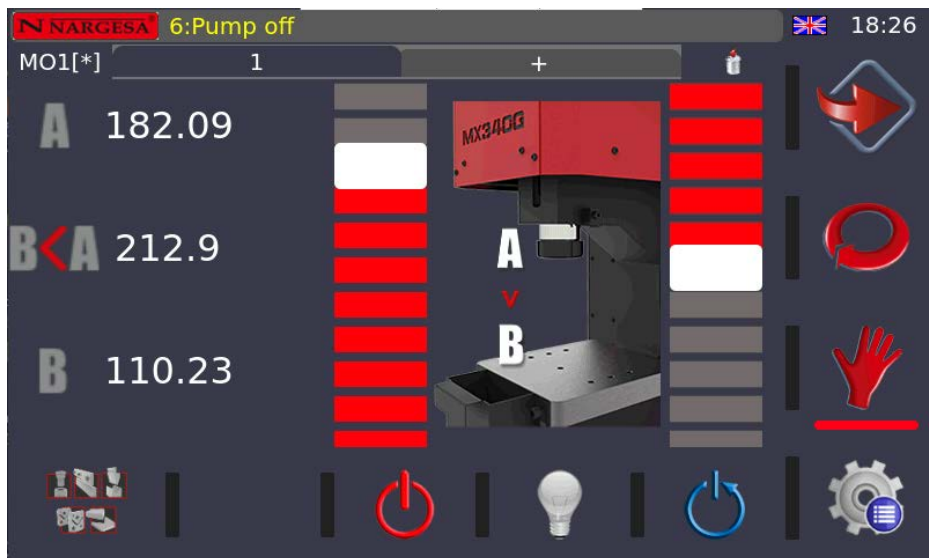
Once these parameters are completed, press the  button to start the machine.

Insert the material into the cutting zone and press the pedal to perform the operation.

Remember that when doing the cutting operation, the sub-modes are the same as already explained for bending. These sub-modes are "Manual" and "Automatic" and they work in the same way. In automatic mode, the action is done autonomously at the end of each operation.

5.6. Manual Positioning Mode

Upon accessing manual positioning mode, this screen appears:



To perform any function in manual mode, you must enter the following parameters into the CNC. Press the **A** key to enter the piston starting dimension:



Once the numerical value has been entered, press the **SET** key to confirm.

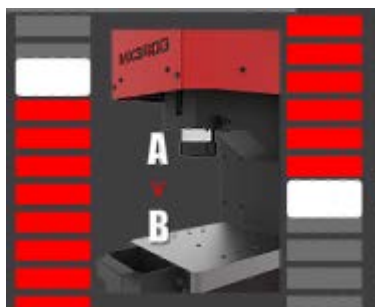
Press the **B** key to enter the final piston dimension:




Once the numerical value has been entered, press the **SET** key to confirm.

Similarly, you can adjust these two dimensions using the progress bars.

Note: It is important to regulate the piston stroke so that it does not travel further than necessary, unnecessarily increasing the time of each operation.



Once these parameters are completed, press the  button to start the machine.

Insert the material in the work area and press the pedal to perform the operation.

Just like with the other modes (punching, bending and cutting), you can work with a manual or automatic sub-mode which eases and speeds up the operator's work managing the machine when required.

6. SAVING PROGRAMS

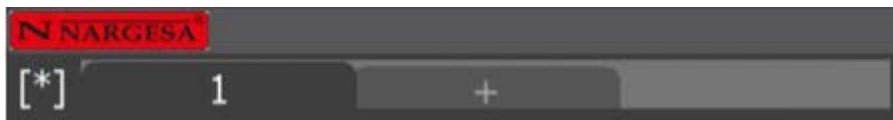
Now we're going to explain the following screen area (to the top):



The purpose of this area is to allow multiple punching, bending, cutting or manual operations.

So, you should then use the program step bar. This way you can add new bends, punches, cuts or manual operations to the same piece. So, in line with the example given (one part with two bends), you must press the tab with the "+" symbol after having completed all the data mentioned to operate.

Upon doing that, you'll see how a new step is added with the same data as before except the angle and angle correction. In this new step you only need to enter the degrees of the second bend.



At this point, you can continue creating new bends for the same part or you can do the bending operations already. It's important to note that if you change any data other than the angle or angle correction in any of the steps, that change will be made to all steps; in other words, it will be considered general program data.

It's now time to physically produce your part. To do so, follow the same steps as explained previously. The only difference you'll see is that after completing each bend, the software will automatically move to the next bend. This way, you can produce your part (with two bends) very easily.


You may now need to produce a new part. So, what happens with the data already on screen? Are they lost?

The answer is no as you can save all the data to produce your part, later upload it and continue making the same type of parts. To do so, just press the "[*]" text that appears at the top left of the screen.


When you do so, a screen will appear to insert the name under which you want to save this program. Using a descriptive name is recommended as it will be easier later on to know what features are included in each of the programs saved.

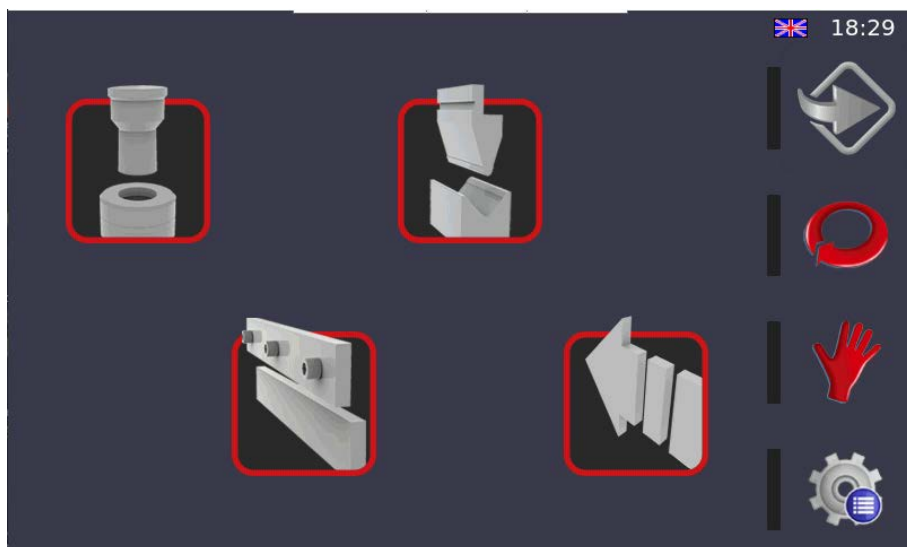
After you do this, the "[*]" text will change to the program name entered. It's important to remember at this point that it's still possible to change the data for your program. If you do so, an asterisk will appear after the program name to remind you that your program again has data not yet saved. To save it, just press the program name again.

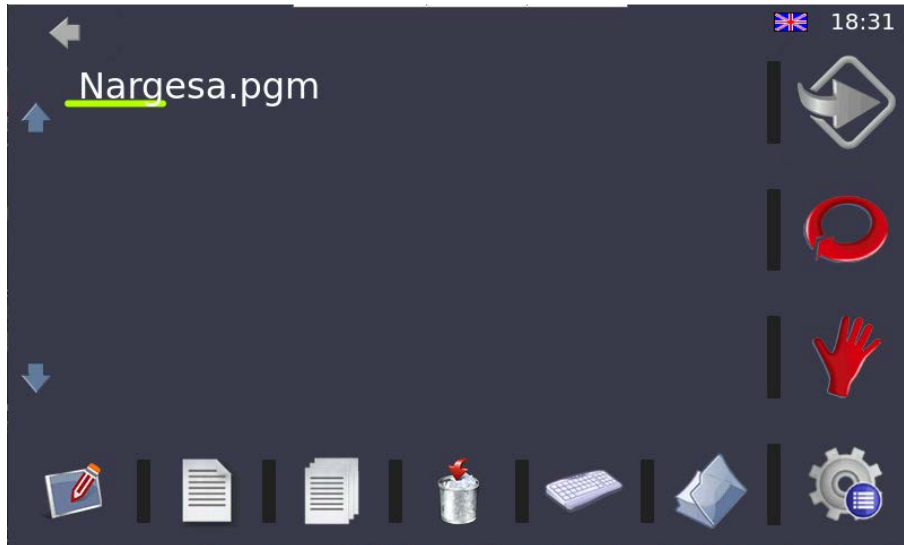
At this point, it's time to talk about program management. In other words, until now, you've only saved your program. But what about creating a new program? Or how do you upload a previous one?

Press the menu icon  located in the lower right part of the screen. This icon gives you access to the next screen.



Now, press the following icon  to go to the program management screen for the technology you wish to use; in this case, bending:





You can do the following operations using this interface:

- | | |
|---|---|
|  New program |  Rename program |
|  Load or edit program |  Delete program |
|  Copy program |  Folder mode |

The operations you can do only require the operator press the corresponding icon. We must mention how folder mode works though.

This mode allows you to do the same operations using the same icons already mentioned yet this time from folders saved on the digital control internal hard drive. This is an advanced operation which is rarely used. But, if you're able to take advantage of this feature, you can organize programs in a very customized manner.



NOTE: This process can be performed for all four technologies.

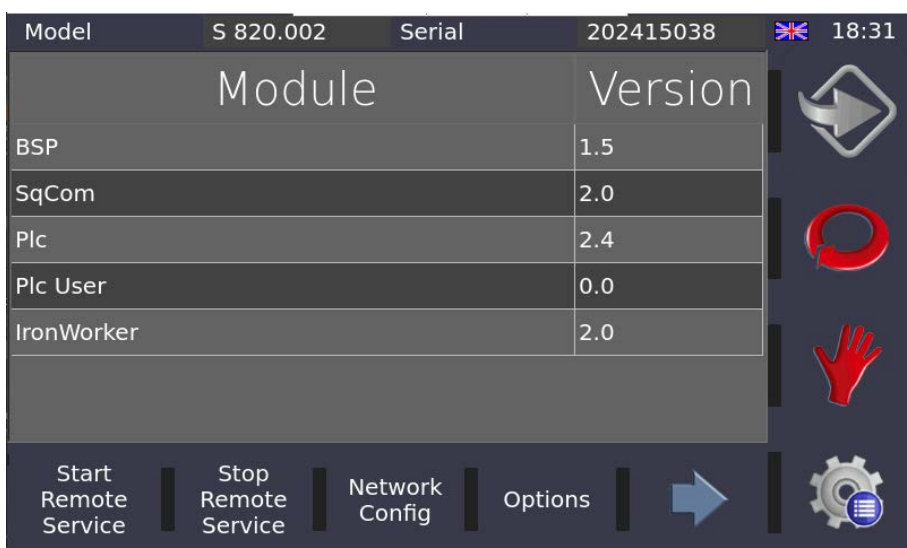
7. MENU

7.1. Remote Service

The Punching Machine is ready to connect to Ethernet using the cable supplied for this purpose. Within the local area network, the IP address is 10.10.51.110, and it is factory preset. Plus, this makes remote servicing on the machine possible. This service allows Nargesa, as the manufacturer of the Punching Machine, to remotely connect to the machine to resolve technical issues and provide remote training to the end customer.



To enable the remote service, press the  key to access the menus window and then the .





The information shown in the figure above refers to the model and serial number of the Punching Machine control as well as the versions of the different computer libraries used in the user interface.


To activate the remote service so that Nargesa's technical support department can connect to the machine to resolve issues and/or provide remote training, you must press START REMOTE SERVICE. However, this mode is already enabled by default on all our machines.

7.2. Import/Export Parameters, Materials and Programs

All configuration parameters for the Punching Machine, as well as defined materials and created programs, can be imported and exported to create backups.



To access the window shown in the previous figure, you must press the  key . Once the menu screen is accessed, press the  key.


By default, all filters are enabled, as well as the internal memory option. If you now press , all parameters, materials and tools will be saved in the internal memory of the Punching Machine brake control, making a backup copy. Additionally, if you want to perform a backup on a removable device such as an external USB device, you simply need to select the USB option and press again.

It is important to perform frequent backups to have a record of the parameters, materials and tools created. If you need to recover all or part of this information at any time, you simply need to select the source of the data (internal memory or external USB).

7.3. Tool Management

The Punching Machine is supplied with a complete library of all the tools you can work with. However, at times, the user may need a specific tool for a specific job that isn't in the original library. Under these circumstances, contact us so you can manufacture that tool or you can create it yourself.

However you do it, how do you tell the software you're using this new tool? The answer is by creating your new tool and adding it to the already existing library.

To do so, you must press the  icon in the general menu. The following screen will appear upon doing this:



Using this interface, select the type of tool; in other words, if the tool is to be used for punching, bending or cutting. The icons and features are shown below:



Punching tools



Bending tools




Cutting tools

7.3.1. Punching Tools

Upon accessing the punching tool screen, you'll see the following interface which corresponds to the materials defined for this work mode.

The following operations are possible if you press the icons in the horizontal menu at the bottom of the screen:


Name	Hardness	Min Thick	Max Thick
Alu	22.0	0.1	20.0
Fe450	45.0	0.1	20.0
Fe700	70.0	0.1	10.0
Inox 304	50.0	0.1	20.0
Inox 316	55.0	0.1	20.0

 Create a new material

 Edit existing material

 Delete existing material

It's necessary to mention at this point that upon creating or editing material, you'll see the following screen. Here you must enter all the data shown below, which physically define the characteristics of the material.

Now, you're going to create the actual tool. To do so, press the  icon at the right of the horizontal menu on the bottom. Having done this, the punch-die window appears for punching.

Name	Len	Per	Pen	T	Shape	Pos
3mm/...	58.00	9.42	1.00	3.0	Circle	100
3.5m...	58.00	10.99	1.00	3.5	Circle	99
4mm/...	58.00	12.56	1.00	4.0	Circle	98
4.5m...	58.00	14.13	1.00	4.5	Circle	97
4X4m...	58.00	16.00	1.00	4.0	Square	96
5mm/...	58.00	15.70	1.00	5.0	Circle	94
5.5m...	58.00	17.27	1.00	5.5	Circle	93

Just like with the material management screen, the bottom icons are the ones used to do the operations. In any case, the features of each one of the icons in the bottom menu will not be repeated here as they always do the same actions (new part, part edition, part deletion, etc.).

To create or edit a tool, you must enter the following data defining the real situation. An example is provided below showing the data for an already-existing tool. However, you must enter the actual data defining it if you want to create a new tool.


Name	<input type="text"/>
Punch Length	<input type="text"/>
Perimeter	<input type="text"/>
Penetration	<input type="text"/>
Max thickness	<input type="text"/>
Shape	Circle
Position	<input type="text" value="0"/>

✓
✗

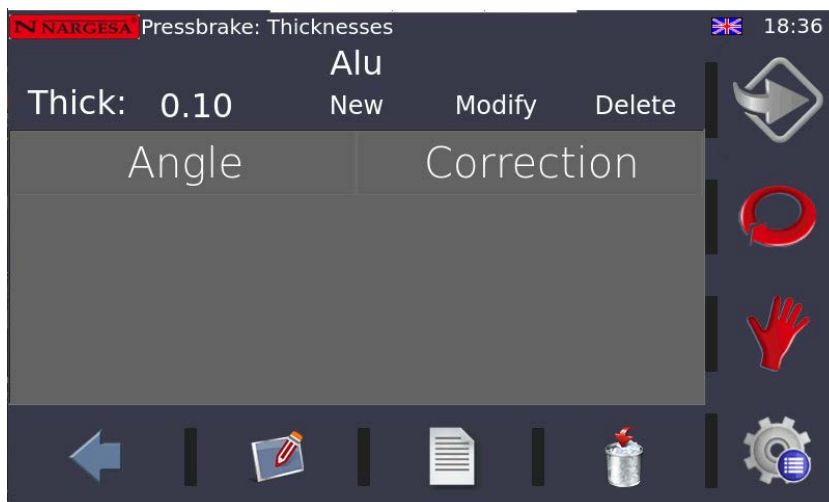
7.3.2. Bending Tools

Just as occurred with the punching tools, upon accessing the bending tool screen, the first thing you'll see are the materials defined for this work mode. If necessary, you can create, edit or delete materials using this interface. These operations (as explained above) are done using the icons in the horizontal menu at the bottom.



Given that the bending feature is the most complicated of the operations that can be done using the Punching Machine, note that the materials are even more important here. In other words, after defining the material, you can define certain corrections for certain thicknesses and angles to finish correcting the machine behavior during the bending process. This is done by pressing the  icon in the bottom menu.

The following screen will appear upon doing this:




Once inside this window, you can create, change or delete thicknesses by pressing the text on the horizontal line at the height of the thickness.




Plus, you can define a correction for each angle for each thickness. This means these corrections will be applied generally when choosing a specific thickness and angle for the bending feature.

This explanation can seem difficult to understand, but it's an advanced feature that allows you to correct the behavior of the bending process without needing to enter the same corrections again and again for the same angles.

As always, creating, editing and deleting corrections is done using the icons in the menu at the bottom.

To exit this mode and return to the materials screen, just press the  icon also found in the horizontal menu at the bottom.

Again on the materials screen, press the  icon in the menu at the bottom to access the bending punches. The window that appears is as follows:




Following the same process already explained, you can create, change and delete punches. The data physically defining a punch is shown below. Remember that this data is for a punch that exists in the library. If you need to create a new tool, you must enter the data defining the real situation.

Name	
Height	
Angle	
Radius	
Pressure	
Position	

✓
✗

Having reached this point and to sum up, you access the materials screen upon entering and you can manage the bending punches by pressing the icon.

If you press the same icon  again, you'll access the die management screen:

N NARGESA PressBrake: Dies 🇬🇧 18:38

name	H	W	Ang	L	Rad	Off	Pos
mx34...	82.40	70.00	88.0	56.00	1.00	0.00	101
mx34...	82.40	70.00	88.0	26.00	1.00	0.00	101













Just like always, the menu at the bottom is where you can manage the tasks (creation, edition and deletion). The data physically defining a die is as follows:

Name	
Height	
Width	
Angle	
L	
Radius	
Offset	
Position	

✓
✗

Again, if you need to create your own tool, in this case a die, enter the correct data defining that task in the actual situation and not the values shown here.

7.3.3. Cutting Tools

Upon accessing the cutting tools screen, you'll see the following:

NARGESA Shear: Materials 🇬🇧 18:40



Name	Hardness	Min Thic	Max Thic
Alu	10.0	1.0	10.0
Fe450	50.0	1.0	10.0
Fe700	70.0	1.0	10.0

To be more exact, you could say no tool in particular is defined for the cutting mode. You just define the characteristics defining the specific materials you're using. In the end, this data defines the cutting behavior and not anything others.

So, you create, edit and delete materials again using the icons that appear in the menu at the bottom of the window.

The physical data defining a material is as follows:

Name	<input type="text"/>
Hardness	<input type="text"/>
Min Thick	<input type="text"/>
Max Thick	<input type="text"/>

As always, the data shown as the example corresponds to material that already exists in the library supplied with the machine. If you need to create new materials, you must enter the data defining the real situation.

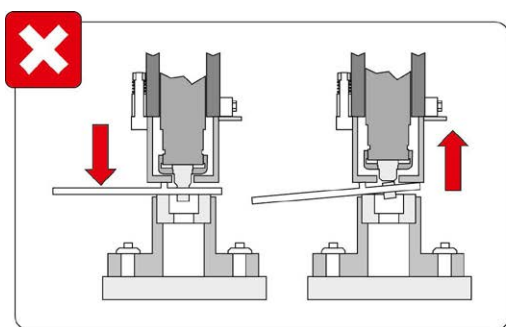
8. WARNINGS

- Do not handle any component when the machine is on.
- Do not use the machine for any purposes not described in the manual.
- Use gloves to work on the machine and during all punching processes.
- Use goggles and safety boots approved by EC certification.
- Secure the material on the ends; never by the punching area.
- Do not work without the protective mechanisms installed on the machine. (Never punch without the extractor)
- Keep a safe distance between your body and the machine.
- Do not use punches or tools not supplied by Nargesa.
- The tools that can be coupled to the machine must always be fixed to the base and rotor.
- NARGESA, S.L. will not be held liable for any accident due to operator negligence, and not following the instructions for use and safety indicated in the manual.

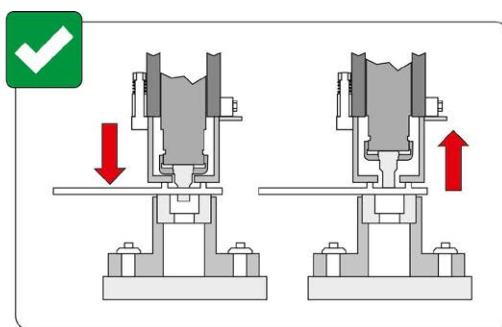
WARNING

Parts that cannot be supported by the two side parts of the EXTRACTOR may never be placed on it. Extremely narrow or flexible parts cannot be punched either, as there is a risk that they may bend towards the extractor.

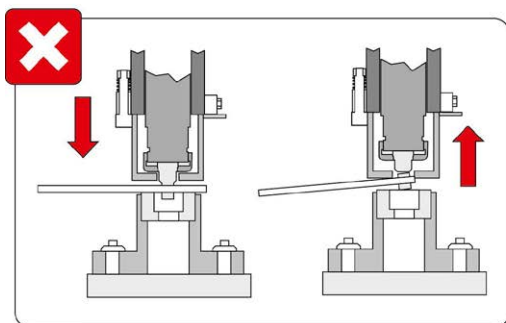
- Do not punch pieces that do not rest symmetrically on the extractor
- Do not punch if the workpiece is not supported on both sides of the extractor



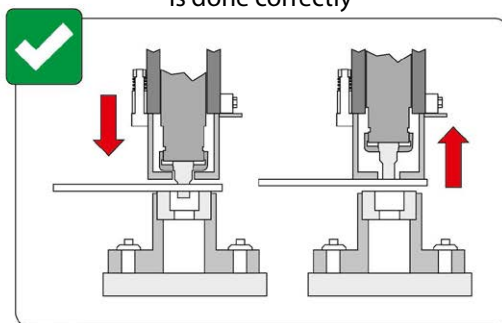
When reversing, the punch breaks



When reversing, the extraction is done correctly



When reversing, the punch breaks



When reversing, the extraction is done correctly

**Never punch a sheet metal thicker than the diameter
of the punch to be used**

9. TROUBLESHOOTING

Due to the daily use of the NARGESA MX340G CNC punching machine, you may encounter some unusual situations which we will try to describe below in order to facilitate its use and repair.

Problem	Cause	Solution
The screen does not turn on	There is no electrical power	Make sure your machine is connected to the power supply system
	One of the power supply phases is failing	Verify that all three phases of power are being received
	The protective fuse is blown	Replace the fuse
The electric motor does not start	The motor protection thermal switch is off	Reset the engine protection
	One phase of the power supply fails	Verify that all three phases of power are being received
	The emergency stop is enabled	Disengage the emergency stop and reset the machine
	Motor contactor failure	Please contact technical support

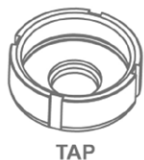
Control messages	Cause	Solution
Emergency	The emergency stop is enabled	Disengage the emergency stop and reset the machine
Thermal protection of the pump motor	The engine temperature sensor has detected dangerous overheating and has cut off the power supply	Reset the thermal protection on the electrical panel and reset the machine

NOTE: If you have the same problem again and again, please contact the NARGESA technical service.

10. ACCESSORIES

All Nargesa Hydraulic Punching Machines are equipped with the punching tool that includes the fitting nut for punches and the base holder for dies. The rest of accessories are optional, which means each customer equips his machine as desired.

Fitting nuts for punches MX340



TAP



ATAP

Reference	Type	Fitting nuts for punches
120-02-01-00011	TAP28	Fitting nuts for punches N28 <i>Standard</i>
140-02-01-00019	TAP40	Fitting nuts for punches N40
140-02-01-00020	TAP50	Fitting nuts for punches N50
140-02-01-00021	TAP60	Fitting nuts for punches N60
125-02-01-00002	ATAP	Fitting part for TAP60

Fitting parts for dies MX340



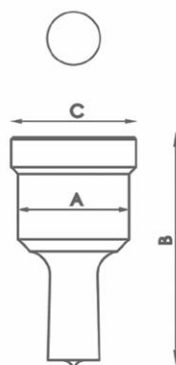
CAB



PORTABASES

Reference	Type	Fitting for dies
120-02-01-00012	N46	Fitting for dies N46 <i>Standard</i>
140-02-01-00024	N60	Fitting for dies N60
140-02-01-00025	N78	Fitting for dies N78
140-02-01-00037	N100	Base holder for dies N100
140-02-01-00038	N125	Base holder for dies N125

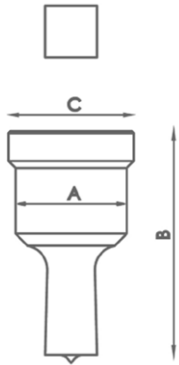
Standard round punches MX340



Type	Available sizes in mm Ø	A	B	C
N28	3/3'5/4/4'5/5/5'5/6/6'5/7/7'5/8 8'5 /9mm up to 28mm from 0'5 in 0'5mm	28 mm	58 mm	31,5 mm
N40	29/30/31/32/33/34/35 36/37/38/39/40mm	40 mm	64 mm	43,5 mm
N50	41/42/43/44/45/46/47/48/49/50mm	50 mm	58 mm	54 mm
N60	52/54/56/58/60mm	60 mm	58 mm	64 mm
N75	62/64/66/68/70/72/74mm	75 mm	58 mm	79 mm
N100	76/78/80/82/84/86/88 90/92/94/96/98/100mm	100 mm	58 mm	104 mm

For different sizes, please ask the manufacturer

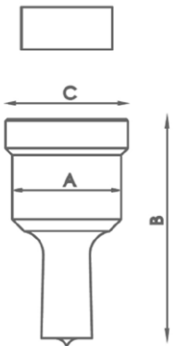
Standard square punches MX340



Type	Available sizes in mm	A	B	C
N28	4/5/6/7/8/9/10/11/12/13/14/15 16/17/18/19/20mm	28 mm	58 mm	31,5 mm
N40	21/22/24/26/28mm	40 mm	64 mm	43,5 mm
N50	31/33/35mm	50 mm	58 mm	54 mm
N75	40/44/48/53mm	75 mm	58 mm	79 mm
N100	58/64/70mm	100 mm	58 mm	104 mm

For different sizes, please ask the manufacturer

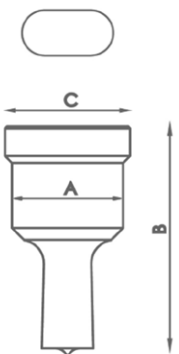
Standard rectangular punches MX340



Type	Available sizes in mm	A	B	C
N28	7x10/7x15/9x13/9x19/11x17/11x23 13x19/15x21mm	28 mm	58 mm	31,5 mm
N40	13x25/15x27/17x25/19x30/20x34mm	40 mm	64 mm	43,5 mm
N50	25x43mm	50 mm	58 mm	54 mm
N75	25x70mm	75 mm	58 mm	79 mm
N100	25x96mm	100 mm	58 mm	104 mm

For different sizes, please ask the manufacturer

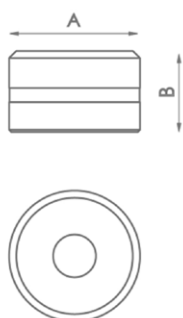
Standard oval punches MX340



Type	Available sizes in mm	A	B	C
N28	7x10/7x15/7x20/9x13/9x19/11x17/11x23 11x27/13x18/13x22/13x27/15x20/15x24 15x27/17x22/17x26/19x26/21x27mm	28 mm	58 mm	31,5 mm
N40	13x31/15x31/17x31/17x40/19x31 19x40/21x31/21x40mm	40 mm	64 mm	43,5 mm
N50	25x45/25x50mm	50 mm	58 mm	54 mm
N75	27x63/27x75mm	75 mm	58 mm	79 mm
N100	30x87/30x100mm	100 mm	58 mm	104 mm

For different sizes, please ask the manufacturer

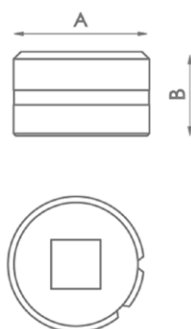
Standard round dies MX340



Type	Available sizes in mm	A	B
N46	3/3,5/4/4,5/5/5,5/6/6,5/7/7,5/8/8,5 9mm up to 28mm from 0,5 in 0,5mm	46 mm	28,5 mm
N60	29/30/31/32/33/34/35/36/37/38/39/40mm	60 mm	32 mm
N78	41/42/43/44/45/46/47/48/49/50mm	78 mm	28,5 mm
N100	52/54/56/58/60/62/64/66/68/70/72/74mm	100 mm	28,5 mm
N125	76/78/80/82/84/86/88/90/92/94/96/98/100mm	125 mm	28,5 mm

For different sizes, please ask the manufacturer

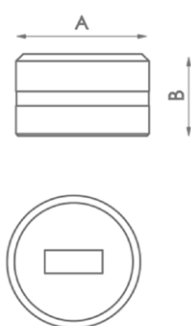
Standard square dies MX340



Type	Available sizes in mm	A	B
N46	4/5/6/7/8/9/10/11/12/13/14/15/16/17/18/19/20mm	46 mm	28,5 mm
N60	21/22/24/26/28mm	60 mm	32 mm
N78	31/33/35mm	78 mm	28,5 mm
N100	40/44/48/53mm	100 mm	28,5 mm
N125	58/64/70mm	125 mm	28,5 mm

For different sizes, please ask the manufacturer

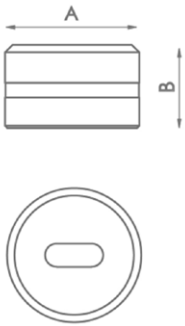
Standard rectangular dies MX340



Type	Available sizes in mm	A	B
N46	7x10/7x15/9x13/9x19/11x17/11x23 13x19/13x25/15x21mm	46 mm	28,5 mm
N60	15x27/17x25/19x30/20x34mm	60 mm	32 mm
N78	25x43mm	78 mm	28,5 mm
N100	25x70mm	100 mm	28,5 mm
N125	25x96mm	125 mm	28,5 mm

For different sizes, please ask the manufacturer

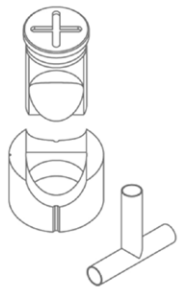
Oval dies MX340



Type	Available sizes in mm	A	B
N46	7x10/7x15/7x20/9x13/9x19/11x17/11x23 11x27/13x18/13x22/13x27/15x20/15x24/15x27 17x22/17x26/19x26/21x27mm	46 mm	28,5 mm
N60	13x31/15x31/17x31/17x40/19x31 19x40/21x31/21x40mm	60 mm	32 mm
N78	25x45/25x50mm	78 mm	28,5 mm
N100	27x63/27x75mm	100 mm	28,5 mm
N125	30x87/30x100mm	125 mm	28,5 mm

For different sizes, please ask the manufacturer

Tube notching tooling MX340



Reference	Available sizes in mm	Required fitting	
MAN28	Tube from 16 to 28mm	TAP 28	CAB 46
MAN40	Tube from 28,5 to 40mm	TAP 40	CAB 60
MAN50	Tube from 40,5 to 50mm	TAP 50	CAB 78
MAN60	Tube from 50,5 to 60mm	TAP 60	

For different sizes, please ask the manufacturer

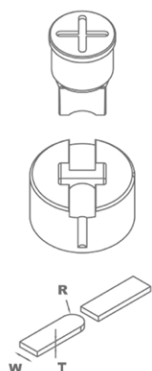
Corner rounding tooling MX340



Reference	Available sizes in mm	Required fitting	
MRE28	Radius from 3 to 15mm	TAP 28	CAB 46
MRE40	Radius from 16 to 26mm	TAP 40	CAB 60
MRE50	Radius from 26,5 to 32mm	TAP 50	CAB 78

For different sizes, please ask the manufacturer

Flat bar round end tooling R1 MX340



Reference	Model	Width size	Required fitting
MOR1-35A	A	From 20 to 35mm	TAP28 / TAP40
MOR1-35B	B	From 20 to 35mm	TAP28 / TAP40
MOR1-35C	C	From 20 to 35mm	TAP28 / TAP40
MOR1-35D	D	From 20 to 35mm	TAP28 / TAP40
MOR1-50A	A	From 40 to 50mm	TAP50 / TAP60 with ATAP
MOR1-50B	B	From 40 to 50mm	TAP50 / TAP60 with ATAP
MOR1-50C	C	From 40 to 50mm	TAP50 / TAP60 with ATAP
MOR1-50D	D	From 40 to 50mm	TAP50 / TAP60 with ATAP

For different sizes, please ask the manufacturer.

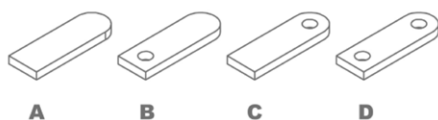
When placing order it must be specified the REFERENCE, MODEL,

R (radius), W (flat bar width), T (flat bar thickness)

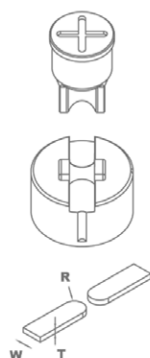
In models B, C and D specify diameter of the hole.

The ear shaped length is always adjustable.

Production capacity: 450 to 600 parts per hour.



Flat bar round end tooling R2 MX340



Reference	Model	Width size	Required fitting
MOR2-35A	A	From 20 to 35mm	TAP28 / TAP40
MOR2-35B	B	From 20 to 35mm	TAP28 / TAP40
MOR2-35C	C	From 20 to 35mm	TAP28 / TAP40
MOR2-50A	A	From 40 to 50mm	TAP50 / TAP60 con ATAP
MOR2-50B	B	From 40 to 50mm	TAP50 / TAP60 con ATAP
MOR2-50C	C	From 40 to 50mm	TAP50 / TAP60 con ATAP

Para medidas distintas o superiores consultar con el fabricante.

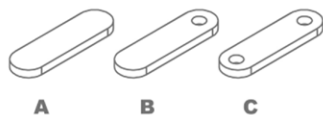
Al realizar el pedido especificar REFERENCIA, MODELO, R (radio),

W (ancho pletina), T (grueso pletina)

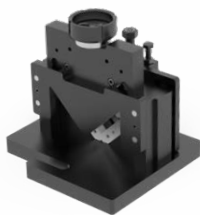
En los modelos B y C especificar diámetro del agujero.

La longitud de la orejeta siempre es ajustable.

Capacidad de producción: 450 a 600 piezas la hora.



Angle cutting tooling. MX340



Reference: 140-02-01-00001
Angle cutting tooling, from 90° up to 45°.



Units per machine	Max. Capacity for straight cut	Max. Cutting capacity for miter	Weight
1	60x60mm	50x50mm	32 Kg

Flat bar cutting tooling. MX340

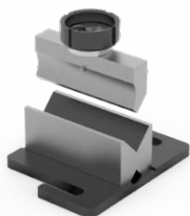


Reference: 140-02-01-00002
Tooling for cutting sheet or flat bars from 0.8mm up to 10mm thickness.



Units per machine	Max. Cutting capacity	Weight
1	100x10mm	28 Kg

Folding tooling 170mm. MX340



Reference: 140-02-01-00004
Tooling for folding sheet and flat bar up to 170mm. 88° punch. Dies with V for 56mm and V for 26m.

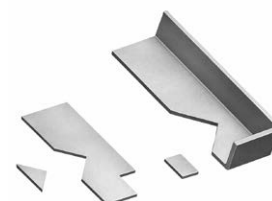


Units per machine	Max folding length	Max folding thickness	Weight
1	170mm	8 to 12mm	12 Kg

Stripping tooling to 90° adjustable 100x100 MX340



Reference: 140-02-01-00005
Stripping tooling for angle etc. Adjustable up to 100x100mm to 90° fijos.



Units per machine	Max. Cutting capacity	Weight
1	100x100x4	21 Kg

Arrow tooling for metal sheet MX340



Reference: 140-02-01-00006
 Tooling for punching metal sheet in arrow shapes for fences.



Units per machine	Max. Sheet Thickness	Weight
1	3mm	21 Kg

Arrow tooling for pipes MX340



Reference: 140-02-01-00007
 Tooling to flatten and cut arrow shaped pipes end. Suitable for different diameters.



Units per machine	Pipe max. Diameter	Min. Pipe diameter	Weight
1	30x2mm	10x2mm	19 Kg

Ventilation grip tooling. MX340



Reference: 140-02-01-00010
 Tooling to make ventilation grips in metal sheet. Adjustable amount of punchings. They are to made one by one.



Units per machine	Punchings sizes	Max. thickness	Weight
1	100x20mm	2mm	20Kg

Angle & U profile punching tooling MX340



Reference: 140-02-01-00031
 Base holder for angle punching. Suitable for punches and dies of different diameters, exchangeables.



Units per machine	Max. Hole diameter	Min. Hole diameter	Weight
1	28mm	2mm	7 Kg

Round bar cutting tooling. MX340



Reference: 140-02-01-00035
Tooling for cutting round bar from 3mm up to 35mm.



Units per machine	Max. Cutting diameter	Min. Cutting diameter	Weight
1	35mm	3mm	15 Kg

Locks punch and die MX340



Reference: 140-02-01-00036
Set for making the lock hole in metal sheet.
Necessary complements: CAB60 and TAP40



Parts per set	Max. Thickness	Weight
2	6mm	1 Kg

Flattening tooling MX340



Reference: 140-02-01-00039
It's an extractor which acts as the flat bar holder at the punching time to prevent the flat bar from deformation while being punched.



Parts per tooling	Flat Bar Max Thickness	Weight
3	15mm	15 Kg

Fence post end tooling MX340



Reference: 140-02-01-00040
Tooling to flatten and punch the pipe for fences. It admits different pipe diameters. Exchangeable hole size.

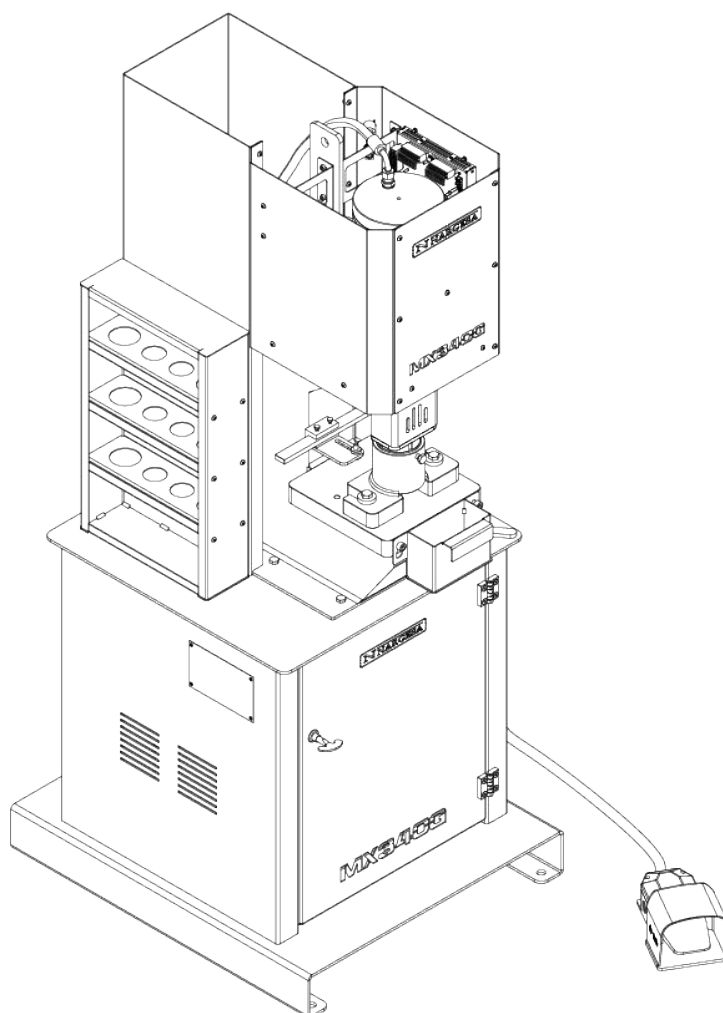


Parts per tooling	Max. Pipe diameter	Min. Pipe diameter	Hole diameter	Weight
2	50mm	10mm	Exchangeable	23 Kg



TECHNICAL ANNEX

Hydraulic Punching MX340G



PRADA NARGESA, S.L

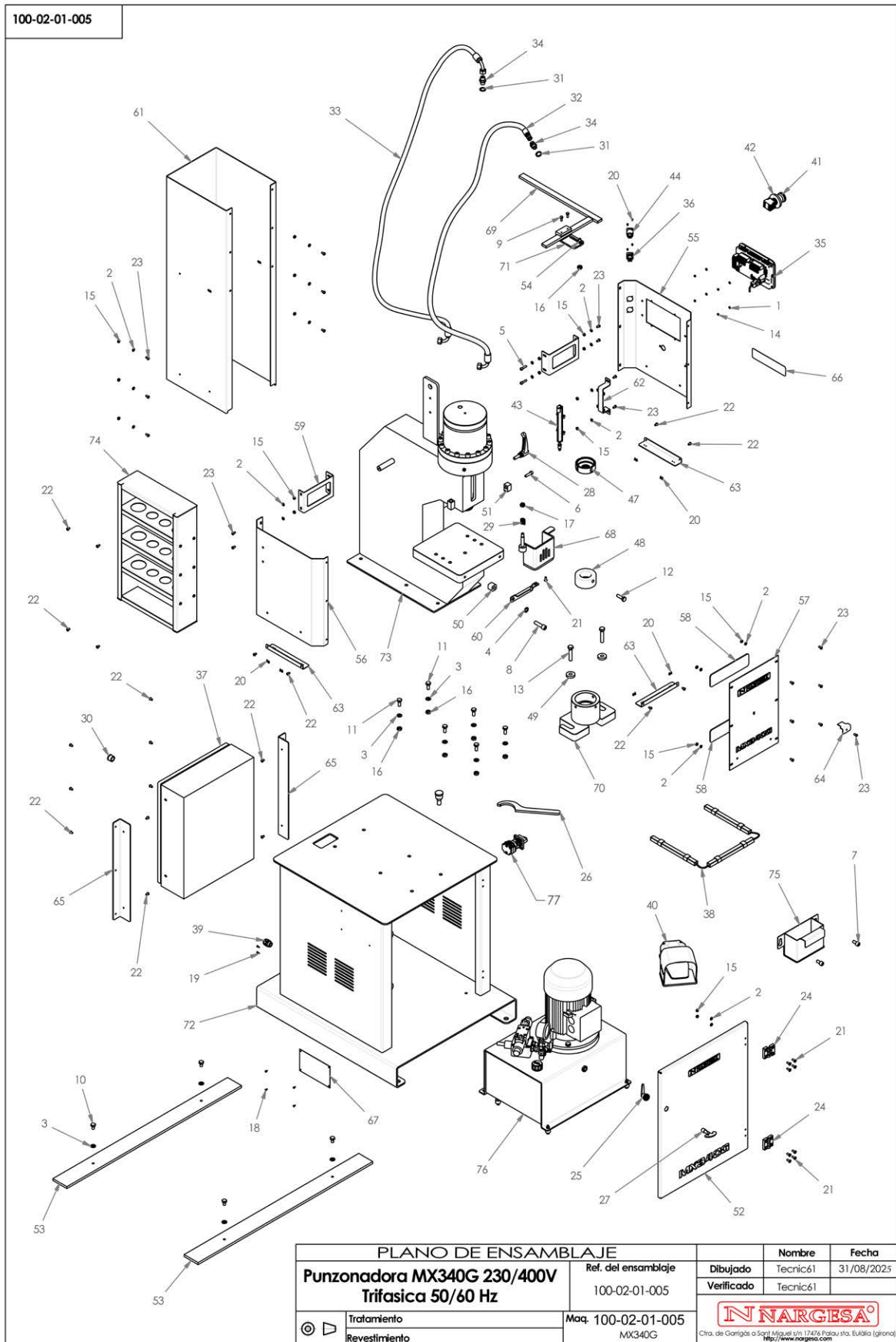
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CONTENTS















A1. General Blow-Up View.....	4
A2. Piston Parts Diagram	11
A3. Hydraulic Unit Blow-Up View	13
A4. Electrical Cabinets	17
A5. Electrical Diagrams	26
A6. Hydraulic Diagram	34















A1. General Blow-Up View



Elemento	Miniatura	Nº de pieza	Descripción	CTDAD
1		020-D125B-M4	Arandela Biselada DIN125B Para M4	4
2		020-D125B-M6	Arandela Biselada DIN 125B M6	24
3		020-D125B-M10	Arandela Biselada DIN 125B M10	10
4		020-D127-M12	Arandela Glower DIN127 Para M12	1
5		020-D912-M6X25	Tornillo Allen DIN912 M6X25	2
6		020-D912-M8X30	Tornillo Allen DIN 912 M8X30	1
7		020-D912-M10X20	Tornillo Allen DIN 912 M10X20	2
8		020-D912-M12X45	TORNILLO ALLEN DIN912 M12X45	1
9		020-D933-M6X16	Tornillo Hexagonal DIN 933 M6X16	2
10		020-D933-M10X16	TORNILLO HEXAGONAL DIN 933 M10X16 8.8 PAVONADO	4
11		020-D933-M10X25	Tornillo Hexagonal DIN 933 M10X25	6
12		020-D933-M10X35	Tornillo Hexagonal DIN 933 M10X35	1
13		020-D933-M12X60	Tornillo Hexagonal DIN 933 M12X60	2
14		020-D934-M4	Tuerca Hexagonal DIN934 M4	4

Elemento	Miniatura	Nº de pieza	Descripción	CTDAD
15		020-D934-M6	Tuerca Hexagonal DIN 934 M6	24
16		020-D934-M10	Tuerca Hexagonal DIN934 M10	7
17		020-D985-M10	Tuerca Autoblocante DIN 985 M10	1
18		020-D7337-3X8	Remache De Clavo DIN7337 De Al D3X8	4
19		020-D7985-M3X10	Tornillo DIN7985 M3X10 Zincado	2
20		020-D7991-M3x8	Tornillo Allen DIN 7991 M3X8	16
21		020-D7991-M6X16	Tornillo Allen DIN 7991 M6X16	10
22		020-I7380-M6X10	Tornillo Allen Abombado ISO 7380 M6X10	19
23		020-I7380-M6X12	Tornillo Allen Abombado ISO 7380 M6X12	21
24		031-BP-00001	Bisagra De Plástico 30 Entre Centros	2
25		031-CLT-00001	Cierre De Lengüeta Con Triangulo 8 M20	1
26		031-LLGU-00001	Llave Gancho Con Uña 80/90	1
27		031-LLT-00001	Llave Para Cierre Triangulo De 8 Flotante Niquelada	1
28		031-MAG-00003	MANETA GRADUABLE M10x30	1

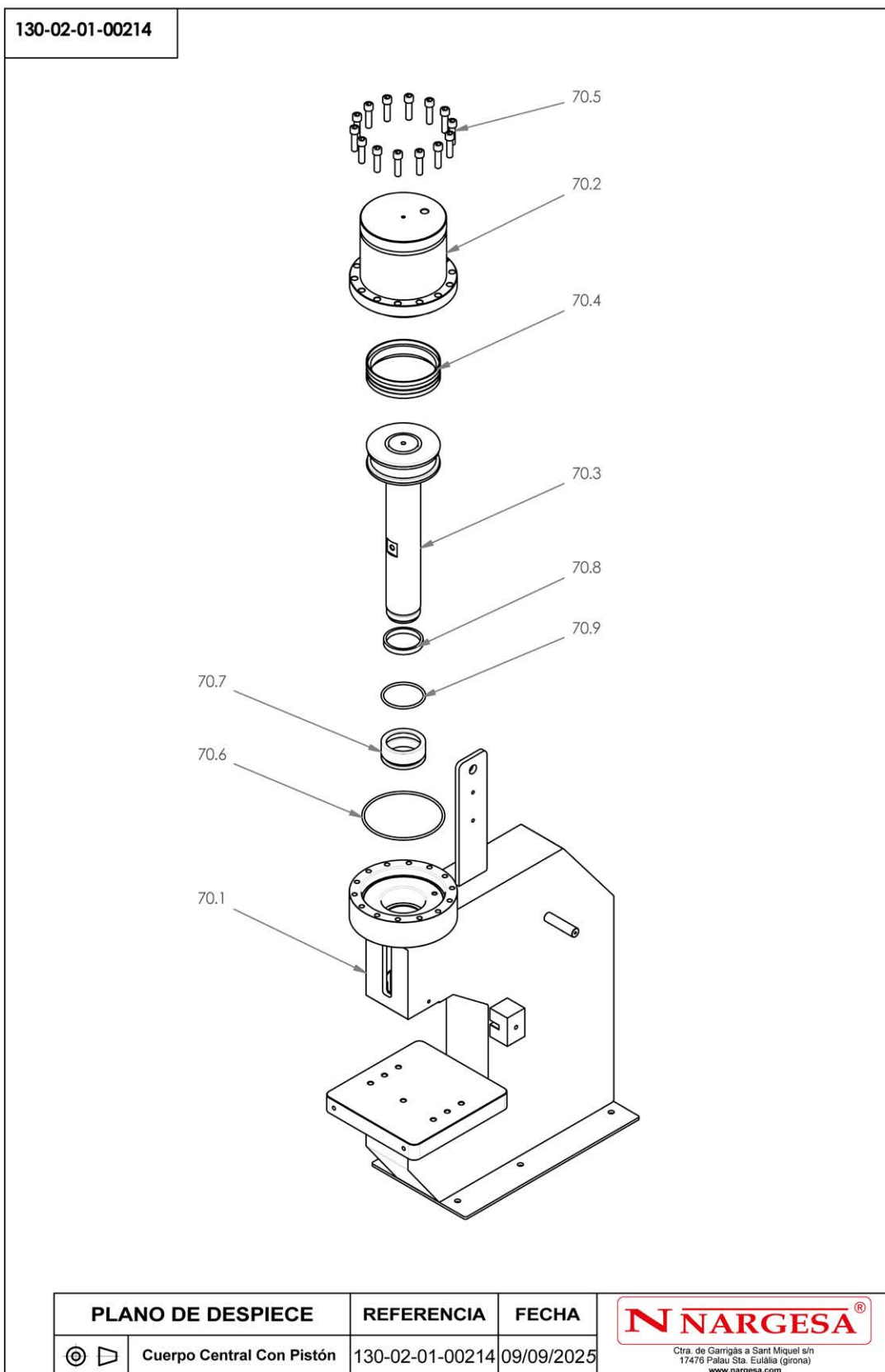
Elemento	Miniatura	Nº de pieza	Descripción	CTDAD
29		031-MUC-00001	Muelle Ø13xØ18xØ2.5x23.5	1
30		031-TAP-00005	Tapon De Plastico Para Tubo Redondo D25	1
31		040-JMG-00004	Junta Metal Goma 3/8' Gas	2
32		040-MF-00006	Manguera hidráulica flexible con Codo 90º TG BSP 3/8" - Recto TG BSP 3/8 " Longitud : 1750 mm	1
33		040-MF-00008	Manguera hidráulica flexible con Codo 90º TG BSP 3/8" - Codo 90º TG BSP 3/8 " Longitud : 2100 mm	1
34		040-RMM-00003	Racor 3/8" Macho Macho	2
35		050-CNC-00007	Pantalla ESA CNC S820	1
36		050-ETH-00002	Conector Pasante RJ45 Cat.5	1
37		050-KIE-1601-004	Kit Instalación Electrica PP-200	1
38		050-LED-00017	Tira led MX340G	1
39		050-PE-00003	Prensaestopa GFPT 212 50043 M20X150 PG13.5	1
40		050-PED-00019	Pedal Pizzato PX 10111-M2	1
41		050-PED-00028	Paro Emergencia CAT 4 (2NC+1NO)	1
42		050-PED-00029	Anillo Luminoso Paro Emergencia	1

Elemento	Miniatura	Nº de pieza	Descripción	CTDAD
43		050-PO-00010	Potenciometro Lineal OPKON SLPT 125 D 5K 1M	1
44		050-USB-00002	Conector Pasante USB 2.0	1
45		120-02-01-00008	Chapa Extractora De 37	1
46		120-02-01-00009	Chapa Extractora De 18	1
47		120-02-01-00011	Tuerca Acoplamiento Punzón de Ø28	1
48		120-02-01-00012	Adaptador Base de Corte de Ø46 CAB3-N46	1
49		120-02-01-00017	Arandela D35XD13X8	2
50		120-02-01-00079	Tope Pistón MX340	1
51		120-02-01-00084	Tope Extractor	1
52		120-02-01-00097	Puerta MX340G	1
53		120-02-01-00106	Pasamano Anclaje Máquina	2
54		120-02-01-00108	Tetón Tope	1
55		120-02-01-00172	Tapa Lateral Superior Lado Mandos	1
56		120-02-01-00173	Tapa Lateral Superior	1

Elemento	Miniatura	Nº de pieza	Descripción	CTDAD
57		120-02-01-00174	Tapa Frontal Superior	1
58		120-02-01-00175	Metacrilato Negro Tapa Frontal Superior	2
59		120-02-01-00177	Tirante Rigidizador	2
60		120-02-01-00178	Enlace Cilindro Potenciómetro	1
61		120-02-01-00179	Carenado Posterior	1
62		120-02-01-00181	Soporte Potenciómetro Lineal OPKON SLPT 125	1
63		120-02-01-00182	Chapa Soporte Led	3
64		120-02-01-00183	Soporte Antigiro	1
65		120-16-01-00317	Soporte Cuadro Electrico PP200	2
66		122-CAL-0602-002	Calca PP200, C2006 i C3006	1
67		122-PLC-0000-001	Placa Caracteristicas General	1
68		130-02-01-00111	Extractor Protector Estandar	1
69		130-02-01-00114	Tope	1
70		130-02-01-00119	Portabases Ø85	1

Elemento	Miniatura	Nº de pieza	Descripción	CTDAD
71		130-02-01-00121	Soporte Útil Tope	1
72		130-02-01-00213	Bastidor MX340G	1
73		130-02-01-00214	Cuerpo Central Con Pistón	1
74		130-02-01-00216	Conjunto Estantería MX340 G	1
75		130-02-01-00217	Cubeta Recogida Retales	1
76		130-02-01-00218	Grupo Hidráulico	1
77		050-IG-00001	Interruptor General Kg10Ak300	1

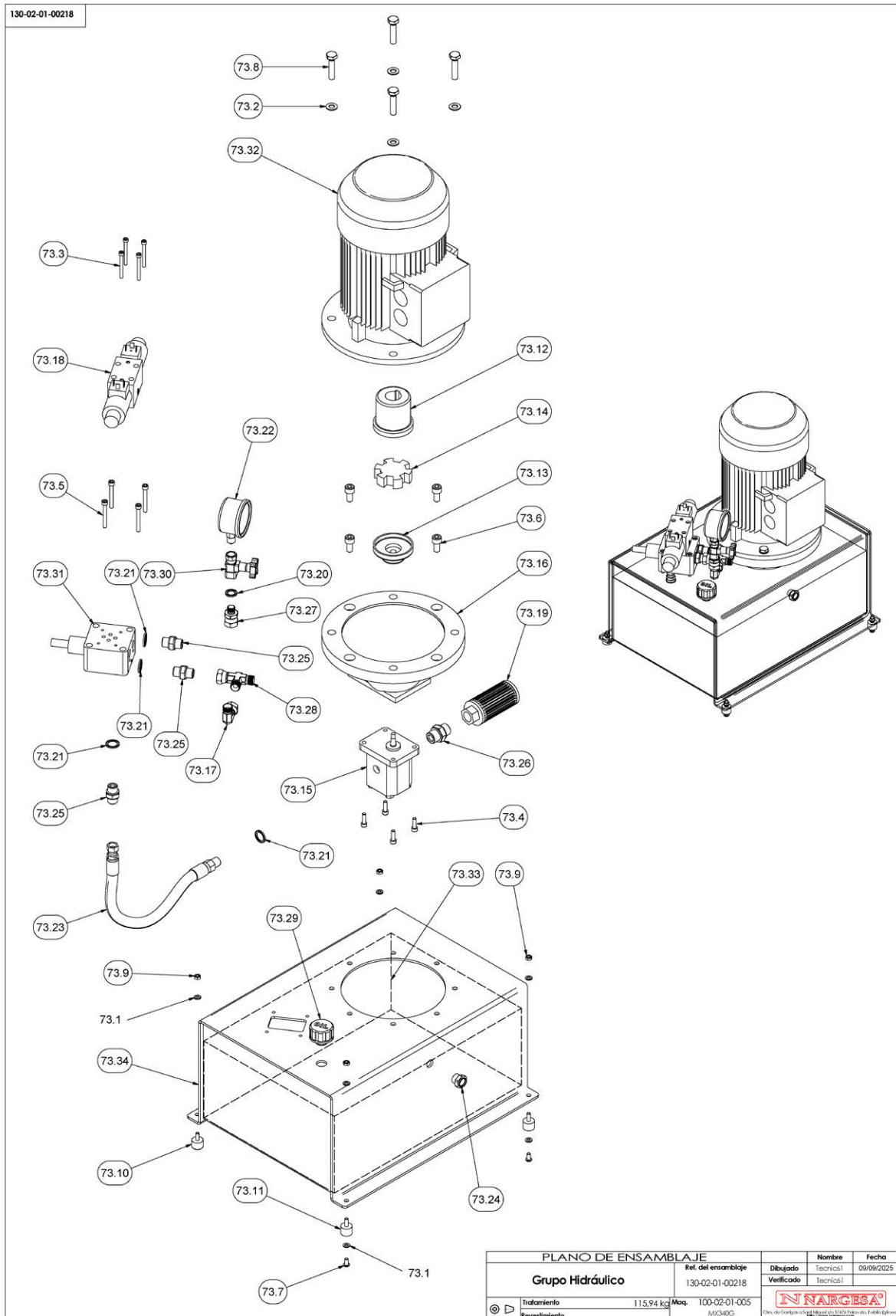
A2. Piston Parts Diagram







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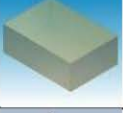
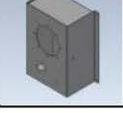
Elemento	Miniatura	Nº de pieza	Descripción	CTDAD
70.1		130-02-01-00204	CUERPO CENTRAL MX340G	1
70.2		130-02-01-00205	Sombrero Pistón MX340G	1
70.3		130-02-01-00210	PISTON MX340G	1
70.4		040-DPS-00003	DPS 150 X 133 X 20 X 40	1
70.5		020-D912-M12X45	TORNILLO ALLEN DIN912 M12X45	14
70.6		040-JT-00006	JUNTA TORICA D158X5 90 Shore	1
70.7		120-02-01-00046	Dolla De Bronce D90XD70X39	1
70.8		040-BA-00010	COLLARIN BA D70XD80X11.4	1
70.9		040-JT-00023	JUNTA TORICA D80X5 90 Shore	1

A3. Hydraulic Unit Blow-Up View

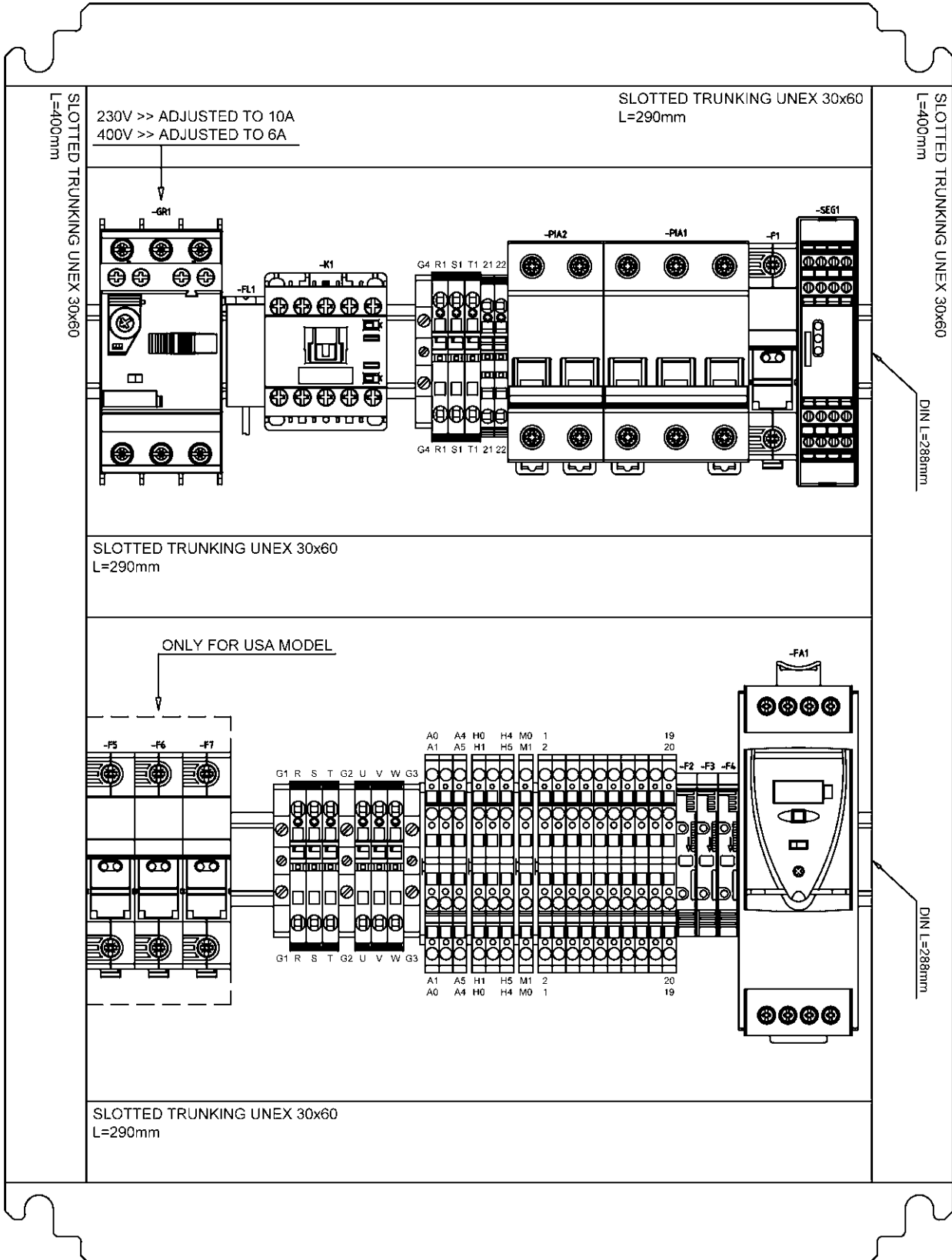


Elemento	Miniatura	Nº de pieza	Descripción	CTDAD
73.1		020-D125B-M6	Arandela Biselada DIN 125B M6	6
73.2		020-D125B-M10	Arandela Biselada DIN 125B M10	4
73.3		020-D912-M5X50	Tornillo Allen DIN 912 M5X50	4
73.4		020-D912-M6X20	Tornillo Allen DIN912 M6X20	4
73.5		020-D912-M6X50	Tornillo Allen DIN 912 M6X50	4
73.6		020-D912-M10X20	Tornillo Allen DIN 912 M10X20	4
73.7		020-I7380-M6X12	Tornillo Allen Abombado ISO 7380 M6X12	2
73.8		020-D933-M10X45	Tornillo Hexagonal DIN933 M10X45	4
73.9		020-D934-M6	Tuerca Hexagonal DIN 934 M6	4
73.10		031-SIB-00001	Silentblock D20x15 Macho M6	2
73.11		031-SIB-00005	SILENT BLOCK D20X15 M6 ESPARRAGO Y ROSCA	2
73.12		040-AE-00007	Acoplamiento Lado Motor 3/4 / 5.5CV	1

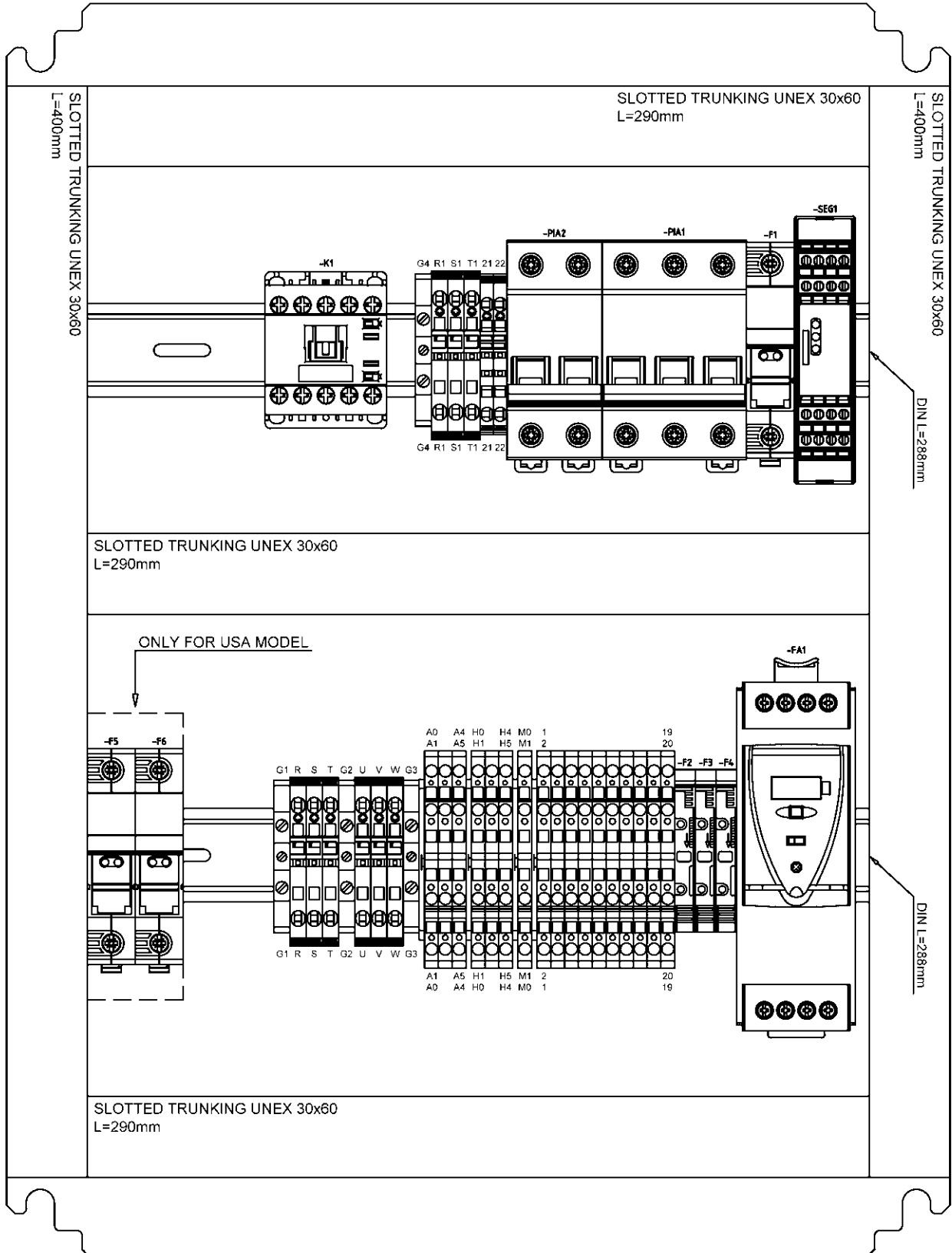
Elemento	Miniatura	Nº de pieza	Descripción	CTDAD
73.13		040-AE-00008	Acoplamiento Lado Bomba Lo Para Motor 3/4 / 5.5 CV	1
73.14		040-AE-00009	Estrella Acoplamiento Para Motor 3/4 / 5.5 CV	1
73.15		040-BH-00002	Bomba Hidraulica De Aluminio De 7.5 L 1LO7.5DE10R	1
73.16		040-CA-00002	Campana Acoplamiento Bomba Tipo Lo Motor 3/4/5.5 CV	1
73.17		040-CMH-00002	CODO 90º MACHO HEMBRA 3/8"	1
73.18		040-ELV-00012	Electrovalvula Doble Bobina 5EVP3D1C02D24	1
73.19		040-FL-00002	Filtro De Aspiracion 1/2' REF 2FA15R125N	1
73.20		040-JMG-00002	Junta Metal Goma 1/4' Gas	1
73.21		040-JMG-00004	Junta Metal Goma 3/8' Gas	4
73.22		040-MAN-00003	Manómetro 0-300 bar D63 1/4 Inferior	1
73.23		040-MF-00007	Manguera Hidráulica Macho - Hembra con TG 3/8" Gas Longitud : 450 mm	1
73.24		040-NA-00001	Visor Nivel Aceite De 3/8" Gas	1

Elemento	Miniatura	Nº de pieza	Descripción	CTDAD
73.25		040-RMM-00003	Racor 3/8" Macho Macho	3
73.26		040-RMM-00004	Racor 1/2" Macho Macho	1
73.27		040-RMTG-00007	REDUCCION MACHO 1/4" TG 3/8"	1
73.28		040-TGL-00001	Figura 'T' Giratoria Lateral 3/8'	1
73.29		040-TLL-00003	Tapon Llenado De 1/2' Doble Respiradero Y Filtro	1
73.30		040-VDP-00002	Grifo Manometro 1/4' Salida Superior Linea Recto Ref. FT290-01-14	1
73.31		040-VLP-00002	Valvula Limitadora Presion 5R1102P2F/03 -T210 tarada a 210 Bars	1
73.32		050-ME-00003	Motor Eléctrico 2.2Kw 1500RPM 50-60Hz B5 220/380V	1
73.33		120-02-01-00164	Aceite Hidráulico HM68 25 Litros	1
73.34		130-02-01-00201	DEPOSITO HIDRAULICO MX340G	1

A4. Electrical Cabinets
THREE-PHASE MACHINE

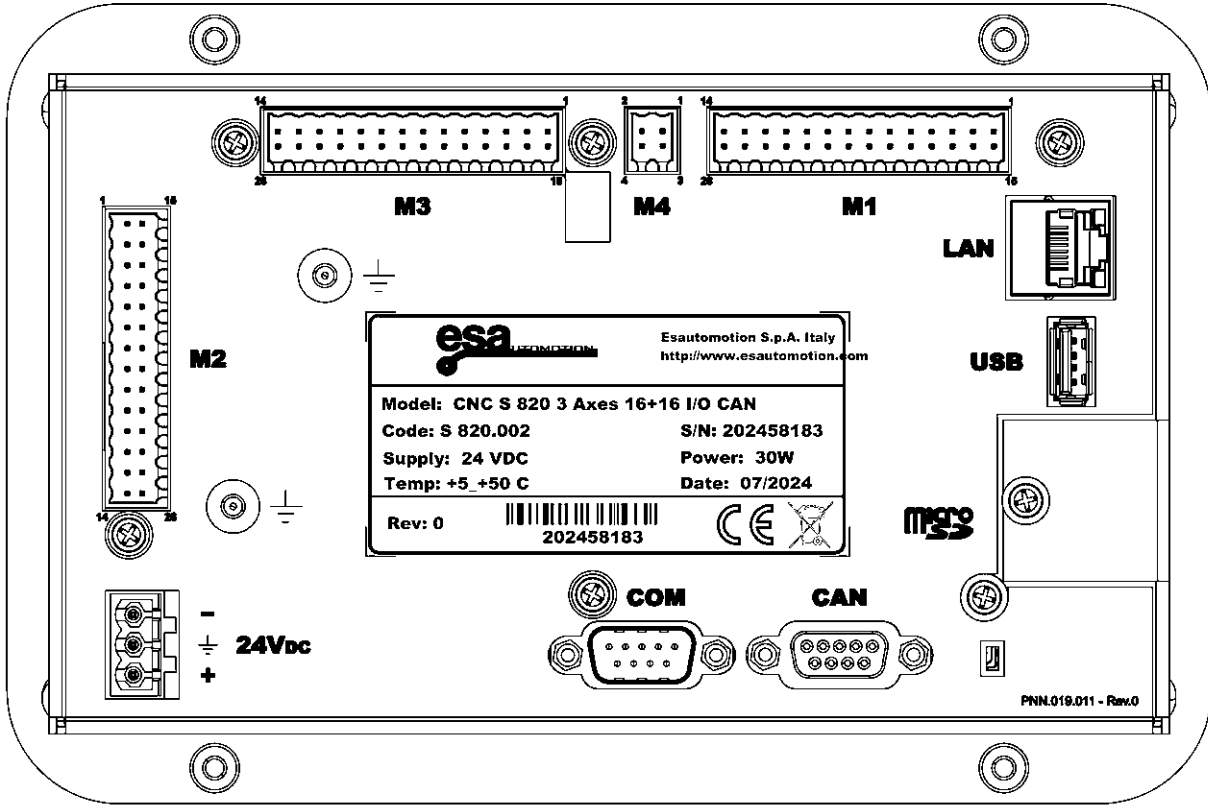


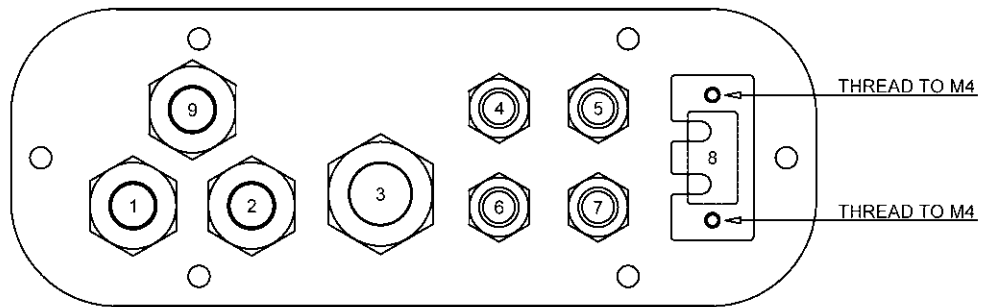
SINGLE-PHASE MACHINE



PLACE THE LABELS ON THE TOP OF THE TERMINALS.
PLACE THE TERMINALS AND FUSES WITH THE OPEN SIDE TO THE LEFT.

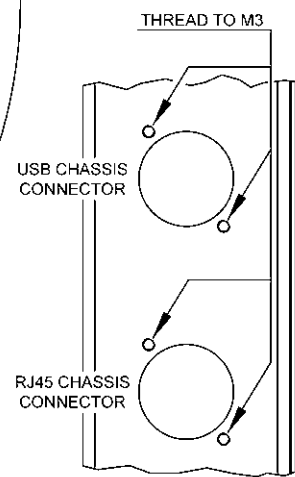
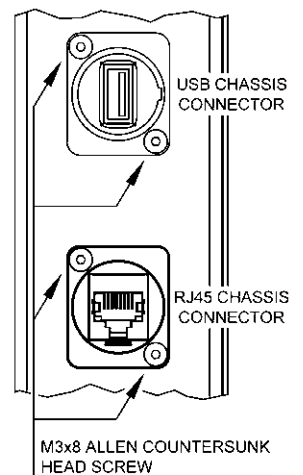
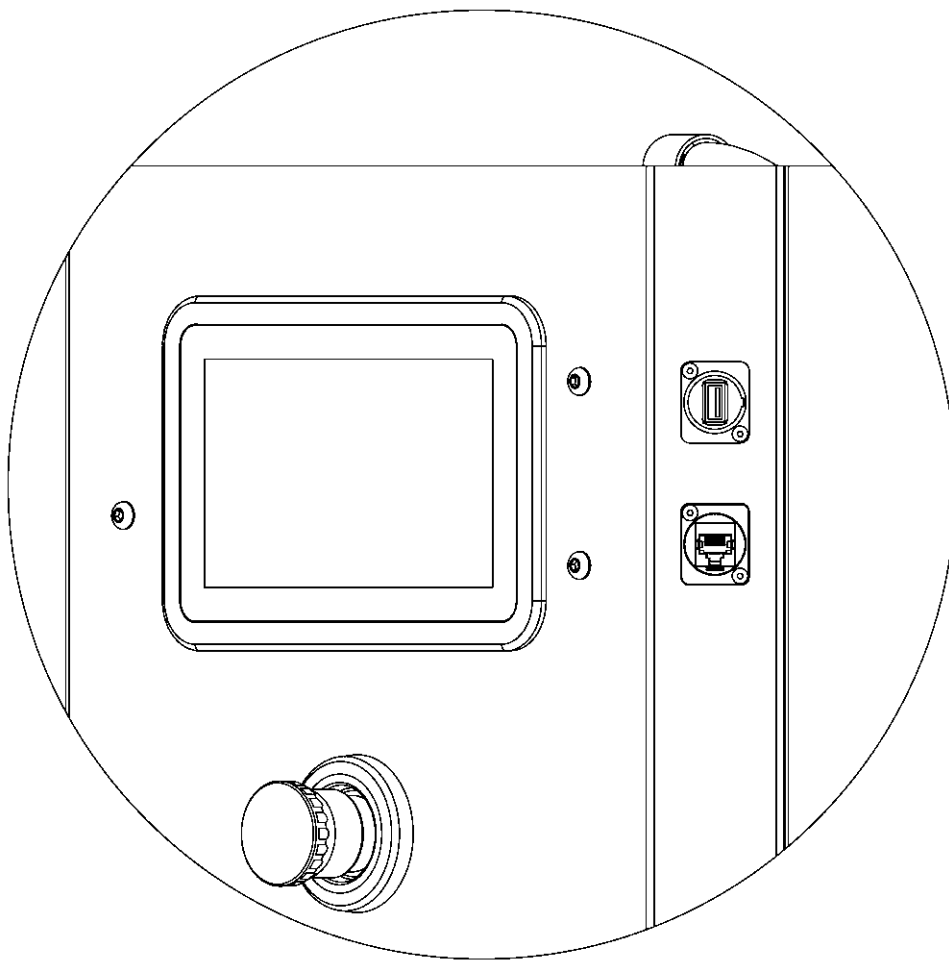
-CONTROL1

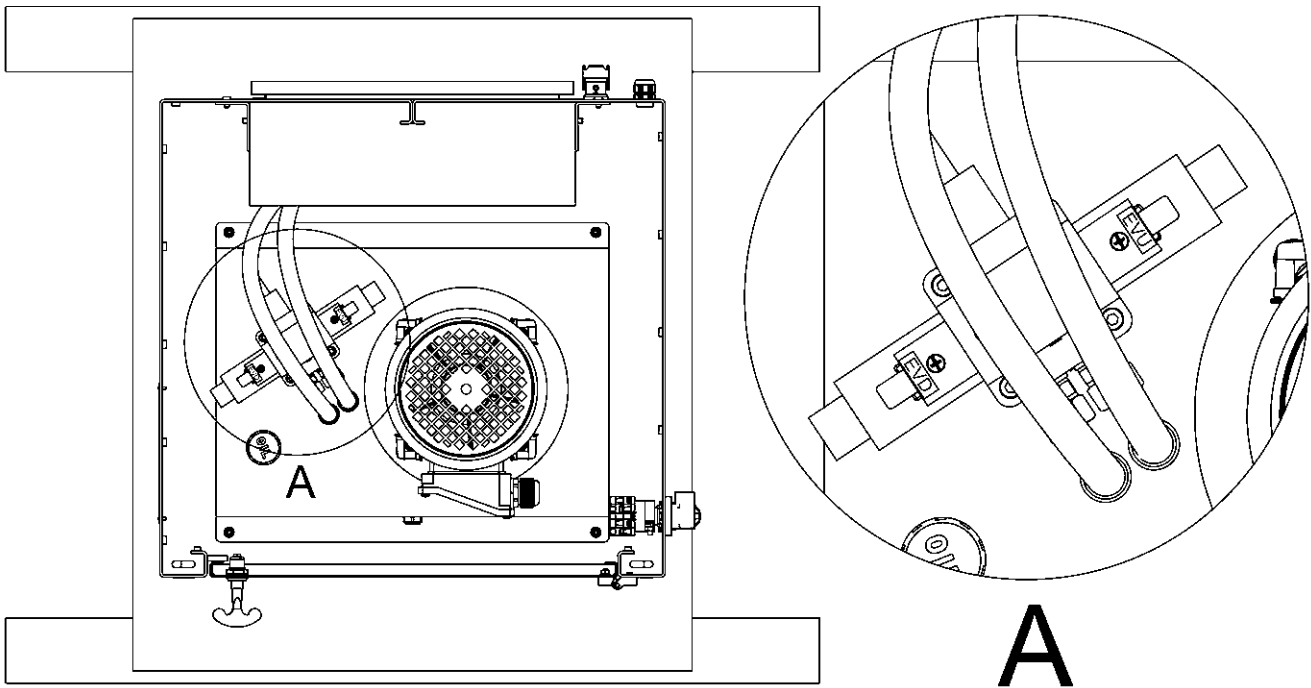


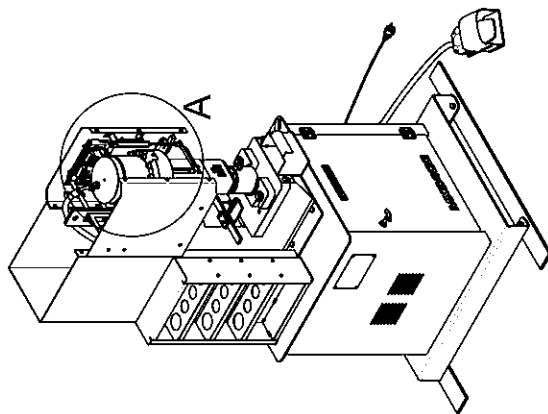


3 PHASE MODEL			
PLATE HOLE NUMBER	PLASTIC CABLE GLAND	ELECTRIC WIRE	DESCRIPTION
1	M20	MG1	POWER INPUT AFTER MAIN SWITCH S1
2	M20	MG2	PUMP MOTOR
3	M25	---	MESH WITH SIGNAL WIRES
4	PG9	---	---
5	PG9	MG6	EVR (REVERSE ELECTROVALVE)
6	PG9	MG3	PEDAL
7	PG9	MG5	EVF (FORWARD ELECTROVALVE)
8	---	---	---
9	M20	---	---

SINGLE PHASE MODEL			
PLATE HOLE NUMBER	PLASTIC CABLE GLAND	ELECTRIC WIRE	DESCRIPTION
1	M20	MG1	POWER INPUT AFTER MAIN SWITCH S1
2	M20	MG10	VF POWER INPUT
3	M25	---	MESH WITH SIGNAL WIRES
4	PG9	MG9	VF FORWARD CONTROL
5	PG9	MG6	EVR (REVERSE ELECTROVALVE)
6	PG9	MG3	PEDAL
7	PG9	MG5	EVF (FORWARD ELECTROVALVE)
8	---	---	---
9	M20	---	---







!Attention!

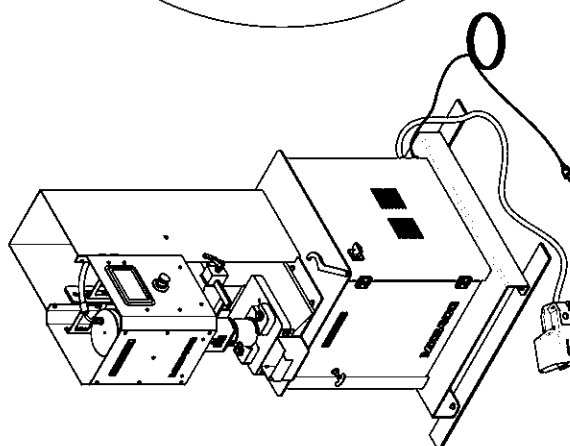
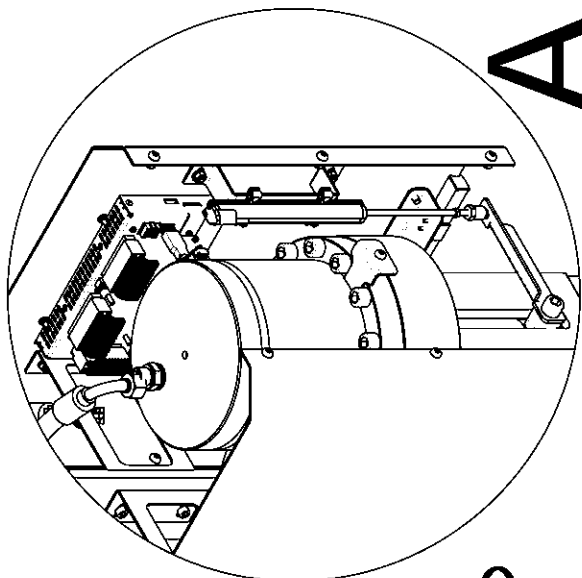
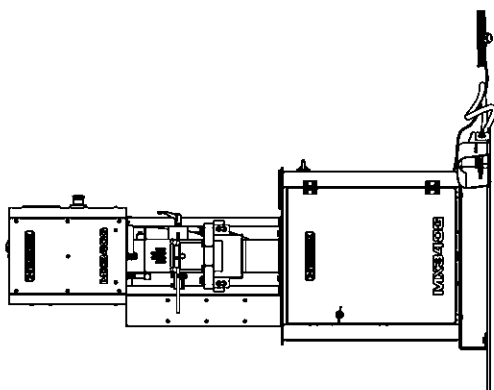
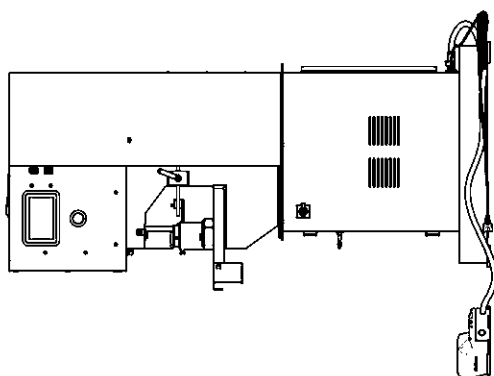
To attach the ESA S820 control to the chassis use:

x4 zinc plated washer Out Ø = 11.8 mm

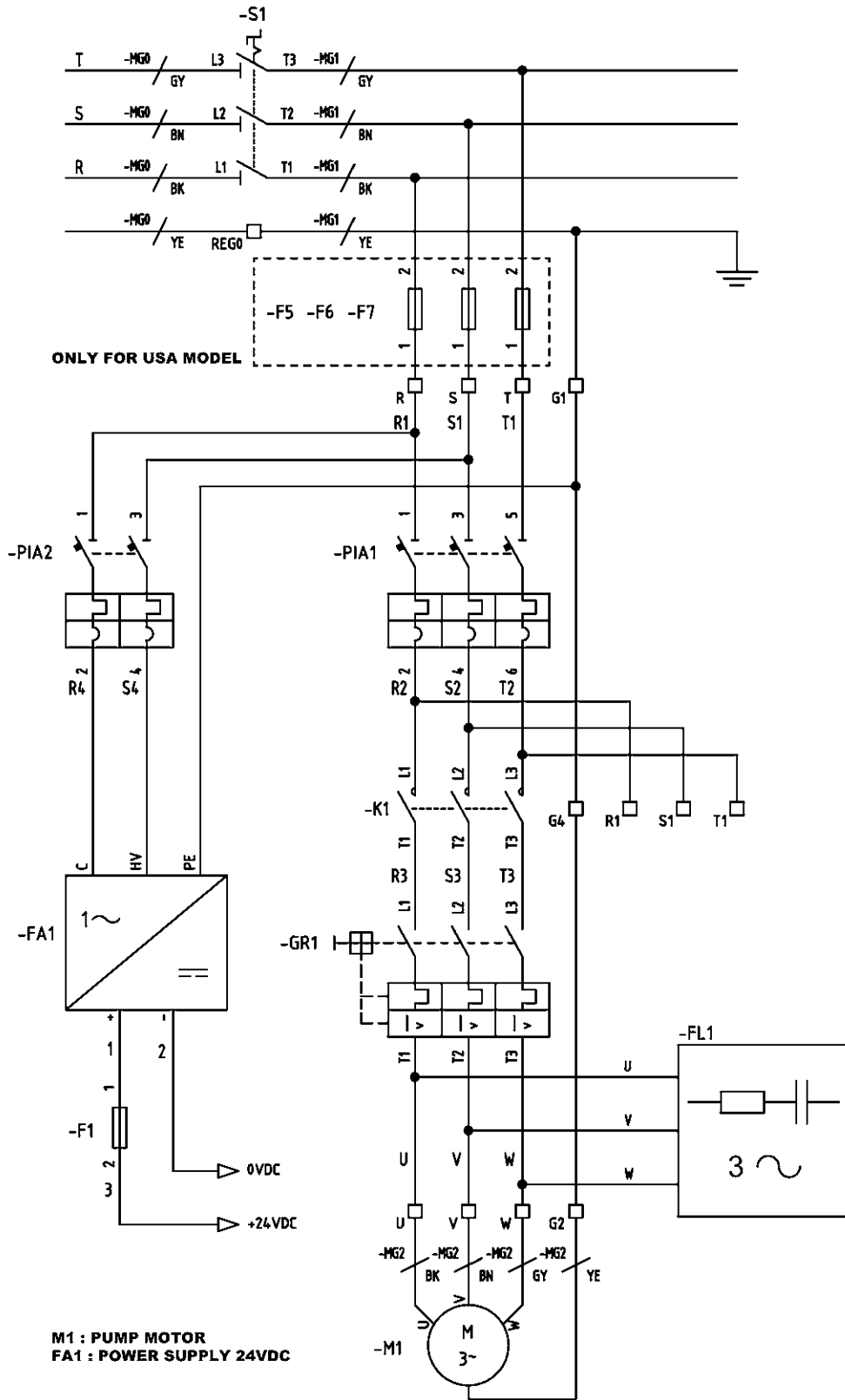
In Ø = 4.4 mm

Thickness = 0.9 mm

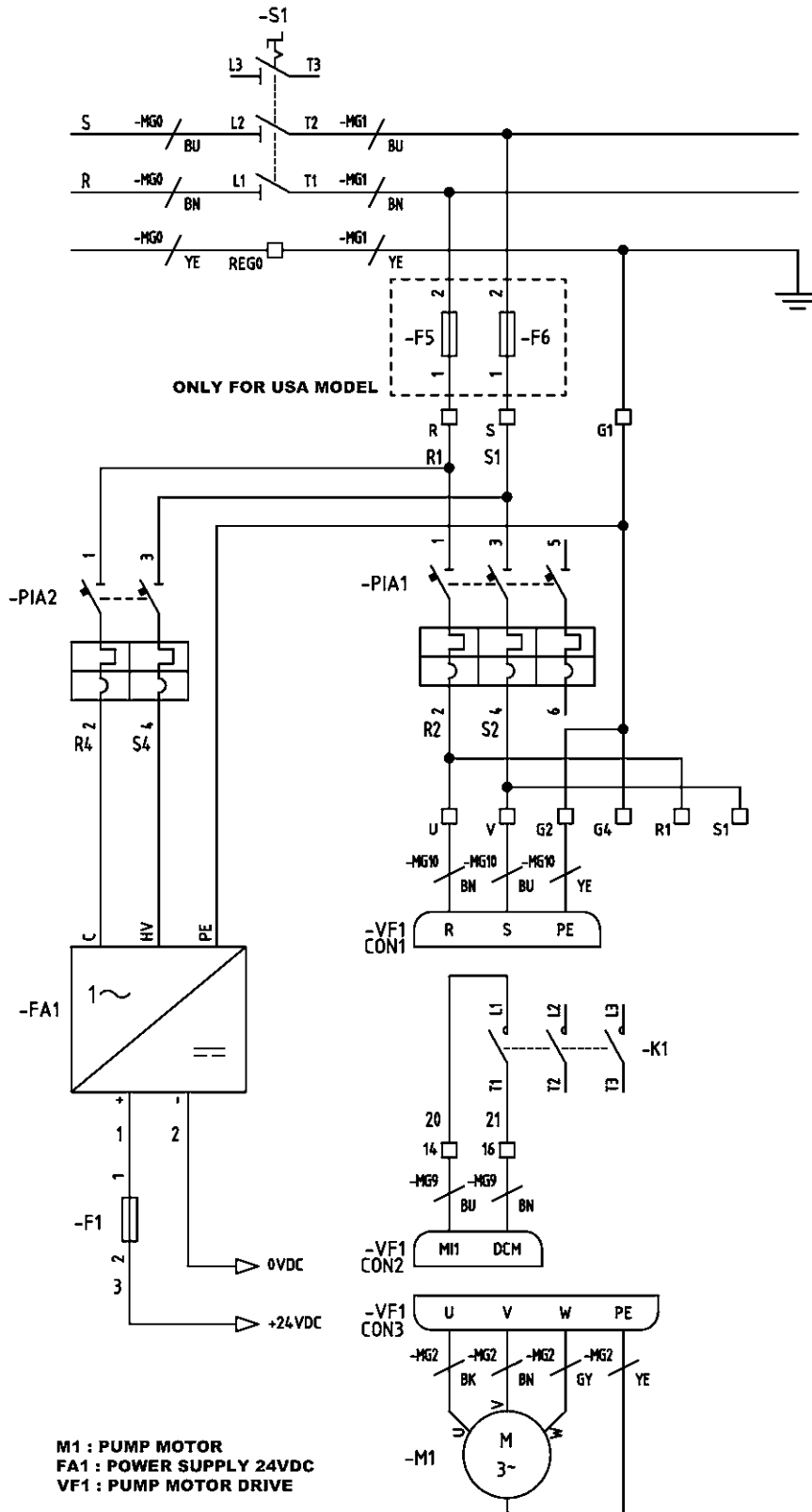
x4 zinc plated locknut M4

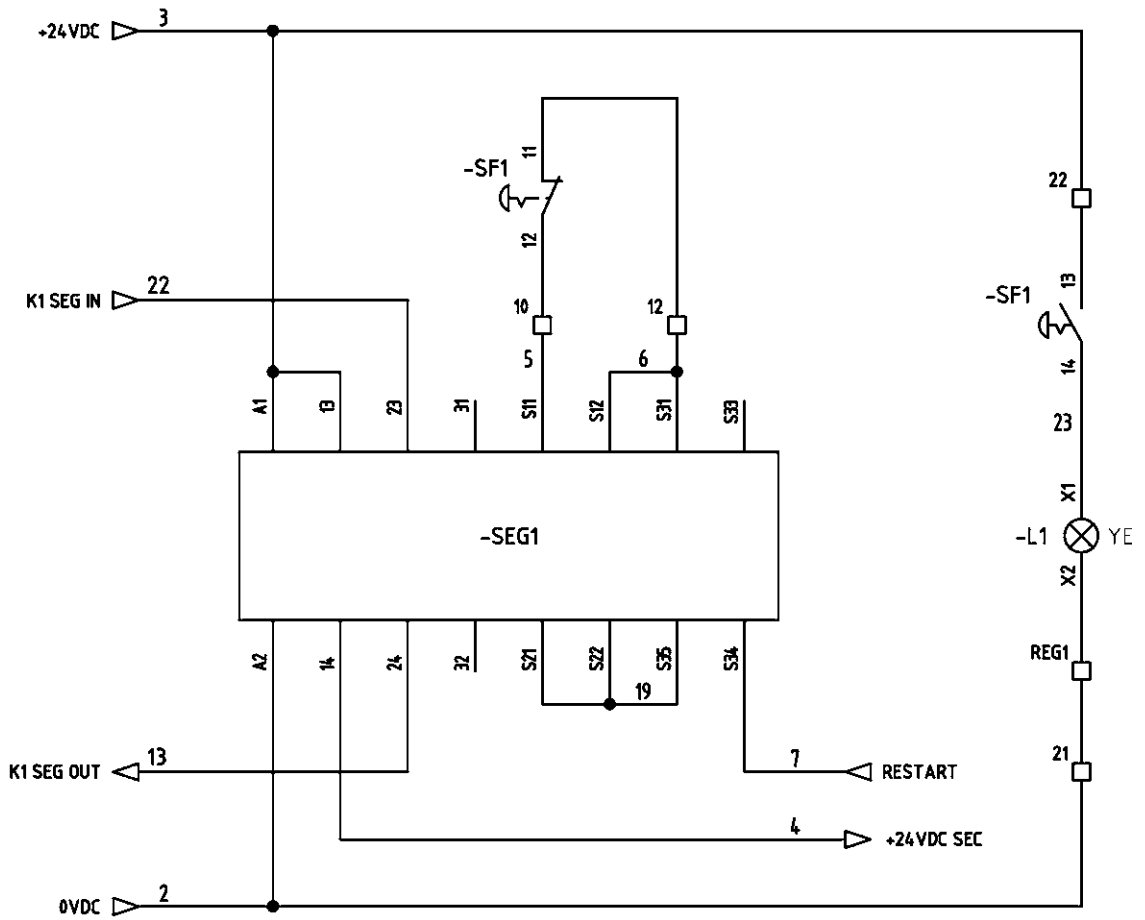


A5. Electrical Diagrams
THREE-PHASE MACHINE

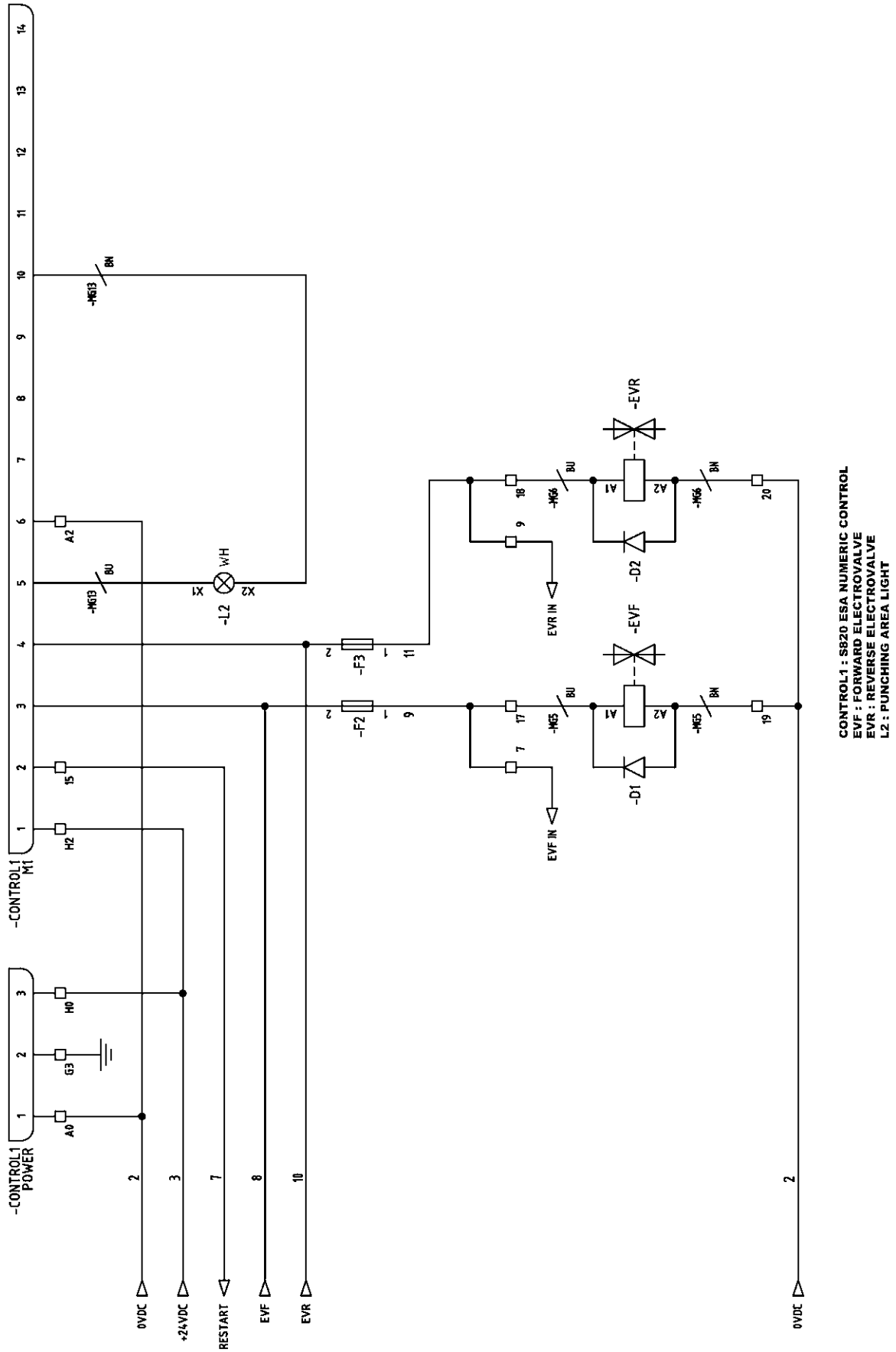


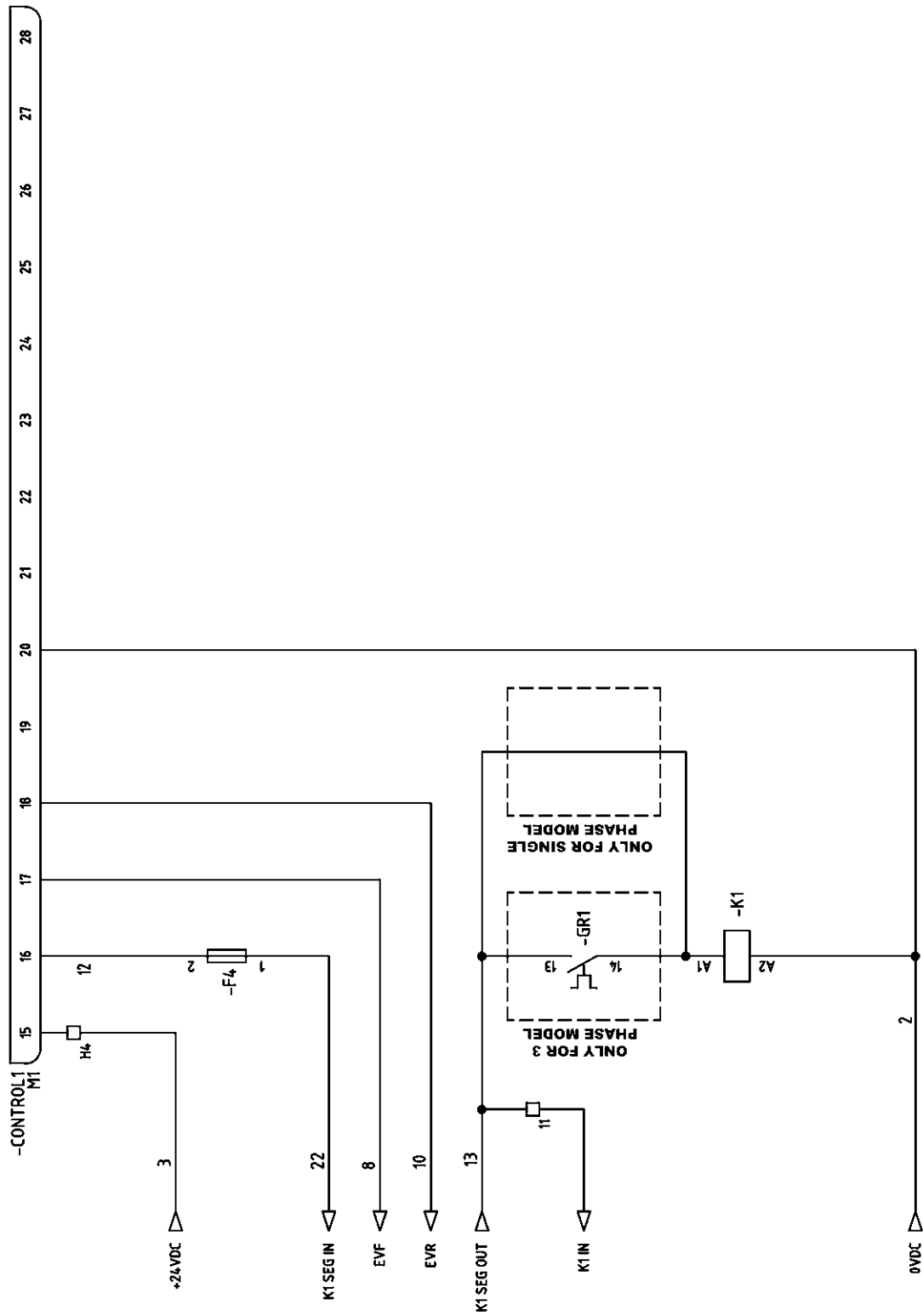
SINGLE-PHASE MACHINE



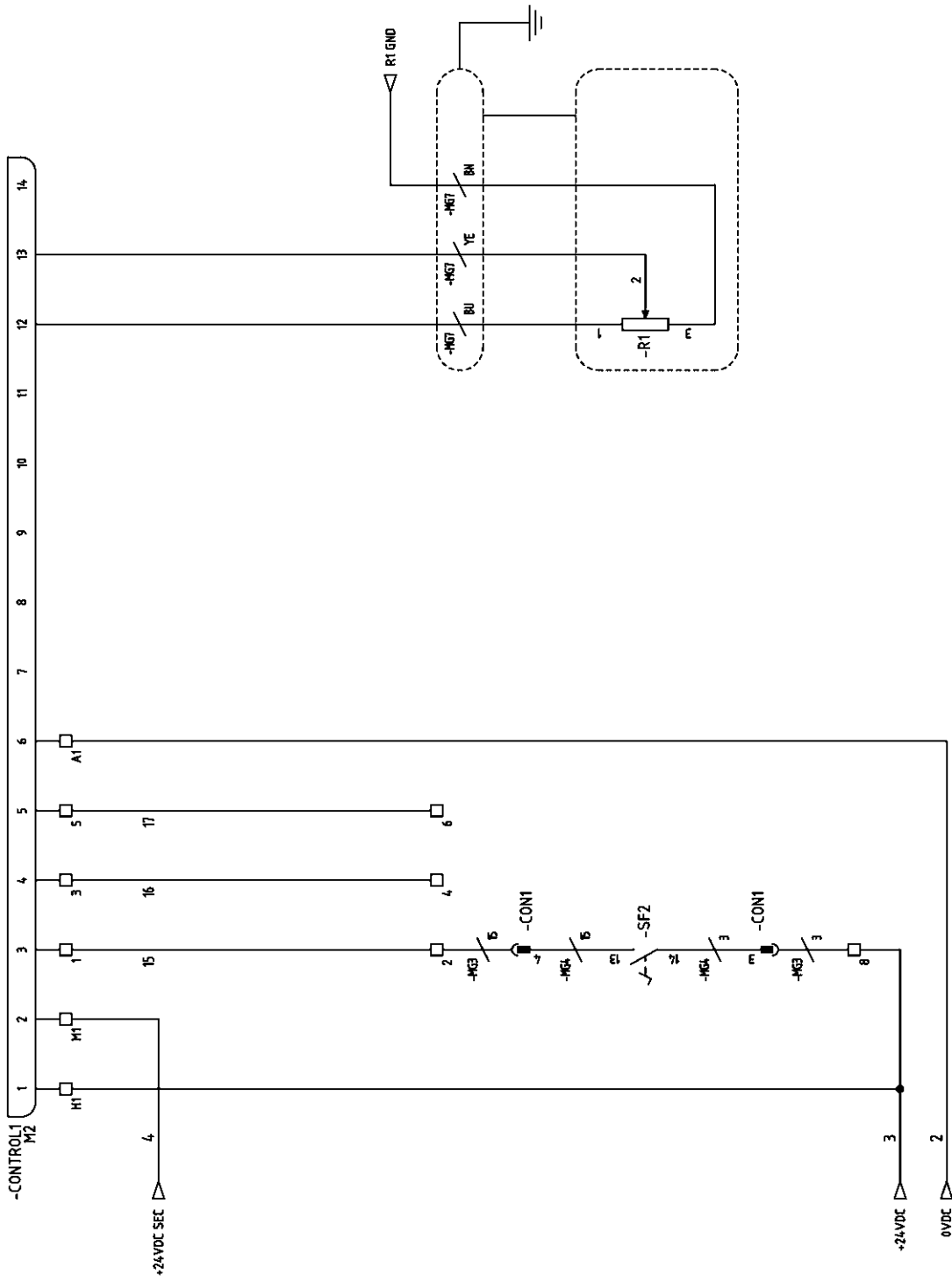


**SF1 : EMERGENCY STOP
L1: EMERGENCY STOP RING**

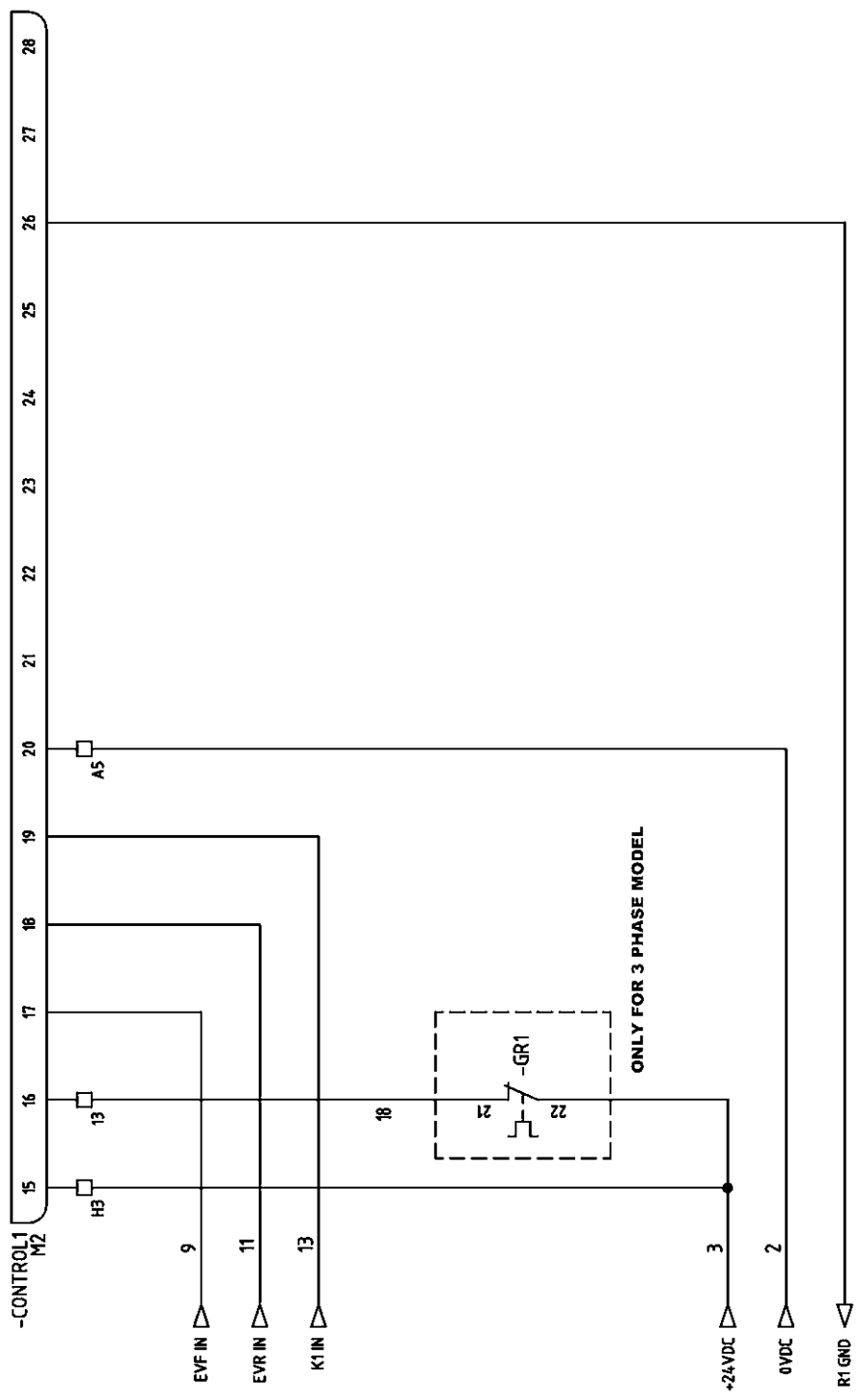




CONTROL 1 : S820 ESA NUMERIC CONTROL

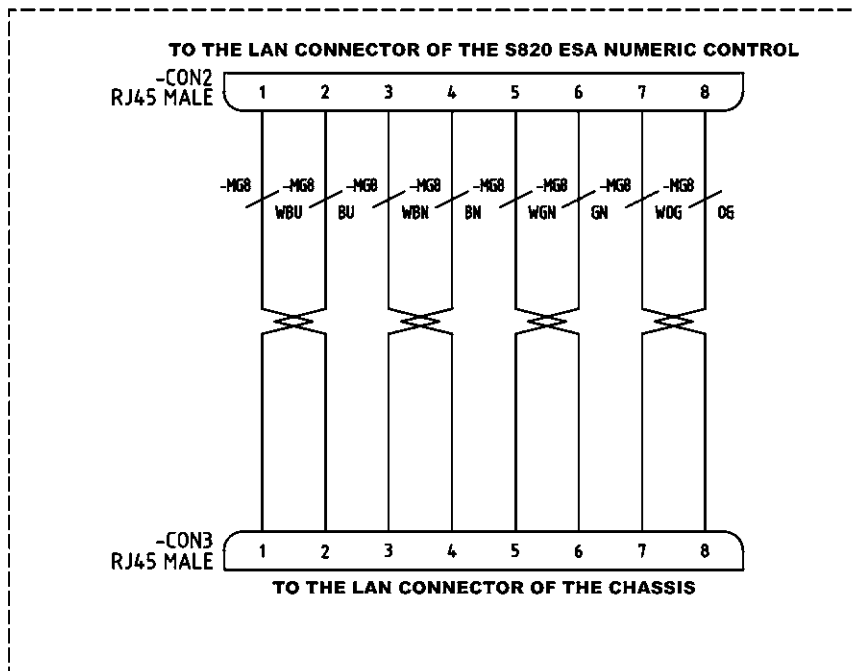


CONTROL1 : S820 ESA NUMERIC CONTROL
 SF2 : FORWARD PEDAL
 R1 : 5K LINEAR POTENTIOMETER

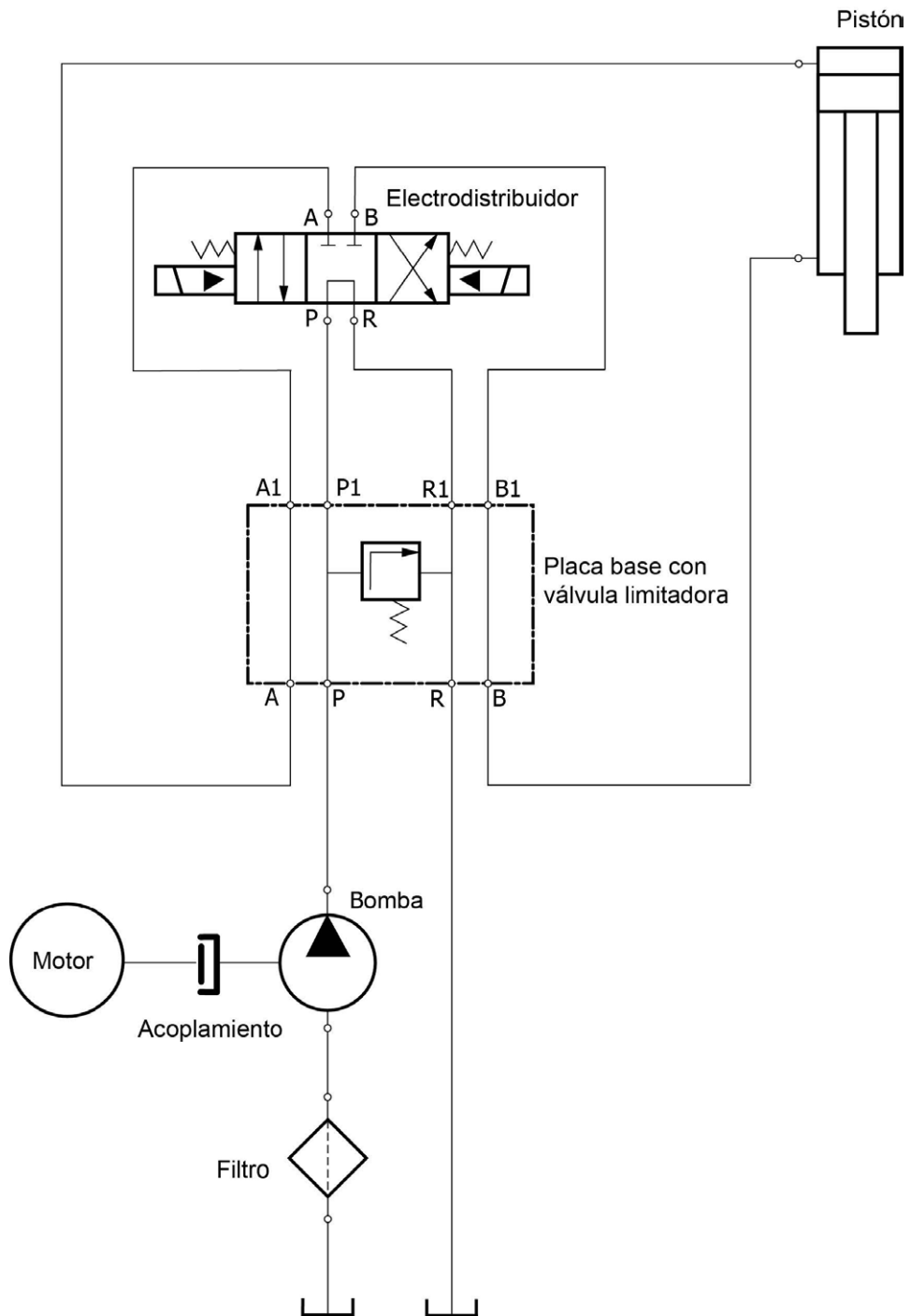


CONTROL1 : S820 ESA NUMERIC CONTROL

ETHERNET EXTENSION CABLE



A6. Hydraulic Diagram



OUR RANGE OF MACHINERY



IRON WORKERS



NON-MANDREL PIPE BENDERS



HORIZONTAL PRESS BRAKES



SECTION BENDING MACHINES



CNC PIPE BENDERS



LASER WELDING EQUIPMENTS



TWISTING/SCROLL BENDING MACHINES



HYDRAULIC PRESS BRAKES



HYDRAULIC SHEAR MACHINES



GAS FORGES



IRON EMBOSSING MACHINES



END WROUGHT IRON MACHINES



BROACHING MACHINES



POWER HAMMERS



BLACKSMITH FORGING PRESS