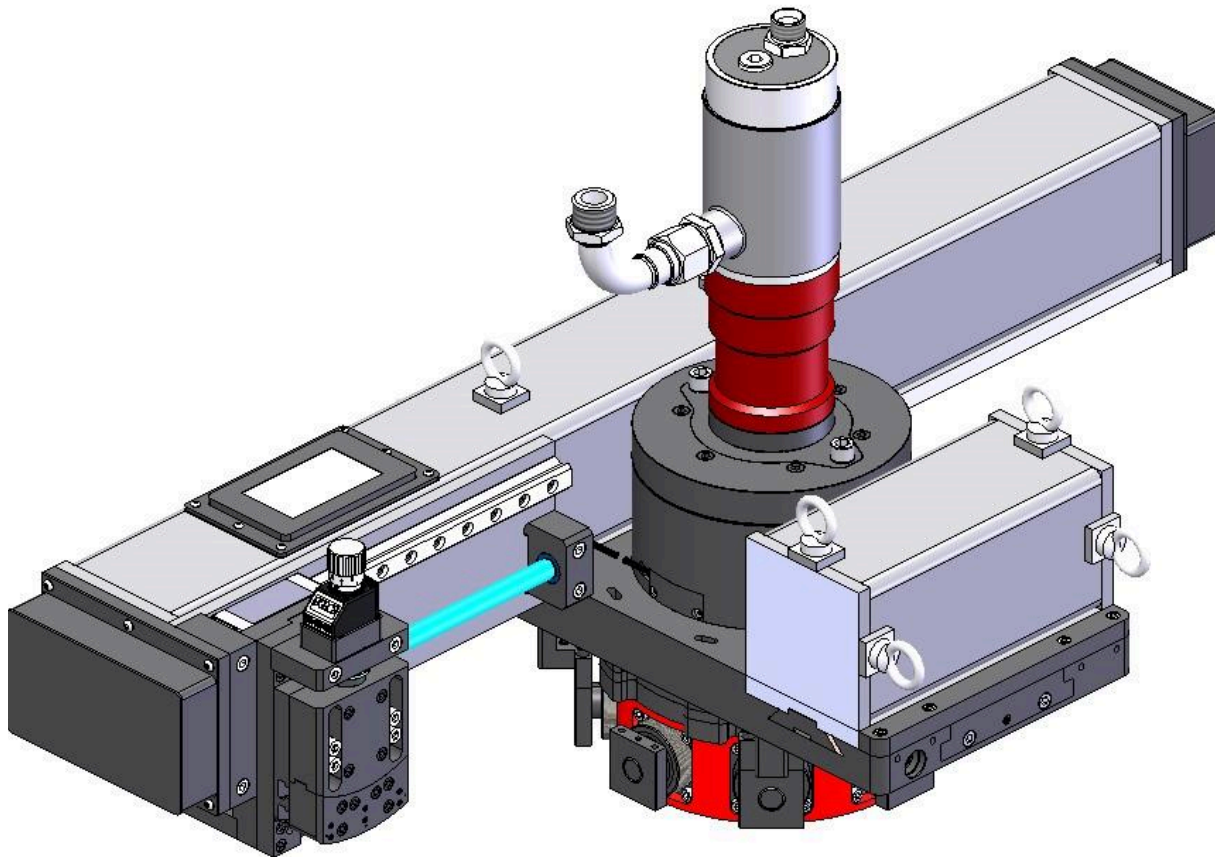




INSTRUCTION MANUAL



SPIDER 12''-70'' PNEUMATIC VERSION

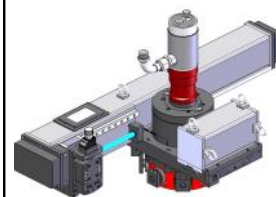
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SPIDER 12”-70”

Original Instructions Rev. 00 - 2019 in compliance with the § 1.7.4 of the Machine Directive
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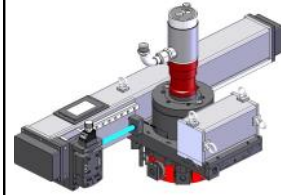
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PRESENTATION OF THE COMPANY AND INTRODUCTION TO THE INSTRUCTION MANUAL

G.B.C. Industrial Tools S.p.A. is known worldwide for the quality of its machines and accessories for pipe cutting and beveling procedures of any sort and plate beveling machines..

The Headquarters are located in Cazzago San Martino (BS) where are currently operating the General Management, the sales de-department, as well as the main workshop and the shipping department.

QUALITY STANDARD—All our machines are assembled according to the highest quality standard. Since 1996 **G.B.C. Industrial Tool S.p.a.** has implemented management procedures in compliance with

This Manual is supplied together with the machine it makes reference to. The customer may apply for further copies to **G.B.C. Industrial Tools S.p.a.** Our company owns the copyright of this document and any partial or complete copy or distribution to natural persons or to corporate bodies is strictly forbid-den unless our prior approval to do so is obtained. **G.B.C. Industrial Tools S.p.a.**

informs its customers that any operation carried out on the machines which is not prescribed in this manual entails the automatic invalidation of the warranty. G.B.C. Industrial Tools S.p.a.

recommends to contact the Maintenance Service in Cazzago San Martino – Italy prior to proceed with any modi-fication on the machine.

You are invited to scrupulously adhere to the information written on the identification tag.

For any further information you are invited to contact us at these numbers:

Tel. +39 - 030 -7451154
Email : sales@gbcspa.com

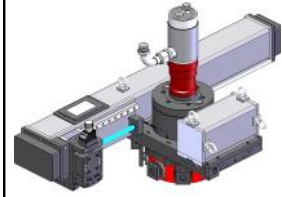
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WARRANTY GENERAL CLAUSES

G.B.C. Industrial Tools S.p.a. guarantees the reliability of the machine and its conformity to the specifications herewith reported. The warranty covers the machine in its whole for a time period of one year from the shipment date (ref. Delivery Note) for any flaw not imputable to the user.

The parts subject to wear are excluded from the warranty at sole discretion of **G.B.C. Industrial Tools S.p.a.**

In case of any operational malfunction arising during the warranty period, **G.B.C. Industrial Tools S.p.a.** and its Maintenance Service, hereinafter called MSS, will remedy this inconvenient free of charge, both for handwork and for eventual replaced parts, except when the malfunction is directly or indirectly imputable to misuse or alteration. In any case the machine must not be disassembled or altered before the shipment. The warranty is valid only when the warranty document is duly signed by **G.B.C. Industrial Tools S.p.a.** and by a **G.B.C.** official distributor connected with the MSS maintenance service.

The shipment of the defective material must be performed within 8 (eight) days from the notification of the defect and/or the claim and/or the request of technical assistance. On the contrary the warranty will be void. **G.B.C. Industrial Tools S.p.A.** and **MSS** obligations will cover the defect resolution, the general maintenance and the inspection of the parts subject of the claim only. The component replacement is at **G.B.C. Industrial Tools S.p.A.** discretion only. The shipment costs from and to the **MSS** as well as the direct and indirect costs rising from repair of the product are at user's charge. Any warranty repair or extraordinary repair must be executed by **G.B.C. Industrial Tools S.p.A.** and **MSS**, otherwise the warranty will be void.

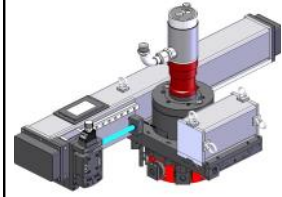
Any ordinary maintenance performed by the customer/user or by any service centre non recognized or approved by **G.B.C. Industrial Tools S.p.A.** will not be refunded and will make the warranty void. The warranty is not valid for cases not listed in this certificate or for damage caused by a misuse of materials, power supply, negligence, unauthorized modifications, atmospheric events, acts of vandalism, incautious handling and/or transport, use of non original **G.B.C. Industrial Tools S.p.A.** parts and damage for causes not specified by **G.B.C. Industrial Tools S.p.A.** and for which **G.B.C. Industrial Tools S.p.A.** declines any responsibility. **G.B.C. Industrial Tools S.p.A.** reserves the right to modify and to improve its products without any obligation to modify equipment and components already supplied. Nobody is authorized to modify the conditions herewith contained or to issue any on behalf of **G.B.C. Industrial Tools S.p.A.** The claim terms for defects and/or damages in the material or of the ordered quantities, are those pre-scribed by the Civil Code; the goods acceptance entails the buyer to automatically accept the above mentioned warranty clauses.

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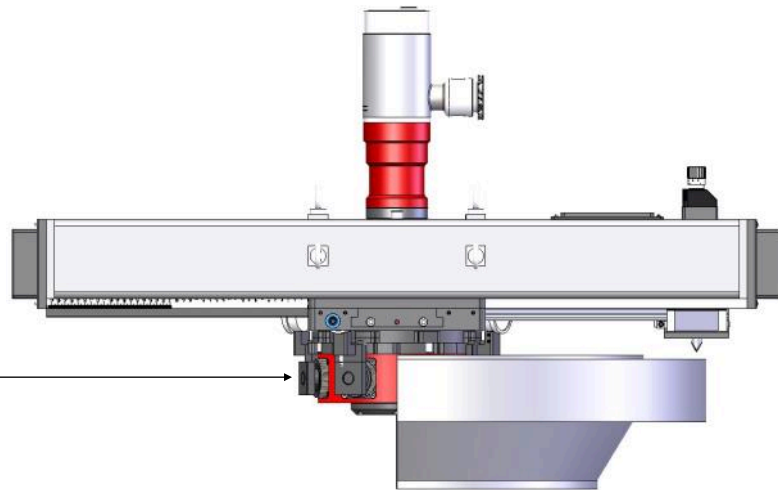
SPIDER 12"-70"

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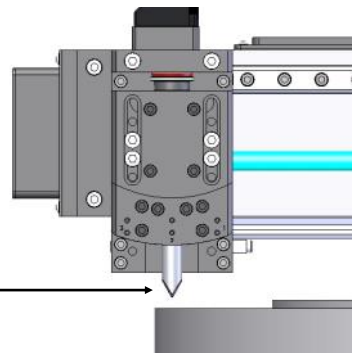


INTENDED USE OF THE SPIDER 12 70

The Spider 12_70 is a flange facing and grooving machine suitable for flanges with ID 12" up to 70" and can work any kind of steel.



The Spider 12_70 is an ID gripping machine which means that it has to be fixed in the flange ID with an 8 point of contact self-centering system.



The facing and the grooving processes are executed by tools with various shape and material, depending by the specific finishing required by the application and by the material the flange is made of.

THE MACHINE SHOULD BE USED ONLY BY SPECIALIZED OPERATORS, DULY TRAINED ON THE UNIT.

FOLLOWING TO A SPECIFIC FORMATION THERE IS NO REASONABLY PREDICTABLE MISUSE OF THE UNIT

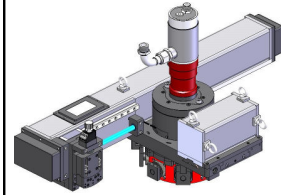
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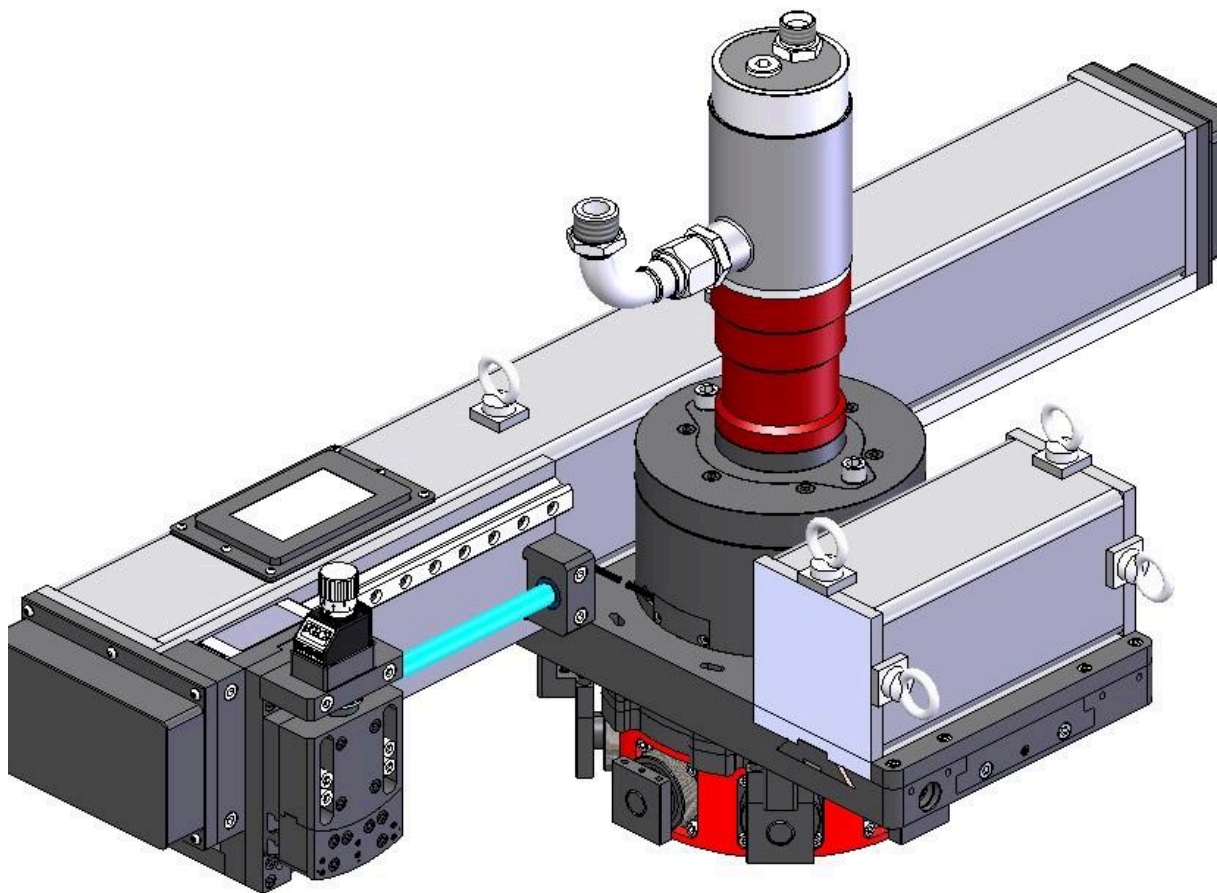


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SPIDER 12 70 PNEUMATIC VERSION



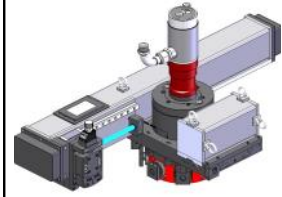
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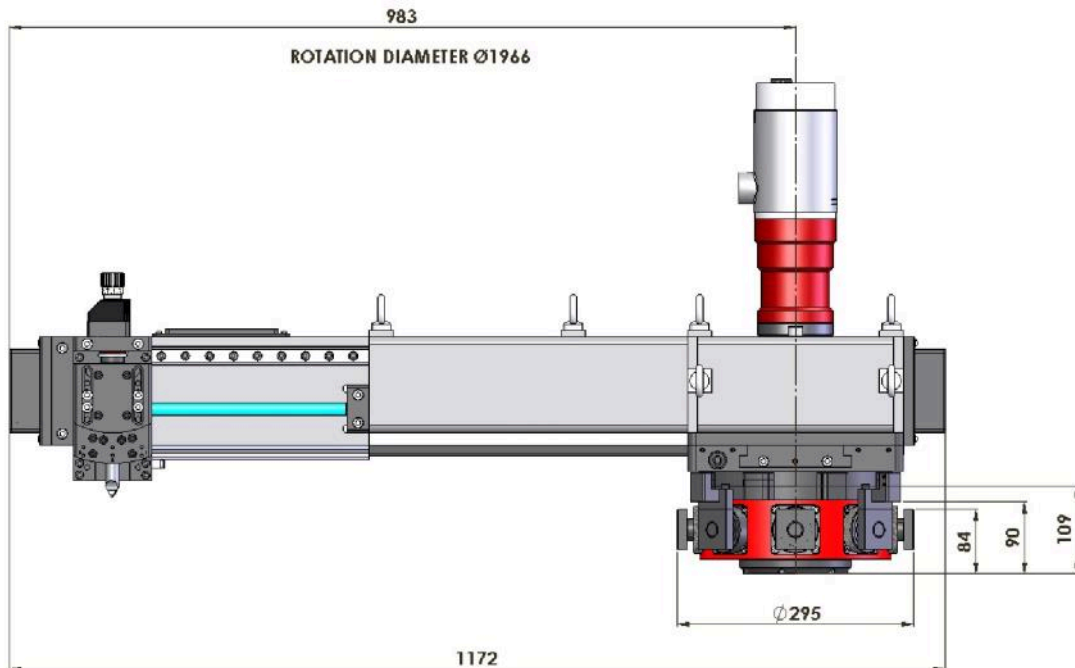
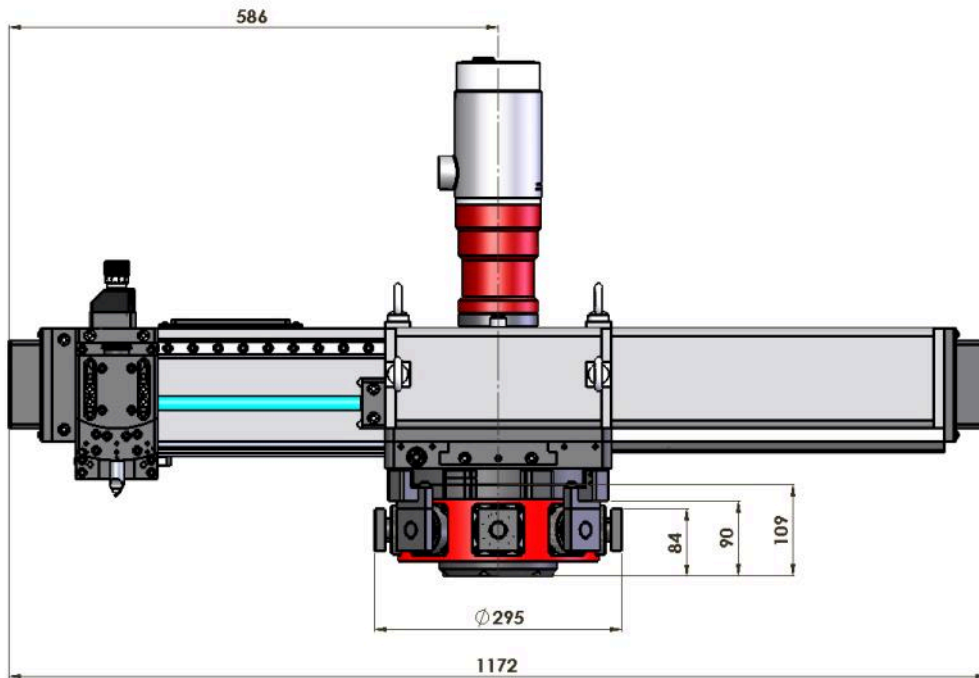


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DIMENSIONS



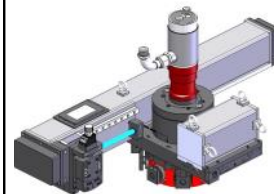
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TECHNICAL FEATURES

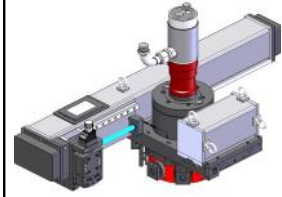
FEATURES	UNIT MEASURE	VALUES	NOTE
ID Locking Range	mm (inches)	304.8-1625.6 (12-64)	/
Working Range	mm (inches)	304.8-1778 (12-70)	/
Speed in Idle	gg/min (Rpm)	35 35	/
Torque at Max Power	Nm (Nm)	1000 (1000)	/
Toolholder Radial Stroke	mm (inches)	272 (10.708)	/
Toolholder Axial Stroke	mm (inches)	60 (2.362)	/
Air Motor Power	Hp (W)	4.21 (3.1)	/
Tiltin Angle of the Toolholder Head	(°)	+ - 8.5	/
Air Consumption	NI/min (cfm)	2800 (98.8)	/
Air Pressure	Bar (psi)	6 (90)	/
Air Connection	Pollici (inches)	3/4" (3/4")	/
Onboard Computer Battery Voltage	V	25.2	/
Onboard Computer Battery Capacity	Ah	64	/
Axial Push Power	Nm	13000	/
Max Acoustic Emissions @ 2 mt	dB A	80÷85	Vedi nota *
Weight of the Machine	Kg	285	/

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SPIDER 12''-70''

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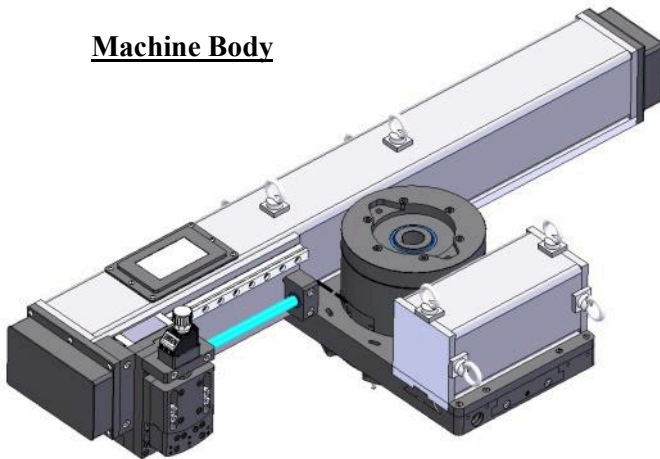


SPIDER 12 70 STANDARD EQUIPMENT

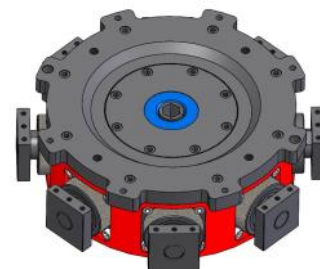
The Spider 12_70 is supplied with:

- N.1 Machine Body
- N.1 Locking Assembly Hub
- N.4 Supports with Dial Indicator
- N.4 Supports

Machine Body



Locking Assembly Hub



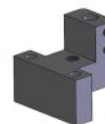
Pneumatic Drive Unit



Supports with Dial Indicator



Supports



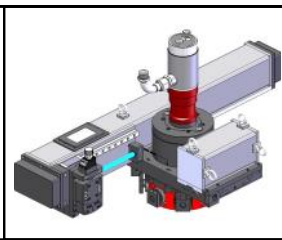
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SPIDER 12"-70"

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- N.1 Air Supply Hose
- N.1 Air Exhaust Hose With Speed Regulator
- N.1 Battery Charger
- N.1 Service Tools
- N.1 Storage Wooden Box
- N.1 Instruction Manual and Drawings

Air Supply Hose



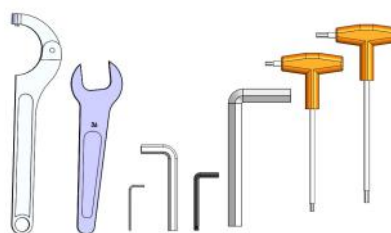
Air Exhaust With Speed Regulator



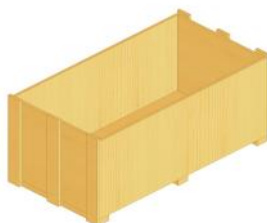
Battery Charger



Service Tools



Storage Wooden Box



Instruction Manual and Drawings



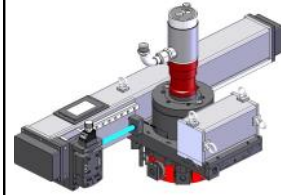
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OPTIONAL EQUIPMENT

LOCKING EXTENSION SET 16"-28"

N°1 Kit # K 20806

- N.24 Cylindrical Extensions



LOCKING EXTENSION SET 16"-40"

N°2 Kit # K 20806

- N.48 Cylindrical Extensions

N°1 Kit # K 20831

- N. 8 Supports



LOCKING EXTENSION SET 16" A 52"

N°3 Kit # K 20806

- N.72 Cylindrical Extensions

N°1 Kit # K 20831

- N. 8 Supports



LOCKING EXTENSION SET 16"-64

N°4 Kit # K 20806

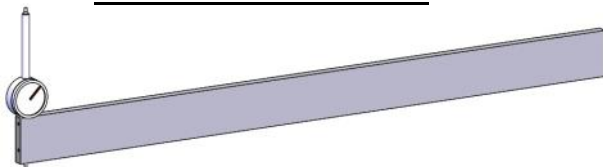
- N.96 Cylindrical Extensions

N°1 Kit # K 20831

- N. 8 Supports



LEVEL WITH INDICATOR



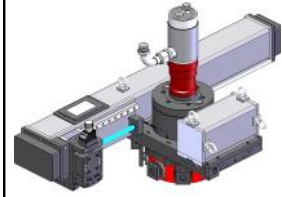
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SAFETY PRESCRIPTIONS

G.B.C. Industrial Tools S.p.A. designs and assembles its machines in strict compliance with the safety regulations provided by the applicable EC directives and by the Italian laws regulating this matter.

G.B.C. Industrial Tools S.p.A. declines any responsibility for misuse of its machines and their use when in contrast with the regulation listed hereinafter and with the use and maintenance instructions hereto.

- Carefully read ALL the following regulations and the instructions herewith attached before starting any operation.
- Carefully ensure that the operator and the foreman using the machine are fully aware of all the regulations and all the instructions and that they are qualified to operate the unit.
- Strictly attain to the indications given by the international symbols applies on the machine and/or on its case.
- Do not perform any maintenance operation when the machine is plugged to the power supply.
- Before every use, ensure the power supply connections to be conform to the specs given by our manual.

The authorized operator in any case will not have to disregard the basic safety rules such as:

- Using gloves and goggles (safety gear supplied by the company responsible for the site or for the building)
- To properly illuminate the working area
- Ensure you are operating in an area which grants free movements (at least 1,5 metres around the operator)
- Do not replace the control system and do not replace parts with non original spare parts, and do not project violent water squirts on the machine
- Keep the hands away from hot and sharpened parts.
- **G.B.C. Industrial Tools S.p.A.** remarks that for any non specified circumstances it is necessary to obtain the authorization of the manufacturer.

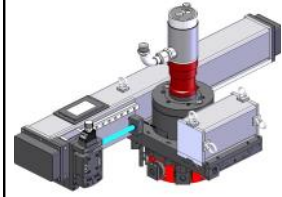
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Proper use of the safety gear entails the only risks to be generated by the user's system and not by inborn defects of our machines.

1. Always wear gloves and goggles during every operation
2. Any adjustment or inspection of the machine shall be done with the unit unplugged from the power source.
3. During the operations the hands shall be kept on the security valve and on the hand wheel.
4. The Use and Maintenance Manual as well as the drawings will always supply quick and adequate explanations.



SHIPPING DETAILS

Weight of the Machine	kg	285
Shipping Dimensions	mm	1450X810X750
Shipping Weight	kg	300

Under 25 Kgs no lifting machines are required.

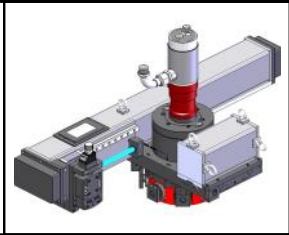
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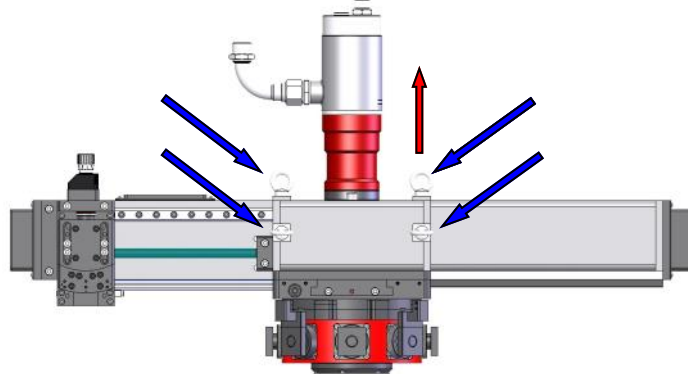
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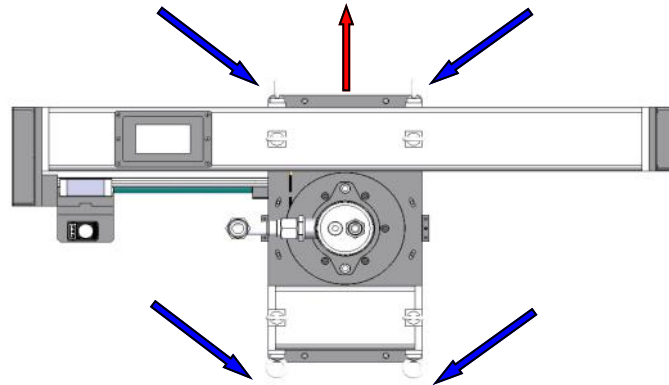


MACHINE STABILITY

The Spider 12-70 can be lifted **EXCLUSIVELY** by the lifting lugs indicated by the arrows.



The Spider 12-70 can work @ 90° and should be moved in this position by using **EXCLUSIVELY** the lifting lugs indicated below.



DO NOT try to remove the shavings with your hands buy do it exclusively with a proper tool.

WORKPLACE

MAINTAIN A SAFETY DISTANCE OF AT LEAST 2 METERS FROM THE MACHINE WHEN IT IS RUNNING and use **EXCLUSIVELY** the pendant control.

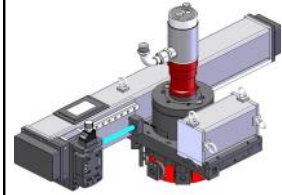
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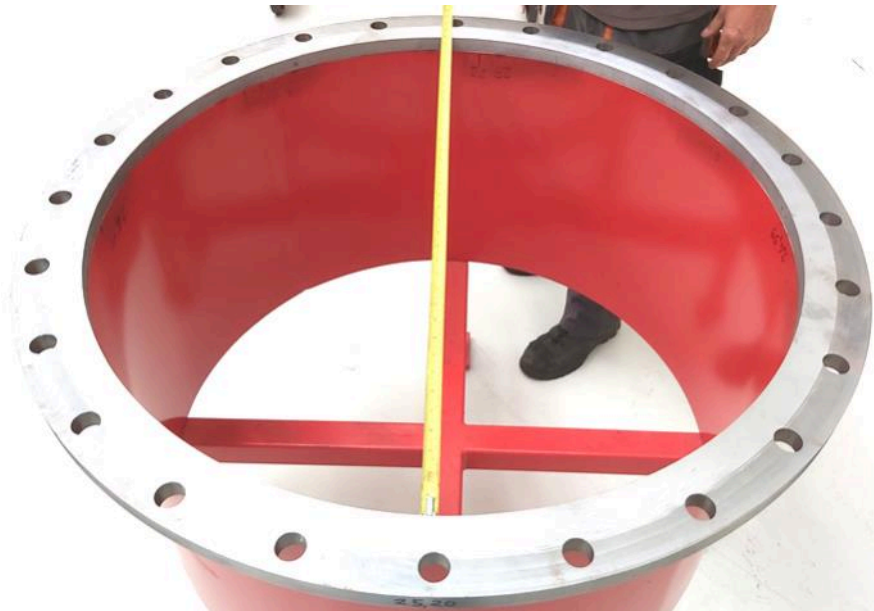


SETUP OF THE LOCKING ASSEMBLY

Place the locking assembly hub on a table to have it in a comfortable position to be handled.



Determin the locking extension set to install by measuring the flange ID with a tape meter.

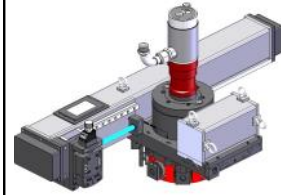


G.B.C. Industrial Tools S.p.A.

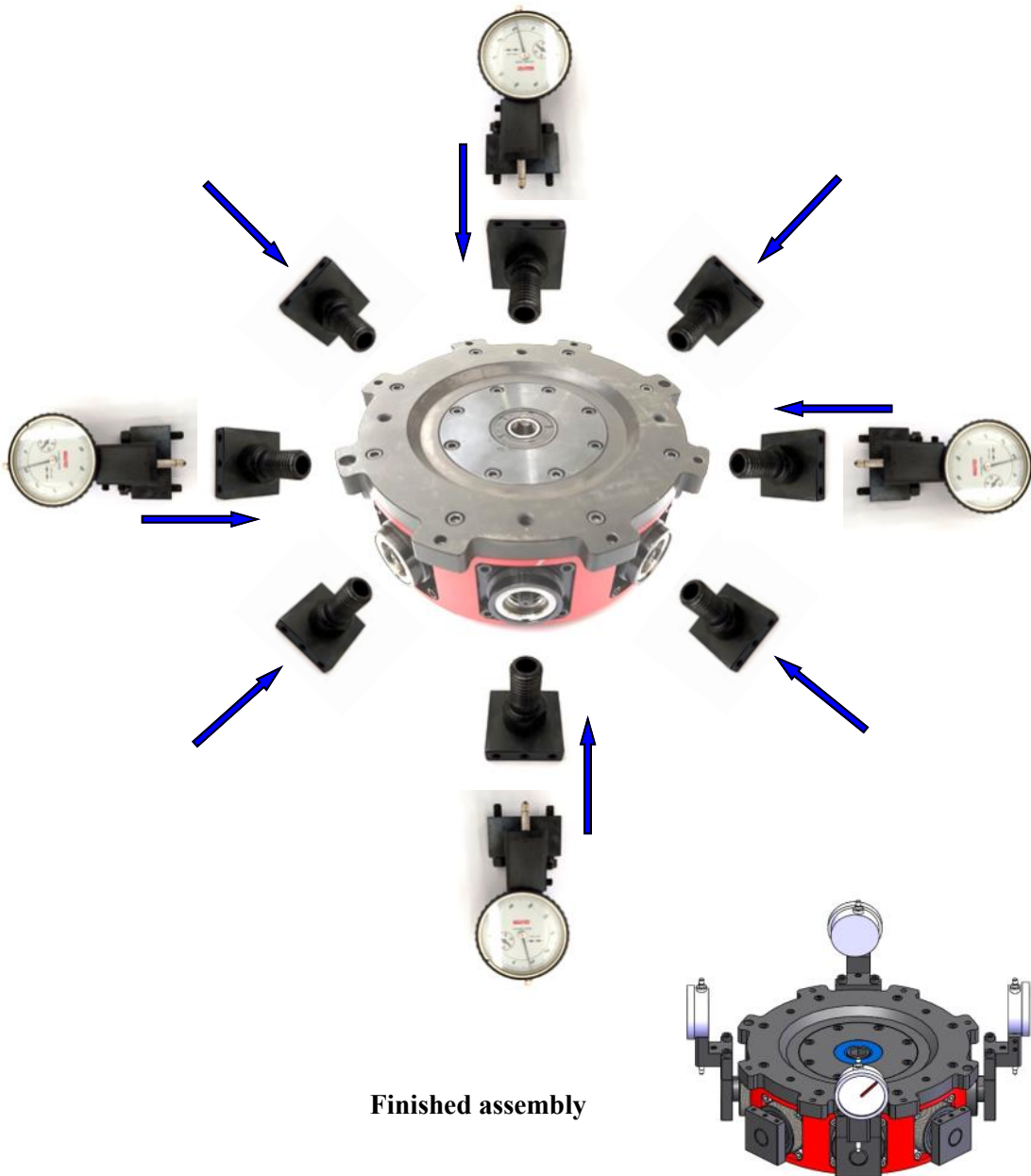
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N.B. If the ID of the flange is **not greater than 16"**, you will have to mount only the 8 oscillating feet and the 4 supports with dial indicators using the tools supplied with the unit as shown in the picture below.



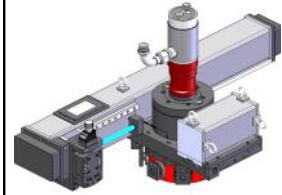
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N.B. For any ID **greater than 16"** follow the indications provided by the chart below and in the following pages.



LOCKING ASSEMBLY CHART		
LOCKING RANGE	NUMBER OF CYL. EXTENSION	SUPPORTS REQUIRED
12"-16"	0	0
16"-20"	1	0
20"-24"	2	0
24"-28"	3	0
28"-32"	4	1
32"-36"	5	1
36"-40"	6	1
40"-44"	7	1
44"-48"	8	1
48"-52"	9	1
52"-56"	10	1
56"-60"	11	1
60"-64"	12	1

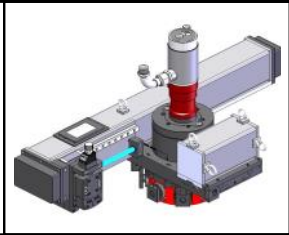
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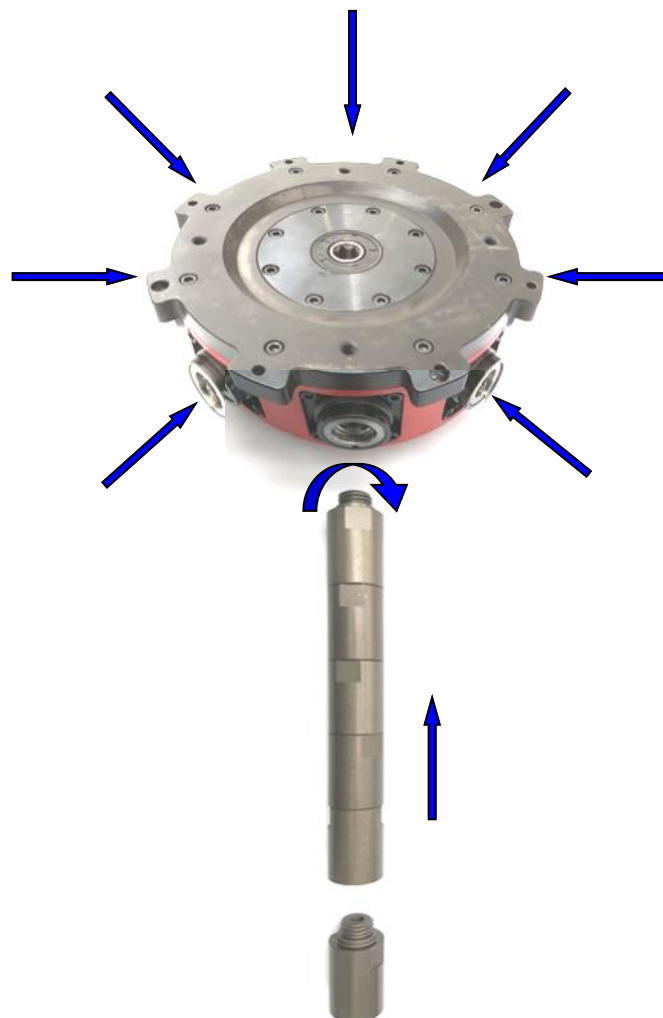
SPIDER 12"-70"

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Once determined the correct length of the locking legs, install every leg in the locking assembly hub.

The legs have to be screwed in the threaded seat as shown in the picture below.

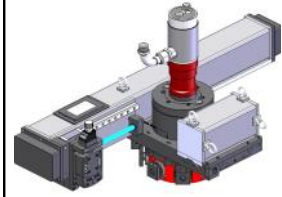


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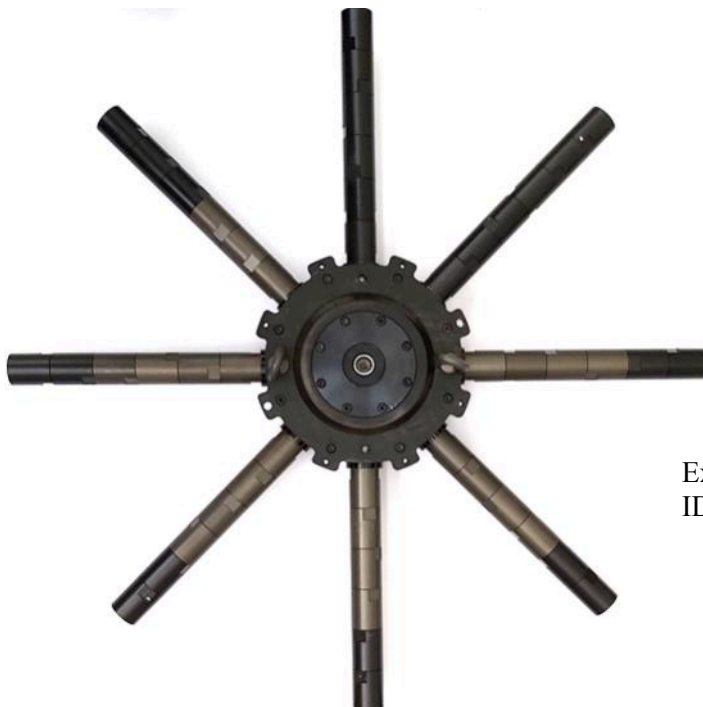
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SPIDER 12"-70"

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This operation has to be repeated for every leg making sure they are tightened very well in order to grant stability to the entire assembly.



Example of a locking assembly for a max ID of 28" correctly put together.

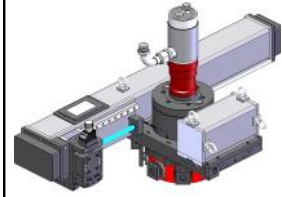
G.B.C. Industrial Tools S.p.A.

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N.B. On every locking assembly for ID **greater than 28"**, slide the supports on the legs and screw them on the hub as shown in the picture below.
This operation has to be done for every single leg.



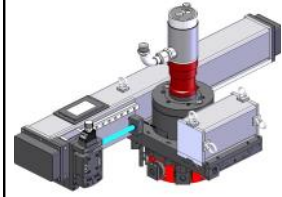
G.B.C. Industrial Tools S.p.A.

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Use the Hook Wrench supplied with the machine to tight the support properly.



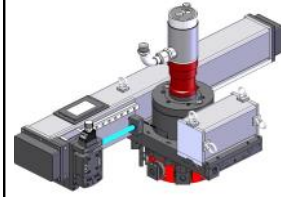
Example of a locking assembly with supports for an ID greater than 28" up to 64".

G.B.C. Industrial Tools S.p.A.

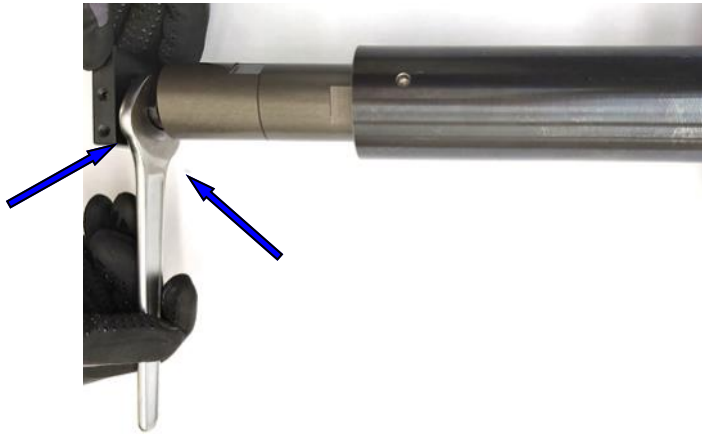
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SPIDER 12"-70"

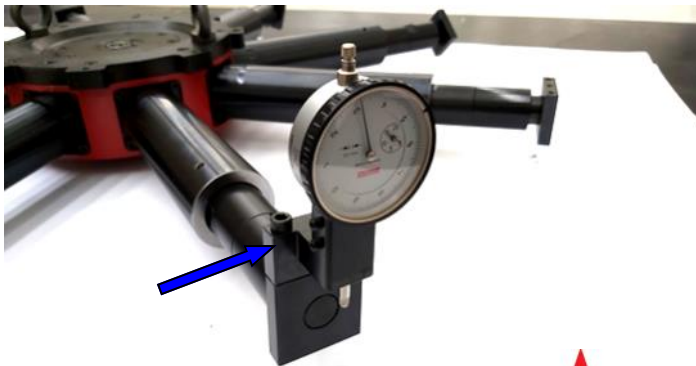
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Mount the oscillating feet on the extremity of every leg using the open end wrench supplied with the machine as shown in the picture below.



Mount the Dial Indicators on 4 legs, so that they will be equidistant at a 90° angle.
N.B. In case the locking assembly is for IDs greater than 16", mount the remaining supports (without Dial Indicators) on the remaining legs in order to grant more stability to the whole assembly thus to the machine.



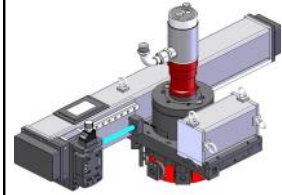
G.B.C. Industrial Tools S.p.A.

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SPIDER 12"-70"

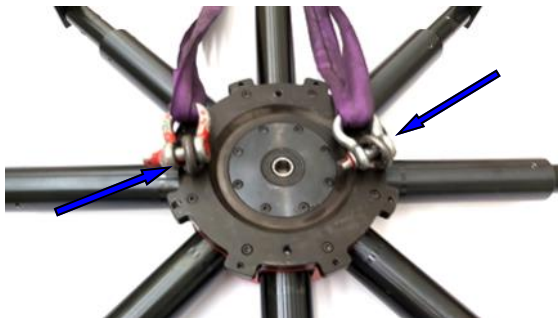
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Install the lifting lugs by screwing them in the threaded seats indicated by the arrows in the picture below.



Lift the entire locking assembly with slings and gently lower it into the flange ID as you will want the oscillating feet located at each leg extremity, to ease down onto the flange face as shown in the picture below.

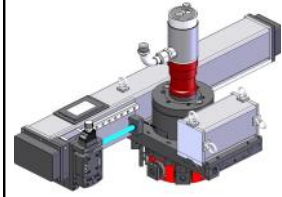


G.B.C. Industrial Tools S.p.A.

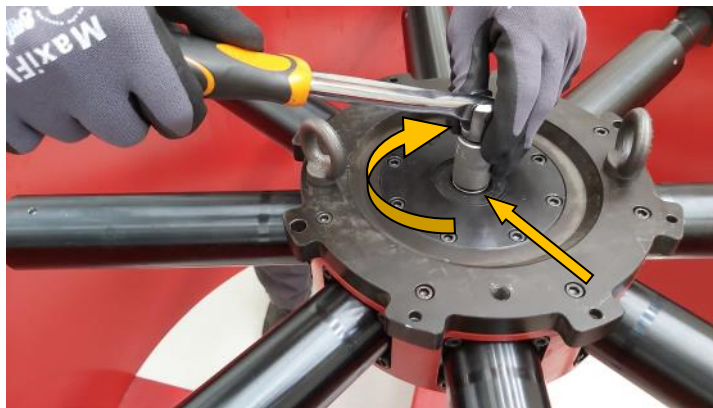
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SPIDER 12''-70''

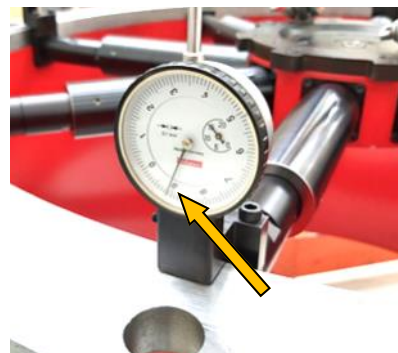
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Secure the whole assembly in position by turning clockwise the central locking nut using the socket wrench supplied with the machine as shown in the picture below.



Adjust the perpendicularity and the parallelism of the locking assembly by acting on the adjusting screws of the supports as shown in the picture below.



N.B. The correct positioning of the locking assembly is reached when all the **Dial Indicators** read the same number.

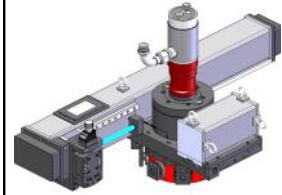
G.B.C. Industrial Tools S.p.A.

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As a final step you will want to tight again the oscillating feed in order to grant the best grip to the assembly.



At this point the locking assembly is correctly assembled and positioned and it is ready to accommodate the Spider 12_70.



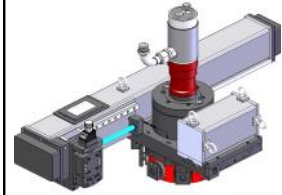
G.B.C. Industrial Tools S.p.A.

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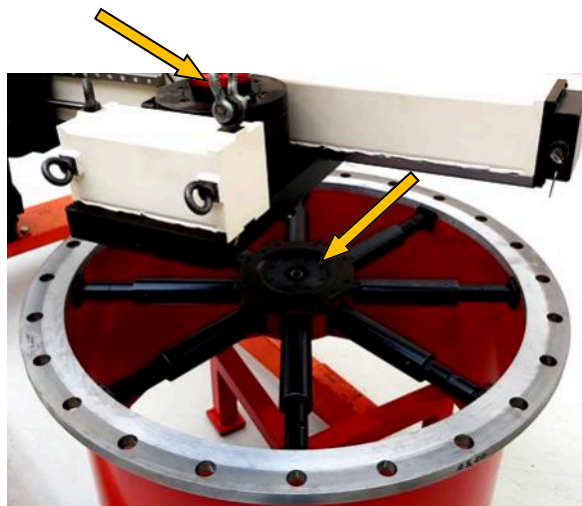
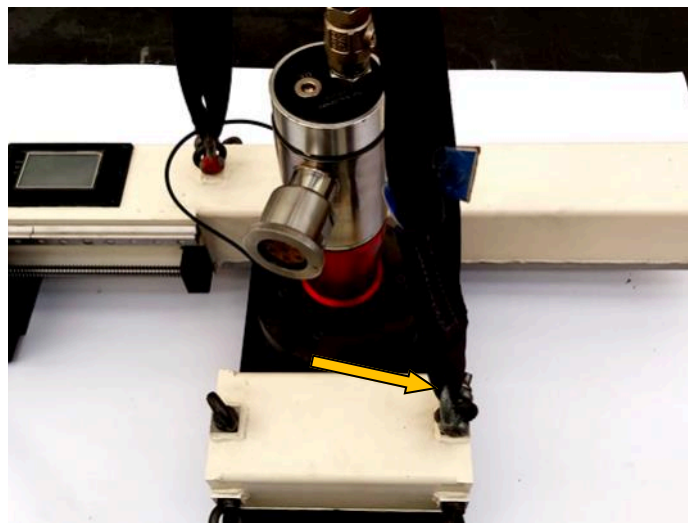
SPIDER 12''-70''

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SETUP OF THE SPIDER 12_70

Take the Spider 12_70 out of its box by the lifting lugs using slings as previously done for the locking assembly and position it in line with the locking assembly hub.

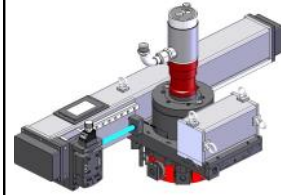


G.B.C. Industrial Tools S.p.A.

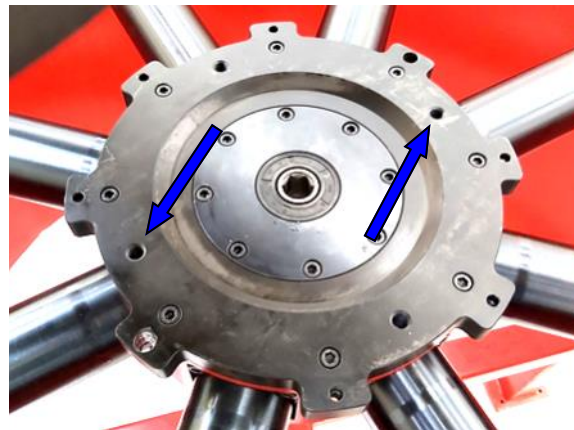
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SPIDER 12"-70"

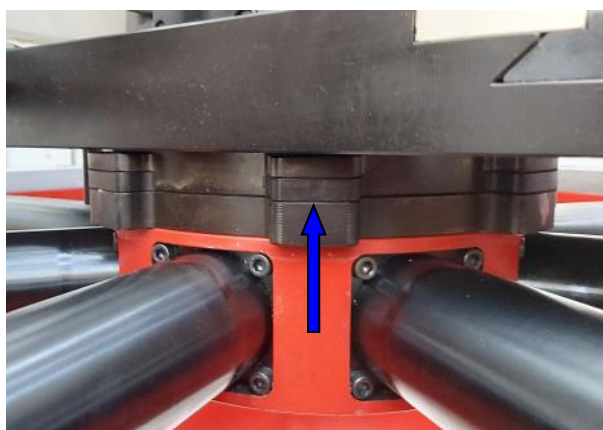
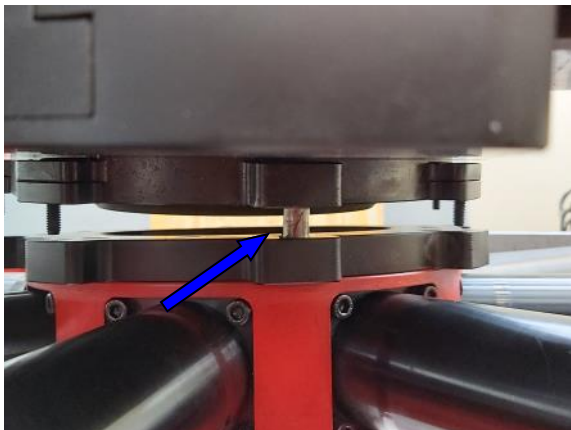
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N.B. During the alignment phase it is very important that the two pins present on the Spider 12_70 bottom are matching with the seats located on the locking assembly as shown in the picture below.



When the two are matching ease the machine down for the coupling.



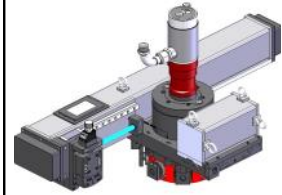
G.B.C. Industrial Tools S.p.A.

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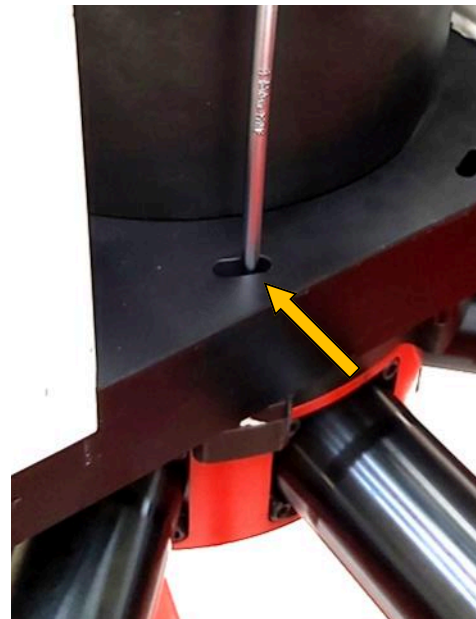
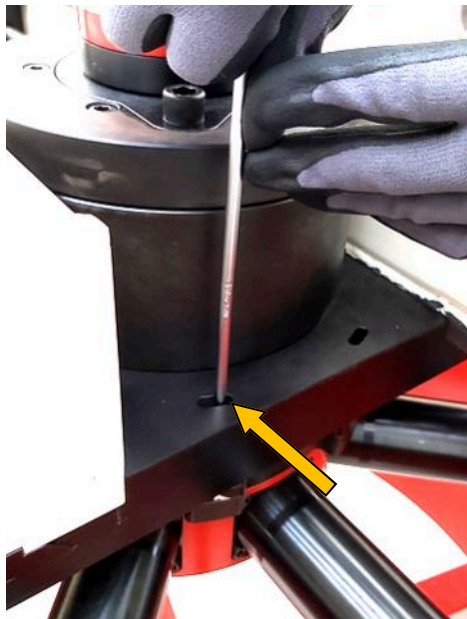


SPIDER 12"-70"

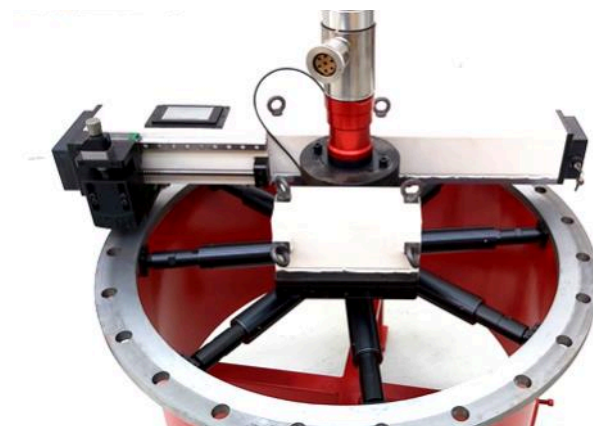
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Use the long body Allen Key supplied with the machine to intercept the locking screws through the slots cut into the machine flange and fasten them to secure the two parts together.



The machine is now successfully coupled with the locking assembly.



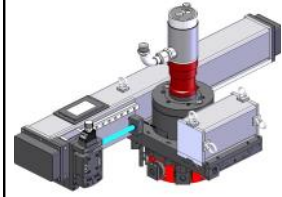
G.B.C. Industrial Tools S.p.A.

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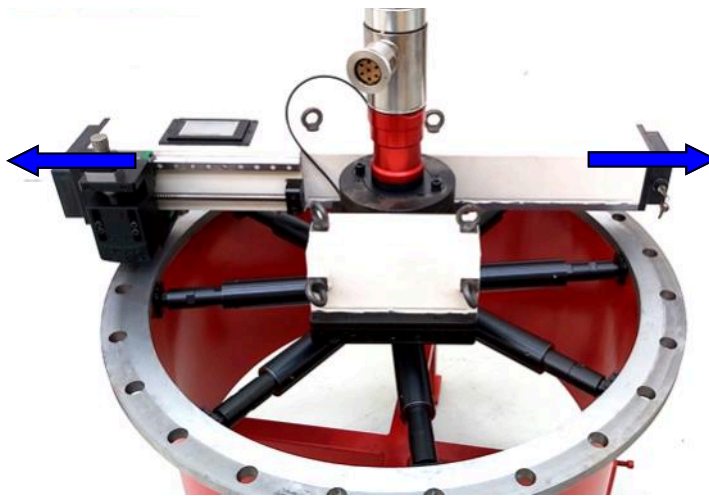
SPIDER 12"-70"

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ADJUSTMENT OF THE ARM

The arm of the Spider 12_70 can be moved left or right to match the actual diameter of the flange that has to be worked.



Loose the two Allen screws shown in the picture with the Allen Key supplied with the machine and with the same key turn the adjusting screw (located between the two locking screws just loosen) left or right, depending by the direction you wish to move the arm **N.B. Once the correct position of the arm is found, secure the two locking screws again.**

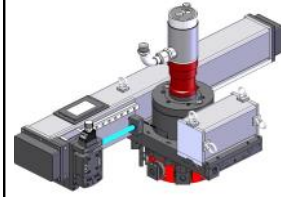


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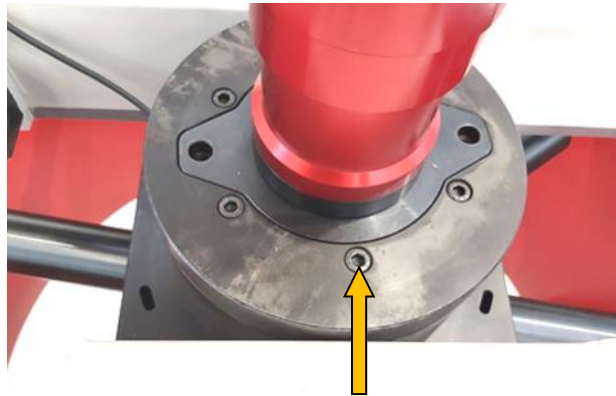
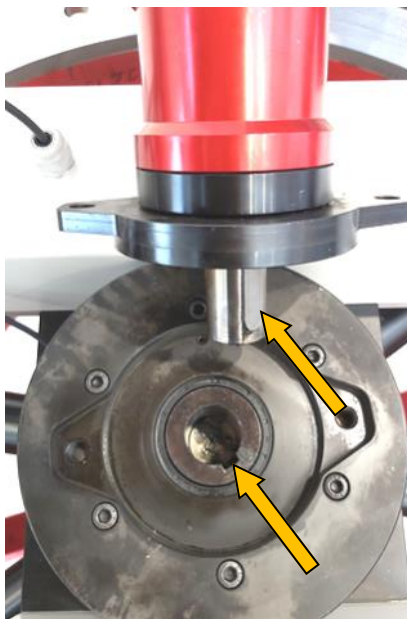
SPIDER 12"-70"

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INSTALLATION OF THE AIR MOTOR

The air motor flange matches with the recess present on the motor hub of the machine making this process very straightforward, however the key present on the motor spindle will have to match the position of the notch located on the shaft end as pointed by the arrows in the drawing below, otherwise the motor will not sit in the correct position.



Secure the motor in position with the two screws included in the assembly.



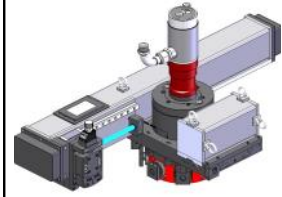
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SPIDER 12"-70"

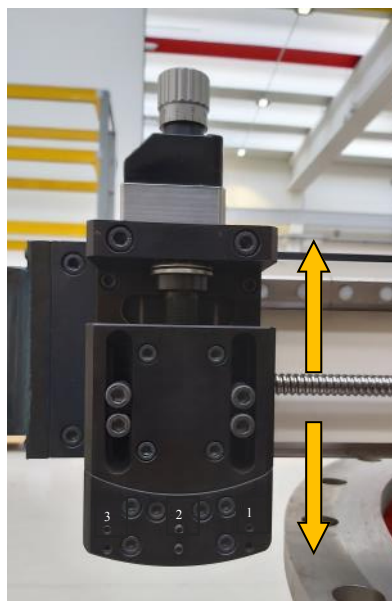
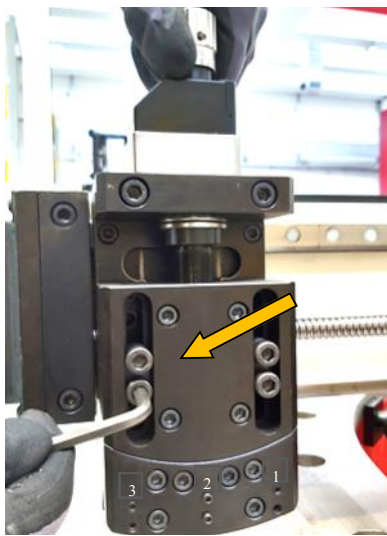
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ADJUSTMENT OF THE TOOL HOLDER ASSEMBLY

Loosen the 4 locking screws to free the vertical slide and rotate the **Positioning Setting Knob** until the correct vertical position is acquired.

N.B: Once the position is set, secure the locking screws.

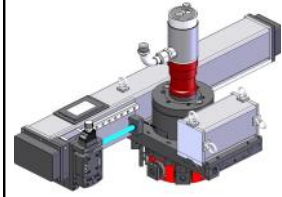


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SPIDER 12"-70"

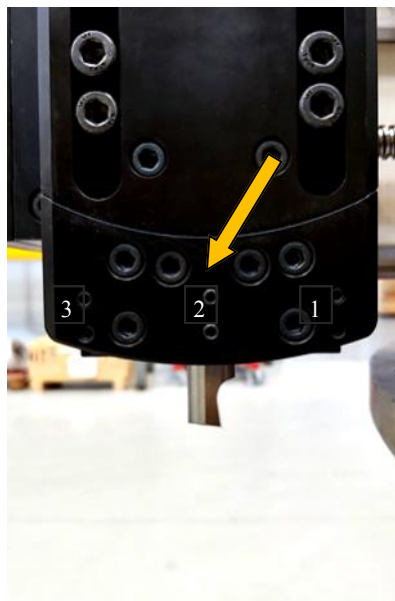
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TOOL INSTALLATION

Select the tool required for the specific operation to perform and insert it in one of the three seats of the Tool Holder (the correct seat of the tool has to be selected in relation to the diameter of the flange).

N.B. Insert the tool all the way in the seat and have its flat part facing the set screws so that they can firmly hold the tool in position when tightened.



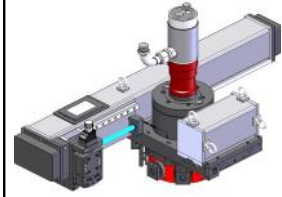
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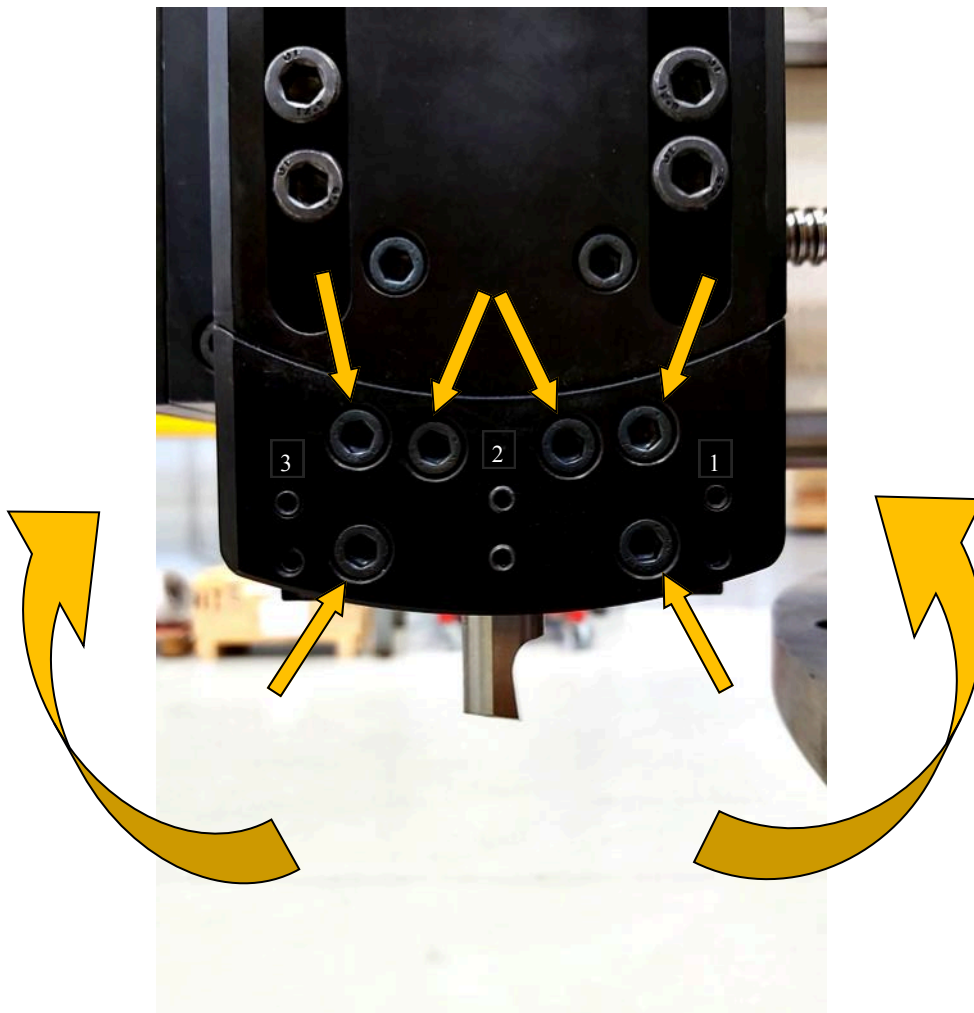
SPIDER 12"-70"

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TOOL HOLDER HEAD TILTING

If necessary, the head of the tool holder can be tilted left or right for a maximum tilt of max $8^{\circ}30'$. In case tilting is required, loose the 6 set screws indicated by the arrows, push the head in the required position and tighten the 6 screws to lock the head.

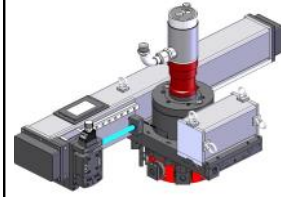


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AIR CONNECTION

Connect the first hose (with the ball valve at one end) to the motor by the end without the ball valve. The end with the ball valve has to be connected to the filter lubricator unit which in turns will have to be connected to the air system.



Connect the second hose (with the speed regulator valve at one end) to the exhaust elbow as shown in the picture below



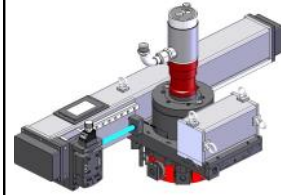
G.B.C. Industrial Tools S.p.A.

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SPIDER 12"-70"

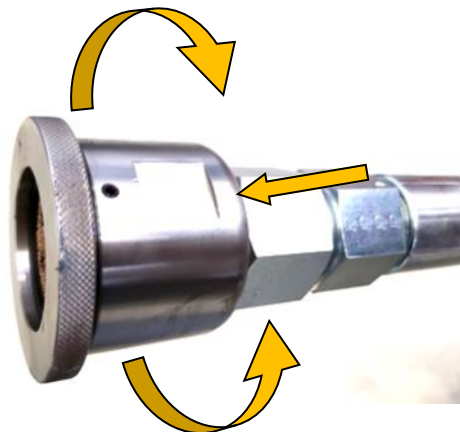
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When all the connections are done, open the ball valve by acting on the handle.

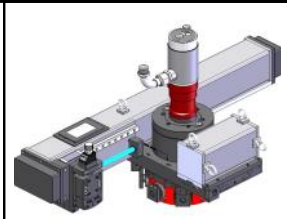


The speed of rotation of the arm can be adjusted by acting on the speed adjustment valve as shown in the picture below.



G.B.C. Industrial Tools S.p.A.

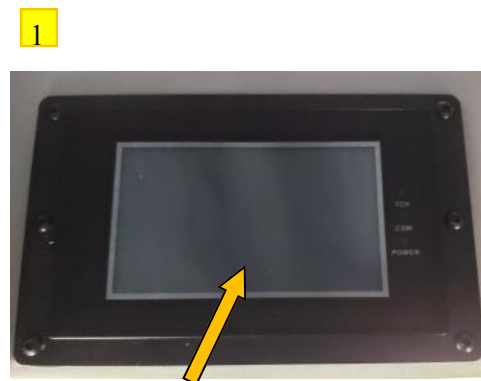
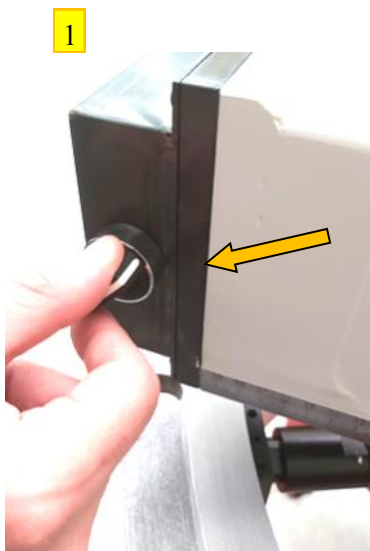
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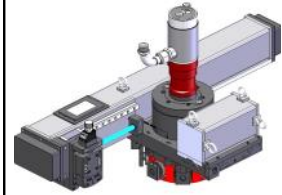


ONBOARD COMPUTER ACTIVATION

NB : This procedure must be carried out when the machine is turned off.

- 1) Switch on the onboard computer by rotating the switch as shown in the picture below.



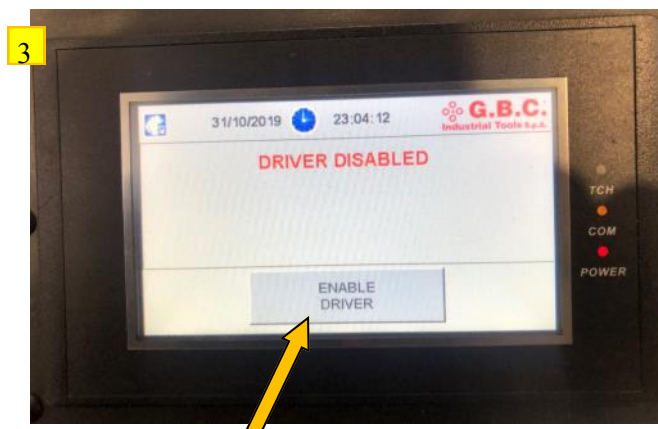


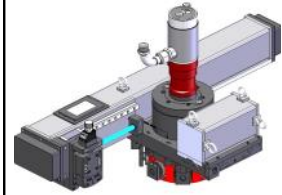
AXIAL ADJUSTMENT

2) The touch display will load 3 different screens and will stop on the third one reading "DRIVER DISABLED".



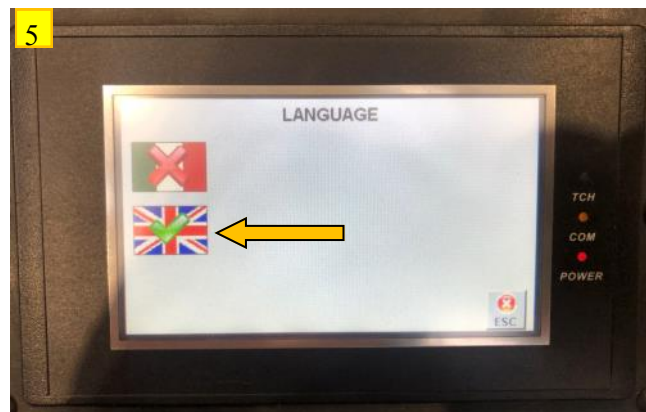
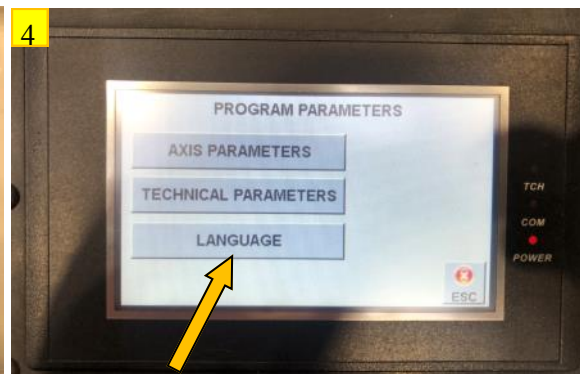
Press "ENABLE DRIVER" to proceed further.





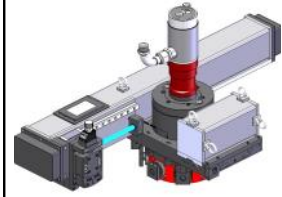
AXIS POSITIONING

- 3) Before entering any data, select the desired language by pressing “PROGRAM PARAMETERS” on the main screen.
- 4) Press LANGUAGE.
- 5) Press the flag corresponding to the desired language.

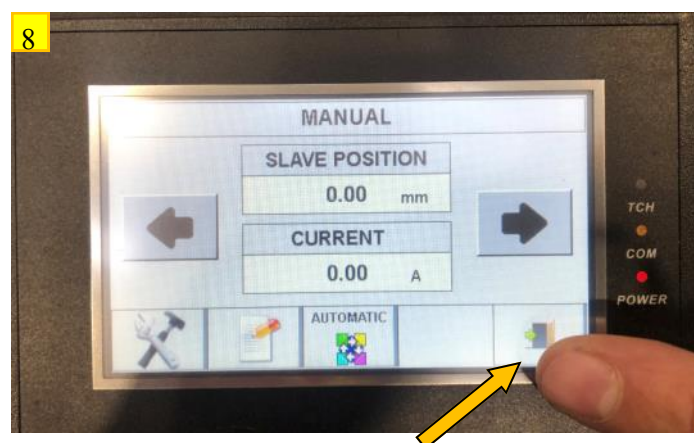
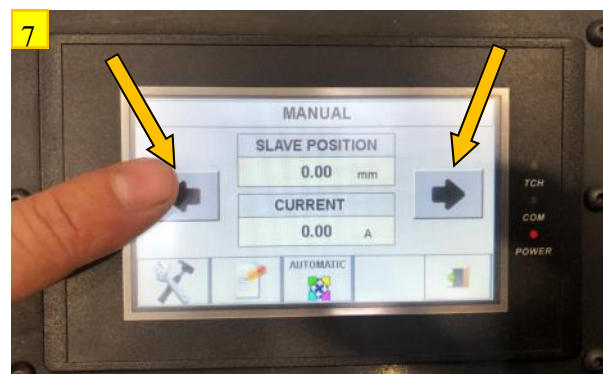


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- 6) To manually position the Tool Holder Assembly press “MANUAL”.
- 7) Press the arrows to adjust the position of the tool holder.
- 8) Press “ESC” to return to the main menu.

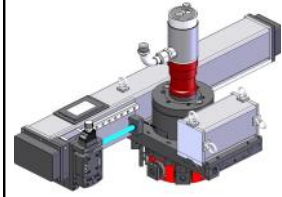


G.B.C. Industrial Tools S.p.A.

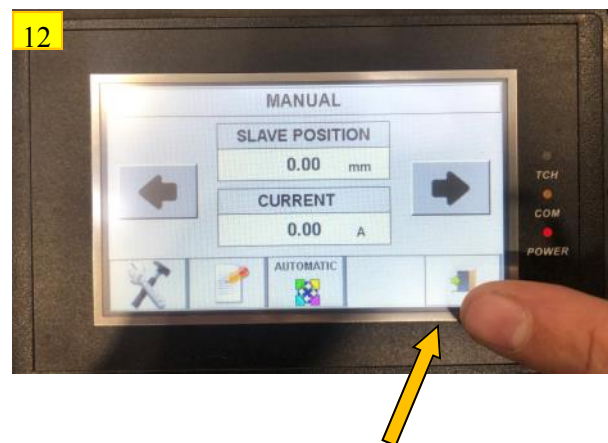
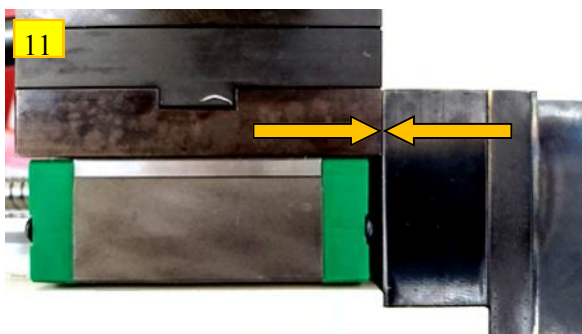
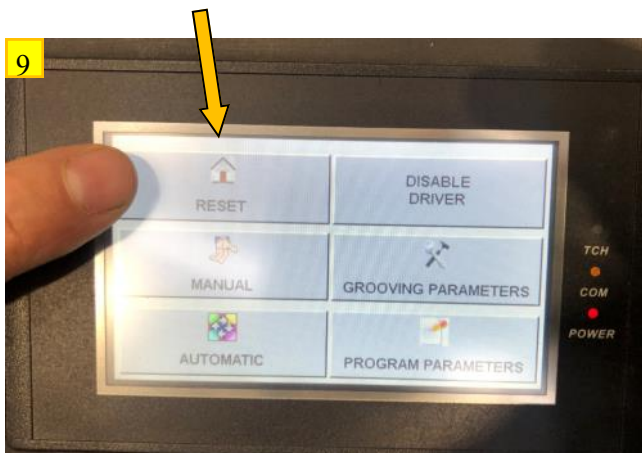
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- 9) To reset the position of the Tool Holder Assembly press "RESET".
- 10) On the next screen press "START".
- 11) The Tool Holder Assembly will travel all the way back and will come to an automatic stop.
- 12) Now press "ESC" to return to the previous menu.

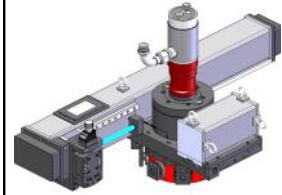


G.B.C. Industrial Tools S.p.A.

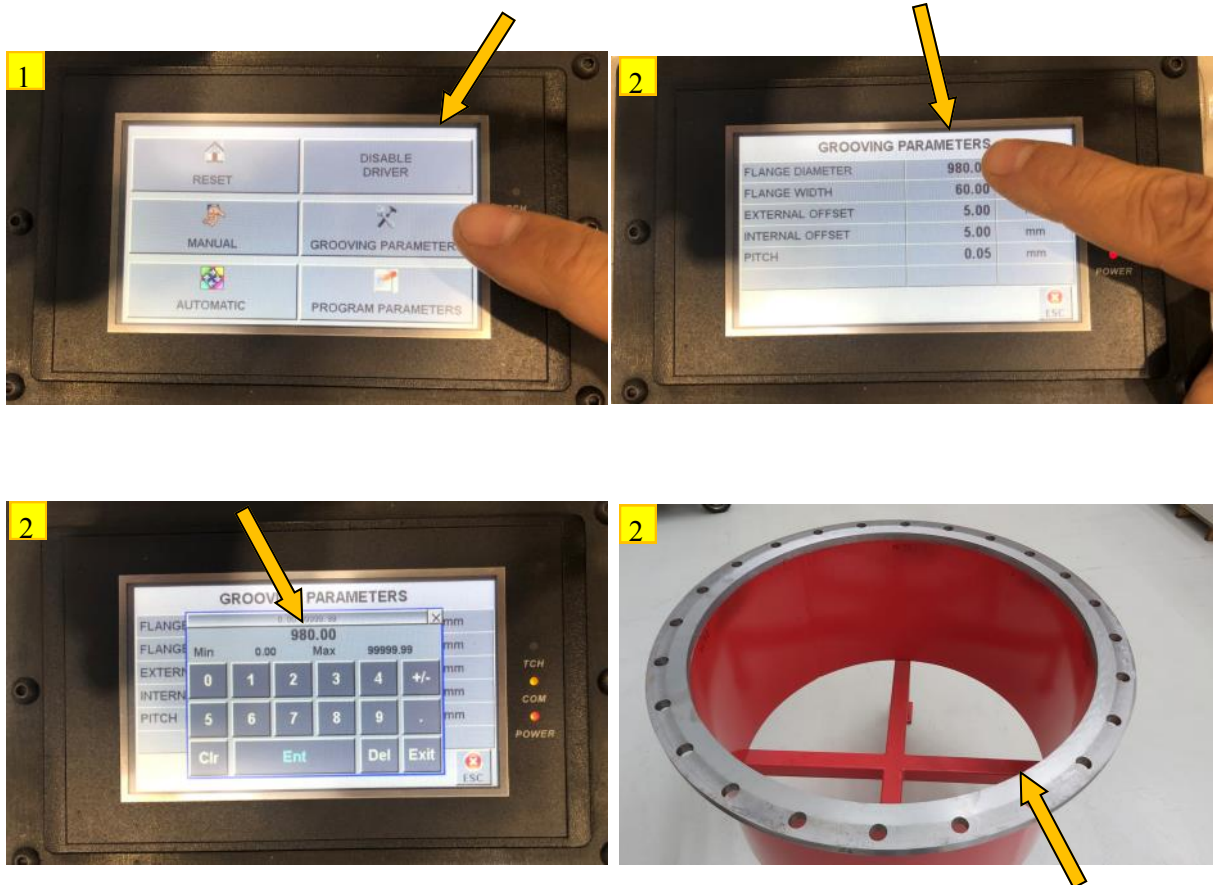
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- 1) On the Main Menu, press "GROOVING PARAMETERS".
- 2) Press the specific line of parameters you want to edit and enter the parameters of the flange into the keypad appearing on the screen, including the grooving pitch in case of grooving operation.

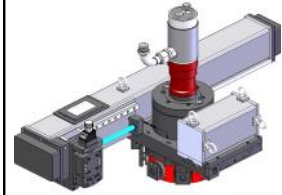


G.B.C. Industrial Tools S.p.A.

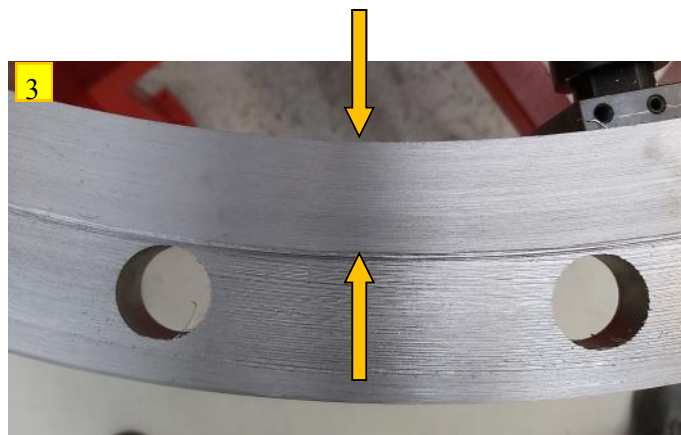
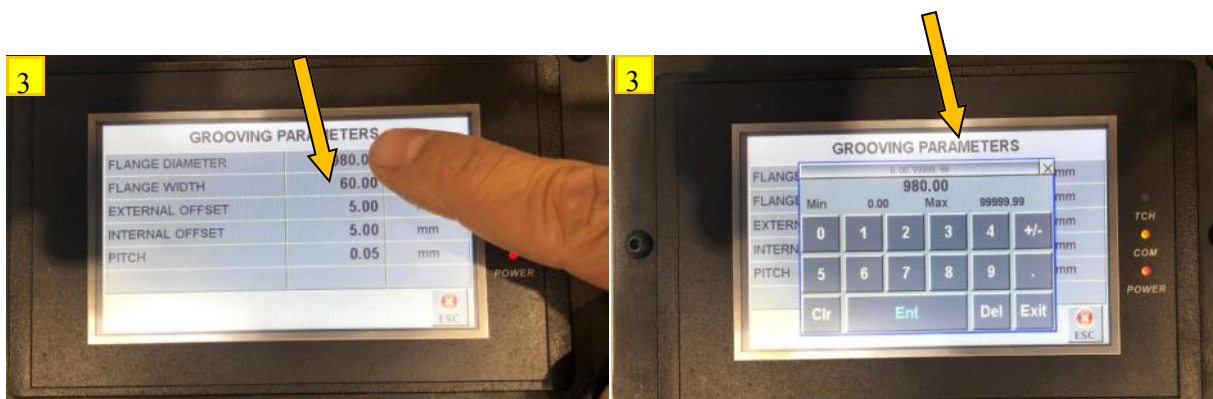
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- 3) From the menu “GROOVING PARAMETERS” you can modify the “FLANGE WIDTH” by pressing the corresponding line of parameters and the data can be entered in the keypad appearing on the screen as shown in the pictures below.

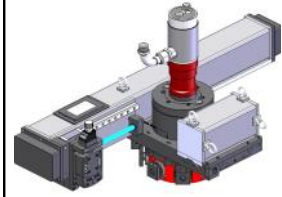


G.B.C. Industrial Tools S.p.A.

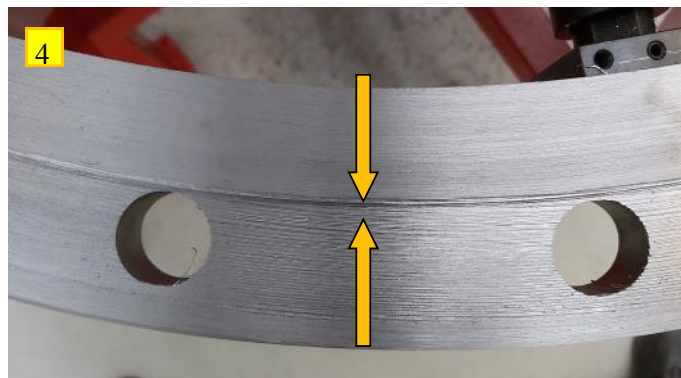
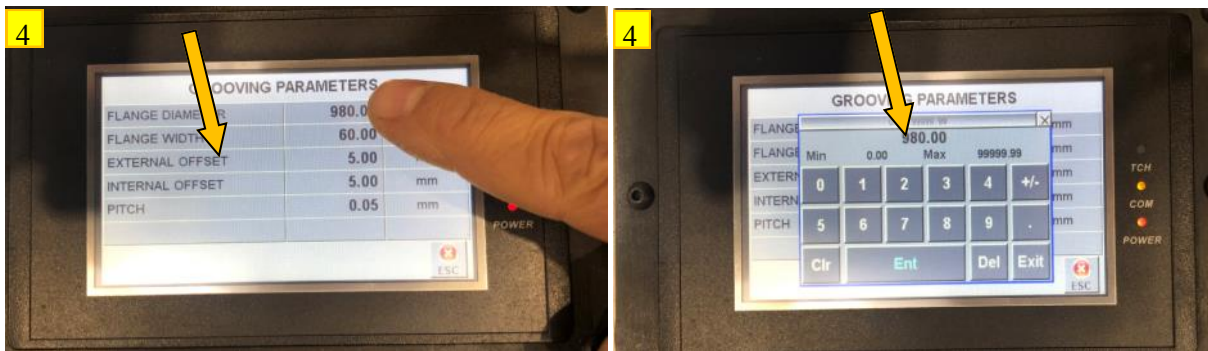
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- 4) Repeat the same procedure to modify the “EXTERNAL OFFSET”. This parameter determines where the tool will have to start working as shown by the arrows in the picture below. N.B.: The EXTERNAL OFFSET is necessary as a precautional measure in case of ovality of the flange because it sets the tool position so that it anticipates the area of interest ensuring the full preparation of the surface area.

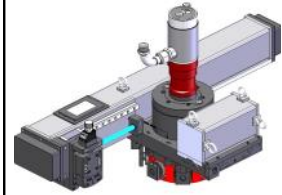


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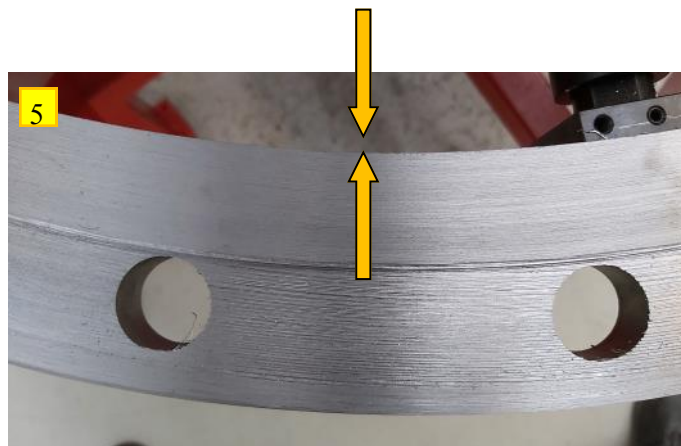
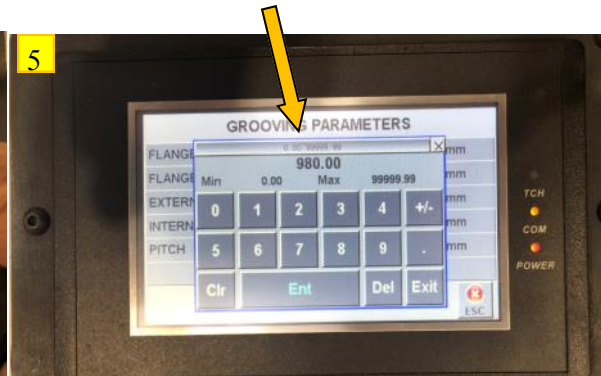
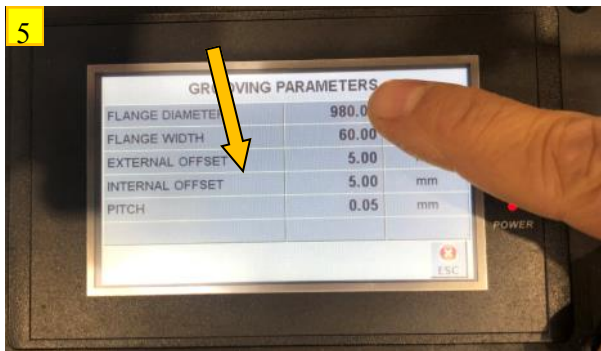
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5) Repeat the same procedure to modify the “INTERNAL OFFSET”. This parameter determines where the tool will have to stop working as shown by the arrows in the picture below.

N.B.: The INTERNAL OFFSET is necessary as a precautionary measure in case of ovality of the flange because it sets the tool position so that it keeps working after it passes the actual flange ID ensuring the full preparation of the surface area.

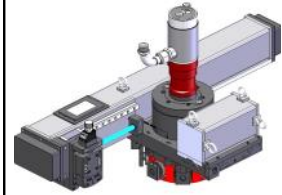


G.B.C. Industrial Tools S.p.A.

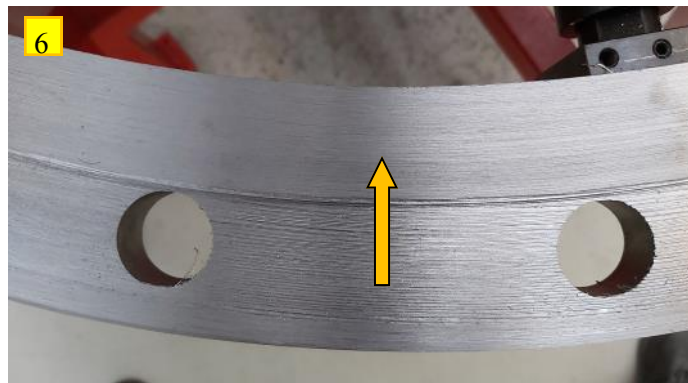
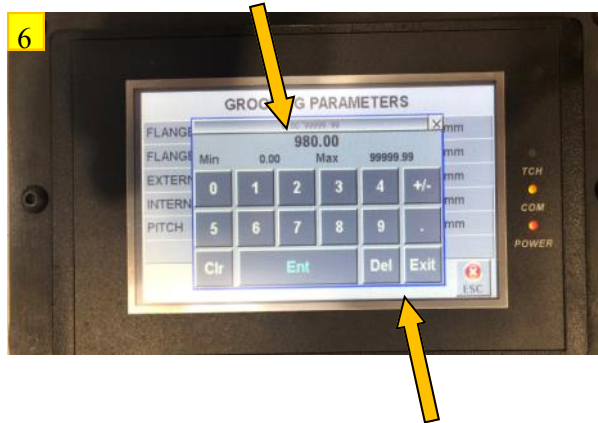
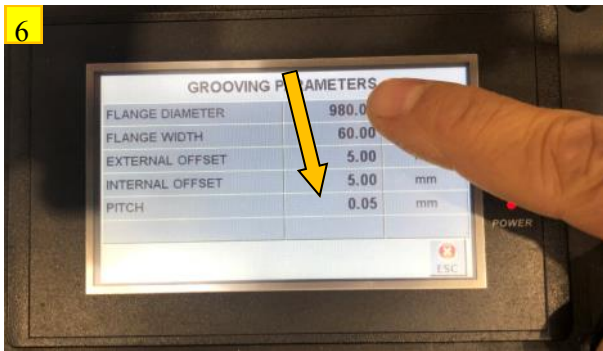
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6) Repeat the same procedure to modify the "PITCH". This parameter determines the width of the grooves thus the finishing of the grooving as shown by the arrows in the picture below.

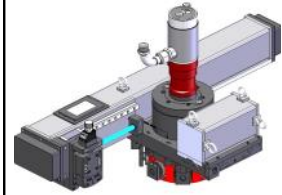


G.B.C. Industrial Tools S.p.A.

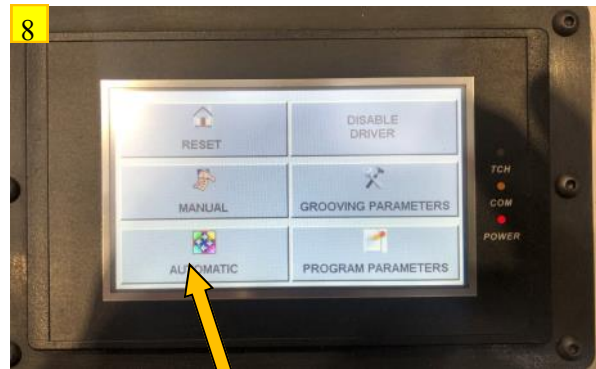
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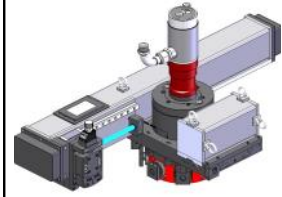
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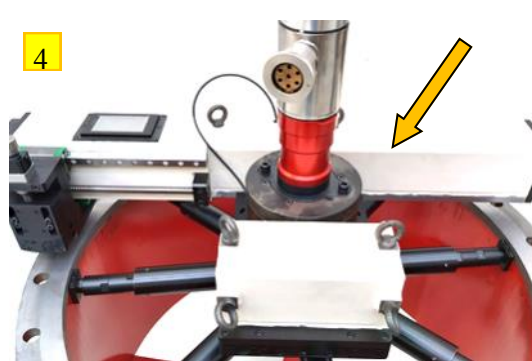
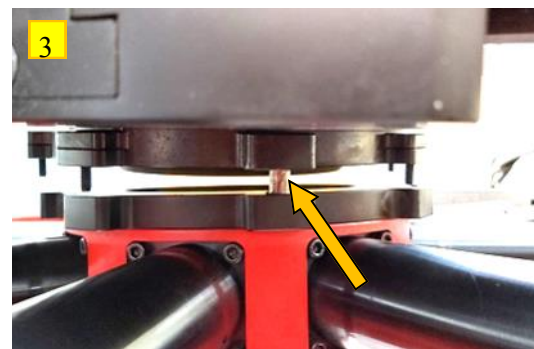
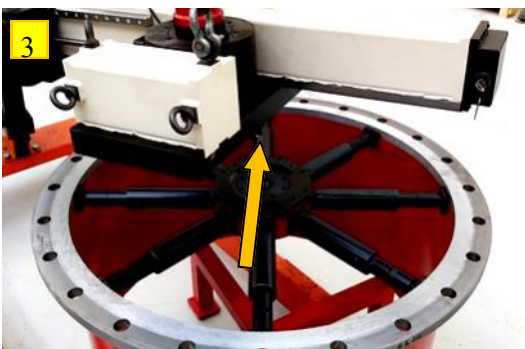
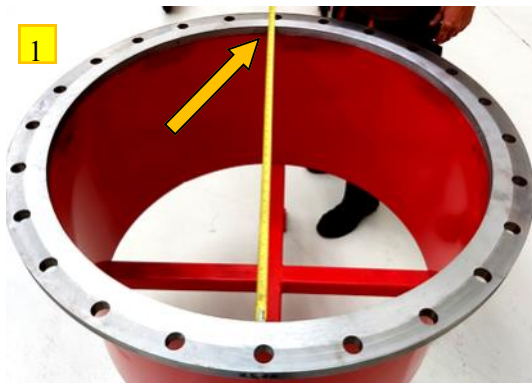
- 7) Once all the data has been input in the computer press "ESC".
- 8) Press the button "AUTOMATIC" and a new screen will appear, showing all the parameters set in the previous steps.

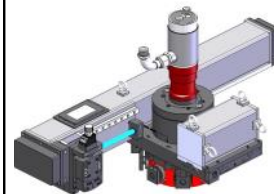




STARTUP PROCEDURE

- 1) Measure the ID of the flange.
- 2) Assemble the Locking Assembly according to the ID measured (as explained on the previous parameters) and position it on the flange.
- 3) Position the machine body on the Locking Assembly as previously explained.
- 4) Install the machine body and the air motor and secure them in position with the screws supplied with the machine and with the motor.





STARTUP SEQUENCE

- 1) Loose the set screws of the Toolbox Vertical Slide
- 2) Adjust the tool depth by acting on the knob located right above the depth LCD Display
- 3) Open the air valve to start the machine
- 4) The Spider 12_70 will start rotating and the toolbox will begin moving according to the parameters previously inserted in the specific menus.

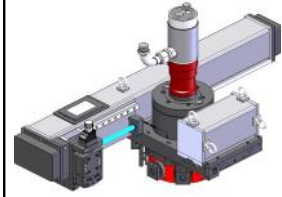


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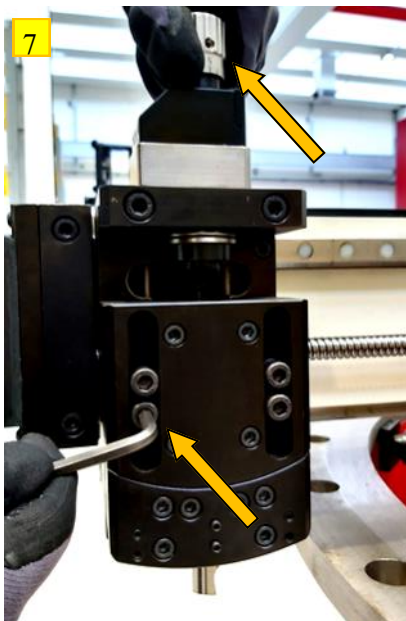
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- 5) Connect the air motor to the air system as explained in the previous paragraphs.
- 6) Install the tool selected in one of the 3 seats of the Tool Holder Assembly.
- 7) Loosen the set screws of the carriage and adjust the height of the tool checking the values on the LCD located right below the Tool Adjusting Knob as explained in the previous paragraphs.

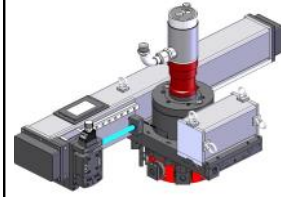


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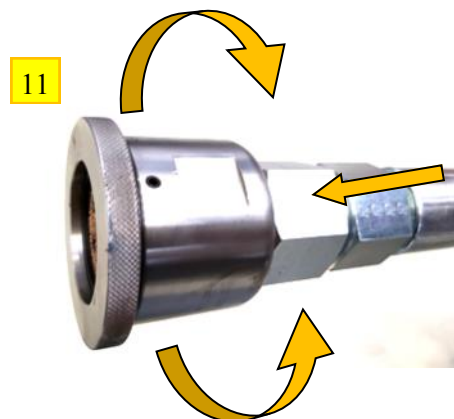
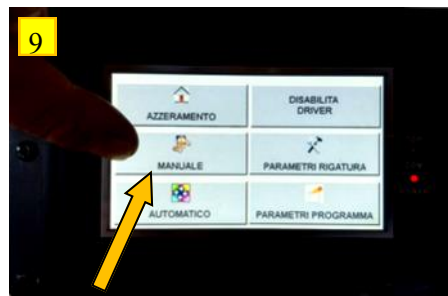
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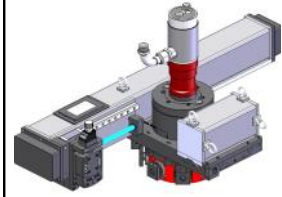


- 8) Turn on the onboard computer by moving the switch on the "ON" position.
- 9) Press the icon "MANUAL" on the main menu screen and enter all the parameters of the flange and of the required preparation as explained in the previous paragraphs.
- 10) Press the icon "AUTOMATIC" on the menu.
- 11) Once the machine is set, slightly open the air valve to start the machine.



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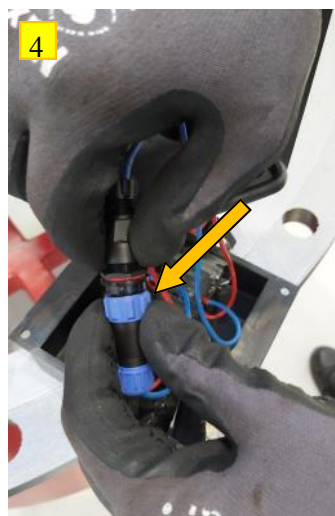
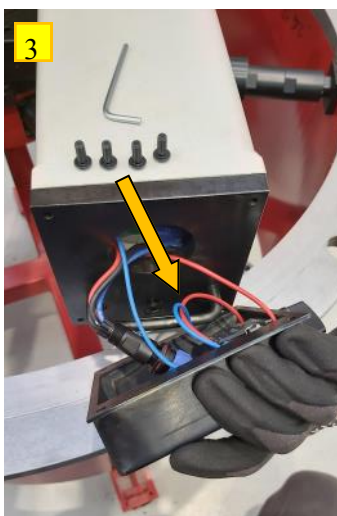
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BATTERY CHARGING

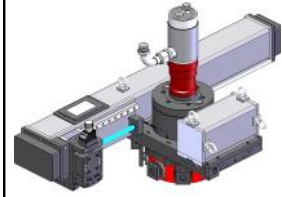
Follow the procedure below to charge the battery that powers the onboard computer:

- 1) Switch off the onboard computer by setting the switch on the "OFF" position.
- 2) Remove the 4 Allen screws that hold the black cover in place as shown in the picture below.
- 3) Remove the cover.
- 4) Unscrew the ferrule of the connector and unplug the connector as shown in the picture below.

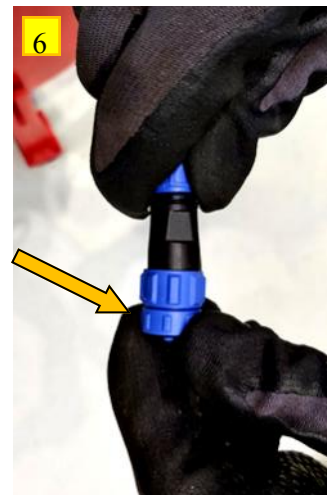


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- 5) Identify the battery charger.
- 6) Unscrew the protective lid of the connector of the battery charger and plug it to the power.
- 7) Couple the connector of the battery charger with the connector of the onboard computer battery as shown in the picture below.
- 8) Press the button located on the battery charger on the "ON" position. The charge status is shown on the LCD screen of the device..



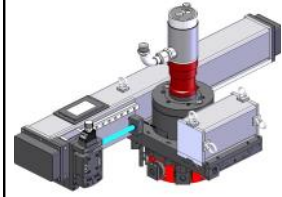
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ORDINARY MAINTENANCE

It is advisable to perform a service c/o G.B.C. Industrial Tools S.p.A. premises every 400 hours working cycles.

PERIODICAL CHECKS

- Verify the general conditions of the machine;
- Always use the filter + lubricator when using pneumatic machines
- Ensure the filter + lubricator is mounted the nearest possible to the machine and that the lubricant contained is supplied by G.B.C. Industrial Tools S.p.A. only.
- Perform a compressed air periodical cleaning on the threaded part of the guiding shaft and in the rear part of the machine.
- Always ensure that the seats of the tools on the chuck are clean
- Every 20 – 30 hours ensure the security valve has no air leaks
- Ensure no air leaks are present on the air supply system nearby the connection between the machine and the hose.
- Introduce some drops of gasoline or similar oily solvent in the air intake nipple of the pneumatic motor and start the machine in idle.
- Always use well sharpened tools to obtain the maximum result.

G.B.C. Industrial Tools is at your disposal for any information you may re-quire about the above mentioned procedures and for any general clarification you may need.

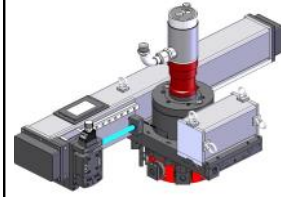
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TROUBLESHOOTING AND ACOUSTIC EMISSIONS

The machine does not start : Check the power supply is connected and suitable in regard to the motor power consumption.

The machine does not run properly : Check the condition of the shaft and verify it to perfectly spins around its axis of rotation.

The onboard computer does not start: Check the battery charge level and its integrity.

The acoustic emissions are within the maximum limits provided by the current Machinery Directive.

The tests are performed on every single machine and the results are stored in our archives.

The Spider 12_70 must be switched off before performing any adjustment or maintenance service .

The facing and grooving tools very sharp. Handle them very carefully to avoid injuries.

Do not stand close to the machine while it is working. Maintain a safety distance of at least 2 meters.

Do not adjust the tools manually while the machine is in motion.

During the operations use cutting oil or a suitable coolant to lubricate the tools.

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