



TOOLS TO SHAPE THE WORLD

USE AND MAINTENANCE MANUAL

DRIVEN TOOLS





Dear Customer,

We thank you for having chosen MPA and we hope that it fully satisfies your expectations, guaranteeing a high quality production.

We kindly request you to read the instructions provided in this manual before starting to use the product, as they provide important information on how to use and service the product in absolute safety.

This manual also provides the technical features of the product, visible even on enclosed technical drawing.

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Yours faithfully

MPA srl



**EEC MACHINE DIRECTIVE
MANUFACTURER'S DECLARATION**

MPA srl
Via Pizzoli, 3 - Bargellino Cà Bianca
40012 Calderara di Reno (Bo) Italy

in the Person of the Legal Representative
declares that this product
is compliant with the provisions of the
Machinery Directive 2006/42/EC

and forbids the start-up
before the machine in which the product has to be fitted in
is declared compliant with Machinery Directive it self.

Signature of issuer

Marco Ceneri



EUROPEAN
COMMUNITY



General warranty conditions

Proper use and maintenance of the MPA productd will ensure that it stays in good working order.

Any modification, tampering, or improper use relieves MPA from all liability for accidents or damage to persons or things occurring during the use the head.

MPA guarantees this product against material and manufacturing defects for a period of **12 months**, considering ordinary application. Failure to follow the instructions provided in this manual will void the warranty. MPA guarantees exclusively the repair or replacement of parts found to be defective by its service centre. MPA remains at your complete disposal for any clarification and to provide any technical support necessary for achieving the best performance of the product.

MPA reserves the right to make any modifications to all parts that are believed to be necessary to improve the quality of the product without prior notice.



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1 GENERAL NOTES

1-1 Purpose of the document

The information in this manual has been provided to highlight the operations necessary for the end user to correctly use and service the MPA product. Information concerning installation, adjustment and maintenance relating to the MPA product you have purchased can be found in this document.

Special attention has been given to questions matters involving the safety and safeguard of the operators' security, together with the safeguard and respect of the work area.

Before using the MPA product, read carefully this manual and, in case of doubts, contact the MPA After-sales technical service.

1-2 Main information

To obtain maximum product yield in time, we recommend complying with the following notes:

- Ensure to have correctly installed the MPA product to the machine.
While choosing the connection to the tool machine, verify compatibility with the declared performances.

The MPA product can be clamped on a machine tool equipped with regulatory accident-prevention protections and in compliance with Machinery Directive 2006/42/EC.

- Absolutely avoid any improper use of the equipment and work with care and attention.
- Carry out regularly all routine maintenance interventions (see chap. 10).

1-3 Standard references

The MPA product you have purchased is compliant with Machinery Directive 2006/42/EC (ex 98/37/EC).

1-4 Noise level

The MPA products complies with current Standards with regard to noise levels.

The manufacturer of the machine on which the MPA product is clamped must provide the data concerning the noise levels in the relative manual.

1-5 Packaging

The MPA product you have purchased is supplied packed in carton boxes and protected with shock-resistant protections.



IMPORTANT Upon receipt, check that the supply corresponds to the order specifications and that no damages have occurred during the transport. In case of anomalies, do not use the head and contact the manufacturer immediately.

Packaging must be disposed of in compliance with the local waste disposal Standards.

1-6 Transport

During transport, keep in mind that you are handling a precision tool requiring adequate caution. When carrying out the operation, observe the safety Standards in force with regard to safety at work.



DANGER do not disassemble, transport or re-assemble the MPA product with tools fitted in the spindles, as the sharp cutting parts could cause injuries.

For MPA product with a weight over 10 kg, use a suitable hoisting mean for the operation. In the attachment technical drawing are highlighted, if the product provides, the preparation for this operation.

1-7 Storage

In case you don't use the MPA product for a long time, it is a good rule to clean the MPA product and to protect it against salty, damp or chemically aggressive environments.



IMPORTANT For inactivity periods of more than 6 months, before start-up, we recommend to replace the lubricant inside the MPA product (see chap. 10).

1-8 Disposal

This MPA product is manufactured using the following substance:

- aluminum;
- steel;
- cast iron;
- lubricants.



IMPORTANT

The MPA product must be disposed of per type of substance, in strict compliance with the legal regulations with regard to recycling and management of waste in force in the country where the head is used.

In particular, exhaust lubricants must not be thrown outdoors but must be handed over to specialised and authorised waste collection centres.

2 IDENTIFICATION

2-1 Manufacturers' Data

MPA srl

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40012 Calderara di Reno (BO) Italy

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2-2 Product identification data

An aluminum identification nameplate is fitted on each MPA product indicating the main features of the product. **Fig. 1** illustrates example of identification nameplates displaying the data that should be written on it.

As each MPA product is different in shape and size, the position and the shape of the identification nameplate will vary depending on the model. It will could be of adhesive type or riveted on one of the external surfaces.



Fig. 1



IMPORTANT It is forbidden to remove or tamper with the identification nameplate.



3 MAIN DESCRIPTION

3-1 Intended use

This product has been designed and manufactured to perform the machining operation required by the end-user when ordering and confirmed by MPA. Any other use is to be considered improper and relieves MPA from all liabilities.

3-2 Improper use

Any different use to those indicated in **point 3-1** of this manual, is to be considered improper and, therefore, unauthorised, and relieves MPA from every liability for damages to persons or things.

4 SAFETY RULES

- Before starting the tool machine, make sure that the MPA product is correctly clamped to the machine tool and, consequently, that there is no risk of it releasing and falling off.
- Wear always industrial safety gloves when handling. Be sure that no cutting tools are in the spindles. Don't power up the head while carrying out service. Disassemble the MPA product, as the sharp parts may cut or injure the personnel.
- Don't touch the MPA product when it is moving. Any adjustments and interventions must be carried out when the machine is inactive and in absolute safe conditions for the operator.
- The operating machine on which the MPA products is clamped, must be manufactured in compliance with current safety Standards. All operator safety guards must be correctly fitted and efficient and approved according to Machinery Directive 2006/42/EC (ex 98/37/EC).
The design of these safety guards is under the sole responsibility of the Manufacturer of the machine on which the MPA product is clamped; safety parameters must be checked exclusively by the factory manager where the head is used.
- Suitable clothing for workshop jobs must always be worn when using the MPA product. It is therefore forbidden to wear ties, necklaces and any other non-adhering clothes or accessories that may create a hazard.
The safety at work Standard in force must be complied with.
- During cleaning operations, especially when compressed air is being used, proceed with caution and wear safety goggles or other suitable means of protection.
- Keep always transmission and rotation direction ratio under control; the values are shown both on the nameplate and on the attached technical drawing.
- The use manual must always be kept handy where the MPA product is being used. You also must comply with the precautions in this manual, the general and local Standards in force regarding accident prevention, and environmental protection.
- Check the conditions and state signs of wear on the tool.
- Any anomalies on the head may cause serious damages and reduce significantly the life-time and precision of the MPA product . When in doubt, always contact MPA.
- The **normal temperature** of the head while it is working must not tendentiously **exceed 60°C**. Only during the first 80 hours of use the temperature can increase its maximum value by about 25%



5 TECHNICAL FEATURES

Overall dimension, technical features and performance value are available on the attached technical drawing.

6 INSTALLATION AND RUNNING

- To ensure long product life is important to properly run-in the product. While installing the MPA product to the machine and, generally, each time that it's necessary to work on MPA product, make sure that the machine is inactive and that no possibility exists to power up the MPA product, while you are carrying out service operation.
- Before starting to install the MPA product, ensure that the weight and overall dimensions of the MPA product, complete with its accessories, are compatible with the technical features of the machine tool on which it will be used.

The operation must be carried out in compliance with the security Standard in force.

Ensure that the machine on which the MPA product will be installed is equipped with accident-prevention protections compliant with the Machinery Directive 2006/42/EC (ex 98/37/EC).



IMPORTANT

This MPA product is lubricated, runned and ready to be used. Is recommended at start-up phase, supplementary run of 4 hours, running the MPA product at 50% of R.P.M. max. (see also the drawing of the product).



7 PREDISPOSITION FOR INTERNAL COOLANT FEED THROUGH THE SPINDLE

This MPA product can have the predisposition for the internal coolant feed through the spindle by rotary joint. Please, read the attached technical drawing.



IMPORTANT

Run the MPA product, with coolant activated only. To avoid premature wear and damage to the seal system, the coolant should flow through the tool before the tool drive is switched on.

coolant filtration: please, read the attached technical drawing.

coolant pressure: please, read the attached technical drawing.

8 PRESSURIZED SPINDLE PREDISPOSITION

This MPA product can have pressurized output spindle.

Please, read the attached technical drawing.



9 ALIGNMENT PREDISPOSITION

This MPA product can be prepared with alignment function.

Please, read the attached technical drawing.

10 MAINTENANCE

10-1 Personnel in charge

OPERATOR: person trained for the normal use of the tool machine and authorised to perform any adjustments or simple maintenance jobs.

TECHNICIAN: qualified and authorised person who performs complex maintenance and repair jobs.

10-2 Scheduled maintenance



DANGER All maintenance jobs must be performed when the machine is inactive and in safe conditions for the operator. These operations must be performed by sufficiently trained and skilled mechanical technicians.

Personnel required: **Operator**

- **On a periodic basis:**

Visually check that there are no leaks of lubricant from the MPA product. In case leaks are found contact the MPA engineering department.

Personnel required: **Operator**

- **Every 500 hours of use:**

Every 500 hours of use, re-lubricate the MPA product . You can find lubricant type on the nameplate fitted on the MPA product.

The MPA product is equipped with 2 threaded holes (closed) that must be used lubrication operation.

Operating procedure:

- Unscrew and remove the caps specifically listed in attached technical drawing and screw in a greasing valve;
- inject new lubricant until the new lubricant come out from the other hole;
- run the MPA product at **low speed** to facilitate the outflow of lubricant injected in excess;
- turn off the machine tool, remove the greasing valve and close the holes with plugs unscrewed previously;
- Please read the technical drawing of the product to locate the position of the greasing points.



ATTENTION

it is possible that MPA product can have feeding hole for greasing the spindle axis bearings. Please, read the attached technical drawing.



IMPORTANT

Never apply excess lubricant, as this will cause the hazardous overheating of the same head when it is in use.

Only use the type of lubricant indicated on the nameplate.

Personnel required: **Technician**

• **every 12 months or 2000 hour of application:**

It is advisable to take the head off to visually inspect the Kinematic devices, to check the wear of the bearings and the seals, and to replace any worn components. Replace the old lubricant with fresh lubricant of the same type as indicated on the nameplate, filling the spaces to be lubricated by about 1/3 of their volume.

When this operation has been completed, check if the head works efficiently and make sure that there are no leaks of lubricant.



ADJUSTMENT

For this intervention and/or any other not mentioned above, it is advisable to contact MPA srl directly.

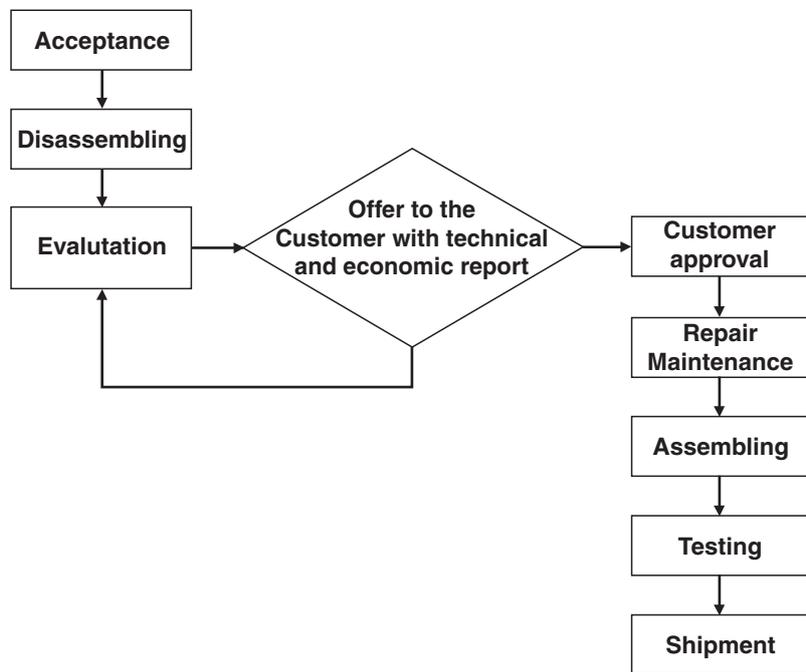


11 AFTER-SALES SERVICE AND SPARE PARTS

11-1 Customers service

MPA guarantee direct service for the product:

Flow-chart:

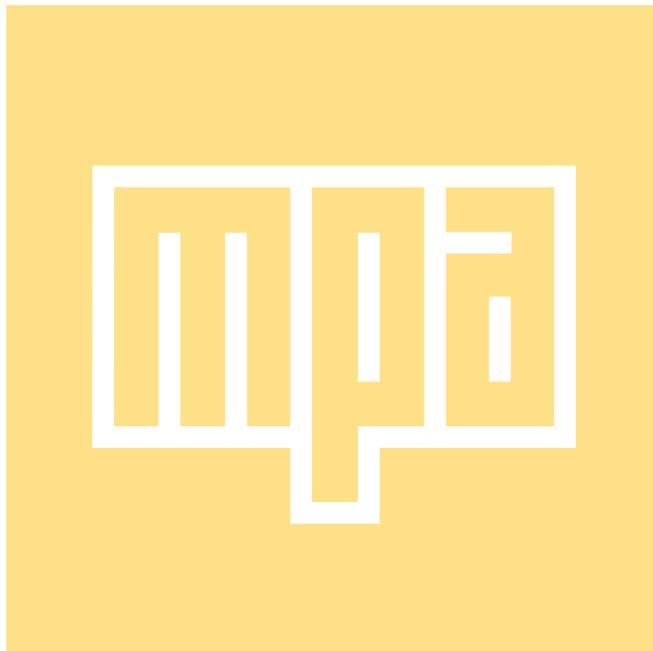


11-2 Spare-parts service

Indicate the following information when ordering spare parts:

- type and code of the MPA product
- serial number of the MPA product

MPA guarantees the supply of spare parts for its products without time restrictions.



MPA srl

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