A large industrial machine, the MEC-PLD-400x150, is shown with its front door open. The machine is white and grey, with a control panel on the right side featuring a digital display and a red emergency stop button. Inside the machine, a polishing head is visible, mounted on a vertical axis. The machine is set against a background of orange and white geometric patterns.

MEC-PLD-400x150

CIRCULAR and **VARIABLE SECTION** **CAVITY POLISHER**

(moulds for glass, plastic...)

Efficiency, speed and flexibility
in any internal circular geometry
polishing process

MECO
MACHINES

CE

MOULD POLISHER

MEC-PLD-400x150-CNC

MECO has entirely developed and manufactured the revolutionary MEC-PLD-400x150-CNC, an innovative polishing machine for circular moulds with a continuous surface, which is especially useful for the glass containers industry, and for all kinds of mould manufacturers.

This machine enables the polishing of moulds of any material, whether it be cast iron, bronze or steel, at a speed and to standards of precision and perfection which are exceptional in the industry. It is a development which was needed as a replacement for the obsolete machines still used in the sector and to finally do away with manual operations.

Its multiple innovations, such as the two independent heads or the vectorial motors—which enable a high working range at different speeds and frequencies— together with other improvements, make it an ergonomic machine. The MEC-PLD-400x150-CNC therefore offers you high productivity plus quality and safety.

The CNC system controls the 3 machine axes simultaneously, thus allowing a specific programme to be produced for each mould. The sophisticated but intuitive control built into the MEC-PL-400-150-CNC also enables sectorised programming of the full height of the mould to be polished. The mould can be divided into 10 completely independent sectors in its programming, thus optimising the working parameters, rotational speeds and feeds according to the area of the mould being worked on.

The remote connection system built into the machine enables technical assistance tasks to be carried out remotely, besides other functions such as the updating of new improved software, etc.

The machine also incorporates an uploading and downloading system which is especially useful for sharing programmes between different work centres equipped with the same machine.



SYSTEM DESIGNED AND MANUFACTURED IN SPAIN

The MEC-PLD-400-150-CNC polisher has been designed by our engineers from the beginning to satisfy the highest quality and safety standards. Only the best materials are used in its manufacture, and the commercial components used are always recognised international brand names. This all places the MEC-PLD-400-150-CNC polisher right at the top in terms of machine quality and performance.

MAXIMUM EFFECTIVENESS FOR YOUR MOULDS

Innovative and revolutionary system

The MEC-PLD-400x150-CNC incorporates improvements and innovations which give it the edge in productivity, effectiveness and safety over other polishers in the market.

Precision, perfection and shorter execution time

The ability to adjust the working parameters for each mould in a sectorised manner makes it possible to achieve hitherto impossible standards of precision in the work, in addition to a big reduction in working times. The ability to exchange programmes between users facilitates ongoing improvement of the polishing processes.

Versatility

Enables the polishing of circular continuous surface moulds of up to 450 mm in height and 250 mm in diameter.

Greater productivity

The incorporation of a double head allows two moulds to be polished simultaneously and independently according to two separate programmes.

All kinds of polishing

The polisher allows the option of using different models of abrasive disks and brushes to achieve a perfect polish according to the requirements of each mould.

Latest technology

The latest generation vectorial servomotors employed follow the programming sequences with absolute precision, thus guaranteeing the repeatability of jobs and, as a result, adherence to programmes designed by the user.

Tool durability

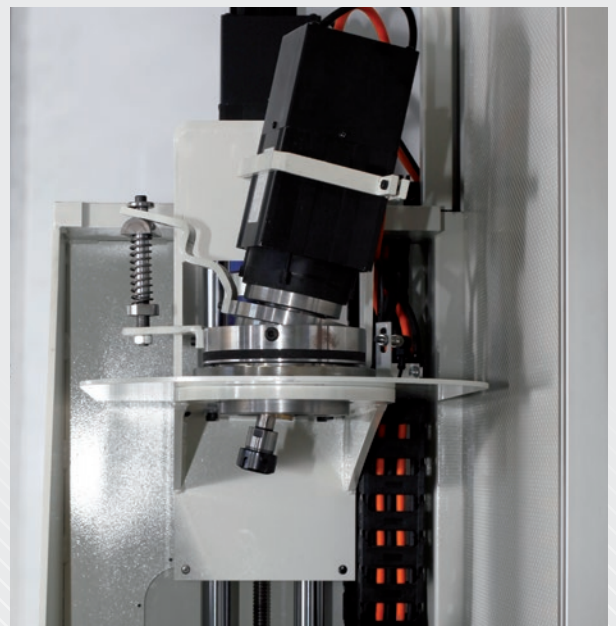
The durability of the tools in the MEC-PLD-400-150-CNC polisher is greater than in any other machine. This is because by correctly programming the working parameters, the working life of the tool can be maximised. The programmes can be modified quite simply, creating secondary programmes according to whether the tool is new or already has a degree of wear.

Ease of use

The machine can be used by any semi-skilled operator after a short training course.

Cleaning and maintenance

The design of the machine facilitates quick and easy cleaning of dust and other waste that may gather in the work area. Most of the dust generated during the polishing work is removed from the work area via extraction ducts provided for the purpose. Nearly all parts of the machine require no maintenance, other than a few marked points which need greasing at certain intervals.





UNIQUE ADVANTAGES FOR A PERFECT POLISH

1 / Sequential programming

The ability to divide the mould polishing into up to 10 different sectors ensures uniformity of polishing over the whole surface.

2 / Programme storage

The machine software can memorise a multitude of mould configurations.

3 / Total connectivity and interface with the operator

The MEC-PLD-400x150 mould polisher uses:

- Remote connectivity applicable to both programme exchanges between machines and to troubleshooting via the Internet from MECO:
- Complete, intuitive and easy-to-use software.

4 / Time saving and elimination of manual processes

With the MEC-PLD-400x150 a complex profile mould can be polished in 1-3 minutes depending on the required standard of finish. Skilled operators are not needed.

5 / Semiautomatic mould loading system

The loading table travels smoothly on guides to load the heavy moulds semiautomatically. No unnecessary effort is involved.

6 / Automatic securing by electromagnet

The moulds are secured by electromagnets, without clamps. This prevents any clamp rotation, thus enabling perfect and absolutely secure polishing.

7 / Automatic mould centring

The innovative MEC-PLD-400x150 system allows the mould to be centred automatically independently of the operator's skill.

8 / Ergonomic design

The MECO polisher has been designed with a view to operator comfort and safety. The work can therefore be done easily and confidently, fully protected and without any physical effort.

A UNIQUE POLISHER FOR INDUSTRY

The MEC-PLD-400x150-CNC has been designed to make up for the lack of automation and to replace obsolete machines currently used in the mould polishing sector after turning or milling, or in the glass industry in the case of mould maintenance.

More specifically the MECO polisher is ideal for:

- Bottle moulds
- Perfume moulds
- Pharmaceutical moulds
- All kinds of circular moulds

TECHNICAL CHARACTERISTICS

General technical characteristics

Machine dimensions	1570 x 1830 x 2600 mm
Machine weight	2000 Kg
Apparent power	5 Kw
Air requirements	Not needed
Extraction intake	Ø50 mm
Magnetic force per station	600 Kg
Type of magnet	Electromagnet
Cabin lighting	700 lumens
CNC	3 simultaneous axes
Status signalling	2 (one per head)
Homologation	CE, UL or other standards that may apply
Oscillation drive	By belt
Inclination pressure	By spring
Remote connection system	Yes
Programme uploading and downloading system	Yes



Características técnicas del cabezal

	Power	Revolutions	Output speed (max)	Working range
Rotation motor	0.75 kW	3.000 rpm	3.000 rpm	1.000 rpm - 3.000 rpm
Oscillation motor	0.55 kW	1.500 rpm	143 rpm	70 rpm - 143 rpm
Lifting motor	0.5 kW	3.000 rpm	6.000 mm/min	10 mm/min - 6.000 mm/min

MECO, advanced mechanical engineering

MECÁNICA COMERCIAL MECO, with over 30 years' cumulative experience, is a company headed by the Peirón family whose business is the development of advanced mechanical engineering projects, whether they be designs based on customers' needs or its own innovations and creations. During these more than three decades, MECO has also become the most reliable partner for industrial engineering and maintenance projects at the most important factories in its catchment area, and at some abroad.

In 2000, MECO developed an innovative notching machine which was quite a revolution in this sector because of its high precision, speed and ease of use. It is a system which has been patented and developed entirely by the MECO team, and has been successfully introduced into more than 20 countries around the world.

At the present time, in addition to its marketing of several types of machine tools and the establishment of the industrial maintenance service, MECO has an R&D department dedicated to the development of new machines and equipment for industry, to meet the specific needs of customers, or simply to introduce new devices into the market.



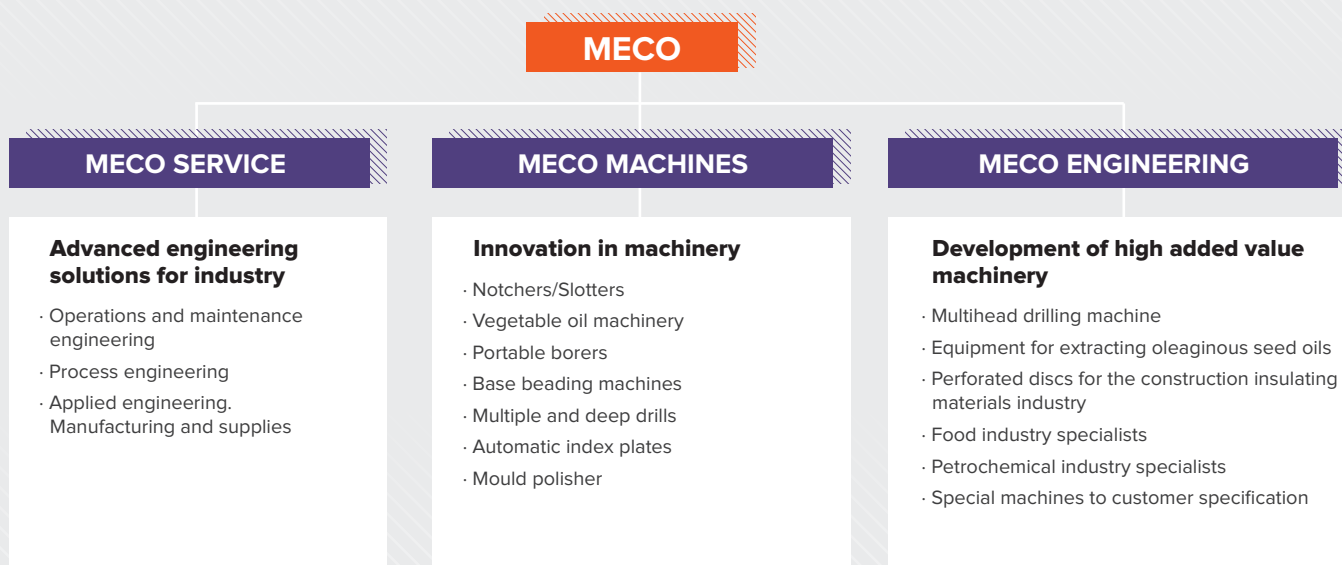
A FAMILY COMPANY WITH INTERNATIONAL VALUES

- ✓ Innovation
- ✓ Teamwork

- ✓ Professionalism
- ✓ High involvement

- ✓ Customised service
- ✓ Quality and precision

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