FAST MOVING TECHNOLOGY



Magnetic clamping QMC 123

Premium line | Plastics industry



Magnetic clamping QMC 123, next generation



Strategic partnership

When two world leaders in the plastics industry, experts in magnetic mould clamping, combine their skills, the result is a new generation of magnetic clamping solutions bringing together technological expertise and mastery of applications from both companies. The recent partnership between Stäubli and MAG-Autoblok Tecnomagnete combines the technology of Stäubli's leading edge in high precision force measurement and control with the compact and robust design of the magnetic plates from MAG-Autoblok Tecnomagnete.

STÄUBLI

TECNOMAGNETE

Innovation and safety at the heart of our developments

With its innovative technology, Stäubli's clamping solutions are designed to meet the needs of industry 4.0.

Our efficient and easy to use magnetic clamping systems give you the flexibility required to increase the production capability of different parts.

Adaptable to all injection presses and mould sizes, magnetic clamping does not require any modification of existing moulds.

As above the need for frequent production changes, this technology is highly rated for its versatility, simple implementation and its ability to optimise productivity. Based on solid expertise and an in-depth analysis, Stäubli provides personalized support in order to provide with you the solutions which will increase productivity and set up a process SMED.

Our priority is customer satisfaction

With strong expertise in quick mould change solutions, we will support you at every step, from the design of your project through its implementation. Throughout the product life cycle, we will provide you with comprehensive and quality service.

IMAG EDITOR

The IMAG Editor software allows you to calculate the clamping force of each mould. This information makes it possible to anticipate any problems prior to starting production.

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On-site support

Stäubli's international network provides local service. Our teams of qualified technicians ensure installation of the systems and offer a fast and efficient after-sales service.

Training

Once the installation is complete, Stäubli provides training to ensure that users are familiar with all available features and can perform operations safely.

Customer portal

Safe and Secure, the customer portal gives you access to information about your systems.

Features dedicated to safety



Securing production, personnel and the working environment. The QMC 123 system ensures compliance with the most demanding safety and security guidelines as standard.



Displaying the clamping force and comparison with the opposing forces of the press: the clamping force of each mould half is measured and displayed in real time on the IMAG screen. If the values are insufficient an alert message is displayed to the operator immediately.



Mould movement anticipation

The complete unit comprises of precision measurement coils, capable of detecting changes in flux and therefore anticipating movement of the mould.



Temperature monitoring

A message and an alarm alert the operator in the event of excessive temperature of magnetic plates.



Standards The QMC 123 system ensures standard compliance with safety guidelines and the most demanding: EN201: 2009, Directive 2014/35/EU and 2014/30/EU.

Stäubli

All the info you need in the palm of your hand

Fully controlled clamping/unclamping operations

Thanks to the IMAG Technology, the touch screen hand pendant allows the operator to easily view and confirm that all safety points/checks have been completed before clamping/unclamping. These safety operations are simple to follow via the user interface:

- Press ready signal when the door is closed
- Select mould changing mode
- Lock mould in place
- Confirm crane is attached

Various other functions

- 3 user levels with codes dependent on the authority level:
 - Service mode (Stäubli technician): installation, setting parameters and maintenance
 - Chief operator mode: access to the history, date, language, PIN code, machine forces and setting parameters
 - Operator mode: all the information necessary for mould changing operations
- Personal access for each user
- User interface available in numerous languages.









Innovative design and manufacturing process



Each magnetic plate is customised to meet your exact specifications

The custom made design adapts to the press, the mould stock and other necessary requirements.

Specific machining is available for fixing points, shape of the magnetic plate, centering ring etc.



Our magnetic plates, with their honeycomb design and metal construction, provide a constant clamping force during the manufacturing process. The reinforced insulation of the electrical parts and the monolithic construction, ensure the system is reliable even under the most demanding conditions. Moreover, QMC123 is IP65 certified.

Thanks to these features, QMC123 is very resistant to shocks.



Magnetic technology

Magnetic technology is fast, simple and requires no adaptation of the moulds. It is particularly suitable for frequent mould changes and moulds with non-standard dimensions. Magnetisation and demagnetisation operations are carried out by simply pressing a button. For an example, magnetisation for 180 magnetic modules can be achieved in less than 1 second. QMC 123 systems are energy efficient, as electricity supply is only required for magnetisation and demagnetisation. Once magnetised, clamping is guaranteed, even in the event of power failure.





Knowledge and use of the most innovative electronic technology

By fully controlling the design and manufacture of our magnetic clamping systems, from the development of the controller to the industrialization of the magnetic plates, Stäubli's solutions are 100% quality assured.



| Pole size (mm) | Ø 67,8 | |
|--|------------|--|
| Plate thickness (mm) | 46 | |
| Maximum working temperature (°C) | 120 | |
| Supply voltages (V) - others available on request | 380 to 480 | |
| Frequency (Hz) | 50 or 60 | |
| Machine clamping, force clamping of the machine (T) | 50 to 4000 | |
| Ejection holes according to the specification | | |
| Mounted on all of our systems, as standard - Temperature sensor on each plate | | |

- if necessary moving side
- Fixing screw

For other operating conditions: please contact us.



Construction of a Magnetic module of a QMC123 platen



• Stäubli Units O Representatives/Agents

Global presence of the Stäubli Group

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