

QMC 122 Features Magnetic clamping system





What makes the QMC 122 magnetic clamping different ?

- Anticipated detection of mold movements: each magnetic module is fitted with a very precise measurement coil. The mold is thus monitored at all points and the slightest movements are detected.
- **Display of the clamping force** and comparison with the opposing forces of the press: the clamping force is measured and displayed in real time on the IMAG screen. If it is too low, a message immediately alerts the operator.
- The clamping/declamping operations are fully controlled thanks to the IMAG system: the operator confirms all the safety points necessary in advance of clamping/declamping operations.
- Mold stock referencing: to monitor the clamping performance, the features and initial clamping force of each mold is pre-recorded. Thus, every variation is detected and signalled to the operator.
- **Temperature control**: a message and an alarm alerts the operator in the event of excessive plate temperature.

Advantages of the QMC 122 Magnetic Clamping

The magnetic technology is fast, simple and requires no work on the molds. It is especially suitable for frequent mold changes and molds with non-standard dimensions. Magnetisation and demagnetisation operations are done by simply pressing a button.

- Numerous safety functions
- Very low energy consumption
- Magnetisation in less than 1 second
- Uniform clamping: significant reduction of mold wear

Recommendations

- Contact area: mold to plate contact area is proportional to holding force. Deep drawn parts with a small footprint must be reviewed.
- Material composition: acceptable mold base materials are 1020, 420, 4130 and DME#7.
- Base plate thickness : All magnetic flux generated must be absorbed by the base plate steel. All mold bases must be a minimum of 0.79 inch thick.
- Surface quality: it is important to ensure that the magnet and base plate are free from dirt, debris and rust. These can create air gaps which reduce holding force.



Main features of the IMAG interface

- There are three user levels: Service mode (Stäubli technician), Chief operator mode, Operator mode.
- You have access to the history of operations carried out.
- The user interface is available in several languages.



How does the QMC 122 system work?



Technical characteristics

•	Pole size	2.36 in
•	Plate thickness	2.05 in
•	Maximum working	212°F
	temperature	
•	Supply voltages	200 to 480 V
		Others on request
•	Frequency	50 or 60 Hz
•	Machine clamping force	55 - 4409 ton

• Ejection holes according to the specifications

Mounted on all of our systems, in standard

- Temperature sensor on each plate
- Force measurement: flow sensor on each pole
- Removable centering ring, fixed side and if necessary moving side



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