

agneti

Magnetic clamping technique



For thermoplastics, elastomers, duroplastics, pressure die casting and metal forming

M-TECS M-TECS M-TECS

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M-TECS magnetic clamping systems provide evident benefits:

Injection moulds, even if not standardised, can be easily and swiftly changed without need for retooling. As a result of a clamping force which is evenly distributed all over the clamping surface, tool wear is considerably reduced which means lower tool maintenance costs. With no moving parts, the system is basically maintenance-free. It is suitable for fitting onto existing injection moulding machines or incorporating into new machines.

M-TECS 130 being stable up to 130°C largely covers the whole temperature range that may occur in the thermoplastics processing industry. The magnetic poles have been designed to build up a clamping force of between 5 and 12 kg/cm². Highest quality materials are used for the long pole design which is based on a double-magnet technique. Its outstanding power concentration makes the system much stronger than any comparable magnetic plates.

Applications:

- thermoplastics processing
- processing of large workpieces, bumpers, dash boards etc.
- model machines and small-lot production

Special features:

- double-magnet technique
- Iong pole design
- M-TECS power concentration

Technical data M-TECS 130-K

Max. temperature	130°C	
Spec. magnetic force	8 kg/cm ²	
Effective magnetic force	5-12 kg/cm ²	
Magn. penetration depth	15-20 mm	
Plate thickness	47 mm	
Fastening	as per Euromap	
Available for machines of between 300 kN and 50,000 kN.		
Larger systems on request.		





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Hilma-Römheld GmbH Schützenstraße 74 · 57271 Hilchenbach, Germany Phone +49 (0) 2733 / 281-0 · Fax +49 (0) 2733 / 281-169 · www.hilma.de Subject to technical modification



Applications:

- processing of rubber and duroplastics
- production of O-rings and rubber parts
- manufacture of fibre-reinforced components (SMC, GMT)

Special features:

- resistant to temperatures of up to 240°C
- double-magnet technique
- Iong pole design
- M-TECS power concentration
- two designs: standard version for presses power version for injection moulding presses

Technical data M-TECS 240-G

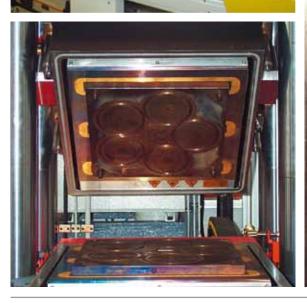
Max. temperature	230°C (240°C on request)
Spec. magnetic force	18 kg/cm ²
Effective magnetic force	single: 2-7 kg/cm ² , double: 5-12 kg/cm ²
Magn. penetration depth	15-20 mm
Plate thickness	47-85 mm (85 mm including heating plate)
Fastening	as per Euromap
For presses and injection moulding presses of any size,	
vertical and horizontal, with or without heating	



M-TECS 240 opens up brand new paths for the rubber and the duroplastics processing industries. With no downtime or waiting time to cool down or heat up tools, retooling times can sometimes be cut by hours. Using the advanced magnetic clamping technique, moulds can be changed even when they are hot as the operator will not make contact with them at all. This is both convenient and safe.

The magnetic plates have a complete metal surface. With no T-slot between the heating and the tool, temperatures inside the tool are quite homogeneous, which gives an enhanced production quality.

A real highlight is the magnetic clamping plate M-TECS 240 with an integral heating plate. Basically, M-TECS 240 is available in various designs, with or without heating, for presses, injection moulding machines or for vacuum techniques.





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A convincing technique to rely upon.

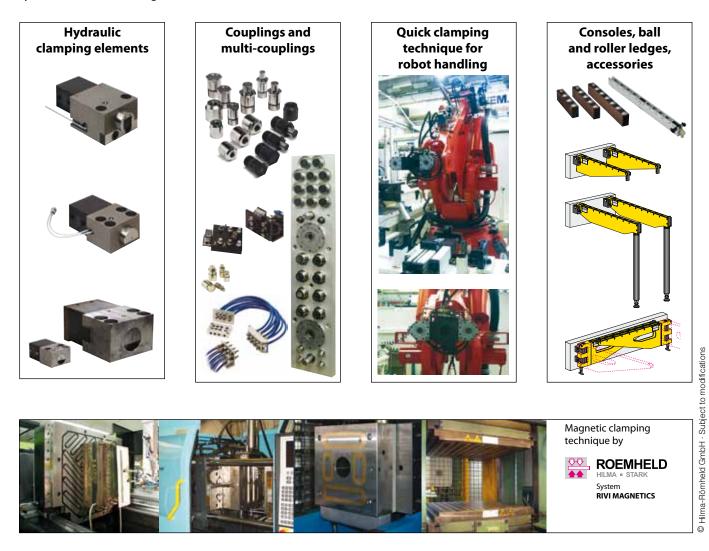
Basically, the electric permanent magnet clamping system is firmly kept in place even in the case of a power failure: electricity is required for just 1–2 seconds to first magnetise the system. Then permanent magnets generate the required magnetic clamping force so that the system operates independently of any power source.

Only for releasing the mould is electric power required again (for 1– 2 seconds) in order to demagnetise the clamp-ing plate. The integrated electronic controls monitor the magnetic force and the tool centre and protect the system from overheating.

Guaranteed adaptability to any power level and any system design.

M-TECS magnetic clamping systems have been CE tested and comply with the provisions of the applicable machine guidelines 98/37EEC, 73/23 EEC, EMC 89/336. The magnetic plates can be designed to fit various tool sys-

tems. With their highly flexible layout, they may be adapted to suit a large range of sizes and shapes. Each pole can be considered as an independent power source. Standard or special designs are available.



Friedrichshütte Römheldstraße 1–5 35321 Laubach Germany

Tel.: +49 (0) 64 05 / 89-0 Fax: +49 (0) 64 05 / 89-211 E-mail: info@roemheld.de www.roemheld.de

Stark Spannsysteme GmbH Kommingerstraße 48

6840 Götzis Austria

Tel.: +43 (0) 55 23 / 6 47 39-0 Fax: +43 (0) 55 23 / 647 39-7 E-mail: verkauf@stark-inc.com www.stark-inc.com

Friedrichshütte GmbH

Friedrichshütte 11–13 35321 Laubach Germany

Tel.: +49 (0) 64 05 / 8 26-2 91 Fax: +49 (0) 64 05 / 8 26-2 60 E-mail: info@friedrichshuette.com www.friedrichshuette.com

Hilma-Römheld GmbH

Schützenstr. 74 57271 Hilchenbach Germany

Tel.: +49 (0) 27 33 / 281-177 Fax: +49 (0) 27 33 / 281-113 E-mail: qmc@hilma.de www.hilma.de

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