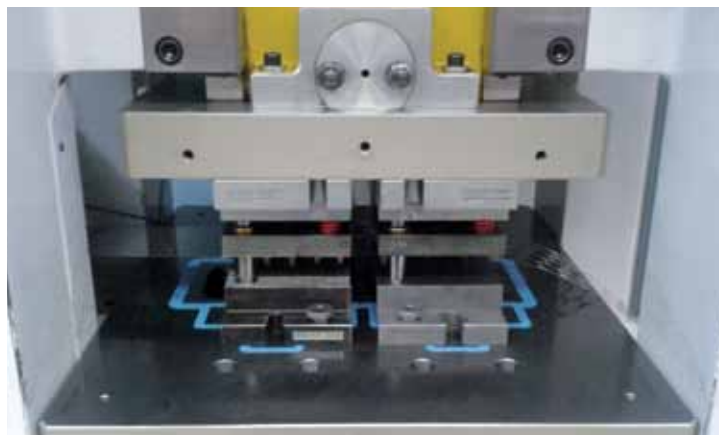


SYMPLI-L

THE ELECTROPERMANENT MAGNETIC SYSTEM



**DESIGNED TO QUICKEN THE MOULD CHANGE OPERATIONS
ON FORMING AND TRIMMING PRESSES**



MOLD CLAMPING IN JUST A FEW SECONDS

SAFETY

The magnetic modules type **SYMPLI-L** feature a sturdy steel structure along with high-quality alnico and neodymium magnets on its inside.

The magnets are arranged in a chessboard pattern by alternating north and south poles, thus generating an adhesive force upon their magnetization.

The corresponding activation is carried out by means of an electronic device and is performed in less than one second.

The magnetic module remains therefore magnetized as long as required, without any further energy supply.

BEST CLAMPING

Unlike traditional clamping methods, the magnetic system **SYMPLI-L**, generates a uniform clamping force all over the mold surface, thus avoiding any tension and deformation.

In this way, the mold preserves its mechanical features, guaranteeing at the same time a better quality and repeatability as far as the molded parts are concerned.

VERSATILITY

The **SYMPLI-L** system is suitable for any type of injection moulds on already existing or newly designed machines, allowing to exploit the whole available surface of the machine beds. Whatever their shape and dimensions, the moulds are easily anchored without having to modify the sub-plate.

For moulds featuring a reduced or non-magnetic contact surface, there is the possibility of either mounting a suitable sub-plate or of using T-nuts provided on the machine bed.

UNIFORMITY

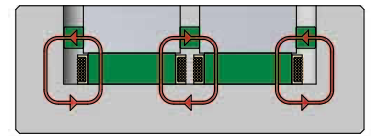
The versatility of the **SYMPLI-L** module results from the chessboard pattern of its magnetic structure, able to distribute the clamping force uniformly over its entire surface.

No matter the shape of the mold to be clamped, the penetration of the magnetic flux will take place without any problems, reducing to a minimum the leakage flux with a consequent enhancement in terms of clamping force.

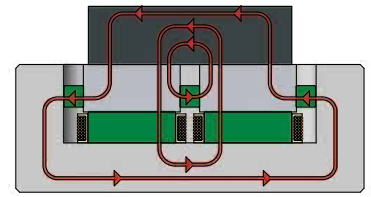
STURDINESS

As the **SYMPLI - L** modules are obtained by machining a single steel block, they offer an extremely high mechanical resistance.

The epoxy resin coating stands for excellent insulation of the magnets, longterm durability of the inner components.

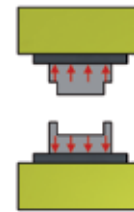
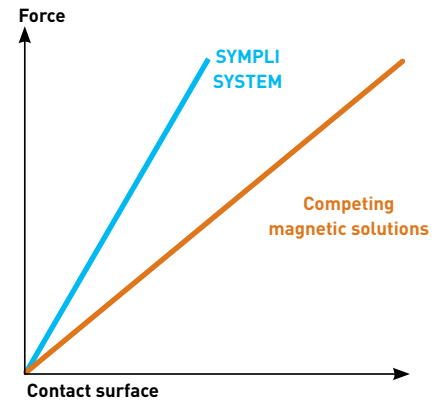


DEMAG CYCLE

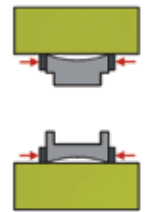


MAG CYCLE

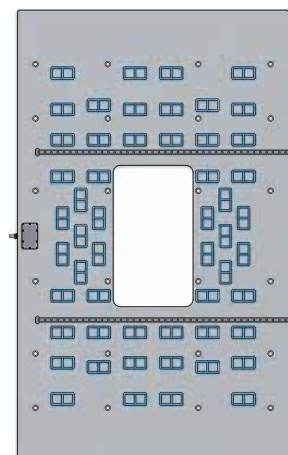
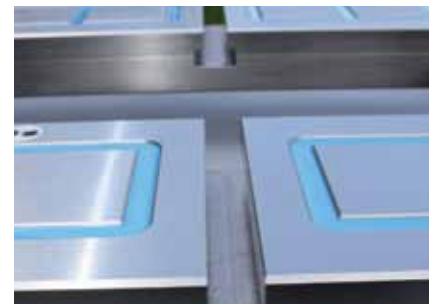
Actual force 785 daN/pole



Magnetic clamping with SYMPLI-L



Clamping with brackets



QUICK AND USER-FRIENDLY

MOLD CLAMPING IN JUST A FEW SECONDS!

The **SYMPLI-L** system offers the possibility of a considerably reduced mold change time as well as simplified and therefore user-friendly clamping operations.

1. Mold centering on the stationary platen with injection molding machine open.
2. Closing of the mold.
3. Activation of the **SYMPLI-L** system by key-switch.
4. Magnetization by pressing simultaneously the SAFE and MAG button of both stationary movable platen.
5. Molding machine ready for operation after just a few seconds.



ADVANCED ENGINEERING

ACTIVE MONITORING

An inductive sensor as well as an active coil monitoring system are integrated into the magnetic module, meant to ensure maximum safety during its operation.

A mold release of more than 0.2mm occurring in the automatic mode, for example, would immediately bring the injection molding machine to a halt.

Furthermore, the same sensors allow the system activation only if the mold has been properly positioned onto the magnetic module.

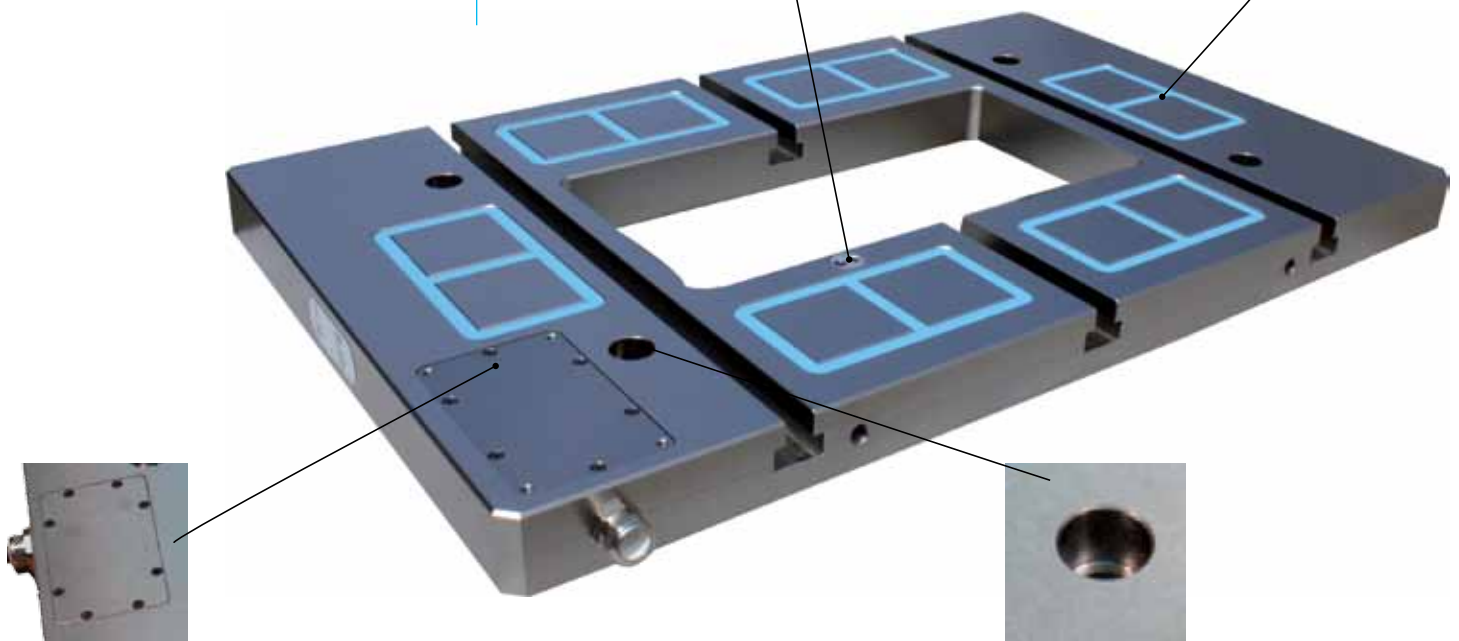
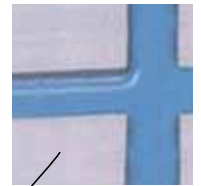
CHIPS DISCHARGE

Customized hole meant for the chips discharge.



RESIN

The highly resistant resin is obtained by means of an automatic vacuum filling process, during which also the chemical composition and crystallization properties are kept under control. Additionally, the resin lies at a lower level compared to the poles, in order to prevent it from any mechanical stress.



ELECTRICAL JUNCTION BOX

The built-in electrical junction box ensures maximum sturdiness.



FASTENING HOLES

By means of the customized fastening holes the magnetic modules can be anchored onto the IMM beds.



EVERYTHING UNDER CONTROL

GENERAL FUNCTIONS

Activation of the remote control by key switch



Safety button Temperature alarm Voltage presence indicator

Armored metal button
Enhanced LED backlighting



Electronic control unit
model USP dim. H400xL300xP1200

INDEPENDENT CONTROL

MOVABLE PLATEN



STATIONARY PLATEN

Demagnetization Magnetization Mold release alarm Mold adhesion

The electronic control unit features different safety devices to safeguard both operator and handled material. The key switch on the remote control prevents the system to be activated by unauthorized persons. Moreover, having to press the SAFE and MAG (or DEMAG) buttons simultaneously, unintentional activations or deactivations are avoided.

Another device measuring the point of saturation is meant to constantly ensure best magnetic performance. The **SYMPLI-L** system features furthermore a control panel comprising all the functions and indicating the different states of the system. In case of an unexpected mold release, for example, or if the magnetic module exceeds the maximum allowed contact temperature, the control panel notifies the operator immediately by means of corresponding alarms.

Last but not least, it supplies the necessary interface signals to guarantee a perfect synergy with modern injection molding machines or with those requiring retrofitting.

Its main advantage, however, lies in the fact that it enables the working cycle only after having detected the correct positioning and magnetization of the mold.

TECHNICAL FEATURES

TYPE	SYMPLI - L 70	SYMPLI - L 50
Magnetic force of each pole	785 daN	400 daN
Square pole size	70x70 mm	50x50 mm
Module thickness	45-51 mm	38-45 mm
Maximum contact temperature	150°C	150° C
Magnetic flux penetration dept	20 mm	10 mm
Activation field of the mould sensors	0,2 mm	0,2 mm
Available standard voltages	200/230/400/440/480 VAC, 50/60Hz	



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