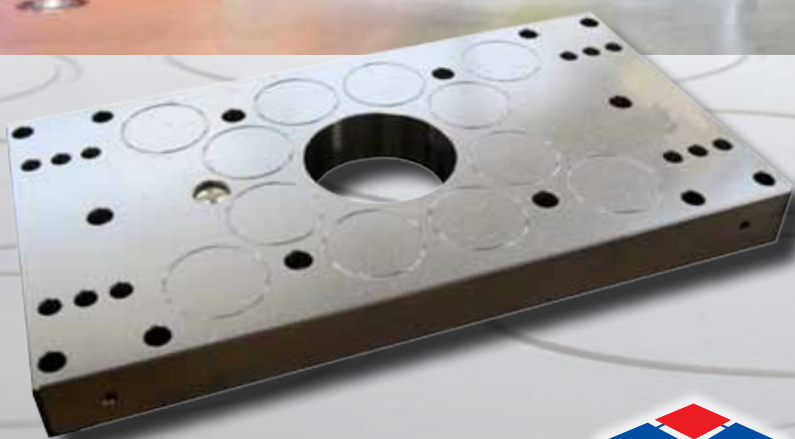


## Permanent-electro system for die clamping

- Easy to use
- Quick and safe clamping
- Suitable for dies of any size



A quick die clamping system changes the entire production process, allowing for lean production and small batches. StampTEC is at the heart of this change with no hidden time for fixing clamps, making adjustments or conducting tests between 2 production batches.



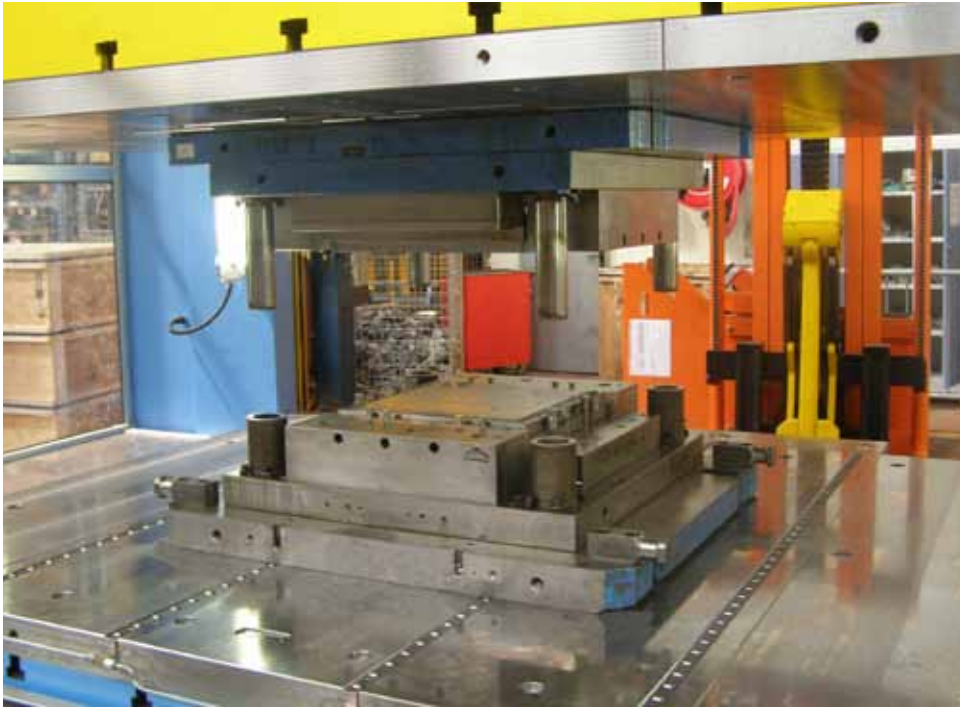
**TECNOMAGNETE®**  
Safety through power

## Easily adaptable on all presses

Consisting of 2 magnetic modules, it's easy to install and integrate into the existing machine and controls. Its modularity allows adaptability for any need. No modification to the press is required.

StampTEC is made to fit your press.

The new 37mm reduced thickness of the modules enables the full working height to be utilized. Bigger dies can be used in smaller presses.



Upper platen



Lower platen

## User friendly

One operator, with no tools, can operate the entire die-clamping process easily and in total safety outside the press.



Load die



Close press



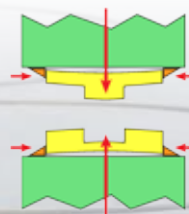
Push the button for upper, then lower platen



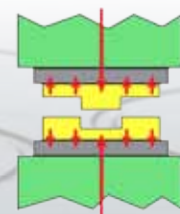
Open press... ready!

## Uniform clamping

The uniform clamping force allows repeatability and constant quality of the stamping process by eliminating any flexing of die shoe.



Traditional clamping



Clamping with StampTEC

## No die modifications

StampTEC is suitable for dies of any shape and size, with no modification.

Die standardization is unnecessary: reduced engineering time and overall costs.

If the die is not magnetic or when the die/magnet contact surface is too small, the die can be equipped with a common steel backplate.

The die face and part are not magnetized, allowing scrap removal without interference.



## Exclusive technology

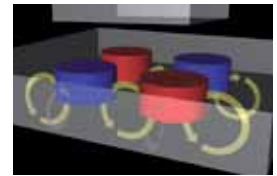
Initially applied on machine tools, then for the handling of ferrous loads and to clamp molds in IMMs, the Quadsystem technology is now available for metal stamping presses.

The patented Quadsystem double magnet circuit is composed of poles in a chessboard configuration machined into a solid block of steel.

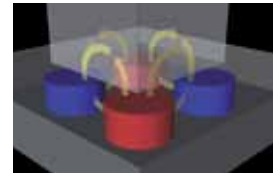
Each pole generates a constant, uniform and predefined force proportional to the number of poles in contact with the die surface.

The Quadsystem technology is not affected by electrical breakdowns; even without a power supply, the dies stay in position with the same strength indefinitely.

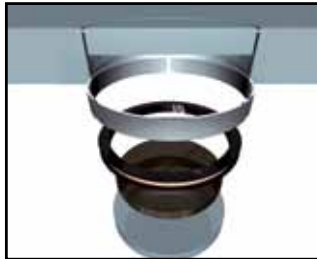
Even during a power failure, the system remains operative with constant clamping force.



MAG phase



DEMAG phase



## An impenetrable shield

The Quadsystem MONOLITE technology allows the creation of magnetic modules with a full-metallic clamping surface, without any sealing resin or any filling part.

This surface acts as a mechanical shield which is impossible to penetrate, enabling maximum durability without maintenance.

## GRIP Function

The Grip function allows the self clamping of the system to the machine platens.

The innovative magnetic circuit generates a powerful clamping force toward the die and the machine platens thus allowing to exploit the full machine performances.

Die, magnetic system and machine platens become a single block, magnetically clamped, with absolute rigidity, avoiding any vibration and deflections of the die thus granting higher precision and quality.



## Completely customizable



Reference pins can be added to speed-up the positioning of the die.

The lower magnet can be provided with a through hole for scrap removal.



The system is prearranged for "U" slots for the insertion of rollers on the machine platen.



StampTEC can match the T-slots of the machine table.

## “Error-proof” system

The ST400 control unit is designed according the EMC (Electro Magnetic Compatibility) norms; it monitors all operations and in case of failure stops the press.

Several safety devices are designed for avoidance of accidental MAG or DEMAG:

- Buttons must be activated simultaneously (SAFE function).
- Interlock key to prevent MAG / DEMAG by unauthorized personnel.
- Bottom dead center channel enable
- UCS current detecting system
- FCS system for magnetic flux detection
- Proximity sensors to check die presence and its correct positioning on magnet.



IPC Control



Pushbuttons

ST400 cabinet

On request StampTEC can be supplied with an IPC Interactive Power Control pushbutton.

Using a touch-screen it is possible to control all system functions and display the actual force generated by the magnet on each different die.

## Technical data - STG StampTec GRIP

Magnetic force on polar area	up to 16 kg/cm <sup>2</sup>
Magnetic force on die contact area	up to 90 tons/m <sup>2</sup>
Upper module thickness	37 mm (ST: 46mm)
Lower module thickness	37 mm (ST: 46mm)
“U” roller prearrangement on lower module	standard
Central hole for scrap removal on lower module	standard
Clamping holes	standard
Electronic control Unit type	ST400
UCS current detecting system	standard
Voltage	200-480V / 50-60 Hz
FCS flux detection system	standard
Digital pushbutton for MAG/DEMAG cycles	remote
Machine enable	standard
IPC - touch screen control with force reading system	on request
Additional enable key DCM (Die Change Mode)	standard
Control unit-modules connection, interface and power supply cables	standard
Proximity sensors (1 for each module)	standard
Set of fixing bolts	standard
Instruction manual and CE certification	standard

With StampTEC it's easy to achieve maximum efficiency and a fast return on investment.

Tecnomagnete's commercial network and our experience are at your disposal for any comparison in terms of convenience and efficiency.



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