

ELECTRO - PERMANENT SYSTEM FOR MILLING SQUARE POLARITY MAGNETIC CHUCKS



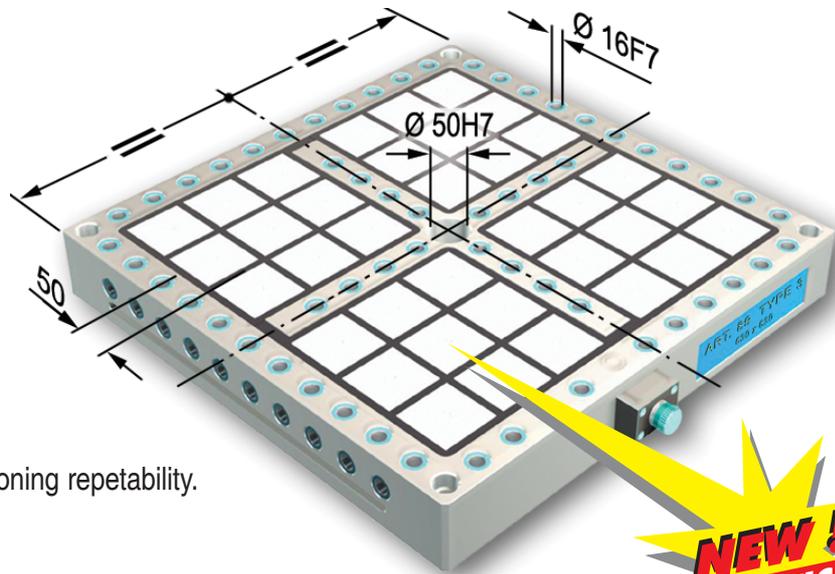
FIT FOR ANY MILLING APPLICATION

GRID MAGNETIC PLATES

**THE SECRET LIES
IN THE POLE PITCH !**

Grid magnetic plate
Art. 89

Center hole $\varnothing 50^{H7}$, lateral referenceres and grid pitch 50 mm with hardened bushings for a highest workpieces positioning repetability. Elicoids in inox steel



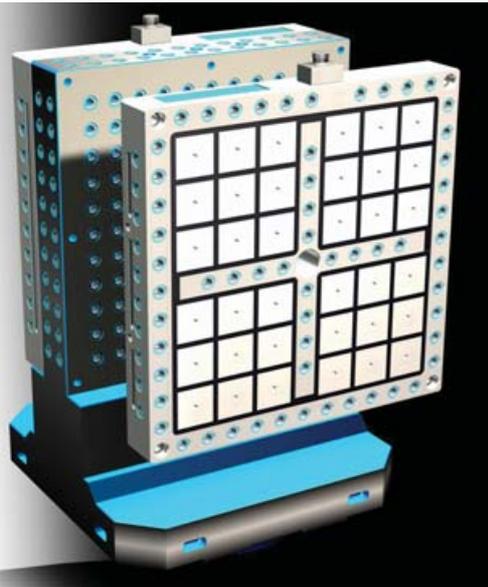
Solid grid crankweb integrated with pallet machine

TECHNICAL CHARACTERISTICS

High = 810 mm from the pallet - Width = 630 mm - Thickness = 320 mm
 Total weight = 1050 Kg
 N° 2 independent magnetic plates
 Magnetic pole = 70 x 70 mm (central hole M10 x 12) - Pole pitch = 80 mm
 Sliding chuck force = 200 daN - Max performance at = 65 mm - Ideal for pole shoes

ADVANTAGES:

- ♥ Highest rigidity, max vibration reduction
- ♥ Highest accuracy thanks to the one solid piece construction.
- ♥ No misalignment faults among pallet, tombstone and magnetic plate
- ♥ Weight and overall dimensions reduced compared to traditional fixtures
- ♥ Easiest and reduced machine set up times



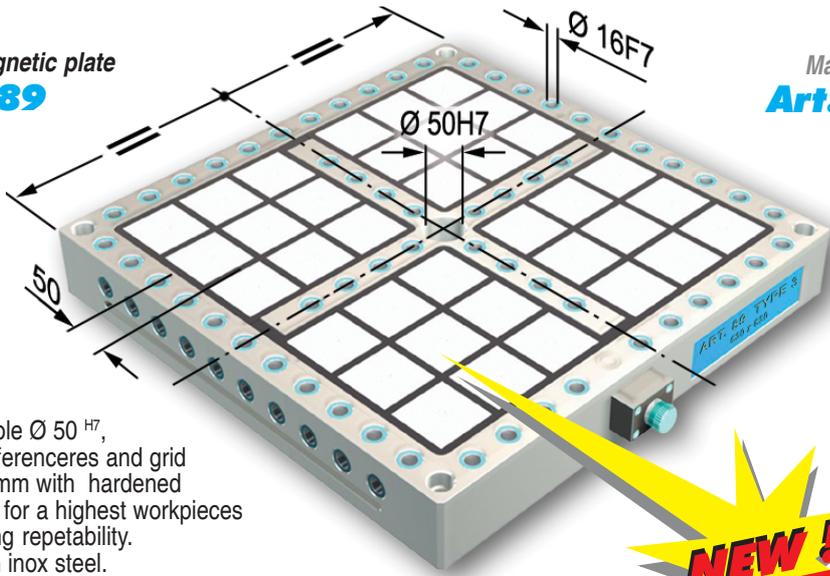
Solid grid crankweb
integrated with pallet machine

**Special solid cast iron tombstone
integrated with machine pallet
and magnetic plate**



FIT FOR ANY MILLING APPLICATION GRID MAGNETIC PLATES

Grid magnetic plate
Art. 89



Center hole Ø 50^{H7}, lateral referenceres and grid pitch 50 mm with hardened bushings for a highest workpieces positioning repetability. Elicoils in inox steel.

Magnetic plates
Art. 88/89

Type 1 Magnetic chuck 32 x 32 mm - Pitch 37 mm

LOW THICKNESS WORK-PIECES
Max performance at 8 mm height

Type 2 Magnetic chuck 50 x 55 - Pitch 60 mm

MEDIUM-LOW THICKNESS WORK-PIECES
Max performance at 40 mm height

Type 3 Magnetic chuck 70 x 70 mm - Pitch 80 mm

MEDIUM-HIGH THICKNESS WORK-PIECES
Max performance at 40 mm height
(Sliding chuck force: daN 180)

Type 4 Magnetic chuck 70 x 70 mm - Pitch 80 mm

THICK PARTS USING POLE SHOES
Max performance at 65 mm height
(Ideal for remote chuck shoes)



10 GOOD REASONS FOR CHOOSING THE ELECTRO - PERMANENT SYSTEM

- 1 - **No energy consumption:** the chuck absorbs power only for a few seconds during the magnetizing and de-magnetizing phases.
- 2 - **Always safe:** if during the working plase current is cut out, the chuck remains magnetized.
- 3 - **Immediate work loading/unloading piece:** only a few seconds for loading/unloading the piece from its working position.
- 4 - **Simple and practical:** very simple commands from the pushbutton panel.
- 5 - **Extremely accurate machining:** the fixing force is electronically proportioned to the machining at hand by precisely adjusting the magnetic power.
- 6 - **Perfect clamping:** since it is uniformly distributed along the surface, it allows a finishing quality without deformations.
- 7 - **Totally free working surface:** the working face are free and clear of neutral points used for mechanical fixing.
- 8 - **Flexibility:** prompt, since the discharged chuck is immediately ready to accept a new piece, even of a different size.
- 9 - **Reduction of others costs:** all structures and other dedicated casings are eliminated even as a traditional cost items.
- 10 - **Machine full exploitation:** during machining, all available working surface is used.

Often a power magnetic chuck is inadequate for machining with little removals.

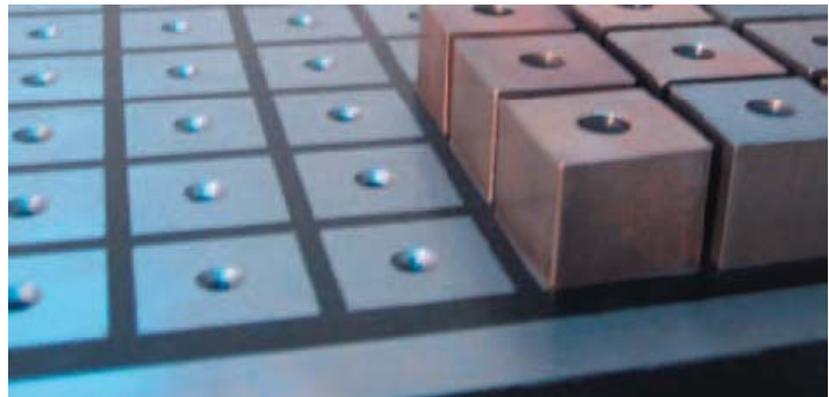
The magnetic field performs only when the flux is concentrated on the piece to be held, If the magnetic power, exceeds the thickness of the workpiece, it will decrease and may become inadequate for machining.

THE SECRET LIES IN THE POLE PITCH

The right choice of one magnetic chuck rather than another is represented by the ideal pole pitch for the machining at hand. The pole pitch determines the ideal chuck for executing a range of required machining operations. (See above **Art. 88/89**)

THE MAGNETIC CHUCK

The chuck structure is a whole monoblock solid plate (dug from a solid) while the magnetic and reeling parts are assembled under the supervision of an advanced and automated process. The resin treatment operation is done under vacuum to guarantee an insulation and a longer magnetic life.



Magnetic chuck plate without grid

THE POWER UNIT

Includes a push-button panel for magnetizing and demagnetizing the magnetic chuck. The mounting of the unit is made easy by the magnetic rubber applied on one side of the external box.

It includes a 5 m supply cable without a plug to the supply and a 5 m earth cable with a metallic cladding towards the magnetic chuck. The unit is preset for connecting a safety signal (machine enabling device) which prevents the machine from running when the chuck is not magnetized.



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