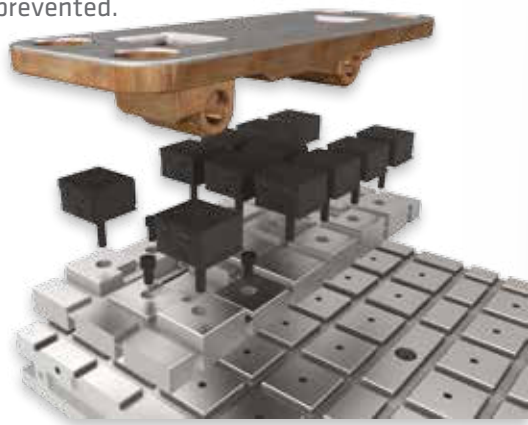


Magnaslot

Electropermanent Magnetic Chucks

The patented (EPM) ElectroPermanent Magnetic chuck with solid steel top and squarepole technology is the perfect clamping solution for milling.

Each pole is surrounded by opposite poles (chess pattern). Hence magnetic power flows in X- and Y- axis. The current impulse for magnetizing and demagnetizing is very energy efficient. By using fixed and mobile pole extensions the roughness of unmachined or bent workpieces can be compensated. Also a distortion will be prevented.



☺ An adapter plate with mobile poles provides maximum magnetic power for clamping the uneven workpiece

Features [HD 50]

- ☒ Pole size 50 x 50 mm
- ☒ Adhesive force \geq 350 kg per pole
- ☒ Magnetic field penetration up to 15mm
- ☒ A minimum of 2 alternate poles must be at least partially covered to get any power
- ☒ The more poles are covered the higher the magnetic clamping force



- ☒ Magnaslot HD or ECO ?
HD is recommended when workpiece sizes vary a lot from small to big.
ECO is sufficient when only larger workpieces are clamped.

Technical data

	Dimension [LxWxH]	Number of Poles	Weight	No.
High pole density (HD)	[mm]		[kg]	
304 HD 50	300 x 430 x 55 *	24	50	38335
306 HD 50	300 x 590 x 55	32	72	50613
308 HD 50	300 x 750 x 55	40	91	41485
404 HD 50	420 x 430 x 55	36	71	49812
406 HD 50	420 x 590 x 55 *	48	100	56130
408 HD 50	420 x 750 x 55	60	127	48641
410 HD 50	420 x 990 x 55	84	168	49787
508 HD 50	480 x 750 x 55 *	70	145	50615
510 HD 50	480 x 990 x 55	98	192	50249
606 HD 50	600 x 590 x 55	72	143	50541
608 HD 50	600 x 750 x 55	90	181	49574
610 HD 50	600 x 990 x 55 *	126	240	49319
Reduced pole density (ECO)	[mm]		[kg]	
304 ECO 50	325 x 370 x 55	20	42	63276
406 ECO 50	370 x 635 x 55	40	90	63277
408 ECO 50	370 x 790 x 55	50	120	64066
508 ECO 50	445 x 790 x 55	60	150	64072
608 ECO 50	580 x 790 x 55	80	170	63278
609 ECO 50	580 x 940 x 55	96	200	63279

* stock standard

↻ Magnaslot 400 x 800 mm with 32 x P75



↻ Magnaslot HD means: maximum pole number on given chuck size ***Pole number and chuck size define the chuck price***

Professional advantages

- ▶ All-around 5-side machining and distortion free clamping is possible in one clamp by means of pole extensions -> With given pole number the chuck can be covered with 3 x fixed and multiple mobile pole extensions for rough machining. If already machined side is clamped, then only fixed pole extensions may be advantageous
- ▶ Set-up time is reduced to a minimum, hence an increase of productivity
- ▶ Less vibrations for longer tool life and better process accuracy
- ▶ Patented solid top resists best to hot chips and coolance and cares also for heat dissipation

Technical data

	Dimension [LxWxH]	Number of Poles	Weight	No.
High pole density (HD)	[mm]		[kg]	
304 HD 75	327 x 425 x 60	12	62	48900
306 HD 75	327 x 601 x 60	18	87	49835
308 HD 75	327 x 815 x 60	24	118	52548
404 HD 75	415 x 425 x 60	16	78	52546
406 HD 75	415 x 601 x 60 *	24	110	49011
408 HD 75	415 x 815 x 60	32	150	49012
410 HD 75	415 x 1,029 x 60	40	188	50235
508 HD 75	503 x 815 x 60 *	40	181	52542
510 HD 75	503 x 1,029 x 60	50	228	49833
606 HD 75	591 x 601 x 60	36	157	52543
608 HD 75	591 x 815 x 60	48	212	52544
610 HD 75	591 x 1,029 x 60 *	60	268	49985

* stock standard

Features [HD 75]

- ↻ Pole size 75 x 75 mm
- ↻ Adhesive force ≥ 790 kg per pole
- ↻ Magnetic field penetration up to 24 mm
- ↻ Less sensitive to air gaps
- ↻ A minimum of 2 alternate poles must be at least partially covered to get any power. The more poles are covered, the higher the magnetic clamping force

Options

- ↻ Controllers and pole extensions -> see accessories on page 15

Application

- ▶ Clamping of small and big workpieces for milling
- ▶ Clamping without vibration and without distortion
- ▶ Process accuracy with plane parallelism 0.02/1000 mm and better

Accessories

For Electropermanent Magnetic Chucks

EPM chucks need a controller for switching ON/OFF. The magnetic power can be controlled in 8 steps.

Multiple chucks can also be switched at a time by a multi channel controller or with additional junction box JB in between chuck and controller.

A square pole 50 needs at 400V app. 0,5 A, a pole 75 app. 1A. The controllers are equipped with fixed 3m source cable for Plug 16A/32A. Each channel of the controller is connected with the chuck by a 3.5 m shielded, heat and water resistant cable with bayonet and terminal. For special purposes special connecting cables are available.



Controller D50/D100



Hand operating unit - pendant with 8 powersteps (with pin plug for connection with controller)



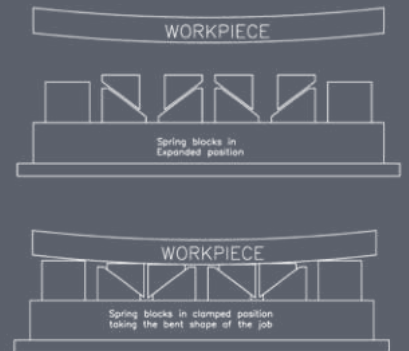
PVF fixed Pole extension



PVB mobile Pole extension compressed (left) and expanded (right)

Technical data

	Pole size	Dimensions	Version	No.
Pole extensions [Typ]	[mm]	[mm]		
PVF 50	50	50 x 50 x 32	fixed	38010
PVB 50	50	50 x 50 x 32 (+/-3)	mobile	38011
PVF 70	70	70 x 70 x 45	fixed	40127
PVB 70	70	70 x 70 x 45 (+/-5)	mobile	40128



Technical data

	Channel	No.
Controller [Typ]		
EPM-D50 to 50 A, with pendant	1	13070
EPM-D100 to 100 A, with pendant	1	52950
EPM-D100-4 to 100 A, with pendant	4	58088
EPM-D100-6 to 100 A, with pendant	6	60875



4-channel- operator panel for D100-4



Bayonet connection



Bayonet socket



Bayonet plug