MAGNETIC CHUCKS

Accelerate your work when machining ferromagnetic materials. Magnetic chucks are modern devices replacing vices, mechanical clamps and fixtures. Clamping and unclamping of the machined components is a matter of a moment, the workpiece is accessible from 5 sides, and the chuck does not damage the product. Thanks to this, you will reduce your production costs.



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Mastermill 50







When to choose a Mastermill 50 electropermanent magnetic chuck:

If you are looking for a versatile magnetic chuck for milling and drilling of small and large workpieces, then a Mastermill 50 chuck is the right choice. Using pole extensions, the material can be machined from 5 sides, drilled through, and uneven material can be clamped as well. For optimum clamping force, the required workpiece thickness is at least 12 mm. The standard version with steel/stainless steel pole plate can also be used for dry machining or with minimal coolant.

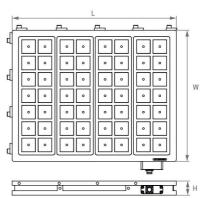
APPLICATION	TECHNOLOGY	CHUCK DIMENSION	HOLDING FORCE	POLES
	EP	1	£====3	
Milling	Electro-permanent	from 300 x 490 mm	170 N/cm ²	Square

Catalog number	Number of poles	W (mm)	L (mm)	H (mm)	Weight (kg)
MM50300490	24	300	490	51	49
MM50300600	32	300	600	51	61
MM50300800	40	300	800	51	82
MM50300900	48	300	900	51	92
MM50420490	36	420	490	51	70
MM50420600	48	420	600	51	86
MM50420800	60	420	800	51	114
MM50420900	72	420	900	51	128
MM50480600	56	480	600	51	97
MM50480800	70	480	800	51	130
MM50480900	84	480	900	51	146
MM50480990	84	480	990	51	161
MM50580800	80	580	800	51	157
MM50580900	96	580	900	51	177
MM50580990	96	580	990	51	194

Other important parameters:

Min. workpiece size: $50 \times 110 \times 12 \text{ mm}$ Regrinding limit: 5 mmPole size: $50 \times 50 \text{ mm}$

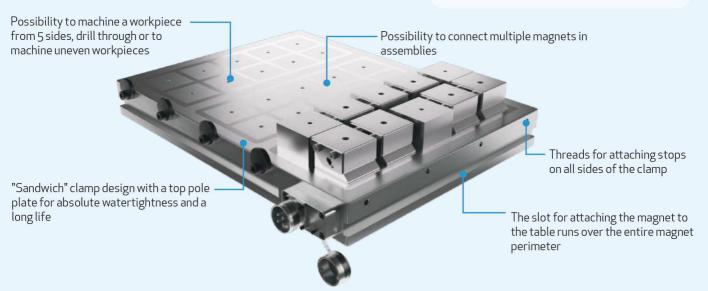
- + machining uneven parts up to 5 sides
- + clamping a wide range of workpiece sizes during milling
- + clamping for drilling large moulds, castings, blocks, structures, etc.
- + rough grinding of large parts
- + suitable control unit: LCC 10 XC or EP-CU 10 SW



Mastermill 70







When to choose a Mastermill 70 electropermanent magnetic chuck:

If you're looking for a powerful magnetic chuck suitable for heavy-duty milling and drilling of medium to larger workpieces, choose the Mastermill 70. Compared to the standard Mastermill 50 series, it offers larger magnetic poles of 70 x 70 mm, and higher performance when using pole attachments for clamping uneven parts or machining from 5 sides in one clamping. For optimum clamping force, the required workpiece thickness is at least 17 mm. Thanks to the steel/stainless steel top pole plate, this series of chucks is also suitable for dry machining or with minimal coolant.

APPLICATION	TECHNOLOGY	CHUCK DIMENSIONS	HOLDING FORCE	POLES
	EP	1	£====3	
Milling	Electro-permanent	from 300 x 620 mm	170 N/cm ²	Square

Catalog number	Number of poles	W (mm)	L (mm)	H (mm)	Weight (kg)
MM70300620	18	300	620	68	86
MM70300820	24	300	820	68	114
MM703001020	30	300	1020	68	142
MM70380420	16	380	420	68	74
MM70380540	20	380	540	68	95
MM70380620	24	380	620	68	109
MM70380820	32	380	820	68	144
MM703801020	40	380	1020	68	180
MM70460540	25	460	540	68	115
MM70460620	30	460	620	68	132
MM70460820	40	460	820	68	175
MM704601020	50	460	1020	68	218
MM70580620	36	580	620	68	167
MM70580820	48	580	820	68	221
MM705801020	60	580	1020	68	274

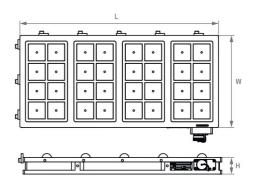
Other important parameters:

Min. workpiece size: 150 x 150 x 17 mm Regrinding limit: 6 mm Pole size: 70 x 70 mm

Use:

- + machining uneven and larger parts from up to 5 sides
- clamping a wide range of workpiece sizes during milling
- clamping for drilling large moulds, castings, blocks, structures, etc.

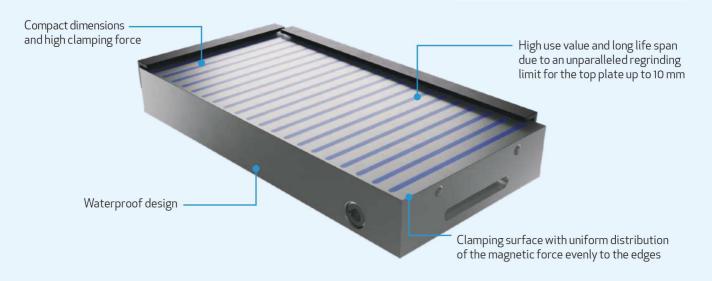
- + rough grinding
- + suitable control unit: LCC 10 XC or EP-CU 10 SW



Neomill Compact







When to choose a Neomill Compact magnetic chuck:

Milling, drilling, planing, or heavy grinding. The Neomill Compact magnetic chuck can be used anywhere where a particularly high clamping force and stability for clamping of relatively small and thinner workpieces are needed. This product is suitable for machining using coolant. If you are machining without coolant, it is advisable to use a Neomill magnetic clamp.

APPLICATION TECHNOLOGY CHUCK DIMENSIONS HOLDING FORCE POLES











Milling

Permanent

from 150 x 250 mm

160 N/cm² Transverse

Other important parameters:

Min. workpiece size: $25 \times 25 \times 6 \text{ mm}$ Regrinding limit: 10 mm

Pole pitch: T1511 + 4 mm - steel/epoxy resin

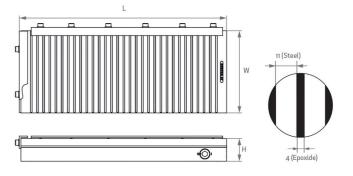
Additional information:

 optional accessories include additional pole plates that can be modified by milling or threaded for attaching clamping tools or stops

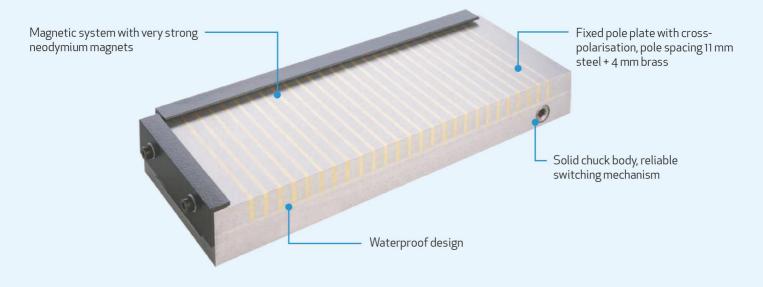
Use:

+ milling, drilling, planing, and power grinding

Catalog number	W (mm)	L (mm)	H (mm)	Weight (kg)
NEOMC150250	150	250	50	17
NEOMC150450	150	450	50	25
NEOMC200400	200	400	55	33
NEOMC200500	200	500	55	42
NEOMC200600	200	600	55	51
NEOMC250400	250	400	60	46
NEOMC300500	300	500	60	66
NEOMC300600	300	600	60	82



Neomill



When to choose a Neomill permanent magnetic clamp:

Use this magnetic chuck for milling, drilling, planing, and heavy grinding. With a clamping force of up to 160 N/cm2, it can handle even the toughest operations. It is also suitable for machining without cooling.

APPLICATION TECHNOLOGY		CHUCK DIMENSIONS	HOLDING FORCE	POLES
	P	\[]	± ± ± ±	
Milling	Permanent	from 150 x 250 mm	160 N/cm ²	Transverse

Other important parameters:

Min. workpiece size: 25 x 25 x 6 mm Regrinding limit: 6 mm

Pole pitch: T1511+4 mm - steel/brass

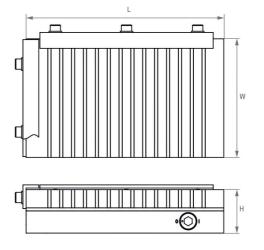
Catalog number	W (mm)	L (mm)	H (mm)	Weight (kg)
NEOM150250	150	250	55	17
NEOM150450	150	450	55	31
NEOM200400	200	400	60	39
NEOM200500	200	500	60	48
NEOM200600	200	600	60	55
NEOM250400	250	400	65	50
NEOM300500	300	500	65	72
NEOM300600	300	600	65	87

Additional information:

 optional accessories include additional pole plates that can be modified by milling or threaded for attaching clamping tools or stops

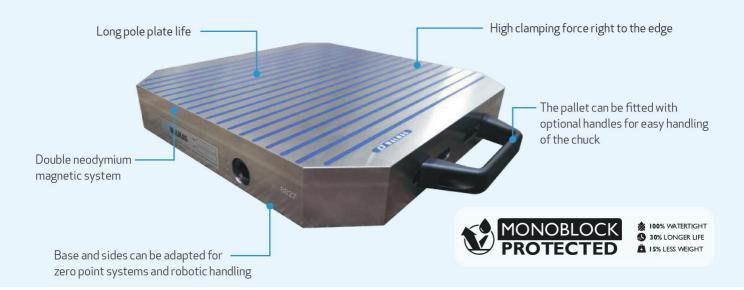
Use:

+ milling, grinding, drilling, planing





Neomill Compact pallet



When to choose a Neomill Compact pallet chuck:

The Neomill Compact pallet magnetic clamp has been designed for precise workpiece clamping in automated operations. It is suitable for machining, grinding, milling, EDM, and measuring operations, from smaller to medium and larger parts. You will use it everywhere a high clamping force and stability is required.

APPLICATION TECHNOLOGY CHUCK DIMENSIONS HOLDING FORCE POLES



P







Milling

Permanent

from 240 x 240 mm

160 N/cm² Transverse

Other important parameters:

Min. workpiece size: $25 \times 25 \times 6 \text{ mm}$ Regrinding limit: 10 mm

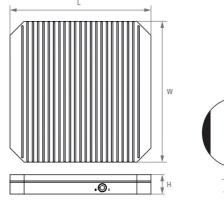
Pole pitch: T1511+4 mm (steel/epoxy resin)

Uses

- + clamping small and large workpieces
- + moderately difficult and fast milling
- + demanding flat grinding
- five-axis machining
- + electrical discharge machining EDM

Catalog number	W (mm)	L (mm)	H* (mm)	Weight (kg)
NEOM240240	240	240	49	21
NEOM280280	280	280	49	28
NEOM320320	320	320	49	37







Neopower pallet



When to choose a Neopower pallet magnetic chuck:

The Neopower pallet magnetic chuck is used for clamping of medium large up to large components on automatic machining centres. It is suitable for heavy and high speed milling, five-axis machining, drilling, threading and heavy grinding.

APPLICATION TECHNOLOGY CHUCK DIMENSIONS HOLDING FORCE POLES











Milling

Permanent

from 240 x 240 mm

160 N/cm² Transverse

Other important parameters:

Min. workpiece size: $50 \times 50 \times 10 \text{ mm}$

Regrinding limit: 8 mm

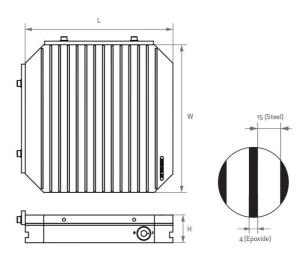
Pole pitch: T19 15+4 mm (steel/epoxy resin)

- + clamping medium and large components
- + heavy and fast milling
- + five-axis machining
- + drilling and threading
- + heavy grinding

Catalog number (Neopower pallet)	W (mm)	L (mm)	H* (mm)	Weight (kg)
NEOP240240P	240	240	60	27
NEOP280280P	280	280	60	37
NEOP320320	320	320	60	46

Catalog number (Neopower)	W	L	H	Weight
	(mm)	(mm)	(mm)	(kg)
NEOP300600	300	600	63	90

^{*}May vary for drilled versions for zero point systems



Neodymax



When to choose the Neodymax permanent magnetic chuck:

Neodymax magnetic chucks have a double magnetic system with neodymium magnets to create a very high clamping force. This makes the chucks suitable for demanding machining operations, e.g. heavy surface grinding or light milling.

APPLICATION TECHNOLOGY		CHUCK DIMENSIONS	HOLDING FORCE	POLES
	P		<u>+</u> -+-+	
Milling/grinding	Permanent	from 150 x 300 mm	120 N/cm ²	Transverse

Other important parameters:

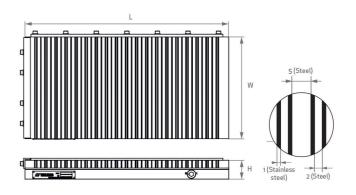
Min. workpiece size: 10 x 10 x 5 mm Regrinding limit: 6 mm

Pole pitch: T15, further refined 5/1/5/1/2/1

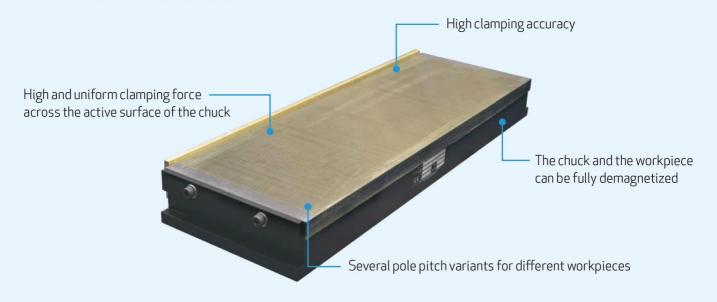
steel/stainless steel

- + precision grinding from small and thin parts to large components
- + light surface milling
- + can be immersed in dielectric fluid during EDM machining

Catalog number	W (mm)	L (mm)	H (mm)	Weight (kg)
NEOD150300	150	300	54	20
NEOD150450	150	450	54	30
NEOD200450	200	450	54	40
NEOD250380	250	380	56	40
NEOD300600	300	600	56	78



Grindmaster



When to choose a Grindmaster electropermanent magnetic chuck:

The Grindmaster series magnetic chucks are designed for grinding a very wide range of workpieces, from extremely small and thin to larger pieces. The electro-permanent technology used ensures not only high accuracy (it does not gradually heat the chuck after switching on), but also high safety and minimum operating costs.

APPLICATION TECHNOLOGY CHUCK DIMENSIONS HOLDING FORCE POLES Grinding Electro-permanent from 200 x 400 mm up to 120 N/cm² Transverse

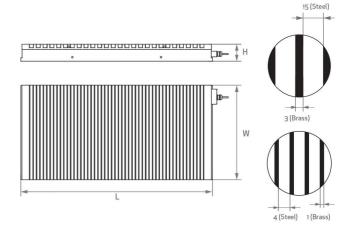
Catalog number	W (mm)	L (mm)	H (mm)	Weight (kg)	Control unit
GM200400T5	200	400	68	30	EP-CU10 SW
GM200500T5	200	500	68	37	EP-CU10 SW
GM200600T5	200	600	68	44	EP-CU10 SW
GM300600T5	300	600	68	66	EP-CU10 SW
GM400600T5	400	600	68	88	EP-CU10 SW
GM400800T5	400	800	68	118	EP-CU10 SW
GM200500T18	200	500	90	59	EP-CU10 SW
GM200600T18	200	600	90	71	EP-CU10 SW
GM300600T18	300	600	90	106	EP-CU10 SW
GM3001000T18	300	1000	90	177	EP-CU10 SW
GM400600T18	400	600	90	145	EP-CU10 SW
GM400800T18	400	800	90	188	EP-CU10 SW
GM5001000T18	500	1000	90	288	EP-CU10 DW
GM6001000T18	600	1000	90	354	EP-CU10 DW
GM6001500T18	600	1500	90	530	EP-CU10 DW

Other important parameters:

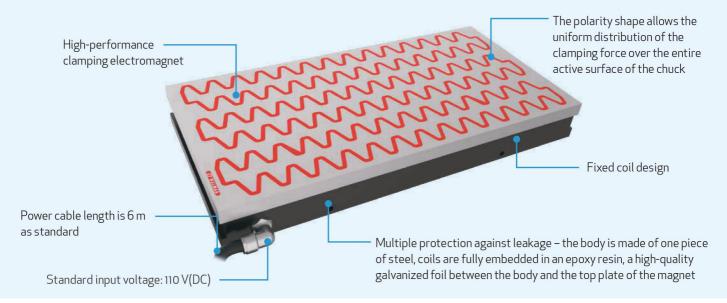
Pole pitch: T5 4+1 mm or T18 15+3 mm (other spacing on request)

Use:

+ clamping of small and larger workpieces during grinding



Elmag Wave



When to choose an Elmag Wave magnetic chuck:

Elmag Wave is an electromagnetic chuck suitable for heavy and high-performance surface grinding. The chucks are particularly efficient for roughing operations primarily on vertical grinders with grinding segments.

APPLICATION	TECHNOLOGY	CHUCK DIMENSIONS	HOLDING FORCE	POLES













Grinding Electro from $200 \times 600 \, \text{mm}$ $130 \, \text{N/cm}^2$ Wave type

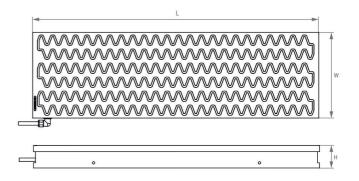
Catalog number	W (mm)	L (mm)	H (mm)	Power input (W)	Weight (kg)
ELMGW200600	200	600	69	90	57
ELMGW2001000	200	1000	79	152	109
ELMGW2501000	250	1000	79	219	135
ELMGW300500	300	500	69	106	72
ELMGW300600	300	600	69	135	86
ELMGW300800	300	800	79	164	148
ELMGW3001000	300	1000	79	189	164
ELMGW3001500	300	1500	79	318	246
ELMGW400600	400	600	69	210	115
ELMGW400700	400	700	79	223	174
ELMGW400800	400	800	69	240	153
ELMGW6001000	600	1000	79	456	328
ELMGW6001500	600	1500	79	622	492

Other important parameters:

Min. workpiece size: $120 \times 40 \times 20 \text{ mm}$ Pole pitch: 740Regrinding limit: 8 mm

Use

- + heavy and high-performance surface grinding
- + roughing primarily on vertical grinders with grinding segments
- + suitable control unit: EM-CU630





When to choose an Elmag Compact magnetic chuck:

The Elmag Compact electromagnetic chuck is suitable for heavy and final surface grinding of medium to large size workpieces.

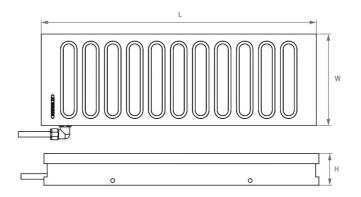
APPLICATION	TECHNOLOGY	CHUCK DIMENSIONS	HOLDING FORCE	POLES
	E		· · · · · · · · · · · · · · · · · · ·	
Grinding	Flectro	from 200 x 600 mm	130 N/cm²	Oval

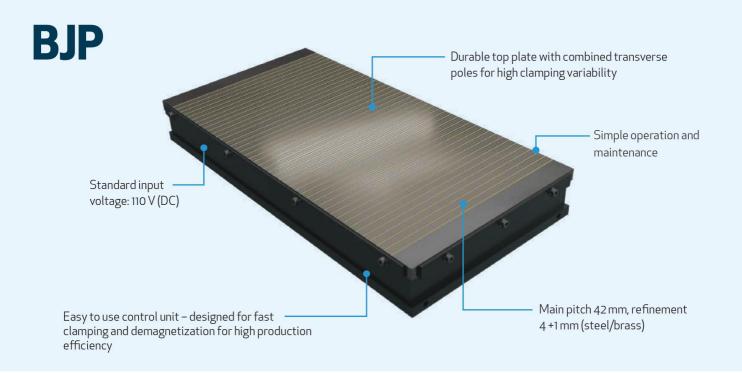
Catalog number	W (mm)	L (mm)	H (mm)	Power input (W)	Weight (kg)
ELMG200600	200	600	69	90	57
ELMG2001000	200	1000	79	152	109
ELMG2501000	250	1000	79	219	135
ELMG300500	300	500	69	106	72
ELMG300600	300	600	69	135	86
ELMG300800	300	800	79	164	148
ELMG3001000	300	1000	79	189	164
ELMG3001500	300	1500	79	318	246
ELMG400600	400	600	69	210	115
ELMG400700	400	700	79	223	174
ELMG400800	400	800	69	240	153
ELMG6001000	600	1000	79	456	328
ELMG6001500	600	1500	79	622	492

Other important parameters:

Min. workpiece size: 22 x 144 x 48 mm
Pole pitch: T48 mm
Regrinding limit: 8 mm
Power supply cable length: 6 m

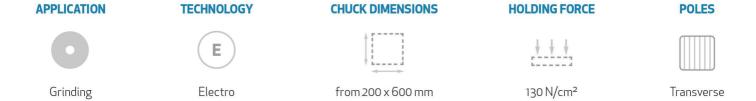
- + clamping medium to large parts on grinding machines
- + power and final flat grinding
- + suitable control unit: EM-CU630





When to choose a BJP electromagnetic chuck:

The BJP electromagnetic chuck is suitable for difficult grinding of a wide range of parts from a minimum size of 35 x 35 x 3 mm. Due to the combined pole pitch, it also clamps massive parts very well. The electromagnet is operated simply by pressing the button on the remote control for the control unit. This also provides variable adjustment of the force to create optimum conditions for clamping.



Other important parameters:

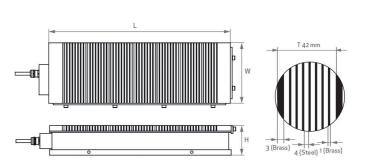
Min. workpiece size: 35 x 35 x 3 mm

Regrinding limit: 7 mm Pole pitch: 742

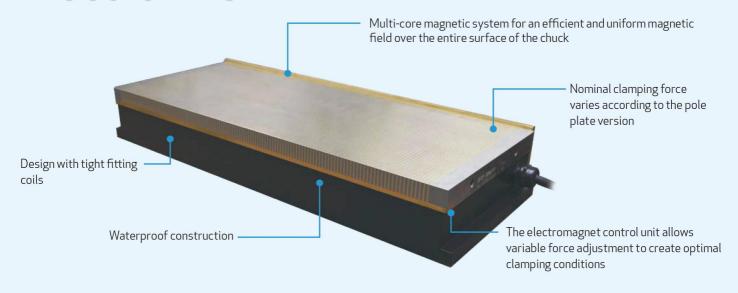
further refined 4+1 mm (steel/brass)

- + heavy grinding for a wide range of workpiece sizes
- + suitable control unit: EM-CU630

Catalog number	W (mm)	L (mm)	H (mm)	Power input (W)	Weight (kg)
BJP200600	200	600	98	160	77
BJP300600	300	600	98	215	118
BJP400800	400	800	100	350	212
BJP3001000	300	1000	103	350	201
BJP4001000	400	1000	103	435	269
BJP5001000	500	1000	108	530	352
BJP6001000	600	1000	113	620	420



Electrofine



When to choose the Electrofine electromagnetic chuck:

Electrofine is used for efficient clamping of very small workpieces during precise surface grinding. Recommended minimum dimensions are $25 \times 25 \times 3$ mm. The special Microfine version is available for smaller workpieces from $15 \times 15 \times 1$ mm.

APPLICATION TECHNOLOGY CHUCK DIMENSIONS CLAMPING FORCE POLES Grinding Electro from 150 x 250 mm from 100 N/cm² Transverse/Longitudinal

Catalog number (Electrofine)	W (mm)	L (mm)	H (mm)	Power input (W)	Weight (kg)
ELEC150300T31	150	300	74	78	25
ELEC200400T31	200	400	74	112	41
ELEC200500T31	200	500	74	166	55
ELEC200600T31	200	600	74	137	65
ELEC300600T31	300	600	74	253	94

Catalog number (Microfine)	W (mm)	L (mm)	H (mm)	Power input (W)	Weight (kg)
ELEC150250T1405	150	250	72	71	19
ELEC150300T1405	150	300	72	78	22
ELEC200400T1405	200	400	72	113	39
ELEC200500T1405	200	500	72	166	52
ELEC200600T1405	200	600	72	137	61
ELEC300600T1405	300	600	72	252	97

Other important parameters:

Regrinding limit: 6 mm

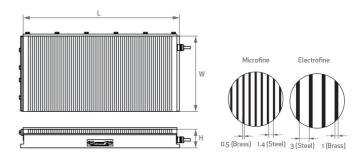
Min. workpiece size: $25 \times 25 \times 3 \text{ mm}$ (Electrofine),

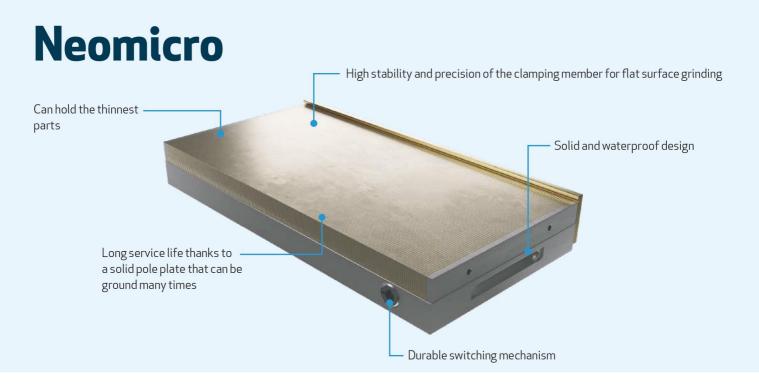
15 x 15 x 1 mm (Microfine)

Pole pitch: T4 3+1 mm (Electrofine),

T1.9 1.4+0.5 mm (Microfine)

- for clamping small and large workpieces during precise surface grinding
- + suitable control unit: EM-CU630





When to choose a Neomicro magnetic chuck:

The Neomicro permanent chuck with an exceptional clamping force combines high quality with a favourable price. It is simple and low maintenance. It is primarily suitable as an accessory for precise surface grinding of very small and thin parts to large workpieces. It is suitable for electrical discharge machining.

APPLICATION	TECHNOLOGY	CHUCK DIMENSIONS	HOLDING FORCE	POLES
	P		£====3	
Grinding	Permanent	from 100 x 175 mm	100 N/cm ²	Transverse

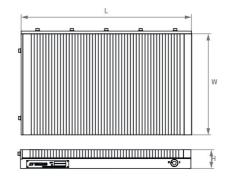
Catalog number	W (mm)	L (mm)	H (mm)	Weight (kg)
NEOC100175	100	175	49	7
NEOC100250	100	250	49	10
NEOC130255	130	255	49	13
NEOC150250	150	250	51	15
NEOC150300	150	300	51	18
NEOC150350	150	350	51	22
NEOC150400	150	400	51	25
NEOC150450	150	450	51	28
NEOC200400	200	400	51	33
NEOC200450	200	450	51	37
NEOC200500	200	500	51	41
NEOC200600	200	600	51	49
NEOC250500	250	500	56	56
NEOC300600	300	600	56	81

Other important parameters:

Min. workpiece size: 4 x 4 x 1 mm Regrinding limit: 7 mm

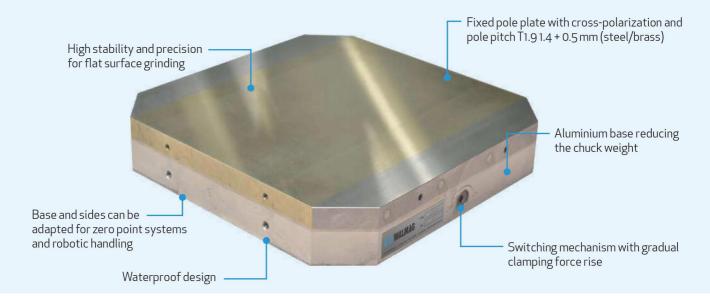
Pole pitch: T1.91.4+0.5 mm - steel/brass

- + precision flat grinding, and small and thin, as well as large parts
- also for EDM applications





Neomicro pallet



When to choose a Neomicro permanent magnetic pallet chuck:

The Neomicro permanent pallet chuck can be used for machining in automated production plants and machining centres. Suitable primarily for grinding and electrical discharge machining of a wide range of parts, from large to very small and thin.

APPLICATION TECHNOLOGY CHUCK DIMENSIONS HOLDING FORCE POLES Grinding Permanent from 240 x 240 mm 100 N/cm² Transverse

Other important parameters:

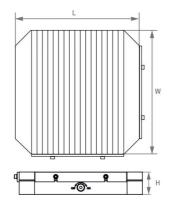
Min. workpiece size: 4 x 4 x 1 mm Regrinding limit: 7 mm

Pole pitch: T1.91.4+0.5 mm - steel/brass

- + precision flat grinding, and small and thin, as well as large parts
- electrical discharge machining (EDM)

Catalog number	W (mm)	L (mm)	H* (mm)	Weight (kg)
NEOC240240P	240	240	63,5	21,5
NEOC280280P	280	280	63,5	29
NEOC320320P	320	320	63,5	38

^{*}May vary for drilled versions for zero point systems







When to choose the Unigrip electromagnetic chuck:

Unigrip is a universal electromagnetic chuck which, due to an attractive price and a clamping force of 90 N/cm², is suitable for ordinary industrial plants for clamping for everyday grinding of medium to large workpieces.

Grinding Electromagnet from $300 \times 600 \text{ mm}$ 90 N/cm^2 Transverse

Other important parameters:

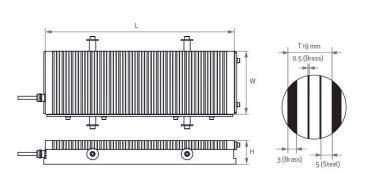
Min. workpiece size: $25 \times 25 \times 5$ mm Regrinding limit: 6 mm

Pole pitch: 19, further refined

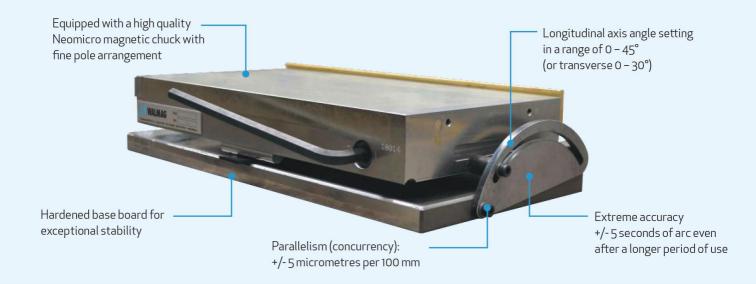
5+0.5/5+0.5/5+3 mm steel/brass

- + clamping of medium to large workpieces during ordinary grinding
- + suitable control unit: EM-CU630

Catalog number	W (mm)	L (mm)	H (mm)	Power input (W)	Weight (kg)	
UNIG300600	300	600	73	198	96	
UNIG400800	400	800	73	253	162	
UNIG3001000	300	1000	73	235	172	
UNIG4001000	400	1000	73	384	210	
UNIG5001000	500	1000	73	443	251	
UNIG6001000	600	1000	73	568	358	

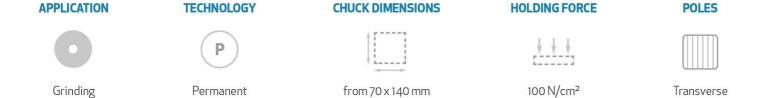


Fixar simple sine table



When to choose a Fixar simple sine table:

Fixar – a simple sine table with a Neomicro permanent chuck suitable for precise angle grinding, electrical discharge machining, and measuring. You can choose a model with an angle setting in the longitudinal axis or an angle setting in the transverse axis.



Important parameters:

Min. workpiece size: $4 \times 4 \times 1 \text{ mm}$ Regrinding limit: 7 mm

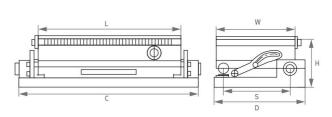
Additional information:

+ can be fitted with other types of chuck

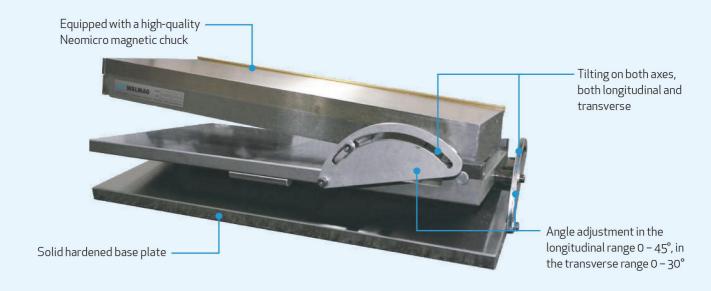
Use:

+ precision angular surface grinding, EDM, or measuring

Catalog number	W (mm)	L (mm)	H (mm)	C x D (mm)	S (mm)	Weight (kg)
SINES70140	70	140	67	130 x 140	55	7
SINES130250	130	250	76	295 x 145	115	20
SINES150250	150	250	79	290 x 165	135	20
SINES150300	150	300	79	340 x 165	135	27
SINES150350	150	350	87	390 x 165	135	34,5
SINES150450	150	450	87	490 x 165	135	44
SINES200400	200	400	88	440 x 215	185	52
SINES300600	300	600	95	660 x 320	285	121



Fixar compound sine table



When to choose a Fixar compound sine table:

The Fixar compound sine table with a Neomicro permanent chuck is designed for precise angle grinding. You will get excellent variability of machining during workpiece clamping because the Fixar allows tilting on the longitudinal and the transverse axes at the same time.

APPLICATION TECHNOLOGY CHUCK DIMENSIONS HOLDING FORCE POLES

Grinding Permanent from 100 x 175 mm 100 N/cm² Transverse

Important parameters:

Min. workpiece size: 4 x 4 x 1 mm Regrinding limit: 7 mm

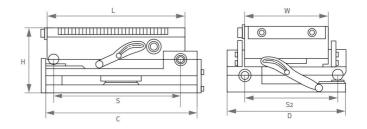
Pole pitch: T1.9 1.4+0.5 mm (steel/brass)

Additional information:

+ can be fitted with other types of chuck

Use:

+ precision angular surface grinding, EDM, or measuring

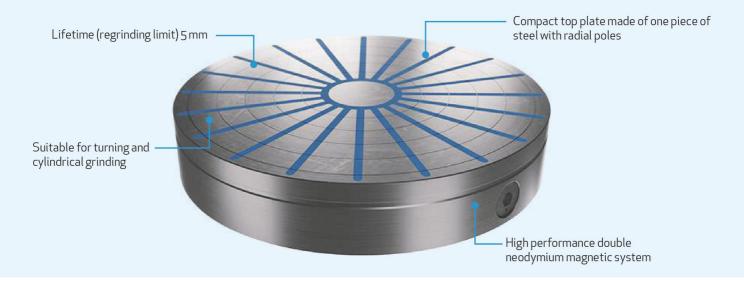


Catalog number	W (mm)	L (mm)	H (mm)	C x D (mm)	S (mm)	Weight (kg)
SINEC100175	100	175	104	210 x 140	165/110	15
SINEC130255	130	255	120	290 x 170	245/140	32
SINEC150300	150	300	123	335 x 190	290/160	43,5
SINEC150350	150	350	123	385 x 190	340/160	49,5
SINEC200400	200	400	124	435 × 240	390/210	73

Neostar







When to choose a Neostar permanent magnetic chuck:

Thanks to the top plate with radial poles, the Neostar permanent chuck is primarily designed for turning and grinding round workpieces. The advantage consists in the possibility to machine the front face, inner and outer diameter of the workpiece in a single operation.

APPLICATION TECHNOLOGY CHUCK DIAMETER HOLDING FORCE POLES











Turning

Permanent

from 130 mm

140 N/cm² Radial

Other important parameters:

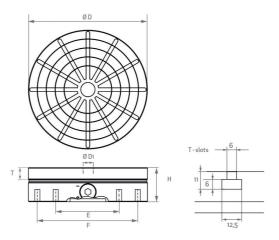
Min. workpiece diameter: 35 mm Regrinding limit: 5 mm

Catalog number	D (mm)	H (mm)	D1 (mm)	E (mm)	F (mm)	Weight (kg)	Number of poles
NEOS130	130	57	15	-	100	5	10
NEOS150	150	57	15	80	120	7,3	10
NEOS200	200	57	20	110	180	13	12
NEOS250	250	70	30	140	220	25	16
NEOS300	300	73	38	180	260	37	16
NEOS350	350	73	40	220	300	49	20
NEOS400	400	74	40	260	340	68	20
NEOS500	500	78	50	300	400	109	24
NEOS600	600	78	90	350	450	172	30
NEOS700	700	78	90	350	450	234	30
NEOS800	800	110	100	400	700	420	30

Additional information:

- + optional accessories include additional pole plates for clamping shaped parts
- + on request, the top plate can be supplied with T-slots

- + turning and grinding of round workpieces
- + facing work, internal and external diameter machining is possible separately or in one operation



Alustar



\$ 100% WATERTIGHT
\$ 30% LONGER LIFE
\$ 15% LESS WEIGHT

Compact top plate made of one piece of steel with radial poles

The aluminium base reduces the load on the machine tool spindle and increases the possible workpiece weight capacity

Recesses and threads on the underside of the base for holding to a suitable flange



High performance neodymium magnetic system

Very safe, self-locking mechanism to prevent chuck release during machining

Design with worm self-locking switching mechanism for infinitely adjustable clamping force

When to choose an Alustar permanent magnetic chuck:

The Alustar permanent chuck is used during turning and grinding of ring-shaped workpieces. The chuck excels due to its low weight resulting from the aluminium design of the body. It can cope with a larger weight range of machined components. With this chuck, you have the possibility to machine the front, inner and outer diameter of the workpiece in one operation. The possibility of continuous control of the clamping force facilitates centring.

APPLICATION TECHNOLOGY CHUCK DIAMETER HOLDING FORCE POLES











Turning

Permanent

from 200 mm

140 N/cm²

Radial

Other important parameters:

Min. workpiece diameter: 40 mm Regrinding limit: 5 mm

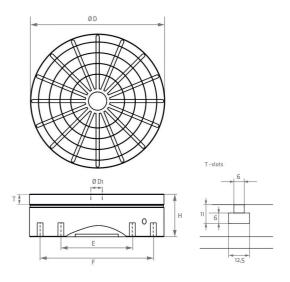
Additional information:

- optional accessories include additional pole plates for clamping shaped parts
- + on request, the top plate can be supplied with T-slots

Catalog number	D (mm)	H (mm)	D1 (mm)	E (mm)	F (mm)	Weight (kg)	Number of poles
ALUS20D200	200	79	20	110	180	11,5	12
ALUS20D250	250	79	30	166	220	18	16
ALUS20D300	300	82	38	180	260	27	16
ALUS20D350	350	82	40	220	300	36	20
ALUS20D400	400	84	40	260	340	47	20
ALUS30D500	500	109	50	330	400	98	24
ALUS30D600	600	109	90	350	450	142	30

Use:

turning and grinding of round workpieces



Maxgrip





Parallel



When to choose the Maxgrip permanent magnetic clamp:

The high clamping force and versatility of the Maxgrip permanent magnetic chuck make it stand out. The combination of a pole plate with a relatively fine parallel pole arrangement and the ability to infinitely adjust the clamping force means that workpieces can be centred very easily during turning and grinding.

APPLICATION TECHNOLOGY CHUCK DIAMETER HOLDING FORCE POLES

P

P

from 155 mm

Other important parameters:

Circular grinding

Min. workpiece diameter: 40 mm Regrinding limit: 10 mm

Pole pitch: T1511+4 mm - steel/epoxy

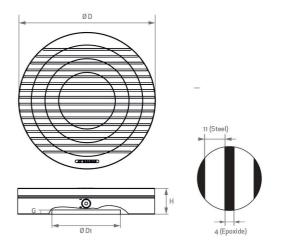
Permanent

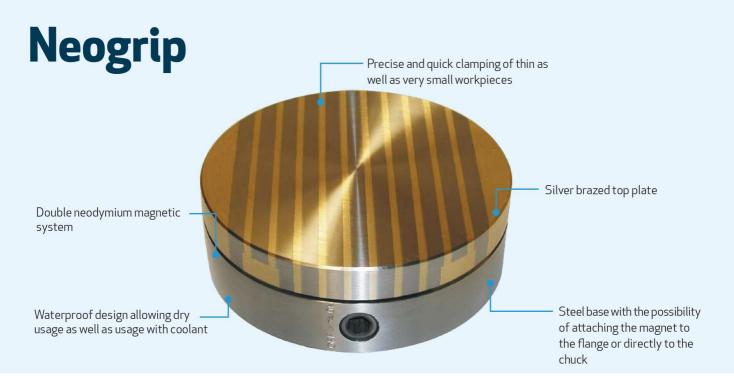
Use:

+ clamping workpieces during turning and cylindrical grinding

160 N/cm²

Catalog number	D (mm)	H (mm)	G (mm)	D1 (mm)	Weight (kg)
MAXGRIP155	155	57	5	50	7
MAXGRIP200	200	57	5	60	15
MAXGRIP250	250	57	5	80	22
MAXGRIP300	300	57	6	150	32
MAXGRIP350	350	57	6	170	43
MAXGRIP400	400	57	8	200	56





When to choose a Neogrip permanent magnetic chuck:

The Neogrip permanent magnetic chuck with a solid steel structure and robust control mechanism is designed for clamping $5 \times 35 \times 35$ mm workpieces.



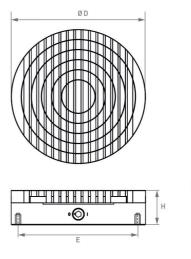
Other important parameters:

Min. workpiece diameter: 35 mm Regrinding limit: 7 mm

Pole pitch: T11 8+3 mm (steel/brass)

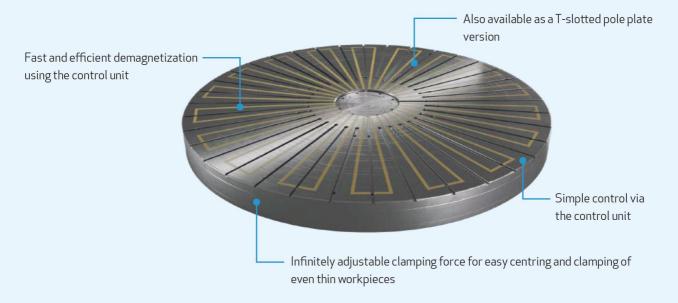
- + finishing work during circular grinding
- + dry circular grinding as well as under cooling emulsion
- + a tool for various mechanical workplaces

Catalog number	D (mm)	H (mm)	E (mm)	Weight (kg)
NEOG100	100	51	86	3
NEOG130	130	51	120	5
NEOG150	150	51	137	7
NEOG200	200	51	182	12





Circu EM



When to choose the Circu EM electromagnetic chuck:

The Circu EM is an electromagnetic chuck with a radial pole layout designed for installation on rotary tables of grinders and lathes for stable clamping of rotary workpieces with circular or cylindrical shapes such as bearing rings, bushings, etc. Due to the high clamping force and the possibility of control, this chuck is also suitable for thin workpieces.

APPLICATION TECHNOLOGY CHUCK DIAMETER HOLDING FORCE POLES

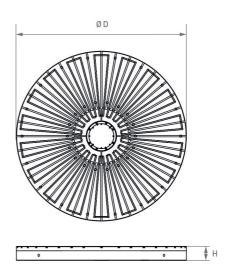
Circular grinding Electro from 400 mm up to 120 N/cm² Radial

Other important parameters:

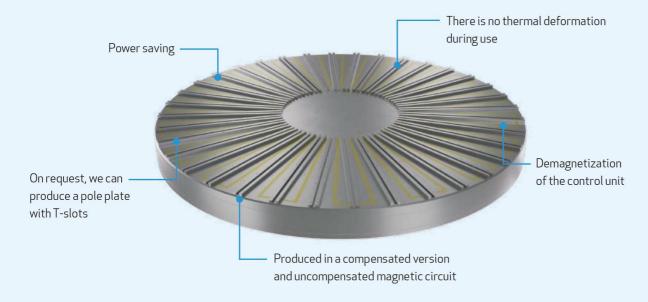
Poles: Radial (other types available on request)
Regrinding limit: 8 mm

- machining external and internal surfaces of round and ring shaped workpieces on vertical grinders
- + turning
- + suitable control unit: EM-CU

Catalog number	D (mm)	H (mm)	Weight (kg)	Voltage (∀)
Circu EM 400	400	90	76	110
Circu EM 500	500	90	120	110
Circu EM 600	600	100	195	110
Circu EM 700	700	100	265	110
Circu EM 800	800	100	365	110
Circu EM 1000	1000	100	550	110
Circu EM 1200	1200	110	990	110
Circu EM 1500	1500	120	1550	110



Circu EP



When to choose the Circu EP electromagnetic chuck:

The Circu EP series of chucks are designed for centric as well as off-centric clamping of ferromagnetic workpieces during turning and precision grinding on circular workbenches. Depending on the required operation or the nature of the workpieces to be clamped, it is possible to select a suitable combination of the polarity design and the magnetic system of the clamp.

APPLICATION TECHNOLOGY CHUCK DIAMETER HOLDING FORCE POLES











Radial

Turning Electro-permanent

from $400 \, \text{mm}$ up to $170 \, \text{N/cm}^2$

Other important parameters:

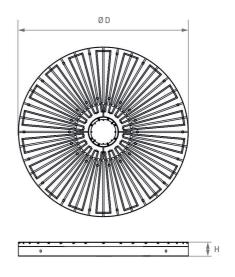
Application: Turning, grinding

Poles: Radial, parallel, concentric

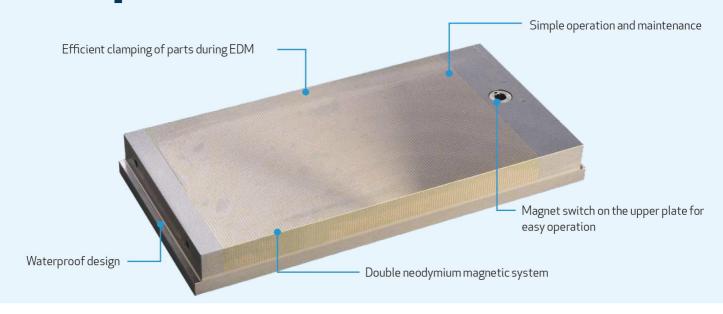
Regrinding limit: 8 mm

- + circular grinding, roughing, turning of circular or cylindrical parts
- the specific version of the chuck depends on the customer's desired application
- + suitable control unit: EP-CU

Catalog number	D (mm)	H (mm)	Weight (kg)	Voltage (V)
Circu EP 400	400	90	76	170/340V
Circu EP 500	500	90	120	170/340V
Circu EP 600	600	100	195	170/340V
Circu EP 700	700	100	265	170/340V
Circu EP 800	800	100	365	170/340V
Circu EP 1000	1000	100	550	170/340V
Circu EP 1200	1200	110	990	170/340V
Circu EP 1500	1500	120	1550	170/340V

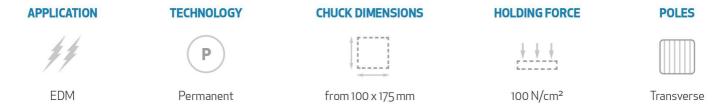


Neospark



When to choose a Neospark permanent magnetic chuck:

The Neospark permanent magnetic chuck is suitable for clamping workpieces in EDM machines. The high clamping force and fine pole pitch make it possible to clamp small and thin workpieces. Due to its very low structure, you do not lose any working area. Moreover, this chuck offers comfortable control from the top of the magnet, so it is possible to use the entire area of the submersion working tank of your EDM machine better.



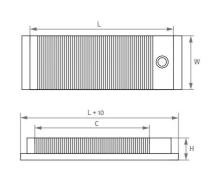
Other important parameters:

Min. workpiece size: 4 x 4 x 1 mm Regrinding limit: 7 mm

Pole pitch: T1.91.4 + 0.5 mm (steel/brass)

- + electrical discharge machining EDM
- + possibility of immersion in dielectric liquid
- + precise grinding of very small and thin parts

Catalog number	W (mm)	L (mm)	H (mm)	C (mm)	Weight (kg)
NEOK100175	100	175	32	120	5
NEOK130255	130	255	32	200	9
NEOK150150	150	150	35	95	7
NEOK150300	150	300	35	245	13
NEOK150350	150	350	35	295	15
NEOK150450	150	450	35	395	19
NEOK200400	200	400	35	342	23





Magbase 3D



When to choose a Magbase 3D magnetic base for measuring:

A magnetic base is an excellent method of mounting the measuring arm onto the steel surface of the work table or directly onto the machine bed. Due to its low weight and easy switching, it is really a portable tool for quick repositioning in case of measuring on different parts of the table. The measuring instrument with this base can be placed directly on the measured part.

APPLICATION TECHNOLOGY CHUCK DIAMETER HOLDING FORCE POLES

Qo

Accessories



Permanent

150 mm

+++

up to 140 N/cm²

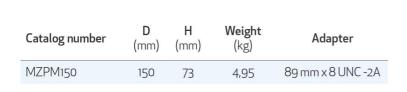


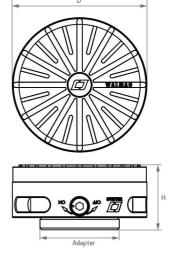
Radial

Other important parameters:

Application: Accessories
Technology: Permanent
Clamping force: 140 N/cm²
Chuck diameter: 150 mm
Poles: Radial

- accessories for portable measuring arms designed for highly precise measurement using touch probes
- + magnetic holder for laser scanner



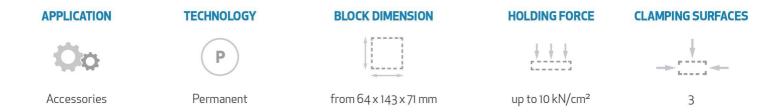


Magnetic blocks WBM



When to choose WBM magnetic blocks:

WMB magnetic blocks are an excellent tool for attaching components during surface machining or welding. With these blocks, you will get flexible attachment without disturbing contours for easy drilling, deburring, fine grinding, and mounting work.



Other important parameters:

Clamping force: 5–10 kN

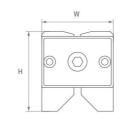
Additional information:

+ two magnetic blocks are always included

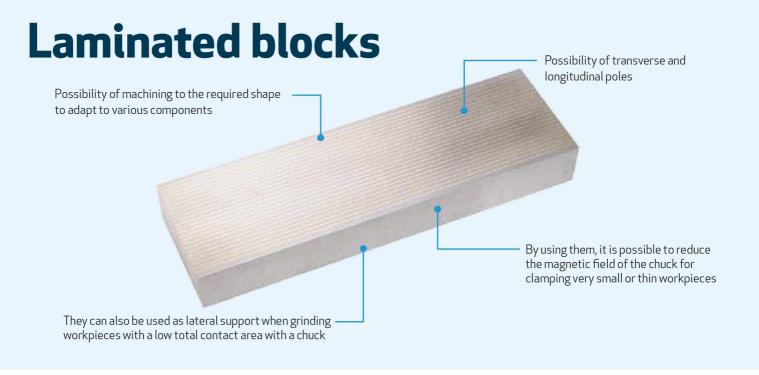
Use:

+ clamping components during welding, surface machining, drilling, deburring, fine grinding, or mounting work

Catalog number	W (mm)	L (mm)	H (mm)	Weight (kg)
WBM500	64	143	71	3,9
WBM700	64	178	71	4,9
WBM1000	87	184	88	8,8

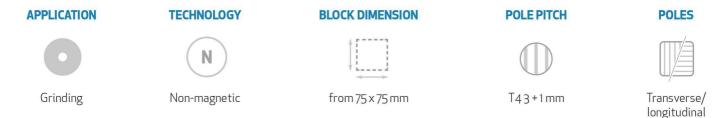






When to select laminated blocks:

Silver brazed laminated blocks are delivered for circular and rectangular chucks. They can be placed loosely or mechanically using screws or pins. They widen the application possibilities of the chuck, like holding non flat or irregularly shaped materials.

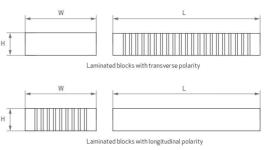


Catalog number	W (mm)	L (mm)	H (mm)	Polarity
LB2510075TP	75	100	25	transverse
LB25200100TP	100	200	25	transverse
LB25300200TP	200	300	25	transverse
LB25400300TP	300	400	25	transverse
LB257575LP	75	75	25	longitudinal
LB2575100LP	75	100	25	longitudinal
LB25150200LP	150	200	25	longitudinal
LB25100650LP	100	650	25	longitudinal
LB25150200LP	150	200	25	longitudinal
LB25150500LP	150	500	25	longitudinal
LB25200400LP	200	400	25	longitudinal
LB25300300LP	300	300	25	longitudinal
LB25400400LP	400	400	25	longitudinal
LB25400600LP	400	600	25	longitudinal

Important parameters:

Application: Grinding
Technology: Non-magnetic
Block size: from 75 x 75 mm
Pole pitch: T4 3 + 1 mm (steel/brass)
Poles: Transverse/longitudinal

- reduction of the basic pole pitch of the chuck
- expansion of the application possibilities of the chuck by clamping irregular shaped material





LCC control units



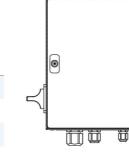
When to choose LCC electropermanent magnet controllers:

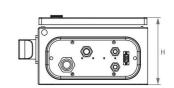
The LCC is the standard series of control units used to control the Mastermill series of compensated electropermanent magnetic chucks. Available versions are LCC 10 XC, LCC 20, LCC 40.

Basic functions of the LCC control unit:

- + control of the control unit using the integrated HMI keypad on the box
- + possibility to control up to 4 magnetic chucks at the same time
- + microprocessor controlled de/magnetization of workpiece and chuck
- magnetization status check connection to the machine safety contact
- + possibility of connection with a PLC machine
- + overheating protection (safety delay between cycles)

Catalog number (LCC)	W (mm)	L (mm)	H (mm)	Weight (kg)
LCC10XC	200	150	75	1,1
LCC20	300	250	150	5,9
LCC40	400	300	150	7,5





The above parameters apply to the IP54 version of the unit

EPCU control units



When to choose EPCU electropermanent magnet controllers:

The advanced EPCU series units are used to magnetize all Walmag EP chucks. They offer additional features compared to the standard LCC units. Available versions are EPCU 10, 20, 40 SW/DW.

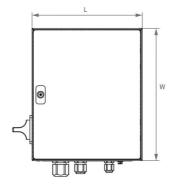
Basic functions of the EPCU control unit:

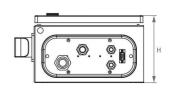
- + possibility to control up to 4 magnetic chucks at the same time
- + microprocessor controlled de/magnetization of workpiece and chuck
- magnetization status check connection to the machine safety contact
- + possibility of connection with a PLC machine
- + overheating protection (safety delay between cycles)
- + control by the U19 wired remote control with clamping force adjustment (optional RM remote control with selection of sections and magnetizing groups)

Other functions of the EPCU:

- possibility to adjust the demagnetization cycle according to the material workpieces
- full demagnetization of workpiece and chuck for uncompensated EP chucks
- networking support (connecting multiple units and fixtures in large assemblies)
- + remote connection function (demagnetization settings, firmware update, diagnostics)
- magnetization credit function gives the possibility to shorten the safety delay between cycles

Catalog number (EPCU)	W (mm)	L (mm)	H (mm)	Weight (kg)
EPCU10 SW	300	250	150	6,4
EPCU20 SW	400	300	150	8,0
EPCU40 SW	400	400	200	13,3
EPCU10 DW	400	300	150	8,2
EPCU20 DW	400	400	200	13,5
EPCU40 DW	500	400	200	15,5





The above parameters apply to the IP54 version of the unit

EMCU control units



When to choose solenoid control units:

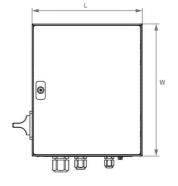
This series of units is used to power and control 110 VDC Walmag electromagnetic chucks. We can offer different versions according to the input supply voltage – 110V, 200 - 230V, 380 - 460V 50/60 Hz. The standard version of the units is in a steel enclosure (IP54). A version for direct installation in the machine cabinet (IP00) is available on request. The units are equipped with a safe magnetization level control function.

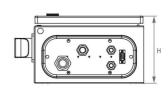
Available power versions are 150, 630, 1250, 2500W.

EMCU control unit functions:

- + possibility of controlling multiple switches at the same time
- + control by the U19 wired remote control
- + fully adjustable clamping force
- + possibility of connection with a PLC machine
- networking support (connecting multiple units and fixtures in large assemblies)

Catalog number	W (mm)	L (mm)	H (mm)	Weight (kg)
EMCU 150W	300	200	120	4
EMCU 630W	300	250	150	5,8
EMCU 1250W	400	300	150	8
EMCU 2500W	400	300	150	8,5

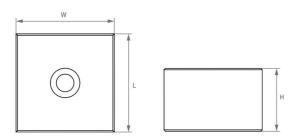




The above parameters apply to the IP54 version of the unit

Accessories





Fixed pole extensions

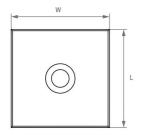
- + allow machining from five sides on straight parts
- + determine the plane when using movable pole attachments
- + allow the clamping of straight parts vertically
- + protects the magnet body when drilling through workpieces
- + can act as a grid for the foundation of the parts, preventing shifting during machining
- used as stops for precise positioning of the workpiece on the magnet
- + can be adapted for clamping more complex workpiece shapes

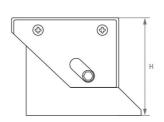
Catalog number	W (mm)	L (mm)	H (mm)
TB50FI	50	50	32
TB70FI	70	70	45



Flexible pole extensions

- compensate for unevenness of clamped parts to obtain a stable clamp
- reduce the risk of deformation of the workpiece by clamping on the magnet
- + protects the magnet body from tool damage
- elimination of unwanted air gaps for maximum clamping force





Catalog number	W (mm)	L (mm)	H (mm)
TB50FL	50	50	32
TB70FL	70	70	45

Pro Export Plus

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