



Superior Clamping and Gripping



MAGNOS E compact

The economical Introduction to
Magnetic Clamping Technology!

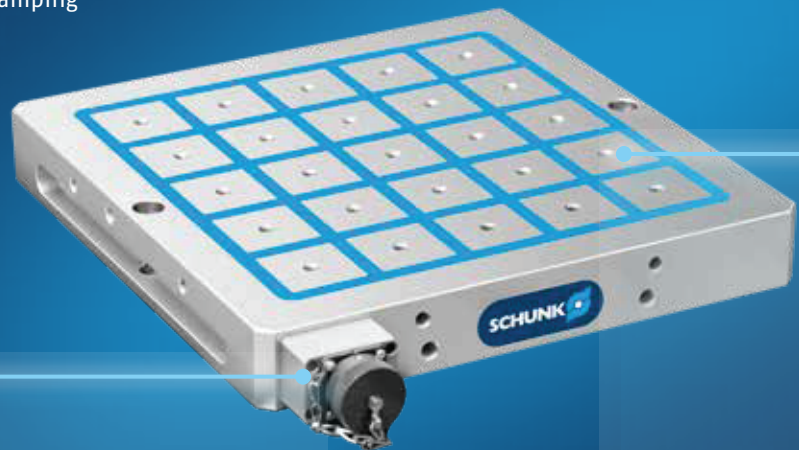
MAGNOS E compact for your Added Value!

Everything you need, at a small low Price.

MAGNOS square pole technology is the ideal clamping solution for powerful cutting processes. It can be used with any system and offers energy-efficient, actionable clamping for all common milling, grinding, and machining centers.

The benefits at a glance

- **The economical introduction to magnetic clamping technology** with MAGNOS E compact
- **5-sided workpiece machining in one set-up**
Higher accuracy by setting up once and at best accessibility of the machine spindle
- **No deformation** due to gentle workpiece clamping
- **Shortest possible set-up times** and a resulting increase in productivity
- **Clamping within a few seconds**
- **Increase in tool life and process capability**



MAGNOS control unit KSS-EC 01

The control unit KSS-EC 01 can be used to control a magnetic chuck. The magnetic chucks only require a short pulse for clamping and releasing. This is achieved via simple actuation on the hand remote control.



MAGNOS control unit KEH-EC 04

The control unit KEH-EC 04 can be used to control up to four magnetic chucks. Using the connection box facilitates easy installation. The magnetic chucks only require a short pulse for clamping and releasing. This is achieved via actuation on the hand remote control. On the control unit, the individual magnetic chucks can be selected using the switches. In addition, the KEH-EC 04 offers the option of machine integration via the PLC connection.



Pole extension – for any workpiece geometry

Fixed and movable pole extensions ensure that the magnetic chuck locating surface can be perfectly adjusted to the workpiece, thus ensuring deformation-free clamping. Using the pole extensions fully enables the workpiece to be machined from 5 sides in just one set-up.

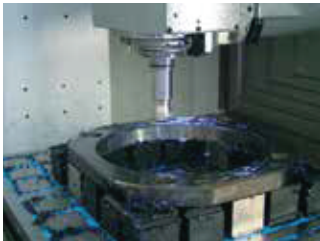


MAGNOS E compact in Comparison

Characteristics	MAGNOS E compact	MAGNOS standard chucks
Patented status display for clamping status	no	yes
Holding force	max. 3,925 kN per pole	max. 3,925 kN per pole
Height of the magnetic chuck	52 mm	66 mm
Mechanical rigidity/stability	++	+++
Grindability of the magnetic chuck	3 mm	5 mm
Accessory pole extensions	+	+++
VERO-S interface	no	yes
Modular control unit	no	yes
Easy replacement of spare parts	+	+++
Plastic coating on the cable	no	yes
Optional: fixed cable connection	no	yes
Optional: drill holes suitable for machine table	no	yes
Optional: connection block in a different position	no	yes
Expansion technology	no	yes

+++ excellent ++ very good + good

Equipped by SCHUNK



CNC Universal milling machine

Task: Machining hardened rings made of X37 CrMoV5-1

Solution: Magnetic chucks of type MFR-A1 1000 x 600 x 66 mm, pole size 50 x 50 mm

Advantage: Reduction in production times by approx. 60%, vibration-free clamping



CNC Universal milling machine

Task: Face milling steel plates ST 52

Solution: 2 magnetic chucks of type MFR-A1 750 x 480 x 66 mm pole size 50 x 50 mm. Additional 60 pole extensions 50 x 50 mm, controlled in parallel

Advantage: Plane parallelism < 0.02 mm along a length of 1.2 m due to vibration-free clamping. Optimum 5-side accessibility and savings on set-up time of 30%



Vertical machining center

Task: Machining large plates

Solution: 4 magnetic chucks of type MFR-A1 800 x 500 x 66 mm, pole size 50 x 50 mm

Advantage: Grinding operations no longer necessary due to flatness of < 0.05 mm over the length of 1.4 m



Horizontal machining center

Task: Machining a medium sized cast angle (GG25)

Solution: Magnetic chucks of type MFR-A2 600 x 400 x 85 mm, pole size 50 x 50 mm

Advantage: 4-sided machining in one clamping, optimum access to the workpiece

Magnetic chucks

Designation	ID	L [mm]	B [mm]	H [mm]	Number of poles	max. total holding force [kN]	Price [\$]
MFR-EC-A1-050 370X370	46000431	370	370	52	25	98	\$2,899
MFR-EC-A1-050 580X370	46000430	580	370	52	40	157	\$4,299
MFR-EC-A1-050 800X370	46000432	800	370	52	50	196	\$5,499
MFR-EC-A1-050 800X450	46000433	800	450	52	60	236	\$6,499
MFR-EC-A1-050 980X580	1341759	980	580	52	84	330	\$9,999



Control unit for a magnetic chuck

Designation	ID	L [mm]	W [mm]	H [mm]	Connection	Price [\$]
KSS-EC-01 460V/60Hz	0422611	300	150	77	1x 4-PIN	\$1,349

- No PLC connection



Control unit for four magnetic chucks with connection box

Designation	ID	L [mm]	W [mm]	H [mm]	Connection	Price [\$]
KEH-EC-04 460V/60Hz	1360003	400	300	120	4x 4-PIN	\$4,499

- with connection box for installation
- PLC connection possible
- Selecting each magnetic clamping plate to control unit possible



Pole extensions

Designation	ID	Description	Price [\$]
10x PVF-EC 50-32	1342945	Fixed pole extension, 50 x 50 x 32 mm with a through bore and screw M8	\$199
10x PVB-EC 50-32	1342946	Flexible pole extension, 52 x 45 x 32 mm with a through bore and screw M8, stroke 5 mm to compensate for workpiece unevenness	\$599



J. Lehmann

Jens Lehmann, German goalkeeper legend, SCHUNK brand ambassador since 2012 for safe, precise gripping and holding.
schunk.com/lehmann