



MAGNOS MFRS

Magnetic Clamping Technology

Superior Clamping and Gripping



Product Overview



Gripping Systems

Clamping Technology



Chuck Jaws



Lathe Chucks



Stationary Workholding



Toolholders



Hydraulic Expansion Technology



VERO-S



TANDEM



ROTA



KONTEC



Tombstones

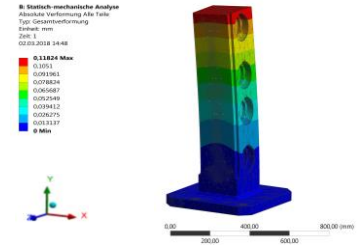


MAGNOS

SCHUNK Services

Engineering

- Dimensioning of special plates designed to the manufacturing specifications
- Development of special solutions together with the customer
- FEM analysis for critical components



Testing

- Endurance tests with all new developments
- Abrasion checking
- Measurement of accuracy

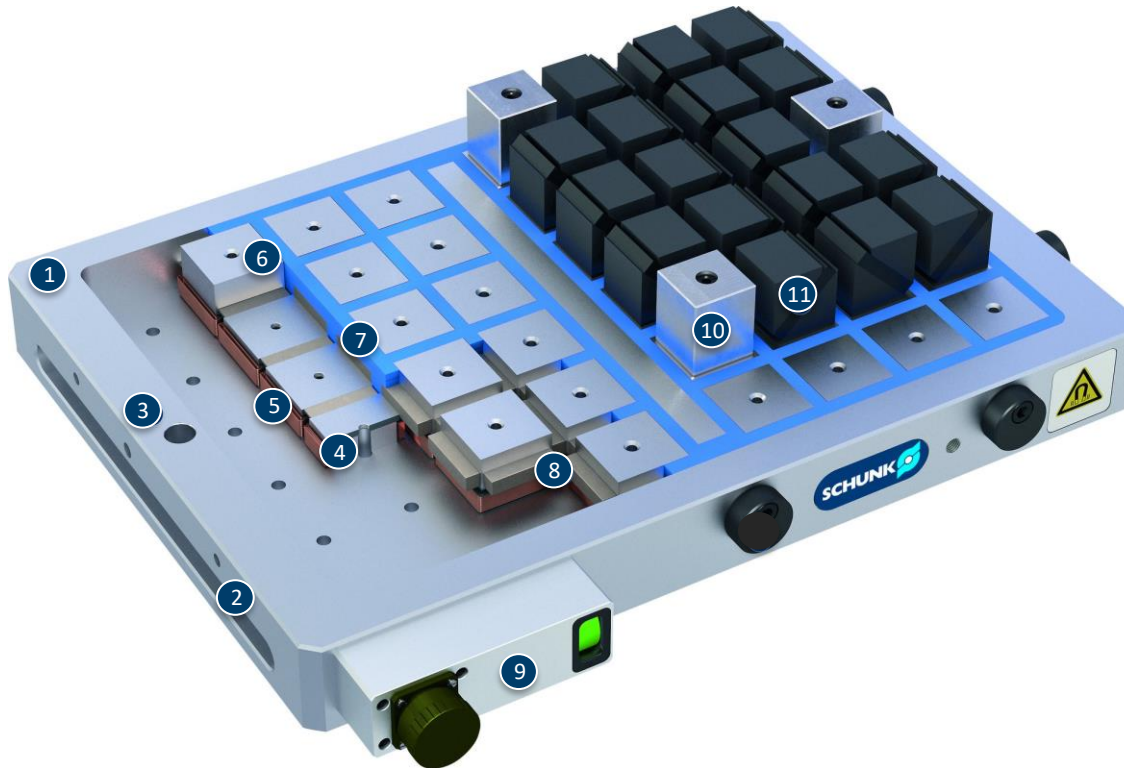


Service

- Initial operation of customer's solution
- Inspection and maintenance
- Repairs



MAGNOS MFRS



- ① Solid base body
- ② Mounting groove
- ③ Fastening bore
- ④ Invertible AlNiCo magnets
- ⑤ Coil body, insulated version
- ⑥ Steel pole
- ⑦ Synthetic resin grouting
- ⑧ Neodymium magnets
- ⑨ Connection housing with status display
- ⑩ Fixed pole extensions
- ⑪ Flexible pole extensions

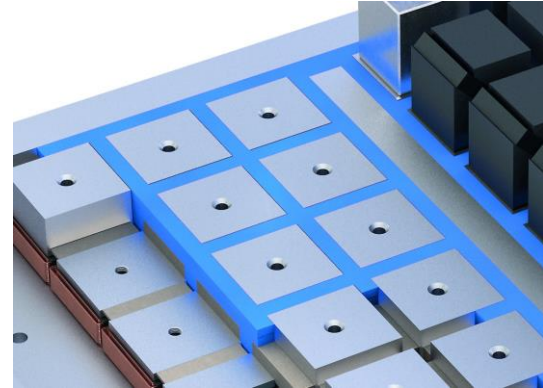
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Solid base body

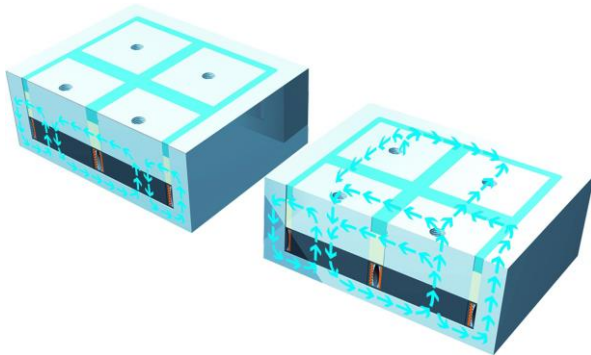


1 Monoblock design of the base body

Synthetic resin filling



Magnetic double cycle



Visual display – MAG status

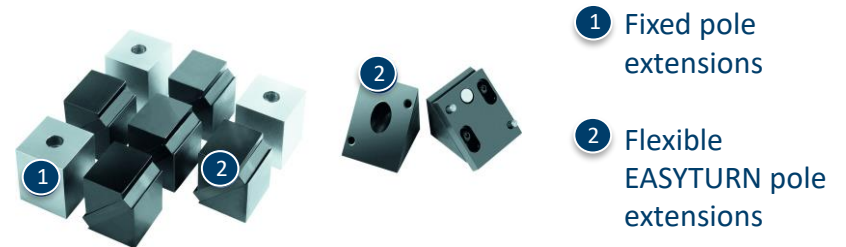


MAGNOS MFRS

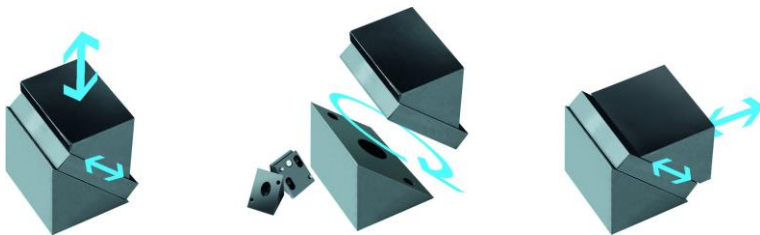
Visual display – DEMAG status



Perfect support for workpieces



EASYTURN pole extensions – for vertical or horizontal use

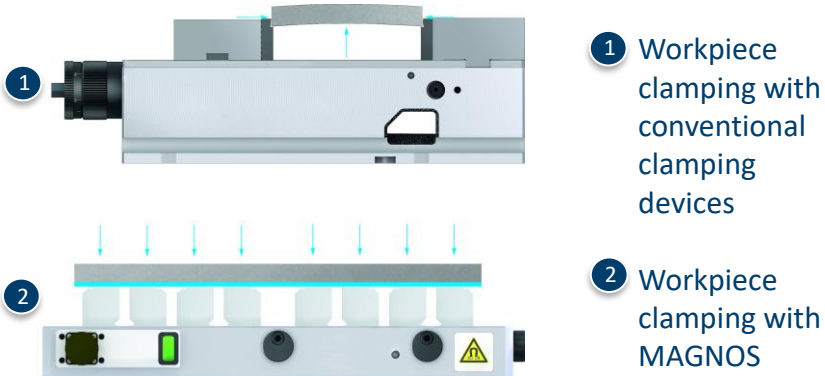


5-sided workpiece machining in one set-up

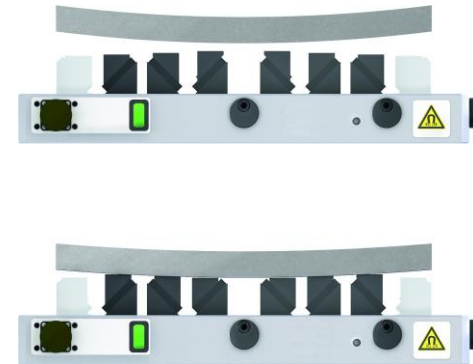


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No deformation due to gentle clamping



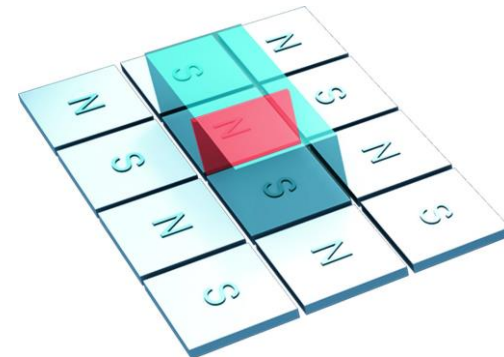
Adapts perfectly to the contours of the workpiece



Shortest possible set-up times and a resulting increase in productivity

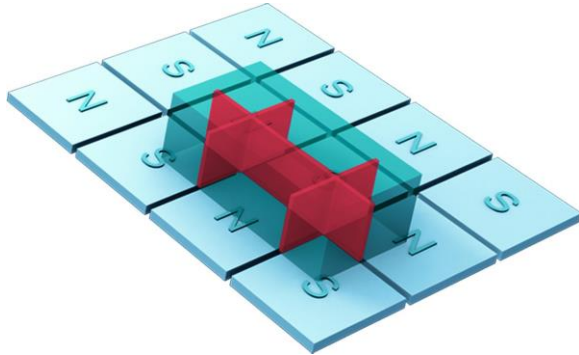


Increasing clamping force by covering poles – two poles



MAGNOS MFRS

Increasing clamping force by covering poles –
six poles



SCHUNK MAGNOS pole size 32



SCHUNK MAGNOS pole size 50

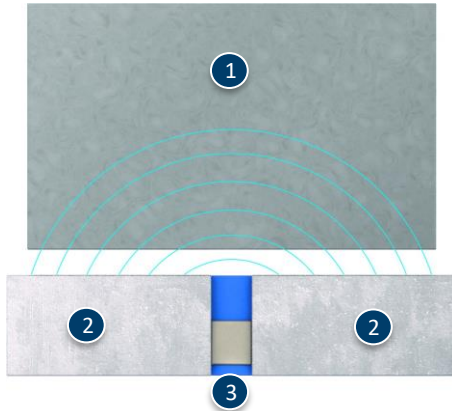


SCHUNK MAGNOS pole size 70



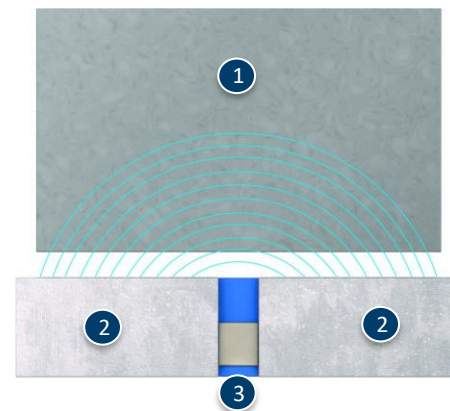
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Magnetic chuck type MFRS-A1



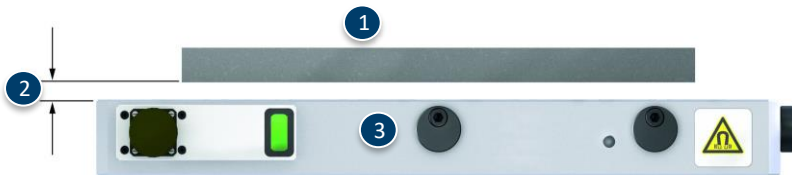
- 1 Workpiece
- 2 Poles MFRS-A1
- 3 MFRS-A1

Magnetic chuck type MFRS-A2



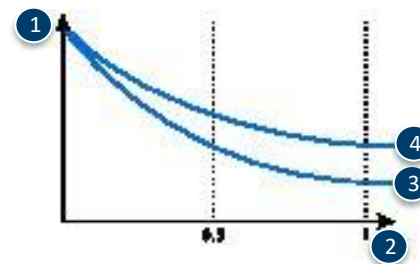
- 1 Workpiece
- 2 Poles MFRS-A2
- 3 MFRS-A2

Definition of air gap



- 1 Workpiece
- 2 Air gap
- 3 Magnetic chuck

Influence of the air gap on the magnetic clamping force



- 1 Magnetic clamping force [kN]
- 2 Air gap [mm]
- 3 MFRS-A1
- 4 MFRS-A2

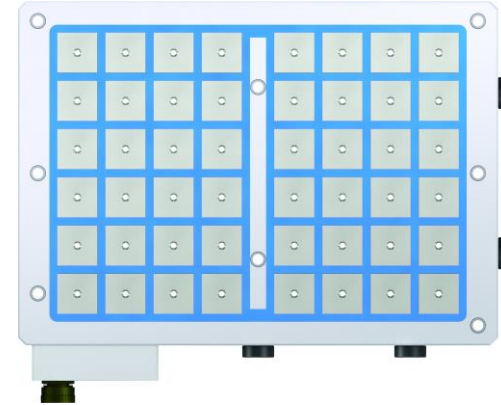
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Position of the connection (option)



- 1 Standard connection
- 2 Customized connection in the middle

Additional mounting bores (on option)



Variants of MAGNOS MFRS

Technical data	MFRS-A1-032	MFRS-A1-050	MFRS-A2-050	MFRS-A1-070	MFRS-A2-070	MFRS-V-A1-050
L [mm]						
B [mm]						
H [mm]	55	66	86	66	86	66
Max. clamping force [kN]	26 – 154	63 – 377	63 – 377	123 – 554	123 – 385	63 – 314
Number of poles	24 – 140	16 – 96	16 – 96	16 – 72	16 – 50	16 – 80
Connection	4-PIN	4-PIN	4-PIN / 7-PIN	4-PIN	4-PIN / 7-PIN	4-PIN
Amount of channels	1	1	1 / 2	1	1 / 2	1

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