



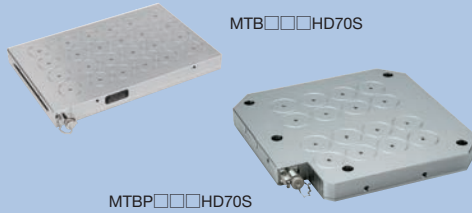
Magnetic Chucks

- Permanent electromagnetic chucks maintain clamping force even after the power cable has been disconnected.
- The workpiece is fixed by a powerful 6150N magnetic force using Neodymium magnets.
- Since the workpiece is clamped from underneath, there is no need to worry about interference with cutting tools.

Product Lineup

Magnetic Chuck Main Bodies

Vertical Magnetic Chucks



MTB□□□HD70S

MTBP□□□HD70S

Controller (Included)

Controller ST120F

Controller ST200F



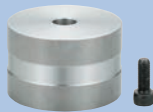
Horizontal Magnetic Chucks

With magnetic chuck
MC Angle PlateWith magnetic chuck
MC Tooling Blocks
(2 Faces)

Peripheral Devices

Magnetic Height Block

Magnetic Height Block



Protects the top surface of the magnetic chuck
Improves the precision of the top surface of the magnetic chuck

Magnetic Height Block with Lift Function



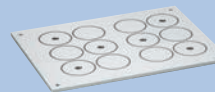
Supports removing workpieces that are adsorbed by residual magnetism, etc. during unclamping

Mag-work Support



Supports uneven workpieces
Supports easy chattering workpieces

Magnetic Self-cut Plate



Protects the top surface of the magnetic chuck
Improves the precision of the top surface of the magnetic chuck

Magnetic Side Stopper



Stands workpieces sideways from the side face of the magnetic chuck

Clamping Accessories for Magnetic Chuck



Fixes machine tables and magnetic chucks

Base Elements

Clamp Units

Clamping Parts

Machine Vises

Drilling Vises

Vibration Isolation

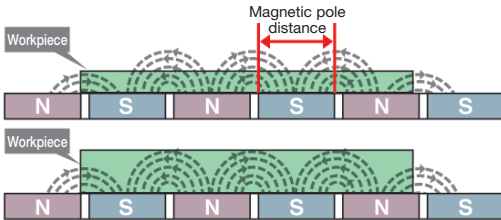
Surface Plates and Measurement Instruments

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Features

Strong magnetic clamping force of 6150N...But will not attract chips (ϕ 70 mm per 1 magnetic pole: in case of SS400)

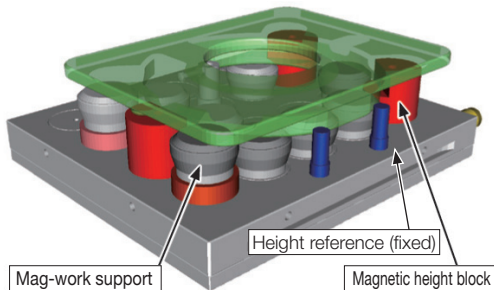
When the thickness of the workpiece is more than half the pole to pole distance, most chips are not attracted by magnetism and do not remain on the surface of the workpiece. Magnetism flows from N magnetic pole to S magnetic pole within the workpiece, and therefore does not attract chips.



When Using Magnetic Height Blocks/Mag-work Support

For accurate and stable clamping of uneven workpieces with mill scales for face milling.

By using magnetic height blocks/mag-work support with magnetic chucks, you can clamp to suit the height reference, and can also clamp at the center of the workpiece.



Usage Methods

(1) Insert the connector.



The unit is magnetized by turning the magnetization button (green) on.

(2) Remove the connector and attach the waterproof cover.



(3) Start machining.



(4) After machining, insert the connector again.



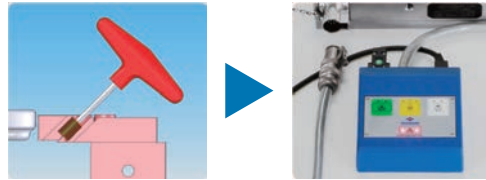
The unit is demagnetized by turning the demagnetization button (white) on.

(5) Replace the workpiece.



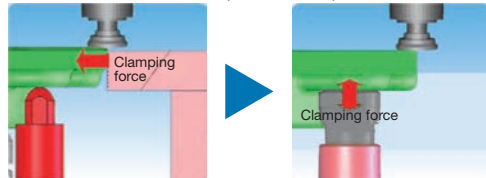
Improves work efficiency.

Whereas fastening using a tool is required in the case of a manual jig, in the case of a magnetic chuck, the workload on the worker is reduced because tools are not needed.

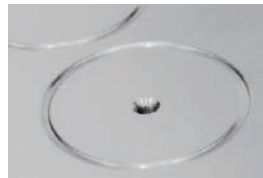


Process integration (top face and contour machining).

Whereas attention needs to be paid to interference with main spindle when selecting the clamp position in the case of a manual jig, magnetic chucks are easier and produce less areas of interference because the workpiece is clamped at the bottom.



Prevents infiltration of metal working coolant.



Resin and brass are not used on the top surface that the workpiece is placed on. The surface is completely metal, preventing infiltration of metal working coolant and increasing durability.

Base Elements

Clamp Units

Clamping Parts

Machine Vises

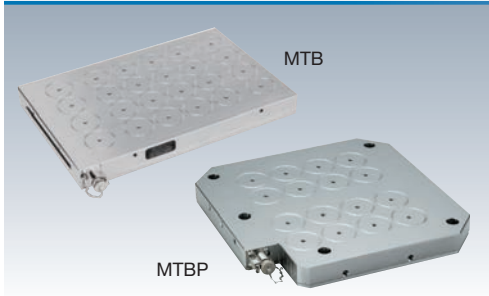
Drilling Vises

Vibration Isolation

Surface Plates and Measurement Instruments

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Magnetic Chucks

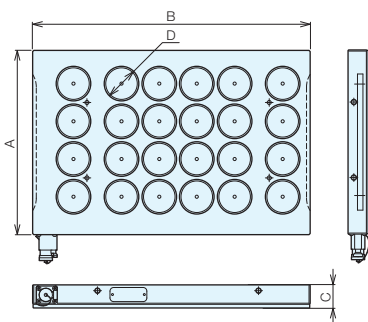


Material Main body: Structural steel

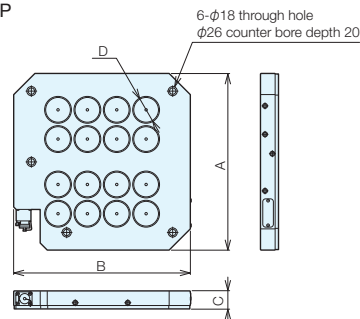
Accessories Controller 1 unit

Specifications and External Dimensions

MTB



MTBP



MTB Specifications

Order No.	No.	Size A × B × C	Magnetic Pole Size D	No. of Magnetic Poles	Magnetic Force (Per Pole) N	Magnetic Force (Overall) kN	Model of Controller	Weight (kg)
107666	MTB304HD70S	320 × 425 × 51	φ 70	12	6150	73	ST120F	50
107667	MTB306HD70S	320 × 610 × 51		18		110	ST120F	72
107668	MTB308HD70S	320 × 800 × 51		24		147	ST120F	95
107669	MTB310HD70S	320 × 965 × 51		30		184	ST120F	114
107670	MTB404HD70S	405 × 425 × 51		16		98	ST120F	64
107671	MTB406HD70S	405 × 610 × 51		24		147	ST120F	91
107672	MTB408HD70S	405 × 800 × 51		32		196	ST120F	120
107673	MTB410HD70S	405 × 965 × 51		40		246	ST200F	145
107674	MTB504HD70S	485 × 425 × 51		20		123	ST120F	76
107675	MTB506HD70S	485 × 610 × 51		30		184	ST120F	110
107676	MTB508HD70S	485 × 800 × 51	40	246	ST200F	144		
107677	MTB510HD70S	485 × 965 × 51	50	307	ST200F	173		
107678	MTB606HD70S	570 × 610 × 51	36	221	ST200F	128		
107679	MTB608HD70S	570 × 800 × 51	48	295	ST200F	169		

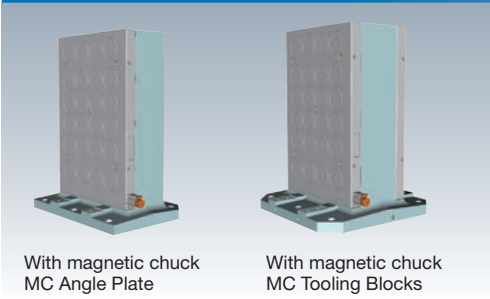
MTBP Specifications

Order No.	No.	Size A × B × C	Magnetic Pole Size D	No. of Magnetic Poles	Magnetic Force (Per Pole) N	Magnetic Force (Overall) kN	Model of Controller	Weight (kg)
114997	MTBP500HD70S	500 × 500 × 51	φ 70	16	6150	98	ST120F	88
114998	MTBP630HD70S	630 × 630 × 51		30	6150	184	ST120F	117

Reference Pages



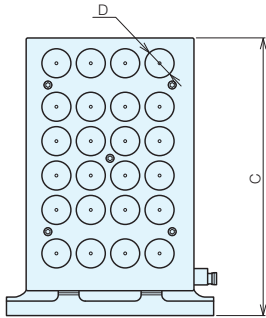
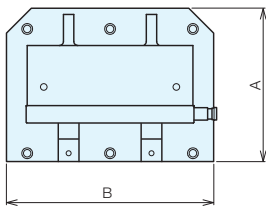
MC Angle Plates with Magnetic Chuck/MC Tooling Blocks with Magnetic Chuck



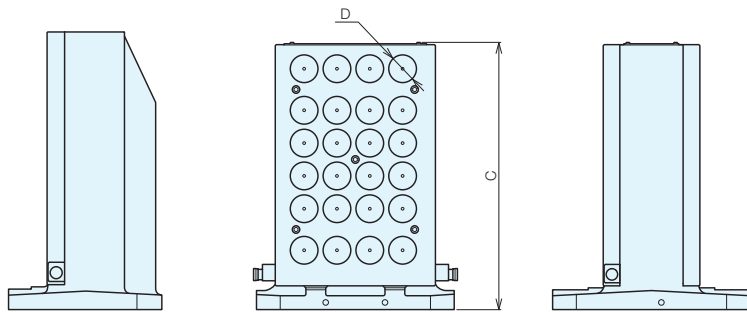
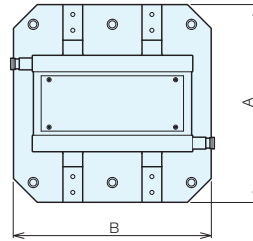
- Material** Magnetic chuck main body: Structural steel
MC Angle Plate and
MC Tooling Block: FC250
- Accessories** Controller 1 unit

Specifications and External Dimensions

Magnetic Chuck with Angle Plate



Magnetic Chuck with Tombstone



Magnetic Chuck with Angle Plate - Specifications

Order No.	No.	Size A × B × C	Magnetic Pole Size D	No. of Magnetic Poles	Magnetic Force (Per Pole) N	Magnetic Force (Overall) kN	Model of Controller	Weight (kg)
109148	GTM500-406HD	370x500x670	φ 70	24	6150	147	ST120F	270

Magnetic Chuck with Tombstone - Specifications

Order No.	No.	Size A × B × C	Magnetic Pole Size D	No. of Magnetic Poles (Per Face)	Magnetic Force (Per Pole) N	Magnetic Force (Overall) kN	Model of Controller	Weight (kg)
109149	TBM5002-406HD	500x500x675	φ 70	24	6150	147	ST120F	330
109150	TBM6302-606HD	630x630x675	φ 70	36	6150	221	ST200F	460

Reference Pages



MC Angle Plates with Magnetic Chuck/MC Tooling Blocks with Magnetic Chuck

Base Elements

Clamp Units

Clamping Parts

Machine Vises

Drilling Vises

Vibration Isolation

Surface Plates and Measurement Instruments

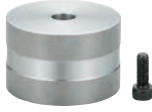
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Magnetic Height Block

Material Structural steel

Accessories Mounting bolt

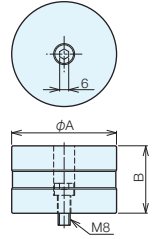
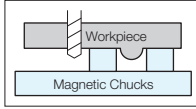
- Protects the top surface of the magnetic chuck
- Improves the precision of the top surface of the magnetic chuck (enables self-cut)
- Fixed by mounting bolt
- Avoids interference with through hole drills and the workpiece, etc.



Specifications

Order No.	No.	A	B	Weight (kg)
114993	MHB-R70C-15	70	15	0.4
110442	MHB-R70C-45	70	45	1.3
114994	MHB-R50C-32	50	32	0.5

Usage Examples



No.E-939

Magnetic Height Block with Lift Function

Material S45C

Accessories Mounting bolt

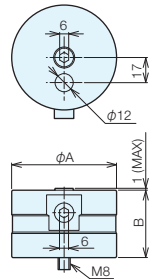
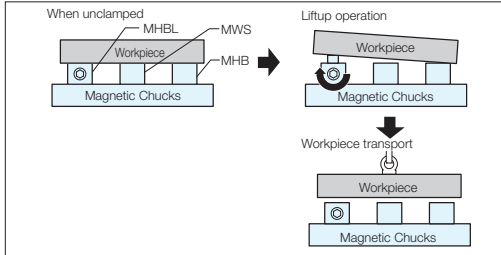
- Supports removing workpieces that are adsorbed by residual magnetism, etc. during unclamping



Specifications

Order No.	No.	A	B	Weight (kg)
114995	MHB L -R70C-32	70	32	0.9
114996	MHB L -R70C-45	70	45	1.3

Usage Examples



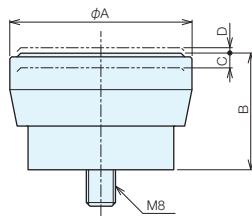
No.E-939

Mag-work Support

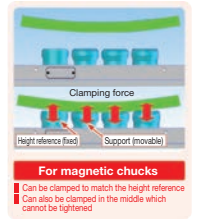
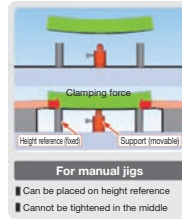
- Supports uneven workpieces
- Supports easy chattering workpieces

Specifications

Order No.	No.	A	B	C	D	Weight (kg)
100968	MWS-R50-32	$\phi 57$	32	2.5	1.5	0.4
110174	MWS-R76V-45	$\phi 76$	45	3	3	1.3



Accuracy stability of face milling for deformed workpieces or castings with a rough surface



No.E-939

Controllers ST120F/ST200F

Specifications and External Dimensions

Order No.	No.	Weight (kg)
107694	ST120F	2.5

Order No.	No.	Weight (kg)
107695	ST200F	5.9

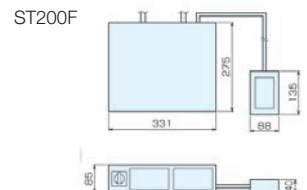
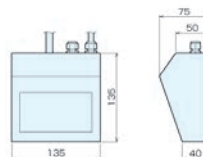


ST120F

ST200F

Specifications

Power supply: 200 V AC single phase 50/60 Hz
 Power cable length: 3.5m
 Output cable length: ST120F 2.5m/ST200 4.5m



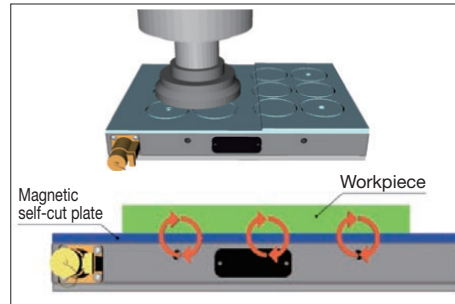
Magnetic Self-cut Plate

Material Structural steel, plastic **Accessories** Attachment bolt MB X 10 Maximum tightening torque 10 Nm
Self-cut Allowance 4 mm

- Protects the top surface of the magnetic chuck
- Improves the precision of the top surface of the magnetic chuck (enables self-cut)

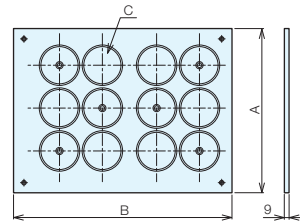


Usage Examples



Specifications

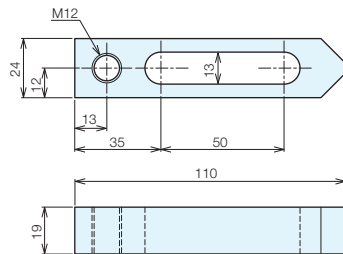
Order No.	No.	A	B	C (No. of Magnetic Poles)	Compatible Chucks	Weight (kg)
109151	MSC304HD70	318	423	12	MTB304HD70	9.4
109152	MSC306HD70	318	608	18	MTB306HD70	13.6
109153	MSC308HD70	318	798	24	MTB308HD70	17.8
109154	MSC310HD70	318	963	30	MTB310HD70	21.5
109155	MSC404HD70	403	423	16	MTB404HD70	12.0
109156	MSC406HD70	403	608	24	MTB406HD70	17.2
109157	MSC408HD70	403	798	32	MTB408HD70	22.6
109158	MSC410HD70	403	963	40	MTB410HD70	27.2
109159	MSC504HD70	483	423	20	MTB504HD70	14.3
109160	MSC506HD70	483	608	30	MTB506HD70	20.6
109161	MSC508HD70	483	798	40	MTB508HD70	27.1
109162	MSC510HD70	483	963	50	MTB510HD70	32.7
109163	MSC606HD70	568	608	36	MTB606HD70	25.5
109164	MSC608HD70	568	798	48	MTB608HD70	33.5



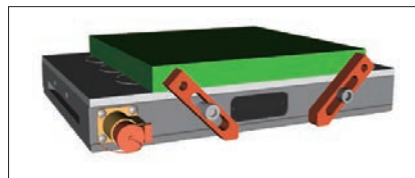
* The positions of the mounting holes differ depending on the size.

Side Stopper

Material S50C



Usage Examples



Specifications

Order No.	No.	Screw Dia.	Weight (kg)
109166	MT-SS110	M12	0.23

Clamping Accessories for Magnetic Chuck



Specifications

(4 pieces per set)

Order No.	No.	T-slot	Weight (kg)
109165	MTB-CS18	18	1.6

