

MAGNETIC TOOLS / JIG / CLAMP / SCRIBERS

MEASURING TOOLS

Magnetic Tools / Jigs / Clamp

• Block	
V-Block Set	S-002
Magnetic V-Holder	S-002,003
MINI V-Adapter	S-002
Magnetic V-Block	S-003
Box V-Block	S-004
Precision Cast Iron Type-A	S-004
Precision Cast Iron Type-B	S-005
Hard Steel V-Block	S-005
Cast Iron V-Block	S-006
Granite V Block	S-006
Cast Iron Vlock with V Groove	S-007
V Block with Magnet	S-007
Square Type Block	S-008
Free Block	S-009
• Demagnetizer	
Table Type Demagnetizer	S-009
Pen Type Demagnetizer	S-010
Handy Type Demagnetizer	S-010
Tool Demagnetizer	S-010
• Magnetic Chuck	
MillTec - MTB	S-011
MillTec - MTG	S-011
MillTec - ZERO	S-012
PressTec	S-012
Electronic Control Units	S-013
MaxX	S-013
• Magnetic Holder	
Magnetic Holder -ALNICO-	S-014
Magnetic Holder - SAMARIUM COBALTRust-	S-014
Magnetic Holder - ANISOTROPIC FERRITE WITH YOKE-	S-015
• Jigs	
Angle Block Set	S-016
Solid Angle Plate	S-016
Universal Angle Blocks	S-016
Multi Sine Bar	S-017
Measuring Clip	S-017
• Clamp	
HANE - Clamp	S-018
SCRIBER	
• Punch	
Combination Carbide Tip Scriber And Automatic Puch (S Type)	S-019
Carbide Tip Automatic Puch (M Type)	S-019
Carbide Tip Automatic Puch (M2 Type)	S-019
Carbide Tip Automatic Puch (L Type)	S-019
Carbide Tip Center Punch	S-020
• Scriber	
Scriber	S-020
Carbide Tip Scriber	S-020
Carbide Tip Scriber (Handy Pocket Type)	S-021
Carbide Tool Set	S-021-022
• Power Scriber	
Electric Marking Pencil	S-022

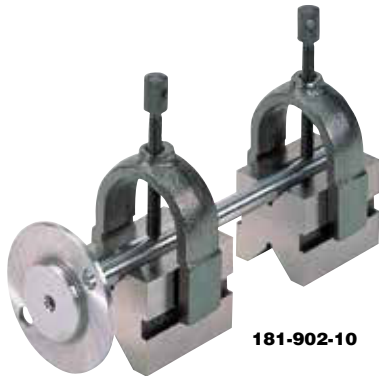
MAGNETIC TOOLS / JIGS / CLAMP

อุปกรณ์จับยึดชิ้นงาน

Mitutoyo

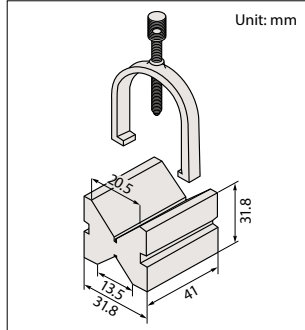
วี-บล็อก

**V-Block Set
SERIES 181**



181-902-10

DIMENSIONS



Optional Accessories

No.101462 Serrated anvil (standard accessory)

	Mitutoyo	Reference JIS B 7540 Grade 1, 100mm or less
Bottom-surface flatness	2µm or less	10µm or less
V-surface flatness	2µm or less	10µm or less
Parallelism between the bottom-surface and the cylinder on the V-surface	7.5µm or less	10µm or less
Inclination of the V-anvil against the bottom-surface	10µm or less	10µm or less
Parallelism between the side surface and the cylinder on the V-surface	7.5µm or less	20µm or less
Difference in the height of a pair of V-Blocks	9µm or less	10µm or less

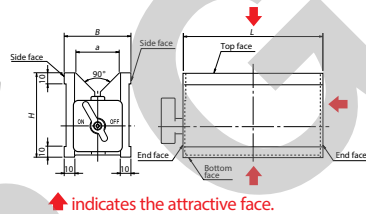
Metric

Order No.	Stem hole	Remarks
181-902-10	25mm	With Clamp



แท่นจับแม่เหล็ก

MAGNETIC V-HOLDER - Model KVA



[Application]

Holding tools for round bar marking, drilling, tapping and grinding of irregularly shaped workpieces. Holding tools for three-dimensional measuring instruments and various measuring systems.

[Features]

- Workpieces can be held on the top face (V face), bottom face and rear face.
- The ON/OFF lever is detachable. (The length of the opposite sides of the hex hole is 8mm.)
- Drip-proof and oil-resistant construction.
- Ultra-precision finishing is also available. Please contact us.

[mm (in)]

Order No.	Holding Power	Applicable Diameter	Dimensions			Mass
			B	H	L	
KVA-1A	300N (30kgf) or over.				80(3.14)	2kg/ 4.4 lb
KVA-2A	450N (45kgf) or over.	Ø8(0.31) - Ø50(1.96)	60(2.36)	73(2.87)	125(4.92)	3kg/ 6.6 lb
KVA-3A	700N (70kgf) or over.				180(7.08)	4.5kg/ 10 lb

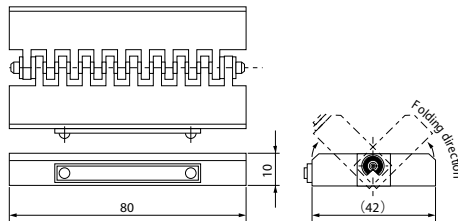
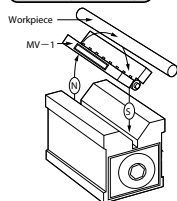
※ The holding power is based on the V face and Ø20 round steel bar. ※ For accuracy, see the table below.
 ※ Note that when workpieces are held on two or more faces simultaneously, the holding power of each face drops.

V-Adapter

MINI V-ADAPTER - MODEL MV



An example of usage



- Model: MV-1
- Dimensions: 80(3.14)x(42)(1.65)x10(0.39) mm(in)
- Mass: 250 g / 0.55 lb ■ Parallelism: 0.006 ■ Hardened

[Application]

This adapter itself is not magnetic, but when it is placed on a V-holder having the N pole and S pole on separate sides like Model KVA, it induces magnetism to hold small diameter workpieces that cannot be physically mounted directly. (See the figure below.) This adapter is recommended for holding workpieces during grinding, drilling and measurement.

[Features]

- The attractive face can be set to any angle between 90 and 180 degrees.
- The hinge part acts as a separator to divide magnetic poles.

แท่นจับแม่เหล็ก

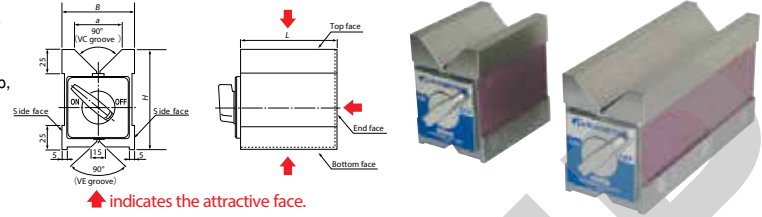
MAGNETIC V-HOLDER - Model KVS

[Application]

Suitable for securing irregularly shaped workpieces for grinding and light duty cutting such as drilling and tapping.

[Features]

- The special construction exerts a strong magnetic force on three faces of top, bottom and end.
- Usable for inspection also. Two accuracy grades; standard and special are available.
- The magnetic force can be turned on and off easily by turning the lever..
- Drip-proof construction.



[mm (in)]

Order No.	Holding Power	Applicable Diameter		Dimensions				Mass
	Steel bar	VC groove	VE groove	B	H	L	a	
KVS-1B	0.7kN (70kgf)	Ø8(0.31) - Ø68(2.67)	Ø8(0.31) - Ø20(0.78)	75(2.95)	50(1.96)	100(3.93)	105(4.13)	4.5kg/9.9 lb
KVS-2B	1.0kN (100kgf)					200(7.87)		9.0kg/ 19.8 lb

※ The holding power is based on the V face and Ø20 round steel bar. ※ For accuracy, see the table below.

※ Note that when workpieces are held on two or more faces simultaneously, the holding power of each face drops.

■ KYB accuracy

Item	Model • Accuracy	KYS-1B		KYS-2B	
		Standard	Special	Standard	Special
Parallelism	Bottom face to top face				
	Bottom face to V face	12	7	20	12
	End face to end face				
	Side face to V face				
Squareness	Bottom face to side face	21	10	21	15

แท่นจับแม่เหล็ก

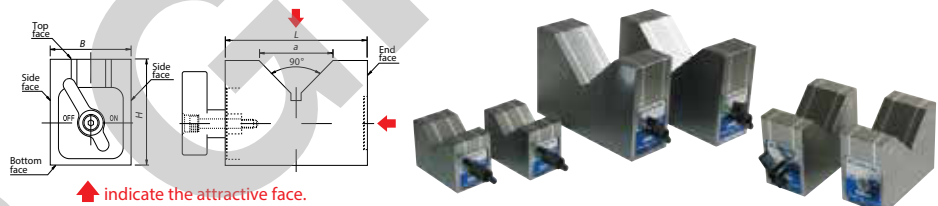
MAGNETIC V-BLOCK - Model KMV

[Application]

Holding tools for round bar marking and drilling.
Holding tools for three-dimensional measuring instruments and various measuring systems.

[Features]

- Workpieces can be held on the top face (V face) and end face.
- The ON/OFF lever is detachable. (The length of the opposite sides of the hex hole is 8 mm.)
- Drip-proof and oil-resistant construction.
- Two blocks make one set.
- Ultra-precision finishing is also available. Please contact us.



[mm (in)]

Order No.	Holding Power	Applicable Diameter	Dimensions				Mass
			B	H	L	a	
KMV-50D	150N (15kgf) or over.	Ø8(0.31) - Ø50(1.96)	40(1.57)	50(1.96)	70(2.75)		1kg/ 2.2 lb x 2
KMV-80D	200N (20kgf) or over.	Ø8(0.31) - Ø80(3.14)		80(3.14)	60(2.36)	38(1.49)	3kg/ 6.6 lb x 2
KMV-125D	230N (23kgf) or over.	Ø8(0.31) - Ø125(4.92)	50(1.96)	100(3.93)	90(3.54)		5kg/ 11 lb x 2

※ The holding power is based on the V face and Ø20 round steel bar. ※ For accuracy, see the table below.

※ Note that when workpieces are held on two or more faces simultaneously, the holding power of each face drops.

■ KMV accuracy

Item	Model • Accuracy	KMV-50D		KMV-80D		KMV-125D	
		Standard	Special	Standard	Special	Standard	Special
Parallelism	Bottom face to top face						
	Bottom face to V face	10	7	15	8	20	9
	End face to end face			12		15	
	Side face to V face	20		25		30	
Flatness of bottom face		10		15		20	
Squareness	Bottom face to side face	20	10	25	12	30	14
Difference in height of V faces of one set of blocks		7		8		8	

※ If you require higher accuracy, specify the required grade. ※ If you require special accuracy on areas not listed in the table, please contact us.

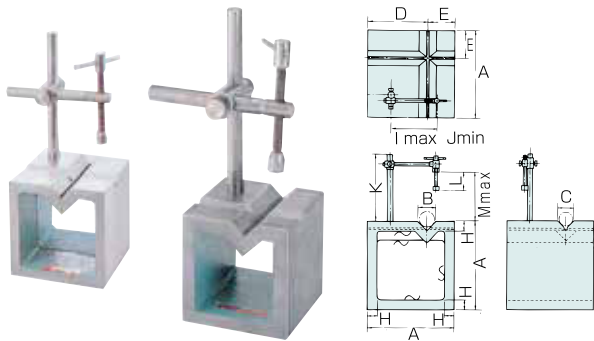
MAGNETIC TOOLS / JIGS / CLAMP

อุปกรณ์จับยึดชิ้นงาน



วี-บล็อก

BOX V-BLOCK OS-124



Features

- Support workpiece by clamping holder to keep parallel and squareness.
- By clamping holder and v-groove, marking the 45° line.
- Due to the molding characteristics of this product, patterns and fine nests may remain.
- *Material -- FC250

Dimensions (with fittings) OS-124

Order No.			
Machine	Class B	Class A	Class AA
124-100K	124-100B	124-100A	124-100AA
124-125K	124-125B	124-125A	124-125AA
124-150K	124-150B	124-150A	124-150AA
124-175K	124-175B	124-175A	124-175AA
124-200K	124-200B	124-200A	124-200AA
124-250K	124-250B	124-250A	124-250AA
124-300K	124-300B	124-300A	124-300AA
124-400K	124-400B	124-400A	124-400AA
124-500K	124-500B	124-500A	124-500AA
124-600K	124-600B	124-600A	124-600AA

- Parallelism of 6 faces \pm Squareness
 - \pm Parallelism of V-groove from the reference flat
- Machine $\left(50 + \frac{A}{15} \right) \mu\text{m}$
- Class B $\left(10 + \frac{A}{25} \right) \mu\text{m}$
- Class A $\left(5 + \frac{A}{50} \right) \mu\text{m}$
- Class AA $\left(3 + \frac{A}{100} \right) \mu\text{m}$
- A=Nominal size

Nominal size (mm)	Size (mm)											Weight (kg)
	A	B	C	D	E	H	I	J	K	L	M	
100	100	25	16	66	35	12	118	15	175	60	136	3.4
125	125	26	20	73	52	14	118	15	175	60	136	6.2
150	150	31	22	95	55	16	118	15	175	60	136	10.3
175	175	31	28	112	63	20	118	15	175	60	136	16.3
200	200	39	26	132	68	22	118	15	175	60	136	24.5
250	250	50	38	185	65	23	210	20	275	120	225	53
300	300	50	38	200	100	30	210	20	275	120	225	76
400	400	120	110	300	100	40	380	50	500	150	450	208
500	500	150	140	375	125	50	380	50	500	150	450	376
600	600	160	150	450	150	60	380	50	500	150	450	650

วี-บล็อก

PRECISION CAST IRON TYPE-A (V-BLOCK) OS-126



Features

- Due to the molding characteristics of this product, patterns and fine nests may remain.
- Material - FC250

Dimensions (Two pieces = one pair) OS-126

Order No.		Nominal Size (mm)	Size (mm)										Weight (kg)
Machine	Class A		L x H x W	ØA	ØB	C	D	E	F	G	I		
126-50K	126-50A	50	50 x 32 x 22	38	5	29	18	16	15	12	3	0.4	
126-75K	126-75A	75	75 x 38 x 25	44	5	33	25	20	22.5	20	3	0.9	
126-100K	126-100A	100	100 x 58 x 35	72	5	54	33	27	27.5	27.5	3	3	
126-125K	126-125A	125	125 x 80 x 50	94	5	71	47	35	32	32	3	8	
126-150K	126-150A	150	150 x 90 x 60	113	7	85	45	35	37.5	37.5	4	10	
126-175K	126-175A	175	175 x 107 x 62	122	8.5	92	60	51	44	44	5	13	
126-200K	126-200A	200	200 x 140 x 90	162	8.5	122	79	50	60	55	5	26	
126-250K	126-250A	250	250 x 160 x 110	202	8.5	152	88	58	65	65	5	48	
126-300K	126-300A	300	300 x 200 x 125	253	8.5	190	108	78	75	75	5	88	
126-400K	126-400A	400	400 x 260 x 210	260	11	195	100	80	110	100	7	255	
126-500K	126-500A	500	500 x 260 x 210	380	11	285	117	98	153	138	7	320	
126-600K	126-600A	600	600 x 300 x 210	386	11	290	118	94	166	154	7	442	

The weight shown is for one pair



วี-บล็อก

PRECISION CAST IRON TYPE-B (V-BLOCK)

OS-127

Features

- Due to the molding characteristics of this product, patterns and fine nests may remain.
- Material - FC250

Dimensions (Two pieces = one pair) OS-127

Order No.		Nominal Size (mm)	Size (mm)						Weight (kg)
Machine	Class A		L x H x W	ØA	ØB	C	D	E	
127-50K	127-50A	50	50 x 32 x 24	33	5	25	8	3	0.7
127-75K	127-75A	75	75 x 60 x 32	53	5	40	10	3	2
127-100K	127-100A	100	100 x 65 x 40	54	5	41	11	3	3
127-125K	127-125A	125	125 x 80 x 50	80	5	60	15	3	5
127-150K	127-150A	150	150 x 90 x 65	85	7	64	15	4	9
127-175K	127-175A	175	175 x 121 x 90	109	8.5	83	15	5	15
127-200K	127-200A	200	200 x 140 x 100	118	8.5	89	18	5	25
127-250K	127-250A	250	250 x 170 x 130	193	8.5	145	20	5	37
127-300K	127-300A	300	300 x 190 x 140	232	8.5	174	25	5	60
127-400K	127-400A	400	400 x 260 x 160	280	11	210	30	7	94
127-500K	127-500A	500	500 x 300 x 175	353	11	265	30	7	162
127-600K	127-600A	600	600 x 400 x 220	533	11	400	35	7	329

The weight shown is for one pair

วี-บล็อก

HARD STEEL V-BLOCK

OS-128

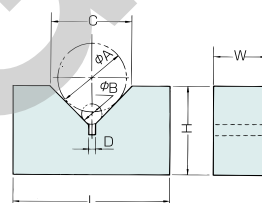
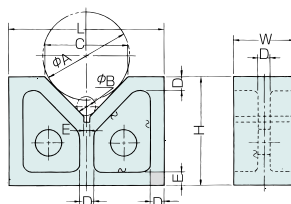
Features

- Heat treatment - Hardened
- Material - S50C

Dimensions (Two pieces = one pair) OS-128

Order No.	Nominal Size (mm)	Size (mm)					Accuracy (mm)			Weight (kg)
		L x H x W	ØA	ØB	C	D	Parallelism	Squareness (±)	V-Slot parallelism (±)	
128-38	38	38 x 24 x 19	26	5	20	3	0.005	0.005	0.005	0.26
128-50	50	50 x 28 x 22	33	5	25	3	0.005	0.005	0.005	0.47
128-75	75	75 x 50 x 35	60	5	45	3	0.005	0.005	0.005	2.01
128-100	100	100 x 60 x 38	73	5	55	3	0.005	0.005	0.005	3.51
128-125	125	125 x 70 x 50	86	5	65	3	0.005	0.005	0.005	6.75
128-150	150	150 x 90 x 60	120	7	90	4	0.005	0.005	0.005	12.52
128-200	200	200 x 140 x 90	160	8.5	120	5	0.008	0.008	0.008	35.07
128-250	250	250 x 160 x 110	200	8.5	150	5	0.01	0.01	0.01	55
128-300	300	300 x 200 x 125	250	8.5	190	5	0.014	0.014	0.014	98

The weight shown is for one pair



MAGNETIC TOOLS / JIGS / CLAMP

อุปกรณ์จับยึดชิ้นงาน

Seiki

วี-บล็อก

CAST IRON V BLOCK - A type • B type

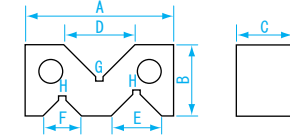
For general engineering work or marking work.

Tool for precise holding of round parts during measurement and production.

Unit : mm



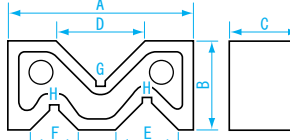
SV-100AT



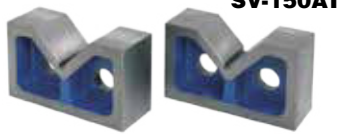
SV-50AT ~ SV-100AT



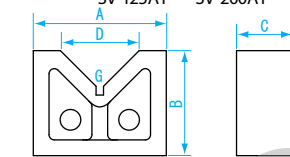
SV-125AT



SV-125AT ~ SV-200AT



SV-150AT



SV-75BT ~ SV-200BT

Order No.	A	B	C	D	E	F	G*	H*
SV-50AT	50	24	20	23	17	13	4	2
SV-75AT	75	35	24	37	24	16	4	2
SV-100AT	100	52	33	52	32	22	4	4
SV-125AT	125	69	44	63	37	26	5	3
SV-150AT	150	80	50	74	45	30	5	4
SV-200AT	200	110	70	100	60	40	5	4
SV-75BT	75	53	30	34	-	-	2	-
SV-100BT	100	60	38	48	-	-	5	-
SV-125BT	125	79	46	58	-	-	5	-
SV-150BT	150	88	57	80	-	-	5	-
SV-200BT	200	140	85	114	-	-	5	-

※ Reference value

USE :
• Tool for precise holding of round parts

MATERIAL :

• Cast iron

FEATURES :

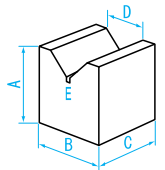
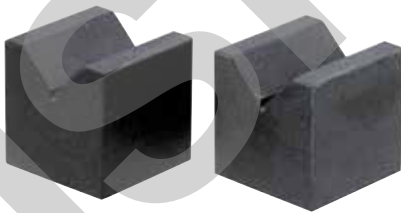
• Machine finish

• 2 pcs (matched pair)

Order Code	Model No.	Type	Nominal Size (mm)	Pair groove height tolerance (mm)	Weight
SV-50AT	150975	A Type	50	0.05	300g
SV-75AT	150976		75		600g
SV-100AT	150977		100		1.8kg
SV-125AT	150978		125		3.4kg
SV-150AT	150979		150		5.4kg
SV-200AT	150980	200	0.07	12.5kg	
SV-75BT	150956	B Type	75	0.05	1.1kg
SV-100BT	150957		100		1.8kg
SV-125BT	150958		125		3.6kg
SV-150BT	150959		150		5.8kg
SV-200BT	150960		200		16.2kg

วี-บล็อก

GRANITE V BLOCK



Unit : mm

USE :
• Tool for precise holding of round parts

MATERIAL :

• Granite

FEATURES :

• Granite is abrasion resistant. Unlike cast iron, granite does not rust or deteriorate with time.

• 2 pcs (matched pair)

Order No.	A	B	C	D	E*
GV-50	50 ± 1			40 ± 1	Approx. 4
GV-75	75 ± 1			50 ± 1	Approx. 4
GV-100	100 ± 1			63 ± 1	Approx. 6
GV-150	150 ± 1			110 ± 1	Approx. 8

※ Reference value

Order Code	Model No.	Nominal size (mm)	V groove squareness Squareness of parallels sides	Weight
GV-50	150961	50	5μm / 100mm	430g
GV-75	150962	75		1.2kg
GV-100	150963	100		2.5kg
GV-150	150964	150		8.6kg

วี-บล็อก

CAST IRON BLOCK WITH V GROOVE

Allows clamping of workpiece for processing or measurement

USE

- Allows clamping of workpiece for marking, processing or measurement

MATERIAL

- Cast iron

FEATURES

- Machine finish
- with clamp

SPECIFICATIONS

- V groove(dovetail) angle: 90°



Order Code	Model No.	Nominal Size (mm)	Groove height squareness / parallelism / perpendicularity (mm)	Length (mm)	Width (mm)	Height (mm)	Thickness (mm)	Weight
SBV-100T	150987	100	0.05	100	100	100	13	3.7kg
SBV-125T	150988	125	0.06	125	125	125	15	6.7kg
SBV-150T	150989	150		150	150	19	12.2kg	
SBV-200T	150990	200	0.07	200	200	200	25	28.1kg

Blocks

ตัวจับยึดชิ้นงาน

Demagnetizer

เครื่องสลายแม่เหล็ก

Magnetic Chuck

แม่เหล็กยึดชิ้นงาน

Magnetic Holder

หัวจับแม่เหล็ก

Jigs

จิ๊ก

Clamps

แคลมป์

Punch

เหล็กมาร์ค

Scriber

เหล็กขีด

Power Scriber

ปากกาไฟฟ้า

วี-บล็อก

V BLOCK WITH MAGNET

USE

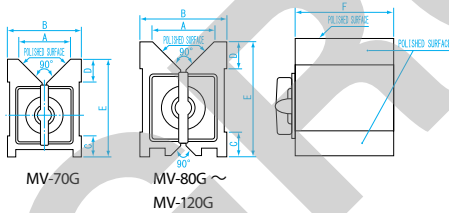
- Use as a jig to hold cylindrical workpieces for measuring or marking

MATERIAL

- Cast iron/ Ground finish

FEATURES

- Right angle/ Parallelism: 0.025mm/100mm
- The magnet can be turned ON/OFF by lever operation
- Ground finish



Unit : mm

Order No.	A	B	C	D	E	F
MV-70G	38	60	10	10	73	70
MV-80G	50	70	20	22	95	80
MV-100G	50	70	20	22	95	100
MV-120G	50	70	20	22	95	120



※ Magnetic power when used with 20mm cylindrical workpiece

Order Code	Model No.	H x W x D (mm)	Magnetic Power ※ N	Weight
MV-70G	151181	73 x 60 x 70	80	1.7kg
MV-80G	151178	95 x 70 x 80	140	3.3kg
MV-100G	151179	95 x 70 x 100	180	4.1kg
MV-120G	151180	95 x 70 x 120	200	4.9kg

MAGNETIC TOOLS / JIGS / CLAMP

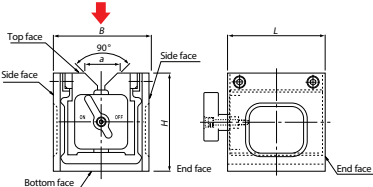
อุปกรณ์จับยึดชิ้นงาน



BLOCKS
ตัวจับยึดชิ้นงาน

แท่นจับแม่เหล็ก

SQUARE TYPE BLOCK - Model KYB



↑ indicates the attractive face.

[Application]

Holding tools for marking and light duty machining.
Holding tools for three-dimensional measuring instruments and various measuring systems.

[Features]

- A workpieces can be held on one face of the top (V face).
- The ON/OFF lever is detachable. (The length of the opposite sides of the hex hole is 8mm.)
- Drip-proof and oil-resistant construction.
- An M8 tapped hole is provided on the top for lifting (KYA-18 and 20B only).
- Ultra-precision finishing is also available. Please contact us.

[mm (in)]

Order No.	Holding Power	Applicable Diameter	Dimensions				Mass
			B	H	L	a	
KYB-8A	180N (18kgf) or over.	Ø10(0.39) - Ø32(1.25)	80(3.14)	80(3.14)	80(3.14)	29(1.02)	2.5kg/ 5.5 lb
KYB-10A	343N (35kgf) or over.	Ø13(0.51) - Ø50(1.96)	100(3.93)	100(3.93)	100(3.93)	40(1.57)	6kg/ 13 lb
KYB-13A	400N (40kgf) or over.	Ø13(0.51) - Ø50(1.96)	125(4.92)	125(4.92)	125(4.92)	40(1.57)	8kg/ 17 lb
KYB-15A	589N (60kgf) or over.	Ø13(0.51) - Ø50(1.96)	150(5.90)	150(5.90)	150(5.90)	40(1.57)	12kg/ 26 lb
KYB-18A	600N (60kgf) or over.	Ø14(0.55) - Ø66(2.59)	180(7.08)	180(7.08)	180(7.08)	50(1.96)	16kg/ 35 lb
KYB-20A	785N (80kgf) or over.	Ø14(0.55) - Ø66(2.59)	200(7.87)	200(7.87)	200(7.87)	50(1.96)	22kg/ 48 lb

※ The holding power is based on the V face and Ø20 round steel bar. ※ For accuracy, see the table below.

■ KYB accuracy

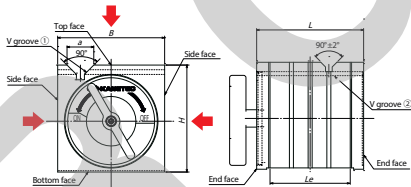
Item	Model • Accuracy	KYB-8B		KYB-10B		KYB-13B		KYB-15B		KYB-18B		KYB-20B	
		Standard	Special	Standard	Special	Standard	Special	Standard	Special	Standard	Special	Standard	Special
Parallelism	Bottom face to top face	10	7	10	7	15	8	15	8	20	9	20	9
	Bottom face to V face	10		10		12		12		15		15	
	End face to end face	20		20		25		25		30		30	
	Side face to V face	20		20		25		25		30		30	
Flatness of bottom face		10		10		15		15		20		20	
	Squareness	Bottom face to side face	20	10	20	10	25	12	25	12	30	14	30

■ KYA accuracy

Item	Model • Accuracy	KYA-8B		KYA-10B		KYA-13B		KYA-15B		KYA-18B		KYA-20B	
		Standard	Special	Standard	Special	Standard	Special	Standard	Special	Standard	Special	Standard	Special
Parallelism	Bottom face to top face	10	7	10	7	15	8	15	8	20	9	20	9
	Bottom face to V face	10		10		12		12		15		15	
	End face to end face	20		20		25		25		30		30	
	Side face to V face	20		20		25		25		30		30	
Flatness of bottom face		10		10		15		15		20		20	
	Squareness	Bottom face to side face	20	10	20	10	25	12	25	12	30	14	30

แท่นจับแม่เหล็ก

SQUARE TYPE BLOCK - Model KYA



↑ indicates the attractive face.

[Application]

Holding tools for marking and light duty machining.
Holding tools for three-dimensional measuring instruments and various measuring systems.

[Features]

- Workpieces can be held on three faces of the top (V face) and both side faces.
- The ON/OFF lever is detachable. (The length of the opposite sides of the hex hole is 8 mm.)
- Drip-proof and oil-resistant construction.
- An M8 tapped hole is provided on the top for lifting (KYA-18 and 20B only).
- Ultra-precision finishing is also available. Please contact us.

[mm (in)]

Order No.	Holding Power		Applicable Diameter		Dimensions					Mass
	V groove①	V groove②	V groove①	V groove②	B	H	L	Le	a	
KYA-8B	120N (12kgf)	100N (10kgf)	Ø10(0.39) - Ø25(0.98)	Ø8(0.39) - Ø15(0.59)	80(3.14)	80(3.14)	80(3.14)	60(2.36)	20(0.78)	3.5kg/ 7.7 lb
KYA-10B	200N (20kgf)	120N (12kgf)	Ø10(0.39) - Ø35(1.37)	Ø10(0.39) - Ø30(1.18)	100(3.93)	100(3.93)	100(3.93)	72(2.83)	26(1.02)	7kg/ 15 lb
KYA-13B	300N (30kgf)	250N (25kgf)	Ø10(0.39) - Ø40(1.57)	Ø10(0.39) - Ø26(1.02)	125(4.92)	125(4.92)	125(4.92)	85.5(3.36)	30(1.18)	14kg/ 30 lb
KYA-15B	400N (40kgf)	400N (40kgf)	Ø10(0.39) - Ø40(1.57)	Ø10(0.39) - Ø30(1.18)	150(5.90)	150(5.90)	150(5.90)	107(4.21)	32(1.25)	23kg/ 50 lb
KYA-18B	400N (40kgf)	300N (30kgf)	Ø14(0.55) - Ø50(1.96)	Ø14(0.55) - Ø30(1.18)	180(7.08)	180(7.08)	180(7.08)	123(4.84)	38(1.49)	37kg/ 81 lb
KYA-20B	650N (65kgf)	650N (65kgf)	Ø14(0.55) - Ø50(1.96)	Ø14(0.55) - Ø30(1.18)	200(7.87)	200(7.87)	200(7.87)	155(6.10)	38(1.49)	51kg/ 112 lb

※ The holding power is a reference value obtained using a test piece of S15C, □50 x 125, ground surface.
※ Note that when workpieces are held on two or more faces simultaneously, the holding power of each face drops.

■ KYA accuracy

Item	Model • Accuracy	KYA-8B		KYA-10B		KYA-13B		KYA-15B		KYA-18B		KYA-20B	
		Standard	Special	Standard	Special	Standard	Special	Standard	Special	Standard	Special	Standard	Special
Parallelism	Bottom face to top face	10	7	10	7	15	8	15	8	20	9	20	9
	Bottom face to V face	10		10		12		12		15		15	
	End face to end face	20		20		25		25		30		30	
	Side face to V face	20		20		25		25		30		30	
Flatness of bottom face		10		10		15		15		20		20	
	Squareness	Bottom face to side face	20	10	20	10	25	12	25	12	30	14	30

แท่นจับแม่เหล็ก

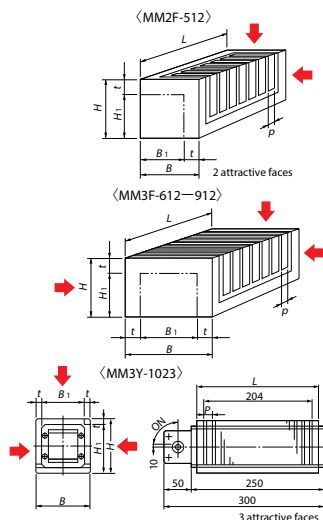
FREE BLOCK - Model MM

[Application]

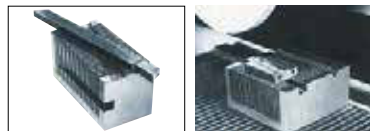
These blocks are designed to allow deep engraving such as grooves and steps on the attractive face to fit workpiece shapes when holding workpieces.

[Features]

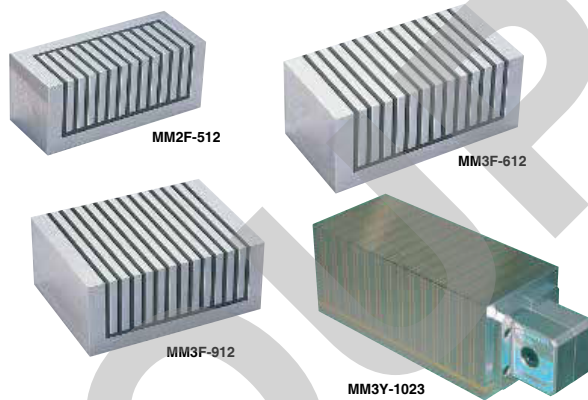
- The attractive face can be removed up to 10 mm deep from the surface of the new block.
- As workpieces can be fitted in grooves, a large machining pressure can be used. Also cemented carbide workpieces, which are difficult to hold by a magnetic chuck, can be secured by using these blocks to enable grinding.
- These blocks can be mounted on the magnetic chuck work face.
- There are two types; a magnetic force ON-OFF type and a type not equipped with an ON-OFF function.



↑ indicates the attractive face.



Freely workable permanent magnetic block



Order No.	Nominal Size	Holding Power	Dimensions					Pole Pitch	Work Allowance	Mag. Force ON/OFF	Mass
			B	L	H	B1	H1				
MM2F-512	50(1.96) x 120(4.72)	200N (20kgf)	50 (1.96)			40				2kg/ 4.4 lb	
MM3F-612	60(2.36) x 120(4.72)	400N (40kgf)	60 (2.36)	120 (4.72)	50 (1.96)	40 (1.57)	8(3+5) 0.31	Max.10	Not Provided	2.5kg/ 5.5 lb	
MM3F-912	90(3.54) x 120(4.72)	600N (60kgf)	90 (3.54)			70 (2.75)	(0.11+0.19)	(0.39)		3.5kg/ 7.7 lb	
MM3Y-1023	100(3.93) x 230(9.05)	750N (75kgf)	100 (3.93)	230 (9.05)	100 (3.93)	80 (3.15)	15.2 (0.59)		Provided	20kg/ 44 lb	

*The holding power is a reference value obtained using a test piece of S15C, □50 x t25, ground surface.

*Note that when workpieces are held on two or more faces simultaneously, the holding power of each face drops.

Blocks

ตัวจับยึดชิ้นงาน

Demagnetizer

เครื่องสลายอำนาจแม่เหล็ก

Magnetic Chuck

แม่เหล็กยึดชิ้นงาน

Magnetic Holder

หัวจับแม่เหล็ก

Jigs

จิ๊ก

Clamps

แคลมป์

Punch

เหล็กมาร์ค

Scriber

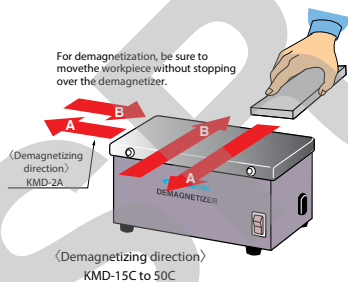
เหล็กขีด

Power Scriber

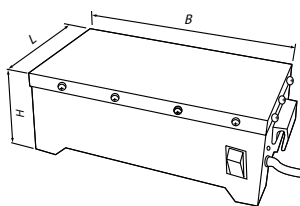
ปากกาไฟฟ้า

เครื่องสลายอำนาจแม่เหล็ก

TABLE TYPE DEMAGNETIZER - Model KMD



For demagnetization, be sure to move the workpiece without stopping over the demagnetizer.



KMD-2A

[Application]

These demagnetizers produce an alternating magnetic field on the surface by use of an AC power source, through which workpieces are passed to remove the magnetism remaining on their surface.

[Features]

- Thick workpieces can be demagnetized effectively by moving both the face and the back over the demagnetizer.
- These demagnetizers have good heat radiation and can withstand continuous power-on condition.
- These demagnetizers are very powerful and can demagnetize steel materials that have properties similar to magnetic steel and have large magnetism holding power such as high-speed steel, bearing steel, nickel-chrome steel, spring steel, die steel, etc. that are usually difficult to demagnetize. (KMD-2A, KMD-30C to 50C)

■ If you plan to install the demagnetizer in the vertical direction or opposite direction, please contact us.

[mm (in)]

Order No.	Power Source	Power Capacity (Current)	Working Rate	Effective Demag. Width	Dimensions			Mass
					B	L	H	
KMD-2A	3-phase 200 VAC, 50/60 Hz	2kVA (5.8A)		160(6.29)	453(17.8)	245(9.64)	140(5.51)	30kg/66 lb
KMD-15C	Single-phase 100 VAC, 50/60 Hz	140VA (1.4A)	100% ED	80(3.15)	150(5.90)	120 (4.72)	80 (3.15)	5kg/11 lb
KMD-20C		300VA (3.0A)		130(5.11)	200(7.87)			7kg/15 lb
KMD-30C	Single-phase 200 VAC, 50/60Hz	0.74kVA (3.7A)		180(7.08)	300(11.8)	200(7.87)	120(4.72)	19kg/41 lb
KMD-40C		1.04kVA (5.2A)		280(11.0)	400(15.7)			29kg/63 lb
KMD-50C	Single-phase 220 VAC, 60Hz	1.28kVA (6.4A)		380(14.9)	500(19.6)			37kg/81 lb

*Cable, 2 m, included. *KMD-15C/20C come with a ground plug. *A different-voltage type (special type) is also available.

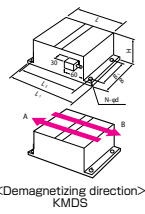
MAGNETIC TOOLS / JIGS / CLAMP

อุปกรณ์จับยึดชิ้นงาน



เครื่องสลายอำนาจแม่เหล็ก

TABLE TYPE DEMAGNETIZER - Model KMDS



[Application]

These demagnetizers produce a strong magnetic field on the surface by use of an AC power source to demagnetize workpieces on a belt which runs over close to the surface.

[Features]

- The demagnetizers are of drip-proof construction. They will not fail if wetted by grinding fluid or cooling water.
- These can be incorporated in belt type grinders or other automatic and continuous grinders.
- The very strong demagnetizing force generated provides some margin for the clearance on the surface to allow a belt conveyor to run over the work face.

Order No.	Power Source	Power Capacity (Current)	Working Rate	Dimensions							Mass	
				B	L	H	B1	N	Ø d	L1		L2
KMDS-1A	Single-phase 200 VAC, 50/60 Hz	200VA (3.7A)	50% ED	150(5.90)	206(8.10)	100(3.93)	-	2	8.5	260(10.2)	235(9.25)	9.0kg/19 lb
KMDS-2A		400VA (5.2A)	Continuous operation	200(7.87)					(0.33)			13.5kg/30 lb
KMDS-3A		800VA (6.4A)	allowed when cooled by water.	400(15.7)	350(13.7)	120(4.72)	120(4.72)	4		140(16.1)	380(14.9)	41.0kg/90 lb

※ Cable, 2 m, included. ※ KMD-15C/20C come with a ground plug. ※ A different-voltage type (special type) is also available.

เครื่องสลายอำนาจแม่เหล็ก

PEN TYPE DEMAGNETIZER - Model KMDP

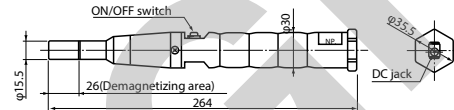


[Application]

Recommended where magnetism on the surface of metallic workpieces in general needs to be reduced in a limited area or locally. This is useful to completely eliminate weak magnetism that remains locally in jigs and workpieces after they have been demagnetized by a large demagnetizer. It is also useful for demagnetizing cutters of machines and punches and guide pins of press dies while they are mounted.

[Features]

- Compact and powerful as a rare earth magnet having strong magnetic force is used at the end of the rotary magnetic field.
- A re-chargeable battery is used as a power source of the motor. No need to replace the battery. Power can also be supplied with the included AC adapter if the battery has reached its life.
- Simple construction and simple appearance.
- An environment friendly nickel hydrogen battery is used.



Order No.	Battery Rating	Mass
KMDP-16A	2.4V2000mAh	0.3kg/0.6lb

※ The AC adapter (input 100 VAC, 50/60 Hz, output 2.7 VDC, 0.5 A, cord length 1.9 m) is included as a standard accessory.

เครื่องสลายอำนาจแม่เหล็ก

HANDY TYPE DEMAGNETIZER - Model KMDH



[Application]

Suitable for demagnetizing tools such as drills, cutting tools, cutters and magnetized slide calipers. These can also be used for demagnetizing large steel plates partially.

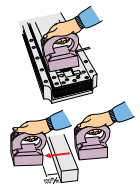
[Features]

- Compact and handy.



HOW TO USE

- The demagnetizer is turned on while the pushbutton switch is held pressed and turned off when you release it.
- The button must be held pressed while demagnetizing is going on.
- Turn off the demagnetizer after it has been moved more than 100 mm away from the demagnetized workpiece.



Working rate 70% ED (Power on 7 minutes and pause 3 minutes)

Order No.	Power Source	Source Capacity	Effective Demag. Width	Dimensions			Mass
				B	L	H	
KMDH-5A	Single-phase 100 VAC, 50/60 Hz	70VA	50(1.96)	86(3.38)	102(4.01)	119(4.68)	2.3kg/5.1 lb

※ The height is up to the grip. ※ 2 m cord is included. The plug is provided with a ground pin. ※ A different-voltage type (special type) is also available. ※ The power plug is of tracking resistance type.

เครื่องสลายอำนาจแม่เหล็ก

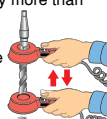
TOOL DEMAGNETIZER - Model KMDC

Demagnetization of magnetized tools such as drills, reamers and cutters and measuring instruments!



HOW TO USE

- Power is applied only while the pushbutton switch is held pressed for demagnetization.
- Turn off the demagnetizer after moving it away more than 100 mm from the demagnetized object.
- If the demagnetizer is turned on frequently, the body temperature rises. If the temperature rises too high, it is indicated by an overheat alarm seal. Stop using it for a while.



[Application]

Easy demagnetization of a wide variety of magnetized objects including tools such as drills, milling cutters, reamers and cutters, round workpieces and measuring instruments such as slide calipers.

[Features]

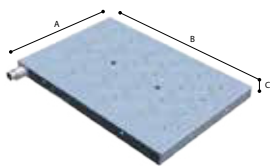
- Light weight, compact and easy operation.
- Fine chips sticking by attraction to drills, reamers, etc. can be removed while they remain mounted on machines.



Order No.	Power Source	Source Capacity	Working Rate	Working Rate	Working Rate	Mass
KMDC-40	Single-phase 100 VAC, 50/60 Hz	75VA	20% ED, 1 minute max.	Momentary input by use of pushbutton	Ø40 (1.57)	0.9kg/2 lb

※ Cord length 2.5 m (with curled cord). ※ The power plug is of tracking resistance type.

แม่เหล็กยึดชิ้นงาน มิลล์เทคโนโลยี รุ่น MTB MillTec-MTB



• MillTec Basic

All the advantages of MillTec technology, in a version without GRIP function.

MillTec /B is available in HD configuration and in the new ST low-polar-density version; both have a thickness of 51mm.

The ST version is optimized for clamping medium-large pieces; it is recommended to compose magnetic tables with a low investment.

MillTec /B is supplied with XT200 and ST200/F series controls.



MillTec Basic

Order No.	Dimensions			Poles (n°)	Force (Ton**)	Weight Kg.
	A	B	C			
MTB304HD	320	420	51	12	7.8	70
MTB306HD	320	600	51	18	11.7	90
MTB308HD	320	790	51	24	15.6	120
MTB310HD	320	975	51	30	19.5	140
MTB404HD	405	420	51	16	10.4	90
MTB406HD	405	500	51	24	13.0	90
MTB408HD	405	600	51	32	15.6	110
MTB410HD	405	790	51	40	20.8	140
MTB504HD	485	975	51	20	26.0	175
MTB506HD	485	600	51	30	19.5	130
MTB508HD	485	790	51	40	26.0	165
MTB510HD	485	975	51	50	32.5	195
MTB606HD	570	600	51	36	23.4	155
MTB608HD	570	790	51	48	31.2	195
MTB610HD	570	975	51	60	39.0	225

(**) : Maximum force with workpiece in intimate contact, with all poles covered

Up to 16kg/cm² in active magnetic area.

Over 75 Ton/m² in workpiece contact area.

2 lateral slots to fix on machine table

Magnetic flux depth : 17 mm

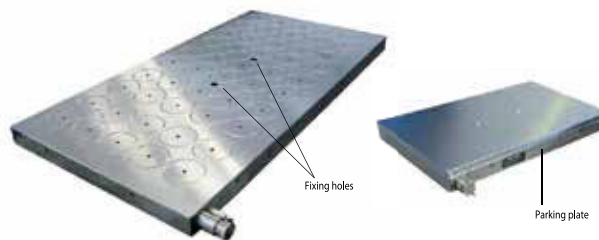
แม่เหล็กยึดชิ้นงาน มิลล์เทคโนโลยี รุ่น MTG MillTec-MTG

• MillTec GRIP

It generates a self-clamping force to the machine table equivalent to 30% of the nominal force of the system.

Each pole provides a nominal force of 615 daN to the workpiece and of 185 daN to the machine table.

The mechanical clamping elements will be well supported to obtaining perfect stability and clamping uniformity.



Fixing holes

Parking plate

Order No.	Dimensions			Poles (n°)	Force (Ton**)	Weight Kg.
	A (mm)	B (mm)	Thickness (mm)			
MTG304HD	320	420	42	12	7.8	40
MTG306HD	320	600	42	18	11.7	60
MTG308HD	320	785	42	24	15.6	80
MTG310HD	320	970	42	30	19.5	100
MTG404HD	405	420	42	16	10.4	60
MTG405HD	405	500	42	20	13.0	70
MTG406HD	405	600	42	24	15.6	80
MTG408HD	405	785	42	32	20.8	100
MTG410HD	405	970	42	40	26.0	120
MTG506HD	485	600	42	30	19.5	90
MTG508HD	485	785	42	40	26.0	120
MTG510HD	485	970	42	50	32.5	140
MTG606HD	570	600	42	36	23.4	110
MTG608HD	570	785	42	48	31.2	140
MTG610HD	570	970	42	60	39.0	170

(**) : Maximum force with workpiece in intimate contact, with all poles covered

Up to 16kg/cm² in active magnetic area.

Over 75 Ton/m² in workpiece contact area.

2 lateral slots to fix on machine table

Magnetic flux depth : 17 mm

MAGNETIC TOOLS / JIGS / CLAMP

อุปกรณ์จับยึดชิ้นงาน



แม่เหล็กยึดชิ้นงาน มิลล์เทค รุ่นZERO MillTec-ZERO



• MillTec Zero

This is a highly innovative solution: a "zero point" with magnetic technology.

MillTec Zero combines the operational flexibility of the magnetic clamping with the precision and repeatability typical of a "zero point" system.

Equipped with a precision grid, it is suitable for the rapid and precise positioning of pre-machined pieces, pallets and clamping equipment.

Modular and practical to use, it presents a large clamping surface suitable for pieces of various shapes and sizes.

MillTec Zero has 2 centering devices in hardened steel, precision turrets for support the workpiece and a series of mobile extensions for automatic shimming.

MANETIC CHUCK

แม่เหล็กยึดชิ้นงาน

Blocks

ตัวจับยึดชิ้นงาน

Demagnetizer

เครื่องสลายแม่เหล็ก

Magnetic Chuck

แม่เหล็กยึดชิ้นงาน

Magnetic Holder

หัวจับแม่เหล็ก

Jigs

จิก

Clamps

แคลมป์

Punch

เหล็กขวาด

Scriber

เหล็กขีด

Power Scriber

ปากกาไฟฟ้า

Order No.	Diamensions	Poles (n°)	Min. thick (mm)	Force Tons	Force / pole daN	Weight Kg.
MTB404ZT	400x400x51	9	17	5.8	615	90
MTB505ZT	500x500x51	16	17	10	615	120
MTB606ZT	600x600x51	25	17	16	615	155

We reserve the right to bring up any modification connected with the technological development

แม่เหล็กยึดชิ้นงาน เพลสเทค PressTec



• PressTec

The permanent-electro PressTec system allows to work with greater ease, flexibility and maximum safety on all types of injection molding machines.

PressTec guarantees dramatic increases in productivity and efficiency in JIT and SMED processes.

Highest quality

The GRIP effect generates an additional magnetic attraction to the machine bed without affecting the magnetic force to the side of the mold, giving full uniform clamping of the mold without bending and deformation during molding operations.

PressTEC is also available in special configurations, without GRIP function:

- **PT Classic** - 46mm (1.81 in.) thick modules
- **QP/HT** - for temperatures up to 180 °C (356 °F) in contact with mold. Thickness 54mm (2.12 in.)
- **VS** - Prearranged for mold side loading. Thickness 46mm (1.81 in.)
- **ROT** - for multi-injection machine with rotary table. Thickness 51mm (2.00 in.)

Magnetic force on the polar area	up to 16 kg / cm ²
Magnetic force on the mold contact area	up to 90 Ton / m ²
Module thickness	37 mm / 1.45 in.
Max working Temp in contact	120 °C / 248 °F
Magnetic flux depth	20 mm / 0.78 in.
Proximity sensors activation range	0.2 mm / 0.0078 in.
Standard voltages	200 - 480VAC, 50/60 Hz
Fastening and ejector holes	EUROMAP / SPI / JIS standard to be specified
Center ring, fixed side	Standard supply
Center ring, mobile side	On request
Control unit ST 400	Standard supply
Standard keypad	Standard supply
IPC system	On request
Proximity sensors on each side	Standard supply
UCS system	Standard supply
FCS System	Standard supply

คอนโทรล

ELECTRONIC CONTROL UNITS

ST series electronic control units are equipped with current (UCS) and cycle status control systems.

They have been designed for quick activation and deactivation cycles, to save power consumption, to limit electromagnetic emissions and grant long reliability in time.



Order No.	Description
ST200	The ST200 version, available from 200V to 400V, is suitable to control modules of large dimensions and is equipped with the practical TC remote pendant. The ST200 is also used to control tables with multiple chucks, equipped with TCF pendant that allows to select each MillTec module independently.
ST200 SK	The ST200 SK, available from 200V to 400V, is equipped with a key selector for WORK/GRIP function. The practical TC remote pendant is included in the standard supply. An RS232 connector is located at the back of the machine to connect with the PLC.

Blocks
ตัวจับยึดชิ้นงาน

Demagnetizer
เครื่องสลายแม่เหล็ก

Magnetic Chuck
แม่เหล็กยึดชิ้นงาน

Magnetic Holder
หัวจับแม่เหล็ก

Jigs
จิ๊ก

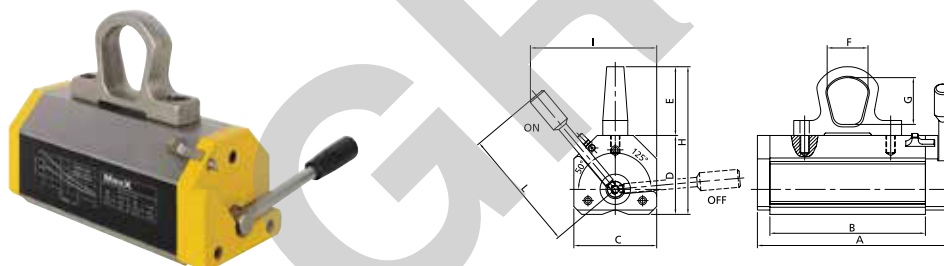
Clamps
แคลมป์

Punch
เหล็กมาร์ค

Scriber
เหล็กขีด

Power Scriber
ปากกาไฟฟ้า

แม่เหล็กยกชิ้นงาน MaxX



A wide range of models is available with capacity from 125 Kg. (275 lbs) up to 2000 Kg. (4450 lbs) and with different versions for load with regular and reduced thickness.

Order No.	Weight (kg)	Dimension (mm)									
		A	B	C	D	E	F	G	H	I	L
MaxX 125	3.7	121	76	79	79	66	30	44	145	132	137
MaxX 250	6	189	143	79	79	63	35	43	142	130	137
MaxX 500	15	250	199	106	101	88	52	60	189	165	170
MaxX 1000	36	342	284	133	131	88	52	60	219	225	240
MaxX 1500	66	383	316	166	171	122	64	87	293	330	377
MaxX 2000	80	457	390	166	171	122	64	87	293	330	377
MaxX 300 E	6	189	143	79	79	63	35	43	142	130	137
MaxX 600 E	15	250	199	106	101	88	52	60	189	165	170

For plates

Order No.	SWL-Load Max. (kg)	Thick Min. (mm)	Length Max. (mm)
MaxX 125	125	20	100
MaxX 250	250	20	1500
MaxX 500	500	25	2000
MaxX 1000	1000	40	3000
MaxX 1500	1500	45	3000
MaxX 2000	2000	55	300
MaxX 300 E	300	20	1500
MaxX 600 E	600	25	2000

For rounds

Order No.	SWL-Load Max. (kg)	Thick Min. (mm)	Length Max. (mm)	Ø Max. (mm)
MaxX 125	50	10	1000	300
MaxX 250	100	10	1500	300
MaxX 500	200	15	2000	400
MaxX 1000	400	25	3000	450
MaxX 1500	600	30	3000	500
MaxX 2000	800	35	3000	600
MaxX 300 E	120	10	1500	300
MaxX 600 E	250	15	2000	400

MAGNETIC TOOLS / JIGS / CLAMP

อุปกรณ์จับยึดชิ้นงาน

SKM Magnetics Seiki

แม่เหล็กยึดจับชิ้นงาน

MAGNETIC HOLDER -ALNICO-

For general purpose



USE :

- For holding drawings, stencils and rulers
- For holding items during processing

MATERIAL :

- Steel
- Alnico magnet

FEATURES

- Durable and resistant to high temperature
- With T-handle (SKM-01 - SKM-05)

MAGNETIC HOLDER
หัวจับแม่เหล็ก

Blocks
ตัวจับยึดชิ้นงาน

Demagnetizer
เครื่องสลายแม่เหล็ก

Magnetic Chuck
แม่เหล็กยึดชิ้นงาน

Magnetic Holder
หัวจับแม่เหล็ก

Jigs
จิก

Clamps
แคลมป์

Punch
เหล็กมารัด

Scriber
เหล็กขีด

Power Scriber
ปากกาไฟฟ้า

	Order No.	Model No.	Magnet Dimensions (mm)	Screw Hole Size	Maximum Pull Force	Weight
	SKM-0005	012750	Ø5 x 13	-	1.8N	8g
	SKM-0007	012751	Ø7 x 13	-	4N	8g
	SKM-001	012710	Ø10 x 15	-	8N	10g
	SKM-001TN	012740	Ø10 x 18	M5 x P0.8	8N	10g
	SKM-0015	012715	Ø15 x 15	-	12N	20g
	SKM-0015TN	012741	Ø15 x 18	M5 x P0.8	12N	20g
	SKM002	012720	Ø20 x 15	-	30N	30g
	SKM002TN	012742	Ø20 x 18	M5 x P0.8	30N	40g
	SKM-01	012801	Ø25 x 30	M6 x P1.0	80N	120g
	SKM-02	012802	25 x 25 x 25	M6 x P1.0	65N	120g
	SKM-03	012803	57 x 25 x 25	M6 x P1.0	120N	270g
	SKM-04	012804	Ø40 x 30	M8 x P1.25	300N	290g
	SKM-05	012805	Ø50 x 40	M8 x P1.25	400N	610g

แม่เหล็กยึดจับชิ้นงาน

MAGNETIC HOLDER -SAMARIUM COBALTRust-

Super strong magnet for molding and jigs



USE :

- Embed into stamping dies, hold work during EDM (Electric Discharge Machining)

MATERIAL :

- Samarium cobalt magnet

FEATURES

- Thin and high magnetic intensity by samarium cobalt

	Order No.	Model No.	Magnet Dimensions (mm)	Maximum Pull Force	Weight
	SKT-0010	012735	Ø10 x 8	30N	8g
	SKT-0018	012736	Ø18 x 8	50N	20g
	SKT-0025	012737	Ø25 x 10	90N	30g

MAGNETIC TOOLS / JIGS / CLAMP

อุปกรณ์จับยึดชิ้นงาน

JSR Magnetics Seiki

MAGNETIC HOLDER
หัวจับแม่เหล็ก

แม่เหล็กยึดจับชิ้นงาน

MAGNETIC HOLDER -ANISOTROPIC FERRITE WITH YOKE-

Combination of ferrite magnet and iron yoke for stronger magnetic force

USE :

- For attaching parts of mold, jig to workpiece

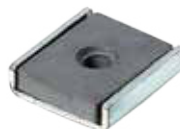
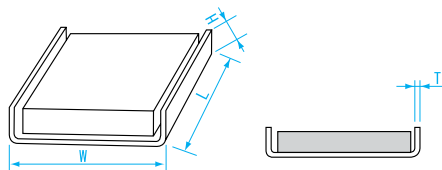
MATERIAL :

- Anisotropic ferrite magnet

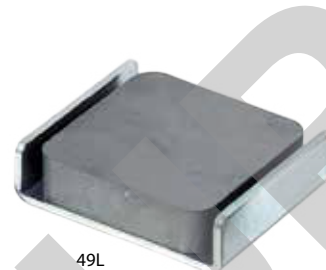
FEATURES

- Anisotropic ferrite magnet in combination with iron yoke provide a strong magnetic field, concentrated in one direction
- $\varnothing 5$ mm hole can be used to mount magnet (25L only)
- Dimensions are reference only (not suitable for precise positioning jig or fixture)

DIMENSIONS



25L



49L

Order No.	Model No.	L (mm)	W (mm)	H (mm)	T (mm)	Maximum Pull Force	Weight
20L	012670	20	8	4	0.6	10N	5g
24L	012671	24	14	5.5	1.0	20N	10g
25L	012672	25.5	23.5	6.5	1.4	60N	20g
45L	012673	45	30	7	1.6	150N	50g
49L	012674	49	41	13	2.0	200N	120g
60L	012675	60	24	7	1.4	150N	50g

Blocks

ตัวจับยึดชิ้นงาน

Demagnetizer

เครื่องสลายแม่เหล็ก

Magnetic Chuck

แม่เหล็กยึดชิ้นงาน

Magnetic Holder

หัวจับแม่เหล็ก

Jigs

จิ๊ก

Clamps

แคลมป์

Punch

เหล็กตีรู

Scriber

เหล็กขีด

Power Scriber

ปากกาไฟฟ้า

แม่เหล็กยึดจับชิ้นงาน

MAGNETIC HOLDER -ANISOTROPIC FERRITE WITH YOKE-

Combination of ferrite magnet and iron yoke for stronger magnetic force

USE :

- For attaching parts of mold, jig to workpiece

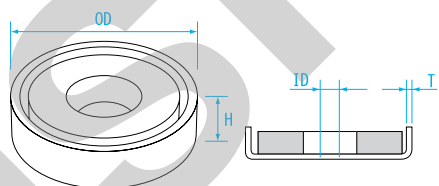
MATERIAL :

- Anisotropic ferrite magnet

FEATURES

- Anisotropic ferrite magnet in combination with iron yoke provide a strong magnetic field, concentrated in one direction
- Hole can be used to mount magnet (20R, 44R only)
- Dimensions are reference only (not suitable for precise positioning jig or fixture)

DIMENSIONS



24R



44R



20R

Order No.	Model No.	OD (mm)	H (mm)	ID (mm)	T (mm)	Maximum Pull Force	Weight
18R	012650	$\varnothing 18$	5	-	0.6	9.8N	5g
20R	012651	$\varnothing 20$	4	$\varnothing 3.5$	0.8	19N	10g
24R	012652	$\varnothing 24$	5	-	0.8	29N	10g
36R	012653	$\varnothing 36$	7	-	1.6	68N	30g
44R	012654	$\varnothing 44$	8	$\varnothing 4.5$	1.6	98N	50g

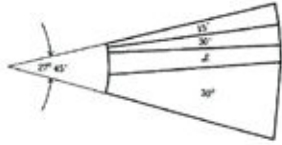
MAGNETIC TOOLS / JIGS / CLAMP

อุปกรณ์จับยึดชิ้นงาน



บล็อกตงองศา

ANGLE BLOCK SET



Features

Use for angle inspection
The block of angle inspection.
Highly precise finish. 12 pc set
Material: Carbon Steel
Hardness: HRC50 ~ 55°
Size: 76mm
Thickness: 7mm
Accuracy: $\pm 0.005^\circ$ ($\pm 20''$)

Order No.	Model No.	Size Composition / Contrnts
05-202	FB-12 (AB-12)	15° 30° 1° 2° 3° 4° 5° 10° 15° 20° 25° 30°

บล็อกตงองศา

SOLID ANGLE PLATE



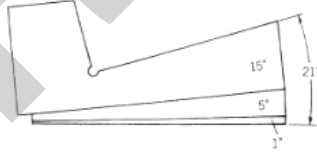
Features

Triangle Ruler
Precisely ground angle for convenient set-ups in tooling, production and inspection.
Material: Carbon Steel
Hardness: HRC50~55
Thickness: 7mm
Accuracy: $\pm 0.01^\circ$ ($\pm 40''$)
Square ness: ± 0.015 mm

Order No.	Model No.	Size Composition / Contrnts
05-601	FS-2 (SAP-2)	30°X60° 45°X45 2pc set
05-602	3x6 (SAP-30)	30°X60° Dimension : 50mmX88mmX100mm
05-603	4x9 (SAP-45)	45°X45° Dimension : 75mmX75mmX108mm

บล็อกตงองศา

UNIVERSAL ANGLE BLOCKS



Features

Universal Angle Blocks are used to take out an angle with cutting.
Highly precise finish.
Combination of a simple design V blocks and angle plates provides rapid and easy angler setting, resulting in substantially improved operational efficiency.
Contents : 8pc set
V blocks : 10°, 15°, 30°
Angle plates : 1°, 2°, 3°, 4°, 5°
Material : Carbon Steel
Hardness : HRC50 $\pm 2^\circ$
Accuracy : $\pm 0.015^\circ$ ($\pm 1'$)

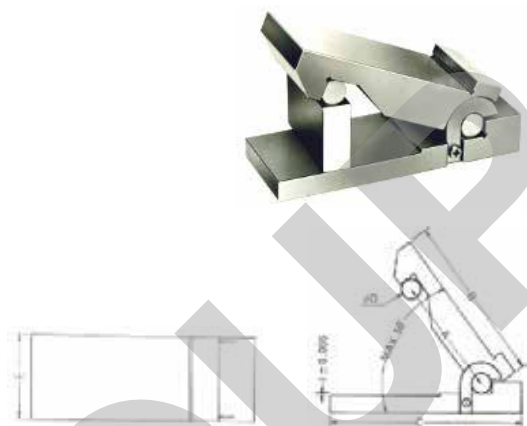
Order No.	Model No.	Size Composition / Contrnts
05-301	UAB-8	W:30 X L:75
05-302	UAB-8A	W:38 X L:100

MULTI SINE BAR MULTI SINE BAR

Features

With the entire surfaces being hardened and finished by precision grinding, this sine bar is extremely rugged, having almost infinite service life. Parallelism and square ness for the critical surfaces, and roller center distance are held to precise tolerances, thus, setting angle accuracy is as high as 0.003mm in 50mm or better.

Material : Carbon Steel
Accuracy : parallelism
S-50 within 0.003mm
S-100 within 0.006mm



Order No.	Model No.	Size Composition
07-301	S-50	A:50 B:70 C:82.5 D:8 E:30
07-302	S-100	A:100 B:128 C:145 D:12.7 E:37

- Blocks**
ตัวจับยึดชิ้นงาน
- Demagnetizer**
เครื่องสลายแม่เหล็ก
- Magnetic Chuck**
แม่เหล็กยึดชิ้นงาน
- Magnetic Holder**
หัวจับแม่เหล็ก

Jigs

Clamps

Punch

Scriber

Power Scriber

MEASURING CLIP MEASURING CLIP

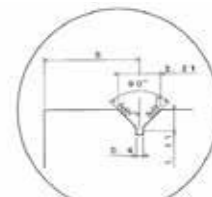
Features

Measuring Clip be used to hold items on the table to facilitate measurements by Coordinate Measuring Machine, Projector, Microscope, etc. Work piece holding force can be easily adjusted by operating the springs. Body is machined to within precise tolerance for flatness and square ness.

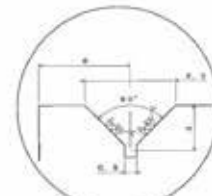
Material : Stainless Steel
Flatness : ± 0.01mm
Square ness : ± 0.015mm



Dimension of V-groove



MC-300S



MC-450S

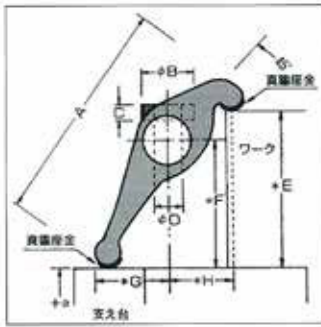
Order No.	Model No.	Width	Length	Capacity (Max diameter Ø)	Size Composition
08-203	MC-300S	30mm	55mm	10mm (Ø11)	150g
08-204	MC-450S	45mm	63mm	16mm (Ø16)	400g

MAGNETIC TOOLS / JIGS / CLAMP

อุปกรณ์จับยึดชิ้นงาน



แคลมป์ HANE-CLAMP



Features

These clamps can set up height freely. Simplest clamping operation results in shortened working time. It is powerful bolting power.

Material : S45C
Hardness : HRC 35~45°
Set : 2pcs / Set

Dimensions (Body)

Order No.	Model No.	Bolt	Size Composition/Contents	Width	Clamping Capacity
08-101	PM-3	M12	A: 93 ØB: 24 C: 6 ØD: 12.4 E: 60 F: 50 G: 35 H: 30	38	0 ~ 60 (+ α)
08-102	PM-4	M14	A: 112 ØB: 28 C: 7 ØD: 14.4 E: 70 F: 58 G: 43 H: 35	47	0 ~ 70 (+ α)
08-103	PM-5	M16	A: 128 ØB: 32 C: 9 ØD: 16.3 E: 80 F: 70 G: 48 H: 40	50	0 ~ 80 (+ α)
08-104	PM-6	M20	A: 157 ØB: 40 C: 10 ØD: 21.2 E: 100 F: 82 G: 60 H: 50	60	0 ~ 100 (+ α)
08-105	PM-7	M22	A: 210 ØB: 47 C: 12 ØD: 25 E: 135 F: 114 G: 80 H: 64	76	0 ~ 135 (+ α)

Set Type

Order No.	Model No.	Stud Bolts	*Apollo Nuts	T-Slot Nuts
08-106	PM-3S	12-100H	M12	1412
08-107	PM-4S	14-125H	M14	1614
08-108	PM-5S	16-150H	M16	1816
08-109	PM-6S	20-175H	M20	2220
08-110	PM-7S	22-200H	M22(Flange Nut)	2622

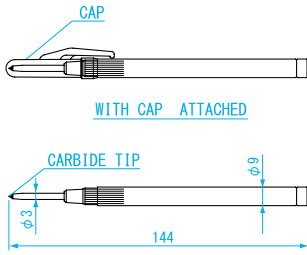
*Apollo Nut: without frictional resistance; it is a special type of nut with a steel ball embedded inside which reinforces the clamping force.

TORQUE TEST

Order No.	*Apollo Nuts	T-Slot Nuts
PM-3	60 - 75Nm	19kN
PM-4	100 - 120Nm	24kN
PM-5	140 - 175Nm	48kN
PM-6	300 - 370Nm	50kN
PM-7	400 - 510Nm	72kN

เหล็กขีด และเหล็กมาร์คอัตโนมัติเมติกปลายคาร์ไบด์ รุ่น S

COMBINATION CARBIDE TIP SCRIBER AND AUTOMATIC PUNCH (S TYPE)



USE :

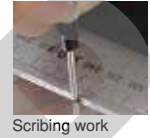
- For center punch and marking work

MATERIAL :

- Body : Aluminum (anodized)
- Tip : Carbide tip (G5)
- Tip hardness : HRA87

FEATURES

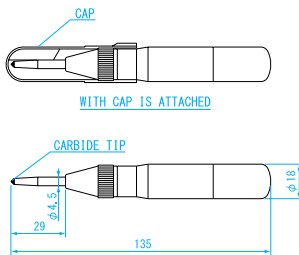
- Spring loaded, no need to use a hammer
- Can be used as center punch and as a scribe
- Strength of the driving force can be adjustable by rotating the rear cap



Order No.	Model No.	Punch Force	Weight
AP-S	000001	98N	33g

เหล็กมาร์คอัตโนมัติเมติกปลายคาร์ไบด์ รุ่น M

CARBIDE TIP AUTOMATIC PUNCH (M TYPE)



USE :

- For center punch

MATERIAL :

- Body : Plastic
- Tip : Carbide tip (G5)
- Tip hardness : HRA87

FEATURES

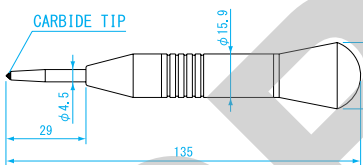
- Spring loaded, no need to use a hammer
- Strength of the driving force can be adjustable by rotating the rear cap



Order No.	Model No.	Punch Force	Weight
AP-M	000002	294N	65g

เหล็กมาร์คอัตโนมัติเมติกปลายคาร์ไบด์ รุ่น M2

CARBIDE TIP AUTOMATIC PUNCH (M2 TYPE)



USE :

- For center punch

MATERIAL :

- Body : Brass (nickel plated)
- Tip : Carbide tip (G5)
- Tip hardness : HRA87

FEATURES

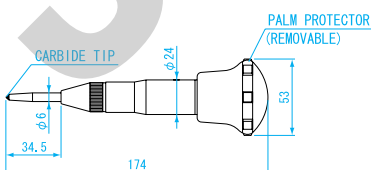
- Spring loaded, no need to use a hammer
- Strength of the driving force can be adjustable by rotating the rear cap



Order No.	Model No.	Punch Force	Weight
AP-M2	000004	294N	155g

เหล็กมาร์คอัตโนมัติเมติกปลายคาร์ไบด์ รุ่น L

CARBIDE TIP AUTOMATIC PUNCH (L TYPE)



USE :

- For center Punch

MATERIAL :

- Body : Plastic
- Tip : Carbide tip (G5)
- Tip hardness : HRA87

FEATURES

- Spring loaded, no need to use a hammer
- Strength of the driving force can be adjustable by rotating the rear cap
- Wide grip for palm protection. Can be used continuously without impact on hand.



Order No.	Model No.	Punch Force	Weight
AP-L	000003	490N	114g

SCRIBERS

เหล็กมาร์ค / เหล็กขีด

Seiki

เหล็กมาร์คศูนย์ปลายคาร์ไบด์ CARBIDE TIP CENTER PUNCH



- USE :**
- For punch work
- MATERIAL :**
- Body : Sulfur free cutting steel
 - Tip : Carbide tip (G5)
- FEATURES**
- Black oxide knurled grip
 - Hardness of punching material less than HV520 (hardened steel)



Order No.	Model No.	Length (mm)	Knurled part Diameter (mm)	Tip angle	Weight
TCP-S	000021	77	Ø8	85°	36g
TCP-M	000022	100	Ø10		59g
TCP-L	000023	110	Ø15		137g
TCP-LL	000024	125	Ø17		190g
TCP-XL	000025	177	Ø20		320g

เหล็กขีด SCRIBER



- USE :**
- For scribing work
- MATERIAL :**
- Body : Carbon tool steel for machine use (nickel plated)
 - Grip : Plastic
 - Hardened tip
 - Tip Hardness : HV520 ~ 590
- FEATURES**
- Plated for rust resistance



Order No.	Model No.	Length (mm)	Diameter (mm)	Grip Length (mm)	Grip Diameter (mm)	Spatula Width (mm)	Weight
K	000150	240	5	82	15	-	46g
N	000151						48g

เหล็กขีดปลายคาร์ไบด์ CARBIDE TIP SCRIBER



- USE :**
- For scribing/drawing on steel, brass, plastic and glass
- MATERIAL :**
- Tip : carbide tip (G2)
 - Tip hardness: HRA87
- FEATURES**
- Carbide tip for use on hard steel or marking glass
 - Low wear. The marking point is durable and will not burr.
 - Tip angle: 55°
 - Replacement scriber tip sold separately (KW, A)



Order No.	Model No.	Length (mm)	Diameter (mm)	Grip Length (mm)	Grip Diameter (mm)	Material	Weight
KW	000160	224	4.5	-	-	Sulphur free-cutting steel	54g
PKW	000170	235	7	80	Ø11	Carbon tool steel for machine use	70g
A	000180	170 (Stored•110)	5	97	Ø10	Carbon steel	40g
H	000190	150	(HEX)6	-	-	Carbon tool steel	50g
S	000200	156	6	-	-	Carbon tool steel	40g

เหล็กขีดแบบปากกา ปลายคาร์ไบด์

CARBIDE TIP SCRIBER (HANDY POCKET TYPE)

USE :

- For scribing/drawing on steel, brass, plastic and glass

MATERIAL :

- Body : ABS resin
- Tip : carbide tip (G2)

FEATURES

- Carbide tip for use on hard steel or marking glass
- Low wear. The marking point is durable and will not burr.
- Cap with clip for storage and carrying



Order No.	Model No.	Size	Length (mm)	Diameter (mm)	Carbide tip Dia. (mm)	Carbide tip Angle	Weight
SC-P50	000260	0.5mm			0.5		
SC-P10	000262	1.0mm	125	10	1.0		10g
SC-P20	000264	2.0mm			2.0		
SC-PE-05	000261	Spare tip 0.5mm	-	-	0.5	50°	
SC-PE10	000263	Spare tip 1.0mm	-	-	1.0		5g
SC-PE20	000265	Spare tip 2.0mm	-	-	2.0		

Blocks

ตัวจับขีดชิ้นงาน

Demagnetizer

เครื่องสลายแม่เหล็ก

Magnetic Chuck

แม่เหล็กยึดชิ้นงาน

Magnetic Holder

หัวจับแม่เหล็ก

Jigs

จิ๊ก

Clamps

แคลมป์

Punch

เหล็กมาร์ค

Scriber

เหล็กขีด

Power Scriber

ปากกาไฟฟ้า

เหล็กขีดแบบปากกา ปลายคาร์ไบด์

CARBIDE TIP SCRIBER (HANDY POCKET TYPE)

USE :

- For scribing work

MATERIAL :

- Body : Plastic (DX-metal)
- Tip : carbide tip (G2)

FEATURES

- Clip for convenient carrying
- Scriber tip retracts into body
- Durable carbide tip for scribing on hard steel, glass etc.
- Low wear. The marking point is durable and will not burr.
- Tip angle: 50°



SC-P



SC-PDX

Order No.	Model No.	Standard	Tip Angle (mm)	Length (mm)	Diameter (mm)	Weight
SC-P	000210	-	1	145	7.2	26g
SC-PDX	000215	DX	1	132	8	30g

Replacement tip for Pencil scribers (5 pcs)

อะไหล่เหล็กขีด ปลายคาร์ไบด์

MATERIAL :

- Tip holder: Brass
- Tip : carbide tip (G2)

SPECIFICATIONS

- Tip Diameter : 1mm



Order No.	Model No.	Quantity	Length (mm)	Weight
SC-PE5	000213	5 pcs.	40	50g

ชุดเหล็กขีด และเหล็กมาร์ค ปลายคาร์ไบด์

CARBIDE TOOL SET

USE :

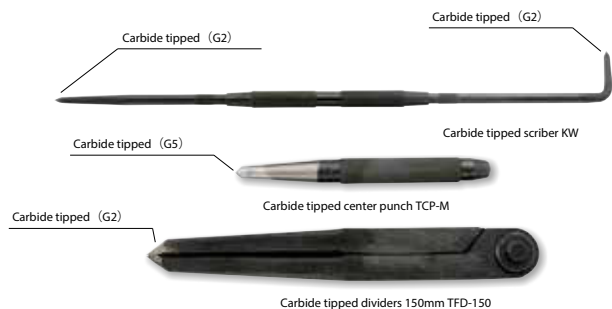
- For scribing materials such as glass, brass, plastic, copper
- For punch work
- For scribing circles and dividing distances

FEATURES :

- Plastic carrying case

CONTENTS

- Carbide tipped scriber KW
- Carbide tipped center punch TCP-M
- Carbide tipped dividers 150mm TFD-150 (one each)



Order No.	Model No.	Weight
CTS-3	000303	280g

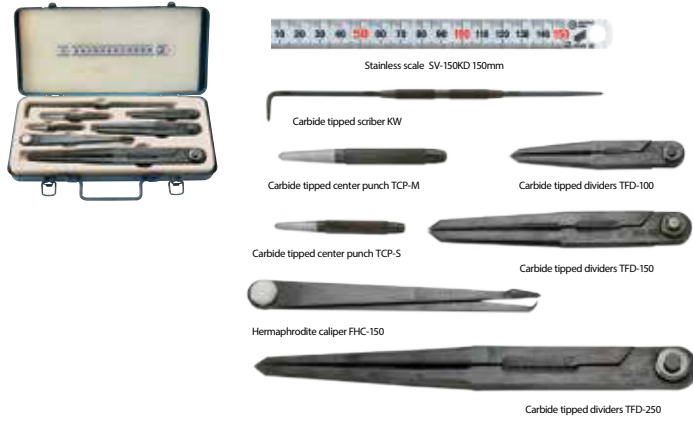
SCRIBERS

เหล็กมาร์ค / เหล็กขีด



SCRIBER
เหล็กขีด

ชุดเหล็กขีด และเหล็กมาร์ค ปลายคาร์ไบด์ CARBIDE TOOL SET



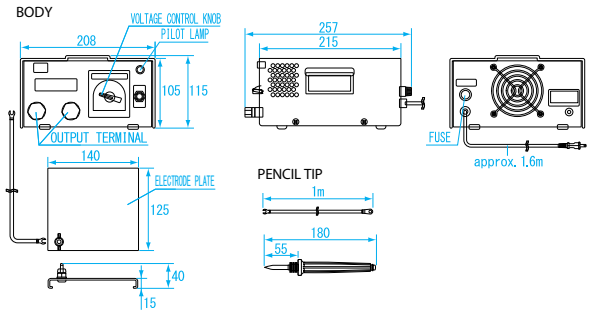
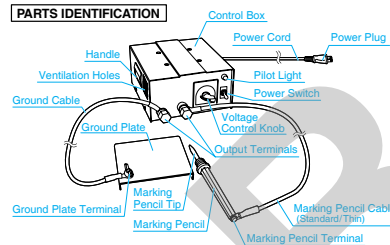
- USE :**
- For scribing work
- FEATURES :**
- Metal case holds 8 tools
- CONTENTS**
- Stainless scale SV-150KD 150mm
 - Carbide tipped scriber KW
 - Carbide tipped center punch TCP-S
 - Carbide tipped center punch TCP-M
 - Carbide tipped dividers 100mm TFD-100
 - Carbide tipped dividers 150mm TFD-150
 - Carbide tipped dividers 250mm TFD-250
 - Hermaphrodite caliper 150mm FHC-150 (one each)

Order No.	Model No.	Weight
CTS-8	000308	1.5kg

ปากกาไฟฟ้า ELECTRIC MARKING PENCIL



- USE :**
- Iron, steel, hard metal marking
- MATERIAL :**
- Body : Steel
- FEATURES**
- Capable of marking conductive metals(iron, steel, stainless steel) Hard clean surface can be marked (Copper, aluminum, carbide can not be marked. Black oxide coated can not be marked because of poor conductance.)
 - Tip alloy has superior abrasion resistance and electrical conductance
- SPECIFICATIONS**
- Rated voltage: 100V
 - Rated frequency: 50-60Hz
 - Rated current: 4.2A
 - Fuse: 5A (Diameter 6.4mm Length 30mm)
 - Power cord: 1.6m
 - Product dimensions: (W)115 x (D) 208 x (H) 257mm
 - Accessories includes:
 - Cable with marking pen (approx. 1m)
 - Cable with fine marking pen (approx. 1m)
 - Grounding plate, Ground cable (approx. 1m)



[Application Table] (...possible to mark ...will not mark)

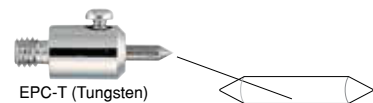
Iron	Steel	Stainless steel	Hardness steel	Copper	Aluminum	Carbide
○	○	○	○	×	×	×

※ Black oxide coated can not be marked because of poor conductance

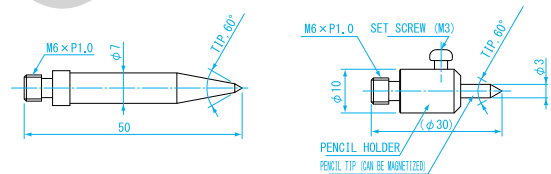
Order No.	Model No.	Weight
EP-A3	011716	6.5kg (includes accessories)

ELECTRIC MARKING PENCIL TIP

อะไหล่ปลายปากกาไฟฟ้า



PENCIL TIP Reversible



- USE :**
- Replacement for A3 Electric Marking Pencil
- FEATURES**
- EPC-P: Standard tip supplied with A3
 - EPC-T: Excellent abrasion resistance, tip insert has two usable points

Order No.	Model No.	Material	Weight
EPC-P	011720	Copper alloy	13g
EPC-T	011724	Tungsten	10g