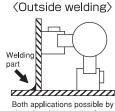


(Note 1) (Inside welding)

Welding part



changing the attractive face.



[Application]

Suitable for mating and keeping stationary jointing parts of iron sheets and members during welding work.

[Features]

Powerful holding by use of a high performance permanent magnet.

MT-A-2

Both inside and outside welding are possible.

- Any desired holding angle can be set in a range of 45° and 135° (angle scale provided).
- ON/OFF switchover function and V-groove provided.

MT-A-4

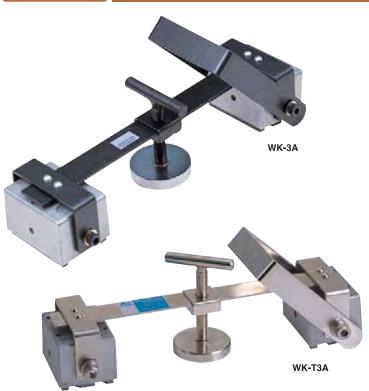
- Any desired holding angle can be set in a range of 30° and 90° (angle scale provided).
- Angle adjustment with a handle.
- ON-OFF switchover function provided.

[mm (in)]

Model	Holding Power	Hold	ler Dimen	sions	Angle	Mass	
Wodel	riolaling Fower	Width	Length	Height	Angle	IVIGOS	
MT-A-2	800N (80kgf) ×2	50	60	55	45°—135°	3.5kg/	
W11-A-2	600IN (60KgI) AZ	(1.96)	(2.36)	(2.16)	45 —135	7.71 lb	
MT-A-4	1500N (150kgf) ×2	60	120	52	30°— 90°	5kg/	
IVI I -A-4		(2.36)	(4.72)	(2.04)	30 — 90	11.0 lb	
%The hold	ing nower applies to S	\$400 this	sknoce 10	mm and a	round curfood		

WELDING CLAMPER Model WK

MT-A-4

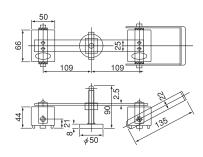


[Application]

Suitable as holding tools for tentative installation and tack welding on such work sites of construction, bridge, ship building and piping.

[Features]

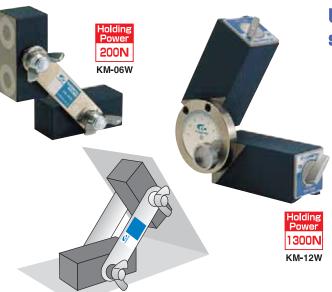
- ●The magnet part has a minimum but enough free rotating angle range for easy mounting on workpieces.
- ●The exterior of the magnet holder part is made of aluminum to prevent adhesion of iron powder on the top and side faces.
- Model WK-T3A has a construction that is highly resistant to heat.
- These clampers have an enough mechanical strength to withstand rough handling.



Model	Maximum Temperature	Holding Power	Mass	
WK-3A 60°C		1000N (100kgf) ×2	2.3kg/5.07 lb	
WK-T3A	180℃	1000IN (100kgi) \2	2.3kg/5.07 lb	

*The holding power applies to SS400, thickness 10mm and ground surface.

Model KM-W MAGNETIC HOLDER



Usable as a hinge of thin plates and simple jig for welding operations.

[Application]

Suitable for tentative holding during drilling and assembly.

[Features]

- Two magnets as a pair for easy angle setting.
- An angle scale provided. (KM-12W)
- ●The magnetic force can be turned on and off by operating the lever. (KM-12W)
- ●The V-groove allows the holder to be attached to certain poles and curved surfaces in addition to the flat surface. (KM-12W)

	Model	Holding Power	Holder Dimensions			Length	Anale	Mass
Model	Model	riolaling Fower	Width	Length	Height	Lengin	Angle	iviass
	KM-06W	200N (20kgf)	26	60	25	129		0.7km/1.54 lb
	KIVI-UOVV		(1.02)	(2.36)	(0.98)	(5.07)	_	0.7kg/1.54 lb
	KM 40W	1000N (1001	50	117	55	273	Free	4 51/0 00 15
	KM-12W	1300N (130kgf)	(1.96)	(4.60)	(2.16)	(10.75)		4.5kg/9.92 lb

^{*}The holding power applies to SS400, thickness 10mm and ground surface.

Model KM-SA HEXAGONAL MAGNETIC HOLDER

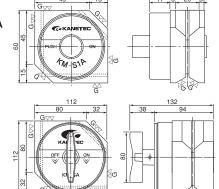


Holding Power Round steel Steel plate 200~300**N**|200~600N

KM-S1A







[Application]

These holders provide a strong holding power for tentative holding during welding and tentative assembly. These holders can also be used as a block.

[Features]

- ●The holding angle can be set to 45°, 90° and 135°.
- ●The small type is equipped with a pushbutton and the large type with a rotary handle for turning on and off the magnetic force.
- ●The V-groove enables the work attractive face to be located not only on the flat surface but on the curved surface.

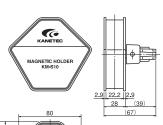
[mm (in)]

Model	Ho l di	ng Power	Dimensions	Mass
Model	Round Steel	Steel Plate	Dimensions	IVIASS
KM-SA	600—900N (60—90kgf)	1200—1400N (120—140kgf)	rgf) 112 (4.40) ×112 (4.40)	
KIVI-SA	{150-200N (15-20kgf)}	{ 800—1000N(80—100kgf)}	×94 (3.70)	13.2 lb
KM-S1A	200-300N (20-30kgf)	200 600N(20 60kgf)	60 (2.36) ×60 (2.36)	0.85kg/
KIVI-STA	{ 50— 70N(5— 7kgf)}	{ 100— 350N(10— 35kgf)}	×42 (1.65)	1.87 lb

*The holding power applies to iron plate, SS400, 10mm thickness, and ground-surface. Note: The holding power in { } is for attraction on one face in the case of double-face

HEXAGONAL MAGNETIC HOLDER





.DER	Ħ		-
2.9	22.2	2.9	
	28	(39)	
		(67)	

[Application]

Usable to temporarily hold and assemble workpieces during welding. These holders hold workpieces firmly.

- ●The workpiece holding angle can be selected from 15°, 45°, 60°, 90°, 105° and 120°.
- The magnetic force can be turned on and off.
- The holding power on steel plates is about the same as when both faces of KM-S9 and S12 are used and at angles other than 105°, the holding power does not drop when two faces are used.

			[mm (in)]				
Madal	Holding Power	Dimensions	Mass				
Model	Steel Plate	Dimensions	IVIASS				
KM-S10	150-250N (15-25kgf)	104 (4.09) ×95 (3.74) ×67 (2.63)	0.9kg/1.98 lb				
KM-S13	250-450N (25-45kgf)	132 (5.19) ×120 (4.72) ×73 (2.87)	1.6kg/3.52 lb				
W.T. I.							

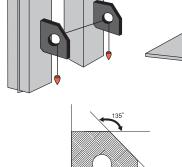
Model KM-S SIMPLE HEXAGONAL HOLDER

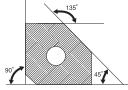


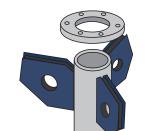
KM-S12

Holding Power Round steel Steel plate 250~400N | 250~700N

Holding Power Round steel Steel plate 100~200N | 150~500N







[Application]

These holders are used for tack welding and tentative assembly during welding and assembly work. They can be used in wide applications as they hold round pipes and round steel.

[Features]

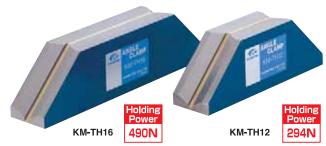
- ●The holding angle can be set to 45°, 90° and 135°.
- Compact and handy. Lower cost and simpler than the hexagonal holder KM-S.
- The concave attractive face can hold certain round steel.

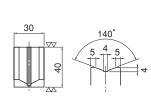
[mm (in)]

Model	Holding	Power	Dimensions	Dia ofround	Mass
wodel	Round Steel	Steel Plate	Differsions	Steel	IVIASS
KM-S9 100—200N (10—20kgf) 150—500I		150-500N (15-50kgf)	90 (3.54) ×90 (3.54)	minø10 (0.39)	0.5kg/
KIVI-39	{ 50—100N (5—10kgf)}		×14 (0.55)	ΠΠφτυ (0.39)	1.10 lb
KM C10	250-400N (25-40kgf)	250-700N (25-70kgf)	120 (4.72) ×120 (4.72)	minø24 (0,94)	1.2kg/
KM-S12	{150-250N (15-25kgf)}	{200-500N (20-50kgf)}	×26 (1.02)	minφ24 (0.94)	2.64 lb

**The holding power applies to iron plate, SS400, 10mm thickness, and ground-surface.
Note: The holding power in { } is for attraction on one face in the case of double-face attraction.

ANGLE CLAMP





[mm (in)]

	Model	Holding Power	Dimer	nsions	Mass
	Model	Holding Fower	L	L 1	IVIdSS
	KM-TH12	294N (30kgf)	115 (4.52)	50 (1.96)	0.8kg/1.76 lb
	KM-TH16	M-TH16 490N (50kgf)		90 (3.54)	1.2kg/2.64 lb

*The holding power applies to SS400, thickness 10mm and ground surface.

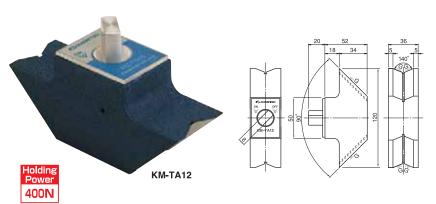
[Application]

Usable to temporarily hold workpieces during tack welding and assembly or to hold gages and rulers.

[Features]

The all inclined sides provide strong magnetic force. Angles of 45°, 90° and 135° can be used.

ANGLE CLAMP



[Application]

This clamp can be used for tentative holding and tentative assembly during welding to hold workpieces strongly. It can also be used as a block.

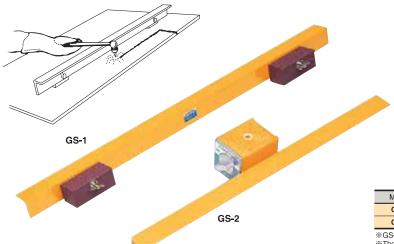
- ●The V-groove on the attractive face enables this clamp to be used for materials having curved surfaces such as round steel and pipe in addition to flat materials.
- ON-OFF switchover function provided.
- Holding angle 90° only.

[mm (in)]

					2
Madal	Haldian Davis		Dimension	s	Mana
Model	Holding Power	Length	Width	Height	Mass
KM-TA12	400N (40kgf)	72	36	120	1kg/2.20 lb
KIVI-TAT2	400N (40KgI)	(2.83)	(1.41)	(4.72)	1Kg/2.20 ID

*The holding power applies to SS400, thickness 10mm and ground surface.

Model GS GUIDE SCALE



[Application]

Special guide tools for moving the torch while maintaining the height of the nozzle during gas welding.

[Features]

- ■A high performance permanent magnet holds the scale strongly.
- ●Model GS-1 allows scale up-down adjustment according to the height of the nozzle.
- ■Model GS-2 allows its magnetic force to be turned on and off with a lever for easy mounting and dismounting.

[mm (in)]

Model	Holding Power	Length	Width	Height	Mass
GS-1	350N (35kgf)	500 (19.6)	85 (3.34)	70 (2.75)	1.1kg/2.42 lb
GS-2	1000N (100kgf)	400 (15.7)	68 (2.67)	40 (1.57)	2.3kg/5.07 lb

*GS-2 can be mounted and dismounted easily with a select lever.

The holding power applies to SS400, thickness 10mm and ground surface.

EARTH CLAMP



[Application]

Capable of connecting earth terminals on a wide variety of faces.

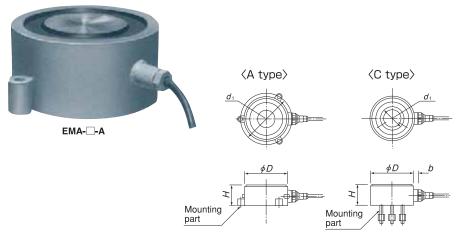
[Features]

A high performance permanent magnet is used for easy mounting and dismounting by "one-touch" operation.

			[mm (in)]				
Model	Holding Power	Current Capacity	Mass				
HL-10E	1600N (160kgf)	300A	1.5kg/3.30 lb				
W.T believe a source and in the 40 and think will and a standard and							

The holding power applies to 16 mm thick mill scale steel plates

WELDING JIG



[Application]

Jigs developed for automatic welding of steel plates to hold steel plates and backing materials. These jigs can be used to hold cut-out pieces during EPM welding operations, to straighten workpieces and to secure stacked steel plates during fusing of stacked steel plates.

[Features]

- Holding and releasing can be controlled elec-
- Workpieces are secured to a welding frame by a strong magnetic force and therefore warping of steel plates due to welding heat can be prevented.
- •Waterproof construction for use for outdoor operations. Highly resistant to impact and heat.

[mm (in)]

	Holding Power		Dimensions				Power Source			
Model	Steel Plate 20mm thick	Steel Plate 50mm thick	D	Н	d ₁	b	Clamp Hole	Voltage	Current	Mass
EMA-25-A	10kN (1000kmf)	0.4kNl (0.400kmf)	045 (0.04)	100 (3.93)	290 (11.4)		3 (0.11) - \$\phi 21 (0.82)		1.0 A	30kg/66.1 lb
EMA-25-C	Tokin (Touukgi)	18kN (1800kgf) 24kN (2400kgf) 245 (9.64)	245 (9.64) 100 (3.93)	150 (5.90)		3 (0.11) -M16 (0.62)		1.0 A	30kg/66.1 lb	
EMA-26-A	20kN (2000kgf)	36kN (3600kgf)	255 (10.0)	120 (4.72)	305 (12.0)	70 (2.75)	4 (0.15) - \$\phi 26 (1.02)	200 VDC	1.4 A	40kg/88.1 lb
EMA-30-A	- 25kN (2500kgf) 50kN (5000kgf) 296 (11.6) 150 (5.90) -	FOLNI (FOOOleef)	200 (11.0)	150 (5 00)	340 (13.3)		3 (0.11) - \$\phi 23 (0.90)		1.75A	65kg/ 143 lb
EMA-30-C		200 (7.87)		3 (0.11) -M20 (0.78)		1./5A	65kg/ 143 lb			