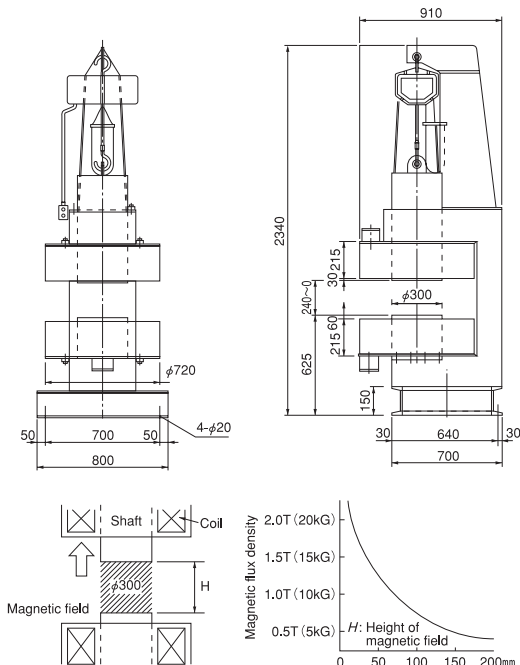


Model **MFG**

MAGNETIC FIELD GENERATOR



MFG-300



LMT-230

[Application]

Generates a powerful magnetic field for magnetization of magnetic substances and seed magnetic field treatment in agriculture and gardening.

[Features]

- A simple configuration for installation within a floor area of less than 1 m².
- A dedicated controller needs to be used.

■Main unit

Model	Capacity	Magnetic Flux Density	Mass
MFG-300	260 VDC·21A	Max.2T (20kG)	2800kg/6173 lb

■Controller

Model	Power Source	Output	Power Panel Dimensions			Mass
			Width	Depth	Height	
LMT-230	3-phase 200 VAC	260 VDC·Max.30A	800 (31.5)	400 (15.7)	1800 (70.8)	250kg/551 lb

[mm (in)]

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WELDING OPERATION

LIFTING
MAGNET

MAGBORE

CHIP & SLUDGE
TRANSPORTERS

ENVIRONMENTAL
EQUIPMENT

MAGNETIZERS AND
DEMAGNETIZERS

MAGNETIC EQUIPMENT
FOR TRANSPORTATION

MAGNETIC
SEPARATORS

HIGH GRADE MAGNETIC
SEPARATORS

MEASURING
INSTRUMENTS

MAGNETIC
MATERIALS

How to Demagnetize and Precautions for Use

- Move a workpiece over the demagnetizing surface slowly in the direction of A-B. Note that the workpiece must be moved more than 20 cm away from the end of the demagnetizer to be demagnetized effectively.
- When the tunnel type demagnetizer is used, pass the workpiece through the tunneled hole.
- A recommended time for passing the workpiece is about 5 seconds. (Recommended speed from 3 to 5 m/min.)
- Some demagnetizers may be heated to considerably high temperature due to electromagnetic induction action, but this does not affect the demagnetizing operation at all. However, be sure to observe the working rate.
- If there is any other metal near the demagnetizer, it may also be heated. You should move such metal at least 5 cm away, and approx. 30 cm away for the tunnel type demagnetizer. However, if such separation is not possible, please use plastics or nonmagnetic materials such as SUS304 for peripheral machinery.

- The strong magnetic field produced by the demagnetizers may cause the CRT of computer and NC units to flicker. It will not adversely affect the operation of these units, but if it causes a recognition problem, such measures must be taken as keeping the CRT away from the demagnetizers and installing a magnetic shield on the CRT side.
- The demagnetizers have large inductance and low power factor. Take influence on the power source into consideration.
- The standard models can not be used on 220 VAC, 50 Hz. For such application, please contact us.

Model KMD TABLE TYPE DEMAGNETIZER

Compact but improved demagnetizing performance!



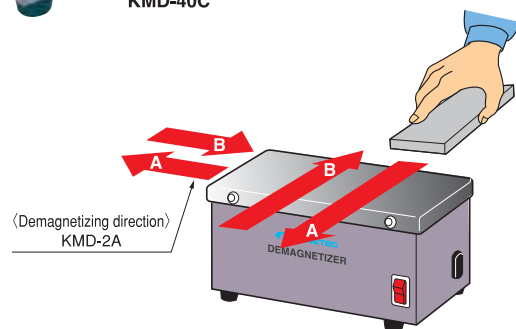
[Application]

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]

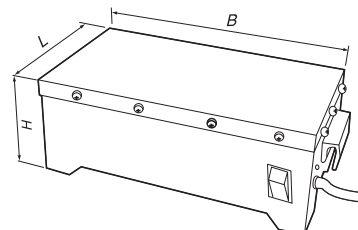
- Thick workpieces can be demagnetized effectively by passing the front and rear side over the demagnetizer.
- These demagnetizers are very powerful and can demagnetize steel materials such as high speed steel, bearing steel, nickel-chrome steel, spring steel, die steel, etc. which are difficult to demagnetize by standard demagnetizers (since these steels have the property similar to magnetic steel which retains residual magnetism and is hard to remove).
- These demagnetizers have good heat radiation and can withstand continuous power application.

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



(Demagnetizing direction)
KMD-15C-50C

(B) and (L) in the figure apply to KMD-2A.



[mm (in)]

Model	Power Source	Power Capacity (Current)	Working Rate	Demagnetizing Width	Dimensions			Mass
					B	L	H	
KMD-2A	3-phase 200 VAC 50/60Hz	2kVA (5.8A)	100%ED	160 (6.29)	453 (17.8)	245 (9.64)	140 (5.51)	30kg/66 lb
KMD-15C	Single-phase 100 VAC 50/60Hz	140VA (1.4A)		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

※2m cord provided.

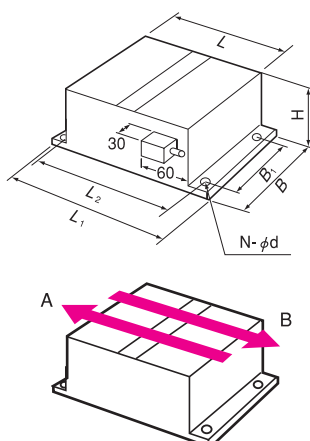
※KMD-15C/20C come with a ground plug.

※A different-voltage type (special type) is also available.

Model KMDS WATER-PROOF TYPE DEMAGNETIZER



KMDS-2A



〈Demagnetizing direction〉
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]

- They are water-proofed and will not fail when wetted by cutting oil or cooling water.
- They can be incorporated in belt type grinders or other automatic and continuous grinders.
- The very strong demagnetizing force produced provides some margin on gap width on the surface to allow a belt conveyor to run over the working face.



Precautions for use

Cool them always by pouring water, 50% rated when you use them in dry area (electrifying them for 20 minutes and turning off for 20 minutes.)

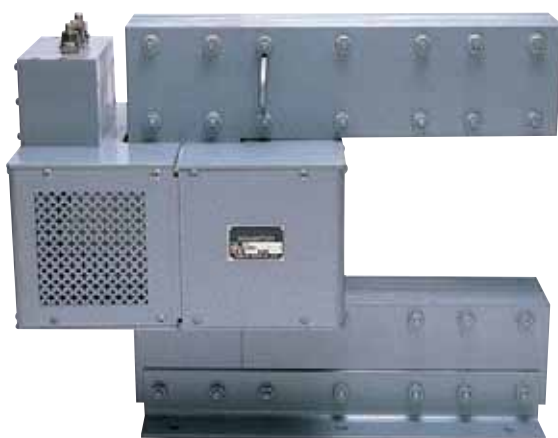
Model	Power Source	Power Capacity (Current)	Working Rate	Dimensions								Mass
				B	L	H	B ₁	N	φd	L ₁	L ₂	
KMDS-1A	Single-phase 200 VAC 50/60Hz	200VA (1A)	50% ED	150 (5.90)	206 (8.10)	100 (3.93)	—	2 (0.07)	8.5 (0.33)	260 (10.2)	235 (9.25)	9.0kg/19 lb
KMDS-2A		400VA (2A)	Usable continuously when water-cooled.	200 (7.87)	206 (8.10)	100 (3.93)	—	2 (0.07)	8.5 (0.33)	260 (10.2)	235 (9.25)	13.5kg/30 lb
KMDS-3A		800VA (4A)		400 (15.7)	350 (13.7)	120 (4.72)	120 (4.72)	4 (0.15)	8.5 (0.33)	410 (16.1)	380 (14.9)	41.0kg/90 lb

※2m cord provided.

※The switch is not housed.

※A different-voltage type (special type) is also available.

Model KMDU U TYPE DEMAGNETIZER



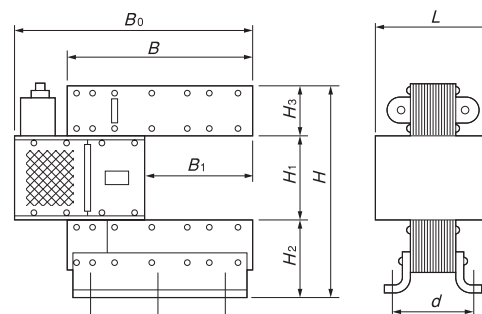
KMDU-25A

[Application]

Suitable for demagnetizing bobs and die sets. This model is also recommended where long and irregular-shaped workpieces need to be demagnetized uniformly since its magnetic flux alternates vertically. Further, this model can easily be incorporated in a transportation system.

[Features]

- Easy incorporation into a transportation system and easy removal and relocation.



														[mm (in.)]
Model	Power Source	Power Capacity (Current)	Working Rate	Dimensions									Mass	
				B ₀	B	B ₁	H	H ₁	H ₂	H ₃	L	d		
KMDU-25A	Single-phase 200 VAC 50/60Hz	14kVA (70A)	30%ED	630 (24.8)	500 (19.6)	250 (9.84)	480 (18.9)	200 (7.87)	150 (5.90)	130 (5.11)	350 (13.7)	270 (10.6)	180kg/ 397 lb	
KMDU-50A		30kVA (150A)	Max. 0.5h	940 (37.0)	770 (30.3)	500 (19.6)	715 (28.2)	300 (11.8)	215 (8.46)	200 (7.87)	420 (16.5)		600kg/1323 lb	

※A different-voltage type (special type) is also available.

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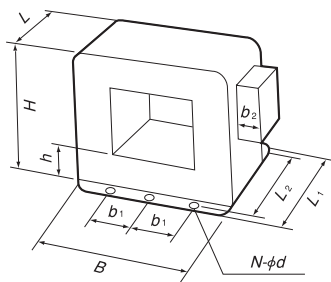
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Model KMDT TUNNEL TYPE DEMAGNETIZER



KMDT-16A



[Application]

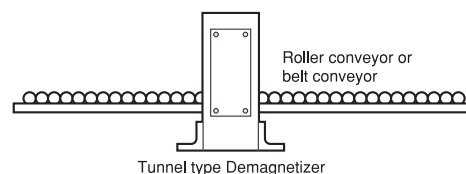
These demagnetizers can meet such demagnetizing needs as passing a bucket containing a large number of small workpieces and being incorporated in a line for continuous demagnetizing by conveyor transportation.

Various sizes are available to meet such requirements. They can also be used to demagnetize long workpieces and irregularly shaped workpieces.

[Features]

- The good heat radiation design enables continuous operation.
- A uniform demagnetizing area can be obtained.
- Almost uniform demagnetization can act on the whole periphery of passing workpieces.

An example of application of KMDT



Caution: The conveyor must be made of nonmagnetic stainless steel or plastic.

Model	Power Source	Source Capacity (Current)	Gate		Dimensions										Mass	Cable (2RNCT)
			Width	Height	B	L	H	b ₁	N	φd	b ₂	L ₁	L ₂	h		
KMDT-10A	Single-phase 200 VAC 50/60Hz	0.46kVA (2.3A)	100 (3.93)	80 (3.15)	210 (8.26)	103 (4.05)	205 (8.07)	60 (2.36)	4 (0.15)	9.5 (0.37)	40 (1.57)	153 (6.02)	133 (5.23)	70 (2.75)	15kg/33.3 lb	1.25mm ³
KMDT-16A		1.6kVA (8A)	160 (6.29)	125 (4.92)	280 (11.0)	144 (5.66)	245 (9.64)	80 (3.15)	6 (0.23)	12 (0.47)	70 (2.75)	204 (8.03)	180 (7.08)	60 (2.36)	32kg/70.5 lb	5.5mm ³
KMDT-25A		6kVA (25A)	250 (9.84)	200 (7.87)	400 (15.7)	224 (8.81)	350 (13.7)	150 (5.90)				284 (11.1)	260 (10.2)	75 (2.95)	80kg/177 lb	
KMDT-40A		11kVA (55A)	400 (15.7)	315 (12.4)	540 (21.2)	304 (11.9)	460 (18.1)	200 (7.87)				384 (15.1)	350 (13.7)		140kg/308 lb	14mm ³

※The cable and switch are not provided. ※A different-voltage type (special type) is also available.

Model KMDTR TUNNEL TYPE DEMAGNETIZER

Made to order



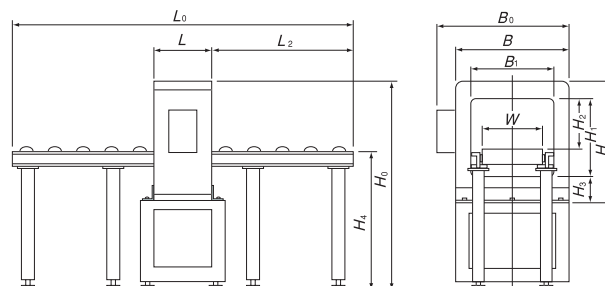
KMDTR-40A

An example of fabrication

Power unit optional

[Application]

This model allows large and heavy workpieces to pass through the demagnetizing area at a nearly constant speed, though manual feed, on a roller conveyor. No extra manpower is required for repeating work, enhancing the demagnetizing efficiency.



Model with roller conveyor

Model	Power Source	Source Capacity Current	Working Rate	Dimensions												
				Conveyor		Demagnetizer			Major Dimensions							
				L ₀	W	L	B	H	L ₀	B ₀	B ₁	H ₀	H ₁	H ₂	H ₃	H ₄
KMDTR-16A	Single-phase 200 VAC 50/60Hz	1.6kVA (8A)	100% ED	2000 (78.7)	90 (3.54)	144 (5.66)	280 (11.0)	245 (9.64)	928 (36.5)	320 (12.6)	160 (6.29)	720 (28.4)	125 (4.92)	60 (2.36)	60 (2.36)	600 (23.6)
KMDTR-25A		6kVA (30A)			150 (5.90)	224 (8.81)	400 (15.7)	350 (13.7)	888 (34.9)	470 (18.5)	250 (9.84)	795 (31.3)	200 (7.87)	120 (4.72)	75 (2.95)	
KMDTR-40A		11kVA (55A)			305 (12.0)	304 (11.9)	540 (21.2)	460 (18.1)	848 (33.4)	610 (24.0)	400 (15.7)	905 (35.6)	315 (12.4)	235 (9.25)		

※A different-voltage type (special type) is also available.

Model KMDTC TUNNEL TYPE DEMAGNETIZER

Made to order



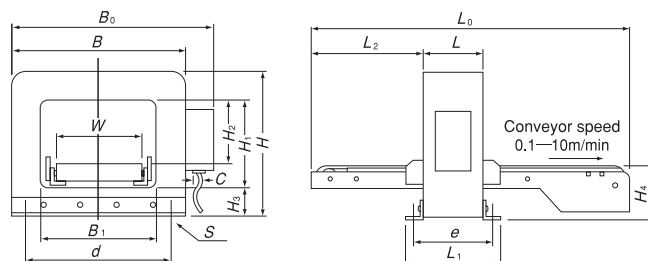
KMDTC-25A

An example of fabrication

Mounting base optional

[Application]

Recommended where a large amount of workpieces such as parts needs to be demagnetized continuously during transfer between processes. Various types can be selected according to the mass and amount of workpieces.



[mm (in.)]

Model with belt conveyor

Model	Power Source	Source Capacity (Current)	Working Rate	Motor	Dimensions																
					Conveyor		Demagnetizer			Major Dimensions											
					L ₀	W	L	B	H	L ₁	L ₂	B ₀	B ₁	H ₁	H ₂	H ₃	H ₄	C	d	e	s
KMDTC-10A	Single-phase 200 VAC 50/60Hz	0.46kVA (2.3A)	100% ED	25W	800 (31.5)	70 (2.75)	103 (4.05)	210 (8.26)	205 (8.07)	153 (6.02)	200 (7.87)	250 (9.84)	100 (3.93)	80 (3.15)	30 (1.18)	70 (2.75)	120 (4.72)	φ12 (0.47)	120 (4.72)	133 (5.23)	4 (0.15) - φ95 (3.74)
KMDTC-16A		1.6kVA (8A)			1000 (39.3)	120 (4.72)	144 (5.66)	280 (11.0)	245 (9.64)	204 (8.03)	400 (15.7)	320 (12.6)	160 (6.29)	125 (4.92)	50 (1.96)	60 (2.36)	135 (5.31)	φ16 (0.62)	160 (6.29)	180 (7.08)	4 (0.15) - φ12 (0.47)
KMDTC-25A		6kVA (30A)			200 (7.87)	224 (8.81)	400 (15.7)	350 (13.7)	284 (11.1)	500 (19.6)	470 (18.5)	250 (9.84)	200 (7.87)	125 (4.92)	75 (2.95)	150 (5.90)	φ20 (0.78)	150 (5.90) ×2	260 (10.2)	6 (0.23) - φ12 (0.47)	
KMDTC-40A		11kVA (55A)			300 (11.8)	304 (11.9)	540 (21.2)	460 (18.1)	384 (15.1)	610 (24.0)	400 (15.7)	315 (12.4)	240 (9.44)	240 (9.44)	240 (9.44)	240 (9.44)	φ26 (1.02)	200 (7.87) ×2	350 (13.7)	6 (0.23) - φ14 (0.55)	

※ Depending on workpieces, they may be pulled back in some cases by a demagnetizing force. In such a case, a belt with special scrapers need to be used. Please consult with us in advance.
 ※ A different-voltage type (special type) is also available.

Model KMD-F INVERTER CONTROL TYPE DEMAGNETIZER



Less power and enhanced demagnetizing performance!



KMD-F20

[Application]

This model is designed to generate an alternating magnetic field on the surface by an AC power source, where workpieces are passed to eliminate the magnetism remaining on the surface of workpieces.

[Features]

- Demagnetization is carried out by varying (sweeping) a frequency lower than commercial frequencies from a lower point to a higher point. This model has improved the demagnetizing performance without increasing the amount of electricity to use.
- The demagnetizing part is of the same dimensions as the conventional table type demagnetizer (KMD-C). With the same output current (AC effective value) as conventional models, the residual magnetism in workpieces (SKH material) can be reduced to one third.
- Workpieces are demagnetized by passing them over the demagnetizing surface at a constant speed, as with conventional models.
- Continuous power on specification, but heat generated in the demagnetizing part is less than conventional models.
- A demagnetizing output variable resistor is provided on the electrical unit that can vary the output current (AC effective value) in a range of 100% and 70%. This feature achieves demagnetization of low-carbon steels like S45C by less power (70%) than conventional models.

[mm (in.)]

	Model	Power Source	Source Capacity	Output	Working Rate	Demagnetizing Width	Dimensions			Mass
							Width	Length	Height	
Demagnetizing part	KMD-F20	Single-phase 100 VAC 50/60Hz	200VA (2.7A)	±20V MAX5A	100%	130 (5.11)	200 (7.87)	180 (7.08)	80 (3.15)	6.5kg/ 14 lb
Electrical unit	EHD-20A					—	140 (5.51)	175 (6.89)	230 (9.05)	4.5kg/ 9.9 lb
Demagnetizing part	KMD-F30	Single-phase 200 VAC 50/60Hz	400VA (3.4A)	±30V MAX7.5A	100%	180 (7.08)	300 (11.8)	200 (7.87)	120 (4.72)	21.0kg/ 46 lb
Electrical unit	EHD-30A					—	220 (8.66)	175 (6.89)	250 (9.84)	5.8kg/ 13 lb

Model **KMDE** STATIC TYPE DEMAGNETIZER

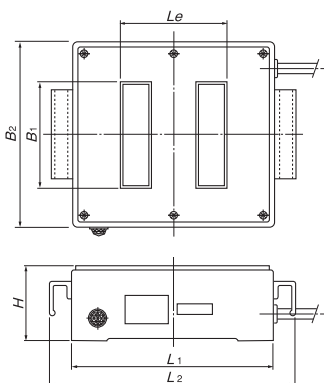


EHD-W205A

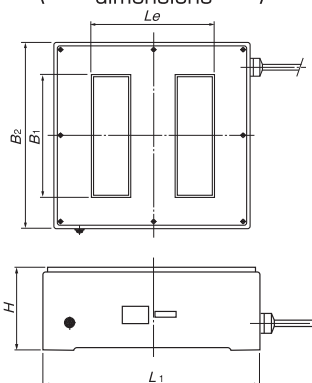


KMDE-1212

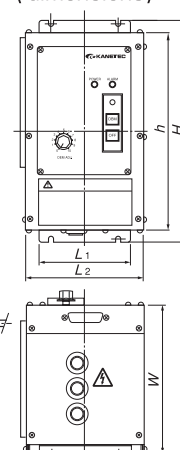
<KMDE-1212 dimensions>



<KMDE-2525/4040 dimensions>



<EHD dimensions>



A larger special demagnetizer is also available.

Main unit

Model	Dimensions						Demagnetizing Area	Withstand Load	Capacity	Mass
	L ₁	L ₂	Le	B ₁	B ₂	H				
KMDE-1212	230	280	120	120	210	85	120 (4.72) ×	20kg/	180 VDC/	15kg/
	(9.05)	(11.0)	(4.72)	(4.72)	(8.26)	(3.34)	120 (4.72)	44 lb	2.1A	33 lb
KMDE-2525	400	—	250	250	380	150	250 (9.84) ×	80kg/	180 VDC/	75kg/
	(15.7)	—	(9.84)	(9.84)	(14.9)	(5.90)	250 (9.84)	176 lb	4.8A	165 lb

※ The withstand load refers to uniform load in the work area.

Applicable power unit (KMDE-1212/2525)

Model	Dimensions						Power	Output	Mass
	L ₁	L ₂	W	H	h				
EHD-W205A	110	140	175	260	230	200 VAC	180 VDC/	4.7kg/	
	(4.33)	(5.51)	(6.89)	(10.2)	(9.05)	1φ	5A	10 lb	

Main unit

Model	Dimensions						Demagnetizing Area	Withstand Load	Capacity	Mass
	L ₁	Le	B ₁	B ₂	H					
KMDE-4040	640	400	400	640	220		400 (15.7) ×	300kg/	180 VDC/	350kg/
	(25.2)	(15.7)	(15.7)	(25.2)	(8.66)		400 (15.7)	661 lb	9A	771 lb

※ The withstand load refers to uniform load in the work area.

Applicable power unit (KMDE-4040)

Model	Dimensions						Power	Output	Mass
	L ₁	L ₂	W	H	h				
EHD-W210A	190	220	175	290	250	200 VAC	180 VDC/	6kg/	
	(7.48)	(8.66)	(6.89)	(11.4)	(9.84)	1φ	10A	13 lb	

[Application]

Pressing the demagnetizing button completes demagnetization within a fixed time without moving workpieces.

[Features]

- A magnetomotive force greater than the AC demagnetizer has been set, which works well on hard workpieces such as bearing steels and cutter steels that are difficult to demagnetize with conventional demagnetizers.
- Since workpieces are demagnetized while keeping them stationary on the demagnetizer, it is not necessary to move workpieces as when using an AC demagnetizer. Thus, this model is suitable for demagnetization of large workpieces (e.g. molds) that are difficult to move.
- Since demagnetization is carried out according to the attenuation pattern programmed in the power unit, electricity needs to be applied only during demagnetization, saving electricity.
- The demagnetizer itself and the power unit are installed separately. Thus, they can be installed in an easy-to-operate place.

Model **KMDE-MP** SINGLE POLE STATIC TYPE DEMAGNETIZER



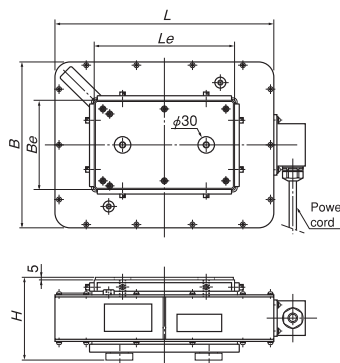
KMDE-MP1013

[Application]

Recommended for demagnetization of thick workpieces and partial demagnetization of large workpieces. Pressing the demagnetizing button completes demagnetization within a fixed time without moving workpieces.

[Features]

- A strong magnetic field is generated in a wide area to make this model suitable for partial demagnetization of large workpieces and thick workpieces.
- Since demagnetization is carried out according to the attenuation pattern programmed in the power unit, electricity needs to be applied only during demagnetization, saving electricity.
- The demagnetizer itself and the power unit are installed separately. Thus, they can be installed in an easy-to-operate place.



[mm (in)]

Model	Dimensions			Demagnetizing Area	Capacity	Mass	Power Unit
	L	B	H	Be × Le			
KMDE-MP1013	240 (9.44)	210 (8.26)	110 (4.33)	100 (3.93) × 130 (5.11)	180 VDC/2.1A	20kg/ 44 lb	EHD-W205A
KMDE-MP1625	390 (15.3)	300 (11.8)	150 (5.90)	160 (6.29) × 250 (9.84)	180 VDC/4.7A	75kg/165 lb	EHD-W205A
KMDE-MP2040	580 (22.8)	380 (14.9)	185 (7.28)	200 (7.87) × 400 (15.7)	180 VDC/7.8A	170kg/375 lb	EHD-W210A

Model KMDP PEN TYPE DEMAGNETIZER



KMDP-16



- Model: KMDP-16
- Dimensions: $\phi 30 \times 264$ mm
(Demagnetizing area $\phi 15 \times 25$ mm)
- Motor: Rating 2.4 V/0.125 A/12,650 rpm (no-load)
- Mass: 310g
- Charging adapter (standard accessory): Input 100 VAC (50/60 Hz) / Output 3.7 VDC, 70 mA

[Application]

Recommended where magnetism on the surface of metallic workpieces in general need 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 suitable for demagnetizing cutters of machines and punches and guide pins of press dies while they are mounted.

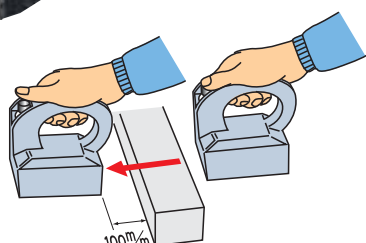
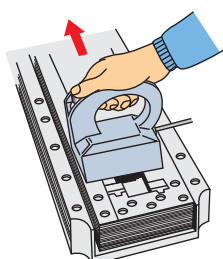
[Features]

- A rare earth magnet having strong magnetic force is used at the end of the rotary magnetic field. This small and high performance demagnetizer can be used easily in limited space.
- The motor is driven by a chargeable battery. This demagnetizer has no cord and therefore can be used in any places. Also the battery needs not be replaced.
- Simple construction and simple exterior. Maintenance free and long lasting service life.

Model KMDH HANDY TYPE DEMAGNETIZER



KMDH-5



[Application]

Suitable for demagnetizing tools such as drills, cutting tools, cutters and magnetized slide calipers. They can also be used for demagnetizing a part of large steel plates.

[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 pressed on during demagnetizing operation.
- Turn it off when the demagnetizer is more than 100 mm away from the demagnetizing work.
- Working rate: 70% ED (power on for 7 minutes and pausing for 3 minutes).

[mm (in)]

Model	Power Source	Source Capacity	Working Rate	Demagnetizing Width	Dimensions			Mass
					Width	Length	Height	
KMDH-5	Single-phase 100 VAC 50/60Hz	70VA	70%ED	50 (1.96)	86 (3.38)	102 (4.01)	119 (4.68)	2.3kg/5.1 lb

※ The height is up to the grip. ※ 2m cord is provided.
※ A different-voltage type (special type) is also available.

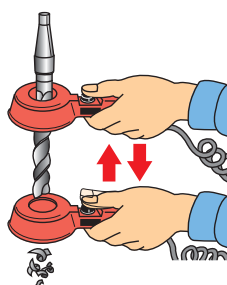
Model KMDC TOOL DEMAGNETIZER



For demagnetization of magnetized tools such as drills, reamers and cutters and measuring equipment!



KMDC-40



[Application]

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

[Features]

- Small and light weight for easy operation.
- Capable of removing small chips attracted by magnetism on drills and reamers while such tools are being mounted on machines.

How to use

- Power is applied only while the pushbutton is held for demagnetization.
- Turn off (release the push-button) the demagnetizer after moving it away more than 100 mm from an object demagnetized.
- 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.

Model	Power Source	Source Capacity	Input	Demagnetizing Dia	Mass
KMDC-40	Single-phase 100 VAC 50/60Hz	75VA	Momentary power on by pushbutton	$\phi 40$ (1.57)	0.9kg/2 lb

※ Cord length 2.5 mm (curled cord) included.

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HOLDERS

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