Model FE- HANDY HOLDER BATTERY POWRED UNIT

Auxiliary transportation tool by battery type magnetic force



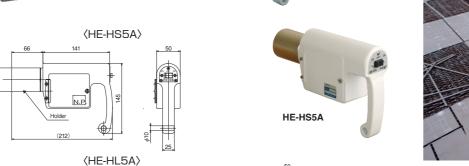
To be used for transportation of cut plate or extra material at room temperature, as well as for retrieving smaller products. Attractive force and battery time are significantly improved!

HE-HL5A

It is used as a holding tool for moving, transporting cut plate or extra material and/or retrieving smaller products e.t.c.

In addition, when cleaning outskirt of machine tools and in case an amount of cut material is entangled and therefore can not be wiped out quickly, it can be applied, and also to removed cut waste by magnetic attraction.

- Only with a small amount of electricity supply of UM1(in case JIS Standard) alkali cell batteries, strong attractive force is achieved.
- ●It is handy type, which can be operated by one hand. Cordless, for use in the field or shop.
- As it is hybrid (complex structure of permanent and electro magnet), a work piece does not drop when the battery finishes discharging, it is safe!
- ●Battery can be changed easily without any tool. In addition, rechargeable battery available in the ordinary market can be used, too.





| | | | | | 2 |
|------------|------------|---------------|--------------------|------------|---------------|
| Model Type | | Holding Power | Power Source | Duty Cycle | Mass |
| HE-HS5A | Short type | 600N (60kgf) | Cingle better VO | E00/ ED | 1.8kg/3.96 lb |
| HE-HL5A | Long type | OUUN (OUKEI) | Single battery × 2 | 50% ED | 2.5kg/5.51 lb |

^{*}The attractive force is the value available on the face of SS400, (mild steel), plate thickness 15mm with finished surface by grinding

Model SL

TOUCHER



[Application] tool by use of a magnet.

A simple transportation

[Features]

- ●You can easily carry workpieces which would otherwise be difficult to handle with hands due to complex shapes or high temperatures. Simply attract/remove with one-touch mechanism.
- •Useful for tacking or positioning small pieces in welding operation.
- Usable for a wide range of applications.

[mm(in)]

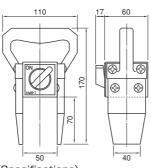
| Model | Holding Power | Dimensions | | | Max.Height | Mass | |
|--------|-----------------|------------|-----------|----------|--------------|------------|--|
| WIOGEI | riolaling Fower | Width | Length | Height | Wax.i leigit | IVIGSS | |
| SL-1 | 500N (50kgf) | 50(1.96) | 92 (3.62) | 32(1.26) | 122(4.80) | 1kg/2.2 lb | |

*The holding power is a value in a perpendicular direction on SS400, t10 steel sheet.

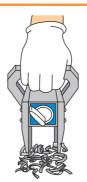
HAND MAGNET Model HMB



HMB-7



(Specifications) ●Capacity: Milling chips about 0.2 kg. M5 x 7 screws about 0.5 kg.



[Application]

This product is useful in wide applications such as in machine shops, casting factories, food and chemical factories, etc. for recovering iron chips, sorting materials of screws, etc., recovering chips in cast sand, etc.

[Features]

- ■Magnetic force is turned ON/OFF just by operating the lever lightly with a hand.
- Compact and strong holding power.

[mm (in)]

| Model | Holding Power | Mass |
|-------|---------------|---------------|
| HMB-7 | 250N (25kgf) | 1.9kg/4,20 lb |
| | | |

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

^{*}Mass includes dry cell battery.

^{*}About one third of magnetic force remains when OFF position compared with strong (Absorption-ON) *It is not designed for heat resistance or water proof.

CHUCK

MAGNETIC CHUCKS :

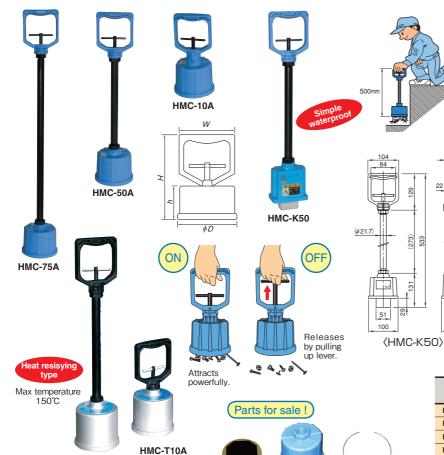
PERMANENT ELECTROMAGNETIC CHUCKS

VACUUM

≰ PROMEL1 SYSTEM

Model HMC MAGHAND

Collection of bolts, screws and nails scattered around on the floor!



Separator

Magnet case

[Application]

These MAGHANDs are suitable for collecting iron pieces that are scattered around on the floor or mixed in media. Since they can also be used to remove and collect iron pieces from powder materials, they have a wide range of applications including machining, forging and food processing. They may also be useful in the household.

[Features]

- The magnetic force can be turned on and off simply by one-hand operation.
- These MAGHANDs have a powerful magnet for strong attraction and a wide attractive face.
- ●Model HMC-75A has a long arm to make it suitable for collecting iron pieces in pits and
- ■Model HMC-T10 is very rigid as its body is cased with aluminum. (High temperature type)
- ■Model HMC-K50 has a square rectangler to make it best suitable for collecting chips from T grooves. It is also useful for collecting iron powder precipitated in coolant tanks as it is of simple waterproof type.

(Specifications)

Ш

26

55

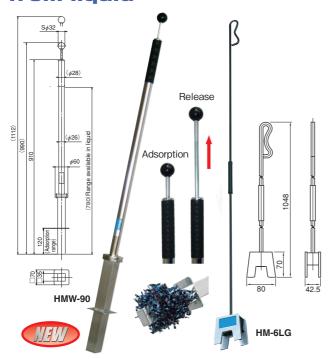
Attracting amount: About 0.6 kg of M10 plain washers and about 0.7 kg of M4 x 10 screws.

| г | 7. Y | - 7 |
|-----|------|-----|
| Lmm | (in) | J |
| | | |

| Model | | Mass | | | | |
|----------|-----------|--|--------|---------------|---------------|--|
| iviodei | φD | Н | h | W | IVIASS | |
| HMC-10A | 444 | 227 (8.93) | 85 | | 0.9kg/1.98 lb | |
| HMC-50A | (4.48) | 500 (19.6) | (3.34) | 104 (4.09) | 1.5kg/3.30 lb | |
| HMC-75A | | 750 (29.5) | (3.34) | | 1.9kg/4.20 lb | |
| HMC-T10A | 112 | 241 (9.48) | 95 | | 1.2kg/2.60 lb | |
| HMC-T50A | (4.40) | 514 (20.2) | (3.74) | | 1.8kg/3.96 lb | |
| HMC-K50 | (51 (2.00 | (51 (2.00) ×26 (1.02) ×29 (1.14)) ×533 (20.9) ⟨See dimension drawing⟩ | | | | |
| | | | | | | |

Ideal for removal of chip from liquid

HMC-T50A



Model HMW

WATERPROOF MAGHAND

[Application]

Pressing spring

It is suitable to remove cut material from liquid in coolant tank and so on. In addition, it can be used to remove iron fragments from powder.

[Features]

- It can release smoothly, even if the material is attracted at its maximum volume. (by pulling a lever, attracted material is released.)
- As there is no magnetic force generated from the bottom of the unit, it can be easily handled in water tanks made of steel.

[mm(in)]

| M | Model Holding Mass | | Length | Holding Dimensions | Mass | |
|----|--------------------|---|------------|----------------------|---------------|--|
| HN | IW-90 | chip (dry) Approx. 90g (0.18) shot blast ball Approx. 1.1kg (2.42) | 990 (38.9) | □35(1.37) ×120(4.72) | 1.6kg/3.52 lb | |

HAND MAGNET WITH GRIP

[Application]

Suitable for removing iron in liquid tanks and collecting iron pieces in small areas. This is also helpful for picking up tools that fell in a complicated machine room in ships.

- Powerful magnetic force.
- Light weight for simple operation.
- The grip can be divided to two for easy storage.

(Specifications)

●Capacity: M10 plain washers about 0.5 kg. M4 x 10 screws about 0.6 kg.

| | | [11 11 (11)] |
|--------|---------------|-----------------|
| Model | Holding Power | Mass |
| HM-6LG | 250N (25kgf) | 1.5kg/3.30 lb |

Suited to collect such iron fragment as nail, needle, iron waste and so on, which are It is suitable to collect such iron fragment as nail, needle, iron waste spread widely spread on floor, road e.t.c.

Adsorption chips Release chips An example of dust collection An example of special fabrication (Road Sweeper) RS-P0930 S-1D

Model RS ROAD SWEEPER

[Application]

on floor from working site, warehouse, event place or on road.

In addition, its effect is achieved for collection dust mixed with fine iron powder.

It not only protects human body and automobile tire but also contributes for recycling.

- •Full length magnetic attraction, even at end corners.
- Simple structure using plate magnet type, makes maintenance, such as changing wheels easy to do.
- Self-standing for store is possible and it saves space.
- Easy operation, hand lever release.

| | | | | | | [| mm (in)] | |
|--|----------|--------------------|-------|----------------|--------------|-------------|----------|--|
| | Model | Holding Mass | Dim | ensions | Wheel dia | Height | Mass | |
| | Model | 1 IOIUII Ig IVIASS | Width | Holding Length | Wileel ula | Tielgiit | | |
| | RS-P0930 | 1100 | | 308(12.1) | φ 100 (3.93) | 1090 (42.9) | 7kg | |

Model S

MAGNETIC SWEEPER

Adopting powerful permanent magnet, you can collect iron pieces even in mud. The sweepers collect harmful iron pieces such as needles and nails to protect human body and rubber types of vehicles and are also useful for recycling purposes.

Most suitable for collecting iron pieces from the floor in the sewing factory, machine shop or woodworking mill.

Useful for cleaning warehouse and truck terminal.

Usable for preparatory work of race track or stadium.

Suitable for constructing displays in exhibition events and cleaning floors after overhauling.

[Features]

- Powerful magnetic force.
- Recovered iron chips can easily be released by operating the lever.

| | | | | | [mm (in)] | |
|-------|-------------------|----------------------|---------|----------|-----------|--|
| Madal | Lielding Mass | Dim | ensions | l loimbt | Mass | |
| Model | Holding Mass | Width Holding Length | | Height | Mass | |
| S-05A | 3cm(1.18) nails | 253 | 152 | 919 | 3.8kg/ | |
| 5-05A | about 0.3 kg/0.6b | (9.96) | (5.98) | (36.1) | 8.39 lb | |
| S-1D | 3cm(1.18) nails | 461 | 362 | 1050 | 4.5kg/ | |
| 3-1D | about 0.45kg/0.6b | (18.1) | (14.2) | (41.3) | 9.92 lb | |

MAGNETIC HOLE CLEANER



| | | | | | | [mm (in)] |
|---------|------------------|--------------|-----------------|-----------------------|------------|---------------|
| Model | | Holding Mass | | Dimensions | Length | Mass |
| Model | | M3×6 | M3 plain washer | Differsions | Lengui | IVIdSS |
| K-510A | φ 5 (0.19) side | | | φ 5(0.19) ×25 (0.98) | | 32g/0.070 lb |
| K-510A | φ 10 (0.39) side | 4g/0.008 lb | 3g/0.006 lb | φ10(0.39) ×18 (0.70) | 250(9.84) | 32g/0.070 lb |
| K-1015A | φ 10 (0.39) side | | | φ10(0.39) ×18 (0.70) | 250 (9.64) | 45-70.000 # |
| K-1015A | φ 15 (0.59) side | 7g/0.0015 lb | 4g/0.008 lb | φ 15(0.59) ×18 (0.70) | | 45g/0.098 lb |
| K-2025A | φ 20 (0.78) side | 21g/0.046 lb | 19g/0.041 lb | φ 20(0.78) ×18 (0.70) | 257(10.1) | 135g/0.297 lb |
| K-2025A | φ 25 (0.98) side | 27g/0.059 lb | 22g/0.048 lb | φ 25(0.98) ×25 (0.98) | 237 (10.1) | 133g/0.297 lb |
| K-5F | 4g/0.008 lb | | 3g/0.006 lb | φ 5(0.19) ×30 (1.18) | 232 (9.13) | 26g/0.573 lb |
| K-10F | | | 3g/0.006 lb | φ 10(0.39) ×15 (0.59) | 017(0.54) | 35g/0.077 lb |
| K-15F | | 7g/0.015 lb | 4g/0.008 lb | φ 15(0.59) ×15 (0.59) | 217(8.54) | 46g/0.101 lb |

| | | [n | nm (in)] |
|-------|---------------|---------------------------------|----------|
| Model | Holding Power | Dimensions | Mass |
| | | $\phi 8(0.31) \times 145(5.70)$ | |
| K-N | 10N (1kgf) | total elongation by 6 steps | 26g |
| | | 660 (25.9) | |



Removing chips.



[Application]

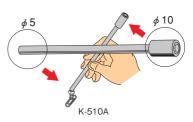
Convenient for removing steel particles from hole and also for removing iron powder and chips after drilling or tapping operation.

[Features]

Small diameter, but with a separator built in, this cleaner is constructed to have the magnetic pole concentrated on the same attractive face.

An example of usage of K-5F





Steel sheet separator



Most suitable for removing iron or steel sheets one by one thereby facilitating feeding in automatic steel sheet feeding lines or for separating each iron sheet and for feeding it into a machine (for press or shearing operation).

[Features]

- ●The highest separating capacity is ensured by two rails on the magnetic polar surface.
- Not only steel sheets but also finished pressed workpieces, circular workpieces and irregular workpieces can be separated at fixed intervals by use of several separators.
- Compact type with highly efficient ferrite magnet. It can be attached easily to machines. Couple it in comformity with the size, shape and weight of the steel sheets in use.
- One set consists of two units.

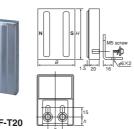
| Model | Dimensions | | | Setting Face | | | Mass | |
|---------|------------|-----------|--------------|--------------|-------------|----------|-----------|----------------|
| iviodei | В | Н | L | l | No. of Hole | φd | b | IVIASS |
| KF-5B | 65 (2.55) | 87 (3.42) | 55.5 (21.8) | 45.0(1.77) | | 8(0.31) | 40 (1.57) | 1.0kg/2.2 lb×2 |
| KF-10 | 125 (4.92) | 07 (3.42) | 61.5(2.42) | 51.5(2.02) | | | 56 (2.20) | 2.0kg/4.4 lb×2 |
| KF-20 | | 127(5.00) | 01.5(2.42) | 31.3(2.02) | 4 | 8(0.31) | 80 (3.15) | 2.5kg/5.5 lb×2 |
| KF-30 | 210(8,26) | | 66.5(2.61) 5 | 56.5 (2.22) | 6.5(2.22) | | 150(5.90) | 7.0kg/ 15 lb×2 |
| KF-40 | 210(0.20) | 254(10.0) | 72.0 (2.83) | 60.0(2.36) | | 1 (0.43) | 150(5.90) | 12.0kg/26 lb×2 |

STEEL SHEET SEPARATOR "FLOATER"* (THIN TYPE) Model KF-T

Thin type

KF-T5A





[Application]

Most suitable for installation in narrow spaces because it is thin and compact. [Features]

- Ultra-thin type 20mm thick.
- ●This separator can be installed in a wide variety of locations, for example, direct installation on a wall face or installation with the L-shaped attachment.
- The installing position is vertically abjustable with the L-shaped attachment.

62 (2.44

102(4.01

Model

KF-T5A

KF-T10

KF-T20

One set consists of two units.

[mm(in)]

[mm(in)]

| h | | Mass | | |
|---|--------|----------------|--|--|
| | 10.5 | 0.7kg/1.5 lb×2 | | |
| | 13.5 | 1.1kg/2.4 lb×2 | | |
| ١ | (0.53) | 1.6kg/3.5 lb×2 | | |

EXAMPLE OF APPLICATION

air cylinder) using the standard type, which can

retrieve one by one piece steel plate smoother is also available. Please consult with us.

(1) 《DELIVERY OF LARGE IRON SHEET》

Use it by standing sheets vertically against a wall, etc.

You can make good use of the separating force if the Floater is used by standing large sheets in this manner; thereby minimizing the effect of the weight of the sheets and enhancing the separating force.

(2) 《SEPARATION OF STUCK SHEETS》

Efficient if you use several Floaters in combination.

For separation of large steel sheets or other iron sheets stuck with oil or grease, increase the number of Floaters.

(3) 《SHEETS PILED UP HIGHLY》

Use a lifter

If steel sheets are piled up high, use a Floater on a lifter (Most adequate level of the Floater is a bit higher than the top sheet) .

b

25 (0.98

50 (1.96

87(3.42)

127 (5.00

■PRINCIPI F OF FLOATER

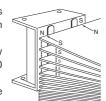
The Floater induces the same magnetic poles in stacked steel sheets to separate the sheets by the repelling force of the same poles.

FLOATING DISTANCE

When a pair of Floaters are positioned on each side of stacked sheets on the longitudinal sides, the distance the top first sheet is floated from the second sheet is as shown in the table.

This distance applies when the Floaters are positioned 50 mm away from the edge of sheets and the initial position of the first sheet is 50 mm below the top end of the Floaters.

Note, however, if sheets are warped or oil is sticking to them, the distance will become shorter.

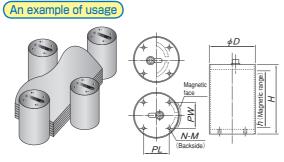


| Test steel Thickness Size | | | | | | [[]]] |
|--|------------|----------|------------|-----------|----------|----------------------------|
| Nodel 1.0 1.6 2.0 3.2 150 (5.90) × 450 (17.7) | Test steel | steel | Thick | Cina | | |
| KF-10 14 (0.55) 12 (0.47) 6 (0.23) - KF-20 26 (1.02) 17 (0.66) 9 (0.35) - KF-30 33 (1.29) 26 (1.02) 18 (0.70) 7 (0.27) | Model | 1.0 | 1.6 | 2.0 | 3.2 | Size |
| KF-20 26 (1.02) 17 (0.66) 9 (0.35) - KF-30 33 (1.29) 26 (1.02) 18 (0.70) 7 (0.27) 1.6kg/3.5 lb × | KF-5B | 18(0.7) | 14(0.55) | 10 (0.39) | 5(0.19) | 150 (5.90) × 450 (17.7) |
| KF-30 33(1.29) 26(1.02) 18(0.70) 7(0.27) 1.6kg/3.5 lb× | KF-10 | 14 (0.55 | 12(0.47) | 6(0.23) | - | |
| KF-30 33 (1.29) 26 (1.02) 18 (0.70) 7 (0.27) | KF-20 | 26(1.02 |) 17(0.66) | 9(0.35) | _ | 1 6kg/2 E lb v 2 |
| KF-40 34 (1.33) 28 (1.10) 20 (0.78) 10 (0.39) | KF-30 | 33(1.29 | 26(1.02) | 18(0.70) | 7(0.27) | 1.0kg/3.5 lb \ 2 |
| | KF-40 | 34 (1.33 | 28(1.10) | 20 (0.78) | 10(0.39) | |
| KF-T5A 5(0.19) 3(0.11) 2(0.07) - 80(3.15) × 200(7.87) | KF-T5A | 5(0.19) | 3(0.11) | 2(0.07) | - | |
| KF-T10 120 10 9 6 160 (6.29) × | KF-T10 | 120 | 10 | 9 | 6 | 160 (6.29) × |
| KF-T20 (4.72) (0.39) (0.35) (0.23) 300(11.8) | KF-T20 | (4.72) | (0.39) | (0.35) | (0.23) | 300(11.8) |

Model KF-HC POWERFUL CIRCULAR STEEL SHEET SEPARATOR "FLOATER"*



KF-HC0813 An example of special fabrication



[Application]

Model

KF-HC0813

KF-HC1218

KF-HC1424

Used to separate irregular workpieces (steel sheets) that do not have a straight line of sufficient length.

76.3

1143

139.8

130.0

175.0

235.0

[Features]

The magnetic force can be adjusted by changing the location of the internal magnet. Small but powerful.

| h | PL | PW | N | М | Mass |
|-------|--------|--------|--------|-----------------|---------------|
| 100 | | 60 | 2 | M 8(0.31) | Approx. 2kg/ |
| 3.93) | _ | (2.36) | (0.07) | Depth 10 (0.39) | 4.4 lb |
| 140 | 65 | 65 | | M 8(0.31) | Approx. 7kg/ |
| 5.51) | (2.55) | (2.55) | 4 | Depth 12(0.47) | 15.4 lb |
| 195 | 80 | 80 | (0.15) | M10 (0.39) | Approx. 14kg/ |

Approx. 14kg/