



STEED

ACCURACY

SPEED

RESPONSIBILITY

COOPERATIVE

|         |   |         |  |
|---------|---|---------|--|
| B1~B3   | PUNCH FORMER/GRINDER                                    | B39     | MAGNETIC STEEL SHEET SEPARATOR<br>MAGNETIC CHIP COLLLECTER<br>MAGNETIC SEPARATING BAR UNIT   |
| B4~B7   | TOOL MAKER VISE/SINE VISE                               |         |  |
| B8~B12  | SINE BAR/ANGLE PLATE/<br>V-BLOCK WITH CLAMP/ANGLE PLATE | B40~B41 | DEMAGNETIZER SERIES  |
|         |   | B42     | CHIP COLLECTER SERIES  |
| B13~B16 | ELECTRODE HOLDER/EDW SERIES<br>TOOL MAKER VISE          | B43~B47 | MAGNETIC V-BLOCK/TOOLS   |
| B17~B18 | WIRE DIES GUIDE/ELECTRODE                               | B48     | HOSE KITS  |
| B19~B23 | GRINDER WHEEL DRESSER SERIES                            | B49~B50 | PAPER FILTER/MAGNETIC SEPARATOR  |
| B23~B24 | WHEEL HANGER/WHEEL BALANCING STAND                      | B51~B52 | COOLANT TANK/OIL SKIMMER   |
| B25~B30 | SINE PLATE/MAGNETIC PLATE                               | B53~B55 | GAUGE BLOCK/SURFACE PLATE  |
| B31~B32 | PERMANENT-ELECTRO MAGNETIC CHUCK                        | B56~B57 | CLEANING PAPER/<br>GRANITE SQUARE RULERS<br>GRANITE SURFACE STAND<br>CYLINDRICAL SQUARES STEEL<br>HORIZONTAL LEVELING INSTRUMENT<br>GRANITE TRIANGLE RULER |
| B33~B34 | LIFTER SERIES   |         |  |
| B35     | STANDARD POLE ELECTRO<br>MAGNETIC CHUCK                 |         |  |
| B36     | CHUCK CONTROLLER  | B58     | CONCENTRIC TEST STAND<br>FIXED SPEED PUNCH FORMER<br>PIN GAUGE   |
| B37     | MAGNETIC LIFTER   |         |  |
| B38     | MAGNETIC TRANSISTING BLOCK                              | B59~B61 | MEASURING TOOL/ANGLE LEVEL   |

## GRINDING MACHINE ACCESSORIES





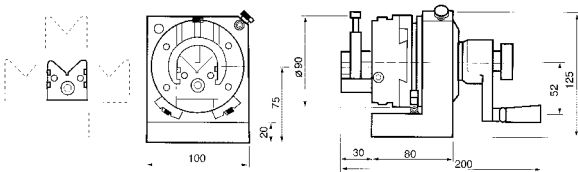
# Punch Former



ORDER NO.V-PB CODE NO.2001-001  
WEIGHT:10KGS

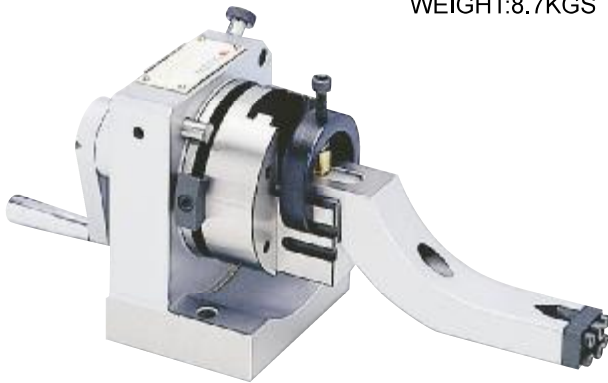


V-PB 2WAY  
V-PS 1WAY, THROUGH HOLE



- Punch former is the fixture to grind the point of standard punches and E.D.M. electrodes for precise and fast operation.
  - Besides the round, radius and multiangle punches, any special forms can be ground precisely .
  - By using this attachment, it can be ground either concave or convex radius shape.
  - The capacity is from 4mm to 30mm.
- Punch Former is the great dressing instrument. Precision forming of grinding wheel can be done by assembling an ARM with the main body. Any combination of tangents or radial form of the grinding wheel may be dressed accurately by easy operation.
- Max. diameter of grinding wheel within 200m/m can be dressed accurately and safely. The height from base to roller`s center is 80m/m. Movement of each side can reach 12.5m/m while aiming at the center of V block. The main body is made of one piece steel construction.

ORDER NO.V-PS CODE NO.2001-101  
WEIGHT:8.7KGS



## Specification

D(diameter)of the pressed part of the punch...4-30mm  
 L(length)of the pressed part of the punch...above22mm  
 Upper and lower movement span of V block.....25mm  
 Horizontal movement span of V block(one side)..12.5mm  
 (tow side)...25mm

Length of V block .....30mm  
 Height of the rotary central axis..... 15mm  
 Cutting and dividing.....24 equal pieces(15")  
 Sand forming of the forming lever  
 (concave R).....100mmR  
 (convex R).....48mmR  
 Diamond sharpening knife  
 (small diameter)60x50(1/10carat)  
 (large diameter)100x50(1/4carat)

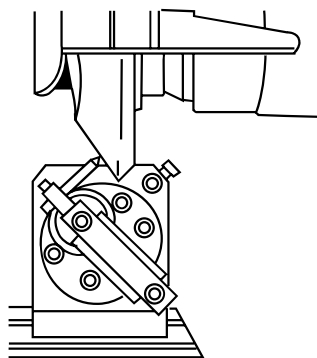
V-PS can pass through from itself to the center of grip, in case of facing a more longer punch ejector pin, it can go deep into of the grip position directly. To assemble an ARM with the main body, any combination of radial form of the grinding wheel may be dressed accurately by easy operation.

\*Except for the handle and graduation scale all metal is special hard tool steel (SKS-2) heat treated at HRC 63

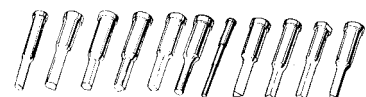
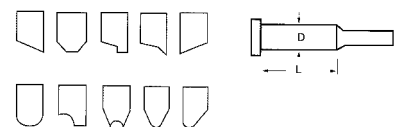
\*V block can be disassembled for use separately.  
 V-PS the center through hole is  $\phi 30$ m/m

## SPECIAL PART ACCESSOR FOR ANGULAR DRESSING

ORDER NO.V-PF CODE NO.2001-020  
WEIGHT:0.7KG



Applycation style:

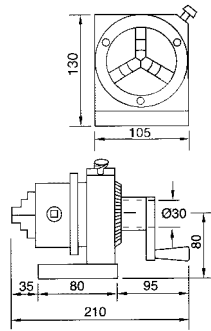


The Wheel angular dressing



## 3-Jaws Punch Former

ORDER NO:V-PS-80J CODE NO:2001-030



- The center of 3 jaws punch grinder can move gently to fix and to help the concentricity more precision.
- This punch grinder can divide into 24 angles, each angle is 15 degrees at 10 seconds accuracy, the weight is 11kgs.
- This style base can be selected to set up with sine plate to make sine angles. The sine plate also can be used with other Machines.
- The base can be adjusted for sine angle. (ORDER NO.V-PS-80JS)

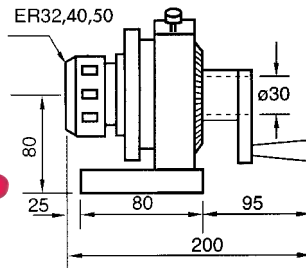
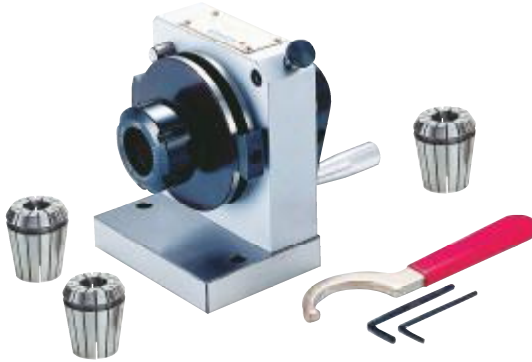


## ER Collet Dividing Punch Former

ORDER NO:V-PS-ER32 CODE NO.2001-040

ORDER NO:V-PS-ER40 CODE NO.2001-041

ORDER NO:V-PS-ER50 CODE NO.2001-042

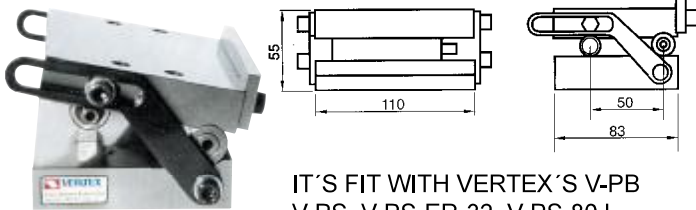


- ER Collet Dividing Punch Grinder put ER32 main body and with collet inner size 6, 8, 10, 12, 16, 20mm, total 6pcs. the weight is 11kgs. ER40 with 7pcs, ER50 with 6pcs collet. (ER50 collet size 12, 16, 20, 26, 30, 32mm)
- The center of collet can move gently to help the concentricity more precision.
- This punch grinder can divide into 24° angles, each angle is 15 degrees at ±10 seconds accuracy.
- ER16 connection, special accessory (v-601 20-ER16-50L WITH 10PCS COLLET) can use ER 16 base can select sine vise base which is good for sine angle use (ORDER NO.V-PS-ER32S) .



## Sine Plate For All Type Punch Former

ORDER NO.V-PS-SP WEIGHT:3.6kgs  
CODE NO.2001-050

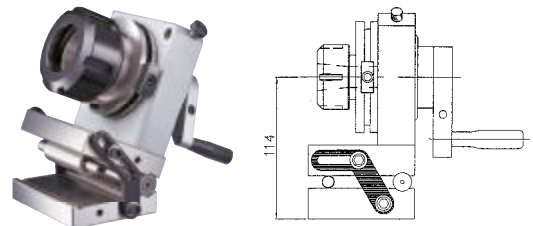


IT'S FIT WITH VERTEX'S V-PB  
V-PS, V-PS-ER-32, V-PS-80J



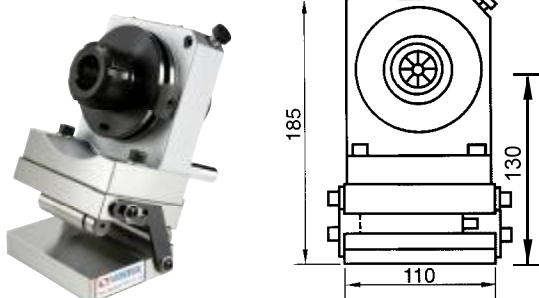
## ER Collet Dividing Punch Grinder With Sine Plate

ORDER NO.V-PS-ER50S WEIGHT:10kgs  
CODE NO.2001-061



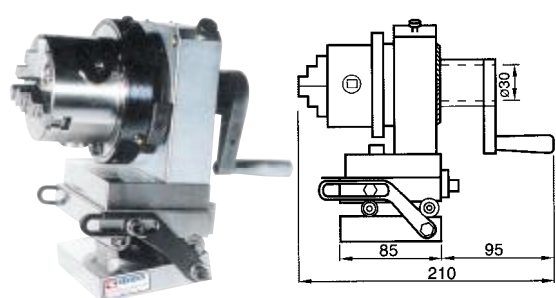
## ER Collet Dividing Punch Grinder With Sine Plate

ORDER NO.V-PS-ER32S WEIGHT:11kgs  
CODE NO.2001-060



## 3-Jaws Punch Former With Sine Plate

ORDER NO.V-PS-80JS WEIGHT:11.7kgs  
CODE NO.2001-070



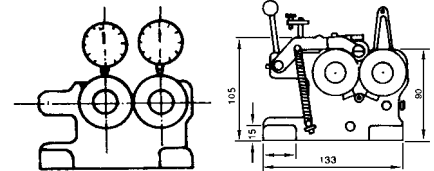
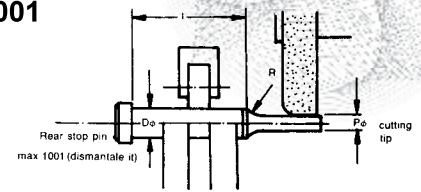
## Punch Grinder



### ORDER NO.V-PGS CODE NO.2002-001 MINI-TYPE PUNCH GRINDER Ø1.5-3mm

This is a mini type punch grinder which can grind fine punch of outside diameter from 1.5mm to 3mm.N.W.4.5kgs

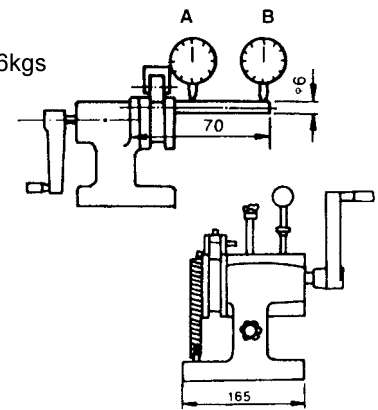
Accuracy of point A within 0.005m/m and point B Within 0.008m/m while turning.



### ORDER NO.V-PG CODE NO.2002-010 STANDARD- TYPE Ø1.5-Ø25 WEIGHT: 6.6kgs

Punch grinder is a tool which can be put on the surface grinding machine for round punches(1.5mm-25mm).It can be ground by putting among three rollers of punch grinder. without checking the center. Accuracy of roller within 0.005mm while turning right or left. It can allow length 5-35m/m

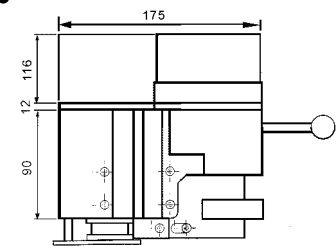
Accuracy of point A within 0.005m/m and point B Within 0.008m/m while turning.



### ORDER NO.V-PGM CODE NO.2002-020 WITH MOTOR TYPE Ø1.5-Ø25 WEIGHT: 11.8kgs

#### Features

- 1.High accuracy cylindrical grinding work possible just by putting this economical unit on surface grinder.
- 2.No center alignment necessary.just put work on rollers.
- 3.Portable with single hand, thus easily set on grinding.
- 4.With rollers motor -driven attention can be concentrated on table/wheel feeds.
- 5.Work can be formed in radius taper as well
- 6.Double roller unit available for long pin or punch grinding.



V- PGM

#### FEATURES

Mounting surface(RLxFB).....175X218X90mm  
50Hz/220v.....108rpm  
Roller speed 60Hz/110v.....129rpm  
Accuracy(Roundness and concentricity).....25.4mm  
Roller driving motor 110v, Single phase, 25W  
(Specifications are subject to change without notice.)

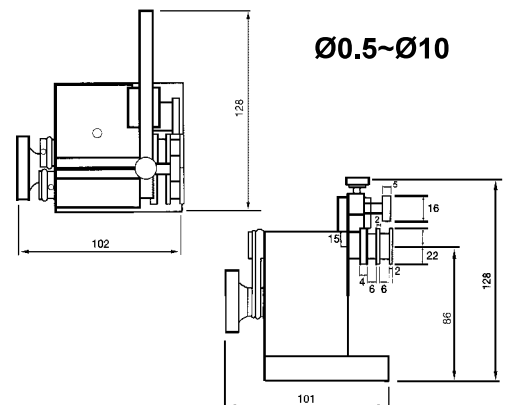
## Punch Grinder

### ORDER NO:V-PGA CODE NO.2002-030

WEIGHT:3.1kgs



1. The small punch grinder can process from dia 0.5mm to 6mm. If the length of workpiece is about 10mm which can be grind.  
This punch grinder can work with surface grinding machine and to grinding any sizes.
2. Easy operation and high precision make it to be the best grindig tool for small workpiece.



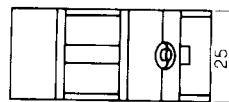
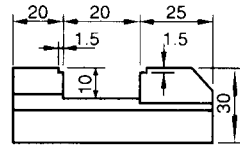
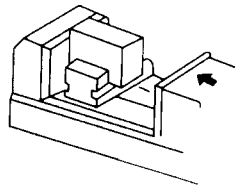
Ø0.5~Ø10



# Mine Tool Maker Vise

ORDER NO.VMV-10 CODE NO.2003-001

WEIGHT:0.3kg



Tool makers vise of mini type which can be put in a bigger vise to process the small and precise workpiece. Also it can be used in an E.D.M. machine and grinding machine. Squareness and parallelism: within 0.003mm.



# Tool Maker Vise



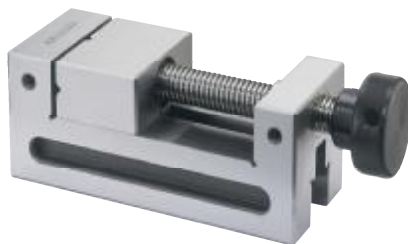
- Made of SK material of J.I.S. specification.
- Hardened by heat treatment and precision ground.
- Squareness and parallelism are ensured to be within  $\pm 0.005\text{mm}$ .
- It can be used and kept its high precision while standing on its base, sides or extremity, for inspection use in stead of squares due to its extremely accuracy.

Unit:mm

| ORDER NO. | MATERIAL | LENGTH | WIDTH | JAW OPENING | JAW HEIGHT | HARDEN     | N.W (KGS) | CODE NO  |
|-----------|----------|--------|-------|-------------|------------|------------|-----------|----------|
| VMV-15    | SK2      | 100    | 36    | 40          | 20         | HRC56°-58° | 0.9       | 2003-010 |
| VMV-20    | SK2      | 150    | 48    | 75          | 30         | HRC56°-58° | 2         | 2003-011 |
| VMV-25    | SK2      | 170    | 63    | 90          | 35         | HRC56°-58° | 3.3       | 2003-012 |
| VMV-30    | SK2      | 190    | 73    | 100         | 35         | HRC56°-58° | 4.5       | 2003-013 |
| VMV-35    | SK2      | 225    | 88    | 125         | 45         | HRC56°-58° | 7         | 2003-014 |
| VMV-40    | SK2      | 230    | 98    | 125         | 45         | HRC56°-58° | 8.9       | 2003-015 |
| VMV-50    | SK2      | 287    | 125   | 150         | 50         | HRC56°-58° | 15.5      | 2003-016 |
| VMV-60    | S50C     | 330    | 150   | 200         | 50         | HRC55°-56° | 21.4      | 2003-017 |



# Tool Maker Vise

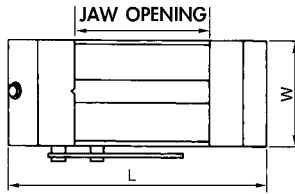
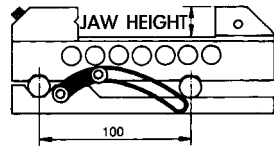


Unit:mm

| ORDER NO. | MATERIAL | LENGTH | WIDTH | JAW OPENING | JAW HEIGHT | HARDEN     | WEIGHT (KGS) | CODE NO. |
|-----------|----------|--------|-------|-------------|------------|------------|--------------|----------|
| VDV-20    | SK2      | 155    | 48    | 60          | 25         | HRC55°-58° | 2.5          | 2003-020 |
| VDV-25    | SK2      | 176    | 64    | 75          | 30         | HRC56°-58° | 3.9          | 2003-021 |
| VDV-30    | SK2      | 181    | 74    | 75          | 30         | HRC56°-58° | 5.7          | 2003-022 |
| VDV-35    | SK2      | 250    | 88    | 125         | 38         | HRC56°-58° | 9.2          | 2003-023 |
| VDV-40    | SK2      | 250    | 98    | 125         | 38         | HRC56°-58° | 10.1         | 2003-024 |

|                  |   |
|------------------|---|
| <b>TOLERANCE</b> | $\pm 0.004\text{mm}$ , $\pm 0.005\text{mm}$ |
|------------------|---|

## Sine Vice



- Compound angles easily and quickly set.
- Adjustments up to 46 degrees.

### Accuracy

**Material Hardened:** SKS HRC60° Sub-zero processing.

**Parallelism:** Within 0.003/100mm

**Squareness:** Within 0.005/100mm

**Model:** V.VC.L CSV

**Angle tol:** Within 15sec Within 20sec

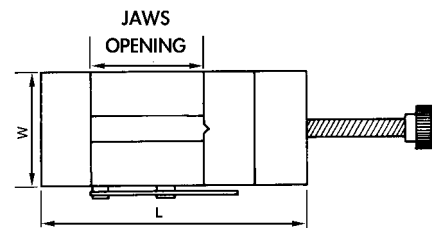
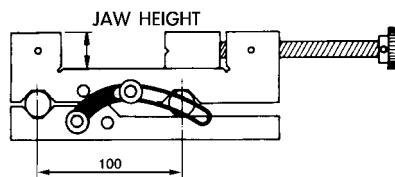
\*Since conversion table attached

### SPECIFICATION

Unit:mm

| ORDER NO. | MATERIAL | LENGTH | WIDTH | JAW OPENING | JAW HEIGHT | ANGLE  | HARDEN     | N.W (KGS) | CODE. NO. |
|-----------|----------|--------|-------|-------------|------------|--------|------------|-----------|-----------|
| SVB-20    | SK2      | 155    | 48    | 65          | 30         | 0°-46° | HRC56°-58° | 4.4       | 2003-030  |
| SVB-25    | SK2      | 175    | 63    | 90          | 35         | 0°-46° | HRC56°-58° | 6         | 2003-031  |
| SVB-30    | SK2      | 180    | 73    | 90          | 35         | 0°-46° | HRC56°-58° | 6.9       | 2003-032  |

## Sine Vice

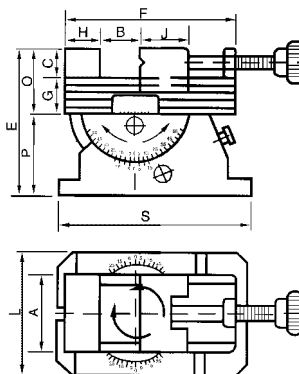


### SPECIFICATION

Unit:mm

| ORDER NO. | MATERIAL | LENGTH | WIDTH | JAW OPENING | JAW HEIGHT | ANGLE  | HARDEN     | N.W (KGS) | CODE. NO. |
|-----------|----------|--------|-------|-------------|------------|--------|------------|-----------|-----------|
| SVD-200   | SK2      | 155    | 48    | 58          | 25         | 0°-46° | HRC56°-58° | 4.6       | 2003-040  |
| SVD-250   | SK2      | 176    | 63    | 68          | 30         | 0°-46° | HRC56°-58° | 6.4       | 2003-041  |
| SVD-300   | SK2      | 180    | 73    | 73          | 30         | 0°-46° | HRC56°-58° | 8.4       | 2003-042  |

## Precision Universal Angle Vice



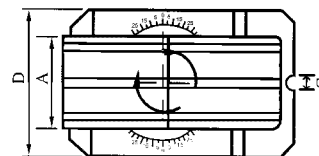
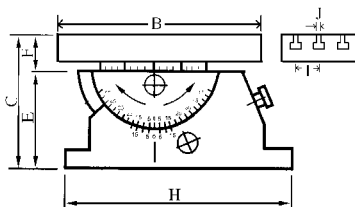
- Precision graduation for accurate reading.
- Horizontal swivel through 360°
- The unit tilts 45° vertically.
- Its swivelling and tilting features make this unit well suited for straight or inclined surface, angular drilling machining on various machine tools as precision grinding machine, boring and milling machine, electrical discharge machine etc.

| ORDER NO. | A  | B   | C  | E   | F   | G  | H  | J  | L   | O  | P  | S   | N.W(KGS) | CODE.NO. |
|-----------|----|-----|----|-----|-----|----|----|----|-----|----|----|-----|----------|----------|
| VUA-3     | 70 | 80  | 30 | 146 | 162 | 32 | 32 | 45 | 110 | 63 | 83 | 182 | 14.6     | 2003-050 |
| VUA-4     | 88 | 108 | 35 | 166 | 200 | 32 | 36 | 56 | 110 | 67 | 99 | 182 | 15.5     | 2003-051 |

## Precision Universal Angle Plate

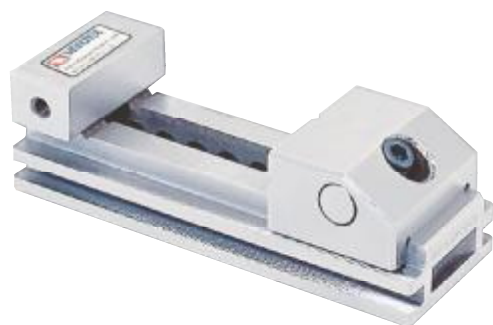


- Precision grounded.
- Rigid design.
- The table can swivel 360°, and tilts 45°
- It can put tool maker vise vmv-type vdv-type or 3 jaw chuck for clamping
- The graduation for accurate reading

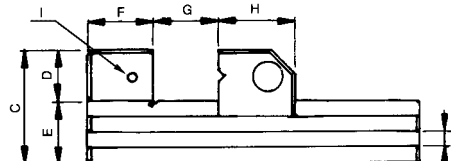
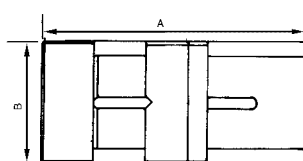


| ORDER NO. | A   | B   | C   | D   | E  | F  | G  | H   | I  | J  | G.W (kgs) | CODE NO. |
|-----------|-----|-----|-----|-----|----|----|----|-----|----|----|-----------|----------|
| VUA-408   | 100 | 200 | 125 | 110 | 82 | 50 | 16 | 182 | 30 | 12 | 15        | 2003-055 |
| VUA-510   | 126 | 250 | 125 | 110 | 82 | 50 | 16 | 182 | 40 | 12 | 18.1      | 2003-056 |

## Tool Makers Vise

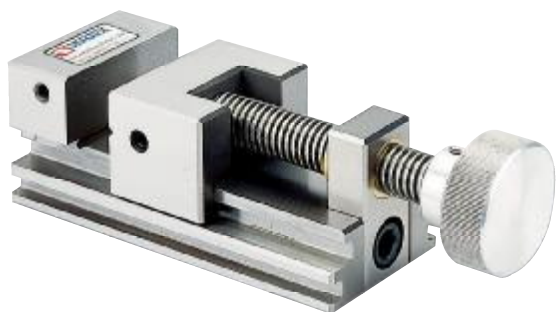


- Material:SKS2
- Hardness:HRC 58°-60°
- Squareness:Within 0.005m/m

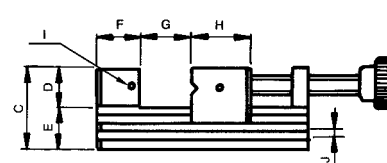
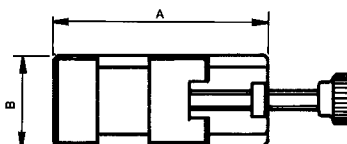


| ORDER NO. | A   | B  | C  | D  | E  | F  | G  | H  | I  | J   | N.W (kgs) | CODE NO. |
|-----------|-----|----|----|----|----|----|----|----|----|-----|-----------|----------|
| VC20      | 135 | 48 | 42 | 20 | 22 | 23 | 62 | 40 | M6 | 5x7 | 1.3       | 2003-070 |
| VC25      | 160 | 70 | 62 | 30 | 32 | 33 | 80 | 45 | M6 | 8x7 | 3.6       | 2003-071 |
| VC30      | 175 | 73 | 65 | 32 | 33 | 35 | 95 | 45 | M6 | 8X7 | 4         | 2003-072 |

## Tool Makers Vise



- Material:SKS2
- Hardness:HRC 58°-60°
- Squareness:Within 0.005m/m



| ORDER NO. | A   | B  | C  | D  | E  | F  | G  | H  | I  | J   | N.W (kgs) | CODE NO. |
|-----------|-----|----|----|----|----|----|----|----|----|-----|-----------|----------|
| V-VE20    | 90  | 60 | 50 | 25 | 25 | 25 | 30 | 30 | M5 | 6x6 | 2         | 2003-080 |
| V-VE25    | 160 | 70 | 62 | 30 | 32 | 33 | 80 | 45 | M6 | 8x7 | 4.7       | 2003-081 |
| V-VE30    | 175 | 73 | 65 | 32 | 33 | 35 | 95 | 45 | M6 | 8X7 | 5.4       | 2003-082 |





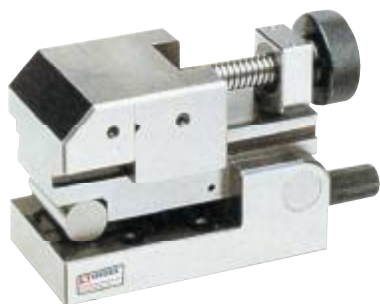
# Precision Sine Vice

ORDER NO.SVC-100 CODE NO.2003-090

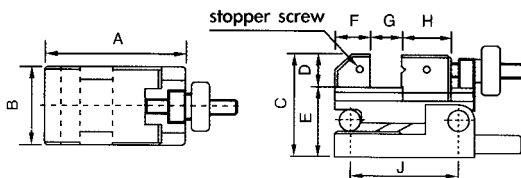


THE CLAMP HANDLE IS PLACED UNDER WORK PIECE.

Unit:mm



HARDNESS HRC 60°, SKS3  
PARALLELISM 0.003/100mm  
SQUARENESS 0.005/100mm



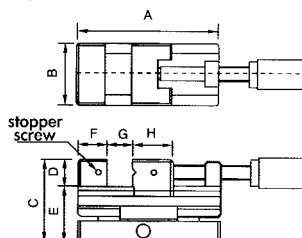
|             |     |
|-------------|-----|
| A           | 130 |
| B           | 70  |
| C           | 93  |
| D           | 30  |
| E           | 63  |
| F           | 33  |
| G           | 45  |
| H           | 45  |
| I           | M5  |
| J           | 100 |
| Max.angle   | 46° |
| Weight(kgs) | 5.5 |



# Precision Sine Vice

ORDER NO.SVL-50 CODE NO.2003-100

HARDNESS HRC 60°, SKS3  
PARALLELISM 0.003/100mm  
SQUARENESS 0.005/100mm



HORIZONTAL WAY

Unit:mm

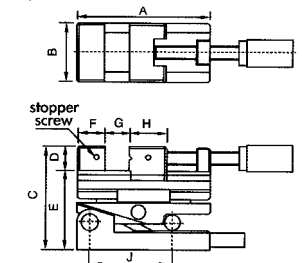
|             |     |
|-------------|-----|
| A           | 160 |
| B           | 73  |
| C           | 93  |
| D           | 30  |
| E           | 63  |
| F           | 33  |
| G           | 80  |
| H           | 45  |
| I           | M5  |
| Max.angle   | 46° |
| Weight(kgs) | 6.6 |



# Two Way Vice

ORDER NO.SVS-100 CODE NO.2003-110

HARDNESS HRC 60°, SKS3  
PARALLELISM 0.003/100mm  
SQUARENESS 0.005/100mm



2 WAYS

Unit:mm

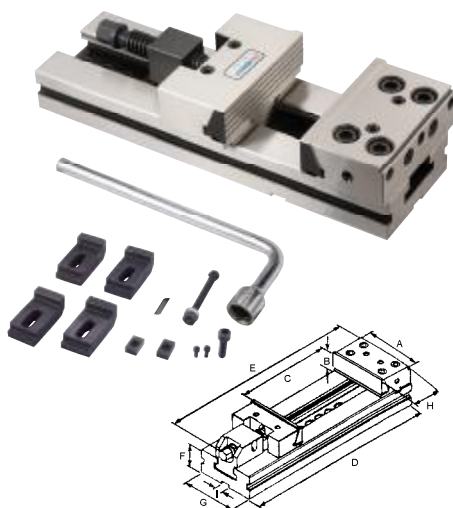
|             |     |
|-------------|-----|
| A           | 160 |
| B           | 73  |
| C           | 124 |
| D           | 30  |
| E           | 94  |
| F           | 33  |
| G           | 80  |
| H           | 45  |
| I           | M5  |
| J           | 100 |
| Max.angle   | 46° |
| Weight(kgs) | 8.3 |



# Modular Precision Machine Vice

## FEATURES

- High Accuracy
- Unlimited Clamping Range
- High Quality Alloy Steel
- High Clamping Pressure
- EACH ONE IS SAME AS HEIGHT.
- CAN BE USED IN MULTIPLE STYLE
- No'Length of Height Limitation
- NO jaw Life
- Low Profile
- All Vises are Matched
- Swivel base be optional

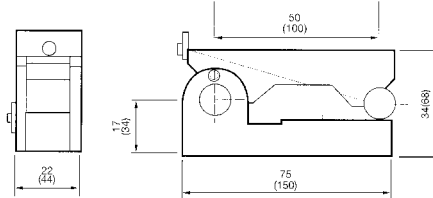


| ORDER NO. | VMP-4    | VMP-5    | VMP-6    | VMP-6B   | VMP-6C   | VMP-7A   | VMP-7B   | VMP-7C   | VMP-8A   | VMP-8B   | VMP-8C   | VMP-8D   | VMP-12C  | VMP-12E  |
|-----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| A         | 100      | 125      | 150      | 150      | 150      | 175      | 175      | 175      | 200      | 200      | 200      | 200      | 300      | 300      |
| B         | 30       | 40       | 50       | 50       | 50       | 60       | 60       | 60       | 65       | 65       | 65       | 65       | 80       | 80       |
| C         | 100      | 150      | 200      | 300      | 400      | 200      | 300      | 400      | 200      | 300      | 400      | 500      | 400      | 600      |
| D         | 270      | 345      | 420      | 520      | 620      | 455      | 555      | 655      | 573      | 595      | 695      | 795      | 735      | 935      |
| E         | 325      | 146      | 530      | 600      | 700      | 620      | 620      | 620      | 718      | 718      | 718      | 880      | 830      | 1030     |
| F         | 35       | 40       | 50       | 50       | 50       | 58       | 58       | 58       | 70       | 70       | 70       | 70       | 78       | 78       |
| G         | 75       | 96       | 125      | 125      | 125      | 145      | 145      | 145      | 170      | 170      | 170      | 170      | 195      | 195      |
| H         | 78       | 78       | 90       | 89.4     | 89.4     | 97       | 97       | 97       | 114      | 114      | 114      | 113.4    | 120.4    | 120.4    |
| I         | 16       | 16       | 16       | 16       | 16       | 16       | 16       | 16       | 16       | 16       | 16       | 16       | 16       | 16       |
| KGS       | 7        | 18       | 29       | 29       | 33       | 38       | 43       | 48       | 65       | 69       | 74       | 79       | 115      | 135      |
| CODE NO   | 1002-190 | 1002-191 | 1002-192 | 1002-201 | 1002-202 | 1002-193 | 1002-194 | 1002-195 | 1002-196 | 1002-197 | 1002-198 | 1002-203 | 1002-204 | 1002-205 |

## Sine Bar With Magnetic



There is magnet in the bottom which can be run on any kind of machine for testing angle use.



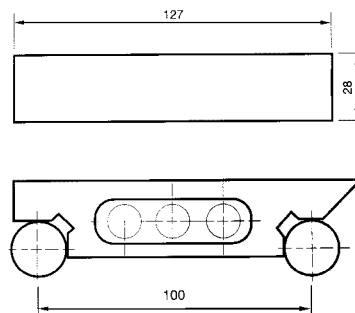
Unit:mm

| ORDER NO. | SQUARNESS | ACCURACY | PARALLELISM | HARDNESS | MATERIAL | N.W. (kgs) | CODE NO. |
|-----------|-----------|----------|-------------|----------|----------|------------|----------|
| V-S50M    | 0.005mm   | ±0.002   | 0.002mm     | HRC60°   | YK-30    | 0.4        | 2004-001 |
| V-S100M   | 0.005mm   | ±0.002   | 0.002mm     | HRC60°   | YK-30    | 2.3        | 2004-002 |

### HOW TO CHOOSE THE BLOCK FOR SINE BAR

| DISTANCE<br>GAUGE BLOCK<br>CAN GET DEGREE | HEIGHT | SIN BAR CENTER | SIN BAR CENTER |
|---|--------|----------------|----------------|
|   |        | +50+           | +100+          |
| 2°  |        | 1.7405         | 3.4899         |
| 3°  |        | 2.6168         | 5.2336         |
| 4°  |        | 3.4878         | 6.9756         |
| 5°  |        | 4.3578         | 8.7155         |
| 6°  |        | 5.2264         | 10.4528        |
| 7°  |        | 6.0935         | 12.1869        |
| 8°  |        | 6.9587         | 13.9173        |
| 9°  |        | 7.8217         | 15.6434        |
| 10°                                       |        | 8.6824         | 17.3648        |
| 11°                                       |        | 9.5404         | 19.0809        |
| 12°                                       |        | 10.3956        | 20.7911        |
| 13°                                       |        | 11.2476        | 22.4951        |
| 14°                                       |        | 12.0961        | 24.1921        |
| 15°                                       |        | 12.9401        | 25.8819        |
| 16°                                       |        | 13.7819        | 27.5637        |
| 17°                                       |        | 14.6186        | 29.2371        |
| 18°                                       |        | 15.4058        | 30.9017        |
| 19°                                       |        | 16.2784        | 32.5586        |
| 20°                                       |        | 17.1010        | 34.2020        |
| 21°                                       |        | 17.9184        | 35.8367        |
| 22°                                       |        | 18.7303        | 37.4606        |
| 23°                                       |        | 19.5366        | 39.0713        |
| 24°                                       |        | 20.3368        | 40.6736        |
| 25°                                       |        | 21.1309        | 42.2618        |
| 26°                                       |        | 21.9186        | 43.8371        |
| 27°                                       |        | 22.6995        | 45.3990        |
| 28°                                       |        | 23.4736        | 46.9471        |
| 29°                                       |        | 24.2405        | 48.4809        |
| 30°                                       |        | 25.0000        | 50.0000        |
| 31°                                       |        | 25.7519        | 51.5038        |
| 32°                                       |        | 26.4960        | 52.9919        |
| 33°                                       |        | 27.2320        | 54.4639        |
| 34°                                       |        | 27.9596        | 55.9192        |
| 35°                                       |        | 28.6788        | 57.3576        |
| 36°                                       |        | 29.3893        | 58.7785        |
| 37°                                       |        | 30.0908        | 60.1815        |
| 38°                                       |        | 30.7831        | 61.5661        |
| 39°                                       |        | 31.4660        | 62.9320        |
| 40°                                       |        | 32.1394        | 64.2787        |
| 41°                                       |        | 32.8030        | 65.6059        |
| 42°                                       |        | 33.4565        | 66.9130        |
| 43°                                       |        | 34.0999        | 68.1998        |
| 44°                                       |        | 34.7329        | 69.4658        |
| 45°                                       |        | 35.3553        | 70.7106        |

## Sine Bar



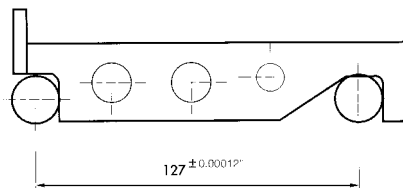
Unit:mm

| ORDER NO. | LENGTH | WIDTH | HEIGHT | CENTER DISTANCE | PARALLEL | HARDEN | BLOCKS DIA | MATERIAL | N.W (kgs) | CODE NO. |
|-----------|--------|-------|--------|-----------------|----------|--------|------------|----------|-----------|----------|
| VS-100    | 127    | 28    | 35     | 0.005           | 0.005    | HRC50° | 20Øm/m     | SK3      | 0.8       | 2004-010 |

## Sine Bar-Inch



Change of the sine angle must be count on sine bar inspection, the bar's tolerance within 0.005mm



Unit:inch

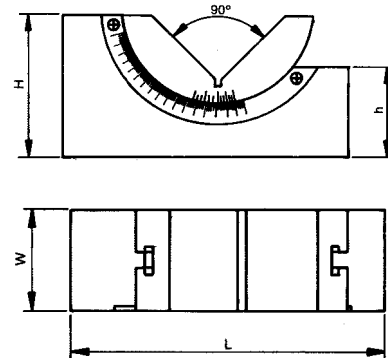
| ORDER NO. | LENGTH | WIDTH | HEIGHT | CENTER DISTANCE | PARALLEL | HARDEN | BLOCKS DIA | MATERIAL | N.W (kgs) | CODE NO. |
|-----------|--------|-------|--------|-----------------|----------|--------|------------|----------|-----------|----------|
| V-S25     | 6-3/8" | 1"    | 1-1/4" | 127             | 0.00012" | HRC52° | 3/4"       | SK2      | 1         | 2004-020 |
| V-S50     | 6-3/8" | 2"    | 1-1/4" | 127             | 0.00012" | HRC52° | 3/4"       | SK2      | 1.8       | 2004-021 |

# Angle Plate



90° V-way. High carbon steel hardened to 50°-54° HRC, precision ground to within 0.005mm accuracy in squareness. Angle tolerance 30 seconds. Sets any angle 0-60°, vernier reading 10 minutes. 2 set screws provided for firmlocking at fixed angle.

Material: SK2  
 Hardness: HRC50°-54°  
 Squareness: ±0.005mm  
 Tolerance of angle: ±10"  
 Angular measures from 0°-60°



IT CAN BE LOCKED AT DESIRED ANGLE FROM THE BOTTOM.

1. USING ON THE MILLING MACHINE.

2. USING ON THE GRINDING MACHINE.

3. TO MARK OUT ON A WORKPIECE.

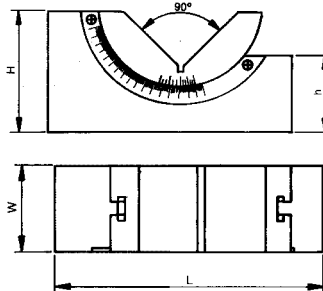
4. USING ON THE DRILLING MACHINE.

5. TO PROCESS WITH AN END MILL.

Unit:mm

| ORDER NO. | H  | W  | L   | h  | N.W. (KGS) | CODE NO. |
|-----------|----|----|-----|----|------------|----------|
| VAP-1     | 47 | 46 | 102 | 28 | 1.4        | 2005-001 |
| VAP-2     | 47 | 30 | 102 | 28 | 0.9        | 2005-002 |
| VAP-2     | 32 | 25 | 75  | 22 | 0.5        | 2005-003 |

# Micro-Adjustable Angle Plate



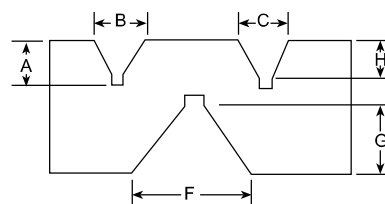
ANGULAR CAN BE ADJUSTED FROM 0°~60° BY SCREW

Unit:mm

| ORDER NO. | H  | W  | L   | h  | N.W. (KGS) | CODE NO. |
|-----------|----|----|-----|----|------------|----------|
| VAPM-1    | 47 | 46 | 102 | 28 | 1.4        | 2005-010 |
| VAPM-2    | 47 | 30 | 102 | 28 | 1          | 2005-011 |
| VAPM-2    | 32 | 25 | 75  | 22 | 0.5        | 2005-012 |

# Precision V Block

PAIRS GROUNDED



Unit:mm

| ORDER NO. | A  | B  | C  | F  | G  | H  | L X W X H | WEIGHT(KGS) | CODE NO. |
|-----------|----|----|----|----|----|----|-----------|-------------|----------|
| V-3VA     | 9  | 23 | 19 | 44 | 21 | 7  | 76X23X43  | 0.9         | 2005-015 |
| V-4VA     | 14 | 34 | 28 | 62 | 27 | 11 | 100X32X60 | 2.1         | 2005-016 |
| V-5VA     | 14 | 35 | 40 | 63 | 29 | 19 | 124X35X61 | 2.8         | 2005-017 |



## Precision Angle Blocks

ORDER NO. AB-130 CODE NO. 2006-001

WEIGHT: 1kg



Furnished in 1° increments to 5 degrees and in 5° increments to 30 degrees. With the addition of the optional 1/4° and 1/2° blocks virtually and conceivable angle to these increments can be established.

- Simple, quick angle set-ups.
- Eliminates calculations, avoids errors.
- Lightly magnetized for better holding.
- Manufactured of steel, hardened, stabilized and ground.
- Sizes: 3" long x 1/4" thick. (75mm x 6mm)
- Accuracy: .0001" per inch.
- Oil-hardened steel, precision ground. 12pcs angle blocks (1/4°, 1/2°, 1°, 2°, 3°, 4°, 5°, 10°, 15°, 20°, 25°, 30°)



## Universal Angle Block Set



No sine plate, sine vise, angle chart or gauge block needed!

- A slope at any angle can be provided by installing a block or blocks on a machine vise up to 5%
- 8 pieces in a deluxe wooden box include: 10°, 15° & 30° vee blocks and 5 angle plates-1° to 5° for AB-164
- Heat treated 45°-50° HRC & ground to 10 sec.
- 9pcs angle blocks (1/2°, 1°, 2°, 3°, 4°, 5°, 10°, 15°, 30°) for AB-163

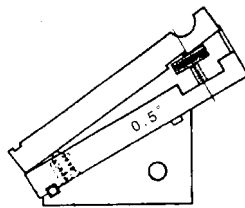
| ORDER NO. | L X W X H  | WEIGHT (KGS) | CODE NO. |
|-----------|--|--------------|----------|
| AB-163    | Vee blocks: 3" L x 1 3/16" W x 1 3/16" H<br>Angle Plates: 2 3/4" L x 1 3/16" W x 5/64" H | 2            | 2006-010 |
| AB-164    | Vee blocks: 4" L x 1 1/2" W x 1 1/2" H<br>Angle Plates: 4" L x 1 1/2" W x 5/32" H        | 3.8          | 2006-011 |



## Micrometric Tangent Bar & Angle Gauge Block Set

ORDER NO. AB-166 CODE NO. 2006-020

WEIGHT: 1kg



### Micrometric Tangent Bar & Angle Gauge Block Set

- Made of Hardened Steel, Precision Ground.
  - Accuracy ±.001" Per Inch.
  - Interlocking Slots.
  - Size of Angle Blocks: .35" x 3"
- A Complete set for Angular set-ups. No Other Gages Required. Consists of set.
- Simplicity in application.
- Angular set-ups with this are a zip. Just dial your angle direct in degrees and minutes. Add one or two angle block gauges for angles over 5° and Secure assembly by dropping 1/8" dowel or square key into slot provided.
- Complete with fitted case.



## Solid Angle Plates

ORDER NO. AB-167 CODE NO. 2006-030

WEIGHT: 0.3kg



### Solid Angle Plates

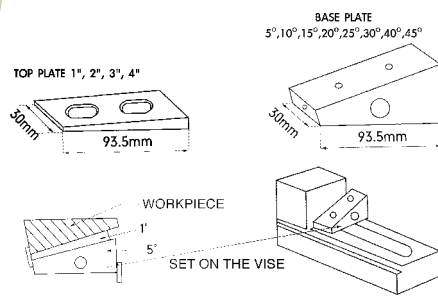
- Precision ground angles for convenient set-ups in tooling, production and inspection.
- Four holes on top of it for easy mounting.
- 1/4" Thick, packed in cardboard box.
- Set of 3" x 3" x 4-3/8", 45° x 45° x 90° x 1pc  
2" x 3-15/32" x 4", 30° x 60° x 90° x 1pc



# Precision Angle Blocks

ORDER NO:AB-113(13PCS/SET) CODE NO:2006-040

WEIGHT:7.1kgs



## FEATURES

- ANGLE TOLERANCE:0.02MM
- CAN BE ASSEMBLED TOP PLATE WITH BASE PLATE FOR 6°-9°,16°-19°,26°-29°, 36°-39°,46°- 49°
- HARDEN TREATMENT UP TO HRC55°-58°
- MADE BY THE MATERIAL OF SK2
- CAN BE COOPERATE TWO SET FOR USE.

## EXAMPLE FOR USE

| PLATE      | ANGLE DEGREE                      |
|------------|-----------------------------------|
| TOP PLATE  | 1°,2°,3°,4°                       |
| BASE PLATE | 5°,10°,15°,20°,25°,30°,35°,40°,45 |



# Hardened Steel Squares



Squares have accurate right angles both inside and outside. Made from a single piece of fully tool steel. Beams and blades are ground and accurately lapped for straightness and parallelism. Accuracy Class H Blades are beveled on both edges of each side. Beam is grooved at inner corner for clearance of burr and dirt. All squares are fully hardened (Rockwell 55). Packed in individual cartons. Accuracy 0.02mm.

| ORDER NO. | L x H x thick | NEW WEIGHT (KGS) | CODE NO. |
|-----------|---------------|------------------|----------|
| SS-304    | 100X75X8MM    | 0.3              | 2006-050 |
| SS-306    | 100X150X8MM   | 0.6              | 2006-051 |
| SS-308    | 130X200X8MM   | 0.8              | 2006-052 |
| SS-310    | 250X160X10MM  | 1.4              | 2006-053 |
| SS-312    | 300X200X12MM  | 2.2              | 2006-054 |

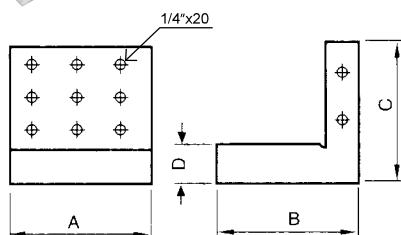


# Precision Steel Angle Plates

HIGH PRECISION TYPE



MATERIAL : YK30 ALLOY STEEL  
 ACCURACY : 0.005/100MM  
 HARDEN TREATMENT UP TO HRC 58°



| ORDER NO. | A   | B   | C   | D  | N.W (KGS) | CODE NO. |
|-----------|-----|-----|-----|----|-----------|----------|
| VRS-33    | 3"  | 3"  | 4"  | 1" | 2.2       | 2006-060 |
| VRS-44    | 75  | 75  | 100 | 25 | 3.7       | 2006-061 |
| VRS-46    | 4"  | 4"  | 4"  | 1" | 4.5       | 2006-062 |
| VRS-85    | 100 | 100 | 150 | 25 | 13        | 2006-063 |
| VRS-1206  | 12" | 6"  | 12" | 2" | 34        | 2006-064 |

## Squares



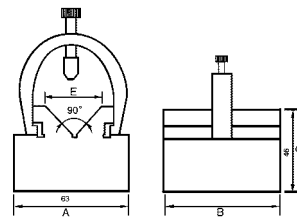
Alloysteel Grounded HRC50



| ORDER NO. | LxHxthick   | ACCURACY | WEIGHT(kg) | CODE.NO. |
|-----------|-------------|----------|------------|----------|
| FS-204    | 100x75x6mm  | 0.02mm   | 0.2        | 2006-055 |
| FS-206    | 150x100x6mm |          | 0.3        | 2006-056 |
| FS-208    | 200x130x6mm |          | 0.5        | 2006-057 |

## V-Block With Clamps

Alloysteel Grounded HRC50

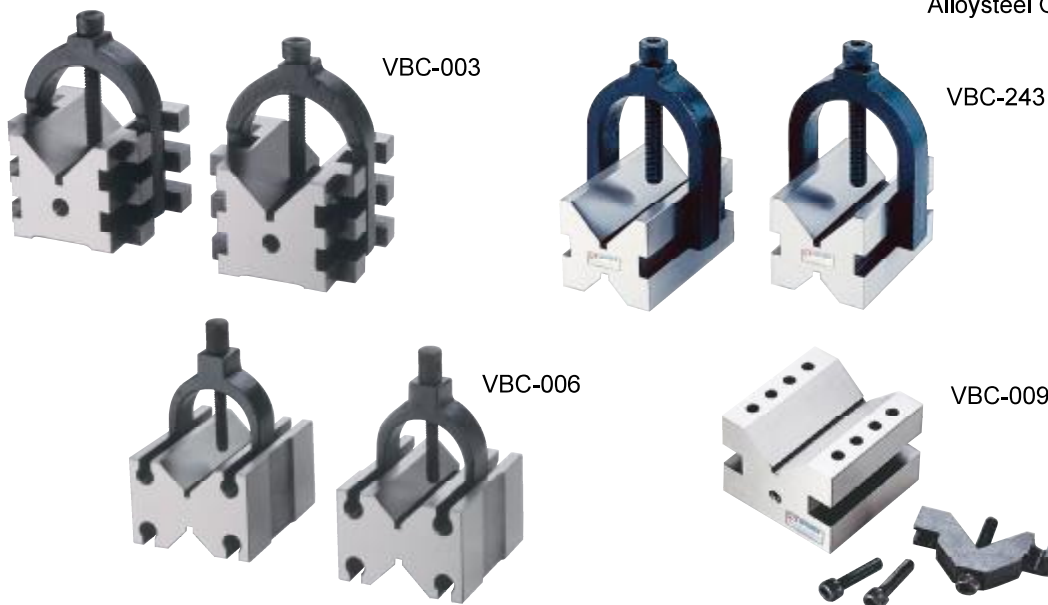


- Two V blocks and two clamps are include in the set.
- Made of hardened tool steel machined & ground in pairs close tolerances.
- A precision set for toolmakers & machinists.

| ORDER NO. | A   | B  | C   | E   | N.W. (kgs) | CODE.NO. |
|-----------|-----|----|-----|-----|------------|----------|
| VBC-195   | 63  | 63 | 46  | 34  | 3.1        | 2007-001 |
| VBC-196   | 100 | 50 | 60  | 60  | 5.9        | 2007-002 |
| VBC-197   | 150 | 65 | 100 | 110 | 14.7       | 2007-003 |

## V-Block With Clamps

Alloysteel Grounded HRC50  
**PAIRS**



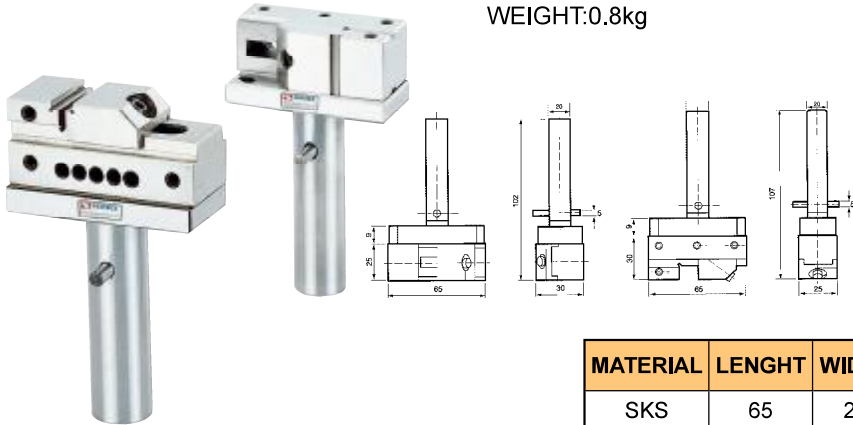
| ORDER NO | W             | H             | L             | W.OF SMALL VEE | W.OF LARGER VEE                  | PACKIN       | G.W. (kgs) | CODE NO. |
|----------|---------------|---------------|---------------|----------------|----------------------------------|--------------|------------|----------|
| VBC-003  | 2.36<br>60mm  | 1.86<br>50mm  | 2.75<br>70mm  | -              | 50mm                             | 110x80x110mm | 2.4        | 2007-010 |
| VBC-243  | 2 3/4<br>70mm | 1 3/4<br>45mm | 1 5/8<br>42mm | -              | 1"                               | 75x80x100mm  | 1.9        | 2007-020 |
| VBC-006  | 2 1/2<br>64mm | 1 3/4<br>45mm | 2 3/4<br>70mm | 1              | 1 <sup>3</sup> / <sub>16</sub> " | 110x80x110mm | 2.6        | 2007-030 |
| VBC-009  | 4<br>102mm    | 3<br>76mm     | 3<br>76mm     | -              | 2 <sup>1</sup> / <sub>4</sub> "  | 70x50x110mm  | 3.9        | 2007-040 |



# Electro Vise

ORDER NO.VEH-20 CODE NO.2008-001 (ALLOY STEEL) FOR EDM

WEIGHT:0.8kg



## ELECTRO HOLDERS FOR ELECTRO DISCHARGE MACHINE

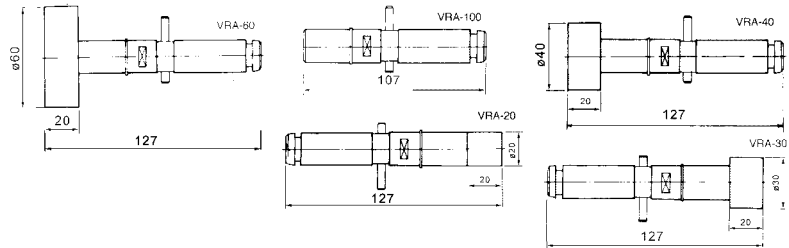
Mini vise can be used in fixed electrode holders. The opening with a cross V groove on the vise can do electric discharging both by vertical way and horizontal way for various-shape workieces. The max. opening on the vise is 20mm.

| MATERIAL | LENGHT | WIDTH | JAW OPENING | JAW HEIGHT | HARDEN     |
|----------|--------|-------|-------------|------------|------------|
| SKS      | 65     | 25    | 20          | 0.8        | HRC58°-60° |



# Electro Holder

FOR EDM



| ORDER NO.  | VRA-20   | VRA-30   | VRA-40   | VRA-60   | VRA-100  |
|------------|----------|----------|----------|----------|----------|
| WEIGHT(KG) | 0.2      | 0.4      | 0.5      | 0.9      | 0.3      |
| CODE NO.   | 2008-010 | 2008-011 | 2008-012 | 2008-013 | 2008-014 |

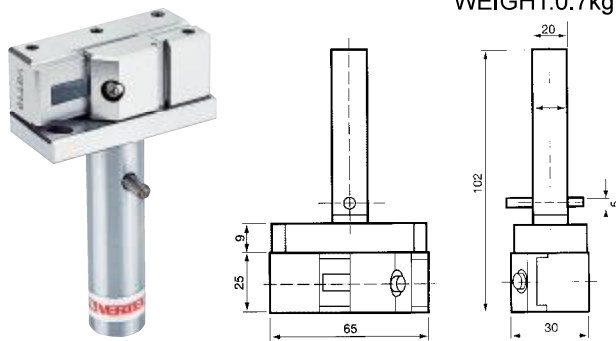


# Electro Holders

ORDER NO.VEH-20MS CODE NO.2008-020

(STAINLESS)FOR EDM

WEIGHT:0.7kg



| Material                      | SUS440               |
|-------------------------------|----------------------|
| Parallelism                   | within 0.003mm/100mm |
| Squareness                    | within 0.005mm/100mm |
| Harden treatment up to HRC58° |                      |

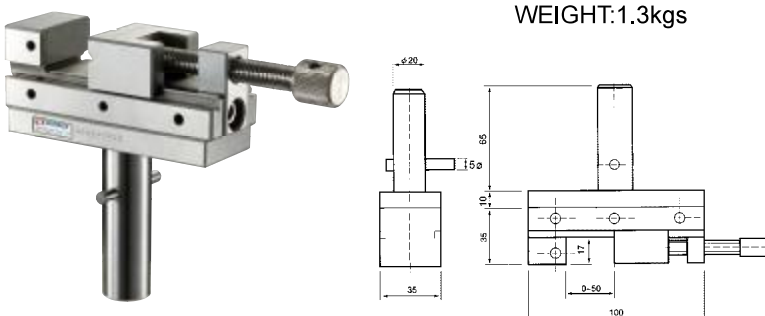


# Electro Holders

ORDER NO.VEH-20DS CODE NO.2008-030

(STAINLESS)FOR EDM

WEIGHT:1.3kgs

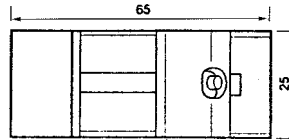
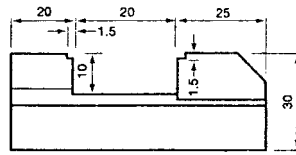


| Material                      | SUS440               |
|-------------------------------|----------------------|
| Parallelism                   | within 0.003mm/100mm |
| Squareness                    | within 0.005mm/100mm |
| Harden treatment up to HRC58° |                      |

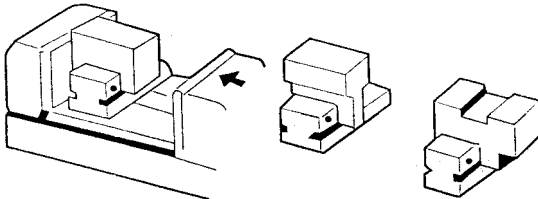


## Tool Maker Vise (STAINLESS)

ORDER NO.VSTV-10V CODENO.2008-070 MINI TYPE FOR EDM  
WEIGHT:0.3kg Squareness:Within0.005m/m



Tool makers vise of mini type which can be put in a bigger vise to process the small and precise workpiece. Also it can be used in an E.D.M. machine and grinding machine. Squareness and parallelism: within 0.003 m/m



| MATERIAL | LENGHT | WIDTH | JAW OPENING | JAW HEIGHT | HARDEN     |
|----------|--------|-------|-------------|------------|------------|
| SUS440   | 65     | 25    | 20          | 10         | HRC56°-58° |



## Tool Maker Vise (STAINLESS)

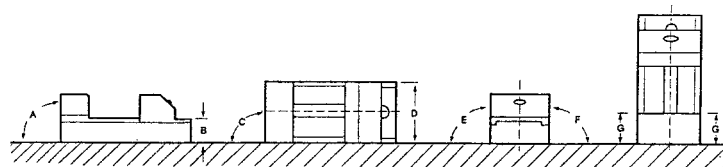
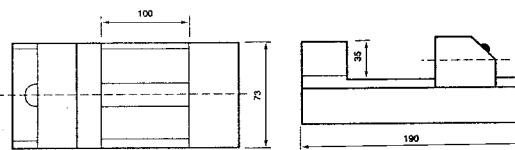
ORDER NO.VBST-30 CODE NO.2008-075  
WEIGHT:4.5kgs

FOR EDM



Material: SUS440  
Hardness: HRC58°~60°  
Squareness: Within 0.005 m/m

Unit:m/m



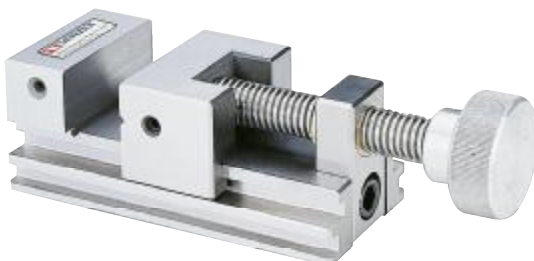
| TOLERANCE |           |
|-----------|-----------|
| A         | ±0.004m/m |
| B         | ±0.005m/m |
| C         | ±0.005m/m |
| D         | ±0.005m/m |
| E         | ±0.005m/m |
| F         | ±0.005m/m |
| G         | ±0.005m/m |



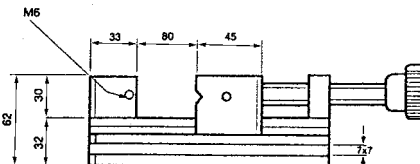
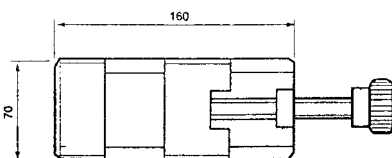
## Tool Maker Vise (STAINLESS)

ORDER NO.VSTV-25 CODE NO.2008-080  
WEIGHT:4.4kgs

FOR EDM



Material: SUS440  
Hardness: HRC56°  
Squareness: Within 0.005 m/m  
It was made by tool steel of stainless steel system and was precision ground after hardened by heat treatment. So, it will not be rusted even though permeation. The vise can pinch workpiece which will not upward for using moveable method. It is getting more easier and convenient for processing in a smaller workpiece.





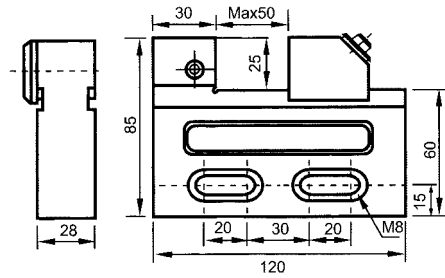


## EDM Tool Marker Vice (STAINLESS)

ORDER NO.VSTV-50W

CODE NO.2008-040

WEIGHT:1.4kgs



Material: SUS440  
Hardness: HRC58°~60°  
Squareness: Within 0.005 m/m

This vise is for wire cutter use. Each of the parts was manufactured by stainless steel and with the appliance of high erosion resisting.

|                    |          |
|--------------------|----------|
| <b>PARALLELISM</b> | ±0.002mm |
| <b>SQUARENESS</b>  | ±0.002mm |

|                    |        |
|--------------------|--------|
| <b>MAX.OPENING</b> | 50mm   |
| <b>THICKNESS</b>   | 28mm   |
| <b>JAW DEEP</b>    | 25mm   |
| <b>N.W</b>         | 1.4kgs |
| <b>MATERIAL</b>    | SUS440 |
| <b>HARDNESS</b>    | HRC58° |

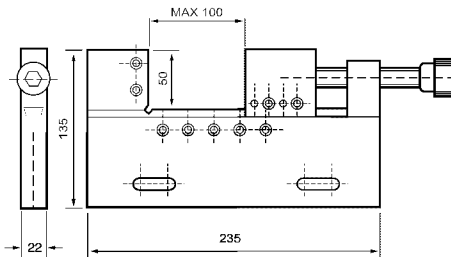


## EDM Tool Maker Vice (STAINLESS)

ORDER NO.VSTV-100W

CODE NO.2008-050

WEIGHT:5.6kgs



|                    |          |
|--------------------|----------|
| <b>PARALLELISM</b> | ±0.002mm |
| <b>SQUARENESS</b>  | ±0.002mm |

|                    |           |
|--------------------|-----------|
| <b>MAX.OPENING</b> | 100mm     |
| <b>THICKNESS</b>   | 22mm      |
| <b>JAW DEEP</b>    | 45mm      |
| <b>N.W</b>         | 4.4kgs    |
| <b>MATERIAL</b>    | STAINLESS |
| <b>HARDNESS</b>    | HRC58°    |

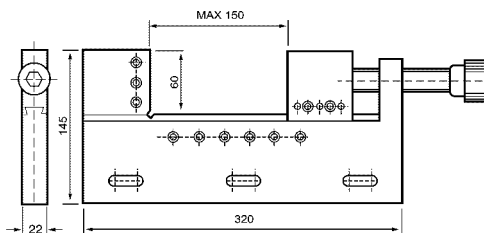
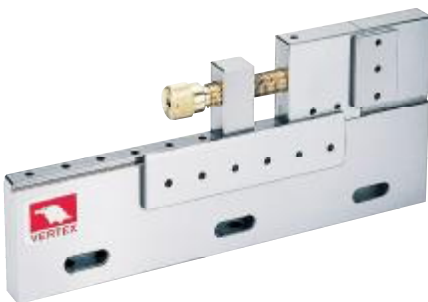


## EDM Tool Maker Vice (STAINLESS)

ORDER NO.VSTV-150W

CODE NO.2008-060

WEIGHT:7.3kgs



|                    |          |
|--------------------|----------|
| <b>PARALLELISM</b> | ±0.002mm |
| <b>SQUARENESS</b>  | ±0.002mm |

|                    |           |
|--------------------|-----------|
| <b>MAX.OPENING</b> | 150mm     |
| <b>THICKNESS</b>   | 22mm      |
| <b>JAW DEEP</b>    | 50mm      |
| <b>N.W</b>         | 6.0kgs    |
| <b>MATERIAL</b>    | STAINLESS |
| <b>HARDNESS</b>    | HRC58°    |

# EDM Wire (BRASS & COPPER)



Zinc COATING IS ALSO AVAILABLE



## FEATURES

### CHEMICAL COMPOSITION

65/35 brass equivalent to Alloy No. JIS-H3260 C2700

### NO ACID-CORROSION AND NO DAMAGE TO RESINS

The special treatment avoids acid-corrosion on machine and workpiece.

### HIGH SURFACE QUALITY

The special treatment makes the wire surface smooth, free from dirt, rust and grease that causes unefficiency to electric discharge.

### STANDARD WEIGHT CONTROL

By perfect control in process, we obtain the standard weight per coil that enables us to maintain the stability of processing time and the accuracy of drawing.

### NO WELDMENT

The rough surface caused by welding could affect the quality and accuracy of performance. The welded wire tends to break that wastes the time to re-thread.

### HIGH-DIMENSIONAL PRECISION

Wire diameter tolerance and roundness tolerance are both limited to  $1/\mu\text{m}$ .

### OUTSTANDING STRAIGHTNESS

Outstanding straightness ensures automatic threading successfully.

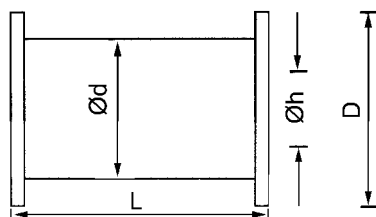
## SPECIFICATION

| ORDER NO. | WIRE TYPE | DIAMETER |      | DIAMETER TOLERANCE (mm) | BREAKING LOAD (kgs) | TENSILE STRENGTH (N/mm <sup>2</sup> ) | ELONGATION (%) | SUITFUL WORKING STYLE  | CODE NO. |
|-----------|-----------|----------|------|-------------------------|---------------------|---------------------------------------|----------------|--|----------|
|           |           | inch     | mm   |                         |                     |                                       |                |  |          |
| VEW-10H   | HARD      | 0.004    | 0.10 | ±0.001                  | 0.78                | 980 ≤                                 | 0.4 ≤          | STRIGHT CUTTING<br>a.PASS CUTTING<br>b.ROUGH CUTTING<br>c.FINISH CUTTING | 2009-001 |
| VEW-15H   |           | 0.006    | 0.15 |                         | 1.73                |                                       |                |  | 2009-002 |
| VEW-20H   |           | 0.008    | 0.20 |                         | 3.14                |                                       |                |  | 2009-003 |
| VEW-25H   |           | 0.010    | 0.25 |                         | 4.92                |                                       |                |  | 2009-004 |
| VEW-30H   |           | 0.012    | 0.30 |                         | 7.07                |                                       |                |  | 2009-005 |
| VEW-33H   |           | 0.013    | 0.33 |                         | 8.55                |                                       |                |  | 2009-006 |
| VEW-20S   | SOFT      | 0.008    | 0.20 | ±0.001                  | 1.41                | 441 ≤                                 | 15 ≤           | ANGLE CUTTING  | 2009-010 |
| VEW-25S   |           | 0.010    | 0.25 |                         | 2.21                |                                       |                |  | 2009-011 |
| VEW-30S   |           | 0.012    | 0.30 |                         | 3.18                |                                       |                |  | 2009-012 |

THE PACKING USED A STANDARD COIL.

HERE SHOW 3 KINDS OF COIL PACKING OF TYPE FOR CHOICE. THE POPULAR IS

P-5R (5kgs). OTHER COIL TYPE, WEIGHT. WELL BE AVAILABLE.







| PACKING COIL TYPE | COIL SHAPE | WIGHT OF WIRE ON COIL (kg) | DIAME-THE OF WIRE (mm)       | D (mm) | d (mm) | L (mm) | h (mm) | LENGTH OF WIRE ON COIL (M)      | NUMBER OF COILS /BOX | CODE NO. |
|-------------------|------------|----------------------------|------------------------------|--------|--------|--------|--------|---------------------------------|----------------------|----------|
| P-3R              |            | 3                          | 0.10<br>0.15<br>0.20<br>0.25 | 130    | 80     | 110    | 20     | 39360<br>18750<br>10988<br>6932 | 6                    | 2009-021 |
| P-5R              |            | 5                          | 0.20<br>0.25<br>0.30<br>0.33 | 160    | 90     | 114    | 20     | 18314<br>11553<br>8001<br>6750  | 4                    | 2009-022 |
| K-125             |            | 3.5                        | 0.2<br>0.25                  | 125    | 80     | 125    | 20     | 5600<br>4725                    | 4                    | 2009-023 |
| K-160             |            | 7                          | 0.20<br>0.25                 | 160    | 100    | 160    | 22     | 25640<br>16174                  | 2                    | 2009-024 |

# Wire Dies Guide

Used to guide wire in wire electro-discharge machines.



| ORDER NO.   | MAKER                           | APPLICATION   | REMARKS   | CODE NO.                         |
|---|---------------------------------|---|---|----------------------------------|
|  M118    | MITSUBISHI                      | SX, CX, FX Upper 上<br>(線切割眼模 M118)                            | C 834G  | 2009-030                         |
|  M119    |                                 | SX, CX, FX Lower 下<br>(線切割眼模 M119)                            | B 243G  | 2009-031                         |
|  M103 Ø3 |                                 | F, FL, G, Opening Ceramic Stainless<br>(眼模螺絲 Stop screw M108) | D 162G  | 2009-032                         |
|  M108    |                                 |   | D 123G  | 2009-033                         |
|  M111    |                                 | G, H~HA, C, CR,<br>(偏心座 Dies Holder M111)                     | X 184D226H01  | 2009-034                         |
|  M117 Ø4 |                                 | H1, HA, B, Z SK/AF Lower 下<br>(線切割眼模 M117)                    | B 176G  | 2009-035                         |
|  M107   |                                 | H1, HA, B, Z SK/AF Upper 上<br>(線切割眼模 M107)                    | B123G   | 2009-036                         |
|  M120  |                                 | H1, A, B, Z/AF Upper 上<br>(眼模螺絲 Stop screw M120)              | C524G   | 2009-037                         |
|  Z141  |                                 |   | Ceramic Guides<br>for Small Hole EDM machine<br>(放電打孔機用導管 Z141) |                                  |
|  S103  | ソデック<br>SODICK                  | A300, 500, Aw330, 450<br>EPOC, AP, BF<br>(線切割眼模 S103)         | GUIDE<br>(87-3)   | 2009-039                         |
|  S111  | SEIBE                           | F, K Upper & Lower<br>(線切割眼模 S111)                            |   | 2009-040                         |
|  H102  | HITACHI                         | H1-Cut 203, 304, 345, 460 Lower 下<br>(線切割眼模 H102)             |   | 2009-041                         |
|  F120  | フアナック<br>FANUC                  | ∞°A, ∞°B Upper 上<br>(線切割眼模 F120)                              |   | 2009-042                         |
|  F121  |                                 |   |   | ∞°A, ∞°B Lower 下<br>(線切割眼模 F121) |
|  F101  |                                 | O, P, Q, R, W Upper<br>& Lower 上、下<br>(線切割眼模 F101, F102)      |   | 2009-044                         |
|  F102  |                                 |   |   | 2009-045                         |
|  F123  |                                 | 1A, 1B, Upper 上<br>(線切割眼模 F123)                               |   | 2009-045                         |
|  F124  | 1A, 1B, Lower 下<br>(線切割眼模 F124) | 2009-046  |   |                                  |

# Electrode (Copper & Brass Pipe Electrode)



STD. STYLE



SUPER 8 STYLE



- BRASS PIPE FOR STEEL & TREATMENT STEEL. COPPER PIPE FOR TUNGSTEN MATERIAL & SMALL HOLE.
- SUPER STYLE HOLE COPPER PIPE FOR HIGH SPEED MACHINNING & NON THROUGH HOLE.
- THE LENGTH 300MM OR 400MM OF PRICE IS SAME. PLEASE NOTIFY THE LENGTH WHEN YOU ORDERING.
- EAH UNIT PRICES IS 20 PCS.

## STANDARD STYLE HOLE

| DIA. MATERIAL \ HOLE |           | 0.4      | 0.5      | 0.6      | 0.7      | 0.8      | 0.9      | 1.0      | 1.1      | 1.2      | 1.3      | 1.4      | 1.5      |
|----------------------|-----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| BRASS                | ORDER NO. | VEB-04   | VEB-05   | VEB-06   | VEB-07   | VEB-08   | VEB-09   | VEB-10   | VEB-11   | VEB-12   | VEB-13   | VEB-14   | VEB-15   |
|                      | CODE NO.  | 2010-001 | 2010-002 | 2010-003 | 2010-004 | 2010-005 | 2010-006 | 2010-007 | 2010-008 | 2010-009 | 2010-010 | 2010-011 | 2010-012 |
| COPPER               | ORDER NO. | VEP-04   | VEP-05   | VEP-06   | VEP-07   | VEP-08   | VEP-09   | VEP-10   | VEP-11   | VEP-12   | VEP-13   | VEP-14   | VEP-15   |
|                      | CODE NO.  | 2010-030 | 2010-031 | 2010-032 | 2010-033 | 2010-034 | 2010-035 | 2010-036 | 2010-037 | 2010-038 | 2010-039 | 2010-040 | 2010-041 |

| DIA. MATERIAL \ HOLE |           | 1.6      | 1.7      | 1.8      | 1.9      | 2.0      | 2.1      | 2.2      | 2.3      | 2.4      | 2.5      | 2.6      | 2.7      |
|----------------------|-----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| BRASS                | ORDER NO. | VEB-16   | VEB-17   | VEB-18   | VEB-19   | VEB-20   | VEB-21   | VEB-22   | VEB-23   | VEB-24   | VEB-25   | VEB-26   | VEB-27   |
|                      | CODE NO.  | 2010-013 | 2010-014 | 2010-015 | 2010-016 | 2010-017 | 2010-018 | 2010-019 | 2010-020 | 2010-021 | 2010-022 | 2010-023 | 2010-024 |
| COPPER               | ORDER NO. | VEP-16   | VEP-17   | VEP-18   | VEP-19   | VEP-20   | VEP-21   | VEP-22   | VEP-23   | VEP-24   | VEP-25   | VEP-26   | VEP-27   |
|                      | CODE NO.  | 2010-042 | 2010-043 | 2010-044 | 2010-045 | 2010-046 | 2010-047 | 2010-048 | 2010-049 | 2010-050 | 2010-051 | 2010-052 | 2010-053 |

## SUPER 8 STYLE HOLE COPPER & BRASS PIPE ELECTRODE

| DIA. MATERIAL \ HOLE |  | 0.6      | 0.7      | 0.8      | 0.9      | 1.0      | 1.1      | 1.2      | 1.3      | 1.4      | 1.5      |
|----------------------|--|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| ORDER NO.            |  | VES-06   | VES-07   | VES-08   | VES-09   | VES-10   | VES-11   | VES-12   | VES-13   | VES-14   | VES-15   |
| CODE NO.             |  | 2010-060 | 2010-061 | 2010-062 | 2010-063 | 2010-064 | 2010-065 | 2010-066 | 2010-067 | 2010-068 | 2010-069 |

| DIA. MATERIAL \ HOLE |  | 1.6      | 1.7      | 1.8      | 1.9      | 2.0      | 2.1      | 2.2      | 2.3      | 2.4      | 2.5      |
|----------------------|--|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| ORDER NO.            |  | VES-16   | VES-17   | VES-18   | VES-19   | VES-20   | VES-21   | VES-22   | VES-23   | VES-24   | VES-25   |
| CODE NO.             |  | 2010-070 | 2010-071 | 2010-072 | 2010-073 | 2010-074 | 2010-075 | 2010-076 | 2010-077 | 2010-078 | 2010-079 |

## EDM Filter For EDM (Oil)



| ORDER NO. | OUTER DIA. | INNER DIA. | LENGTH | SUITABLE MODELS            | WEIGHT (kg) | CODE NO. |
|-----------|------------|------------|--------|----------------------------|-------------|----------|
| NH-01     | 150        | 72         | 450    | SEIBU.JAPAX.SODICK.AMADA   | 1           | 2011-001 |
| NH-09     | 150        | 33         | 360    | CHARMILLES.AGIE.MITSUBISHI | 0.8         | 2011-002 |
| NH-09S    | 150        | 91         | 309    |                            | 1.2         | 2011-003 |
| NH-600L   | 150        | 26         | 600    | WITH STEEL NET             | 1.2         | 2011-004 |

Unit:mm



## Tangimatic Dresser

ORDER NO.V-TDA CODE NO.2012-001

WEIGHT:7kgs



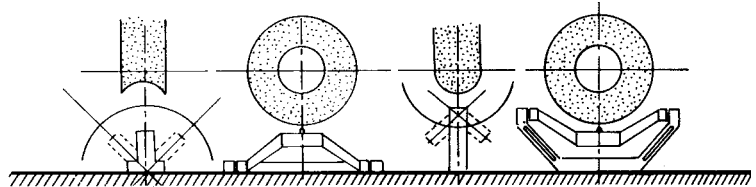
The dresser can be dressing any concave or convex of grinding wheel

Concave R:0-40R(mm)

Convex R:0-90R(mm)

Max. wheel DIA.:8"(200mm)

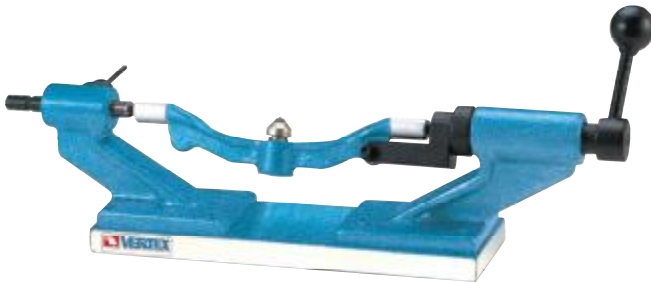
Diamond dresser pen 10mm



## Tangimatic Dresser Handy Type

ORDER NO.V-TDH CODE NO.2012-002

WEIGHT:4.5kgs



The dresser can be dressing any concave or convex of grinding wheel

Convex R:0-90R(mm)

Concave R:0-40R(mm)



## Radius And Angle Dresser

ORDER NO.V-TDB CODE NO.2012-010

WEIGHT:11.5kgs

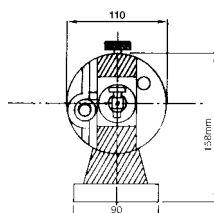
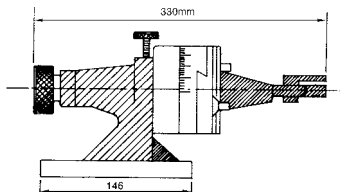


Convex dressing range: 0.8R-40R

Concave dressing range: 0-40R

Max. wheel dressing diameter: 250mm

Max. wheel extending diameter: 375mm



- Positive setting of the diamond to absolute center with the special gage included with the dresser.
- Simple, fast, accurate radius setting; no height gage or other set-up aids required. Radius is set on the grinder by measuring over the two pins or by inserting a gage block, as shown, for direct reading. Inside or outside radius is determined simply by sliding the dowel pin to the right for concave and to the left for convex.
- 4x90° graduation in full 360° circle. 6 Minute vernier reading. Chrome plated.
- One push-pull type knob for radius and angle control and for safer and faster operations.
- ACCURACY. Extremely close tolerances are held in the manufacture of this tool, assured by hardening and precision grinding of all critical parts. Ways are chrome hardened.
- ECONOMY. Set-up and dressing time reduced to a bare minimum due to simplicity.



# Universal Wheel Dresser

ORDER NO.V-TDC CODE NO.2012-020

WEIGHT:7.8kgs



The wheel dresser that dresses two angles tangent to a radius in one continuous motion with .0001~0.0002m/m accuracy. The wheel dresser with a micrometer feed-0.98"(25mm) travel.

### SIMPLE-ELIMINATES HEIGHLY SKILLED OPERATORS

Fluidmotion means YOU CAN dress two angles tangent to a radius in one continuous motion-with only one setting. The diamond automatically returns to center position after dressing angles. Thus even a beginner can dress complex forms quickly and accurately. (center height 195mm)

### ELIMINATES ELABORATE SETUPS

No need to pre-set diamond, or use any other tool except a micrometer and a simple hex wrench.

No Gage block-Master Gage setting or Block-Parallel Bar-Surface Plate-Height Gage-Dial Indicator.

No movement of dovetails necessary to form angles. The angle is dressed by continuing to push handle in both directions after radius is formed.

No need to use Gibs & V-Ways other than positioning surfaces.

### ACCURATE-RAPID, REPAT FORM-DRESSING

Fluidmotion generates clean, precise wheel profiles entirely free of chatter marks. Without fluidmotion a perfect blend of angles and radius is improbable.

**PRECISE SHARP CONTOURS**-concave or convex, at a full 180 degrees, are obtained consistently with (GUARANTEED) 0.001" accuracy.

**CONVEX RANGE**-0R-76.2R

**CONCAVE RANGE**-0.8R-88.9R

**ACCURATE...FLUIDMOTION...PRECISE...**

HOLD INTERSECTING ANGLES 12 to 15 seconds. This is accomplished by operating upright and handle.

Setting up two angles requires 10 seconds. Setting two angles and radius requires less than 3 minutes.

### THE MOST DURABLE DRESSER AVAILABLE

Manufactured from hardened, ground and lapped alloy steels. No wearing surfaces. Swivels on sealed bearings.

This form tangent in one setting-two angles-two radius-one flat.

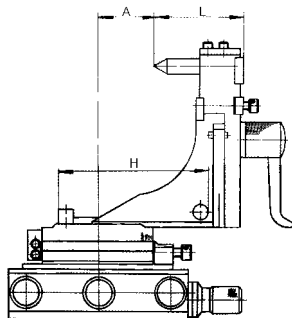
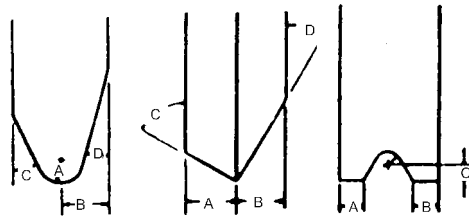
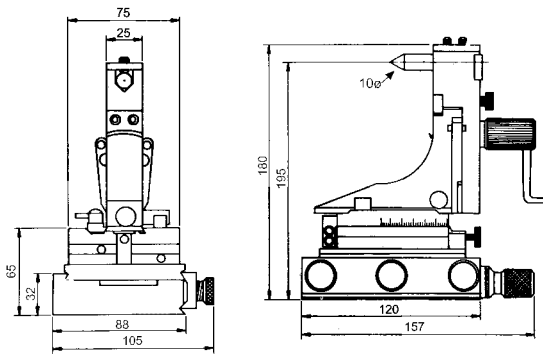
MAX. Swing distance of diamond cutter.....±14mm

Measuring guasi-pin dia.....ø10

MAX. Wheel dia.....ø200mm

Reading accuracy of turret index.....5'

Feed per division of handle scale.....0.01mm



### Calculation Method

To dress convex arc surface:  $H=L + R$

To dress concave arc surface:  $H=L +(-R)$

H: Distance between outer generating lines of two locating pins.

R: Radius of the arc surface to be dressed

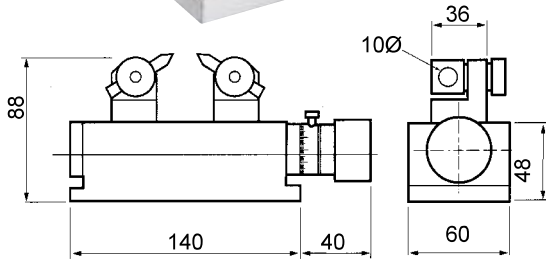
L: Distance from tip of diamond cutter to base plate



# Precision Duplex Dresser

ORDER NO.V-TDF CODE NO.2012-030

WEIGHT:3.7kgs



## FEATURES

PRECISION DUPLEX DRESSER is designed to simultaneously dress both sides of a grinding wheel, precisely and without deformation. It is useful for the thinning of grinding wheels or the dressing of thin wheels. manufactured of tool steel and hardened through out to HRC 60 for life time use.

## Specifications:

Maxi width of wheel.....40mm(1-9/16")  
Maxi dressing depth.....40mm(1-9/16")  
Mini dressing width.....0.2mm(0.0079")  
Graduation.....0.02mm(0.0001")

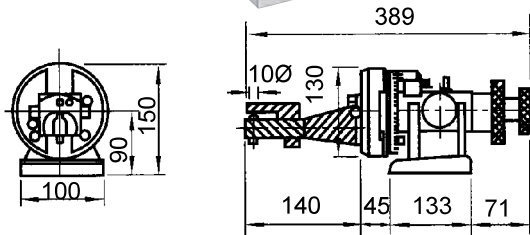
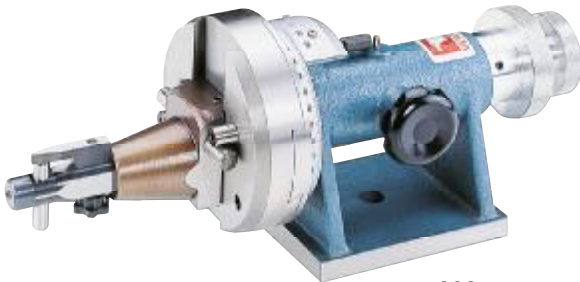
| Max.thickness | Min.  | Max. | Min        |
|---------------|-------|------|------------|
| 40mm          | 0.2mm | 40mm | 0.02mm/div |



# Radius And Angle Dresser

ORDER NO.V-TDG CODE NO.2012-040

WEIGHT:12kgs



## FEATURES

- 6 minute vernier reading.
- 5-1/2" longx6-1/2" high.
- Dual purpose knob for drum & angle movement.
- Stop for concave and convex radius.
- Comes with setting gage for diamond tool.

## Specifications:

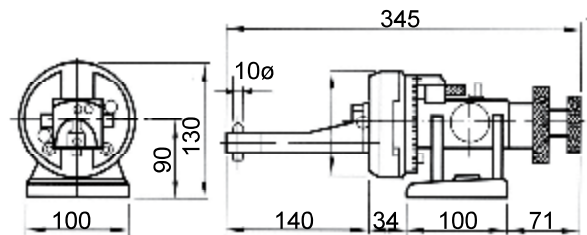
|  |                                   |
|--|-----------------------------------|
| Max. wheel diameter, standard.....         | 11"                               |
| Concave radius with standard diamonds..... | 0-2 <sup>1</sup> / <sub>4</sub> " |
| Concave radius with rta-tail diamonds..... | 0-2 <sup>1</sup> / <sub>4</sub> " |
| Convex radius.....                         | 0-4"                              |
| Tangent travel in either direction.....    | 1.950"                            |
| Center line.....                           | 3.4"                              |



# Radius And Angle Dresser

ORDER NO.V-TDE CODE NO.2012-050

WEIGHT:9.2kgs



## Features

- No height gauge or set-up aids required.
- Radius is set on the grinder by measuring over the two pins or by inserting a gauge block for direct reading.
- Concave radius or Convex radius is determined by using either the left or right hand pins.

## Grinding wheel dressing application

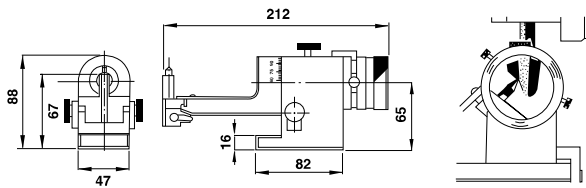




# Optical Radius Angle Dresser

ORDER NO.V-TDT CODE NO.2012-060

WEIGHT:4.3kgs **Features**



Universal Wheel Dresser is Adoptable on Surface grinder and universal tool grinder for dressing grinding wheel into various cross sections of flat or curved shapes.

By "SIGHTING" the diamond point through the lens, radius and angles can easily be made perfectly tangent Visually Even with diamonds. Likewise radius can be blended together with most unbelievable accuracy.

### Specification

Center height.....65mm  
Max wheel diameter.....200mm  
Max convex radius.....10mm  
Max concave radius.....25.4mm  
Dressing angle.....95°-0°-95°  
Tangential travel.....Appo x 22.5mm

Grinding wheel dressing application



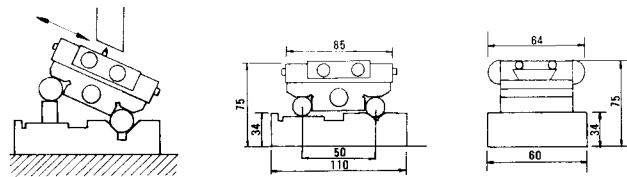
# Matco Sine Dresser

ORDER NO.VP-50 CODE NO.2012-070

WEIGHT:2.5kgs



- This fine precision-made unit dresses grinding wheels to any angle from 0°-60° degrees with new smoothness and accuracy.
- The cross feed up to 50mm, center distance 0.01mm, Sine angle absolutely accurate.



### SPECIFICATION

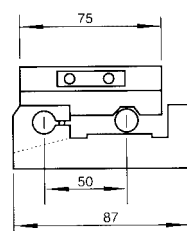
| BLOCK CENTER DISTANCE | CENTER TOLERANCE | MAX CROSS FEED |
|-----------------------|------------------|----------------|
| 50                    | ±0.01            | 50             |



# Matco Sine Diesser

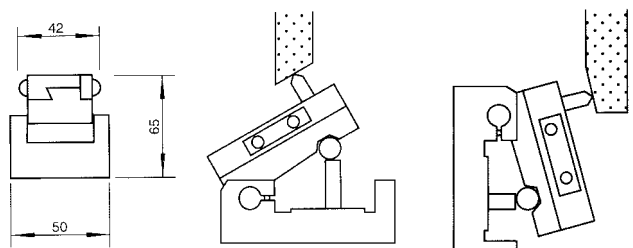
ORDER NO.V-50D CODE NO.2012-080

WEIGHT:1.6kgs



This fine precision-made unit dresses grinding wheels to any angle from 0°-60° degrees with new smoothness and accuracy.

The cross feed up to 50mm, center distance 0.01mm, Sine angle absolutely accurate.





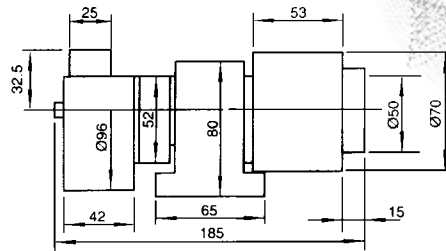


# Diamond Wheel Dresser

ORDER NO.V-TDD CODE NO.2012-090  
WEIGHT:4.6kgs



VERTEX®

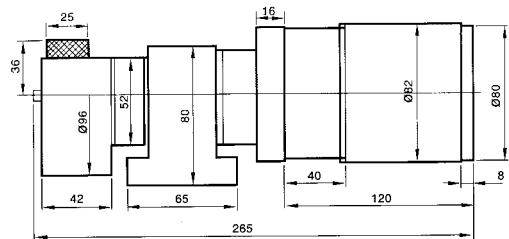


This device is suitably used for Diamond Grinding wheel. The surface is treated with blaze-dried lacquer. Axis part is fixed with shaft bearing and can be rotated in high speed & with great precision.

- Sand wheel size: Ø75x26x12.7 ØWA80



# Motor Type CBN Flat Wheel Dresser



SAND WHEEL SIZE: Ø75x25x12.7 ØWA80

Unit: mm

| ORDER NO | VOLTAGE | RPM | WEIGHT (kgs) | CODE NO. |
|----------|---------|-----|--------------|----------|
| V-TDM-1  | 110V    | 129 | 6.5          | 2012-100 |
| V-TDM-2  | 220V    | 108 | 7.1          | 2012-101 |

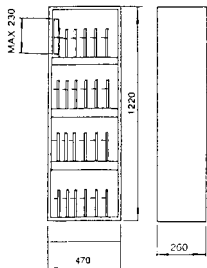
5.5KGS, SINGLE PHASE

0.07HP



# Wheel Hanger

ORDER NO.VWH-24, VWH-32  
CODE NO.2013-001, 2013-002  
WEIGHT:23.1kgs

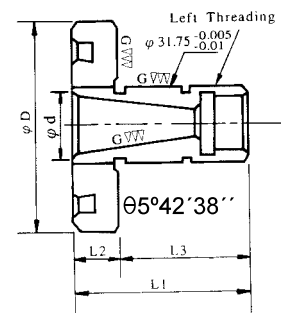


VWH-24 (24pcs)

VWH-32 (32pcs)  
653Wx600Dx1460H mm  
(excl. wheel height)



# Grinding Wheel Flang



Unit: mm

| ORDER NO. | ØD | Ød           | L1 | L2 | L3 | Brand Mark | WEIGHT (kg) | CODE NO. |
|-----------|----|--------------|----|----|----|------------|-------------|----------|
| FKT-250   | 78 | 25.7+0/-0.05 | 40 | 13 | 27 | KENT PROTH | 0.8         | 2013-010 |
| FKT-350   | 75 | 25.4+0/-0.05 | 40 | 13 | 34 | TA TUNG    | 1           | 2013-011 |

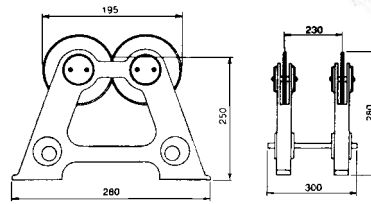


# Wheel Balancing Stand

ORDER NO.WBS-300 CODE NO.2014-001  
WEIGHT:12.5kgs



MAX.WHEEL DIAMETER ALLOWED Ø 400mm

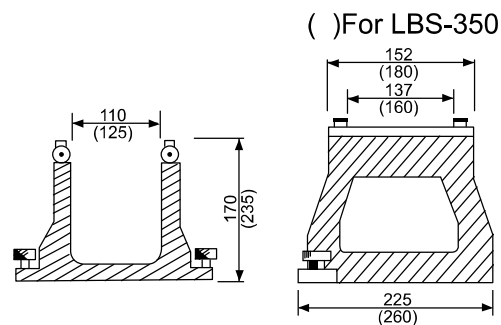


The stand is specifically designed to improve accuracy and longer life for grinding. It is finished with cast iron and fine through hardened to HRC55°.



# Level Balancing Stand

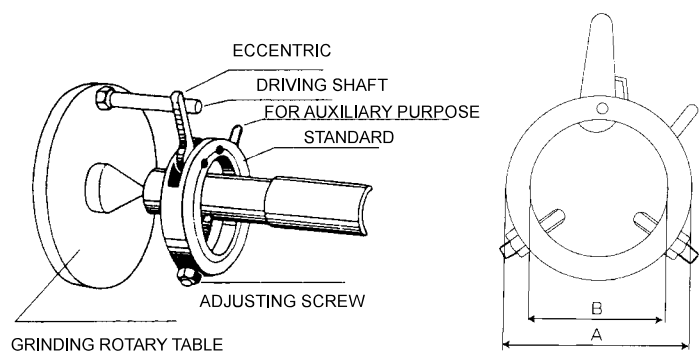
ORDER NO:LBS-100 ORDER NO.LBS-350  
CODE NO.2014-010 CODE NO.2014-011  
WEIGHT:8.8kgs WEIGHT:15.1kgs



This machine encloses minute leveling instrument. The adjustment of horizontal enable rapidly and accurately.  
MAX.WHEEL DIAMETER ALLOWED Ø200mm, Ø350mm



# Driving Carrier



## FEATURES:

- SUITABLE FOR GRINDING OF SHAFTS.
- EASY ATTACH AND DETACH BY ONE HAND.

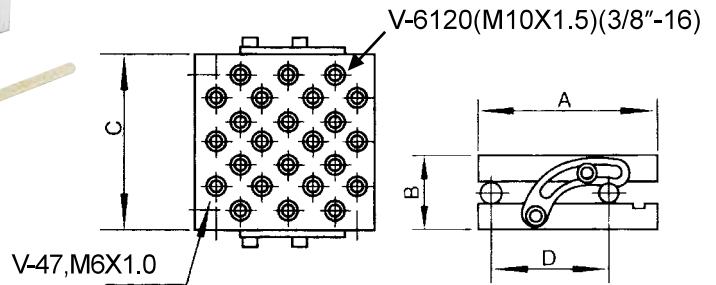
| ORDER NO | CAPACITY | A   | B   | WEIGHT (kg) | CODE NO. |
|----------|----------|-----|-----|-------------|----------|
| VDC-13   | Ø6~Ø14   | 36  | 18  | 0.1         | 2014-020 |
| VDC-22   | Ø13~Ø24  | 48  | 28  | 0.2         | 2014-021 |
| VDC-30   | Ø20~Ø33  | 58  | 38  | 0.2         | 2014-022 |
| VDC-40   | Ø31~Ø42  | 68  | 48  | 0.2         | 2014-023 |
| VDC-50   | Ø36~Ø50  | 78  | 58  | 0.3         | 2014-024 |
| VDC-60   | Ø40~Ø62  | 89  | 68  | 0.3         | 2014-025 |
| VDC-80   | Ø60~Ø80  | 119 | 88  | 0.6         | 2014-026 |
| VDC-100  | Ø80~Ø100 | 140 | 109 | 0.7         | 2014-027 |

## Sine Plates



Design by the principles of SINE, angle grinding can be done well. High precision of parallelism within 0.002mm and squareness within 0.005 mm. Setup and dressing time reduced to a bare minimum due to simplicity. (ANGLE 0° - 46°)

- Made of quality steel, hardened to HRC 55° - 56°
- Two hardened and ground side rails and one.
- Locking strap included.



| ORDER NO. | A   | B  | C   | D   | N.W (kgs) | CODE NO. |
|-----------|-----|----|-----|-----|-----------|----------|
| V-47      | 100 | 62 | 175 | 75  | 8.4       | 2015-001 |
| V-66      | 150 | 62 | 150 | 100 | 9.4       | 2015-002 |
| V-6120    | 150 | 62 | 300 | 100 | 19.8      | 2015-003 |

## Compound Sine Plate



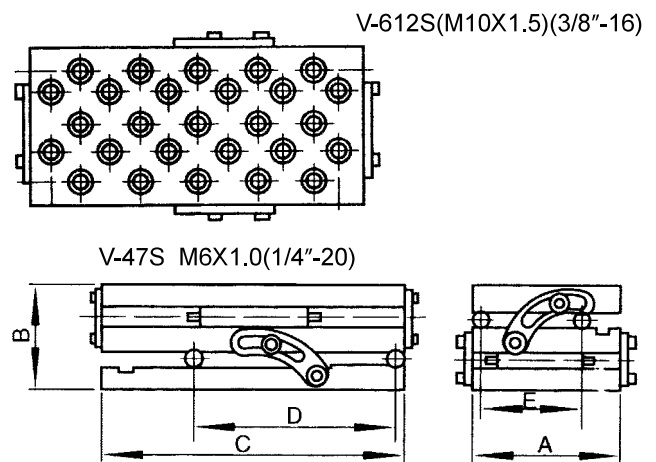
Made of quality steel, hardened to HRC 55°-62°, angles 0°-60° capacity.

Minute angle step 0.2 built into the front gauge block roll eliminates steps in base plate.

Two end rails and one locking strap included

Tapped holes on the top.

Center distance of tools with 0.005mm(0.0001") V-612S within 0.008mm(0.0003")

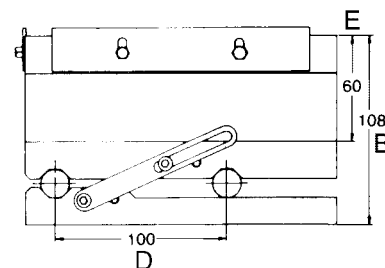
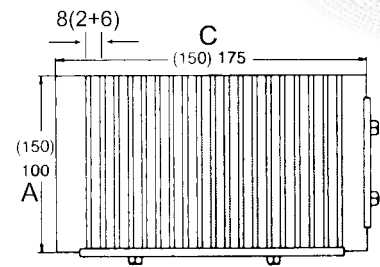


| ORDER NO. | A   | B   | C   | D   | E   | N.W (kgs) | CODE NO. |
|-----------|-----|-----|-----|-----|-----|-----------|----------|
| V-47S     | 100 | 100 | 175 | 125 | 75  | 9.9       | 2015-010 |
| V-66S     | 150 | 100 | 150 | 100 | 100 | 12.4      | 2015-011 |
| V-612S    | 150 | 100 | 300 | 100 | 100 | 23.7      | 2015-012 |

## Magnetic Sine Plate



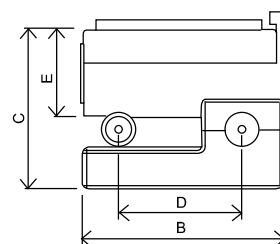
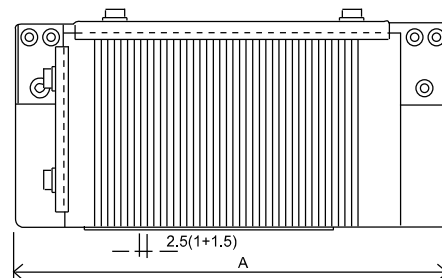
MAGNETIC SINE PLATES with a permanent magnetic, never lose its strong power by press down a screw based on the plate and regain the original after work.



| ORDER NO. | A   | B   | C   | D   | E  | ANGLE  | N.W (kgs) | CODE NO. |
|-----------|-----|-----|-----|-----|----|--------|-----------|----------|
| V-47M     | 100 | 108 | 175 | 100 | 60 | 0°~55° | 11.3      | 2015-020 |
| V-66M     | 150 | 108 | 150 | 100 | 60 | 0°~55° | 15.6      | 2015-021 |
| V-612M    | 150 | 108 | 300 | 100 | 60 | 0°~55° | 27        | 2015-022 |

## Magnetic Sine Plate With Fine Pole

Permanent magnetic chuck. Removable handle for positive on/off control, side rails, end rails all included. All have 200 minute angle steps with 0.005mm(0.0002") tolerance in squareness, parallelism and roll center distances. The chuck of pole is 1+1.5



| ORDER NO. | A   | B   | C  | D   | E  | P              | ANGLE  | N.W (kgs) | CODE NO. |
|-----------|-----|-----|----|-----|----|----------------|--------|-----------|----------|
| V-47MF    | 175 | 102 | 87 | 75  | 47 | 2.5<br>(1+1.5) | 0°~60° | 13.1      | 2015-030 |
| V-66MF    | 200 | 152 | 87 | 100 | 47 |                |        | 16.5      | 2015-031 |
| V-612MF   | 350 | 152 | 87 | 100 | 47 |                |        | 30.3      | 2015-032 |



## Adjustable Sine Plate With Fine Pole Magnetic Chuck

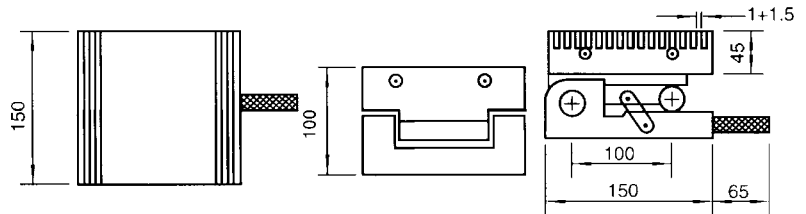


ORDER NO.V-66SA CODE NO.2015-050

WEIGHT:17.9kgs



The sine plate with magnetic chuck is with high accuracy and stability. From 0° to 60° can be used for angle, the precision is within 0.003m/m.



## Double Way Sine Plate With Permanent Magnetic Chuck

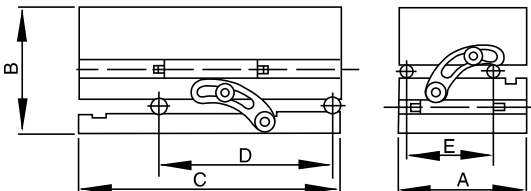


### FEATURES:

- Double way sine plate, can be use to grind two way angle at same time.
- Constructed of hardened alloy tool steel.
- Precise angle setting is obtained with gauge block.
- This device provides positive locking at any angle without distortion.
- A positive locking device is mounted on the base.

| ORDER NO. | A   | B   | C   | D   | E   | P1             | P2             | ANGLE  | N.W (kgs) | CODE NO. |
|-----------|-----|-----|-----|-----|-----|----------------|----------------|--------|-----------|----------|
| V-47MS    | 100 | 142 | 175 | 100 | 75  | 6.5<br>(1.5+5) | 7.5<br>(1.5+6) | 0°~60° | 15.2      | 2015-060 |
| V-66MS    | 150 | 142 | 150 | 100 | 100 |                |                |        | 18.1      | 2015-061 |
| V-612MS   | 150 | 142 | 300 | 200 | 100 |                |                |        | 34.7      | 2015-062 |

Unit:mm



## Double Way Sine Plate With Fine Pole Magnetic Chuck

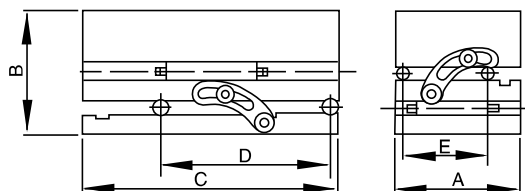


### FEATURES:

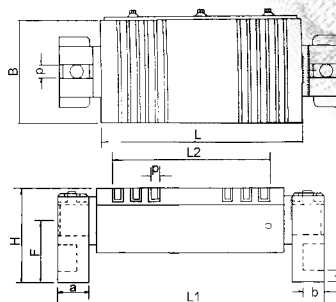
- Double way sine plate, can be grind two way angle at same time.
- Special feature with micropitch magnetic chuck, can fix tiny parts firmly on the chuck.
- Constructed of hardened alloy tool steel.
- Precise angle setting is obtained with gauge block.
- This device provides positive locking at any angle without distortion.
- A positive locking device is mounted on the base.

| ORDER NO. | A   | B   | C   | D   | E   | P              | ANGLE  | N.W (kgs) | CODE NO. |
|-----------|-----|-----|-----|-----|-----|----------------|--------|-----------|----------|
| V-47MSF   | 100 | 122 | 175 | 100 | 75  | 2.5<br>(1+1.5) | 0°~60° | 14.9      | 2015-070 |
| V-66MSF   | 150 | 122 | 150 | 100 | 100 |                |        | 19.8      | 2015-071 |
| V-612MSF  | 150 | 122 | 300 | 200 | 100 |                |        | 35        | 2015-072 |

Unit:mm



# Rotary Permanent Magnetic Plate

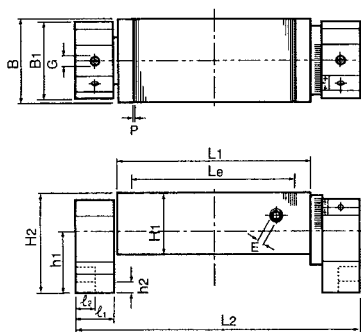


- Can grind the (0°-90°) angle work-piece, could be easily set by graduated collar.

Unit:mm

| ORDER NO. | SIZE    | OPERATION PLANE |     |     | POLE PITCH<br>P | ROTARY SEAT PLANE |    |    |     |     | HEIGHT<br>H | WEIGHT<br>KGS | CODE NO. |          |
|-----------|---------|-----------------|-----|-----|-----------------|-------------------|----|----|-----|-----|-------------|---------------|----------|----------|
|           |         | B               | L   | L2  |                 | a                 | b  | t  | F   | L1  |             |               |          | d        |
| VLU-510B  | 125x250 | 125             | 250 | 191 | 8.5<br>(2.5+6)  | 50                | 35 | 17 | 96  | 380 | 16          | 150           | 33.2     | 2015-080 |
| VLU-612B  | 150x300 | 150             | 300 | 245 |                 |                   |    |    |     | 430 |             |               |          |          |
| VLU-618B  | 150x450 | 150             | 450 | 414 | 8(2+6)          | 27                | 15 | 90 | 565 | -   | 145         | 43            | 2015-082 |          |

# Rotary Fine Pole Permanent Magnetic Plate



## APPLICATION

Suitable for (0°-90°) angle grinding on grinder.

## FEATURES

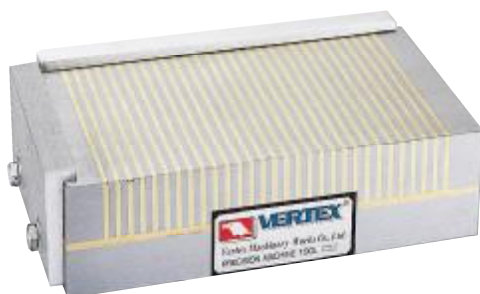
- Rotary shaft with graduation makes it easy to grind at any angle.
- Integrated molding of machine body and rotary spindle.
- Unchanged surface accuracy during ON/OFF change over.
- Design for distance between both magnets enables machining of various unconfirm in thickness & sizes.

Unit:mm

| ORDER NO. | Nominal Dimension | Chuck Dimension |     |     |    | POLE PITCH<br>P | Length<br>L2 | Rotary Base |    |    |    |     | HEIGHT<br>H2 | WEIGHT<br>(kgs) | CODE NO. |          |
|-----------|-------------------|-----------------|-----|-----|----|-----------------|--------------|-------------|----|----|----|-----|--------------|-----------------|----------|----------|
|           |                   | B               | L1  | L2  | H1 |                 |              | B           | e1 | e2 | G  | h1  |              |                 |          | h2       |
| VLU-407BF | 100X175           | 100             | 175 | 125 | 78 | 2<br>(1+1.5)    | 293          | 100         | 50 | 25 | 16 | 103 | 50           | 145             | 19       | 2015-090 |
| VLU-510BF | 125X250           | 125             | 250 | 200 |    |                 | 368          |             |    |    |    |     |              |                 | 27       | 2015-091 |
| VLU-612BF | 150X300           | 150             | 300 | 246 |    |                 | 418          |             |    |    |    |     |              |                 | 31       | 2015-092 |
| VLU-614BF | 150X350           |                 | 350 | 296 |    |                 | 468          |             |    |    |    |     |              |                 | 37       | 2015-093 |
| VLU-618BF | 150X450           |                 | 450 | 396 |    |                 | 568          |             |    |    |    |     |              |                 | 44       | 2015-094 |

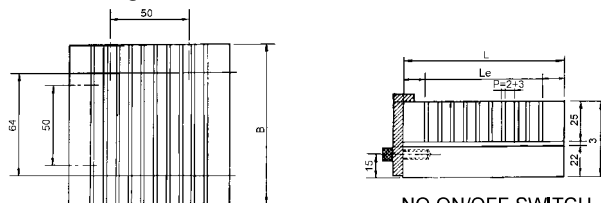
# Hi-Power Mini Type Permanent Magnetic Plate

FOR CARBIDE MATERIAL ONLY  
CAN NOT FOR ALL STEEL



## APPLICATION

This chuck is designed for objects with weaker magnetic force. This chuck can be placed in the plate of large permanent magnetic chuck or electro-magnetic chuck for attraction or attachment.



NO ON/OFF SWITCH

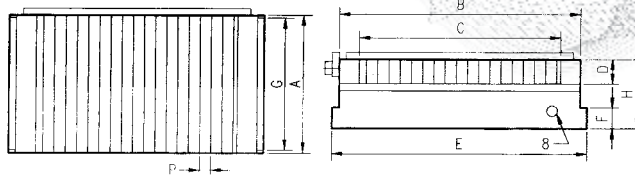
Unit:mm

| ORDER NO. | DIMENSION | CHUCKING SIZE |     |     | POLE PITCH<br>P | HEIGHT<br>H | TESTING BLOCK<br>BLOCK(TUNGSTEN)<br>210N(21kgf) | WEIGHT<br>(kgs) | CODE NO. |
|-----------|-----------|---------------|-----|-----|-----------------|-------------|---|-----------------|----------|
|           |           | B             | L   | Le  |                 |             |   |                 |          |
| VG-404H   | 100X100   | 100           | 100 | 72  | 5(2+3)          | 50          | 5   | 2015-100        |          |
| VG-407H   | 100X180   | 100           | 180 | 152 | 5(2+3)          | 50          | 8   | 2015-101        |          |
| VG-410H   | 100X250   | 100           | 250 | 222 | 5(2+3)          | 50          | 11  | 2015-102        |          |

# Angular Permanent Magnetic Plate



MAGNETIC FORCE 18KGF  
650 GAUSS



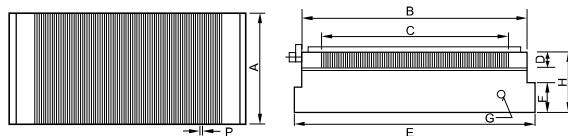
- Permanent magnetic force.
- Operation plane, specially treated, nondeformation and high precision.

Unit:mm

| ORDER NO. | SIZE    | CHUCKING SIZE |     |     |    | POLE PITCH P | CHUCK MOUNTING FACE |          |    | SWITCH TYPE                      | HEIGHT H | WEIGHT KGS | CODE NO. |          |
|-----------|---------|---------------|-----|-----|----|--------------|---------------------|----------|----|----------------------------------|----------|------------|----------|----------|
|           |         | A             | B   | C   | D  |              | G                   | E        | F  |                                  |          |            |          |          |
| VG-407    | 100x175 | 100           | 175 | 146 | 20 | 8(2+6)       | 100                 | 187      | 15 | LIVING HEXAGON SOCKET SCREW KEYS | 50       | 1.2        | 2015-110 |          |
| VG-510    | 125x250 | 125           | 250 | 206 |    |              | 125                 | 262      |    |                                  |          | 15         | 18.5     | 2015-111 |
| VG-612    | 150x300 | 150           | 300 | 256 |    |              | 150                 | 318      |    |                                  |          | 20.9       | 2015-112 |          |
| VG-614    | 150x350 |               | 350 | 306 |    |              |                     | 368      |    |                                  |          | 27.5       | 2015-113 |          |
| VG-618    | 150x450 | 200           | 450 | 406 |    |              | 200                 | 468      |    |                                  |          | 32         | 2015-115 |          |
| VG-816    | 200x400 |               | 400 | 365 |    |              |                     | 418      |    |                                  |          | 36.3       | 2015-116 |          |
| VG-818    | 200x450 | 450           | 406 | 468 |    |              | 40.4                | 2015-117 |    |                                  |          |            |          |          |
| VG-820    | 200x500 | 500           | 456 | 518 |    |              | 50.3                | 2015-119 |    |                                  |          |            |          |          |
| VG-1020   | 250x500 | 250           | 500 | 456 |    |              | 150                 | 162      |    |                                  |          | 9          | 2015-121 |          |
| VG-606    | 150x150 | 150           | 150 | 116 |    |              | 300                 | 620      |    |                                  |          | 73.5       | 2015-122 |          |
| VG-1224   | 300x600 | 300           | 600 | 550 | 18 |              |                     |          |    | 48                               |          |            |          |          |

# Middle Pitch Permanent Magnetic Chuck

MAGNETIC FORCE 19KGF  
680 GAUSS



## APPLICATION

New type of thick chuck, in 50mm thickness, for grinding and electrodischarging works, for thin plate or small works, in wide range of applications, it features a wide effective magnetic area on the chucking face.

## FEATURES

- Thin and light to meet versatile applications.
- Fine-pitched magnetic poles, on this model, make it ideally suitable for small and thin works.
- Hexagonal wrench key is used for the magnetic ON/OFF change over handle it is inserted through the side easily removed and operates quite lightly.
- The chuck surface has a wider effective magnetic area than other chucks of similar type.

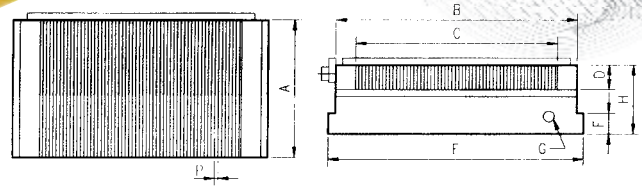
Unit:mm

| ORDER NO.  | DIMENSION | CHUCKING SIZE |     |     |    | POLE PITCH P | CHUCK MOUNTING FACE |     |    | HEIGHT H | HEXAGONAL HANDLE HOLE G | WEIGHT KGS N.W. | CODE NO. |
|------------|-----------|---------------|-----|-----|----|--------------|---------------------|-----|----|----------|-------------------------|-----------------|----------|
|            |           | A             | B   | C   | D  |              | A                   | E   | F  |          |                         |                 |          |
| VGF-1018B  | 100X175   | 100           | 175 | 146 | 18 | 5(1+4)       | 100                 | 195 | 15 | 50       | 8                       | 7.7             | 2015-160 |
| VGF-1515B  | 150X150   | 150           | 150 | 116 | 18 | 5(1+4)       | 150                 | 175 | 15 | 50       | 8                       | 10              | 2015-161 |
| VGF-1530B  | 150X300   | 150           | 300 | 256 | 18 | 5(1+4)       | 150                 | 320 | 15 | 50       | 8                       | 18.8            | 2015-162 |
| VGF-1535B  | 150X350   | 150           | 350 | 306 | 18 | 5(1+4)       | 150                 | 370 | 15 | 50       | 8                       | 21.6            | 2015-163 |
| VGF-1545B  | 150X450   | 150           | 450 | 406 | 18 | 5(1+4)       | 150                 | 470 | 15 | 50       | 8                       | 27.4            | 2015-164 |
| VGF-2040B  | 200X400   | 200           | 400 | 356 | 18 | 5(1+4)       | 200                 | 420 | 15 | 50       | 8                       | 32.3            | 2015-165 |
| VGF-2045B  | 200X450   | 200           | 450 | 406 | 18 | 5(1+4)       | 200                 | 470 | 15 | 50       | 8                       | 40              | 2015-166 |
| VGF-1018BS | 100X175   | 100           | 175 | 146 | 18 | 5(1+4)       | 100                 | 175 | 15 | 50       | 8                       | 8               | 2015-167 |
| VGF-1515BS | 150X150   | 150           | 150 | 121 | 18 | 5(1+4)       | 150                 | 150 | 15 | 50       | 8                       | 9               | 2015-168 |
| VGF-1530BS | 150X300   | 150           | 300 | 256 | 18 | 5(1+4)       | 150                 | 300 | 15 | 50       | 8                       | 20              | 2015-169 |

## Fine Pole Magnetic Plate



MAGNETIC FORCE 21KGF  
700 GAUSS

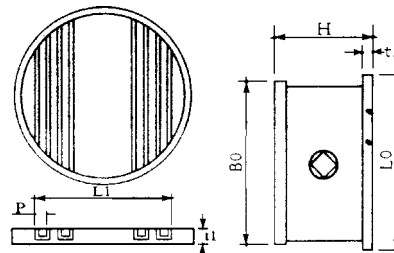


Unit:mm **FEATURES**

| ORDER NO.  | SIZE    | CHUCKING SIZE |     |     |                      | POLE PITCH<br>P | CHUCK MOUNTING FACE |    |    | HEIGHT<br>H | WEIGHT<br>KGS | CODE NO. |
|------------|---------|---------------|-----|-----|----------------------|-----------------|---------------------|----|----|-------------|---------------|----------|
|            |         | A             | B   | C   | D                    |                 | A                   | E  | F  |             |               |          |
| VRTW-1018A | 100X175 | 100           | 175 | 146 | 18<br>2.5<br>(1+1.5) | 100             | 195                 | 15 | 50 | 7.7         | 2015-130      |          |
| VRTW-1515A | 150X150 | 150           | 150 | 116 |                      | 150             | 170                 | 15 |    | 9.8         | 2015-131      |          |
| VRTW-1530A | 150X300 | 150           | 300 | 256 |                      | 150             | 320                 | 15 |    | 18.7        | 2015-132      |          |
| VRTW-1535A | 150X350 | 150           | 350 | 306 |                      | 150             | 370                 | 15 |    | 21.4        | 2015-133      |          |
| VRTW-1545A | 150X450 | 150           | 450 | 406 |                      | 150             | 470                 | 15 |    | 27.4        | 2015-135      |          |
| VRTW-2040A | 200X400 | 200           | 400 | 356 |                      | 200             | 420                 | 15 |    | 32.5        | 2015-137      |          |
| VRTW-2045A | 200X450 | 200           | 450 | 406 |                      | 200             | 470                 | 15 |    | 36.4        | 2015-138      |          |
| VRTW-1224A | 300X600 | 306           | 600 | 556 |                      | 300             | 620                 | 15 |    | 72          | 2015-138A     |          |
| VRTW-1018S | 100X175 | 100           | 175 | 146 |                      | 100             | 175                 | -  |    | 8           | 2015-139      |          |
| VRTW-1515S | 150X150 | 150           | 150 | 121 |                      | 150             | 150                 | -  |    | 9           | 2015-140      |          |
| VRTW-1530S | 150X300 | 150           | 300 | 256 |                      | 150             | 300                 | -  |    | 20          | 2015-141      |          |
| VRTW-1325S | 125X250 | 125           | 250 | 206 |                      | 125             | 250                 | 15 |    | 13.1        | 2015-142      |          |

- Thin and light weight to meet versatile applications.
- Fine-pitched magnetic poles on this micropitch model. Make it ideally suitable for small and thin works.
- Hexagonal wrench key is used for the magnetic ON/OFF change over handle. It is inserted through the side, easily removed and operates quite lightly.
- The chuck surface has a wider effective magnetic area than other chuck of similar type.

## Round Type Magnetic Plate



Unit:mm

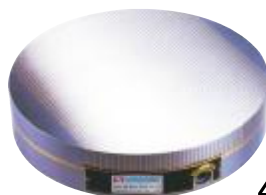
| ORDER NO. | FACE PLATE |    |     | BOTTOM PLATE |     | POLE PITCH<br>P | HEIGHT<br>H | WEIGHT<br>KGS | CODE NO. |
|-----------|------------|----|-----|--------------|-----|-----------------|-------------|---------------|----------|
|           | B0         | t1 | L1  | t2           | L0  |                 |             |               |          |
| VGD-06    | 150        | 21 | 101 | 18           | 200 | 9<br>(2+7)      | 78          | 9.8           | 2015-150 |
| VGD-08    | 200        |    | 137 |              | 200 |                 |             | 12.8          | 2015-151 |
| VGD-10    | 250        |    | 191 |              | 250 |                 |             | 20.2          | 2015-152 |
| VGD-12    | 300        |    | 227 |              | 305 |                 |             | 30.4          | 2015-153 |

**ORDER NO.VGD TYPE**  
**Magnetic field intensity:**  
**Higher than 650 gauss**

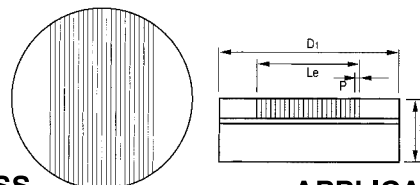
### APPLICATION

Suitable for light cutting and grinding on lathe, grinder, EDM and the Rotary Table.

## Fine Pole Round Type Magnetic Plate



450 GAUSS



### APPLICATION

New type of thin chuck, in 50mm thickness, for grinding and electro-discharging works, for thin plate or small works, in wide range of applications, it features a wide effective magnetic area on the face plate (chucking face).

| ORDER NO. | DIAMETER | TOP PLATE |     | POLE PITCH<br>P | HEIGHT<br>H | WEIGHT<br>KGS | CODE NO. |
|-----------|----------|-----------|-----|-----------------|-------------|---------------|----------|
|           |          | D1        | Le  |                 |             |               |          |
| VGDW-6    | 160mm    | 160       | 115 | 2.5 (1+1.5)     | 50          | 8             | 2015-154 |
| VGDW-8    | 200mm    | 200       | 155 | 2.5 (1+1.5)     | 50          | 13            | 2015-155 |
| VGDW-10   | 250mm    | 250       | 205 | 2.5 (1+1.5)     | 50          | 21            | 2015-156 |
| VGDW-12   | 300mm    | 300       | 255 | 2.5 (1+1.5)     | 50          | 33.5          | 2015-157 |

Unit:mm





# Permanent-Electro Magnetic Chuck



VERTEX®

Suitable for Milling

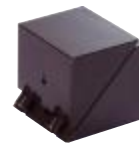
NEW



5 SIDES MACHINING



CONTROLLER INCLUDED



VSB-  
SPRING BLOCK



VTJ-  
MAGNETIC TRANSISTING SOFT JAW

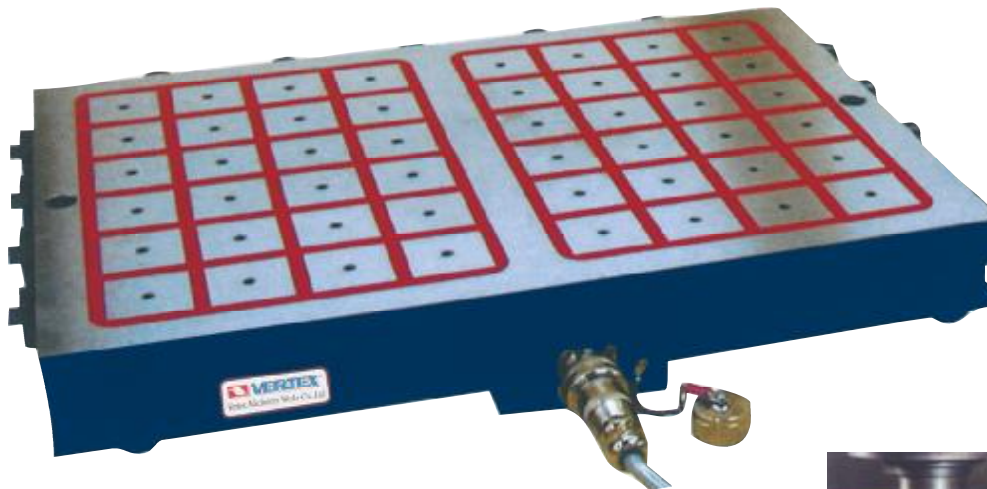
## FEATURES

- Ensure higher magnetic and mechanical performances, as well as absolute reliability.
- Owing to no power supply to keep the magnetic chuck ON, it could be used for long time and never get temperature to affect the accuracy of workpiece. "COLD" device, not subject to internal wear or deformation resulting from moving internal parts.
- Easy and convenient to clamp a workpiece, shortens clamping time.
- Most suitable for heavy duty machining on medium, large or even rough components.
- Easily integrated with Pallet Change of Horizontal Machining Center and FMS System the Magnetic Chucks will be as geometrically stable as the table itself.
- For the most powerful machine tools available. Systems are switched ON or OFF with simple electrical pulse. A variable output from 20%-100% is controlled from the operator push button unit.
- Entirely independent of external power supply when holding work pieces. There is no risk, when power fails.
- 2 seconds control for power ON & OFF. No electric Power Supply required to keep the magnetic chuck ON. Safety in case of power failure.
- 10mm MIN. Thin workpiece & MIN. 4 block magnetic pole for workpiece.

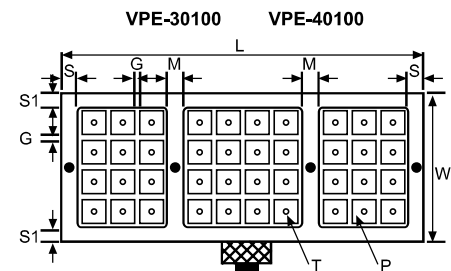
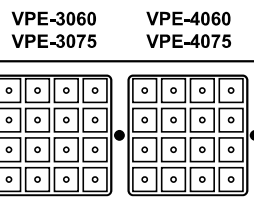
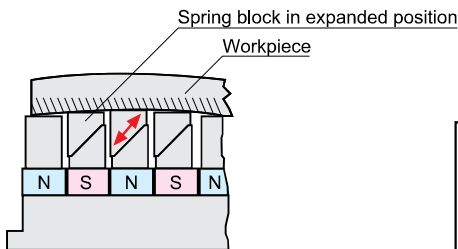


# Permanent-Electro Magnetic Chuck

Suitable for Milling



**STRONG CLAMPING FORCE, FAST SETTING, HIGH SAFETY**



MAGNETIC FORCE 1000 KGS / 100 CM<sup>2</sup> / 4 SQUARE BLOCKS

| ORDER NO. | DIMENSION |     |    |    |    |    |       | PITCH | POLE | No. of POLE | VOLTAGE | AMP | CHUCK N.W | CONTROLLER N.W | CODE NO. |
|-----------|-----------|-----|----|----|----|----|-------|-------|------|-------------|---------|-----|-----------|----------------|----------|
|           | W         | L   | S  | S1 | M  | T  | HIGHT |       |      |             |         |     |           |                |          |
| VPE-2540  | 240       | 430 |    |    | -  |    |       |       | 18   |             | 18      | 42  |           | 2033-030       |          |
| VPE-2560  | 240       | 590 |    |    | 30 |    |       |       | 24   |             | 24      | 63  |           | 2033-031       |          |
| VPE-2580  | 240       | 750 |    |    | 30 |    |       |       | 30   |             | 30      | 84  |           | 2033-032       |          |
| VPE-25100 | 240       | 990 |    |    | 30 |    |       |       | 42   |             | 40      | 105 |           | 2033-033       |          |
| VPE-3030  | 300       | 310 |    |    | -  |    |       |       | 16   |             | 16      | 38  |           | 2033-048       |          |
| VPE-3040  | 300       | 430 |    |    | -  |    |       |       | 24   |             | 24      | 51  |           | 2033-049       |          |
| VPE-3060  | 300       | 590 |    |    | 30 |    |       |       | 32   |             | 35      | 76  | 10        | 2033-050       |          |
| VPE-3075  | 300       | 750 |    |    | 30 |    |       |       | 40   |             | 32      | 102 |           | 2033-051       |          |
| VPE-3090  | 300       | 870 | 30 | 25 | 30 | M8 | 70    | 10    | 48   | AC220V      | 40      | 115 |           | 2033-051A      |          |
| VPE-30100 | 300       | 990 |    |    | 30 |    |       |       | 56   |             | 35      | 127 |           | 2033-052       |          |
| VPE-4040  | 420       | 430 |    |    | -  |    |       |       | 36   |             | 18      | 68  |           | 2033-052A      |          |
| VPE-4060  | 420       | 590 |    |    | 30 |    |       |       | 48   |             | 25      | 102 |           | 2033-053       |          |
| VPE-4075  | 420       | 750 |    |    | 30 |    |       |       | 60   |             | 30      | 135 |           | 2033-054       |          |
| VPE-40100 | 420       | 990 |    |    | 30 |    |       |       | 84   |             | 45      | 168 |           | 2033-055       |          |
| VPE-5060  | 480       | 590 |    |    | 30 |    |       |       | 56   |             | 28      | 126 | 15        | 2033-060       |          |
| VPE-5080  | 480       | 750 |    |    | 30 |    |       |       | 70   |             | 35      | 168 |           | 2033-061       |          |
| VPE-50100 | 480       | 990 |    |    | 30 |    |       |       | 98   |             | 50      | 210 |           | 2033-062       |          |



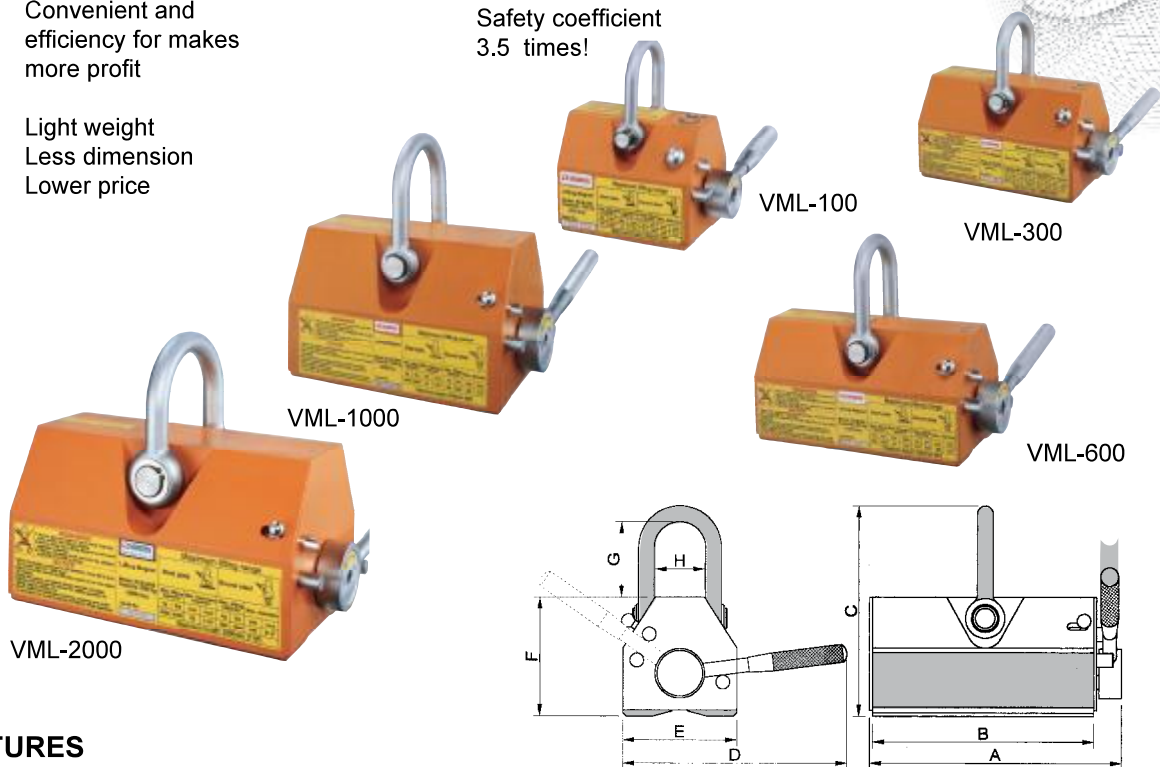
# Permanent Magnetic Lifter (ON/OFF Type)



Convenient and efficiency for makes more profit

Light weight  
Less dimension  
Lower price

Safety coefficient 3.5 times!



## FEATURES

- Each size suit for plate type & round type steel using.
- All new models with "light weight" less dimension" and "lower price".
- Made by permanent magnet, require no power supply, thus eliminating hazards due to failure wiring system as electric type.
- It features powerful magnetic force, with 3.3 times safety coefficient makes more safety in use.

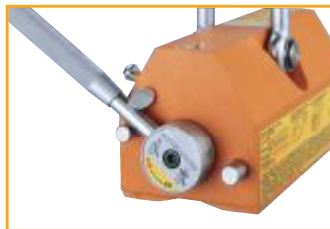
## OPERATION

With ON/OFF switch, it is very easy and convenient to operate.  
See as the example pictures as below

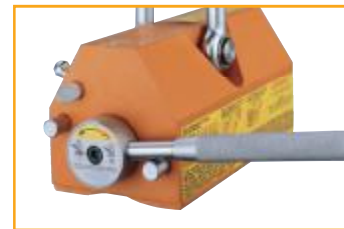
### Notice:

Never moves the handle to "ON" side, except on an iron object of holding.

### ON



### OFF



## DIMENSIONS

| ORDER NO. | Capacity     | A           | B          | C           | D           | E          | F          | G          | H          | Weight       | SAFETY COEFFICIENT | CODE NO. |
|-----------|--------------|-------------|------------|-------------|-------------|------------|------------|------------|------------|--------------|--------------------|----------|
|           | kg<br>lbs    | mm<br>inch  | mm<br>inch | mm<br>inch  | mm<br>inch  | mm<br>inch | mm<br>inch | mm<br>inch | mm<br>inch | kg<br>lbs    |                    |          |
| VML-100   | 100<br>200   | 107<br>4.2  | 84<br>3.3  | 120<br>4.7  | 125<br>4.9  | 60<br>2.4  | 71<br>2.8  | 41<br>1.6  | 30<br>1.2  | 2.7<br>5.5   | x3.3 times         | 2018-060 |
| VML-300   | 300<br>660   | 180<br>7.1  | 155<br>6.1 | 156<br>6.1  | 185<br>7.3  | 90<br>3.6  | 93<br>3.7  | 51<br>2.0  | 41<br>1.6  | 9.1<br>18.9  |                    | 2018-061 |
| VML-600   | 600<br>1320  | 255<br>10   | 224<br>8.8 | 212<br>8.3  | 260<br>10.2 | 115<br>4.5 | 120<br>4.7 | 77<br>3.0  | 52<br>2.0  | 21.5<br>46   |                    | 2018-062 |
| VML-1000  | 1000<br>2200 | 280<br>11   | 245<br>9.6 | 286<br>11.3 | 371<br>14.6 | 165<br>6.5 | 169<br>6.7 | 97<br>3.8  | 87<br>3.4  | 53.4<br>101  |                    | 2018-063 |
| VML-2000  | 2000<br>4400 | 422<br>16.6 | 380<br>15  | 348<br>13.7 | 512<br>20.2 | 216<br>8.5 | 215<br>8.5 | 105<br>4.1 | 121<br>4.8 | 127.8<br>259 |                    | 2018-064 |

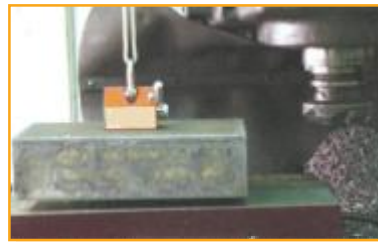


# Permanent Magnetic Lifter (ON/OFF Type)



## APPLICATIONS

- Suitable for move plate steel, block steel and round steel, such as machine parts, press molds, plastic molds and iron material .....etc.



## LOAD OF HOLDING POWER

- The load of holding power will changes depending on the thickness, attractive face roughness and quality of material and clearance between the workpiece with magnet.

Table of difference in holding power by thickness

|     | Thickness |          | Percentage of lifting capacity |          |          |         |         |         |
|-----|-----------|----------|--------------------------------|----------|----------|---------|---------|---------|
|     | mm        | inch     | VML-3000                       | VML-2000 | VML-1000 | VML-600 | VML-300 | VML-100 |
| T1  | up 60     | up 2.36" | 100%                           | 100%     | 100%     | 100%    | 100%    | 100%    |
| T2  | 55        | 2.16"    | 95%                            |          |          |         |         |         |
| T3  | 50        | 1.97"    | 90%                            |          |          |         |         |         |
| T4  | 45        | 1.77"    | 85%                            |          |          |         |         |         |
| T5  | 40        | 1.57"    | 80%                            |          |          |         |         |         |
| T6  | 35        | 1.38"    | 70%                            | 75%      | 90%      |         |         |         |
| T7  | 30        | 1.18"    | 60%                            | 65%      | 80%      |         |         |         |
| T8  | 25        | 0.98"    | 50%                            | 55%      | 70%      | 90%     |         |         |
| T9  | 20        | 0.79"    | 40%                            | 45%      | 60%      | 75%     | 90%     |         |
| T10 | 15        | 0.59"    | 30%                            | 35%      | 50%      | 60%     | 70%     |         |
| T11 | 10        | 0.39"    | 20%                            | 25%      | 35%      | 45%     | 50%     | 70%     |
| T12 | 5         | 0.20"    | 10%                            | 15%      | 20%      | 25%     | 30%     | 40%     |

Table of difference in holding power by attractive face roughness For all models

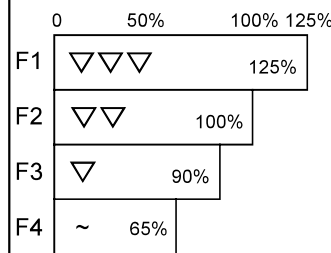
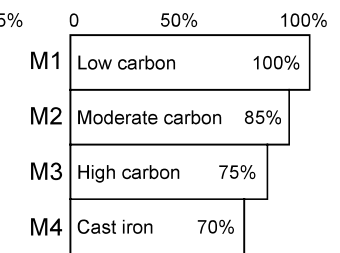


Table of difference in holding power by material quality For all models



Calculating Formula for "Range of Lifting Capacity" → (TxFxMxCapacity of Lifter)

Example:  
Terms of workpiece: T8, F1 and M2  
90% x 125% x 85% x 600kgs (VML-600)=573kgs

## SAFETY COEFFICIENT x 3.3 times

The capacity of magnet indicated as 1/3.3 of holding power, it means the real holding power is 3.3 times of capacity. For example the capacity of VML-600 is 600kgs (1320lbs) but the real holding power is 1980kgs (4350lbs).

The large safety coefficient is consideration for ensuring the use in safety.

## MAXIMUM LIFTING RANGE

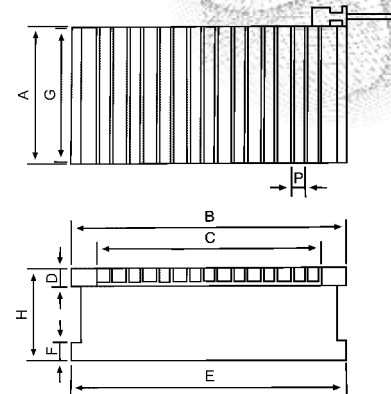
| FORM OF MATERIAL | STEEL PLATE          |                        | ROUND STEEL          |              | Maximum length |
|------------------|----------------------|------------------------|----------------------|--------------|----------------|
|                  | Max.lifting capacity | Min.thickness required | Max.lifting capacity | Max.diameter |                |
| ORDER NO.        | kg<br>lbs            | mm<br>inch             | kg<br>lbs            | mm<br>inch   | mm<br>inch     |
| VML-100          | 100<br>220           | 15<br>0.59"            | 45<br>99             | 150<br>5.9"  | 1000<br>40"    |
| VML-300          | 300<br>660           | 25<br>0.98"            | 135<br>300           | 250<br>9.8"  | 1500<br>60"    |
| VML-600          | 600<br>1320          | 30<br>1.18"            | 270<br>600           | 350<br>13.8" | 2000<br>80"    |
| VML-1000         | 1000<br>2200         | 40<br>1.57"            | 450<br>990           | 450<br>17.8" | 2500<br>98"    |
| VML-2000         | 2000<br>4400         | 55<br>2.16"            | 900<br>1980          | 550<br>21.6" | 3000<br>118"   |
| VML-3000         | 3000<br>6600         | 60<br>2.36"            | 1350<br>2970         | 650<br>25.6" | 3500<br>138"   |



# Standard Pole Electro Magnetic Chuck



MILLING M / C TYPE



Unit:mm

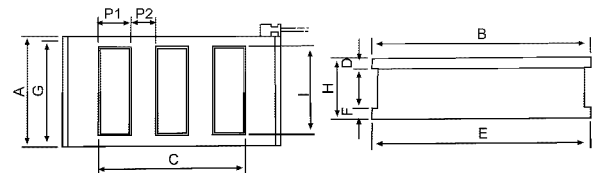
## APPLICATION

Most suitable for grinding operation, of standard electromagnetic chuck.

| ORDER NO.  | DIMENSION | CHUCKING SIZE |      |     |    | POLE PITCH | CHUCK MOUNTING FACE |      |    |    | VOLTAGE | CURRENT | WEIGHT (kg) | CODE NO. |
|------------|-----------|---------------|------|-----|----|------------|---------------------|------|----|----|---------|---------|-------------|----------|
|            |           | A             | B    | C   | D  |            | P                   | G    | E  | F  |         |         |             |          |
| VEM-1530A  | 150x300   | 150           | 300  | 228 | 20 | 15(3+12)   | 144                 | 316  | 20 | 70 | DC-90V  | 0.15A   | 21          | 2015-221 |
| VEM-1535A  | 150x350   | 150           | 350  | 288 | 20 | 15(3+12)   | 144                 | 366  | 20 | 70 | DC-90V  | 0.18A   | 25          | 2015-222 |
| VEM-1545A  | 150x450   | 150           | 450  | 378 | 20 | 15(3+12)   | 144                 | 466  | 20 | 70 | DC-90V  | 0.24A   | 32          | 2015-223 |
| VEM-2040A  | 200x400   | 200           | 400  | 348 | 20 | 15(3+12)   | 194                 | 416  | 20 | 70 | DC-90V  | 0.47A   | 38          | 2015-224 |
| VEM-2045A  | 200x450   | 200           | 450  | 378 | 20 | 15(3+12)   | 194                 | 466  | 20 | 70 | DC-90V  | 0.35A   | 43          | 2015-225 |
| VEM-2550A  | 250x500   | 250           | 500  | 438 | 20 | 15(3+12)   | 240                 | 500  | 20 | 70 | DC-90V  | 0.73A   | 67          | 2015-226 |
| VEM-3060A  | 300x600   | 300           | 600  | 529 | 20 | 15(3+12)   | 290                 | 600  | 20 | 70 | DC-90V  | 0.97A   | 97          | 2015-227 |
| VEM-4080A  | 400x800   | 400           | 800  | 725 | 25 | 19(3+16)   | 390                 | 800  | 20 | 80 | DC-90V  | 1.56A   | 182         | 2015-228 |
| VEM-40100A | 400x1000  | 400           | 1000 | 936 | 25 | 19(3+16)   | 390                 | 1000 | 20 | 80 | DC-90V  | 1.60A   | 228         | 2015-229 |
| VEM-50100A | 500x1000  | 500           | 1000 | 936 | 25 | 19(3+16)   | 490                 | 1000 | 20 | 80 | DC-90V  | 1.72A   | 285         | 2015-230 |



# Super-Powerful Electric Magnetic Chuck



## APPLICATION

Most efficient for heavy cutting with milling machine, shaper, planer and planomiller. It displays the power for the thick work and the high speed cutting operation.

Unit:mm

| ORDER NO.  | DIMENSION | CHUCKING SIZE |      |     |    |     | POLE PITCH |    | CHUCK MOUNTING FACE |      |    |     | VOLTAGE | CURRENT | WEIGHT N.W. (kg) | CODE NO. |
|------------|-----------|---------------|------|-----|----|-----|------------|----|---------------------|------|----|-----|---------|---------|------------------|----------|
|            |           | A             | B    | C   | D  | I   | P1         | P2 | G                   | E    | F  | H   |         |         |                  |          |
| VEM-2040Z  | 200x400   | 200           | 400  | 332 | 20 | 160 | 40         | 35 | 194                 | 400  | 20 | 110 | DC-90V  | 0.71    | 54               | 2015-251 |
| VEM-2050Z  | 200x500   | 200           | 500  | 422 | 20 | 160 | 48         | 34 | 194                 | 500  | 20 | 110 | DC-90V  | 0.91    | 75               | 2015-252 |
| VEM-2060Z  | 200x600   | 200           | 600  | 520 | 20 | 160 | 48         | 30 | 194                 | 600  | 20 | 110 | DC-90V  | 1.00    | 80               | 2015-253 |
| VEM-2550Z  | 250x500   | 250           | 500  | 422 | 20 | 200 | 42         | 34 | 240                 | 500  | 20 | 120 | DC-90V  | 1.16    | 90               | 2015-254 |
| VEM-3060Z  | 300x600   | 300           | 600  | 520 | 20 | 240 | 48         | 30 | 290                 | 600  | 20 | 120 | DC-90V  | 1.63    | 130              | 2015-255 |
| VEM-4080Z  | 400x800   | 400           | 800  | 718 | 25 | 340 | 48         | 30 | 390                 | 800  | 20 | 120 | DC-90V  | 2.53    | 230              | 2015-256 |
| VEM-40100Z | 400x1000  | 400           | 1000 | 917 | 25 | 340 | 45         | 35 | 390                 | 1000 | 20 | 120 | DC-90V  | 2.96    | 288              | 2015-257 |
| VEM-50100Z | 500x1000  | 500           | 1000 | 917 | 25 | 430 | 45         | 35 | 490                 | 1000 | 20 | 120 | DC-90V  | 3.96    | 360              | 2015-258 |
| VEM-60100Z | 600x1000  | 600           | 1000 | 917 | 25 | 530 | 45         | 35 | 590                 | 1000 | 20 | 120 | DC-90V  | 5.30    | 432              | 2015-259 |

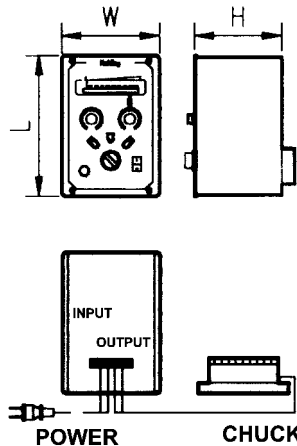


# Chuck Controller (For Rectify & Demagnetize)



ORDER NO. VCC-705(5A)

For VGI-618~2048 / VLZ-510~612 / VIW-612~1224

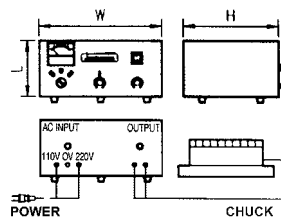


## FEATURES

- Suitable for standard type of electric magnetic chucks.
- With current capacity of 5A; demagnetizing time is 6-15 seconds.
- Precisely adjust the magnetic force of electric magnetic chucks and indicate LED voltage.
- Suitable for any kind of electric magnetic chucks.

ORDER NO. VCC-805A (10A) FOR VGI-2060 / VEA-816~1640

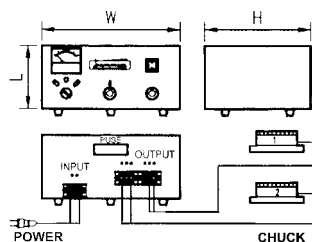
VCC-815 (15A) FOR VEA-2040~VEA2460 / VLZ-2060



## FEATURES

- Suitable for standard type of electric magnetic chucks.
- With current capacity of 10A and 15A; demagnetizing time is 6-15 seconds.
- Precisely adjust the magnetic force of electric magnetic chucks and indicate LED voltage and current.
- Suitable for any kind of electric magnetic chucks.

ORDER NO. VCC-820 (20A) FOR VEA-2460~



## FEATURES

- Suitable for super powerful type of big electric magnetic chucks and could control 2 chucks at the same time.
- With current capacity of 20A; demagnetizing time is 8-15 seconds.
- Precisely adjust the magnetic force of electric magnetic chucks and indicate LED voltage and current.
- Built-in fan for radiating heat.
- Suitable for any kind of electric magnetic chucks.

Unit:mm

| ORDER NO. | INPUT VOLTAGE (SINGLE PHASE) | OUTPUT    |         | DIMENSION |     |     | NET WEIGHT (KGS) | CODE NO. |
|-----------|------------------------------|-----------|---------|-----------|-----|-----|------------------|----------|
|           |                              | VOLTAGE   | CURRENT | L         | W   | H   |                  |          |
| VCC-705   | AC 110V/220V                 | DC 0-100V | 5A      | 200       | 137 | 122 | 3.5              | 2015-380 |
| VCC-805A  | AC 110/220/380/415/440V      | DC 0-100V | 10A     | 150       | 330 | 260 | 18               | 2015-381 |
| VCC-815   | AC 220/380/415/440V          | DC 0-120V | 15A     | 150       | 330 | 260 | 20               | 2015-382 |
| VCC-820   | AC 220/380/415/440V          | DC 0-120V | 20A     | 180       | 385 | 295 | 32               | 2015-383 |

# Magnetic Lifter



## CAM TYPE

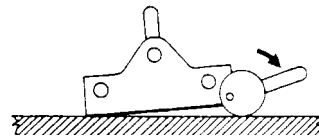
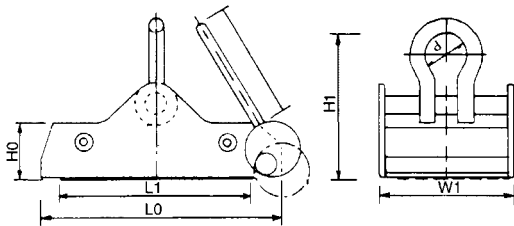
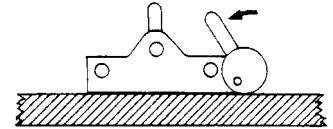


### FEATURES

- Normal operation is not influenced on power off or system breakdown, as there is permanent magnet.
- Cam mechanism, easy operation.
- Ground surface of workpiece may be attracted to be scrap occasionally, please be careful.

### LOADING

- Take the magnetic table on the workpiece, and move it at the vertical position.



### UNLOADING

- Move the level at the horizontal position, the workpiece will be separated.

| ORDER NO. | CAPACITY | W1  | L1  | L0  | H0 | H1  | d  | l   | NET WEIGHT (KGS) | CODE NO. |
|-----------|----------|-----|-----|-----|----|-----|----|-----|------------------|----------|
| VGP-100   | 1000kg   | 204 | 298 | 366 | 65 | 125 | 50 | 135 | 25.8             | 2018-040 |
| VGP-200   | 2000kg   | 330 | 380 | 445 | 65 | 130 | 50 | 135 | 46.8             | 2018-041 |

# Magnetic Lifter

## HANDLE TYPE



VML-60



VML-100-S

### FEATURES

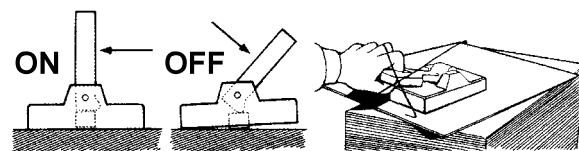
- Work is held and released very smoothly.
- Most suitable to move materials or semi-finished products such as black steel plate, flat iron and other materials etc.

### HOLDING POWER

It depends on the attractive face, quality and thickness of material and clearance between the material and magnet.

### MAXIMUM HOLDING POWER

Workpiece must be thick enough and the surface must be free of dust. magnetic attraction is best and with low carbon-soft steels.



VML-150

Unit:mm

| ORDER NO. | CAPACITY | L    | W   | H   | N.W (KGS) | CODE NO.  |
|-----------|----------|------|-----|-----|-----------|-----------|
| VML-60    | 60kgf    | 60   | 50  | 55  | 1.3       | 2 018-050 |
| VML-100-S | 100kgf   | 75   | 50  | 55  | 1.7       | 2018-051  |
| VML-130   | 130kgf   | 120  | 50  | 55  | 1.9       | 2018-053  |
| VML-80    | 80kgf    | 55.5 | 50  | 62  |           | 2018-054  |
| VML-140   | 140kgf   | 120  | 50  | 55  |           | 2018-055  |
| VML-150   | 150kgf   | 140  | 100 | 140 | 2.5       | 2018056   |

## Magnetic Transisting Block



VCP-1



VCP-3



VCP-2



- VCP-1 Chuck Parallels  
1"x2"x4" Matched pair.
- VCP-2 Chuck Blocks  $2\frac{3}{8}$ "  
 $1\frac{7}{8}$ "x $2\frac{3}{8}$ "x2" Matched pair.
- VCP-3 Chuck Block  
 $1\frac{4}{5}$ "x $2\frac{3}{10}$ "x $4\frac{3}{10}$ "single
- VCP-4 Chuck Block  
Each one of VCP-1 & VCP-2

- The V-Blocks and Parallels transfer the magnetism from permanent magnetic chucks. The steel used in all V-Blocks and Parallels is selected for the highest magnetic transfer and is cast integrally with aluminum.

| ORDER NO. | WEIGHT KGS | CODE NO. |
|-----------|------------|----------|
| VCP-1     | 1.3        | 2015-401 |
| VCP-2     | 1.2        | 2015-402 |
| VCP-3     | 1.4        | 2015-403 |
| VCP-4     | 2.5        | 2015-404 |

## Magnetic Transisting Block Set

ORDER NO.VCP-6 CODE NO.2015-410




WEIGHT:4.2kgs



Non-magnetic laminated plates and blocks are extras to increase the versatility of chucks. These plates and blocks offer excellent guidance of the magnetic force, and can be used in combination with chucks as 'extensions' for the clamping of workpieces of complex shapes.

### BOXED SET

Comprises a selected set of 4 pairs of blocks

| NO. of Blocks | STYLE  | LxHxWxPCS   | USED MODEL |
|---------------|--|-------------|------------|
| 1Pair         |  | 60x35x15x2  | VCP-0      |
| 2Pair         |  | 100x50x25x2 | VCP-1      |
| 1Pair         |  | 48x60x50x2  | VCP-2      |

## Magnetic Adjustable Link

ORDER NO.VCP-5 CODE NO.2015-420

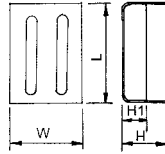
WEIGHT:0.8kg



- Each block 2"x1"x1".Length overall:  $4\frac{1}{8}$ ". width over all  $2\frac{1}{8}$ ".
- For Holding and welding.
- Magnetic blocks can be set at any angle by adjustment and locking of the wing nut. When used in multiples, a number of sheets can be held in complicated arrangement.
- Compact in size for holding work in confined spaces.



## Magnetic Steel Sheet Separator



### APPLICATION

- Suitable for separating a pile of thin iron plates or for chips separation.

### FEATURES

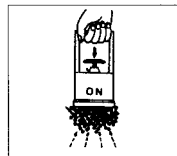
- By the principle of mutual repulsion between same magnetic poles, this item enable easy separation of thin iron plates.
- Also useable for chips separation on the small conveyer belt.



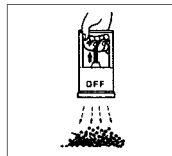
Unit:mm

| ORDER NO. | DIMENSION |     |    |    | NET WEIGHT KGS | CODE NO. |
|-----------|-----------|-----|----|----|----------------|----------|
|           | L         | W   | H  | H1 |                |          |
| VCP-10    | 130       | 130 | 65 | 35 | 2.6            | 2015-430 |
| VCP-11    | 210       | 155 | 65 | 35 | 4.2            | 2015-431 |

## Magnetic Chip Collector



Magnet turned ON attracts Powerfully.



Magnet turned OFF Releases by Piling Up Lever.

### APPLICATION

- You can use it in a wide range of fields for machining, casting food chemical processing, etc.
- Most suitable for collecting iron pieces scattered on the floor or mixed in the medium, for putting in order, and holding the work at the buffing and other types of operations. This is conveniently applied to uses in selecting and collecting iron powder and granule materials; even for house-hold and educational uses.

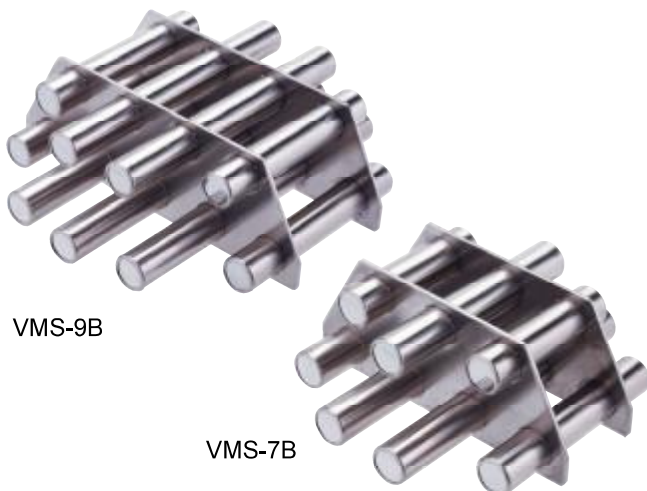


| ORDER NO. | Dimension | Mass kgs | Weight kgs | CODE NO. |
|-----------|-----------|----------|------------|----------|
| VCP-15    | ∅112x178H | 75       | 1.9        | 2015-440 |

### FEATURES

- Magnetic force is turned ON/OFF just by operating the level lightly with a hand.
- Powerful magnet ensure very strong adsorptive force with wide attractive face.

## Magnetic Separating Bar Unit



Magnetic Separating Bar Unit made with Powerful magnet. it is essential to Increase operation efficiency in removing on substances from powder and grain Materials, as in the industries of chemical, various and plastic...etc.

A wide range of applications and easy to mount.

TEMPERATURE LIMIT 60°C

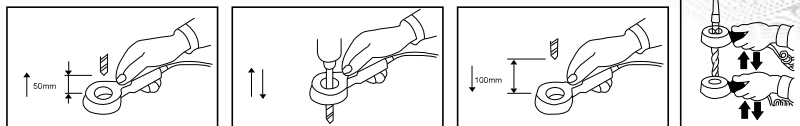
Unit:mm

| ORDER NO. | DIMENSION (LxHxW) | WEIGHT KGS | CODE NO. |
|-----------|-------------------|------------|----------|
| VMS-7B    | 180x170x75        | 2.4        | 2015-450 |
| VMS-9B    | 239x220x65        | 3.8        | 2015-451 |

## Demagnetizer



- Suit for drill, end mill, hard ware, cutting tool...etc.
- Handy type, it can also use the cutting tool.



| ORDER NO. | INPUT VOLTAG | POWER | DUTY CYCLE | HOLE CAPACITY | WEIGHT KGS | CODE NO. |
|-----------|--------------|-------|------------|---------------|------------|----------|
| VDM-40    | AC110V/220V  | 80W   | 20%        | Ø40MM         | 1.3        | 2019-030 |



**HANDY TYPE  
FOR BIGGER OR HEAVY WORKPIECE**

- Suit for molding.
- Work perfectly in the narrow place.
- No need to remove the workpiece.



| ORDER NO. | INPUT VOLTAGE<br>(SINGLE PHASE) | CURRENT | USING TIME                               | DIMENSION |    |    | WEIGHT<br>KGS | CODE NO. |
|-----------|---------------------------------|---------|--|-----------|----|----|---------------|----------|
|           |                                 |         |  | L         | W  | H  |               |          |
| VDM-50    | 110V/220V/19H                   | 1.2A    | Demagnetize 1 minute<br>waiting 4 minute | 345       | 35 | 25 | 1             | 2019-031 |

## Demagnetizer



### FEATURES

- Suitable for general component spare parts, attachments, tools, etc, for fixed way demagnetization.
- Suitable for longtime use; be able to use continuously for 24 hours.
- With the design of double coils inside to avoid heat release.

### DELUXE TYPE

Unit:mm

| ORDER NO. | INPUT VOLTAGE | CAPACITY | DUTY CYCLE | DIMENSION |     |     | NW<br>KGS | CODE<br>NO. |
|-----------|---------------|----------|------------|-----------|-----|-----|-----------|-------------|
|           |               |          |            | L         | W   | H   |           |             |
| VDM-68    | 110V<br>220V  | AC-330VA | 100%       | 150       | 200 | 100 | 7.4       | 2019-001    |

## Demagnetizer



VDM-8, 11

### FEATURES

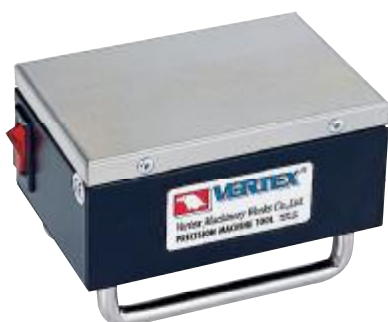
- Input voltage 110-220 Volts AC.
- With On-Off switch.
- Quickly Demagnetizes tools, drills punches, dies, etc. Held by magnetic chucks. Parts are demagnetized by drawing across surface.
- Voltage 200-240 should be ordered.

| ORDER NO. | INPUT VOLTAGE    | CAPACITY | WORKING SURFACE | HEIGHT | WEIGHT (KGS) | DUTY CYCLE | CODE NO. |
|-----------|------------------|----------|-----------------|--------|--------------|------------|----------|
| VDM-8     | AC- 110V<br>220V | 210VA    | 160X110         | 100    | 4.5          | 50%        | 2019-011 |
| VDM-11    | AC- 110V<br>220V | 550VA    | 200X280         | 30     | 16           | 100%       | 2019-021 |

Unit:mm

## Mini Type Demagnetizer

For Handy And Big Plate



| ORDER NO. | INPUT VOLTAGE    | CAPACITY | WORKING SURFACE | HEIGHT | WEIGHT (KGS) | DUTY CYCLE | CODE NO. |
|-----------|------------------|----------|-----------------|--------|--------------|------------|----------|
| VDM-9     | AC- 110V<br>220V | 110VA    | 123X83          | 83     | 1.8          | 90%        | 2019-020 |

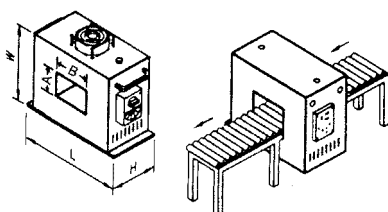
Unit:mm

## Tunnel Type Demagnetizer And Magnetizer



### FEATURES

- Merely using tools to pass through or move into a tunnel will cause a good demagnetizing effect.
- Suitable for planned automatic process; be adapted for delivery belts to proceed in order to increase productivity.
- Suitable for hand manual tools, etc. for filling magnetism.
- Suitable for large production of component spare parts, attachments, tools...etc.
- Suitable for longtime use; be able to use continuously for 24 hours.
- Super efficacy in demagnetizing and magnetizing; suitable for many kinds of metals.
- Attached a fan inside for dissipating heat.



| ORDER NO. | POWER SOURCE                  | CAPACITY | DIMENSION |     |     | THROUGH HOLE |     | NET WEIGHT KGS | DUTY CYCLE | CODE NO. |
|-----------|-------------------------------|----------|-----------|-----|-----|--------------|-----|----------------|------------|----------|
|           |                               |          | L         | W   | H   | A            | B   |                |            |          |
| VDM-150   | AC 220/380V<br>(single phase) | 3520AV   | 370       | 370 | 200 | 100          | 150 | 33             | 100%       | 2019-025 |
| VDM-250   |                               | 4840AV   | 470       | 370 | 200 | 150          | 250 |                |            | 52       |
| VDM-450   | AC 220/380V<br>(3 phase)      | 4400VA   | 700       | 500 | 200 | 250          | 450 | 80             |            | 2019-027 |

## Chip Collector Mini Handy Type



NEW



- Pull the trigger to drop attracted items easily.
- Permanent magnet.
- Light and handy design fitting ergonomics.
- Easy to pick up various kinds of hand of hand tools and small iron or steel parts for office, house and factory.
- Impact-proof plastic materials.

Unit:mm

| ORDER NO. | PACKING   | MASS KGS | CUFT  | DIMENSION |     |     | WEIGHT KGS | CODE NO. |
|-----------|-----------|----------|-------|-----------|-----|-----|------------|----------|
|           |           |          |       | L         | W   | H   |            |          |
| VCC-16    | Color BOX | 4.9      | 0.09' | 110       | 110 | 190 | 0.7        | 2019-040 |

## Chip Collector With Adjustable Arm Type

NEW



- Work perfectly in the narrow space.
- Pick up ferrous metal items such as tools, bolt, paper clips, nails, etc.
- Deluxe handle for comfort.
- Easy to use, safe, practical and time saving.
- Permanent magnet.
- Weight : 2 kgs

| ORDER NO. | MAGNETIC BASE | MASS | CUFT | TOTAL LENGTH | CODE NO.  |
|-----------|---------------|------|------|--------------|-----------|
| VCC-17A   | 120x70m/m     | 50kg | 0.4' | 700m/m       | 2019-041A |

## Chip Collector With Wheels

NEW



- Easy to use, safe and practical time saving device.
- Release magnetic pick up tool has a magnetic device which enable to attract any metal items and spare parts laying on the floor without the trouble to pick them up one by one.
- Pull the trigger to release magnetic force.
- Permanent magnet.

| ORDER NO. | PACKING | MASS  | CUFT  | LENGTH      | WEIGHT KGS | TOTAL WIDTH | CODE NO. |
|-----------|---------|-------|-------|-------------|------------|-------------|----------|
| VCC-19    | In Bulk | 8.9kg | 1.15' | 720~1035m/m | 1.5        | 377m/m      | 2019-043 |

## Chip Collector With Flexible Arm

Flexible Magnetic Pick-Up Tool

WEIGHT:0.4kg



| ORDER NO. | VCC-20       |
|-----------|--------------|
| PACKING   | Tied On Card |
| MASS      | 5kgs         |
| CUFT      | 0.04'        |
| LENGTH    | 533m/m       |
| CAPACITY  | 12 lbs       |
| CODE NO.  | 2019-044     |

## Chip Collector With LED

Lighted Flexible Magnetic Pick-Up Tool

WEIGHT:0.2kg

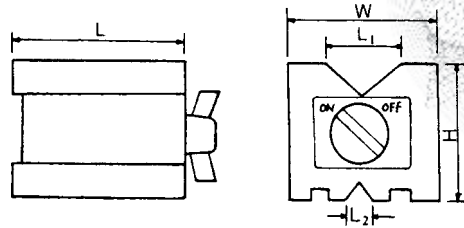


| ORDER NO. | VCC-21       |
|-----------|--------------|
| PACKING   | Tied On Card |
| MASS      | 0.5kg        |
| CUFT      | 0.04'        |
| LENGTH    | 533m/m       |
| CAPACITY  | 0.7 lbs      |
| CODE NO.  | 2019-045     |

With 2pc 1.5V batteries

## Magnetic V Block

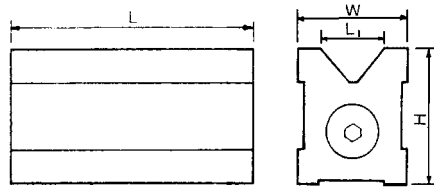
1 PCS



| ORDER NO. | Magnetic Power(pull) | Dimension     |             |             |             |             | Wt. kgs | CODE NO. |
|-----------|----------------------|---------------|-------------|-------------|-------------|-------------|---------|----------|
|           |                      | H             | W           | L           | L1          | L2          |         |          |
| VCP-25    | 70kgs                | 95.3<br>3.75" | 70<br>2.76" | 101.6<br>4" | 50<br>1.97" | 20<br>0.75" | 3.9     | 2015-501 |

## Magnetic V Block

1 PCS

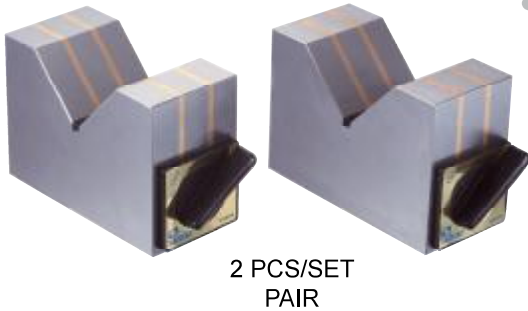


| ORDER NO. | Magnetic Power(pull) | Dimension   |             |              |            | Wt. kgs | CODE NO. |
|-----------|----------------------|-------------|-------------|--------------|------------|---------|----------|
|           |                      | H           | W           | L            | L1         |         |          |
| VCP-26    | 30kgs                | 73<br>2.87" | 54<br>2.13" | 70<br>2.76"  | 38<br>1.5" | 1.8     | 2015-510 |
| VCP-27    | 35kgs                | 73<br>2.87" | 60<br>2.36" | 125<br>4.29" | 38<br>1.5" | 3.3     | 2015-511 |

## Magnetic V Block

### Magnetic V-Block

- Two pieces finished to the same dimension and accuracy are used together as a set.



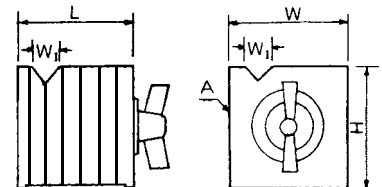
2 PCS/SET  
PAIR

| ORDER NO. | Magnetic Power(pull) | Dimension    |             |              | Width of V  | Wt. kgs | CODE NO. |
|-----------|----------------------|--------------|-------------|--------------|-------------|---------|----------|
|           |                      | H            | W           | L            |             |         |          |
| VCP-29    | 17kgs                | 74<br>2.91"  | 45<br>1.77" | 110<br>4.33" | 60<br>2.36" | 4.9     | 2015-521 |
| VCP-30    | 23kgs                | 100<br>3.94" | 50<br>1.97" | 150<br>5.91" | 90<br>3.54" | 8.9     | 2015-522 |

## Magnetic Square Block



- The V-Blocks and Parallels transfer the magnetism from permanent magnetic chucks. The steel used in all V-Blocks and Parallels is selected for the highest magnetic transfer and is cast integrally with aluminum.



| ORDER NO. | Mag Power of V groove | Mag. Power of base | H            | W            | L            | W1          | Wt. kgs | CODE NO. |
|-----------|-----------------------|--------------------|--------------|--------------|--------------|-------------|---------|----------|
| VCP-31    | 25kgs                 | 50kgs              | 100<br>3.94" | 100<br>3.94" | 100<br>3.94" | 26<br>1.02" | 6.5     | 2015-530 |
| VCP-32    | 50kgs                 | 140kgs             | 150<br>5.91" | 150<br>5.91" | 150<br>5.91" | 32<br>1.26" | 20.4    | 2015-531 |



# Magnetic Tools FOR DIAL GAUGE, INDICATORS



FIXED ARM TYPE VMB-B,01,02  
THE DIAL CLAMP HOLE Ø6.5 & Ø8



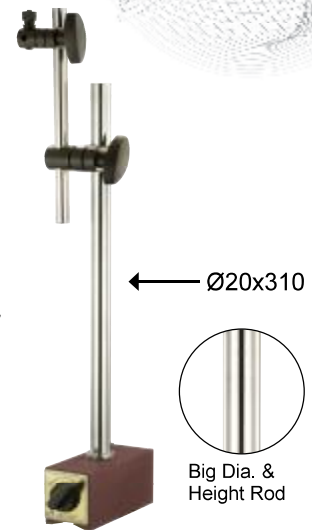
ORDER NO. VMB-B  
MAGNETIC BASE /80kgs



ORDER NO. VMB-01  
MAGNETIC BASE  
(ADJUSTABLE TYPE) /80kgs



ORDER NO. VMB-02  
MAGNETIC BASE  
(ADJUSTABLE TYPE) /80kgs



ORDER NO. VMB-03  
MAGNETIC BASE  
HEIGHT ROD TYPE/130kgs

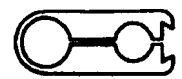
← Ø12x171ℓ

← Ø20x310



Big Dia. & Height Rod

| ORDER NO. | BASE SIZE LXWXH(MM) | HOLDING POWER | MIN ROD O.D XL | SUB ROD OD XL | WEIGHT (KGS) | CODE NO. |
|-----------|---------------------|---------------|----------------|---------------|--------------|----------|
| VMB-B     | 62X50X55            | 80KGS         | Ø12X173        | Ø10X162       | 1.6          | 2015-601 |
| VMB-01    | 62X50X55            | 80KGS         | Ø12X176        | Ø10X150       | 1.6          | 2015-602 |
| VMB-02    | 62X50X55            | 80KGS         | Ø12X171        | Ø10X153       | 1.6          | 2015-603 |
| VMB-70    | 62X50X55            | 100KGS        | Ø25X198        | Ø25X116       | 1.7          | 2015-604 |
| VMB-106   | 75X50X55            | 100KGS        | Ø25X125        | Ø25X125       | 1.9          | 2015-605 |
| VMB-106H  | 75X50X55            | 100KGS        | Ø25X125        | Ø25X125       | 2.2          | 2015-606 |
| VMB-03    | 115X50X55           | 130KGS        | Ø20X310        | Ø14X200       | 3.9          | 2015-607 |



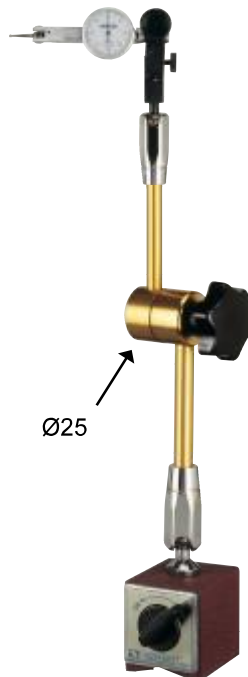
↑ Ø8

↑ Ø6.5

UNIVERSAL ARM TYPE VMB-70,106,106H  
THE DIAL CLAMP HOLE Ø6.5, Ø8 & DOVETAIL



ORDER NO. VMB-70  
DELUXE UNIVERSAL  
MAGNETIC BASE /100kgs



↑ Ø25

ORDER NO. VMB-106  
MECHANICAL ARM  
MAGNETIC BASE /100kgs



↑ Ø25

ORDER NO. VMB-106H  
HYDRAULIC ARM  
MAGNETIC BASE /100kgs

The head also suit for dial indicators



ORDER NO. VMB-06  
FLEXIBLE ARM  
WITH MAGNETEC BASE

ORDER NO. VML-A  
MAGNETIC BASE AND  
WORKING BEAM

ORDER NO. VML-B  
MAGNETIC  
WORKING BEAM

ORDER NO. VML-C  
MAGNETIC  
WORKING BEAM

| ORDER NO. | BASE SIZE<br>LXWXH(MM) | HOLDING<br>POWER | MAIN ROD<br>O.DXL | WEIGHT<br>(KGS) | CODE NO. |
|-----------|------------------------|------------------|-------------------|-----------------|----------|
| VMB-06    | 55.5X50X62             | 75KGS            |                   | 1.6             | 2015-610 |
| VML-A     | 62X50X55.5             | 75KGS            | Ø20X200           | 1.5             | 2015-611 |
| VML-B     | 62X50X55               | 75KGS            | Ø26X200           | 1.5             | 2015-612 |
| VMB-00    | 55.5X50X62             | 80KGS            |                   | 1.1             | 2015-613 |
| VMB-11    | 120X50X55              | 140KGS           |                   | 2.1             | 2015-614 |
| VMB-12    | 60X50X55               | 80KGS            |                   | 1.1             | 2015-615 |
| VML-C     | 60X50X55               | 80KGS            | Ø20X460           | 2.2             | 2015-616 |
| VML-M     | 60X50X55               | 80KGS            | Ø15X325           | 1.7             | 2015-617 |



ORDER NO. VML-M  
MAGNETIC BASE WITH  
MAGNIFYING GLASS  
M8X1.25p,80kgs

ORDER NO. VMB-00  
MAGNETIC BASE ONLY  
M8X1.25p,80kgs

ORDER NO. VMB-11  
MAGNETIC BASE ONLY  
M8X1.25p,140kgs

ORDER NO. VMB-12  
WHEEL DRESSER  
CLAMP HOLE 12MM  
WITHOUT DIAMOND  
DRESSER PEN

# Magnetic Tools



ORDER NO. VMF-112  
MINI MAGNETIC BASE



ORDER NO. VH-70  
MINI MAGNETIC BASE



ORDER NO. VMF-102  
MINI DELUXE UNIVERSAL  
MAGNETIC BASE  
SUITABLE FOR EDM USING.



ORDER NO. VMS-1/4  
ORDER NO. VMS-3/8  
STEEL HOSE WITH  
NOZZLE

| ORDER NO. | BASE SIZE<br>LXWXH(MM) | HOLDING<br>POWER | MAIN ROD<br>O.D X L | SUB ROD<br>O.D X L | WEIGHT<br>(KGS) | CODE NO. |
|-----------|------------------------|------------------|---------------------|--------------------|-----------------|----------|
| VMF-112   | 30X30X30               | 17KGS            | Ø20 X 70            | Ø20 X 65           | 0.6             | 2015-619 |
| VH-70     | 31X31X32               | 15KGS            | Ø10 X 70            | Ø6 X 90            | 0.4             | 2015-620 |
| VMF-102   | 44X50X38               | 22KGS            | Ø20 X 70            | Ø20 X 65           | 0.6             | 2015-621 |
| VMS-1/4   |                        |                  | Ø11 X 370           | HOSE THREAD<br>1/4 | 0.2             | 2015-640 |
| VMS-3/8   |                        |                  | Ø15 X 370           | HOSE THREAD<br>3/8 | 0.4             | 2015-641 |
| VMH-54    | 62X50X55.5             | 75KGS            | Ø16 X 330           | 2PCS.HOSE          | 1.4             | 2015-622 |
| VMH-62    | 62X50X55.5             | 75KGS            | Ø16 X 330           | 3PCS.HOSE          | 1.5             | 2015-623 |
| VMH-63    | 62X50X55.5             | 75KGS            | Ø11 X 330           | 1PCS.HOSE          | 1.6             | 2015-642 |
| VMH-64    | 62X50X55.5             | 75KGS            | Ø11 X 330           | 2PCS.HOSE          | 2               | 2015-643 |
| VMH-65    | 62X50X55.5             | 75KGS            | Ø11 X 330           | 3PCS.HOSE          | 2.2             | 2015-644 |



ORDER NO. VMH-54  
(2 HOSE)  
MAGNETIC BASE  
WITH HOSE NOZZLE



ORDER NO. VMH-62  
(3 HOSE)  
MAGNETIC BASE  
WITH HOSE NOZZLE



ORDER NO. VMH-63  
(1 HOSE)  
MAGNETIC BASE  
WITH STEEL NOZZLE



ORDER NO. VMH-64  
(2 HOSE)  
MAGNETIC BASE  
WITH STEEL NOZZLE



ORDER NO. VMH-65  
(3 HOSE)  
MAGNETIC BASE  
WITH STEEL NOZZLE



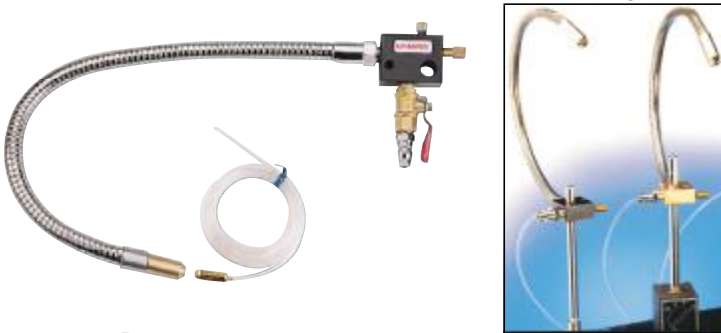


# Multi-Function Mist Coolant System



ORDER NO.VCS-500 CODE NO.2015-700

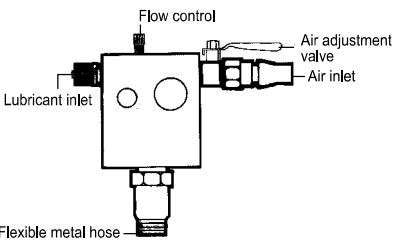
WEIGHT:0.8kg



## FEATURES

- Flexible functions as cooling, lubrication and blowing the metal chips can be performed at the same time.
- Designed and manufactured for improving machinability, cutting speed, and extending tool service life, Saving working time and production cost.
- It insures better quality of parts finishing and cutting performance.
- The unit help to creat micro-finish effect even working on tough alloy steels and exotic metals.

This mist coolant systems are suited to fit on lathe, milling, drilling, tapping, grinding, cutter grinding, NC, CNC, press, sawing machine.....



# Mist Coolant With Magnetic Base



ORDER NO. VMH-71 (1 HOSE)  
MAGNETIC BASE WITH  
MIST COOLANT SYSTEM

| ORDER NO. | BASE SIZE LXWXH(MM) | HOLDING POWER | MAIN ROD O.D X L | SUB ROD O.D X L | WEIGHT (kgs) | CODE NO. |
|-----------|---------------------|---------------|------------------|-----------------|--------------|----------|
| VMH-71    | 62X50X55.5          | 75KGS         | Ø15X500          | 1PCS.HOSE       | 2            | 2015-618 |



# Adjustable Magnetic Nozzle Kit



- The adjustable magnetic nozzle is suitable for cooling and lubricating in machining process.
- Can be prolonged the cutter life and advance the accuracy and beauty of workpiece.
- By different of usage, there are much models for selection.
- Machine tool made by customer's specification and cooperated to develop.
- When using, please take out the spacer (under the magnetic base)



WITH PLASTIC NOZZLE & VALVE  
O.D.34XH230mm

WITH STEEL NOZZLE  
O.D.68X330H

| ORDER NO. | MAGNETIC FORCE | CODENO NO. |
|-----------|----------------|------------|
| CL-01     | 0.3kgs         | 2015-624   |
| CL-02     |                | 2015-625   |
| CL-03     |                | 2015-626   |
| CL-01A    |                | 2015-627   |
| CL-02A    |                | 2015-628   |
| CL-03A    | 2015-629       |            |
| S-1       | 0.2kgs         | 2015-630   |
| L2-S      | 0.5kgs         | 2015-631   |

**CODE NO. & DESCRIPTION**

**FIGURE**

**1/4" VALVE & HOSE KIT**

**62220**

33CM Length Hose Kit  
Assembled with:  
1-Acid Resistant 1/4" Male NPT Valve  
1-20 Element Segments  
1-(1/16" or 1/8" or 1/4") Round Nozzle

**ORDER NO. VHK-1/4A    CODE NO.2016-001**



**62720**

33CM Length Hose Kit  
Assembled with:  
1-1/4" Male NPT Valve  
1-20 Element Segments  
1-(1/16" or 1/8" or 1/4") Round Nozzle

**ORDER NO. VHK-1/4    CODE NO.2016-002**



**3/8" VALVE & HOSE KIT**

**63320**

36CM Length Hose Kit  
Assembled with:  
1-Acid Resistant 3/8" Male PT Valve  
1-16 Element Segments  
1-(1/4" or 3/8" or 1/2") Round Nozzle

**ORDER NO. VHK-3/8A    CODE NO.2016-003**



**63720**

36CM Length Hose Kit  
Assembled with:  
1-3/8" Male PT Valve  
1-16 Element Segments  
1-(1/4" or 3/8" or 1/2") Round Nozzle

**ORDER NO. VHK-3/8    CODE NO.2016-004**



**1/2" VALVE & HOSE KIT**

**64420**

33CM Length Hose Kit  
Assembled with:  
1-Acid Resistant 1/2" Male NPT Valve  
1-12 Element Segments  
1-(1/4" or 3/8" or 1/2") Round Nozzle

**ORDER NO. VHK-1/2A    CODE NO.2016-005**



**64720**

33CM Length Hose Kit  
Assembled with:  
1-1/2" Male NPT Valve  
1-12 Element Segments  
1-(1/4" or 3/8" or 1/2") Round Nozzle

**ORDER NO. VHK-1/2    CODE NO.2016-006**

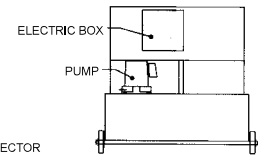
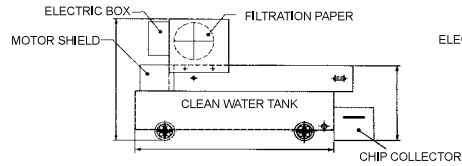
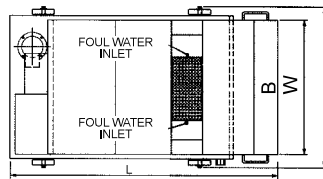


# Paper Filter



## FEATURES

- Applicable to both ferrous and non-ferrous metals.
- Filtration effect depends on paper accuracy.  
Use 50 $\mu$ , 30 $\mu$ , or 15 $\mu$ .
- Not suitable for heavy machining for the sake of paper consumption.
- To save filtration material, use magnetic filter for rough filtration.
- Standard accessory: one roll of paper.



| ORDER NO. | DISPOSAL CAPACITY L/MIN | WATER TANK CAPACITY | L    | A    | B   | C   | W   | H   | PUMP |        | PAPER MOTOR | PAPER            | REMARKS         | N.W (kgs) | GW (kgs) | CODE NO. |
|-----------|-------------------------|---------------------|------|------|-----|-----|-----|-----|------|--------|-------------|------------------|-----------------|-----------|----------|----------|
|           |                         |                     |      |      |     |     |     |     | HP   | OUTLET |             |                  |                 |           |          |          |
| PF-20     | 20                      | 100                 | 1050 | 850  | 600 | 400 | 720 | 610 | 1/8  | PF1/2" | 25W         | W:500MM<br>L:90M | wheels attached | 95        | 120      | 2020-001 |
| PF-40     | 40                      | 120                 | 1200 | 1000 | 600 | 400 | 720 | 660 | 1/8  | PF1/2" | 25W         |                  |                 | 130       | 150      | 2020-002 |
| PF-60     | 60                      | 140                 | 1350 | 1150 | 600 | 400 | 720 | 660 | 1/8  | PF1/2" | 25W         |                  |                 | 140       | 170      | 2020-003 |
| PF-80     | 80                      | 160                 | 1500 | 1300 | 600 | 400 | 720 | 660 | 1/4  | PF3/4" | 25W         | W:700MM<br>L:90M |                 | 170       | 190      | 2020-004 |
| PF-120    | 120                     | 210                 | 1500 | 1300 | 800 | 400 | 920 | 740 | 1/2  | PF3/4" | 40W         |                  |                 | 185       | 210      | 2020-005 |
| PF-160    | 160                     | 260                 | 1800 | 1600 | 800 | 400 | 920 | 740 | 1/2  | PF3/4" | 40W         |                  |                 | 250       | 280      | 2020-006 |

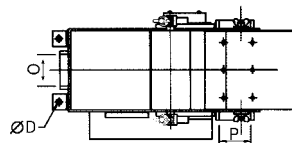
# Magnetic Separator



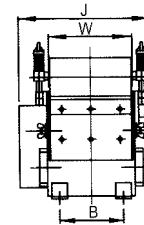
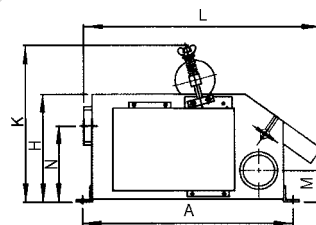
MC-60

## FEATURES

- Suitable in heavy machining for ferrous metal.
- No filtration-material consumption.
- Most economic in purchase & utilization cost.
- Able to serve rough filtration in other filtration process.



MC-20~160



Standard accessories

- a. Chip collector 1pc
- b. plugs 2pc
- c. Elbow 1pc
- d. Steel tubes 3pc

| ORDER NO. | DISPOSAL CAPACITY L/MIN | L   | W   | H   | M  | N   | A   | B   | D  | J   | K   | INLET O  | OUTLET P | MOTOR      | N.W (kgs) | GW (kgs) | CODE NO. |
|-----------|-------------------------|-----|-----|-----|----|-----|-----|-----|----|-----|-----|----------|----------|------------|-----------|----------|----------|
| MC-20     | 20                      | 464 | 130 | 205 | 65 | 145 | 398 | 100 | 11 | 230 | 300 | PF1 1/2" | PF1 1/2" | 220V3Ø,25W | 18        | 20       | 2020-010 |
| MC-40     | 40                      | 464 | 150 | 205 | 65 | 145 | 398 | 120 | 11 | 250 | 300 | PF2"     | PF2"     | 220V3Ø,25W | 20        | 23       | 2020-011 |
| MC-60     | 60                      | 464 | 206 | 205 | 60 | 150 | 398 | 176 | 11 | 306 | 300 | PF2"     | PF2"     | 220V3Ø,25W | 25        | 28       | 2020-012 |
| MC-80     | 80                      | 464 | 242 | 205 | 60 | 150 | 398 | 212 | 11 | 342 | 300 | PF2"     | PF1 1/2" | 220V3Ø,25W | 30        | 40       | 2020-013 |
| MC-120    | 120                     | 530 | 270 | 245 | 68 | 185 | 456 | 230 | 11 | 380 | 345 | PF1 1/2" | PF3"     | 220V3Ø,40W | 50        | 65       | 2020-014 |
| MC-160    | 160                     | 530 | 354 | 245 | 68 | 185 | 456 | 314 | 11 | 464 | 345 | PF3"     | PF3"     | 220V3Ø,40W | 60        | 75       | 2020-015 |



# Magnetic Separator & Paper Filter



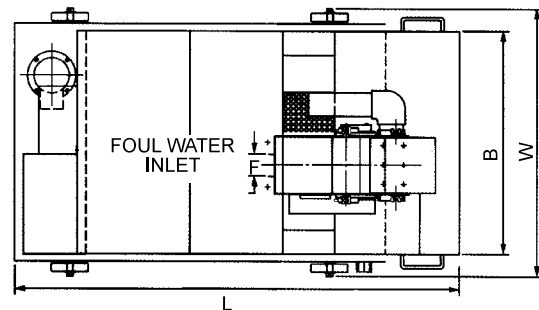
MC+PF60

## APPLICABLE TO THE FOLLOWING WORKING MACHINES

- Plane grinding machine.
- Fine-grinding machine.
- Honing machine.
- Deep-hole drill.
- Internal/exterless cylinder grinder.
- Centerless grinder.
- Please specify the power voltage in your order list.
- Specifications are subject to change without notice.

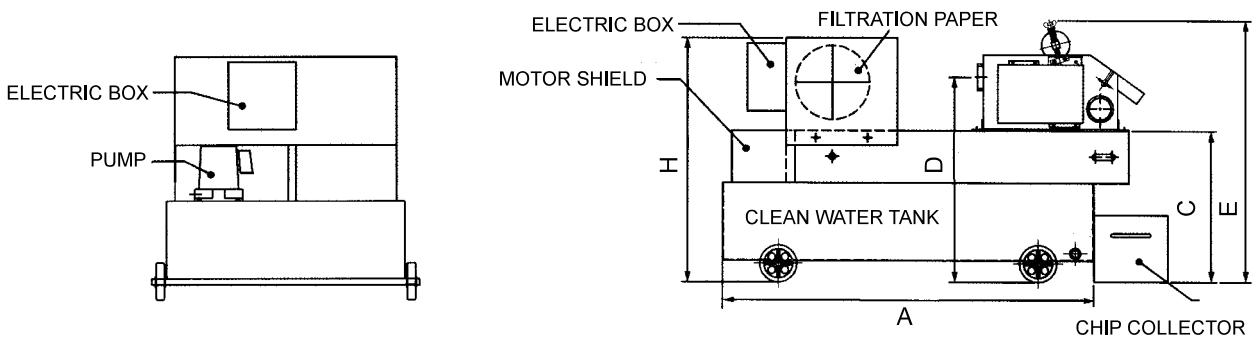
## FEATURES

- Applicable to both ferrous and non-ferrous metals.
- Filtration effect depends on paper accuracy. Use 50 $\mu$ , 30 $\mu$ , or 15 $\mu$ .
- Rough filtration for chip in coolant with magnet and then fine filtration for impurities with paper will save the paper and upgrade filtration accuracy



## DIMENSION DIAGRAM

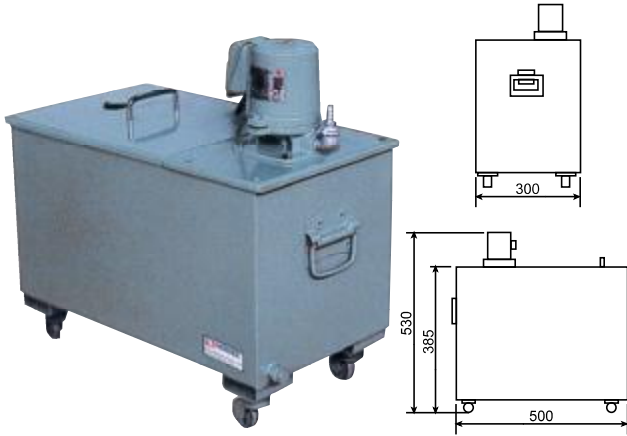
- Standard accessory: one roll paper 30 $\mu$



## MAGNETIC SEPARATOR & PAPER FILTER SPECIFICATIONS

| ORDER NO. | DISPOSAL CAPACITY L/MIN | WATER TANK CAPACITY | L    | A    | B   | C   | D   | E   | F                   | H   | W   | PUMP          |                    | PAPER MOTOR | PAPER            | REMARKS   | N.W (kgs) | GW (kgs) | CODE NO. |
|-----------|-------------------------|---------------------|------|------|-----|-----|-----|-----|---------------------|-----|-----|---------------|--------------------|-------------|------------------|-----------|-----------|----------|----------|
|           |                         |                     |      |      |     |     |     |     |                     |     |     | HP            | OUTLET             |             |                  |           |           |          |          |
| MC+PF-20  | 20                      | 100                 | 1050 | 850  | 600 | 400 | 550 | 655 | PF1 $\frac{1}{2}$ " | 610 | 720 | $\frac{1}{8}$ | PF $\frac{1}{2}$ " | 25W         | W:500MM<br>L:90M | NO wheels | 115       | 140      | 2020-020 |
| MC+PF-40  | 40                      | 120                 | 1200 | 1000 | 600 | 400 | 550 | 705 | PF2"                | 660 | 720 | $\frac{1}{8}$ | PF $\frac{1}{2}$ " | 25W         |                  |           | 150       | 175      | 2020-021 |
| MC+PF-60  | 60                      | 140                 | 1350 | 1150 | 600 | 400 | 555 | 705 | PF2"                | 660 | 720 | $\frac{1}{8}$ | PF $\frac{1}{2}$ " | 25W         |                  |           | 165       | 200      | 2020-022 |
| MC+PF-80  | 80                      | 160                 | 1500 | 1300 | 600 | 400 | 555 | 705 | PF2"                | 660 | 720 | $\frac{1}{4}$ | PF $\frac{3}{4}$ " | 25W         |                  |           | 190       | 225      | 2020-023 |
| MC+PF-120 | 120                     | 210                 | 1500 | 1300 | 800 | 400 | 590 | 750 | PF2 $\frac{1}{2}$ " | 740 | 920 | $\frac{1}{2}$ | PF $\frac{3}{4}$ " | 40W         | W:700MM<br>L:90M |           | 235       | 275      | 2020-024 |
| MC+PF-160 | 180                     | 260                 | 1800 | 1600 | 800 | 400 | 605 | 750 | PF3"                | 740 | 920 | $\frac{1}{2}$ | PF $\frac{3}{4}$ " | 40W         |                  |           | 290       | 335      | 2020-025 |

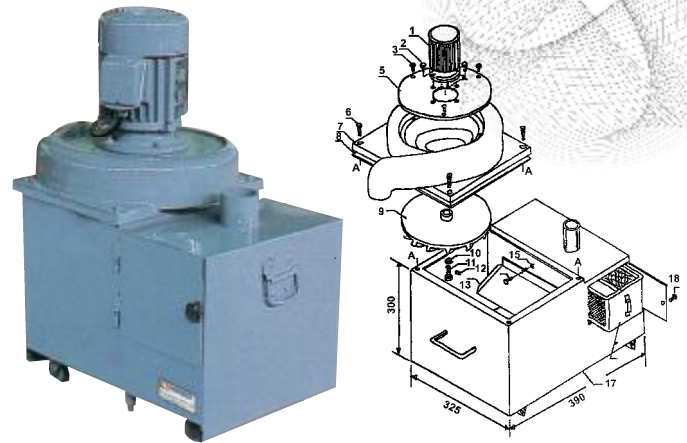
## Coolant Tank



Unit: m/m

| ORDER NO. | LxWxH       | Motor  | G.W.  | CODE NO. |
|-----------|-------------|--------|-------|----------|
| VC-601    | 500x300x530 | 1/8 HP | 23kgs | 2020-030 |

## Dust Collector

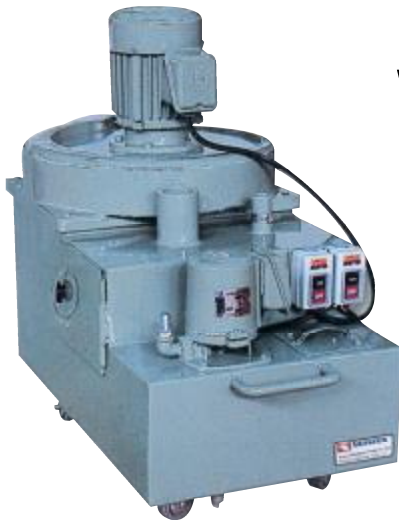


Unit: m/m

| ORDER NO. | LxWxH       | Motor  | G.W.  | CODE NO. |
|-----------|-------------|--------|-------|----------|
| VC-602    | 560x370x720 | 1/2 HP | 47kgs | 2020-026 |

## Dust-Suction And Coolant Tank

TWO IN ONE



PLEASE NOTIFY VOLTA & PHASE,  
WHEN YOU ORDERING.

Combination coolant and

dust collector(10-12 J)

1. Dust suction motor

2. Coolant pump

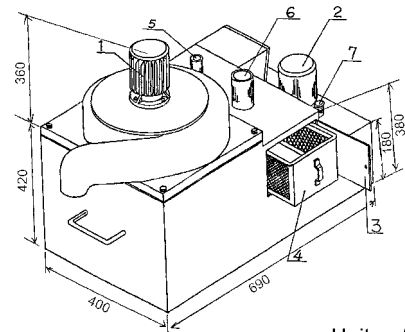
3. Filter access door

4. Filter

5. Coolant return pipe

6. Dust inlet pipe

7. Pump outlet

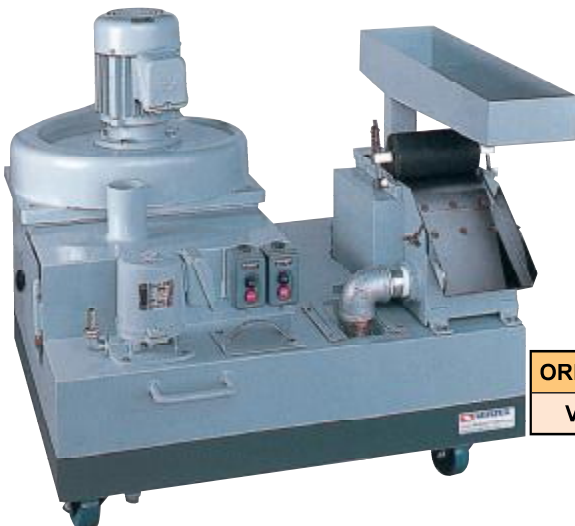


Unit: m/m

| ORDER NO. | LxWxH       | Motor              | G.W.  | CODE NO. |
|-----------|-------------|--------------------|-------|----------|
| VC-603    | 690x400x780 | 1/2 HPx1, 1/8 HPx1 | 80kgs | 2020-027 |

## Dust-Suction & Coolant Tank W/Magnetic Separator

THREE IN ONE



PLEASE NOTIFY VOLTA & PHASE,  
WHEN YOU ORDERING.

Unit: m/m

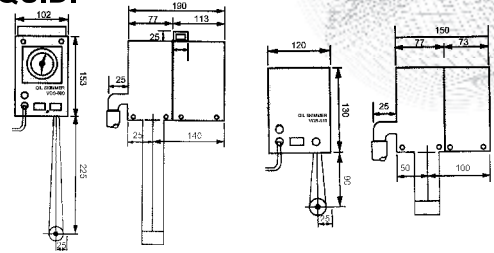
| ORDER NO. | LxWxH       | Motor              | G.W.   | CODE NO. |
|-----------|-------------|--------------------|--------|----------|
| VC-606    | 900x780x850 | 1/2 HPx1, 1/8 HPx1 | 110kgs | 2020-028 |



# Oil Skimmer With Belt Type



OIL SKIMMER FOR MACHINE TOOL.  
IT IS FOR CLEAR FLOATING OIL ON CUTTING LIQUID.



### FEATURES

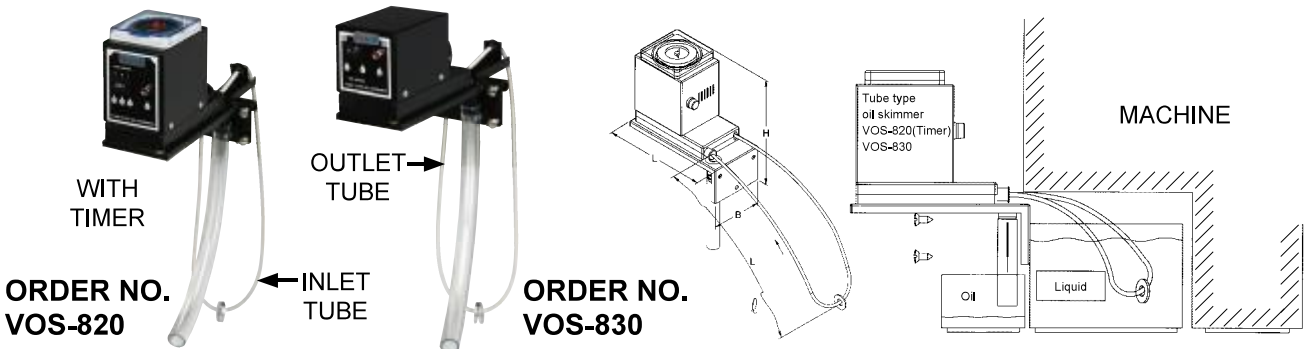
- Oily leather belt cycle for collecting oil and efficiently and completely getting rid of useless oil.
- Much less cost of running., without any material expended.
- Small volume., light weight., easy to install and to operate.
- Special leather belt with feature of excellent durability, heat-resistance, and chemical-resistance.
- VOS-800 attached a 24 hours procedure timer to run repeatedly in accordance with time proportion which it is set, and also provides the best efficiency of sucking floating oil.

Unit: mm

| ORDER NO. | POWER SOURCE | CAPACITY | DIMENSION |        |        | WEIGHT (kgs) | BELT DIMENSION |   | DIMENSION OF HOSE | CODE NO. |
|-----------|--------------|----------|-----------|--------|--------|--------------|----------------|---|-------------------|----------|
|           |              |          | L         | B      | H      |              | B              | L |                   |          |
| VOS-800   | AC 110/220V  | 4L/h     | 190m/m    | 102m/m | 153m/m | 3.4          | 39x800m/m      |   | ø22x600m/m        | 2020-100 |
| VOS-810   |              |          | 150m/m    | 102m/m | 138m/m | 3            | 39x550m/m      |   |                   | 2020-101 |



# Oil Skimmer With Belt Type



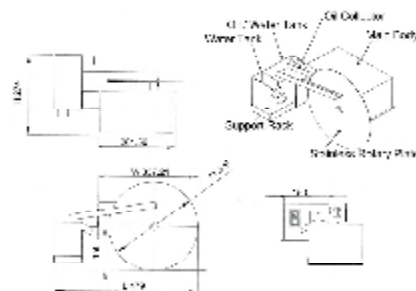
IF THE MACHINE DON'T HAVE SPACE FOR THE OIL SKIMMER. PLEASE CHOICE THIS TYPE.

Unit: mm

| ORDER NO. | CAPACITY | DIMENSION |       |        | INLET TUBE SIZE    | QUTLET TUBE SIZE | POWER SOVRCE | WEIGHT (kg) | CODE NO. |          |
|-----------|----------|-----------|-------|--------|--------------------|------------------|--------------|-------------|----------|----------|
|           |          | L         | B     | H      |                    |                  |              |             |          |          |
| VOS-820   | 1L/hr    | 155m/m    | 78m/m | 178m/m | 1:450mm            | ø22              | 150m/m       | AC 110/220V | 1.9      | 2020-102 |
| VOS-830   |          | 155m/m    | 78m/m | 140m/m | 2:300mm<br>3:200mm |                  |              |             |          |          |



# Oil Skimmer With Rotary Plate Type



Unit: mm

| ORDER NO. | CAPACITY | POWER SOURCE | DIMENSION |        |     | WEIGHT (kgs) | CODE NO. |
|-----------|----------|--------------|-----------|--------|-----|--------------|----------|
|           |          |              | L         | W      | H   |              |          |
| VOS-850   | 1L/hr    | AC 220V      | 479       | 337.21 | 274 | 8.6          | 2020-104 |



## STEEL METRIC GAUGE BLOCKS

Gauge blocks are fundamental standards for linear measurement. For adjusting, checking, or inspecting measuring instruments and tools, and precision workpieces. Gauge blocks are used either individually or in combination of several blocks which are wrung together.

Steel gauge blocks are made of quality alloy steel, and carbide, the ceramics are also available.

The hardness number of the measuring surfaces is no less than HRC64.

The blocks have fine wear resistance, They are heat treated in special ways so as to stabilize their lengths.

### JIS/ISO/DIN ACCURACY STANDARD

| SIZE OVER UP TO | ACCURACY AT 20°C (µm) |         |
|-----------------|-----------------------|---------|
|                 | GRADE 00              | GRADE 0 |
| 10mm            | ±0.06                 | ±0.12   |
| 10 - 25mm       | +0.07                 | ±0.14   |
| 25 - 50mm       | ±0.10                 | ±0.20   |
| 50 - 75mm       | ±0.12                 | ±0.25   |
| 75 - 100mm      | ±0.14                 | ±0.30   |
| 100 - 150mm     | -                     | ±0.40   |

| SIZE OVER UP TO | ACCURACY AT 20°C (µm) |         |
|-----------------|-----------------------|---------|
|                 | GRADE 1               | GRADE 2 |
| 10mm            | ±0.20                 | ±0.45   |
| 10 - 25mm       | ±0.30                 | ±0.60   |
| 25 - 50mm       | ±0.40                 | ±0.80   |
| 50 - 75mm       | ±0.50                 | ±1.00   |
| 75 - 100mm      | ±0.60                 | ±1.20   |
| 100 - 150mm     | ±0.80                 | ±1.60   |

| ORDER NO. | Total blocks | Nominal dimension               | Steps              | No. of blocks | Grade       | Weight (kg) | CODE NO. |
|-----------|--------------|---------------------------------|--------------------|---------------|-------------|-------------|----------|
| VGB-112-0 | 112          | 1.0005                          | -                  | 1             | 0           | 3.7         | 2006-070 |
| VGB-112-1 |              | 1.001-1.009                     | 0.001              | 9             | 1           | 3.7         | 2006-170 |
| VGB-112-2 |              | 1.01-1.49<br>0.5-24.5<br>25-100 | 0.01<br>0.05<br>25 | 49<br>49<br>4 | 1<br>1<br>2 | 3.7         | 2006-270 |
| VGB-103-0 | 103          | 1.005                           | -                  | 1             | 0           | 3.6         | 2006-072 |
| VGB-103-1 |              | 1.01-1.49                       | 0.01               | 49            | 1           | 3.6         | 2006-172 |
| VGB-103-2 |              | 0.5-24.5<br>25-100              | 0.5<br>25          | 49<br>4       | 1<br>2      | 3.6         | 2006-272 |
| VGB-87-0  | 87           | 1.001-1.009                     | 0.001              | 9             | 0           | 3           | 2006-073 |
| VGB-87-1  |              | 1.01-1.49                       | 0.01               | 49            | 1           | 3           | 2006-173 |
| VGB-87-2  |              | 0.5-9.5<br>10-100               | 0.5<br>10          | 19<br>10      | 1<br>2      | 3           | 2006-273 |
| VGB-47-0  | 47           | 1.005                           | -                  | 1             | 0           | 3.4         | 2006-074 |
| VGB-47-1  |              | 1.01-1.09                       | 0.01               | 9             | 1           | 3.4         | 2006-174 |
| VGB-47-2  |              | 1.1-1.9<br>1-24<br>25-100       | 0.1<br>1<br>25     | 9<br>24<br>4  | 1<br>1<br>2 | 3.4         | 2006-274 |
| VGB-38-0  | 38           | 1.005                           | -                  | 1             | 0           | 2.5         | 2006-075 |
| VGB-38-1  |              | 1.01-1.09                       | 0.01               | 9             | 1           | 2.5         | 2006-175 |
| VGB-38-2  |              | 1.1-1.9<br>1-9<br>10-100        | 0.1<br>1<br>10     | 9<br>9<br>10  | 1<br>1<br>2 | 2.5         | 2006-275 |

## CARBIDE METRIC GAUGE BLOCKS

| ORDER NO.  | Total blocks | Nominal dimension               | Steps              | No. of blocks | Grade       | Weight (kgs) | CODE NO. |
|------------|--------------|---------------------------------|--------------------|---------------|-------------|--------------|----------|
| VGB-112T-0 | 112          | 1.0005                          | -                  | 1             | 0           | 5.8          | 2006-080 |
| VGB-112T-1 |              | 1.001-1.009                     | 0.001              | 9             | 1           | 5.8          | 2006-180 |
| VGB-112T-2 |              | 1.01-1.49<br>0.5-24.5<br>25-100 | 0.01<br>0.05<br>25 | 49<br>49<br>4 | 1<br>1<br>2 | 5.8          | 2006-280 |
| VGB-103T-0 | 103          | 1.005                           | -                  | 1             | 0           | 5.6          | 2006-081 |
| VGB-103T-1 |              | 1.01-1.49                       | 0.01               | 49            | 1           | 5.7          | 2006-181 |
| VGB-103-2  |              | 0.5-24.5<br>25-100              | 0.5<br>25          | 49<br>4       | 1<br>2      | 5.7          | 2006-281 |
| VGB-87T-0  | 87           | 1.001-1.009                     | 0.001              | 9             | 0           | 4.8          | 2006-082 |
| VGB-87T-1  |              | 1.01-1.49                       | 0.01               | 49            | 1           | 4.9          | 2006-182 |
| VGB-87T-2  |              | 0.5-9.5<br>10-100               | 0.5<br>10          | 19<br>10      | 1<br>2      | 4.8          | 2006-282 |
| VGB-47T-0  | 47           | 1.005                           | -                  | 1             | 0           | 4.6          | 2006-083 |
| VGB-47T-1  |              | 1.01-1.09                       | 0.01               | 9             | 1           | 4.6          | 2006-183 |
| VGB-47T-2  |              | 1.1-1.9<br>1-24<br>25-100       | 0.1<br>1<br>25     | 9<br>24<br>4  | 1<br>1<br>2 | 4.6          | 2006-283 |



Gauge blocks are fundamental standards for linear measurement. For adjusting, checking, or inspecting measuring instruments and tools, and precision workpieces.

Gauge blocks are used either individually or in combination of several blocks which are wrung together.

### JIS/ISO/DIN ACCURACY STANDARD

| SIZE<br>OVER UP TO | ACCURACY AT 20°C (µm) |         |
|--------------------|-----------------------|---------|
|                    | GRADE 00              | GRADE 0 |
| 10mm               | ±0.06                 | ±0.12   |
| 10 - 25mm          | +0.07                 | ±0.14   |
| 25 - 50mm          | ±0.10                 | ±0.20   |
| 50 - 75mm          | ±0.12                 | ±0.25   |
| 75 - 100mm         | ±0.14                 | ±0.30   |
| 100 - 150mm        | -                     | ±0.40   |

| SIZE<br>OVER UP TO | ACCURACY AT 20°C (µm) |         |
|--------------------|-----------------------|---------|
|                    | GRADE 1               | GRADE 2 |
| 10mm               | ±0.20                 | ±0.45   |
| 10 - 25mm          | ±0.30                 | ±0.60   |
| 25 - 50mm          | ±0.40                 | ±0.80   |
| 50 - 75mm          | ±0.50                 | ±1.00   |
| 75 - 100mm         | ±0.60                 | ±1.20   |
| 100 - 150mm        | ±0.80                 | ±1.60   |

### CERAMIC GAUGE BLOCKS

| ORDER NO.  | Total blocks | Nominal dimension                              | Steps                       | No. of blocks      | Grade | Weight (kgs) | CODE NO. |
|------------|--------------|--|-----------------------------|--------------------|-------|--------------|----------|
| VGB-112C-0 | 112          | 1.0005   | -                           | 1                  | 0     | 3.7          | 2006-090 |
| VGB-112C-1 |              | 1.001-1.009<br>1.01-1.49<br>0.5-24.5<br>25-100 | 0.001<br>0.01<br>0.05<br>25 | 9<br>49<br>49<br>4 |       |              |          |
| VGB-103C-0 | 103          | 1.005  | -                           | 1                  | 0     | 3.6          | 2006-091 |
| VGB-103C-1 |              | 1.01-1.49<br>0.5-24.5<br>25-100                | 0.01<br>0.5<br>25           | 49<br>49<br>4      |       |              |          |
| VGB-87C-0  | 87           | 1.001-1.009                                    | 0.001                       | 9                  | 0     | 3            | 2006-092 |
| VGB-87C-1  |              | 1.01-1.49<br>0.5-9.5<br>10-100                 | 0.01<br>0.5<br>10           | 49<br>19<br>10     |       |              |          |
| VGB-47C-0  | 47           | 1.005  | -                           | 1                  | 0     | 2.4          | 2006-093 |
| VGB-47C-1  |              | 1.01-1.09<br>1.1-1.9<br>1-24<br>25-100         | 0.01<br>0.1<br>1<br>25      | 9<br>9<br>24<br>4  |       |              |          |



# Cast Iron Surface Plates



- These surface plates are designed for a diversity of applications where a smooth surface is needed.
- Rigidity and lasting accuracy are ensured by adequate top and side thickness and ribbed construction.
- The surfaces are free from pinholes. Precisely finished by planing and hand scraping, suitable for various kinds of highest precision work, inspection and countless other uses.



## Surface Plates

Unit:m/m

| ORDER NO. | SIZE         | SURFACE ACCURACY | APPROX. WEIGHT | CODE NO. |
|-----------|--------------|------------------|----------------|----------|
|           | mm           |                  | kgs            |          |
| VS-01     | 200x200x50   | 0.005/100        | 7.1            | 2021-001 |
| VS-02     | 250x250x50   |                  | 11.1           | 2021-002 |
| VS-03     | 250x300x50   |                  | 10.9           | 2021-003 |
| VS-04     | 300x300x50   |                  | 12.6           | 2021-004 |
| VS-05     | 300x400x50   | 0.006/100        | 20.1           | 2021-005 |
| VS-06     | 300x450x65   |                  | 24             | 2021-006 |
| VS-07     | 450x450x75   |                  | 50.4           | 2021-007 |
| VS-08     | 500x500x70   |                  | 56             | 2021-008 |
| VS-09     | 450x600x100  |                  | 64.5           | 2021-009 |
| VS-10     | 600x600x100  | 0.007/100        | 92.9           | 2021-010 |
| VS-11     | 600x900x100  |                  | 117.9          | 2021-011 |
| VS-12     | 900x900x125  |                  | 313            | 2021-012 |
| VS-13     | 900x1200x125 |                  | 431            | 2021-013 |

## STAND

| ORDER NO. | STAND SIZE   | KGS | CODE NO.  |
|-----------|--------------|-----|-----------|
|           | mm           |     |           |
| VSD-09    | 450x600x700  |     | 2021-009A |
| VSD-10    | 600x600x700  |     | 2021-010A |
| VSD-11    | 600x900x600  |     | 2021-011A |
| VSD-12    | 900x900x600  |     | 2021-012A |
| VSD-13    | 900x1200x600 |     | 2021-013A |

# Black Granite Surface Plates



- Black Granite Surface Plates meet or exceed Federal Specification GGG-P-463c.
- Harder than steel.
- Does not nick or burr.
- Retains accuracy for years.
- Auto-collimator checked for overall accuracy.
- Guaranteed repeat reading. Includes an inspection certificate to show the unilateral accuracy of plate.
- Does not rust or corrode.
- All surface plates include inbound freight from factory.



## Surface Plates

Unit:m/m

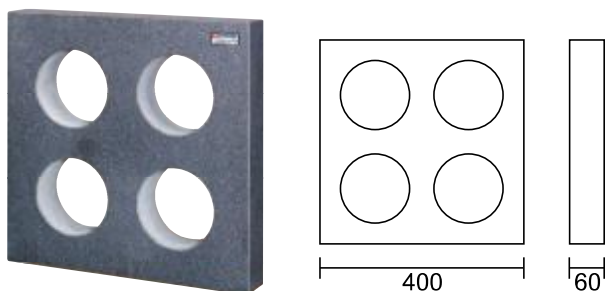
| ORDER NO. | SIZE          | SURFACE ACCURACY | APPROX. WEIGHT | CODE NO. |
|-----------|---------------|------------------|----------------|----------|
|           | mm            |                  | kgs            |          |
| VSG-05    | 300x300x60    | 0.0065           | 25             | 2021-020 |
| VSG-06    | 300x450x60    | 0.0065           | 31             | 2021-021 |
| VSG-07    | 450x450x75    | 0.0065           | 46             | 2021-022 |
| VSG-09    | 450x600x100   | 0.007            | 79             | 2021-023 |
| VSG-10    | 600x600x100   | 0.009            | 110            | 2021-024 |
| VSG-11    | 600x900x110   | 0.009            | 210            | 2021-025 |
| VSG-13    | 900x1200x135  | 0.012            | 470            | 2021-027 |
| VSG-14    | 1000x1000x135 | 0.012            | 450            | 2021-028 |
| VSG-15    | 1000x1500x200 | 0.013            | 670            | 2021-029 |
| VSG-21    | 900x900x160   | 0.013            | 380            | 2021-032 |

## STAND

| ORDER NO. | STAND SIZE    | KGS  | CODE NO.  |
|-----------|---------------|------|-----------|
|           | mm            |      |           |
| VSGD-09   | 450x600x700   | 27.4 | 2021-023A |
| VSGD-10   | 600x600x700   | 30   | 2021-024A |
| VSGD-11   | 600x900x600   | 33.5 | 2021-025A |
| VSGD-13   | 900x1200x600  | 86   | 2021-027A |
| VSGD-14   | 1000x1000x600 | 87   | 2021-028A |
| VSGD-15   | 1000x1500x600 | 100  | 2021-029A |
| VSGD-21   | 900x900x600   | 73.4 | 2021-032A |

Accuracy and O-Ladge Style available only in toolroom Grade A

## Granite Square Rulers

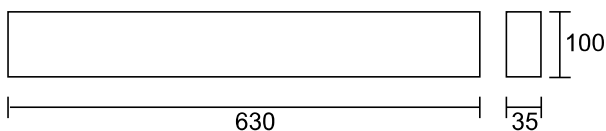


Accuracy:  
SQUARENESS 0.002 m/m

Unit: m/m

| ORDER NO. | SIZE       | G.W.(kgs) | CODE NO. |
|-----------|------------|-----------|----------|
| VQR-400   | 400x400x60 | 24.8      | 2021-050 |
| VQR-500   | 400x500x60 | 40.2      | 2021-051 |

## Granite Straight Rulers



Accuracy:  
PARALLELISM 0.002 m/m

Unit: m/m

| ORDER NO. | SIZE       | G.W.(kgs) | CODE NO. |
|-----------|------------|-----------|----------|
| VSR-630   | 630x100x35 | 8.7       | 2021-060 |
| VSR-1000  | 1000x80x50 | 13.7      | 2021-061 |

## Granite Triangle Ruler



| ORDE NO. | Size    | Squareness | Thickness | Weight (kgs) | CODE NO. |
|----------|---------|------------|-----------|--------------|----------|
| VG-300   | 300x200 | 0.002      | 30        | 5.7          | 2022-020 |
| VG-400   | 400x250 | 0.003      | 30        | 8.4          | 2022-021 |
| VG-600   | 600x400 | 0.004      | 63        | 27.5         | 2022-022 |

mm

## Granite V-Block

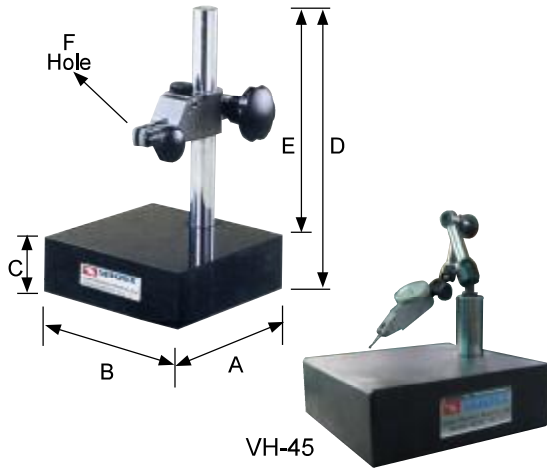


PAIR

| ORDER NO. | CAPACITY | Size        | GRADE | KGS | CODE NO. |
|-----------|----------|-------------|-------|-----|----------|
| VG-63     | Ø10~50   | 63x63x63    | 0     | 1.7 | 2022-030 |
| VG-100    | Ø50~80   | 100x100x100 | 0     | 6.3 | 2022-031 |

mm

## Granite Surface Stand



ACCURACY: 0.005/100mm

| ORDER NO. | AxB GRANITE PLATE DIEMENSION | C  | D   | E   | F               | WEIGHT (kgs) | CODE NO. |
|-----------|------------------------------|----|-----|-----|-----------------|--------------|----------|
| VH-41     | 6" x 6"<br>150x150mm         | 52 | 252 | 200 | 8m/m<br>or 3/8" | 5.2          | 2022-001 |
| VH-42     | 6" x 9"<br>150x220mm         | 52 | 252 | 200 | 8m/m<br>or 3/8" | 7.9          | 2022-002 |
| VH-43     | 9" x 12"<br>230x300mm        | 90 | 290 | 200 | 8m/m<br>or 3/8" | 19.1         | 2022-003 |
| VH-45     | 6" x 6"<br>150x150mm         | 52 | 232 | 180 | 8m/m<br>or 3/8" | 4.4          | 2022-005 |

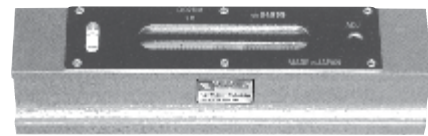
VH-45

## Cylindrical Squares Steel

## Horizontal Leveling Instrument



| ORDER NO. | ØD X L  | ACCURACY         | WEIGHT (kgs) | CODE NO. |
|-----------|---------|------------------|--------------|----------|
| VCS-300   | 100x300 | 0.005/100<br>m/m |              | 2022-010 |
| VCS-400   | 100x400 | 0.005/100<br>m/m | 16           | 2022-011 |



0.02m/m

| ORDER NO. | DIMENSION | WEIGHT (kgs) | CODE NO. |
|-----------|-----------|--------------|----------|
| VLI-100   | 100x38x36 | 1.1          | 2022-040 |
| VLI-150   | 150x50x45 | 1.6          | 2022-041 |
| VLI-200   | 200x50x45 | 2.1          | 2022-042 |

## Precision Square Level



0.02m/m

| ORDER NO. | DIMENSION  | WEIGHT(kgs) | CODE NO. |
|-----------|------------|-------------|----------|
| VSL-200   | 200x200x40 | 3.8         | 2022-050 |
| VSL-250   | 250x250x40 | 5.8         | 2022-051 |
| VSL-300   | 300x300x40 | 7.5         | 2022-052 |

## Cleaning Paper



ORDER NO. P-1000(PAPER)  
CODE NO.2021-200

SIZE: WIDTH: 250M/M (±5M/M)  
LENGTH: 350M, G.W. 11kgs  
PACK: 2 ROLL/CARTON  
COLOR: WHITH

ORDER NO. S-1000(STAND)  
CODE NO.2021-220

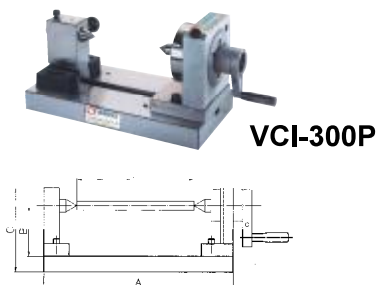
450L x 330W x 940H  
G.W. 2.7kgs

# Concentric Test Stand



| ORDER NO. | LENGTH | WIDTH | HEIGHT | CENTER DISTANCE | CENTER HEIGHT | WEIGHT (kgs) | CODE NO. |
|-----------|--------|-------|--------|-----------------|---------------|--------------|----------|
| VCI-200   | 490    | 90    | 100    | 200             | 145           | 22           | 2021-101 |
| VCI-300   | 530    | 90    | 100    | 300             | 145           | 26.8         | 2021-105 |
| VCI-400   | 650    | 90    | 100    | 400             | 145           | 29.6         | 2021-102 |
| VCI-600   | 1000   | 200   | 230    | 600             | 200           | 138.2        | 2021-106 |
| VCI-800   | 1200   | 200   | 230    | 800             | 200           | 139.8        | 2021-103 |

WITHOUT INDICATORS



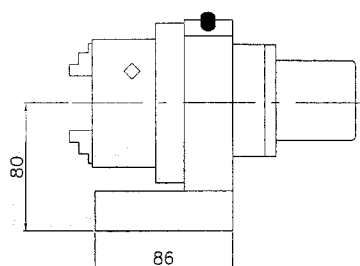
Unit:mm

| ORDER NO. | A   | B  | C   | L      | Roundness | Parallelism | Squareness | Graduation | N.W. (kgs) | CODE NO. |
|-----------|-----|----|-----|--------|-----------|-------------|------------|------------|------------|----------|
| VCI-300P  | 300 | 80 | 133 | 0-120  | 0.002/100 | ±0.002/100  | 0.002/100  | 360°       | 22         | 2021-110 |
| VCI-400P  | 400 | 80 | 133 | 0-220  | 0.002/100 | ±0.002/100  | 0.002/100  | 360°       | 25         | 2021-111 |
| VCI-500P  | 500 | 80 | 133 | 20-320 | 0.002/100 | ±0.002/100  | 0.002/100  | 360°       | 28         | 2021-112 |

# Fixed Speed Punch Former

ORDER NO.V-PS-80M CODE NO.2021-130

Auto Type



- The Punch Former with a motor attached can be applied to precisely grind a punch to round in a short time and saves the processing time.
- ER Collet Type and Chuck Type can clamp workpieces in a wide range.

| O.D  | I,D   | Max. Dia. of Workpiece | Center Height | Motor Output-W Input-V | Roundness | Parallelism | Squareness | Graduation | N.W. (kg) |
|------|-------|------------------------|---------------|------------------------|-----------|-------------|------------|------------|-----------|
| 2-70 | 24-64 | ∅50                    | 80            | 15W 110/220V           | 0.002     | 0.002/100   | 0.002/100  | 360°       | 11.72     |

# Pin Gauge



EACH 0.01mm FOR ONE STEP SIZE

| ORDER NO. | NOMINAL DIMENSION EACH 0.01mm FOR 1 PCS | PCS/SET | WEIGHT (kgs) | CODE NO. |
|-----------|---|---------|--------------|----------|
| VPG-0B    | 0.50, 0.51, 0.52~1.00                   | 51      | 1            | 2022-060 |
| VPG-1A    | 1.00, 1.01, 1.02~1.50                   | 51      | 1            | 2022-061 |
| VPG-1B    | 1.50, 1.51, 1.52~2.00                   | 51      | 1            | 2022-062 |
| VPG-2A    | 2.00, 2.01, 2.02~2.50                   | 51      | 1            | 2022-063 |
| VPG-2B    | 2.50, 2.51, 2.52~3.00                   | 51      | 1            | 2022-064 |
| VPG-3A    | 3.00, 3.01, 3.02~3.50                   | 51      | 1            | 2022-065 |
| VPG-3B    | 3.50, 3.51, 3.52~4.00                   | 51      | 1            | 2022-066 |
| VPG-4A    | 4.00, 4.01, 4.02~4.50                   | 51      | 1.5          | 2022-067 |
| VPG-4B    | 4.50, 4.51, 4.52~5.00                   | 51      | 1.5          | 2022-068 |
| VPG-5A    | 5.00, 5.01, 5.02~5.50                   | 51      | 1.5          | 2022-069 |
| VPG-5B    | 5.50, 5.51, 5.52~6.00                   | 51      | 1.5          | 2022-070 |
| VPG-6A    | 6.00, 6.01, 6.02~6.50                   | 51      | 3.1          | 2022-071 |
| VPG-6B    | 6.50, 6.51, 6.52~7.00                   | 51      | 3.2          | 2022-072 |
| VPG-7A    | 7.00, 7.01, 7.02~7.50                   | 51      | 3.5          | 2022-073 |
| VPG-7B    | 7.50, 7.51, 7.52~8.00                   | 51      | 3.5          | 2022-074 |
| VPG-8A    | 8.00, 8.01, 8.02~8.50                   | 51      | 3.8          | 2022-075 |
| VPG-8B    | 8.50, 8.51, 8.52~9.00                   | 51      | 3.8          | 2022-076 |
| VPG-9A    | 9.00, 9.01, 9.02~9.50                   | 51      | 4            | 2022-077 |
| VPG-9B    | 9.50, 9.51, 9.52~10.00                  | 51      | 4            | 2022-078 |
| VPG-10A   | 10.00, 10.01, 10.02~10.50               | 51      | 5            | 2022-079 |
| VPG-10B   | 10.50, 10.51, 10.52~11.00               | 51      | 5            | 2022-080 |

FEATURES:

| DIAMETER    | EACH STEP SIZE | LENGTH | ACCURACY IN DIAMETER | ROUNDNESS TOLERANCE | HARDNESS |
|-------------|----------------|--------|----------------------|---------------------|----------|
| 0.05~0.09   | 0.01           | 5~10   | ±0.5um               | 0.5um               | HV480    |
| 0.10~0.19   | 0.01           | 20     | ±0.5um               | 0.5um               | HV480    |
| 0.20~0.99   | 0.01           | 40     | ±1um                 | 0.8um               | HV650    |
| 1.00~10.00  | 0.01           | 50     | ±1um                 | 0.8um               | HV650    |
| 10.01~20.00 | 0.01           | 50     | ±1.5um               | 1.6um               | HV650    |
| 20.00~30.00 | 0.01           | 50     | ±1.5um               | 1.6um               | HV650    |

## PRECISION VERNIER CALIPER



L: 150, 200, 300 mm

| ORDER NO. | 1 SCALE            | WEIGHT(kg) | CODE NO. |
|-----------|--------------------|------------|----------|
| VVC-6"    | 0.02 mm<br>1/1000" | 0.4        | 2023-001 |
| VVC-8"    |                    | 0.5        | 2023-002 |
| VVC-12"   |                    | 0.8        | 2023-003 |

## DIGITAL ELECTRONIC CALIPER



L: 150, 200, 300 mm

| ORDER NO. | 1 SCALE | WEIGHT(kg) | CODE NO. |
|-----------|---------|------------|----------|
| VEC-6"    | 0.01 mm | 0.4        | 2023-010 |
| VEC-8"    |         | 0.5        | 2023-011 |
| VEC-12"   |         | 0.8        | 2023-012 |

## DIAL CALIPER



L: 150, 200, 300 mm

| ORDER NO. | 1 SCALE | WEIGHT(kg) | CODE NO. |
|-----------|---------|------------|----------|
| VDC-6     | 0.02 mm | 0.4        | 2023-050 |
| VDC-8     |         | 0.5        | 2023-051 |
| VDC-12    |         | 0.9        | 2023-052 |

## OUTSIDE MICROMETER



0 - 25 mm  
25 - 50 mm  
50 - 75 mm  
75 - 100 mm

| ORDER NO.  | 1 SCALE | WEIGHT(kg) | CODE NO. |
|------------|---------|------------|----------|
| VOM-0025   | 0.01 mm | 0.3        | 2023-060 |
| VOM-2550   |         | 0.4        | 2023-061 |
| VOM-5075   |         | 0.5        | 2023-062 |
| VOM-75100  |         | 0.6        | 2023-063 |
| VOM-100125 |         | 1          | 2023-064 |

## INSIDE MICROMETER



5 - 30 mm  
25 - 50 mm  
50 - 75 mm  
75 - 100 mm

| ORDER NO. | 1 SCALE | WEIGHT(kg) | CODE NO. |
|-----------|---------|------------|----------|
| VIM-0530  | 0.01 mm | 0.3        | 2023-065 |
| VIM-2550  |         | 0.4        | 2023-066 |
| VIM-5075  |         | 0.4        | 2023-067 |
| VIM-75100 |         | 0.4        | 2023-068 |

## Measuring Instrument



DIAL INDICATOR



0.01~10 mm

| ORDER NO. | 1 SCALE | WEIGHT(kg) | CODE NO. |
|-----------|---------|------------|----------|
| VDI-1     | 0.01 mm | 0.3        | 2023-020 |

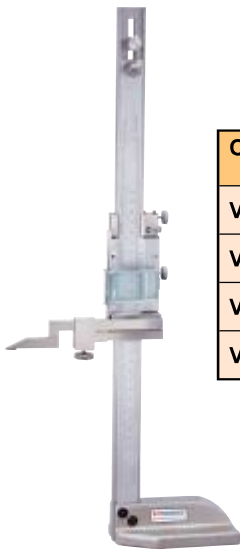
DIAL TEST INDICATOR



0.01~0.8 mm

| ORDER NO. | 1 SCALE | WEIGHT(kg) | CODE NO. |
|-----------|---------|------------|----------|
| VDI-0.8A  | 0.01 mm | 0.2        | 2023-070 |

HEIGHT VERNIER CALIPER



H: 300, 600, 450, 500

| ORDER NO | 1 SCALE | WEIGHT (kgs) | CODE NO. |
|----------|---------|--------------|----------|
| VHG-12   | 0.02 mm | 4            | 2023-034 |
| VHG-18   |         | 11.9         | 2023-035 |
| VHG-20   |         | 10.7         | 2023-036 |
| VHG-24   |         | 11.8         | 2023-037 |

HEIGHT DIAL CALIPER



H: 300, 600 mm

| ORDER NO. | 1 SCALE | WEIGHT (kgs) | CODE NO. |
|-----------|---------|--------------|----------|
| VHD-12    | 0.01 mm | 4            | 2023-080 |
| VHD-24    |         | 9.4          | 2023-081 |

MICROMETER HEAD



| ORDER NO. | SCALE x L  | WEIGHT(kg) | CODE NO. |
|-----------|------------|------------|----------|
| VMH-25    | 0.01x25 mm | 0.2        | 2023-040 |

MICROMETER STAND



160x110x130 mm

| ORDER NO. | WEIGHT(kg) | CODE NO. |
|-----------|------------|----------|
| VH-19     | 1.3        | 2023-090 |

## Measuring Tool Kits

NEW



| ORDER NO. | SET INCLUDING   | WEIGHT (kg) | CODE NO. |
|-----------|---|-------------|----------|
| VVC-20    | VVC-6 x 1 PCS<br>VOM-0025 x 1 PCS<br>VIM-0530 x 1 PCS | 1.37        | 2023-009 |

# Angle Level



## Oil Type Protractor With Magnets



VAL-60



VAL-80



VAL-50



VAL-30



VAL-10



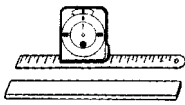
VAL-20

| ORDER NO. | LxWxH            | BASE     | ACU    | WEIGHT (kg) | CODE NO. |
|-----------|------------------|----------|--------|-------------|----------|
| VAL-10    | 78x62x14mm       | ABS      | 0.2°   | 0.2         | 2033-100 |
| VAL-30    | 93x79x15mm       | ABS      | 0.1°   | 0.2         | 2033-101 |
| VAL-50    | 93x79x16mm       | METAL    | 0.083° | 0.4         | 2033-102 |
| VAL-60    | 140x130x20mm     | METAL    | 0.05°  | 1           | 2033-103 |
| VAL-20    | 70x65x30mm       | ABS      | 0.2°   | 0.2         | 2033-104 |
|           | 13mm/1/2"x3M/10' |          |        |             |          |
| VAL-80    | 335x73x30mm      | ALUMINUM | 0.2    | 0.7         | 2033-105 |
|           | 13mm/1/2"x3M/10' |          |        |             |          |

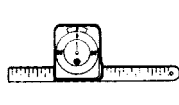
- The pointer is rotating in a hydraulic oil for stable, precise and error-eliminating reading, even to a differential sub-graduation less than one degree. The two pointers or the vernier versus the annular graduations are read super imposedly with minimum reading error.
- Double annular graduations are provided for preventing visual reading error.
- The transparent temperature-resistant oil may visually amplify the pointer for a better optical reading.
- The double-rail magnet may attract this angle level on a round pipe or a surface of ferrous material.
- An extension rule could be inserted into the bottom slot for measurement and drawing line for wider area.

1. RESET: For setting a pseudo-horizon, upon which a new angle on the pseudo-horizon can be directly measured.
2. DOUBLE CHECK: Double annular graduations provided for calibrating either positive or negative degrees.

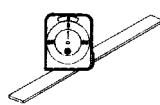
## MULTI-FUNCTION ANGLE LEVEL



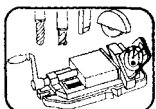
A Thin iron plate (The magnet power the thicker the weaker) may be attracted under the angle level for wider measurement.



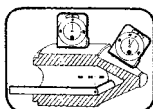
Inserting a straight extension rule into a bottom slot If the angle level.



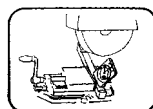
Attracting the angle level on an iron plate for measuring an angle inside a tank.



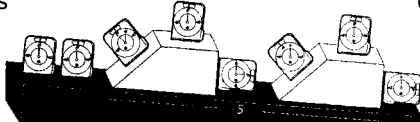
1. Suitable for working machines



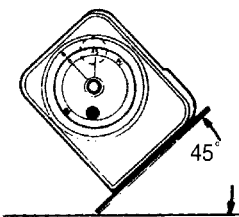
2. Grinding machine



3. Out & inner cone angle

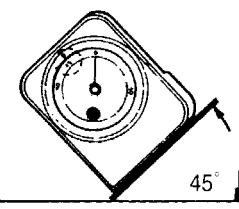


A standard angle block laid on a Non-horizontal Plane showing several measured positions by this angle level.



### Finding an angle

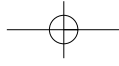
Align the movable degree scale 0° reading, in line with the fixed vernier, 0° mark. Set your instrument's bottom surface on the object to be measured. Your reading off the pointer is your angle of inclination from 0°



### Setting Specific angles

Align the desired angle on the movable scale to the vernier 0° mark. Tilt the instrument until the pointer is aligned with the 0° mark.

OVERLAP



# MEMO

