



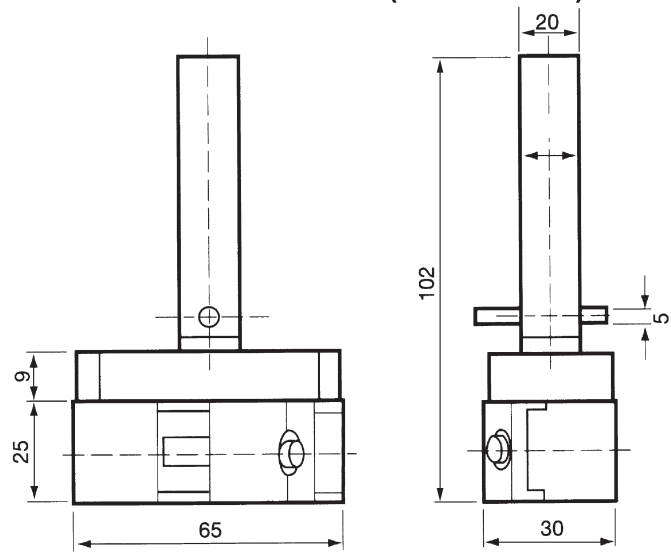
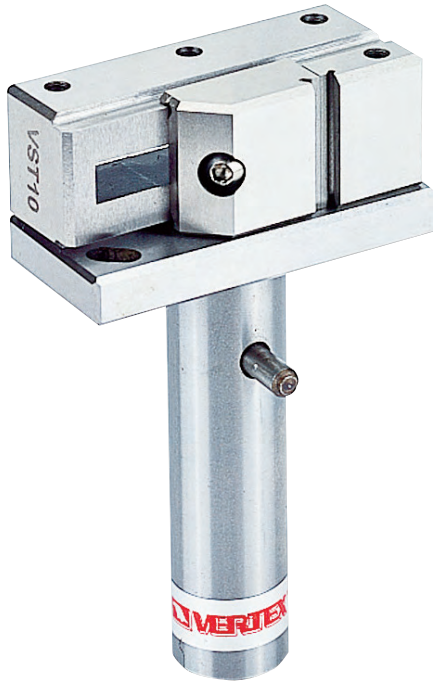
# Electrode Vise (STAINLESS)



MINI TYPE  
JAW WIDTH 25mm

JAW OPENING 20mm

(STAINLESS) FOR EDM



※ Not 100% magnetic proof

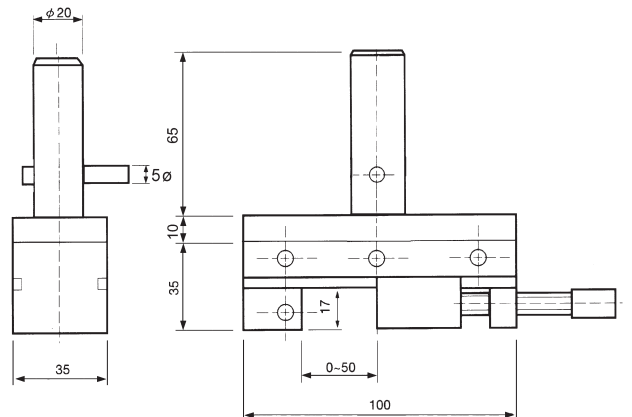
Material	SUS440
Parallelism	within 0.003 mm / 100 mm
Squareness	within 0.005 mm / 100 mm
Harden treatment	up to HRC 58°

ORDER NO.	MATERIAL	LENGHT	WIDTH	JAW OPENING	JAW HEIGHT	HARDEN	WEIGHT (kgs)	CODE NO.
VEH-20MS	SUS440	65	25	20	10	HRC 58°	0.7	2008-020



# Electrode Vise (STAINLESS)

JAW WIDTH 35mm  
JAW OPENING 50mm



※ Not 100% magnetic proof

Material	SUS440
Parallelism	within 0.003 mm / 100 mm
Squareness	within 0.005 mm / 100 mm
Harden treatment	up to HRC 58°

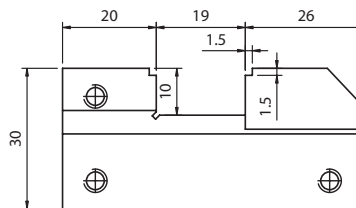
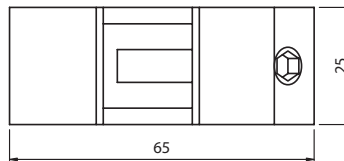
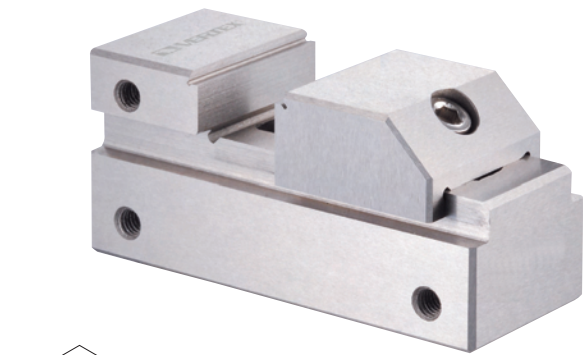
ORDER NO.	MATERIAL	LENGHT	WIDTH	JAW OPENING	JAW HEIGHT	HARDEN	WEIGHT (kgs)	CODE NO.
VEH-20DS	SUS440	100	35	50	17	HRC 58°	1.3	2008-030



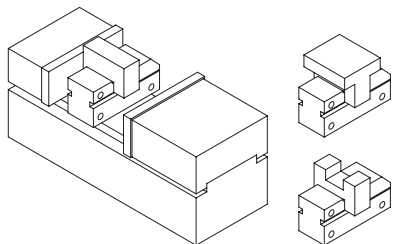
# Tool Maker Vise (STAINLESS)



**VERTEX**  
MINI TYPE FOR EDM



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  $\pm 0.003 / 100$  mm  
✳ Not 100% magnetic proof



ORDER NO.	MATERIAL	LENGHT	WIDTH	JAW OPENING	JAW HEIGHT	HARDEN	WEIGHT (kgs)	CODE NO.
VSTV-10V	SUS 440	65	25	19	10	HRC 56°-58°	0.3	2008-070

TOOL MAKER VISE



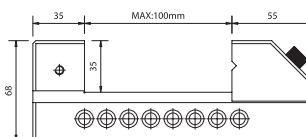
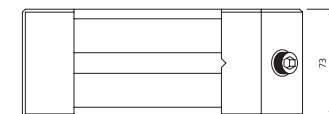
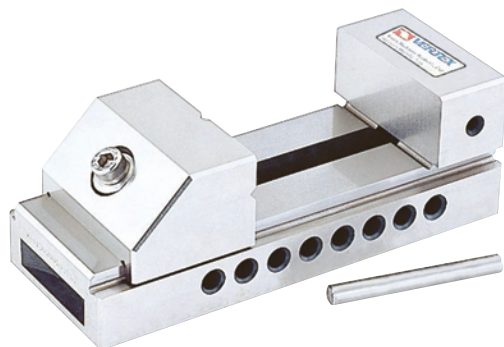
# Tool Maker Vise (STAINLESS)

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

Material: SUS 440  
Hardness: HRC 58°~60°  
Squareness: Within 0.005 / 100 mm  
✳ Not 100% magnetic proof

MINI TYPE FOR EDM

Unit:mm

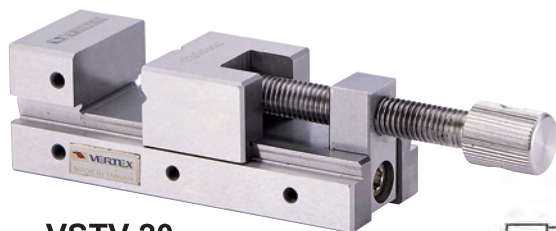


TOLERANCE	
A	$\pm 0.004$ mm
B	$\pm 0.005$ mm
C	$\pm 0.005$ mm
D	$\pm 0.005$ mm
E	$\pm 0.005$ mm
F	$\pm 0.005$ mm
G	$\pm 0.005$ mm

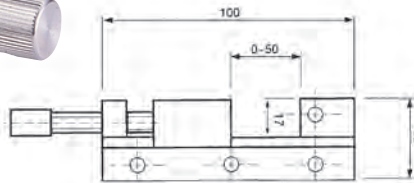


# Tool Maker Vise (STAINLESS)

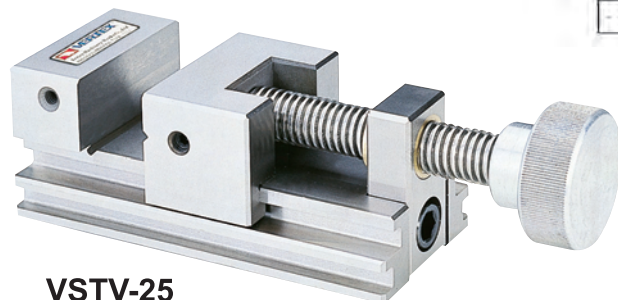
FOR EDM



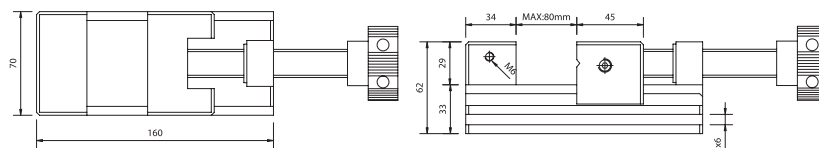
VSTV-20



- Material: SUS 440
  - Hardness: HRC 56°
  - Squareness: Within 0.005 / 100 mm
  - 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 permeation.
  - The vise can clamp workpiece by moveable Jaw without lifting. It is easier and convenient for processing small workpieces.
- ✳ Not 100% magnetic proof



VSTV-25



ORDER NO.	MATERIAL	LENGHT	HEIGHT	JAW OPENIG	JAW WIDTH	JAW HEIGHT	HARDEN	WEIGHT (kgs)	CODE NO.
VSTV-20	SUS440	100	35	50	35	17	HRC56°	1.2	2008-079
VSTV-25		160	62	80	70	29		4.4	2008-080



# Electrode Vise



MINI TYPE  
JAW WIDTH 25mm

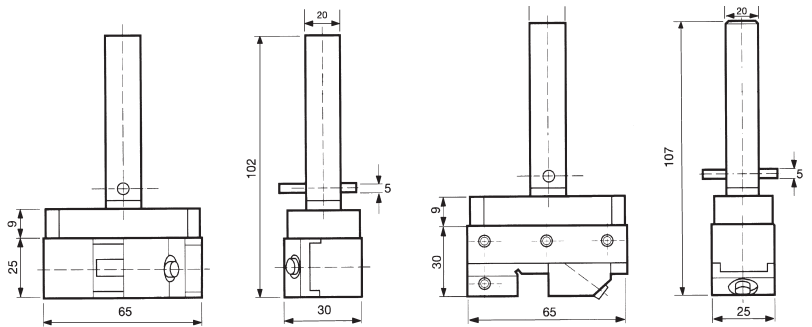
## ELECTRODE HOLDERS FOR ELECTRO DISCHARGE MACHINE

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 20 mm.

※ Not 100% magnetic proof

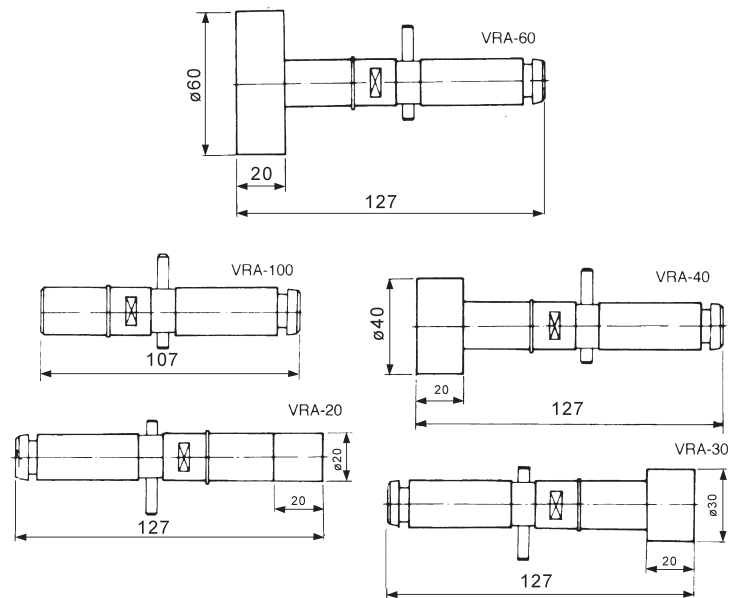


ORDER NO.	MATERIAL	LENGHT	WIDTH	JAW OPENING	JAW HEIGHT	HARDEN	WEIGHT (kgs)	CODE NO.
VEH-20	SKS	65	25	20	10	HRC 58°-60°	0.8	2008-001



# Electrode 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

**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 inefficiency 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**

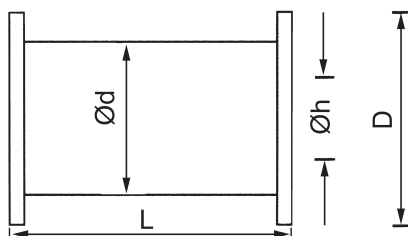
Outstanding straightness ensures automatic threading successfully.

\*FLOATING PRICE, CONTACT US BEFORE ORDERING.

**SPECIFICATION**

ORDER NO.	WIRE TYPE	DIAMETER		DIAMETER TOLERANCE (mm)	BREAKING LOAD (kgs)	TENSILE STRENGTH (N/mm)	ELONGATION (%)	SUITFUL WORKING STYLE	CODE NO.
		inch	mm						
VEW-20H	HARD	0.008	0.20	$\pm 0.001$	3.14	980 $\cong$	0.4 $\cong$	STRAIGHT CUTTING a.PASS CUTTING b.ROUGH CUTTING c.FINISH CUTTING	2009-003
VEW-25H		0.010	0.25		4.92				2009-004
VEW-30H		0.012	0.30		7.07				2009-005
VEW-20S	SOFT	0.008	0.20	$\pm 0.001$	1.41	441 $\cong$	15 $\cong$	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 THE POPULAR IS P-5R (5kgs).











PACKING COIL TYPE	COIL SHAPE	WIGHT OF WIRE ON COIL (kg)	DIAMETHE OF WIRE (mm)	D (mm)	d (mm)	L (mm)	h (mm)	LENGTH OF WIRE ON COIL (M)	NUMBER OF COILS /BOX
P-5R		5	0.20 0.25 0.30 0.33	160	90	114	20	18314 11553 8001 6750	4



# 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 (線切割眼模 M118)	C 834G	2009-030
 M119		SX, CX, FX Lower 下 (線切割眼模 M119)	B 243G	2009-031
 M103 Ø3		F, FL, G, Opening Ceramic Stainless (眼模螺絲 Stop screw M108)	D 162G	2009-032
 M108			D 123G	2009-033
 M111		G, H-HA, C, CR, (偏心座 Dies Holder M111)	X 184D226H01	2009-034
 M117 Ø4		H1, HA, B, Z SK/AF Lower 下 (線切割眼模 M117)	B 176G	2009-035
 M107		H1, HA, B, Z SK/AF Upper 上 (線切割眼模 M107)	B123G	2009-036
 M120		H1, A, B, Z/AF Upper 上 (眼模螺絲 Stop screw M120)	C524G	2009-037
 Z141		Ceramic Guides for Small Hole EDM machine (放電打孔機用導管 Z141)		2009-038
 S103	ソデック SODICK	A300, 500, Aw330, 450 EPOC, AP, BF (線切割眼模 S103)	GUIDE (87-3)	2009-039
 S111	SEIBE	F, K Upper & Lower (線切割眼模 S111)		2009-040
 H102	HITACHI	H1-Cut 203, 304, 345, 460 Lower 下 (線切割眼模 H102)		2009-041
 F120	ファナック FANUC	∞°A, ∞°B Upper 上 (線切割眼模 F120)		2009-042
 F121				∞°A, ∞°B Lower 下 (線切割眼模 F121)
 F101		O, P, Q, R, W Upper & Lower 上、下 (線切割眼模 F101, F102)		2009-044
 F102				2009-044
 F123		1A, 1B, Upper 上 (線切割眼模 F123)		2009-045
 F124	1A, 1B, Lower 下 (線切割眼模 F124)	2009-046		



# Electrode (Copper & Brass Pipe Electrode)



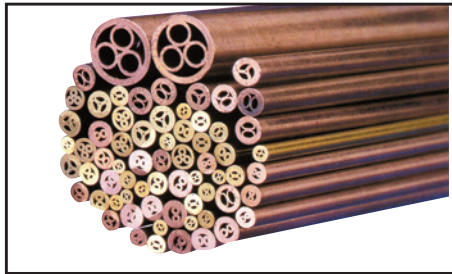
Used to guide wire in wire electro-discharge machines.



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 MACHINING & NON THROUGH HOLE.
- THE LENGTH 300MM OR 400MM OF PRICE IS SAME. PLEASE NOTIFY THE LENGTH WHEN YOU ORDERING.
- EACH UNIT PRICES IS 20 PCS.

ELECTRODE

## STANDARD STYLE HOLE

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

MATERIAL \ HOLE DIA.		1.4	1.5	1.6	1.7	1.8	1.9	2.0	2.1	2.2
BRASS	ORDER NO.	VEB-14	VEB-15	VEB-16	VEB-17	VEB-18	VEB-19	VEB-20	VEB-21	VEB-22
	CODE NO.	2010-011	2010-012	2010-013	2010-014	2010-015	2010-016	2010-017	2010-018	2010-019
COPPER	ORDER NO.	VEP-14	VEP-15	VEP-16	VEP-17	VEP-18	VEP-19	VEP-20	VEP-21	VEP-22
	CODE NO.	2010-040	2010-041	2010-042	2010-043	2010-044	2010-045	2010-046	2010-047	2010-048

## SUPER 8 STYLE HOLE BRASS PIPE ELECTRODE

MATERIAL \ HOLE DIA.		1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7
ORDER NO.		VES-10	VES-11	VES-12	VES-13	VES-14	VES-15	VES-16	VES-17
CODE NO.		2010-064	2010-065	2010-066	2010-067	2010-068	2010-069	2010-070	2010-071

MATERIAL \ HOLE DIA.		1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.5
ORDER NO.		VES-18	VES-19	VES-20	VES-21	VES-22	VES-23	VES-24	VES-25
CODE NO.		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

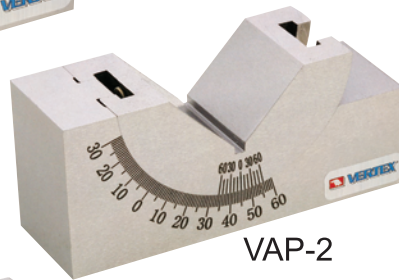
Unit:mm



# Angle Plate



VAP-1



VAP-2



VAP-3

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

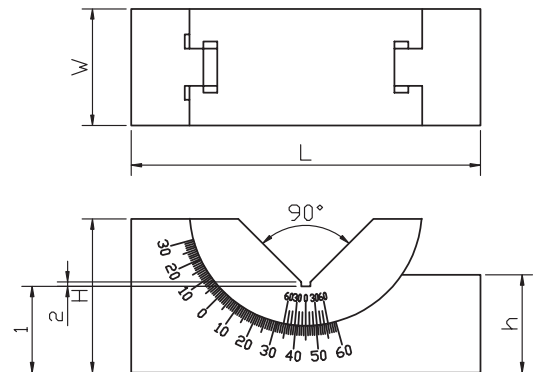
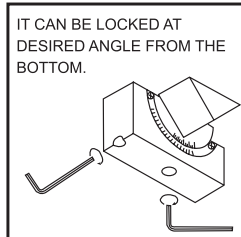
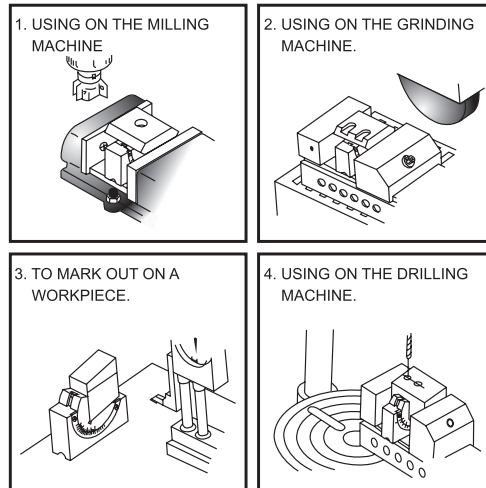
Material: SK2

Hardness: HRC 50°-54°

Squareness:  $\pm 0.01$  mm

Angular measures from 0°-60°

※ Not for LABORATORY

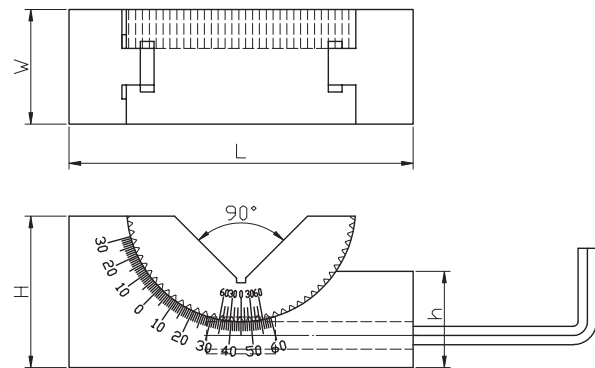
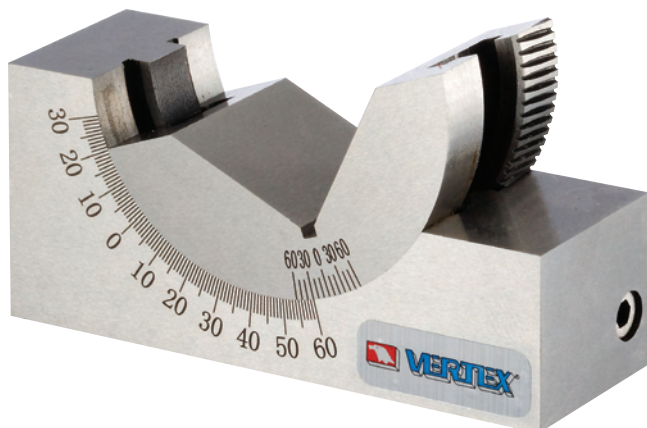


Unit:mm

ORDER NO.	H	W	L	h	N.W. (KGS)	CODE NO.
VAP-1	48	45	102	28	1.4	2005-001
VAP-2	49	30	102	28	0.9	2005-002
VAP-3	32.5	25	75	21	0.5	2005-003



# Micro-Adjustable Angle Plate



Angle Can Be Adjusted From 0°~60° By Screw

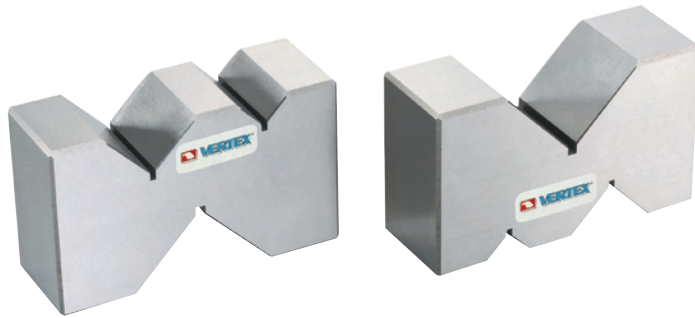
※ Not for LABORATORY

Unit:mm

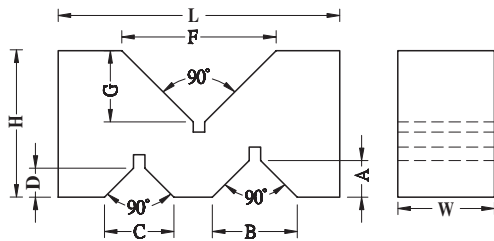
ORDER NO.	H	W	L	h	N.W. (KGS)	CODE NO.
VAPM-1	47	46	102	28	1.4	2005-010
VAPM-2	49	30	102	28	1	2005-011
VAPM-3	32	25	75	22	0.5	2005-012



# Precision V Block



Material : Steel  
 Hardness : HRC 52  
 Accuracy : 0.02 mm / 100 mm  
 ● For Production  
 ✖ Not for LABORATORY



Unit:mm

ORDER NO.	A	B	C	D	F	G	L X W X H	WEIGHT (KGS)	CODE NO.
V-3VA-S	10	22	18	8	40	18	72.8X25X36.7	0.88	2005-018
V-4VA-S	15	32	18	8	50	24	100X36X60	2.9	2005-019
V-5VA-S	16	35	22	9.5	65	31.5	124.6X49.8X79.8	6.8	2005-020

ANGLE BLOCK



# Precision Angle Blocks

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

WEIGHT: 1kg

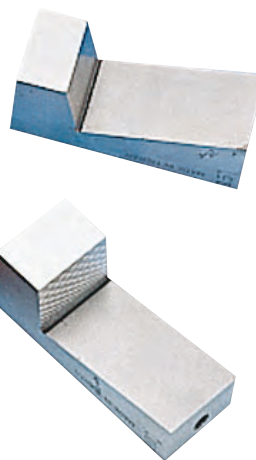


Furnished in 1° increments to 5 degrees and in 5° increments to 30 degrees. With the addition of the optional 1/4° and 1/2° blocks virtually and conceivable angle to these increments can be established.

- 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°)
- ✖ Not for LABORATORY



# 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 50° HRC & ground to 10 sec.
  - 9pcs angle blocks (1/2°, 1°, 2°, 3°, 4°, 5°, 10°, 15°, 30°) for AB-163
- ✖ Not for LABORATORY

mm

ORDER NO.	L X W X H	WEIGHT (KGS)	CODE NO.
AB-163	Vee blocks: 3"Lx1 <sup>3</sup> / <sub>16</sub> "Wx1 <sup>3</sup> / <sub>16</sub> "H Angle Plates: 2 <sup>3</sup> / <sub>4</sub> "Lx1 <sup>3</sup> / <sub>16</sub> "Wx <sup>5</sup> / <sub>64</sub> "H	2	2006-010
AB-164	Vee blocks: 4"Lx1 <sup>1</sup> / <sub>2</sub> "Wx1 <sup>1</sup> / <sub>2</sub> "H Angle Plates: 4"Lx1 <sup>1</sup> / <sub>2</sub> "Wx <sup>5</sup> / <sub>32</sub> "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  $\pm 0.001$ " Per Inch.
- Interlocking Slots.
- Size of Angle Blocks: .35"x3"

A Complete set for Angular set-ups. No Other Gauges Required.

- 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.

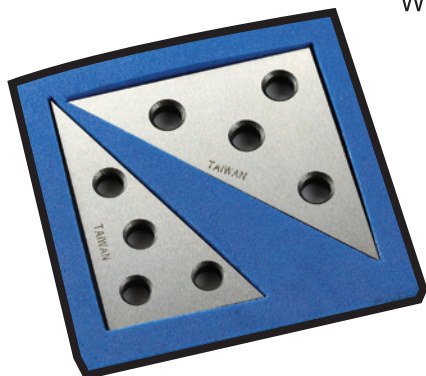
- Complete with fitted case.
- Hardness : HRC 50°
- ※ Not for LABORATORY



# Solid Angle Plates

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

WEIGHT:0.3kg



## Solid Angle Plates

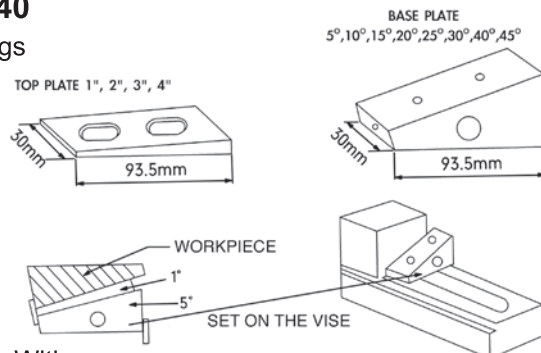
- Precision ground angles for convenient set-ups in tooling, production and inspection.
- Four holes on top of it for easy mounting.
- 1/4" Thick, packed in cardboard box.
- Set of 3"x3"x4-3/8", 45°x45°x90°x1pc  
2"x3-15/32"x4", 30°x60°x90°x1pc
- Hardness : HRC 50°
- ※ Not for LABORATORY



# 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 Hrc 55°
- Made By The Material Of Sk2
- Can Be Cooperate Two Set For Use.
- ※ Not for LABORATORY

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



# Hardened Steel Square



Hardness : HRC50°

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. 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 . Packed in individual cartons. Accuracy 0.02mm.

※ Not for LABORATORY

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

SQUARE



# Square

Alloysteel Grounded HRC50° ± 2



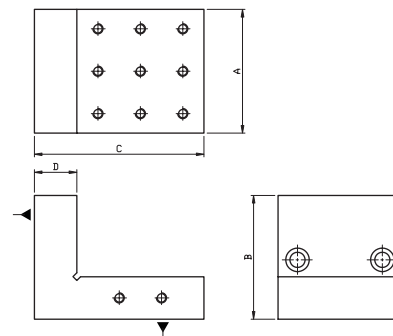
※ Not for LABORATORY

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



# Precision Steel Angle Plate

HIGH PRECISION TYPE



MATERIAL : YK30 ALLOY STEEL  
 ACCURACY : 0.005/100MM  
 HARDEN TREATMENT UP TO HRC 58°  
 ※ Not for LABORATORY

ORDER NO.	A	B	C	D	N.W (KGS)	CODE NO.
<b>VRS-33</b>	3" 75	3" 75	4" 100	1" 25	2.2	2006-060
<b>VRS-44</b>	4" 100	4" 100	4" 100	1" 25	3.7	2006-061
<b>VRS-46</b>	4" 100	4" 100	6" 150	1" 25	4.5	2006-062
<b>VRS-85</b>	8" 200	120	8" 200	40	14.3	2006-063
<b>VRS-1206</b>	12" 300	6" 150	12" 300	2" 50	32.3	2006-064