

PRECISION STEEL PARALLELS

'TOOLFAST' Steel Parallels are used as precision packing supports under jobs or fixtures. Made from tool steel, hardened, tempered & precision ground in matched pairs. Matched pairs are marked with identical serial numbers. All sides are chamfered. Overall sizes are nominal.

- Hardened & Tempered 52 - 56 HRC.
- Parallelism within 0.005mm upto 200mm length.
- Inspection certificate is furnished.

MODEL	SIZE	N. W. Kgs.
TSP-20	10 x 20 x 150	0.47
TSP-35	15 x 35 x 150	1.24
TSP-45	20 x 45 x 200	2.80
TSP-55	25 x 55 x 250	5.34
TSP-60	30 x 60 x 300	8.50
TSP-75	45 x 75 x 300	15.80



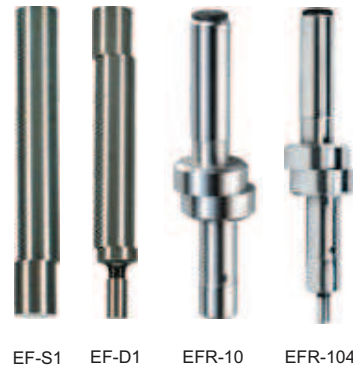
EDGE FINDER

TOOLFAST' Edge Finder is used for fast and accurate location of starting point of work pieces with respect to the machine spindle on milling or jig boring machine tables.

Application: Edge finder is used for location of edges, shoulders, grooves etc. of work pieces kept on machine table with respect to the machine spindle. Shank of the Edge Finder is held in the collet or chuck and work table is traversed to cause the rotating tip of the edge finder make contact with the edge of the work piece to be located. Once the rotating tip comes in contact with the work piece, work table is further traversed so that the rotating tip shifts to a concentric position with respect to the shank. Now any movement to "off centre" will cause a distinct 'wobble'. At this point, the distance from the work edge to the centre of machine spindle is equal to half the diameter of the tip of the edge finder. Available in single & double ended tip. In double ended tip, Edge Finder can be held from both ends and both the tips of two different sizes can be used for edge finding.

Shank and tip of the edge finder are coupled together with the help of an internal spring for independent rotation of both. It is hardened and accurately ground all over to ensure repeatability of work location within 0.01 mm.

MODEL	SHANK DIA	TIP DIA	TYPE	N. W. Kgs.
EF-S1	10	10	Edge Finder-single end	0.03
EF-D1	10	5 & 10	Edge Finder-double end	0.03
EFR-10	10	10	Edge Finder-disc type	0.06
EFR-104	10	4 & 10	Disc Type - double end	0.06

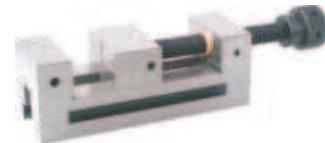


GRINDING VICE - SCREW TYPE

'TOOLFAST' Grinding Vice - screw type is a precision machine vice. Body & jaw made of tool steel, hardened, tempered & precision ground.

- Hardened & Tempered to 52 - 56 HRC.
- All sides Parallelism & Squareness within ± 0.005 mm.
- Inspection certificate is furnished.

MODEL	JAW WIDTH	JAW DEPTH	MAX. JAW OPENING	OVERALL LENGTH	OVERALL HEIGHT	N. W. Kgs.
GV-65	63	32	85	190	65	4.4
GV-75	73	35	100	210	74	6.2
GV-90	88	40	125	250	88	10.0
GV-100	100	45	125	260	95	13.0
GV-125	125	50	158	300	110	20.0
GV-150	150	50	175	315	110	24.5



PRECISION SINE VICE

'TOOLFAST' Precision Sine Vice is used to obtain precise angles by means of gauge blocks. Apart from its use on milling and grinding machine, this Sine Vice can also be used as a reference for inspection.

- All Hardened & Tempered to 52 - 56 HRC.
- All side Parallelism & Squareness within ± 0.005 mm.
- Centre distance of rollers within ± 0.005 mm.
- Inspection certificate is furnished.

Chart for setting sine angles with the help of gauge blocks is provided.

MODEL	JAW WIDTH	JAW DEPTH	MAX. JAW OPENING	OVERALL LENGTH	OVERALL HEIGHT	N. W. Kgs.
PSV-2	50	25	65	140	80	3.2
PSV-3	73	35	100	190	104	7.2
PSV-4	100	45	125	245	134	16.5

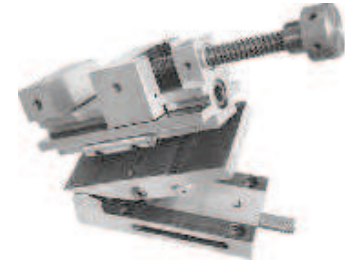


PRECISION COMPOUND SINE VICE - SCREW TYPE

'TOOLFAST' Precision compound Sine Vice has compound sine angle setting on two sine plates. Both the tiltings are controlled by fine screws.

- All Hardened & Tempered to 52 - 56 HRC.
- All side Parallelism & Squareness within $\pm 0.005\text{mm}$.
- Centre distance of rollers within $\pm 0.005\text{mm}$.
- Inspection certificate is furnished.

Charts for setting both sine angles with the help of gauge blocks is provided.



MODEL	JAW WIDTH	JAW DEPTH	MAX. JAW OPENING	OVERALL LENGTH	OVERALL HEIGHT	N. W. Kgs.
CSGV-3	75	30	76	160	124	9.0

STEEL V-BLOCK

'TOOLFAST' Steel V-Blocks are made of tool steel, hardened, tempered & precision ground on all sides. These are supplied in matched pairs having both sides 'V' with one clamp.

- Unbreakable Steel Clamp.
- All Hardened & Tempered 52 - 56 HRC.
- Parallelism & Squareness of all faces & 'V' within $\pm 0.005\text{mm}$.
- Inspection certificate is furnished.

MODEL	LENGTH	HEIGHT	WIDTH	HOLDING CAPACITY Ø MAX	N. W. Kgs. (Pair with one clamp)
SVB-50	50	37	37	35	1.1
SVB-80	80	60	60	60	3.8
SVB-100	100	75	75	75	7.6
SVB-125	125	95	95	90	14.3
SVB-150	150	98	98	95	19.0



MAGNETIC V-BLOCK

'TOOLFAST' Magnetic V-Blocks are precision ground V-Blocks with high power magnets. Accurately fitted magnet ensures easy movement of knob. Available in single as well as matched pairs.

These V-blocks have main holding 'V' and bottom face fitted with hardened steel plates having hardness 52-56 HRC.

- Parallelism & Squareness of all faces & 'V' within $\pm 0.005\text{mm}$.
- Most suitable for inspection and tool room applications.
- Inspection certificate is furnished.

MODEL	LENGTH	HEIGHT	WIDTH	N. W. Kgs. (Pair)
MVB-4-H	100	95	75	9.0
MVB-6-H	150	95	75	13.5



C. I. ANGLE PLATE - SLOTTED

'TOOLFAST' C. I. Angle Plate-Slotted is made out of high quality seasoned casting having precision ground outside faces & ends. Machined slots for clamping on both faces.

- Accuracy in parallelism & squareness within $\pm 0.01\text{mm}$ per 200 mm length.
- Inspection certificate is furnished.

MODEL	SIZE	N. W. Kgs.
APS-110	110 x 85 x 75	2.9
APS-150	150 x 125 x 110	4.7
APS-175	175 x 135 x 110	5.5
APS-200	200 x 150 x 125	8.0
APS-225	225 x 175 x 150	13.0
APS-250	250 x 200 x 150	15.0
APS-300	300 x 225 x 200	25.0

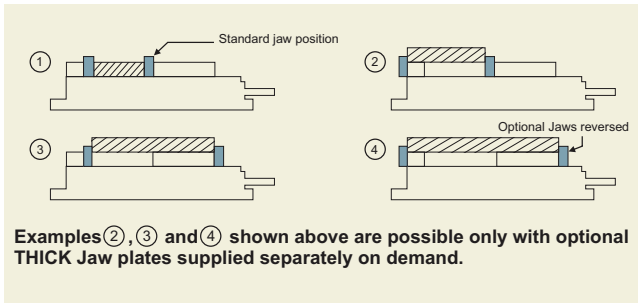
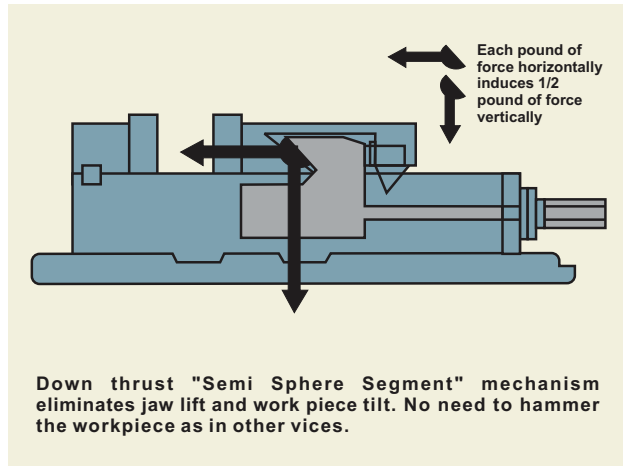
Sizes APS-110 to APS-200 are in open ends type as shown in picture.
 Sizes APS-225 to APS-300 are in webbed ends type .



LOCK DOWN JAW MACHINE VICE

FOR MACHINING CENTRE AND MILLING MACHINE

- Accuracy in Parallelism & Squareness within 0.02 mm
- Unbreakable ductile iron cast body
- No work piece tilt after clamping
- All parts interchangeable and available as spares
- Tenons and tenon slots provided for effortless truing of vice on machine table



MODEL	JAW WIDTH	MAX. JAW OPENING WITH STANDARD JAW POSITION	MAX. JAW OPENING WITH JAWS REVERSED	JAW DEPTH	OVERALL LENGTH	OVERALL HEIGHT WITH SWIVAL BASE	OVERALL HEIGHT WITHOUT SWIVAL BASE	N.W. WITH SWIVAL BASE Kgs.	N.W. WITHOUT SWIVAL BASE Kgs.
MMV-4-H	110	105	270	37	330	135	95	22	16
MMV-6-H	160	155	365	48	420	160	115	44	33
MMV-6-HXL	160	190	395	48	430	160	115	49	38
MMV-8-H	210	210	480	60	550	190	145	80	62

All above models available with or without swivel base.

COMPACT LOCK DOWN JAW MACHINE VICE - PRECISION GROUND

This is a compact version of Lock Down Jaw Machine vice which enables mounting of multiple vices side by side on the machine bed thus saving time by multiple clamping.

- Bed height of all vices is maintained within 0.02 mm.
- Jaws can be mounted in reverse position same as in case of Lock Down Jaw vices shown above.



Compact Vice for multiple Setup on machining center



MODEL	JAW WIDTH	JAW DEPTH	MAX. JAW OPENING WITH STANDARD JAW POSITION	MAX. OPENING WITH JAWS REVERSED	OVERALL LENGTH	OVERALL HEIGHT	N. W. Kgs.
CMMV-6	152	48	152	365	370	120	28