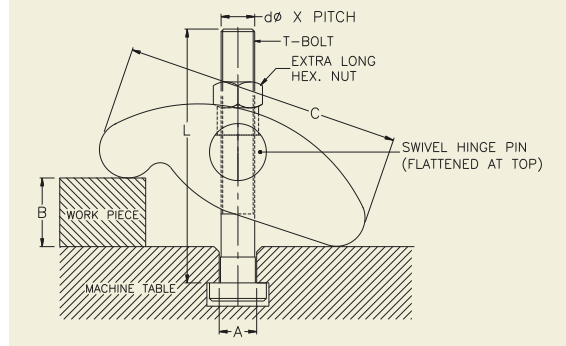


**UNIVERSAL STRAP CLAMP**

FOR POWER PRESSES, MILLING, DRILLING, SHAPING, BORING ETC.

'TOOLFAST' Universal Strap Clamp is most suitable for die clamping on power presses and a very useful clamp for job clamping on 'T' slot table of Drilling, Milling, Shaping, Boring and other machine tools. No supports are required at the rear of the clamp since the body of the clamp is self-positioning as the rear part rests on the table and front holds the job. The body positions itself with the help of swivel hinge pin according to the thickness of the workpiece, the T-Bolt remaining in vertical position and the nut is tightened on the flattened portion of swivel hinge pin.

Clamp is supplied complete with hardened T-Bolt & special nut.



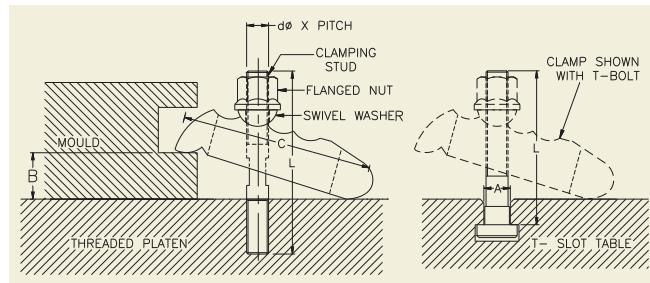
MODEL	T-SLOT SIZE A	dφ x PITCH x L	CLAMPING RANGE B	LENGTH OF CLAMP C	BREADTH OF CLAMP	N. W. Kgs.
USC-12A	12	M12 x 1.75 x 100	0-60	105	42	0.84
USC-12B	14	M12 x 1.75 x 100	0-60	105	42	0.86
USC-16A	16	M16 x 2.0 x 130	0-80	130	50	1.73
USC-16B	18	M16 x 2.0 x 130	0-80	130	50	1.74
USC-20A	20	M20 x 2.5 x 150	0-100	160	55	2.45
USC-20B	22	M20 x 2.5 x 150	0-100	160	55	2.48
USC-24A	24	M24 x 3.0 x 210	0-120	190	65	4.39
USC-24B	28	M24 x 3.0 x 210	0-120	190	65	4.68

**MOULD CLAMP**

FOR PLASTIC INJECTION MOULDING & PRESSURE DIE CASTING MACHINES

'TOOLFAST' Mould Clamp is designed specially for low height applications only such as clamping of moulds on plastic injection moulding machines & pressure die casting machines. The compact front portion of the clamp enables it to penetrate into the limited clamping area of the mould and clamp it. The positioning of forged swivel washer on required curved groove enables the operator to set the center distance between the clamping portion and the clamping bolt as per the nearest tapped hole available on platen (where there are no T-slots). No supports are required at the rear of the clamp as the rear portion rests on the platen and front holds the mould. Flanged nut is tightened on the swivel washer which takes care of the positioning of clamp body. These clamps are equally useful on pressure die casting machines, hydraulic presses & power presses where low height clamping is done.

Clamps are supplied complete with swivel washer, flanged nut & clamping stud or T-Bolt as shown in tables below.



**MOULD CLAMP - WITH CLAMPING STUD**

MODEL	dφ x PITCH x L	CLAMPING RANGE B	LENGTH OF CLAMP C	BREADTH OF CLAMP	N. W. Kgs.
MC-12	STUD M-12 x 1.75 x 100	0-35	110	50	0.99
MC-16	STUD M-16 x 2.0 x 125	0-40	135	60	1.67
MC-20	STUD M-20 x 2.5 x 175	0-50	160	70	2.81
MC-24	STUD M-24 x 3.0 x 200	0-60	180	80	4.19

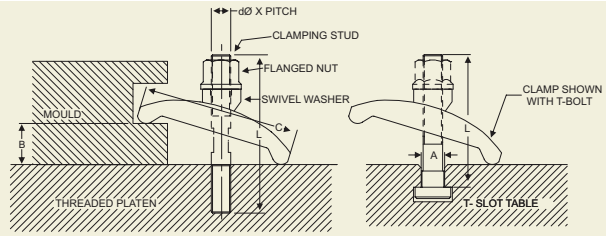
**MOULD CLAMP - WITH T-BOLT**

MODEL	dφ x PITCH x L	T-SLOT SIZE A	CLAMPING RANGE B	LENGTH OF CLAMP C	BREADTH OF CLAMP	N. W. Kgs.
MC-12A	T-BOLT M-12 x 1.75 x 100	12	0-35	110	50	1.15
MC-12B	T-BOLT M-12 x 1.75 x 100	14	0-35	110	50	1.30
MC-16A	T-BOLT M-16 x 2.0 x 130	16	0-40	135	60	1.76
MC-16B	T-BOLT M-16 x 2.0 x 130	18	0-40	135	60	1.78
MC-20A	T-BOLT M-20 x 2.5 x 150	20	0-50	160	70	2.89
MC-20B	T-BOLT M-20 x 2.5 x 150	22	0-50	160	70	2.92
MC-24A	T-BOLT M-24 x 3.0 x 210	24	0-60	180	80	4.40
MC-24B	T-BOLT M-24 x 3.0 x 210	28	0-60	180	80	4.72

### MOULD CLAMP - FORGED

FOR PLASTIC INJECTION MOULDING & PRESSURE DIE CASTING MACHINES

The Popular 'TOOLFAST' mould clamp is now available in forged steel body for extra strength. All models shown below are similar to the MC models on the previous page.



### MOULD CLAMP - FORGED - WITH CLAMPING STUD

MODEL	dø x PITCH x L	CLAMPING RANGE B	LENGTH OF CLAMP C	BREADTH OF CLAMP	N. W. Kgs.
MCF-12	STUD M-12 x 1.75 x 100	0-35	102	46	0.50
MCF-16	STUD M-16 x 2.0 x 125	0-50	124	58	0.98
MCF-20	STUD M-20 x 2.5 x 175	0-65	156	68	1.8
MCF-24	STUD M-24 x 3.0 x 200	0-75	178	82	2.98

### MOULD CLAMP - FORGED - WITH T-BOLT

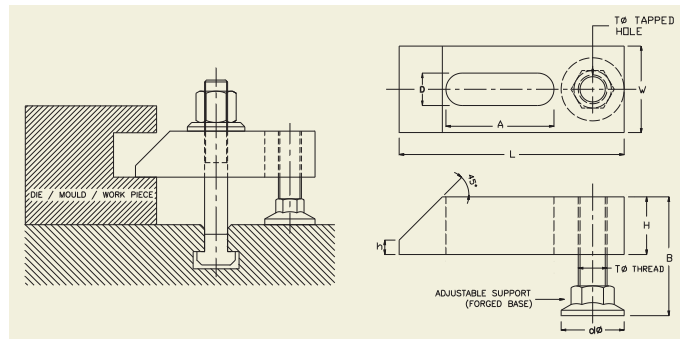
MODEL	dø x PITCH x L	T-SLOT SIZE A	CLAMPING RANGE B	LENGTH OF CLAMP C	BREADTH OF CLAMP	N. W. Kgs.
MCF-12A	T-BOLT M-12 x 1.75 x 100	12	0-35	102	46	0.52
MCF-12B	T-BOLT M-12 x 1.75 x 100	14	0-35	102	46	0.54
MCF-16A	T-BOLT M-16 x 2.0 x 130	16	0-50	124	58	1.45
MCF-16B	T-BOLT M-16 x 2.0 x 130	18	0-50	124	58	1.70
MCF-20A	T-BOLT M-20 x 2.5 x 150	20	0-65	156	68	1.82
MCF-20B	T-BOLT M-20 x 2.5 x 150	22	0-65	156	68	1.86
MCF-24A	T-BOLT M-24 x 3.0 x 210	24	0-75	178	82	3.24
MCF-24B	T-BOLT M-24 x 3.0 x 210	28	0-75	178	82	3.34

### TAPPED END CLAMP - WITH ADJUSTABLE SUPPORT

FOR PLASTIC INJECTION MOULDING & PRESSURE DIE CASTING MACHINES

'TOOLFAST' Tapped End Clamps are Straps having special threaded adjustable support at the rear which can be adjusted to required height. Most useful clamp for plastic injection moulding or pressure die casting machines where mould / die is clamped in vertical position and these clamps with screwed in adjustable support are convenient to the operator as other loose supports tend to fall down while setting. Hardened adjustable support with large diameter forged base gives rigid clamping support and ensures machine bed safety. Extra thick body of the clamp accommodates more number of threads for rigidity of screwed support.

Supplied with adjustable threaded support only. T-Bolt or Stud with nut, washer etc. to be ordered separately.



MODEL	D SUITABLE FOR BOLT	L	A	W	H	h	TØ TAPPED HOLE	dø	B Max	N. W. Kgs.
TTUC-12	M-12	110	55	38	18	6	M-12	30	60	0.54
TTUC-16	M-16	125	60	48	24	8	M-16	35	70	0.98
TTUC-20	M-20	160	80	62	30	10	M-20	40	80	2.45
TTUC-24	M-24	200	110	72	38	10	M-24	50	85	3.67

### FORGED STRAP CLAMP WITH TAPPED END

Forged, Hardened & Tempered

This clamp is a forged version of above TTUC clamps available only for the most popular size M-16. Most suitable for mould clamping on Plastic Injection Moulding Machine.

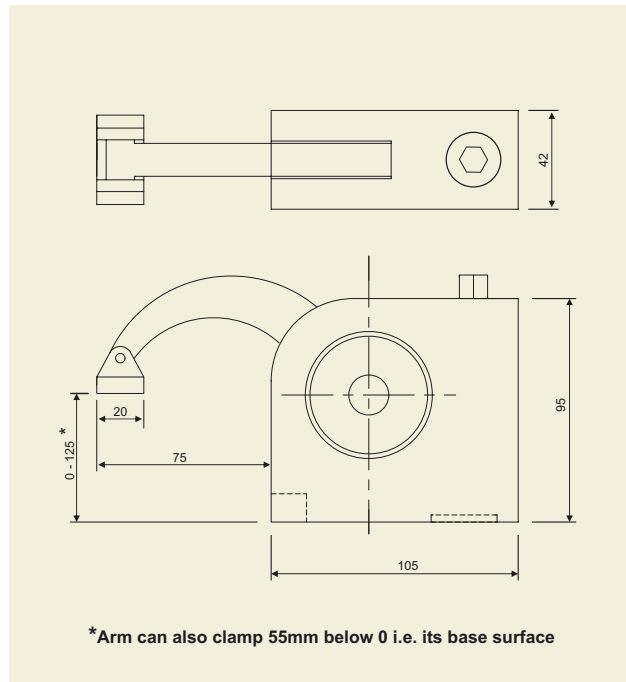
MODEL	SUITABLE FOR BOLT	LENGTH	WIDTH	THICKNESS	SLOT LENGTH	TAPPED END	N. W. Kgs.
TTFC -16	M-16	152	44	22	52	M -16	0.73



Also available as Model TTFC-16S with threaded support TS-16 (M-16 x 70 long).N.W. 0.87 Kgs.

**COMPACT MILLING CLAMP**

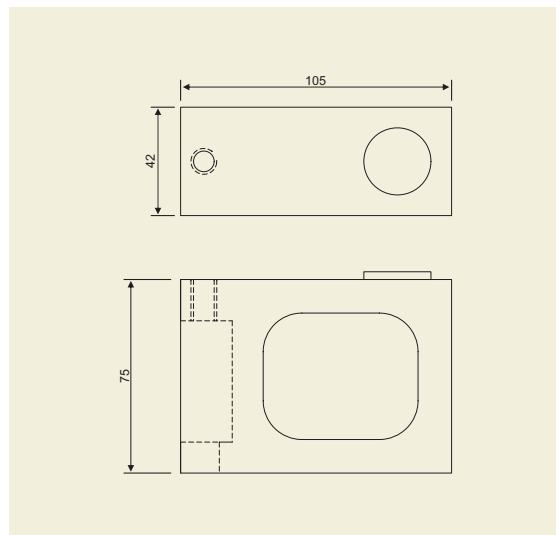
'TOOLFAST' compact milling clamp is the most multipurpose, quick and easy to use down-hold milling clamp. It is equally suitable for clamping while all kinds of machining operation on Drilling, Milling, Machining Centre, EDM etc. This clamp does not require any support blocks or any kind of adjustment, clamping is done by simple turning of the removable spanner key.



MODEL	CLAMPING HEIGHT RANGE	SUITABLE FOR T-SLOT SIZE	HOLDING CAPACITY	N. W. Kgs. (Including Spanner)
CMC-12	0-125	12	1600 kgs.	2.0
CMC-14	0-125	14	1600 kgs.	2.0
CMC-16	0-125	16	1600 kgs.	2.0
CMC-18	0-125	18	1600 kgs.	2.1

**HEIGHT BLOCK FOR CMC CLAMP :**

By stacking one Height block over another and a CMC clamp at the top can enable clamping of any height of workpiece. Each height block model HB-CMC-75 increases clamping height range by 75mm.



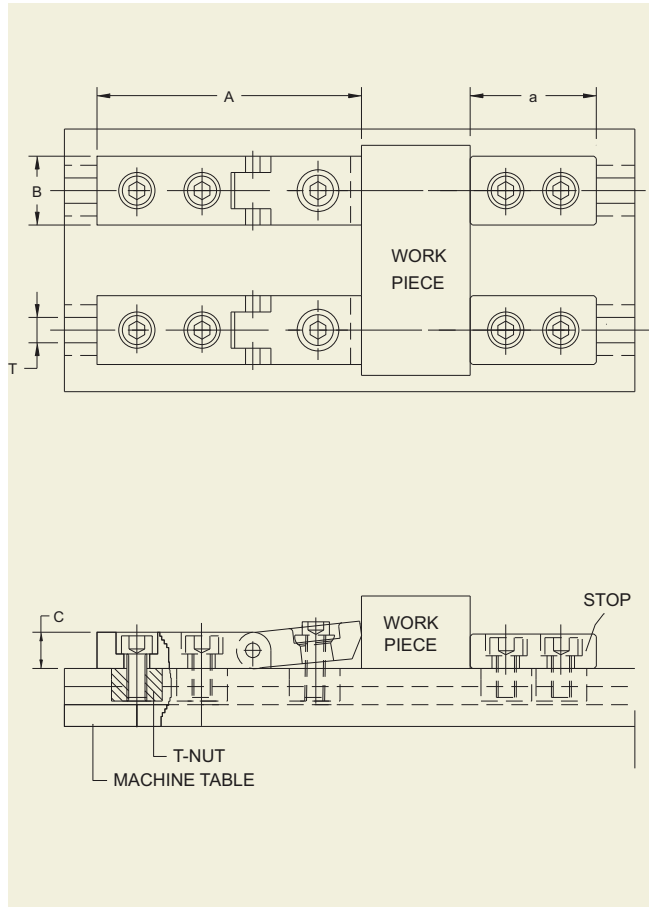
HB-CMC-75 stacked under CMC clamp to increase height by 75 mm. More height blocks can also be stacked over one another to increase height in multiples of 75mm.

Height Block HB-CMC-75 N.W. 1.53 Kgs.

**PINCH CLAMPS** FOR MACHINING CENTER, MILLING, SHAPING, PLANNING, JIG BORING ETC.

**Low Height Pinch Clamp**

'TOOLFAST' Low Height Pinch Clamp is useful for job clamping where complete top surface of the job is to be machined in one setting and hence can be clamped only from side faces. When serrated front portion is pressed against the job by tightening the front bolt, it gives a downward as well as forward clamping force. Body is made of hardened alloy steel. It is most useful on Milling, Shaping, Planning and Jig boring machines. Supplied complete with hardened T-Nuts & Standard Bolts.



MODEL	SUITABLE FOR T-SLOT SIZE T	TOTAL LENGTH A	BREADTH B	HEIGHT C	N. W. Kgs.
PC-1A	12	105	30	15	0.44
PC-1B	14	105	30	15	0.49
PC-2	16	130	38	18	0.92
PC-3	18	130	38	18	1.00
PC-4A	20	175	48	24	1.65
PC-4B	22	175	48	24	2.30
PC-5A	24	175	48	24	2.31
PC-5B	28	175	48	24	2.72

**Heavy Duty Pinch Clamp**

'TOOLFAST' Heavy Duty Pinch Clamp is a heavier version of Low Height Pinch Clamp. Basic function is same but this is used for clamping from sides of heavy blocks or thicker plates for facing of top face in one setting. Supplied complete with hardened T-Nuts & Standard Bolts



MODEL	SUITABLE FOR T-SLOT SIZE T	TOTAL LENGTH A	BREADTH B	HEIGHT C	N. W. Kgs.
HDPC-1A	18	185	62	38	3.35
HDPC-1B	20	185	62	38	3.39
HDPC-2A	22	185	62	38	3.36
HDPC-2B	24	185	62	38	3.96
HDPC-3	28	185	62	38	4.42

**STOP FOR PINCH CLAMPS**

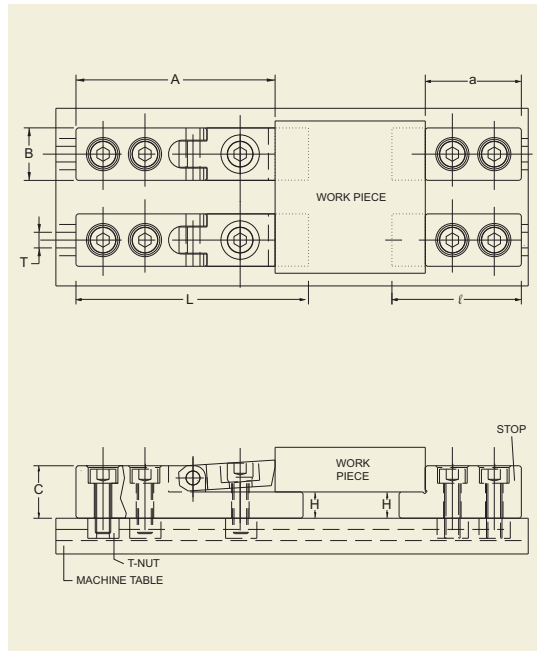
Stop or stopper blocks in different sizes as shown in table below are available to suit all above models of low height pinch clamps (PC Series) and Heavy Duty Pinch Clamps (HDPC Series). These stops are to be mounted on the opposite side of workpiece as shown in drawing above. All faces are ground for precise stopping of workpiece. Available separately in all below sizes.



MODEL	SUITABLE FOR PINCH CLAMP MODEL	SUITABLE FOR T-SLOT SIZE T	TOTAL LENGTH a	BREADTH B	HEIGHT C	N. W. Kgs.
ST-PC-1A	PC-1(a)	12	55	30	15	0.25
ST-PC-1B	PC-1(b)	14	55	30	15	0.27
ST-PC-2	PC-2	16	66	38	18	0.51
ST-PC-3	PC-3	18	66	38	18	0.55
ST-PC-4A	PC-4(a)	20	95	48	24	0.91
ST-PC-4B	PC-4(b)	22	95	48	24	1.26
ST-PC-5A	PC-5(a)	24	95	48	24	1.28
ST-PC-5B	PC-5(b)	28	95	48	24	1.50
ST-HDPC-1A	HDPC-1(a)	18	95	62	38	1.85
ST-HDPC-1B	HDPC-1(b)	20	95	62	38	1.86
ST-HDPC-2A	HDPC-2(a)	22	95	62	38	1.87
ST-HDPC-2B	HDPC-2(b)	24	95	62	38	2.18
ST-HDPC-3	HDPC-3	28	95	62	38	2.44

**LOW HEIGHT PINCH CLAMP AND STOP WITH STEP**

This is a new version of low height pinch clamp (PC Series) having step to support the workpiece above the machine table for through milling and drilling. Each PCS series clamp comes with a suitable size step (ST-PCS Series) as standard.



MODEL	SUITABLE FOR T-SLOT SIZE T	LENGTH A	OVERALL LENGTH L	BREADTH B	HEIGHT C	HEIGHT H ± 0.01	N. W. Kgs.
PCS-1A	12	110	125	30	30	14	0.84
PCS-1B	14	110	125	30	30	14	0.88
PCS-2	16	140	160	38	38	19	1.75
PCS-3	18	140	160	38	38	19	1.81

**STOP FOR LOW HEIGHT PINCH CLAMP WITH STEP**

These are stepped stops to suit clamping with low height pinch clamps with steps (PCS Series shown above). To be mounted on the opposite side of workpiece for stopping and supporting it on the machine table as shown in drawing. All faces are ground for precise stopping and supporting of workpiece. One stop (ST-PCS Series) comes as standard with each of above model PCS Series Clamps.



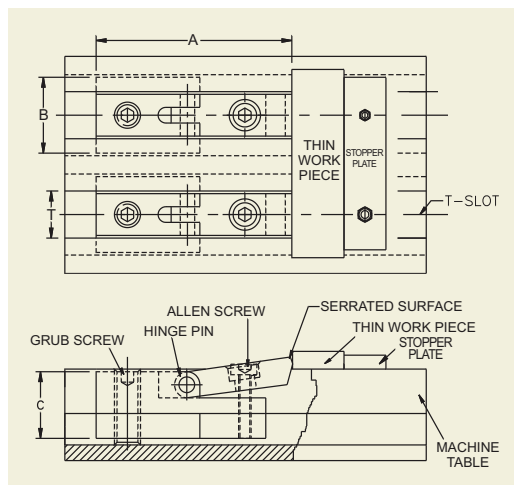
MODEL *	SUITABLE FOR PCS MODEL	SUITABLE FOR T-SLOT SIZE T	LENGTH a	OVERALL LENGTH l	BREADTH B	HEIGHT C	HEIGHT H ± 0.01	N. W. Kgs.
ST-PCS-1A	PCS-1A	12	55	70	30	30	14	0.49
ST-PCS-1B	PCS-1B	14	55	70	30	30	14	0.53
ST-PCS-2	PCS-2	16	66	86	38	38	19	0.96
ST-PCS-3	PCS-3	18	66	86	38	38	19	1.02

\*Are supplied as standard with PCS Series Clamps. To be purchased separately only in case required extra stops.

**MINI PINCH CLAMP**

FOR MILLING, SHAPING & PLANNING ETC.

'TOOLFAST' Mini Pinch Clamp is useful for clamping of thin plates from side faces. Body made of hardened alloy steel is in the form of a T-Nut which slides easily into the T-slot. When rear screw is tightened, the clamp is held tightly with the T-slot and then by tightening the front bolt, it gives a downward as well as forward clamping force to the job. Only a required small portion of the clamp comes above the surface of T-Slot table, rest of the body of clamp remains under the top surface of the T-Slot table. Hence, it can clamp thinnest plates positively and still remain under the top level of the job. This clamp is most suitable for top facing of thin plates on milling, shaping and planning machines. Supplied complete with standard front & rear screws.

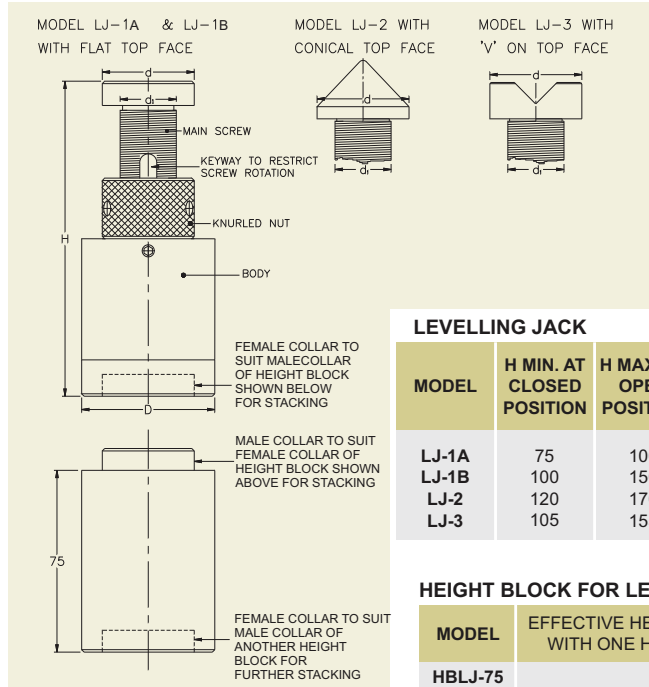


MODEL	SUITABLE FOR T-SLOT SIZE T	TOTAL LENGTH A	BREADTH AT BOTTOM B	HEIGHT C	N. W. Kgs.
MPC-1	14	65	22	21	0.14
MPC-2	16	75	25	23	0.20
MPC-3	18	75	28	26	0.26

**LEVELLING JACKS & HEIGHT BLOCKS**

'TOOLFAST' Levelling Jack can be used as an adjustable support block for clamps and as a stopper or levelling block in fixtures or machines, as well as for levelling surface plates or other heavy duty work pieces. **Its unique design does not allow the levelling screw to rotate while adjustment, hence makes it suitable for fine level adjustment.** Also available in conical & V top for other applications such as inspection.

Picture (a) shows levelling jack model LJ-1(b) and picture (c) shows **HEIGHT BLOCK FOR LEVELLING JACK MODEL HBLJ-75** available separately for the purpose of stacking below levelling jack in order to increase its height. Picture (b) shows levelling jack model LJ-1(b) stacked on height block for levelling jack model HBLJ-75 to increase the height range of levelling jack by 75mm. Any required number of height blocks can be stacked one over another to achieve any required height and finally on top, any model of levelling jack can be kept for final height adjustment as shown in picture (b). Bottom female collar of any levelling jack and height block fits with top male collar of the height blocks to enable stacking.



LEVELLING JACK									
MODEL	H MIN. AT CLOSED POSITION	H MAX. AT OPEN POSITION	DIA AT BOTTOM D	DIA AT TOP d	DIA OF SCREW d <sub>1</sub>	TYPE OF TOP FACE	MAX. LOAD TONS.	N. W. Kgs.	
LJ-1A	75	100	48	38	M-24	FLAT	5.0	0.76	
LJ-1B	100	150	48	38	M-24	FLAT	5.0	1.11	
LJ-2	120	170	48	38	M-24	CONICAL	5.0	1.13	
LJ-3	105	155	48	38	M-24	'V'	5.0	1.11	

HEIGHT BLOCK FOR LEVELLING JACK		
MODEL	EFFECTIVE HEIGHT INCREASE WITH ONE HEIGHT BLOCK	N. W. Kgs.
HBLJ-75	75	0.77



**LEVELLING JACK - HEAVY DUTY**

'TOOLFAST' Levelling Jack-Heavy Duty is a heavier version of Levelling Jack with a heavy body and Levelling Screw & knurled nut. This jack is specially designed for heavy castings & machines. Available in flat head Levelling Screw only.

MODEL	H MIN. AT CLOSED POSITION	H MAX. AT OPEN POSITION	DIA AT BOTTOM D	DIA AT TOP d	DIA OF SCREW d <sub>1</sub>	TYPE OF TOP FACE	MAX LOAD TONS.	N. W. Kgs.
LJ-HD	160	230	75	50	32φ	FLAT	8.0	2.82

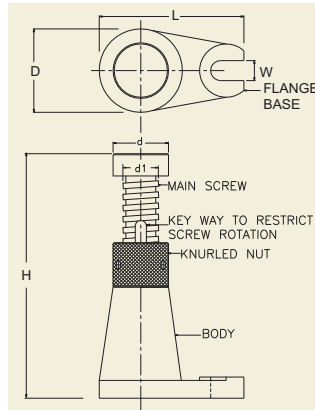
**HEIGHT BLOCK FOR LEVELLING JACK - HEAVY DUTY**

As in case of Levelling Jacks, Height Block for Levelling Jack-Heavy Duty Model HBLJ-HD-75 is available for stacking with Levelling Jack-Heavy Duty.

MODEL	EFFECTIVE HEIGHT INCREASE WITH ONE HEIGHT BLOCK	N. W. Kgs.
HBLJ-HD-75	75	1.58

**LEVELLING JACK - HEAVY DUTY - FLANGE MOUNTING**

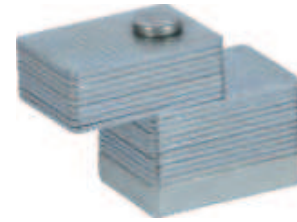
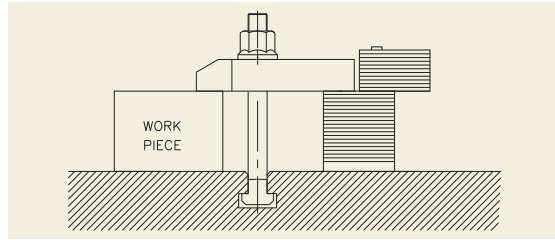
'TOOLFAST' Levelling Jack-Heavy Duty-Flange Mounting is same as LJ-HD but with flanged base for mounting on machine bed for additional rigidity.



MODEL	H MIN. AT CLOSED POSITION	H MAX. AT OPEN POSITION	DIA AT BOTTOM D	L	MOUNTING SLOT WIDTH W	DIA AT TOP d	DIA OF SCREW d <sub>1</sub>	TYPE OF TOP FACE	MAX LOAD TONS.	N. W. Kgs.
LJ-HD-FB	160	230	75	130	18	50	32φ	FLAT	8.0	3.32

## ADJUSTABLE SUPPORT PLATES

'TOOLFAST' Adjustable Support Plates are used as adjustable supports at the rear of the clamp. It comprises of a number of plates each 2mm thick hinged together. Desired height is achieved very easily by swinging aside the required number of plates and using the remaining as support block. Different models of support plates can be stacked on each other to achieve extra height.

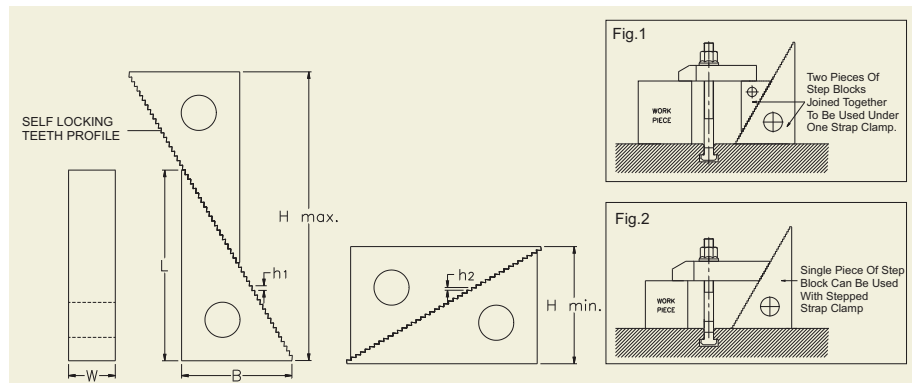


MODEL	MAXIMUM HEIGHT	PLATES THICKNESS	PLATE OVERALL SIZE	SIZE OF CLAMP REST AREA	N. W. Kgs.
TASP-250	50	2	50 x 35	25 X 35	0.66
TASP-2100	100	2	50 x 35	25 X 35	1.33
TASP-2150	150	2	50 x 35	25 X 35	1.99
TASP-L-250	50	2	60 x 50	35 x 50	1.15
TASP-L-2100	100	2	60 x 50	35 x 50	2.30
TASP-L-2150	150	2	60 x 50	35 x 50	3.41

## STEP BLOCKS Machined Steel

'TOOLFAST' Step Blocks are used as adjustable supporting Blocks at the rear of the clamp while clamping the workpiece. Different heights can be achieved by using combination of two different sizes of Step Blocks. Available in pairs. (Pair consists of 2 identical Step Blocks)

Combination of two Step Blocks of same or different sizes is kept as support under one Strap Clamp as shown in Fig.1 below. But in case of use of Step Blocks with Stepped Strap Clamp, as shown in Fig.2 below, only one Step Block of suitable size is kept as support under one stepped strap clamp.



### STEP BLOCK

MODEL	L	B	W	HEIGHT ADJUSTMENT		HEIGHT OF STEP h <sub>1</sub>	HEIGHT OF STEP h <sub>2</sub>	N. W. Kgs. (Pair)
				H MINIMUM	H MAXIMUM			
TSB-1	30	18	30	20	44	2.7	1.6	0.14
TSB-2	66	38	30	40	100	2.7	1.6	0.39
TSB-3	101	58	30	60	155	2.7	1.6	1.36

### STEP BLOCK - HEAVY DUTY

'TOOLFAST' Step Block-Heavy Duty is different than step blocks above in width only. More width enables use on bigger T-slots and also with bigger sizes of stepped strap clamps.

MODEL	L	B	W	HEIGHT ADJUSTMENT		HEIGHT OF STEP h <sub>1</sub>	HEIGHT OF STEP h <sub>2</sub>	N. W. Kgs.
				H MINIMUM	H MAXIMUM			
THSB-5	66	38	48	40	100	2.7	1.6	0.95
THSB-6	117	68	48	72	180	2.7	1.6	2.83

## THREADED SUPPORT FOR TAPPED END CLAMPS Forged Base, Hardened & Tempered , Black Finish

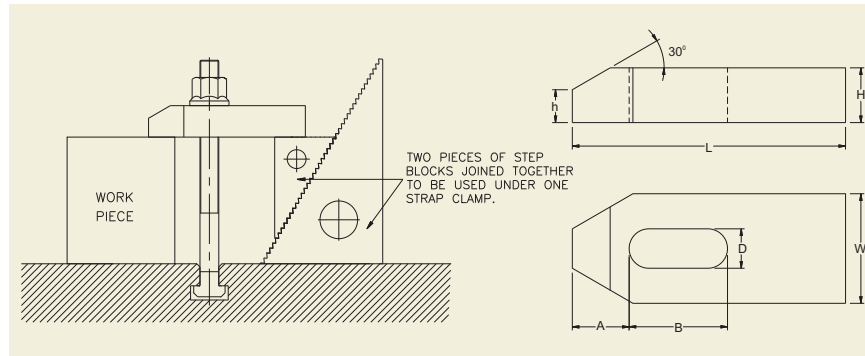
These have large resting base and hexagon at bottom for height adjustment.

MODEL	DIA AT BOTTOM	THREAD SIZE	OVERALL LENGTH	N. W. Kgs.
TS-12	30	M-12 x 1.75 P	60	0.07
TS-16	35	M-16 x 2.0 P	70	0.14
TS-20	40	M-20 x 2.5 P	80	0.23
TS-24	50	M-24 x 3.0 P	85	0.40



**STRAP CLAMP** Hardened & Tempered, Black Finish

based on IS : 4292



MODEL	D SUITABLE FOR BOLT	L	W	H	A	B	h	N. W. Kgs.
TSC-8-60	M-8	60	24	12	13	22	7	0.09
TSC-10-80	M-10	80	30	15	15	30	9	0.23
TSC-12-100	M-12	100	38	18	21	40	12	0.43
TSC-12-125	M-12	125	38	18	21	50	12	0.56
TSC-14-125	M-14	125	48	24	26	45	15	0.85
TSC-16-125	M-16	125	48	24	26	45	15	0.85
TSC-16-160	M-16	160	48	24	26	65	15	1.11
TSC-20-160	M-20	160	62	30	30	60	18	1.89
TSC-24-200	M-24	200	72	38	35	80	21	3.39
TSC-30-250	M-30	250	72	48	45	100	28	5.26

**STRAP CLAMP - FORGED BODY** Hardened & Tempered, Tapped End

The most popular sizes of strap clamps are now made in forged body with additional benefit of tapped end for threaded supports.

MODEL	SUITABLE FOR BOLT	LENGTH	WIDTH	THICKNESS	SLOT LENGTH	TAPPED END	N. W. Kgs.
TSCF-12	M-12	120	44	19	55	M-12	0.55
TSCF-16	M-16	140	50	22	65	M-16	0.86
TSCF-20	M-20	180	62	28	86	M-20	1.61
TSCF-24	M-24	220	76	35	102	M-24	3.28



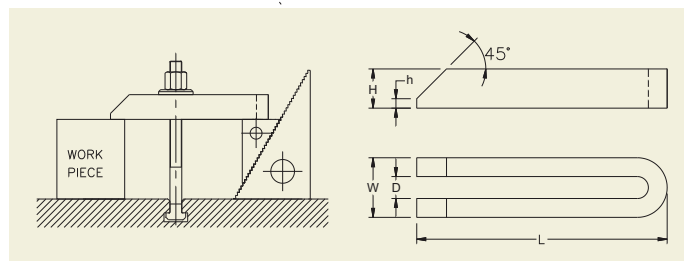
**PLAIN CLAMP** Hardened & Tempered

These are economy models of strap clamps. Can be used where simple shape of a plain strap can serve the purpose.

MODEL	SUITABLE FOR BOLT	LENGTH	WIDTH	THICKNESS	SLOT LENGTH	N. W. Kgs.
TES - 12	M-12	70	38	11	35	0.20
TES - 16	M-16	90	48	18	45	0.50



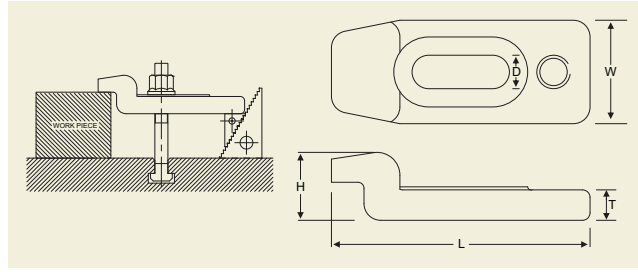
**U - CLAMP** Hardened & Tempered, Black Finish



MODEL	D SUITABLE FOR BOLT	L	W	H	h	N. W. Kgs.
TUC-12-160	M-12	160	38	24	6	0.68
TUC-16-200	M-16	200	48	30	8	1.44
TUC-20-250	M-20	250	62	38	10	2.72
TUC-24-250	M-24	250	62	38	10	2.72



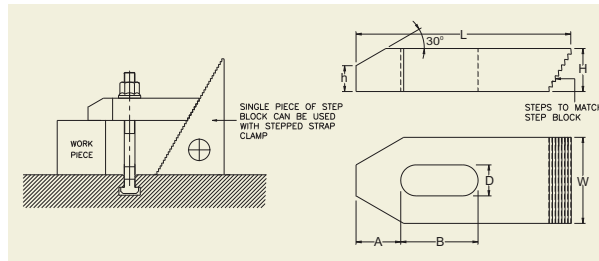
**GOOSE NECK CLAMP - FORGED STEEL**



MODEL	D SUITABLE FOR BOLT	L	H	W	T	N. W. Kgs.
TGNCF-12	M-12	125	33	50	18	0.65
TGNCF-16	M-16	125	33	50	18	0.65
TGNCF-20	M-20	165	47	68	24	1.44
TGNCF-24	M-24	200	52	76	28	2.34

**STEPPED STRAP CLAMP** Hardened & Tempered, Black Finish

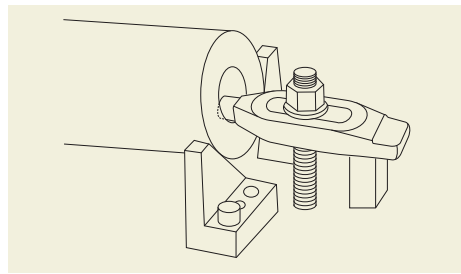
These Strap Clamps have teeth at rear matching to that of Step Blocks for the Step Blocks to be used as supports. Unlike other clamps, single piece of Step Block not a pair can be used as support with Stepped Strap Clamp.



MODEL	D SUITABLE FOR BOLT	L	W	H	A	B	h	N. W. Kgs.
TSSC-12-65	M-12	65	30	15	15	25	9	0.16
TSSC-12-100	M-12	100	38	18	21	35	12	0.42
TSSC-12-125	M-12	125	38	18	21	45	12	0.55
TSSC-16-75	M-16	75	38	18	21	30	12	0.29
TSSC-16-125	M-16	125	48	24	26	45	15	0.75
TSSC-16-160	M-16	160	48	24	26	65	15	1.10
TSSC-20-160	M-20	160	62	30	30	60	18	1.64
TSSC-24-200	M-24	200	72	38	35	80	21	3.21

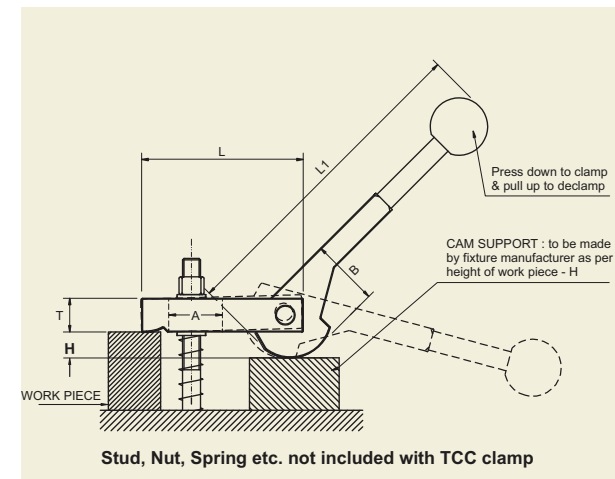
**FINGER STRAP CLAMP** Forged, Hardened & Tempered

Finger clamp is specially designed for holding at curved surfaces or inside holes. Most useful for clamping of heavy blocks while machining where there are no steps for clamping and top surface has to be left clear for machining. In such cases holes are drilled on the side faces and finger clamps can be used for clamping on that holes.



MODEL	SUITABLE FOR BOLT	LENGTH	WIDTH	THICK NESS	SLOT LENGTH	FINGER DIA	N. W. Kgs.
TCF -16	M-16	152	44	22	66	18	0.73

**CAM CLAMP - HOLD DOWN TYPE - FOR QUICK CLAMPING ON MACHINING FIXTURES**



Most ideal for quick Hold Down Clamping in fixtures. Conventional Strap Clamps in fixtures can be replaced by these quick acting Cam clamps without much effort. These clamps have high clamping force suitable for machining fixtures.

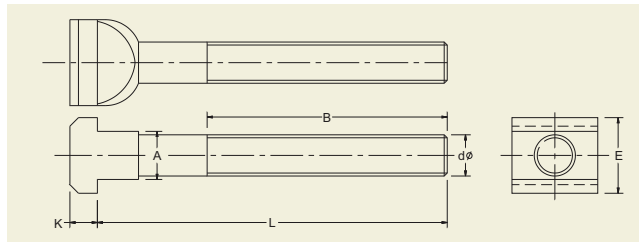


MODEL	SUITABLE FOR CLAMPING BOLT	L	T	WIDTH OF CLAMP	A	B	L1	H	HOLDING CAPACITY	N. W. Kgs.
TCC-10	M10	90	19	30	30	38	180	14	1400 Kgs.	0.56
TCC-12	M12	100	24	38	35	38	180	12	2000 Kgs.	0.86

2D / 3D CAD FILES AVAILABLE

**T-BOLT** Forged Head, Hardened & Tempered, High Tensile Steel, Black Finish

based on IS:2014

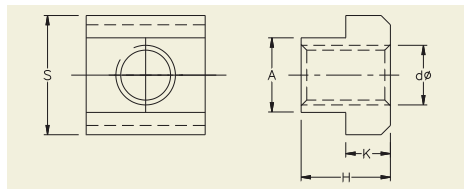


MODEL	A SUITABLE FOR T-SLOT SIZE	E	K	L	dφ THREAD SIZE	B	N. W. Kgs.
TTB-1212-80	12	18	7	80	M12	40	0.08
TTB-1212-100				100		60	0.10
TTB-1212-160				160		100	0.14
TTB-1214-60	14	22	8	60	M12	35	0.09
TTB-1214-80				80		55	0.10
TTB-1214-100				100		65	0.12
TTB-1214-125				125		80	0.14
TTB-1214-160				160		100	0.16
TTB-1214-200				200		125	0.19
TTB-1616-80	16	25	9	80	M16	40	0.17
TTB-1616-130				130		80	0.23
TTB-1616-200				200		125	0.33
TTB-1618-80	18	28	10	80	M16	55	0.19
TTB-1618-100				100		65	0.22
TTB-1618-130				130		80	0.25
TTB-1618-160				160		100	0.29
TTB-1618-200				200		125	0.35
TTB-1618-250				250		155	0.40
TTB-1618-290				290		175	0.47
TTB-2020-110	20	32	12	110	M20	70	0.35
TTB-2020-150				150		95	0.43
TTB-2020-210				210		130	0.55
TTB-2022-110	22	35	14	110	M20	70	0.40
TTB-2022-150				150		95	0.48
TTB-2022-210				210		130	0.60
TTB-2022-285				285		170	0.76
TTB-2424-150	24	40	16	150	M24	95	0.68
TTB-2424-210				210		130	0.87
TTB-2428-110	28	44	18	110	M24	65	0.67
TTB-2428-150				150		95	0.79
TTB-2428-210				210		130	0.96
TTB-2428-250				250		160	1.10
TTB-2428-300				300		190	1.23
TTB-3036-200	36	54	22	200	M30	130	1.52
TTB-3036-250				250		150	1.77
TTB-3036-300				300		190	2.02



**T- NUT** Hardened & Tempered, Black Finish

based on IS : 2015



MODEL	A SUITABLE FOR T-SLOT SIZE	dφ THREAD SIZE	H	K	S	N. W. Kgs.
TTN-10-8	10	M-8	12	6	15	0.015
TTN-12-10*	12	M-10	14	7	18	0.02
TTN-14-10	14	M-10	16	8	22	0.04
TTN-14-12*	14	M-12	16	8	22	0.035
TTN-16-12	16	M-12	18	9	25	0.055
TTN-16-14*	16	M-14	18	9	25	0.05
TTN-18-12	18	M-12	20	10	28	0.085
TTN-18-16*	18	M-16	20	10	28	0.07

MODEL	A SUITABLE FOR T-SLOT SIZE	dφ THREAD SIZE	H	K	S	N. W. Kgs.
TTN-20-16	20	M-16	24	12	32	0.12
TTN-22-16	22	M-16	28	14	35	0.18
TTN-22-20*	22	M-20	28	14	35	0.15
TTN-24-20	24	M-20	32	16	40	0.24
TTN-28-24	28	M-24	36	18	44	0.33
TTN-36-24	36	M-24	44	22	54	0.64
TTN-36-30	36	M-30	44	22	54	0.55

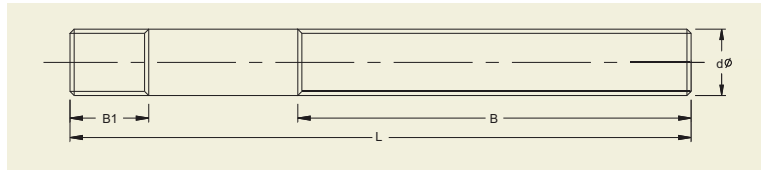
\* marked models are not recommended for heavy duty use because of less wall thickness outside the threading.

**CLAMPING STUD - FOR USE WITH T-NUTS**

based on IS : 1862

Hardened & Tempered, High Tensile Steel, Black Finish

These Studs are meant to be used with T-nuts to be tightened on smaller threaded length B1 shown in figure below and longer threaded length B shown in figure below is to accommodate Clamp / Nut / Washer etc.



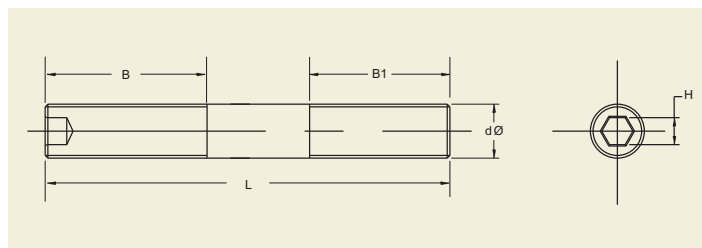
MODEL	dØ THREAD SIZE	L	B1	B	N. W. Kgs.
TCS-8-75	M-8	75	11	48	0.025
TCS-8-100		100		63	0.03
TCS-8-150		150		95	0.05
TCS-10-75	M-10	75	13	48	0.04
TCS-10-100		100		63	0.05
TCS-10-150		150		95	0.075
TCS-10-200		200		125	0.10
TCS-12-75	M-12	75	15	48	0.055
TCS-12-100		100		63	0.075
TCS-12-125		125		75	0.09
TCS-12-150		150		95	0.11
TCS-12-175		175		110	0.13
TCS-12-200		200		125	0.15
TCS-12-250		250		160	0.19
TCS-12-300	300	190	0.23		
TCS-14-100	M-14	100	17	63	0.10
TCS-14-150		150		95	0.15
TCS-14-200		200		125	0.21
TCS-14-250		250		160	0.26
TCS-16-75	M-16	75	19	50	0.10
TCS-16-100		100		63	0.13
TCS-16-125		125		75	0.17
TCS-16-150		150		95	0.20
TCS-16-175		175		110	0.24
TCS-16-200		200		125	0.27
TCS-16-250		250		160	0.34
TCS-16-300		300		190	0.41

MODEL	dØ THREAD SIZE	L	B1	B	N. W. Kgs.
TCS-20-100	M-20	100	27	60	0.21
TCS-20-150		150		95	0.31
TCS-20-200		200		125	0.42
TCS-20-250		250		160	0.53
TCS-20-300		300		190	0.63
TCS-20-400		400		250	0.86
TCS-20-500	500	250	1.11		
TCS-24-150	M-24	150	35	95	0.41
TCS-24-200		200		120	0.61
TCS-24-250		250		160	0.76
TCS-24-300		300		190	0.92
TCS-24-400		400		250	1.23
TCS-24-500	500	250	1.58		
TCS-30-150	M-30	150	43	95	0.69
TCS-30-200		200		120	0.95
TCS-30-250		250		160	1.18
TCS-30-300		300		190	1.40
TCS-30-400		400		250	1.93
TCS-30-500		500		250	2.47

**CLAMPING STUD - FOR USE ON MACHINE BEDS HAVING TAPPED HOLES**

Hardened & Tempered, High Tensile Steel, Black Finish

These Studs having longer threaded length of side B1 shown in figure below which enables use on threaded platens of moulding machines or threaded beds of presses for longer insertion in the tapped holes. These studs also have a **hex key hole at top face for tightening & loosening** with of a hex key.



MODEL	dØ THREAD SIZE	L	B1	B	H	N. W. Kgs.
TCSB-12-100	M-12	100	30	40	6	0.07
TCSB-12-125		125		50		0.09
TCSB-12-150		150		65		0.12
TCSB-12-175		175		80		0.13
TCSB-16-125	M-16	125	40	50	8	0.17
TCSB-16-150		150		65		0.20
TCSB-16-175		175		80		0.23
TCSB-16-200		200		100		0.27

MODEL	dØ THREAD SIZE	L	B1	B	H	N. W. Kgs.
TCSB-20-150	M-20	150	50	60	10	0.31
TCSB-20-175		175		70		0.37
TCSB-20-200		200		80		0.43
TCSB-24-175	M-24	175	60	70	12	0.52
TCSB-24-200		200		80		0.60
TCSB-24-225		225		90		0.68

**EXTRA LONG NUT** Hardened & Tempered, Black Finish

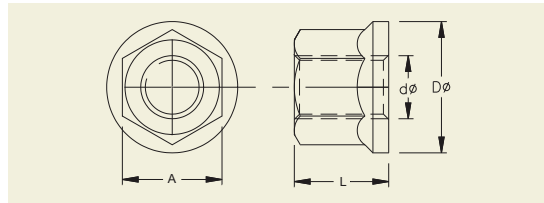
These nuts have longer life as they have more number of threads than ordinary nuts.

MODEL	THREAD SIZE	TOTAL LENGTH	N. W. Kgs.
TELN-8	M-8	12	0.01
TELN-10	M-10	15	0.02
TELN-12	M-12	18	0.03
TELN-14	M-14	21	0.045
TELN-16	M-16	24	0.06
TELN-20	M-20	30	0.12
TELN-24	M-24	36	0.20
TELN-30	M-30	45	0.41



**FLANGED NUT** Forged, Hardened & Tempered, Black Finish

These nuts have flanged face for larger face contact with the surface to be tightened on.



MODEL	dφ THREAD SIZE	Dφ	A	L	N. W. Kgs.
TFN-12	M-12	25	19	18	0.035
TFN-16	M-16	32	24	24	0.07
TFN-20	M-20	40	30	30	0.14
TFN-24	M-24	47	36	36	0.23



**EXTENSION NUT** Hardened & Tempered, Black Finish

These nuts are used to couple the studs with studs or T- Bolts in order to increase their length.

MODEL	THREAD SIZE	TOTAL LENGTH	N. W. Kgs.
TEN-8	M-8	24	0.02
TEN-10	M-10	30	0.04
TEN-12	M-12	36	0.06
TEN-14	M-14	42	0.09
TEN-16	M-16	48	0.12
TEN-20	M-20	60	0.23
TEN-24	M-24	72	0.41
TEN-30	M-30	90	0.82



**PLAIN WASHER** Case Hardened, Black Finish

based on IS : 4291

MODEL	SUITABLE FOR BOLT	THICKNESS	OUTSIDE DIA.	N. W. Kgs.
TPW-8	M-8	4	23	0.01
TPW-10	M-10	4	28	0.015
TPW-12	M-12	5	35	0.03
TPW-14	M-14	6	40	0.05
TPW-16	M-16	7	45	0.07
TPW-20	M-20	7	48	0.07
TPW-24	M-24	9	60	0.15
TPW-30	M-30	11	70	0.25



**C-WASHER** Case Hardened, Black Finish

based on IS : 4291

Knurled outside diameter for easy gripping while quick insertion or removal.

MODEL	SUITABLE FOR BOLT	THICKNESS	OUTSIDE DIA.	N. W. Kgs.
TCW-10	M-10	9	40	0.07
TCW-12	M-12	9	48	0.11
TCW-14	M-14	11	63	0.20
TCW-16	M-16	11	63	0.20
TCW-20	M-20	11	80	0.36
TCW-24	M-24	12	100	0.59
TCW-30	M-30	14	100	0.64



## CLAMPING KIT - 58 PIECE (WITH STEP BLOCKS & STEPPED STRAP CLAMPS)

'TOOLFAST' Clamping Kit - 58 piece is available in an attractive powder coated metallic rack which can be hanged on machines or a wall or kept on a table. Each kit consists of all important clamping elements required to clamp a variety of work pieces. Following table shows the contents of each model of clamping kit suitable for different T-Slot sizes. All the items of clamping kit are taken from our range of products given in this catalogue.



MODEL	TCK-58-1412 T-SLOT SIZE 14MM	TCK-58-1612 T-SLOT SIZE 16MM	TCK-58-1812 T-SLOT SIZE 18MM	TCK-58-1816 T-SLOT SIZE 18MM
<b>CONTENTS</b>				
 <b>T-NUTS</b>	TTN-14-12 - 6 nos.	TTN-16-12 - 6 nos.	TTN-18-12 - 6 nos.	TTN-18-16 - 6 nos.
 <b>CLAMPING STUDS</b>	TCS-12-75 - 4 nos. TCS-12-100 - 4 nos. TCS-12-125 - 4 nos. TCS-12-150 - 4 nos. TCS-12-175 - 4 nos. TCS-12-200 - 4 nos.	TCS-12-75 - 4 nos. TCS-12-100 - 4 nos. TCS-12-125 - 4 nos. TCS-12-150 - 4 nos. TCS-12-175 - 4 nos. TCS-12-200 - 4 nos.	TCS-12-75 - 4 nos. TCS-12-100 - 4 nos. TCS-12-125 - 4 nos. TCS-12-150 - 4 nos. TCS-12-175 - 4 nos. TCS-12-200 - 4 nos.	TCS-16 -75 - 4 nos. TCS-16 -100 - 4 nos. TCS-16 -125 - 4 nos. TCS-16 -150 - 4 nos. TCS-16 -175 - 4 nos. TCS-16 -200 - 4 nos.
 <b>FLANGED NUTS</b>	TFN-12 - 6 nos.	TFN-12 - 6 nos.	TFN-12 - 6 nos.	TFN-16 - 6 nos.
 <b>EXTENSION NUTS</b>	TEN-12 - 4 nos.	TEN-12 - 4 nos.	TEN-12 - 4 nos.	TEN-16 - 4 nos.
 <b>STEPPED STRAP CLAMPS</b>	TSSC-12-65 - 2 nos. TSSC-12-100 - 2 nos. TSSC-12-125 - 2 nos.	TSSC-12-65 - 2 nos. TSSC-12-100 - 2 nos. TSSC-12-125 - 2 nos.	TSSC-12-65 - 2 nos. TSSC-12-100 - 2 nos. TSSC-12-125 - 2 nos.	TSSC-16-75 - 2 nos. TSSC-16-125 - 2 nos. TSSC-16-160 - 2 nos.
 <b>STEP BLOCKS</b>	TSB-1 -2 Pairs (4 nos.) TSB-2 -2 Pairs (4 nos.) TSB-3 -2 Pairs (4 nos.)	TSB-1 -2 Pairs (4 nos.) TSB-2 -2 Pairs (4 nos.) TSB-3 -2 Pairs (4 nos.)	TSB-1 -2 Pairs (4 nos.) TSB-2 -2 Pairs (4 nos.) TSB-3 -2 Pairs (4 nos.)	TSB-1 - 2 Pairs (4 nos.) TSB-2 - 2 Pairs (4 nos.) TSB-3 - 2 Pairs (4 nos.)
<b>TOTAL NO. OF PIECES</b>	<b>58 PIECES</b>	<b>58 PIECES</b>	<b>58 PIECES</b>	<b>58 PIECES</b>
<b>N.W. Kgs.</b>	<b>13</b>	<b>13</b>	<b>13</b>	<b>18</b>

## CLAMPING KIT - 34 PIECE (WITH ADJUSTABLE SUPPORT PLATES & STRAP CLAMPS)

'TOOLFAST' Clamping Kit - 34 piece is an economical clamping kit housed in an elegant wooden box. Following table shows the contents of each model of clamping kit suitable for different T-Slot sizes. All the items of clamping kit are taken from our range of products given in this catalogue.

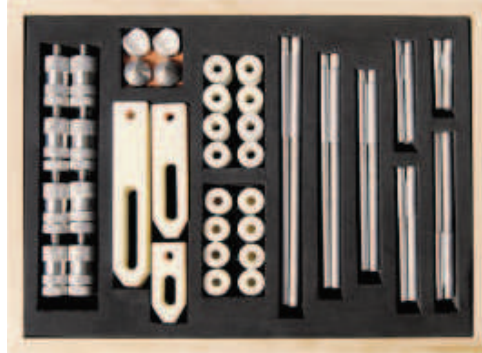


MODEL	TCK-34-1412 T-SLOT SIZE 14MM	TCK-34-1612 T-SLOT SIZE 16MM	TCK-34-1812 T-SLOT SIZE 18MM
<b>CONTENTS</b>			
<b>T-NUTS</b>	TTN-14-12 - 4 nos.	TTN-16-12 - 4 nos.	TTN-18-12 - 4 nos.
<b>CLAMPING STUDS</b>	TCS-12-75 - 4 nos. TCS-12-100 - 4 nos. TCS-12-150 - 4 nos. TCS-12-200 - 4 nos.	TCS-12-75 - 4 nos. TCS-12-100 - 4 nos. TCS-12-150 - 4 nos. TCS-12-200 - 4 nos.	TCS-12-75 - 4 nos. TCS-12-100 - 4 nos. TCS-12-150 - 4 nos. TCS-12-200 - 4 nos.
<b>FLANGED NUTS</b>	TFN-12 - 4 nos.	TFN-12 - 4 nos.	TFN-12 - 4 nos.
<b>EXTENSION NUTS</b>	TEN-12 - 2 nos.	TEN-12 - 2 nos.	TEN-12 - 2 nos.
<b>STRAP CLAMPS</b>	TSC-12-100 - 2 nos. TSC-12-125 - 2 nos.	TSC-12-100 - 2 nos. TSC-12-125 - 2 nos.	TSC-12-100 - 2 nos. TSC-12-125 - 2 nos.
<b>ADJUSTABLE SUPPORT PLATES</b>	TASP-250 - 2 nos. TASP-2100 - 2 nos.	TASP-250 - 2 nos. TASP-2100 - 2 nos.	TASP-250 - 2 nos. TASP-2100 - 2 nos.
<b>TOTAL NO. OF PIECES</b>	<b>34 PIECES</b>	<b>34 PIECES</b>	<b>34 PIECES</b>
<b>N.W. Kgs.</b>	<b>9.2</b>	<b>9.3</b>	<b>9.4</b>

## CMM CLAMPING KIT - 62 PIECE (WITH PLASTIC CLAMPS) MODEL CMMCK - 62

'TOOLFAST' CMM clamping kit is specially designed for 3D coordinate measuring machine and other inspection and gaging applications. The light weight construction of the plastic clamps and aluminium elements prevent damage to granite plates and delicate workpieces.

M-8 threaded\* elements with hand-tightening design allows the user to apply a limited hold down force most suitable for inspection clamping. All 62 pieces are suitably housed in an elegant wooden box. N.W. 1.8 kgs.



### Each Kit Contains :

- 28 nos. **Studs** of M-8 threads made out of suitable aluminium Alloy - 4nos. each of 50mm, 75mm, 100mm, 125mm, 150mm, 175mm and 200 mm length.



- 8nos. of M-8 **Flanged Nuts** made of suitable aluminium alloy designed for hand-tightening without spanner. These nuts can also be used as extension nuts for joining studs.



- 6nos. **Strap Clamps** Suitable for M-8 studs made out of suitable engineering plastic - 2nos. each of 60mm, 100mm and 140mm length.



- 8nos. Aluminium **Screw Jacks**  
 Closed Height = 38 mm  
 Max open Height = 56 mm  
 Top = Flat face having M-8 female thread  
 Bottom = M-8 screw-in type for thread mounting on the granite plate of CMM.



- 4nos. Aluminium **Top Rest Pads** for Screw Jacks  
 2nos. with 'V' on top face and 2nos. having conical top face



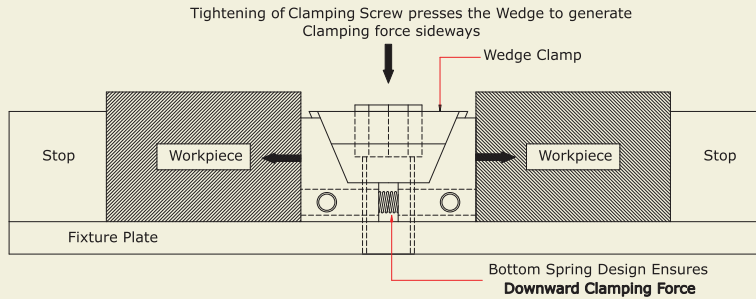
- 8nos. Plastic **Bottom Rest Pads** with M-8 blind hole for use as rest pads at the bottom of screw jacks when screw jacks have to be used directly on the granite surface as shown in picture (a) or for use as rest pads at the bottom of studs when the studs have to be used as threaded supports of strap clamps as shown in picture (b).



\* FOR CMM BEDS WITH M-10 OR M-12 THREAD, ADAPTORS ARE AVAILABLE ON REQUEST TO ENABLE USE OF ABOVE CLAMPING KIT.

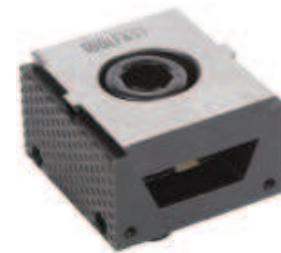
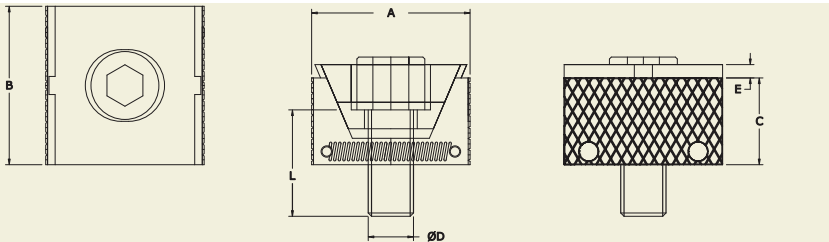
**WEDGE CLAMP - RIGID BODY, HARDENED TOOL STEEL, DOWNWARD FORCE**

'TOOLFAST' manufactures all models of wedge clamps with new improved design now in India as per international sizes and types.



- Improved design with bottom spring ensures downward Clamping force
- Hidden spring eliminates clogging of chips in spring coil

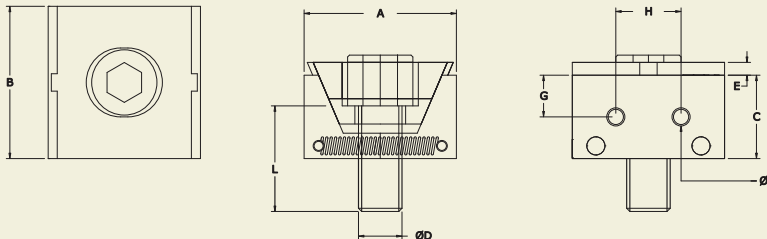
**WEDGE CLAMP - TWC Series - Serrated Hardened Jaws**



MODEL	A			B	C	ØD X L	E	Clamping Force	N. W. Kgs. (Including Clamping bolt)
	min.	optimum	max.						
TWC-8	27	29 ~ 30	33	31	16	M8 X 20	2	2500 Kgs.	0.09
TWC-12	42	45 ~ 46	50	42	23	M12 X 30	3.5	5000 Kgs.	0.26
TWC-16	57	61 ~ 63	67	58	30	M16 X 35	4	10000 Kgs.	0.66

**WEDGE CLAMP - TWC-P Series - Plain Hardened Jaws with Tapped holes**

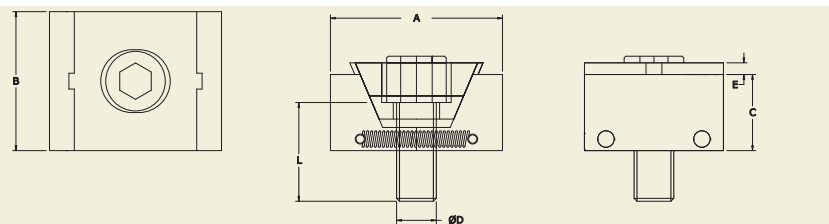
These have plain hardened jaws with added two tapped holes for attaching additional jaw inserts if need be.



MODEL	A			B	C	ØD X L	E	G	H	ØT	Clamping Force	N. W. Kgs. (Including Clamping bolt)
	min.	optimum	max.									
TWC-8P	27	29 ~ 30	33	31	16	M8 X 20	2	7.5	12	M-5	2500 Kgs.	0.09
TWC-12P	42	45 ~ 46	50	42	23	M12 X 30	3.5	11.5	18	M-5	5000 Kgs.	0.26
TWC-16P	57	61 ~ 63	67	58	30	M16 X 35	4	15	26	M-5	10000 Kgs.	0.66

**WEDGE CLAMP - TWC-M Series - Machinable Jaws**

These have extra material on jaws(soft) to machine as per the workpiece shape enabling fixturing of uneven or unusual shape workpieces.

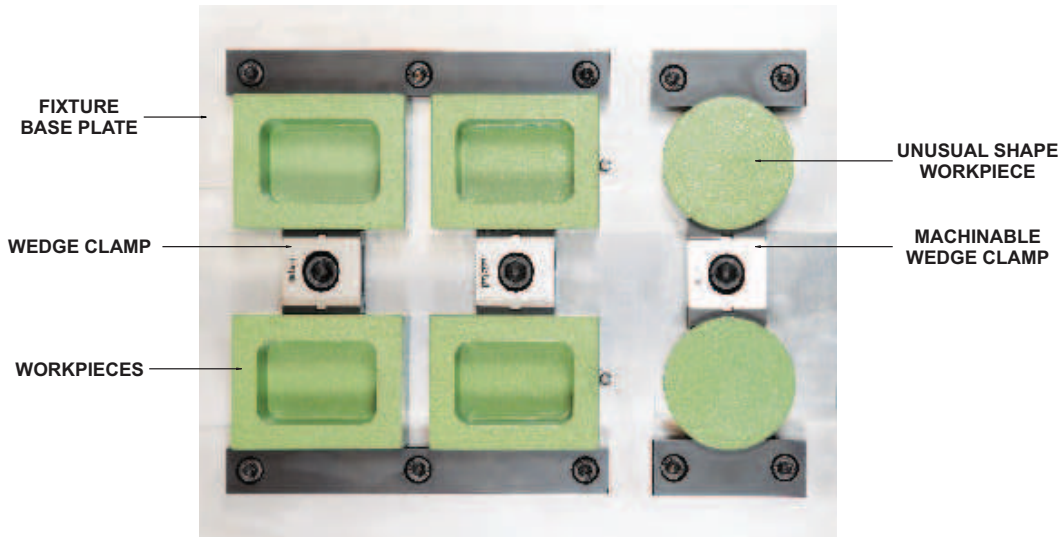


MODEL	A			B	C	ØD X L	E	Clamping Force	N. W. Kgs. (Including Clamping bolt)
	min.	optimum	max.						
TWC-8M	33	35 ~ 36	39	31	16	M8 X 20	2	2500 Kgs.	0.12
TWC-12M	52	55 ~ 56	60	42	23	M12 X 30	3.5	5000 Kgs.	0.34
TWC-16M	67	71 ~ 73	77	58	30	M16 X 35	4	10000 Kgs.	0.86

2D / 3D CAD FILES AVAILABLE ON REQUEST



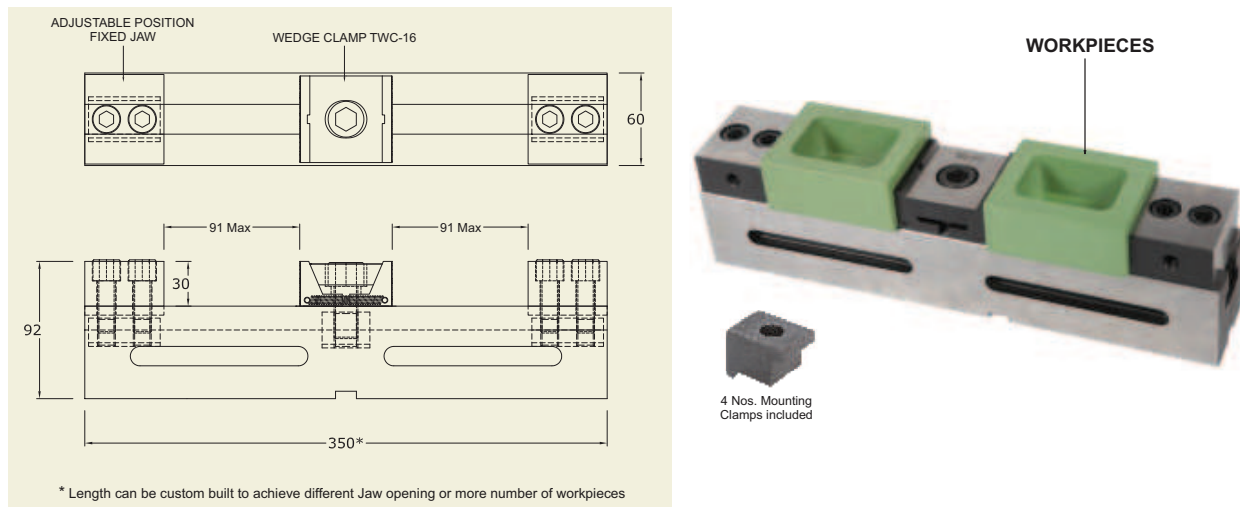
**MULTIPLE WORKPIECE CLAMPLING FIXTURES WITH TWC SERIES WEDGE CLAMPS DESIGNED & MANUFACTURED BY TOOLFAST**



If your workpiece is suitable for clamping with 'TOOLFAST' Wedge clamps, our team can design and manufacture a multiple clamping fixture for you as the one shown in the picture. Please send in your enquiries with workpiece / machine table specifications of your Machining Center to enable us check suitability of our WEDGE CLAMPS and submit an offer to you.

**MULTIPLE CLAMPING VICE WITH TWC-16 WEDGE CLAMPS**

TOOLFAST offers a standard 60mm jaw width vice which is capable of clamping multiple workpieces. All parts such as TWC wedge clamp, fixed jaws and the main body are modular and interchangeable.



- Model VTWC-16-60-350 available as standard having overall length 350mm capable of jaw opening 91mm in case of two workpieces.
- This vice can also be supplied in custom built lengths to suit different sizes of workpieces. Send your enquiries to us if you feel that 60mm jaw width vice is suitable for your workpiece. Additional fixed jaws and TWC series clamps can be included in the vice if more than two workpieces to be clamped.
- For uneven or unusual shape workpieces, TWC-M and TWC-P series wedge clamps can also be used in above vice.