

GROUP 405 RACKING



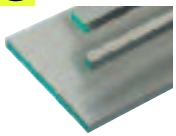
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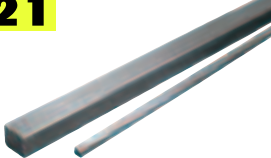
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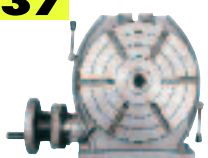
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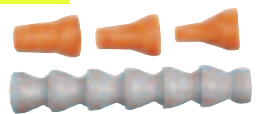
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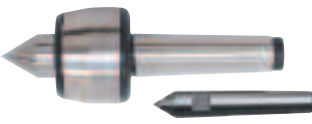
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WORKSHOP EQUIPMENT

**Product Groups
400 - 495**

Product Grading



Production

High performance industrial tooling designed for continuous use applications on machine tools where repeatability and long tool life are of critical importance.



Professional

Industrial tooling that has enhanced features and benefits demanded by craftsmen and professional users.



Industrial

Designed for regular use in industrial applications. Manufactured to stringent quality levels and international standards.



Workshop

Standard quality tooling for use by tradesmen and generally industrial use.



Maintenance

Products designed for general maintenance of machines, workshops, garages and some household applications.



Home Improver

DIY quality tooling. Designed for home use and light industrial applications.

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GROUP 404 BIN STORAGE SYSTEMS

MATLOCK

Plastic Storage Bins

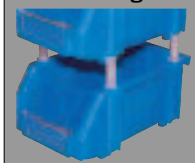
Manufactured from high strength polypropylene. Fit on standard louvre panel, interlocking design. Supplied with risers and label holders.



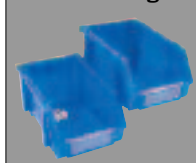
Nesting



Stacking



Interlocking



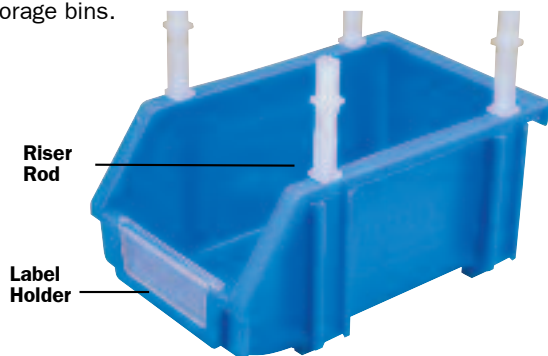
Hanging



Size	Dimensions L x W x H (mm)	Order Code MTL-404				Box Qty	Price/1 RND
		Blue	Green	Red	Yellow		
No.0	130 x 85 x 53	-1000B	-1000G	-1000R	-1000Y	300	11.80
No.1	163 x 104 x 80	-1010B	-1010G	-1010R	-1010Y	100	28.90
No.2	237 x 157 x 132	-1020B	-1020G	-1020R	-1020Y	64	56.30
No.3	278 x 222 x 165	-1030B	-1030G	-1030R	-1030Y	24	98.10
No.3A	350 x 280 x 184	-1035B	-1035G	-1035R	-1035Y	8	170.00
No.4	425 x 280 x 184	-1040B	-1040G	-1040R	-1040Y	12	248.60
No.5	425 x 280 x 260	-1050B	-1050G	-1050R	-1050Y	8	261.60

Storage Bin Accessories

For Matlock storage bins.



Riser
Rod

Label
Holder

Description	Order Code MTL-404	Price/1 RND
Set of 4 Riser Rods	-9010K	32.10
Single Riser rod for No.3A, 4 & 5 Bins	-9020K	9.20
Label Holder For No.0 Bins	-3500K	2.60
Label Holder For No.1 Bins	-3510K	3.10
Label Holder For No.2 Bins	-3520K	3.60
Label Holder For No.3 & 4 Bins	-3530K	4.30
Label Holder For No.3A & 5 Bins	-3540K	4.30

Parts, Component & Tool Storage Bins

High strength polypropylene Euro boxes with reinforced corners and rims and integral interlocking hinged lids. Smooth flat base allows silent movement on conveyors making them suitable for use in distribution centres or warehouse storage. All containers feature ergonomic hand grips and can be sealed using security tags.

Available in 20, 40 or 54ltr capacities.



Capacity	Size (L x W x H)	Colour	Order Code MTL-404	Price/1 RND
20ltr	400 x 300 x 260mm	Blue	-2500K	418.50
40ltr	600 x 400 x 250mm		-2520K	588.50
54ltr	600 x 400 x 335mm		-2530K	627.90
20ltr	400 x 300 x 260mm	Grey	-2600K	418.50
40ltr	600 x 400 x 250mm		-2620K	588.50
54ltr	600 x 400 x 335mm		-2630K	627.90

SENATOR

Plastic Storage Bins

High strength polypropylene storage bins with label holders, designed for component or part storage. Bins can stand alone, be nested on top of each other or hung on louvred panels, allowing you to create the storage system to satisfy your specific requirements. Available in three sizes and four different colours blue, green, yellow and red.



EXTENDED
RANGE

Sen1

Sen2

Product Number	Size (L x W x H) (mm)	Pack Qty	Order Code SEN-404				Offer Price/1
			Blue	Green	Yellow	Red	
Sen1	165 x 110 x 75	35	-1010B	-1010G	-1010Y	-1010R	20.40
Sen2	240 x 155 x 125	35	-1020B	-1020G	-1020Y	-1020R	39.60
Sen3A	350 x 220 x 165	10	-1040B	-1040G	-1040Y	-1040R	70.60

AVON

Cardboard Storage Bins

For easy identification and storage of parts and other components on shelves. Manufactured from corrugated card with writable panels. Supplied flat in packs of 50.

Contents not
included



PACK OF
50

Size L x W x H (mm)	Pack Qty	Order Code AVN-404	Price/1 RND
152 x 76 x 115 (6" x 3" x 4.5")	50	-2010A	474.90
228 x 100 x 115 (9" x 4" x 4.5")		-2011B	693.70
228 x 152 x 115 (9" x 6" x 4.5")		-2012C	737.70
228 x 204 x 115 (9" x 8" x 4.5")		-2013D	774.70
304 x 100 x 115 (12" x 4" x 4.5")		-2014E	749.20

MATLOCK**Mobile
Trolleys/Racks**

Similar to a free standing rack but mobile. Fitted with four 5" castors to the base which supports double sided louvre panels. Available in one height and two widths.

Colour: dark grey/light grey.



**Storage Bins
Not Included**

Description	Size (H x W)	Order Code MTL-405	Price/1 RND
Mobile Louvre Rack	1080 x 457	-7410K	2956.90
	1080 x 877	-7420K	3788.40

Steel Louvred Panels

Pressed steel panels with high frequency louvres that will accept most makes of plastic storage bin. High frequency louvres allow bins to be hung in a high-density configuration in any mix of sizes/colours. The lip on the rear of the plastic storage bin sits securely over the louvre of the panel. The modular design allows storage bins to be easily removed and replaced when required.

Bins supplied separately - see previous page.



Type	Width x Height (mm)	Order Code MTL-404	Price/1 RND
LP450	450 x 450	-2004P	392.40
LP900	450 x 900	-2009P	640.90
LP1600	450 x 1600	-2016P	915.60
LP1800	450 x 1800	-2018P	1242.50

Free Standing Racks

Available in two heights and two widths. Made from 16swg channel section which supports louvre panels either single or double sided.

Colour: dark grey/light grey.



**Storage Bins
Not Included**

Description	Size (H x W)	Order Code MTL-405	Price/1 RND
Double Sided Free Standing Louvre Rack	924 x 457	-7610K	2001.30
	924 x 871	-7615K	2826.30
	1838 x 457	-7620K	2893.40
	1838 x 871	-7625K	4490.40
Single Sided Free Standing Louvre Rack	924 x 457	-7650K	1407.60
	924 x 871	-7655K	2317.30
	1838 x 457	-7660K	2372.30
	1838 x 871	-7665K	3043.60

Bench Assembly Units

A free standing unit supporting a louvre Panel for use on benches or tables. Available in one height and two widths. Kit comprises: louvre panel, support rods and fixings.

Colour: light grey.



Description	Size (H x W)	Order Code MTL-405	Price/1 RND
Bench Louvre Rack	457 x 436	-7250K	294.90
	457 x 852	-7260K	475.10

PRODUCTS ARE ONLY AVAILABLE VIA YOUR DISTRIBUTOR

GROUP 405 RACKING

MATLOCK

Standard Duty Racking

5 Shelves

This racking system has uprights and beams made of medium gauge steel with a corrosion resistant powder coating and rubber feet to protect the floor. It is easy to assemble, interlocking with no nuts and bolts to worry about. The shelves are easily adjustable and can take up to 150kg UDL (uniformly distributed load) with the rack being fixed to a wall.



Shelf Capacity
150kg
Uniformly
Distributed Load

SELF ASSEMBLY
Tools
Required

Dimensions (W x D x H) mm	Max. Shelf Capacity	Number of Shelves	Order Code MTL-405	Price/1 RND
1010 x 400 x 1830	150kg	5	-1760K	807.20
Shelf to suit MTL-405-1760K			-8670K	79.20

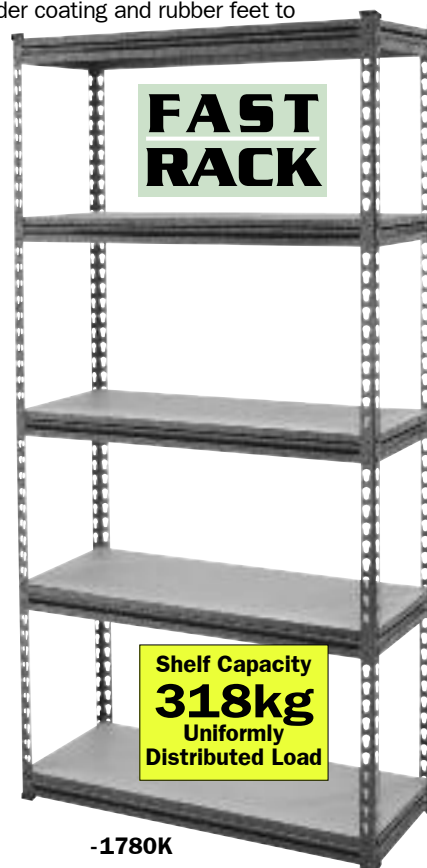
Heavy Duty Racking

5 Shelves

This racking system has two ways of assembly with uprights and beams made of heavy gauge steel with a corrosion resistant powder coating and rubber feet to protect the floor. It is easy to assemble, interlocking 'keyhole' slots, no nuts and bolts. The shelves are easily adjustable and can take up to 318kg UDL (uniformly distributed load) with the rack being fixed to a wall.



**FAST
RACK**



Shelf Capacity
318kg
Uniformly
Distributed Load

Assembly options



SELF ASSEMBLY
Tools
Required

-1780K

Dimensions (W x D x H) mm	Max. Shelf Capacity	Number of Shelves	Order Code MTL-405	Price/1 RND
915 x 460 x 1830	318kg	5	-1740K	1290.80
1230 x 610 x 1830	318kg	5	-1780K	2583.20
Shelf to suit MTL-405-1740K			-8670K	79.20
Shelf to suit MTL-405-1780K			-8700K	152.80

Heavy Duty Racking

4 Shelves

This racking system can be assembled in five ways and has uprights and beams made of heavy gauge steel with a corrosion resistant powder coating and rubber feet to protect the floor. It is easy to assemble, interlocking with just two nuts and bolts joining one upright frame to the next. The 430mm deep shelves are easily adjustable and can take up to 455kg UDL (uniformly distributed load) with the rack being fixed to a wall.



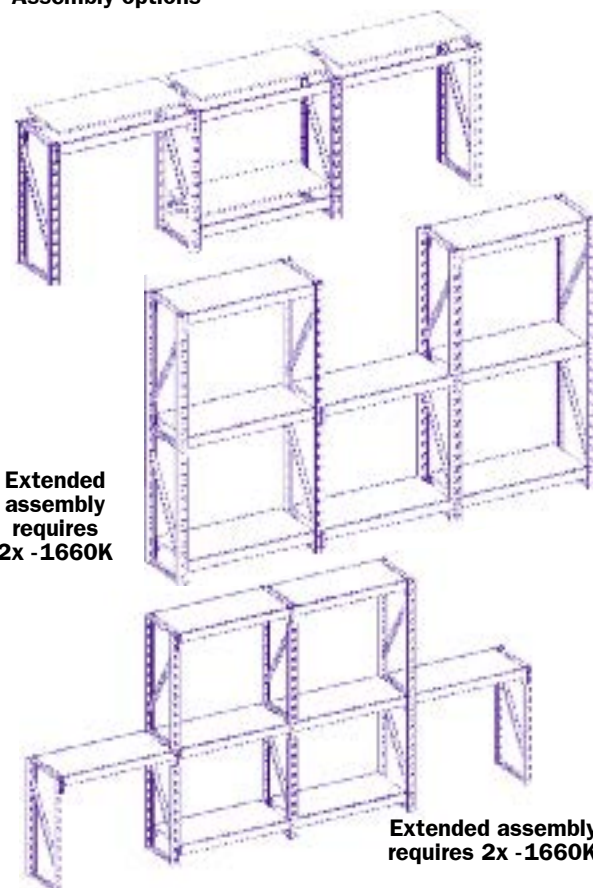
**MULTI
RACK**

Shelf Capacity
455kg
Uniformly
Distributed Load

SELF ASSEMBLY
Tools
Required

Dimensions (W x D x H) mm	Max. Shelf Capacity	Number of Shelves	Order Code MTL-405	Price/1 RND
1040 x 430 x 1830	455kg	4	-1660K	3229.10

Assembly options



Extended
assembly
requires
2x -1660K

Extended assembly
requires 2x -1660K

KENNEDY
QUALITY TOOLING

Portable Bench & Vice

Rapid clamping. Full graduated working surface with channelled chuck block guides. Includes four adjustable chuck blocks and 4 profile blocks. Aluminium mitre guides and lower support arm to assist power tool use. Rapid fold/unfold with quick lock and release action, compact and easy to store.



Rapid clamping



Rapid fold/unfold with auto lock



Lower support arm



Aluminium mitre guide



Mitre clamping

Spare Parts

Description	Order Code KEN-405	Price/1 RND
Spare clamping block	-4610K	54.60
Replacement Rubber Feet (Pk 4)	-4620K	57.20

Description	Order Code KEN-405	Price/1 RND
4 in 1 portable workbench	-4600K	1971.70

Portable Bench Top Workstation

Includes two trays to store tools & small parts. Full graduated working surface with channelled chuck block guides. Includes four adjustable chuck blocks and profile adaptor blocks. Mounting holes in the feet of the workstation allow it to be fitted to a workbench if required. Compact, portable with carry handle and easy to store.



Storage trays



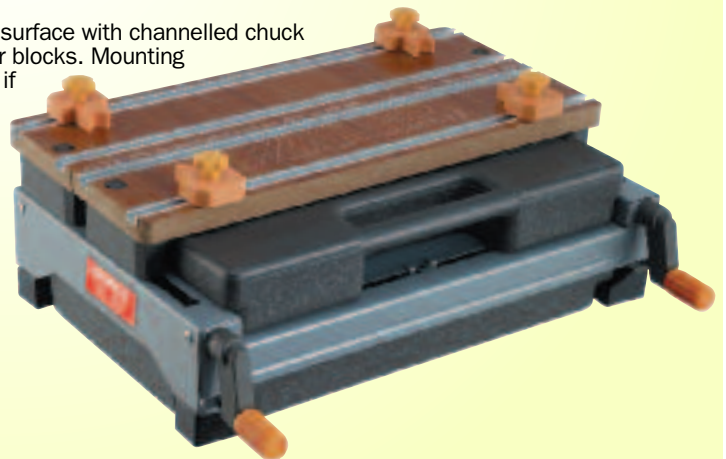
Mitre clamping



Compact, portable and easy to store



Fully graduated working surface



Description	Order Code KEN-405	Price/1 RND
4 in 1 Portable Workbench	-4700K	806.60
Spare Parts		
Spare Clamping Block	-4610K	54.60
Spare Clamping Handle with Sleeve	-4720K	57.20

SENATOR
QUALITY TOOLING

Home Improver Workbench & Vice

Medium duty for hobby and DIY use. All steel body. Solid beech worktop with metric/inch gauging scale and protractor markings. Easy to assemble. Sturdy splay legs with non-slip rubber feet. Four quick-change worktop functions. Supplied with four chuck blocks, assembly spanners and instructions.

Worktop width: 600mm.
Worktop depth (individual): 115mm.
Worktop depth (combined): 230mm.
Overall height: 800mm.
Width (when collapsed for storage): 280mm.
Maximum opening capacity: 140mm.
Maximum clamping capacity (with blocks): 285mm.
Weight capacity: 200kg/440lbs.



Transforms to an upright vice with jaws set at 90°



Transforms to a versatile saw-horse with jaws set at 45°



Transforms to a T-vice



Ideal for clamping pipe and other convex workpieces



Solid hardwood worktop with protractor and rule markings.

Height (mm)	Width (mm)	Order Code SEN-405	Price/1 RND
800	600	-9650K	715.30

PRODUCTS ARE ONLY AVAILABLE VIA YOUR DISTRIBUTOR

SENATOR
QUALITY TOOLING

Cabinet with Shelf & Workbench

Manufactured from cold rolled steel plate with a hard wearing corrosion resistant powder coated finish. Hard wearing solid wooden work surface. Two shelves. Adjustable feet. Supplied with assembly instructions.

Maximum shelf capacity: 20kg.

Maximum cabinet capacity: 150kg.



SELF ASSEMBLY
Tools
Required

Weight	Order Code SEN-405	Price/1 RND
25.5kg	-5030K	1927.20

Locking Cabinet & Workbench

Lockable storage cabinet with two shelves.

Overall dimensions (W x D x H):

838 x 508 x 852mm.

Max shelf capacity: 20kg.

Max cabinet capacity: 150kg.



SELF ASSEMBLY
Tools
Required

Weight	Order Code SEN-405	Price/1 RND
27.0kg	-5020K	1972.90

5 Drawer Cabinet & Workbench

The five drawers have a smooth action sliding mechanism.



SELF ASSEMBLY
Tools
Required

Weight	Order Code SEN-405	Price/1 RND
43.0kg	-5010K	3862.30

Locking Cabinet with Shelf & Workbench

Lockable storage cabinet with two shelves and two open shelves for additional storage.

Overall dimensions

(W x D x H):

1372 x 508 x 865mm.

Max shelf/drawer

capacity: 25kg.

Max cabinet

capacity: 180kg.



SELF ASSEMBLY
Tools
Required

Shelf Capacity
25kg
Uniformly
Distributed Load

Dimensions W x D x H (mm)	Weight	Order Code SEN-405	Price/1 RND
1372 x 508 x 865	48.5kg	-5040K	4565.70

5 Drawer Cabinet & Shelved Workbench

The five drawers have a smooth action sliding mechanism.

Two open shelves for additional storage.

Overall dimensions

(W x D x H):

1372 x 508 x 865mm.

Max shelf drawer

capacity: 25kg.

Max cabinet

capacity: 180kg.



SELF ASSEMBLY
Tools
Required

Shelf Capacity
25kg
Uniformly
Distributed Load

Dimensions W x D x H (mm)	Weight	Order Code SEN-405	Price/1 RND
1372 x 508 x 865	61.0kg	-5050K	5905.70

KENNEDY
CHALLENGE PERFORMANCE TOOLS

2 Drawer Workbench

Professional quality two drawer workbench constructed from heavy gauge steel for sturdy long-term use. Ideal for a range of workshop and industrial applications.

Drawers are lockable and fitted with smooth glide drawer runners.

Full length storage shelf. Quick and easy assembly. Powder coated finish.

Dimensions (W x D x H): 1500 x 640 x 865mm.



SELF ASSEMBLY
Tools
Required

Shelf Capacity
40kg
Uniformly
Distributed Load

Dimensions (W x D x H)	Weight	Order Code KEN-405	Price/1 RND
1500 x 640 x 865	77.4kg	-2320K	6801.00

INDEXA Precision Ground Flat Stock

Precision ground flat stock supplied in **1.2510 (100MnCrW1)** Tool Steel, a wide range of Metric sizes. Oil hardening tool steel supplied in annealed condition. It offers good durability, gives excellent wear resistance and holds a good cutting edge. An excellent general purpose grade.

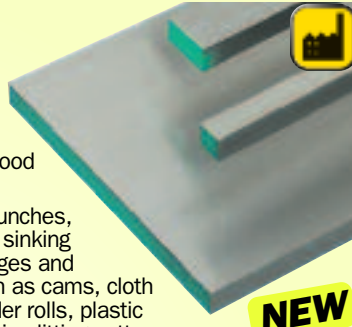
Applications include medium run dies, press tools, drawing punches, broaches, bushings, lathe centres, chuck jaws, master cavity sinking hobs, paper cutting machine knives, plug gauges, thread gauges and precision measuring tools. It is also used in applications such as cams, cloth cutting knives, cold taps, reamers, trimmer dies, tube expander rolls, plastic moulds and woodworking knives, collets, cutting hobs and strip slitting cutters.

Top & bottom surfaces will be supplied in ground condition. Both ends supplied sawn cut. Surface Roughness: Max 3.2my.

Ground Flat Stock Tolerances

Thickness: -0/+0.005mm; Width: -0/+0.20mm; Length: -5/+5.00mm; Square Bars: -0/+0.10mm

Size (mm)	Order Code IND-413	Price/1 RND
2 x 10 x 500	-3300A	102.50
2 x 15 x 500	-3301B	117.40
2 x 20 x 500	-3302C	118.60
2 x 25 x 500	-3303D	141.20
2 x 40 x 500	-3305F	191.50
2 x 50 x 500	-3306G	223.30
3 x 10 x 500	-3400A	116.30
3 x 15 x 500	-3401B	123.20
3 x 20 x 500	-3402C	127.80
3 x 25 x 500	-3403D	149.30
3 x 30 x 500	-3404E	160.40
3 x 40 x 500	-3405F	193.80
3 x 50 x 500	-3406G	223.30
3 x 75 x 500	-3408J	297.30
3 x 100 x 500	-3410L	366.70
3 x 150 x 500	-3412N	512.10
4 x 15 x 500	-3501B	128.90
4 x 20 x 500	-3502C	142.40
4 x 25 x 500	-3503D	156.90
4 x 30 x 500	-3504E	173.00
4 x 40 x 500	-3505F	207.20
4 x 50 x 500	-3506G	228.70
4 x 60 x 500	-3507H	269.70
4 x 100 x 500	-3510L	384.80
5 x 15 x 500	-3601B	159.20
5 x 20 x 500	-3602C	168.40
5 x 25 x 500	-3603D	173.00
5 x 30 x 500	-3604E	182.20
5 x 40 x 500	-3605F	218.70
5 x 50 x 500	-3606G	235.60
5 x 75 x 500	-3608J	334.50
5 x 100 x 500	-3610L	386.30
5 x 150 x 500	-3612N	540.50
6 x 15 x 500	-3702C	182.20
6 x 20 x 500	-3703D	209.50
6 x 25 x 500	-3704E	210.60
6 x 30 x 500	-3705F	218.70
6 x 40 x 500	-3706G	244.80
6 x 50 x 500	-3707H	273.20
6 x 60 x 500	-3708J	350.60
6 x 75 x 500	-3709K	397.40
6 x 100 x 500	-3711M	456.50
6 x 150 x 500	-3713P	656.70
6 x 200 x 500	-3714Q	936.00
8 x 15 x 500	-3802C	216.40
8 x 20 x 500	-3803D	232.10
8 x 25 x 500	-3804E	232.10



Industrial Key Steel

High grade mild steel. Available in square or rectangular sections.

Metric manufactured from: **BS4235 Part 7 1972 grade steel** equivalent to **DIN 6885**.

Inch manufactured from: **BS46 PART 7 1958 grade steel**. Length: 300mm and 12".

Other sizes available on request.

EXTENDED RANGE



Set Metric Square

Contents: 4, 5, 6, 8, 10 and 12mm.

No. of Pieces	Weight each	Order Code KEN-421	Price/1 RND
6	850g	-0500K	249.10

Square - Metric

Type	Size	Order Code KEN-421	Price/1 RND
mm	2mm	-0020K	13.20
	3mm	-0030K	19.70
	4mm	-0040K	25.10
	5mm	-0050K	31.50
	6mm	-0060K	37.30
	7mm	-0070K	44.20
	8mm	-0080K	50.70
	10mm	-0100K	57.10
	12mm	-0120K	62.90
	14mm	-0140K	69.40
	16mm	-0160K	74.80
	18mm	-0180K	99.40
20mm	-0200K	118.30	
22mm	-0220K	136.90	
25mm	-0250K	155.70	

Square - Inch

Type	Size	Order Code KEN-421	Price/1 RND
inch	3/32"	-3060K	13.20
	1/8"	-3080K	19.70
	5/32"	-3100K	25.10
	3/16"	-3120K	31.50
	1/4"	-3160K	37.30
	5/16"	-3200K	50.70
inch	3/8"	-3240K	57.10
	7/16"	-3280K	62.90
	1/2"	-3320K	69.40
	9/16"	-3360K	76.40
	5/8"	-3400K	93.80
	3/4"	-3480K	130.00
	7/8"	-3560K	168.20
	1"	-3640K	230.70

Rectangular - Metric

Type	Size	Order Code KEN-421	Price/1 RND
mm	8 x 5mm	-0850K	47.70
	8 x 7mm	-0870K	58.40
	10 x 8mm	-1080K	79.40
	12 x 8mm	-1280K	100.50
	12 x 10mm	-1300K	113.40
	14 x 9mm	-1490K	119.30
	16 x 10mm	-1610K	150.20
	18 x 11mm	-1910K	173.50
	20 x 12mm	-2120K	206.10
	22 x 14mm	-2400K	283.40
	25 x 14mm	-2420K	300.20
	28 x 16mm	-2550K	149.70
	32 x 18mm	-2650K	195.00
	36 x 20mm	-2700K	219.90

KENNEDY Steel Shim

Designed to achieve accurate alignment. High quality steel to prevent corrosion from exposure to acids or alkalis. With rounded corners, perfectly deburred for maximum safety. Permanent markings indicate thickness and dimensions. Extraction and insertion tabs facilitate positioning and removal of the shims.

EN2. CS4 fully hardened bright mild steel. 6" wide. 1lb tins.

Thickness	Length	Weight each	Order Code KEN-415	Price/1 RND
0.002"	24'4"	454g	-6020K	249.20
0.003"	15'6"	454g	-6030K	249.20
0.004"	12'2"	454g	-6040K	211.00
0.005"	9'8"	454g	-6050K	169.50
0.006"	7'8"	454g	-6060K	164.50
0.007"	7'0"	454g	-6070K	149.60
0.008"	6'0"	454g	-6080K	141.30
0.010"	4'1"	454g	-6100K	123.00
0.012"	3'9"	454g	-6120K	123.00
0.015"	3'4"	454g	-6150K	111.40
0.020"	2'5"	454g	-6200K	83.10
0.025"	2'0"	454g	-6250K	83.10

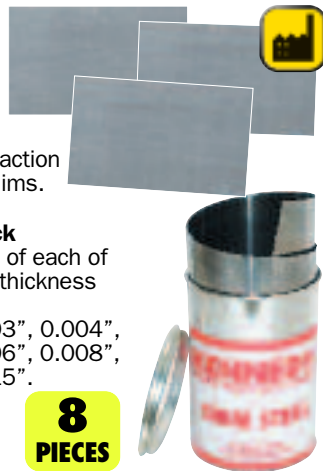
Assorted pack

Contains one of each of the following thickness of shim:

0.002", 0.003", 0.004", 0.005", 0.006", 0.008", 0.010", 0.015".

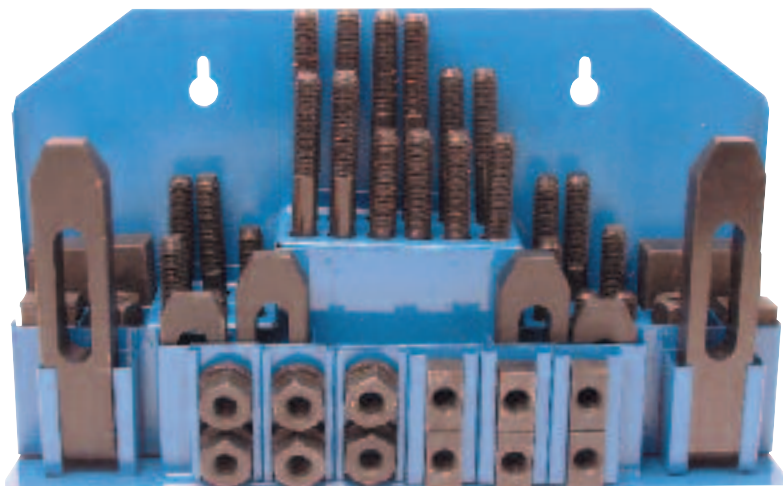
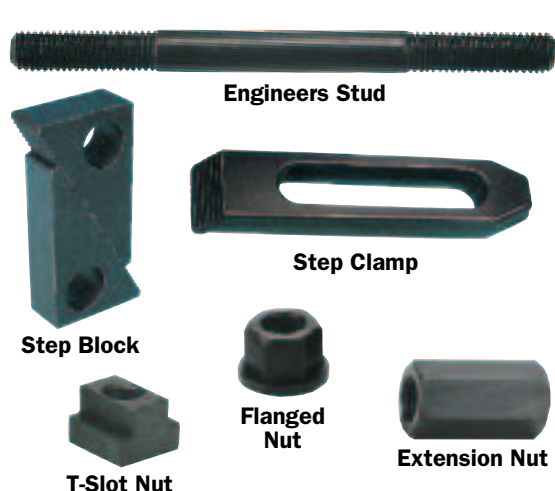
8 PIECES

Number of Pieces	Lengths	Weight each	Order Code KEN-415	Price/Pk RND
8	11"	0.60kg	-6650K	226.70





Designed to save set up time and solve most clamping problems. Manufactured to high standards. All step clamps are forged and hardened and the step blocks are made from high quality steel. All components (other than the studs) are heat treated and finished in black oxide. Available to suit a full range of metric and imperial T-Slot widths. Supplied in steel racks which can be wall mounted or fitted to workbenches for ease of storage (except M16 set which is supplied in wooden box).



58 Pieces Metric Sets (Quantity of each component part given in brackets)

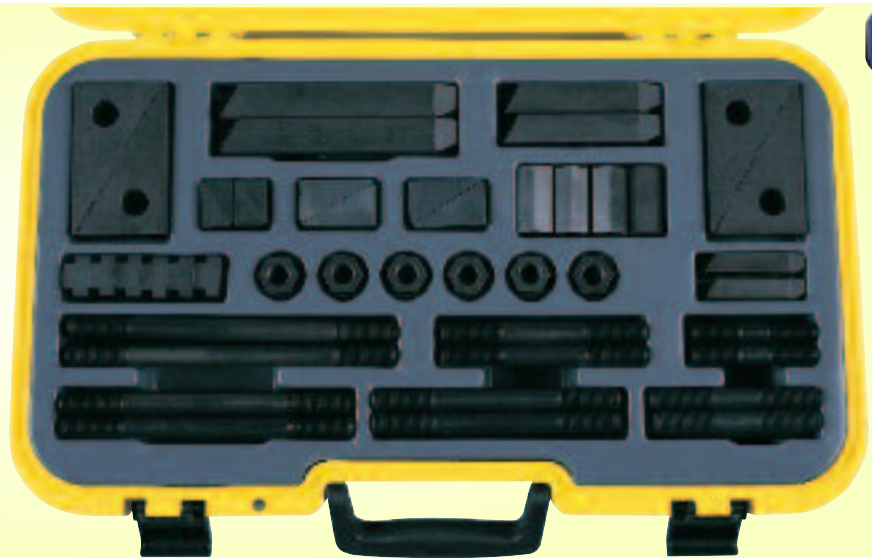
Product Number	Table Slot Size x W x L (mm)	Thread Size	Engineer's Stud L x Thread L (mm)	Step Clamp L x W x H (mm)	Extension Nuts	Flange Nuts	Step Blocks (Pairs) H Adj. Range	Weight each	Order Code ATL-425	Price/1 RND
CK120100	12 x 18 x 14 (6)	M10	75 x 30 (4) 100 x 30 (4) 125 x 30 (4) 150 x 30 (4) 175 x 30 (4) 200 x 30 (4)	55 x 25 x 12 (2) 88 x 25 x 16 (2) 128 x 28 x 19 (2)	M10 x 30mm Long (4)	M10 x 15mm (6)	28 20 - 38 (4) 35 28 - 64 (4) 98 64 - 152 (4)	10kg	-1120K	951.70
CK140120	14 x 22 x 16 (6)	M12	75 x 35 (4) 100 x 35 (4) 125 x 35 (4) 150 x 35 (4) 175 x 35 (4) 200 x 35 (4)	64 x 28 x 12 (2) 100 x 32 x 19 (2) 150 x 32 x 22 (2)	M12 x 36mm Long (4)	M12 x 18mm (6)	28 20 - 38 (4) 35 28 - 64 (4) 98 64 - 152 (4)	12kg	-1140K	1053.00
CK160140	16 x 25 x 18 (6)	M14	75 x 35 (4) 100 x 35 (4) 125 x 35 (4) 150 x 35 (4) 175 x 35 (4) 200 x 35 (4)	64 x 28 x 12 (2) 100 x 32 x 19 (2) 150 x 32 x 22 (2)	M14 x 42mm Long (4)	M14 x 21mm (6)	28 20 - 38 (4) 35 28 - 64 (4) 98 64 - 152 (4)	12kg	-1160K	1154.10
CK180140	18 x 25 x 18 (6)	M14	75 x 35 (4) 100 x 35 (4) 125 x 35 (4) 150 x 35 (4) 175 x 35 (4) 200 x 35 (4)	64 x 28 x 12 (2) 100 x 32 x 19 (2) 150 x 32 x 22 (2)	M14 x 42mm Long (4)	M14 x 21mm (6)	28 20 - 38 (4) 35 28 - 64 (4) 98 64 - 152 (4)	12kg	-1180K	1410.90
CK200160	20 x 28 x 20 (6)	M16	75 x 35 (4) 100 x 35 (4) 125 x 35 (4) 150 x 35 (4) 175 x 35 (4) 200 x 35 (4)	64 x 31 x 12 (2) 100 x 38 x 20 (2) 150 x 38 x 22 (2)	M16 x 48mm Long (4)	M16 x 24mm (6)	28 20 - 38 (4) 35 28 - 64 (4) 98 64 - 152 (4)	14kg	-1200K	2404.10

58 Pieces Inch Sets (Quantity of each component part given in brackets)

Product Number	Table Slot Size x W x L (mm)	Thread Size	Engineer's Stud L x Thread L (mm)	Step Clamp L x H x W (mm)	Extension Nuts	Flange Nuts	Step Blocks (Pairs) H Adj. Range	Weight each	Order Code ATL-425	Price/1 RND
CK500375	1/2" x 1 1/16" x 1 7/32" (6)	3/8" UNC	3" x 1 1/4" (4) 4" x 1 1/4" (4) 5" x 1 1/4" (4) 6" x 1 1/4" (4) 7" x 1 1/4" (4) 8" x 1 1/4" (4)	2" x 1" x 1/2" (2) 3 1/2" x 1 1/4" x 3/4" (2) 5" x 1 1/4" x 7/8" (2)	3/8" UNC x 1" Long (4)	3/8" UNC 7/16" (6)	1 1/8" 3/4" - 1 1/2" (4) 1 3/4" 1 1/8" - 2 1/2" (4) 3 7/8" 2 1/2" - 6" (4)	10kg	-1320K	906.30
CK62500	9/16" x 7/8" x 6/8" (6)	1/2" UNC	3" x 1 1/4" (4) 4" x 1 1/2" (4) 5" x 1 1/2" (4) 6" x 1 1/2" (4) 7" x 1 1/2" (4) 8" x 1 1/2" (4)	2 1/2" x 1 1/8" x 1/2" (2) 2" x 1 1/4" x 3/4" (2) 6" x 1 1/4" x 7/8" (2)	1/2" UNC x 1 1/4" Long (4)	1/2" UNC 13/16" (6)	1 1/8" 3/4" - 1 1/2" (4) 1 3/4" 1 1/8" - 2 1/2" (4) 3 7/8" 2 1/2" - 6" (4)	12kg	-1360K	1002.80
CK62550	5/8" x 7/8" x 6/8" (6)	1/2" UNC	3" x 1 1/4" (4) 4" x 1 1/2" (4) 5" x 1 1/2" (4) 6" x 1 1/2" (4) 7" x 1 1/2" (4) 8" x 1 1/2" (4)	2 1/2" x 1 1/8" x 1/2" (2) 2" x 1 1/4" x 3/4" (2) 6" x 1 1/4" x 7/8" (2)	1/2" UNC x 1 1/4" Long (4)	1/2" UNC 13/16" (6)	1 1/8" 3/4" - 1 1/2" (4) 1 3/4" 1 1/8" - 2 1/2" (4) 3 7/8" 2 1/2" - 6" (4)	12kg	-1400K	1002.80
CK750625	3/4" x 1 3/8" x 1 1/8" (6)	5/8" UNC	3" x 1 1/4" (4) 4" x 1 1/2" (4) 5" x 1 1/2" (4) 6" x 1 1/2" (4) 7" x 1 1/2" (4) 8" x 1 1/2" (4)	2 1/2" x 1 1/8" x 1/2" (2) 2" x 1 1/4" x 3/4" (2) 6" x 1 1/4" x 7/8" (2)	5/8" UNC x 1 5/8" Long (4)	5/8" UNC 13/16" (6)	1 1/8" 3/4" - 1 1/2" (4) 1 3/4" 1 1/8" - 2 1/2" (4) 3 7/8" 2 1/2" - 6" (4)	12kg	-1480K	1410.90

INDEXA Indexa T-Slot Clamping Kits

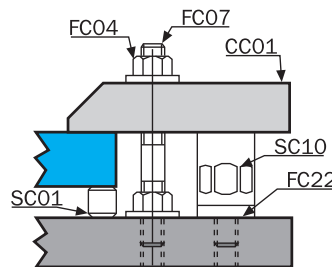
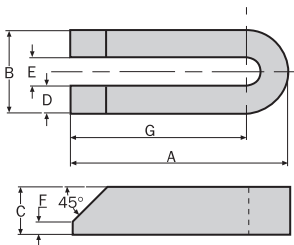
Designed to save set up time and solve most T-Slot clamping problems.
All components are manufactured from **S45C (JIS)/CK45 (DIN)** grade non-alloy carbon steel, heat treated to HRC 28 - 32 and have a manganese phosphate surface finish.
Supplied in a robust plastic case.



T-Slot Size	Thread Size	Part Number	Weight each	Order Code IND-425	Price/1 RND
12mm	M10	TK10	9.0kg	-3610T	1930.90
14mm	M12	TK12	10.0kg	-3612T	2034.90
16mm	M14	TK14	11.0kg	-3614T	3009.00
18mm	M16	TK16	14.0kg	-3616T	2958.10
20mm	M18	TK18	20.5kg	-3618T	3817.50

INDEXA CC01 - U-Clamp

Open end permits quick and easy installation.



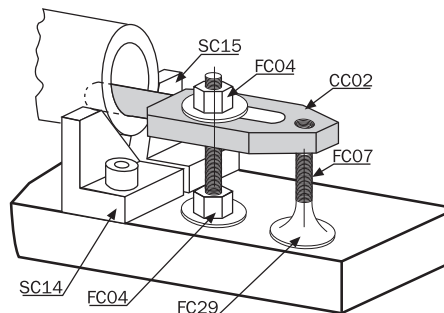
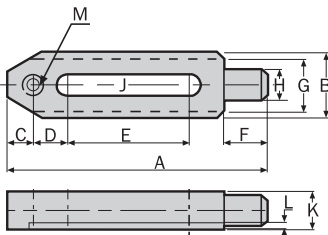
Material: Medium Carbon Steel.
Heat treated to: HRC 32 - 38.
Surface finish: Black Oxide.



Product Number	Length x Width A x B	Dimensions (mm)	Weight each	Order Code IND-425	Price/1 RND
CC010112	100 x 38mm	C 22 D 12.5 E 13 F 6 G 81	0.41kg	-1005D	184.50
CC010316	150 x 50mm	C 30 D 16.5 E 17 F 8 G 125	1.10kg	-1005J	408.00
CC010420	200 x 60mm	C 35 D 19.5 E 21 F 10 G 170	2.10kg	-1005M	724.90

CC02 - Bore Clamp

The cylindrical pin minimises the contact area.
This clamp is for clamping inside horizontal bores and onto concave surfaces.



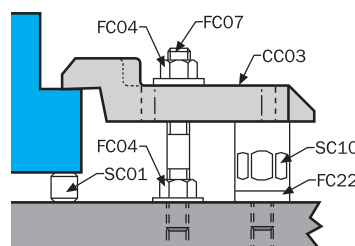
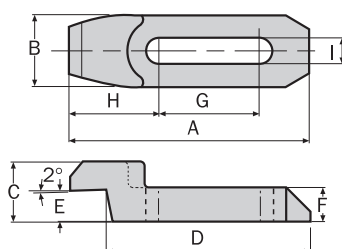
Material: Medium Carbon Steel.
Heat treated to: HR C32 - 38.
Surface finish: Black Oxide.



Product Number	Length x Width A x B	Dimensions (mm)	Weight each	Order Code IND-425	Price/1 RND
CC020112	150 x 38mm	C 15 D 20 E 70 F 25 G 30 H 18 J 13 K 22 L 4 M12	0.58kg	-1010D	318.10
CC020216	150 x 48mm	C 20 D 25 E 40 F 35 G 40 H 24 J 17 K 32 L 5 M16	1.12kg	-1010G	485.40

CC03 - Swan Necked Clamp

Low profile design helps eliminate cutter interference.



Material: Medium Carbon Steel.
Heat treated to: HRC 32 - 38.
Surface finish: Black Oxide.



Product Number	Length x Width A x B	Dimensions (mm)	Weight each	Order Code IND-425	Price/1 RND
CC030216	150 x 48mm	C 48 D 130 E 25 F 25 G 55 H 60 I 17	1.30kg	-1015K	716.20
CC030320	175 x 60mm	C 60 D 150 E 30 F 30 G 65 H 70 I 21	2.26kg	-1015N	1172.60
CC030112	120 x 36mm	C 30 D 102 E 16 F 17 G 50 H 45 I 13	0.49kg	-1015H	397.80

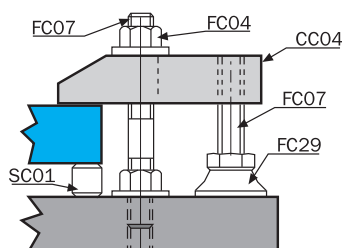
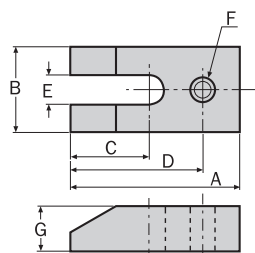
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INDEXA CC04 - Tapped End U-Clamp

Open end design permits easy assembly.



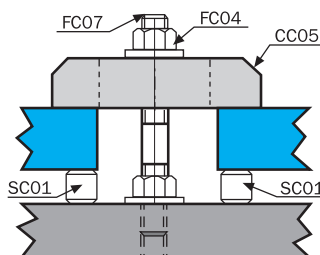
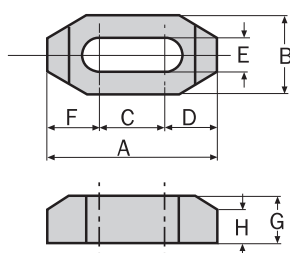
Material: Medium Carbon Steel.
Heat treated to: HRC 32 - 38.
Surface finish: Black Oxide.



Product Number	Length x Width A x B	Dimensions (mm)					Weight each	Order Code	Price/1 RND
		C	D	E	F	G		IND-425	
CC040616	150 x 50mm	95	130	17	M16	25	1.50kg	-1020R	613.80

CC05 - Plain Clamp

Material: Medium Carbon Steel.
Heat treated to: HRC 32 - 38.
Surface finish: Black Oxide.

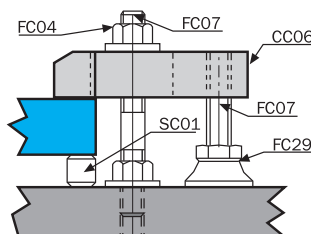
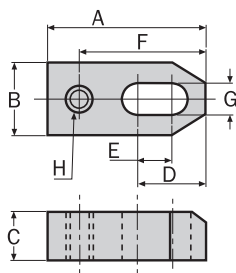


Product Number	Length x Width A x B	Dimensions (mm)						Weight each	Order Code	Price/1 RND
		C	D	E	F	G	H		IND-425	
CC050112	65 x 32mm	25	20.0	13	20.0	19	13	0.22kg	-1025D	195.40
CC050212	100 x 32mm	40	30.0	13	30.0	19	13	0.33kg	-1025G	287.10
CC050316	80 x 38mm	24	28.0	17	28.0	22	14	0.34kg	-1025J	242.30
CC050416	125 x 38mm	41	42.0	17	42.0	22	14	0.57kg	-1025M	313.10
CC050520	100 x 38mm	32	34.0	21	34.0	22	14	0.41kg	-1025P	268.30
CC050620	125 x 38mm	40	42.5	21	42.5	25	15	0.62kg	-1025R	366.60

CC06 - Tapped End Plain Clamp

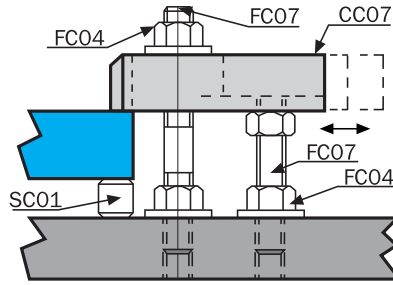
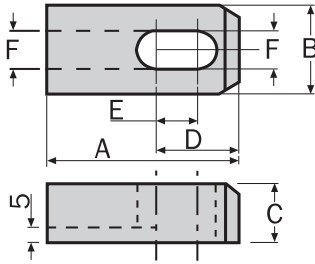
For use with various knobs, jack screws, clamps and pads.

Material: Medium Carbon Steel.
Heat treated to: HRC 32 - 38.
Surface finish: Black Oxide.



Product Number	Length x Width A x B	Dimensions (mm)						Weight each	Order Code	Price/1 RND
		C	D	E	F	G	H		IND-425	
CC060112	65 x 32mm	19	32	14	52	13	M12	0.22kg	-1030D	214.00
CC060212	80 x 32mm	19	48	25	69	13	M12	0.27kg	-1030F	223.10
CC060312	100 x 32mm	19	60	40	89	13	M12	0.33kg	-1030H	273.10
CC060416	80 x 38mm	19	40	17	65	17	M16	0.32kg	-1030J	235.10
CC060516	100 x 38mm	25	55	30	85	17	M16	0.53kg	-1030L	290.50
CC060616	125 x 38mm	25	70	45	110	17	M16	0.65kg	-1030N	405.80
CC060720	150 x 50mm	25	82	50	134	21	M20	1.10kg	-1030P	588.20
CC060820	200 x 50mm	25	112	80	184	21	M20	1.90kg	-1030R	813.20

INDEXA CC07 - Slotted End Clamp



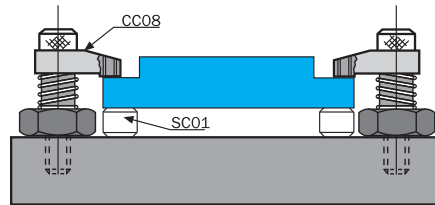
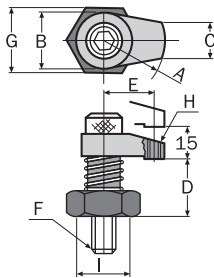
Material: Medium Carbon Steel.
Hardness: HRC 32 - 38.
Surface finish: Black Oxide.



Product Number	Length x Width A x B	C	Dimensions (mm)				Weight each	Order Code	Price/1 RND
CC070212	80 x 32mm	22	D	E	F		0.31kg	IND-425 -1035F	273.00
CC070616	125 x 38mm	25	70	45	17		0.65kg	-1035N	515.10

CC08 - Swing Clamp

A small clamp with good holding power, ideal for tight spaces, full swing away feature permits easy part loading.



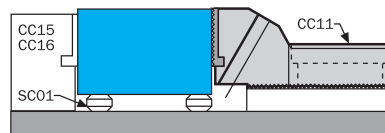
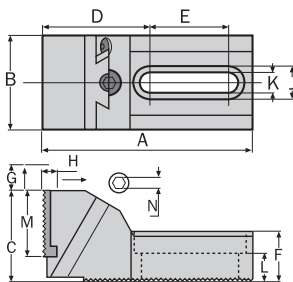
Material: Case Hardened Steel.
Hardness: HRC 38 - 42.
Surface finish: Black Oxide.



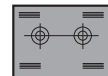
Product Number	Length x Width A x B	C	D	E	Dimensions (mm)				Weight each	Order Code	Price/1 RND
CC080112	30 x 28mm	16	40	-	F	G	H	I	0.29kg	IND-425 -1040D	955.20
CC080212	50 x 32mm	20	45	40	M12	36	M12	26	0.50kg	-1040G	973.10
CC080316	60 x 40mm	25	45	45	M16	41	M16	32	0.75kg	-1040J	1260.80

CC11 - Free Vise Jaw

Clamping force in two directions, with serrated jaws for holding large or irregular shapes.



Serrated



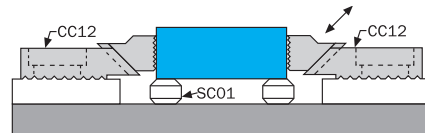
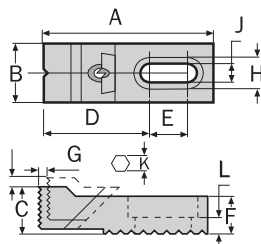
Material: Body: Grey Cast Iron.
Jaw: Medium Carbon Steel EN8D.
Hardness: Jaw Only: HRC 45 - 48.
Surface finish: Jaw: Black Oxide.



Product Number	Type	Length x Width A x B	C	D	E	F	G	H	J	K	L	M	N	Weight each	Order Code	Price/1 RND
CC110112	Serrated	133 x 60mm	54.5	68	50	32	16	6	22	13	16.8	42	10	2.0kg	IND-425 -1045D	4063.80

CC12 - Adjustable Clamp

Low profile clamp that keeps top surfaces clear for machining. Ideal for rough or finished parts.



Material: Medium Carbon Steel.
Hardness: Jaw Only: HRC 38.
Surface finish: Black Oxide.
Jaws: Surface treated with high frequency quenching.

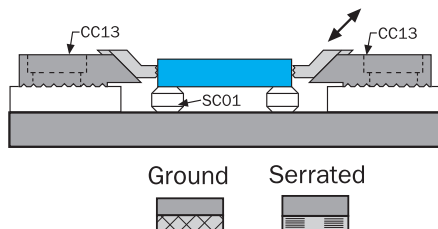
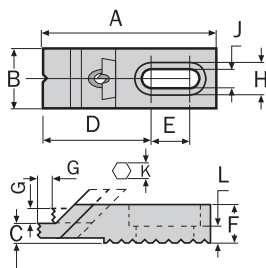


Product Number	Type	Length x Width x Height A x B x C	Dimensions (mm)								Weight each	Order Code	Price/1 RND
CC120108	Serrated	73.45 x 25 x 18mm	D	E	F	G	H	J	K	L	0.18kg	IND-425 -1050D	1085.40
CC120212		106.64 x 35 x 27.5mm	62.14	30.0	22	12	20	13.5	6	9	0.52kg	-1050F	1352.70
CC120316		134.64 x 40 x 37.5mm	82.14	35.0	30	14	26	17.0	8	13	1.02kg	-1050H	1600.00
CC120408		72.00 x 25 x 20.0mm	45.00	16.0	16	7	14	8.5	4	7	0.16kg	-1050J	900.80
CC120512	Ground	104.64 x 35 x 27.5mm	62.14	30.0	22	12	20	13.5	6	9	0.52kg	-1050M	1350.40
CC120616		134.64 x 40 x 37.5mm	82.14	35.0	30	14	26	17.0	8	13	1.02kg	-1050R	1929.30

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INDEXA **CC13 - Adjustable Stepped Clamp**

Low profile clamp for holding thin parts and keeping top surfaces clear for machining.

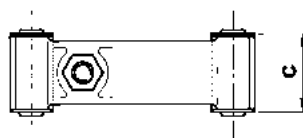
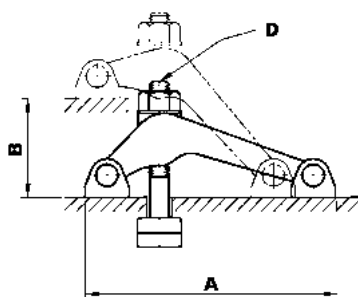


Material: Medium Carbon Steel.
Heat treated to: HRC 38.
Surface finish: Black Oxide.
Jaws: Surface treated with high frequency quenching.

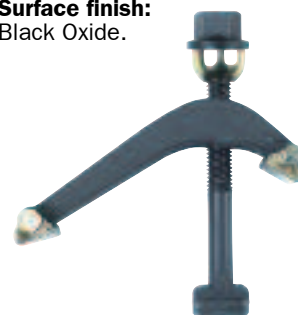


Product Number	Type	Length x Width x Height A x B x C	Dimensions (mm)								Weight each	Order Code IND-425	Price/1 RND
			D	E	F	G	H	J	K	L			
CC130108	Serrated	73.45 x 25 x 18mm	46.95	16.5	16.5	7	14	8.5	5	7	0.18kg	-1055D	1113.90
CC130212		106.64 x 35 x 27.5mm	64.14	30.0	22.0	12	20	13.5	6	9	0.52kg	-1055F	1362.50
CC130316	Ground	133.14 x 40 x 14mm	90.00	30.0	30.0	14	26	17.0	8	13	0.85kg	-1055H	1643.70
CC130512		105 x 35 x 27.5mm	64.14	26.0	22.0	12	20	13.5	6	9	0.52kg	-1055M	1583.20

CC19 - Forged Swivel Clamp

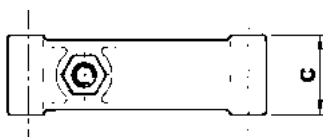
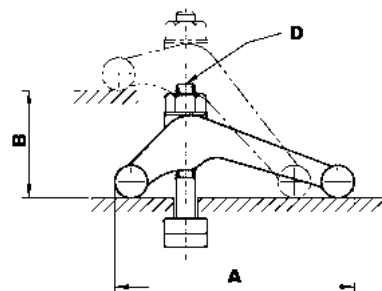


Material: Medium Carbon Steel/Steel Forging.
Heat treated to: 32 - 38°.
Surface finish: Black Oxide.



Product Number	Length x Width A x B	Dimensions (mm)		Weight each	Order Code IND-425	Price/1 RND
		C	D			
CC19-NC50	131 x 75mm	46.5	M12-125	1.50kg	-1085D	1263.90

CC20 - Forged Swivel Clamp

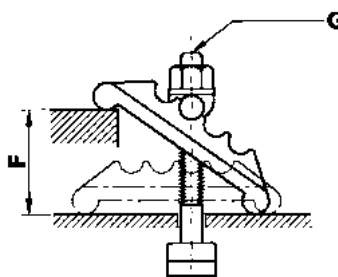
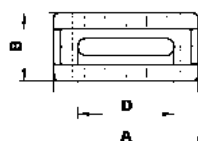
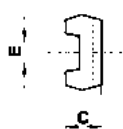


Material: Medium Carbon Steel/Steel Forging.
Heat treated to: 32 - 38°.
Surface finish: Black Oxide.



Product Number	Length x Width A x B	Dimensions (mm)		Weight each	Order Code IND-425	Price/1 RND
		C	D			
CC20-NC6	150 x 85mm	52	M16-150	2.42kg	-1090M	915.80
CC20-NC8	194 x 105mm	58	M20-175	4.50kg	-1090T	1197.20

CC21 - Swivel Rack Clamp



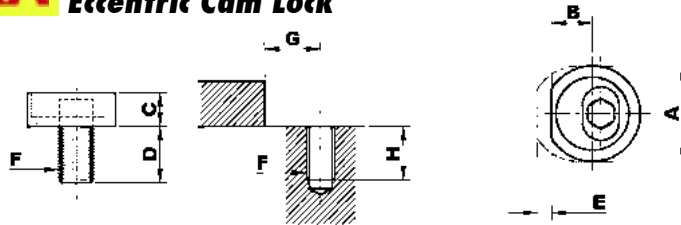
Material: Medium Carbon Steel/Steel Forging.
Surface finish: Black Oxide.



Product Number	Length x Width A x B	Dimensions (mm)					Weight each	Order Code IND-425	Price/1 RND
		C	D	E	F	G			
CC21-0216	125 x 56mm	33	84	18	65	M16	2.10kg	-1095M	917.00

INDEXA

CC24 - Eccentric Cam Lock

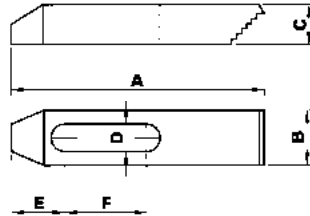


Material: Medium Carbon Steel.
Hardness: HRC 35.
Surface finish: Black Oxide.



Product Number	A	B	C	D	E	F	G	H	Weight each	Order Code	Price/1 RND
CC240210	26	11.8	8	14.3	4	M10	12.5	22	.03kg	-1110C	250.60
CC240312	30	13.5	9	19	5	M12	14.5	22	.06kg	-1110G	287.40
CC240416	38	16.0	12	23	6	M16	17.5	26	.12kg	-1110P	322.90

CC25 - Step Clamp



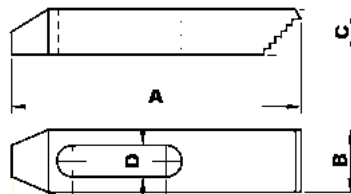
Material: Medium Carbon Steel.
Hardness: HRC 32 - 38.
Surface finish: Black Oxide.



Product Number	Length x Width A x B	C	D	E	F	To Suit Stud Size	Weight each	Order Code	Price/1 RND
CC251463	63 x 25mm	13	15	20	14	M14	0.12kg	-1130C	203.10
CC2514100	100 x 32mm	19	15	29	34	M14	0.38kg	-1130G	160.30
CC2514150	150 x 32mm	22	15	32	50	M14	0.68kg	-1130J	185.80
CC2516100	100 x 32mm	19	17	31	26	M16	0.42kg	-1135G	115.80
CC2516150	150 x 30mm	22	17	40	47	M16	0.72kg	-1135J	238.40

ATLAS WORKHOLDERS

Step Clamp



Material: Medium Carbon Steel.
Hardness: HRC 32 - 38.
Surface finish: Black Oxide.



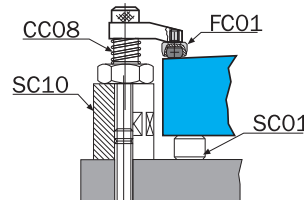
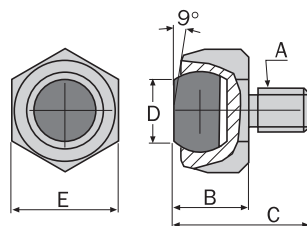
Product Number	To Suit Stud Size	Dimensions (mm) A x B C D	Order Code	Price/1 RND	Product Number	To Suit Stud Size	Dimensions (mm) A x B C D	Order Code	Price/1 RND
SC105222		55 x 25 12 13	-2020K	56.00	SC146428		64 x 28 12 15	-2220K	56.00
SC108825	M10 ^{3/8} " UNC	88 x 25 16 11	-2040K	109.90	SC1410035	M14	100 x 35 19 15	-2240K	109.90
SC1012828		128 x 28 19 11	-2060K	140.90	SC1415032		150 x 32 22 15	-2260K	140.90
SC126428		64 x 28 12 13	-2120K	56.00	SC166432		64 x 32 12 17	-2420K	64.40
SC1210032	M12 ^{1/2} " UNC	100 x 32 19 13	-2140K	109.90	SC1610038	M16 ^{5/8} " UNC	100 x 38 20 17	-2440K	126.40
SC1215032		150 x 32 22 13	-2160K	140.90	SC1615038		150 x 38 22 17	-2460K	161.90

INDEXA

FC01 - Plain Ball End

NEW

Precision swivel ball that can be used either as a contact bolt or rest pad. As contact pads these swivel ball units are ideal for evenly distributing clamping pressure on sloped or uneven surfaces.



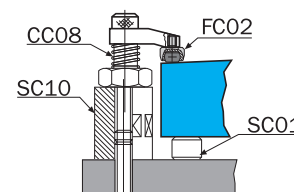
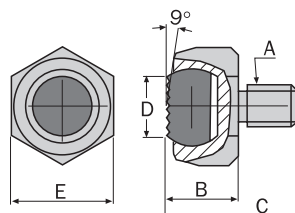
Material:
Body - Medium Carbon Steel.
Ball - Through Hardened Steel EN 31.
Hardness:
Bolt - HRC 35.
Ball - HRC 62.
Surface finish: Black Oxide.



Product Number	Thread A	Dimensions (mm) B C D E	Weight each	Order Code	Price/1 RND
FC010216	M16 x 2.00	26 42 14 27	0.14kg	-2010R	513.00

FC02 - Serrated Ball End

Precision swivel ball that can be used either as a contact bolt or rest pad. As contact pads these swivel ball units are ideal for evenly distributing clamping pressure on sloped or uneven surfaces.



Material:
Body - Medium Carbon Steel.
Ball - Through Hardened Steel EN 31.
Hardness:
Bolt - HRC 35.
Ball - HRC 62.
Surface finish: Black Oxide.



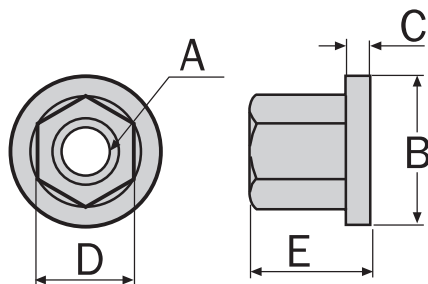
Product Number	Thread A	Dimensions (mm) B C D E	Weight each	Order Code	Price/1 RND
FC010112	M12 x 1.75	22 35 12 22	0.070kg	-2015J	423.80
FC010216	M16 x 2.00	26 42 14 27	0.14kg	-2015R	498.00

PRODUCTS ARE ONLY AVAILABLE VIA YOUR DISTRIBUTOR

INDEXA **FC04 - Flanged Nut**



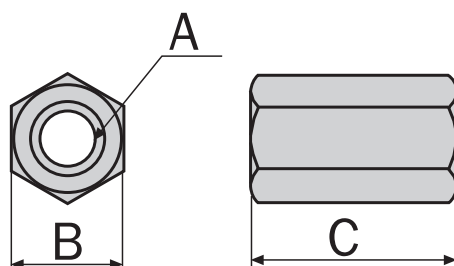
Material: Medium Carbon Steel.
Hardness: HRC 30 - 35.
Surface finish: Black Oxide.



Product Number	Thread A	Dimensions (mm)				Weight each	Order Code IND-425	Price/1 RND
		B	C	D	E			
FC040110	M10	22	3	17	13	0.020kg	-2025G	38.90
FC040212	M12	28	4	19	17	0.040kg	-2025K	41.70
FC040214	M14	28	4	22	17	0.040kg	-2025M	54.50
FC040316	M16	33	5	24	20	0.060kg	-2025P	54.50
FC040420	M20	40	6	30	25	0.110kg	-2025T	100.80

FC05 - Extension Nut

Extends the length of clamping studs.

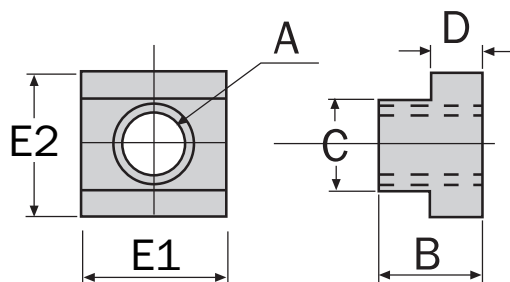


Material: Medium Carbon Steel.
Hardness: HRC 30 - 35.
Surface Finish: Black Oxide.

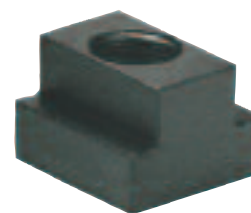


Product Number	Size A	Dimensions (mm)		Weight each	Order Code IND-425	Price/1 RND
		B	C			
FC050110	M10	17	30	0.030kg	-2030F	37.00
FC050212	M12	19	36	0.046kg	-2030K	41.70
FC050314	M14	22	42	0.065kg	-2030M	67.10
FC050316	M16	24	48	0.110kg	-2030N	81.90
FC050420	M20	30	60	0.220kg	-2030R	122.10

FC06 - T-Slot Nut (Milled)



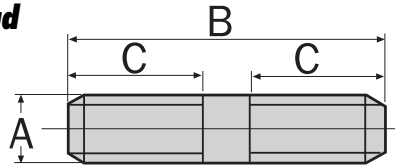
Material: Medium Carbon Steel.
Hardness: HRC 30 - 35.
Surface finish: Black Oxide.



Product Number	Size A	Dimensions (mm)					Weight each	Order Code IND-425	Price/1 RND
		B	C	D	E1	E2			
FC060110	M10	14.0	11.8	7.0	22	18.0	0.022kg	-2035G	34.20
FC060212	M12	16.0	13.8	8.0	28	22.0	0.048kg	-2035K	37.00
FC050314	M14	16.0	15.8	8.0	28	25.0	0.057kg	-2035M	54.50
FC060316	M16	20.0	17.7	10.5	30	28.5	0.085kg	-2035P	54.50
FC060420	M20	25.0	22.0	14.0	38	36.0	0.190kg	-2035T	83.40



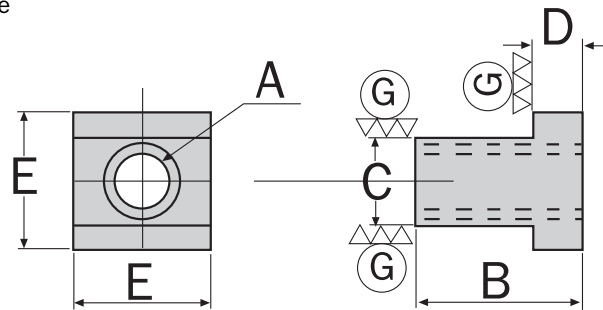
Material:
Medium Carbon Steel.
Hardness:
HRC 30 - 35.
Surface finish:
Black Oxide.



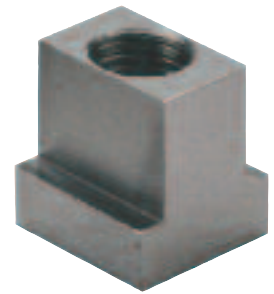
Product Number	Size A x B	Dimension C	Weight each	Order Code IND-425	Price/1 RND
FC070110	M10 x 50mm	22	30g	-2120S	15.20
FC070210	M10 x 75mm	30	42g	-2125S	18.50
FC070310	M10 x 100mm	38	55g	-2130S	18.50
FC070510	M10 x 150mm	50	90g	-2140S	26.90
FC070612	M12 x 50mm	22	40g	-2145S	26.90
FC070712	M12 x 75mm	30	60g	-2150S	24.70
FC070812	M12 x 100mm	38	80g	-2155S	38.60
FC070912	M12 x 125mm	38	100g	-2160S	41.60
FC071012	M12 x 150mm	50	125g	-2165S	45.30
FC071112	M12 x 200mm	65	160g	-2170S	53.80
FC071212	M12 x 300mm	80	240g	-2175S	57.60
FC071214	M14 x 75mm	30	65g	-2176S	59.90
FC071214	M14 x 100mm	38	85g	-2177A	42.90
FC071214	M14 x 125mm	38	105g	-2177G	48.40
FC071214	M14 x 150mm	50	130g	-2177K	58.40
FC071214	M14 x 200mm	65	165g	-2177T	71.70
FC071316	M16 x 75mm	20	120g	-2180S	74.80
FC071416	M16 x 100mm	38	145g	-2185S	79.30
FC071516	M16 x 125mm	38	180g	-2190S	51.70
FC071616	M16 x 150mm	50	230g	-2195S	54.20
FC071616	M16 x 175mm	50	240g	-2197S	64.20
FC071716	M16 x 200mm	65	290g	-2200S	67.70
FC071816	M16 x 250mm	65	350g	-2205S	84.10
FC071916	M16 x 300mm	80	450g	-2210S	113.00
FC072016	M16 x 400mm	100	580g	-2215S	120.90
FC072116	M16 x 500mm	100	700g	-2220S	130.70
FC072220	M20 x 75mm	30	170g	-2225S	137.10
FC072320	M20 x 100mm	38	230g	-2230S	143.90
FC072420	M20 x 125mm	38	280g	-2235S	149.30
FC072520	M20 x 150mm	50	360g	-2240S	156.30
FC072620	M20 x 200mm	65	450g	-2245S	162.50
FC072720	M20 x 250mm	65	550g	-2250S	172.20
FC072820	M20 x 300mm	80	700g	-2255S	178.40
FC072920	M20 x 400mm	100	880g	-2260S	184.60
FC073020	M20 x 500mm	100	1100g	-2265S	225.90

FC08 - T-Slot Nut (Ground)

Ground surfaces provide accurate positioning inside of T-slot.



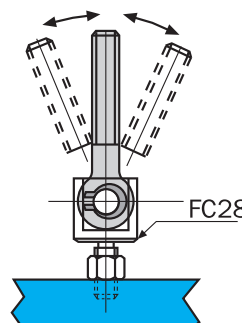
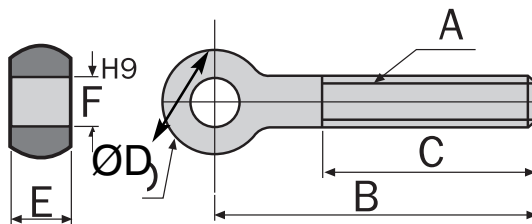
Material: Medium Carbon Steel.
Hardness: HRC 30 - 35.



Product Number	Thread A	Dimensions (mm)					Weight each	Order Code IND-425	Price/1 RND
		B	C (h6)	D	E				
FC008112	M12	22	14	8	22		45g	-2505J	282.70
FC008216	M16	30	18	10	28		80g	-2505R	302.00

FC09 - Swing Bolt

Reamed hole for smooth swivelling.



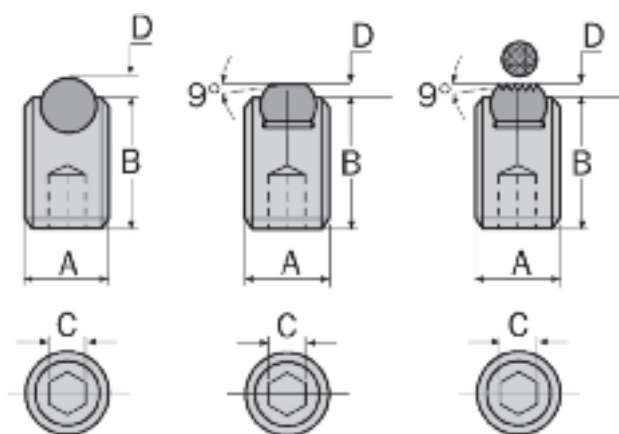
Material: Medium Carbon Steel.
Hardness: HRC 30 - 35.



Product Number	Size A x B	Dimensions (mm)					Weight each	Order Code IND-425	Price/1 RND
		C	D	E	F				
FC040110	M10 x 75mm	40	20	12	10		60g	-2510E	285.20
FC090210	M10 x 100mm	40	20	12	10		80g	-2510H	371.40
FC090412	M12 x 100mm	60	25	14	12		120g	-2510N	423.20
FC090516	M16 x 125mm	60	32	17	16		250g	-2510P	495.70
FC090616	M16 x 150mm	75	32	17	16		300g	-2510R	498.00

GROUP 425 CLAMPING FIXTURES

INDEXA FC16 - Swivel Clamping Screw



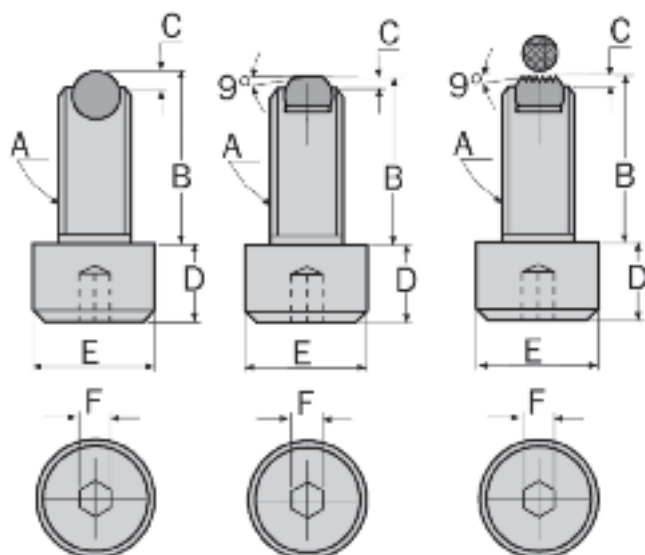
Material:
Body - Medium Carbon Steel **EN198**.
Point - Through Hardened Steel **EN 31**.
Hardness:
Body - HRC 32 - 38.
Point - HRC 62.
Surface finish:
Point - Hardened and Ground.



Ball Point Dog Point Serrated Point

Ball Point						Dog Point				Serrated Point				
Thread x Length	mm	Weight	Product	mm	Order Code	Price/1	Product	mm	Order Code	Price/1	Product	mm	Order Code	Price/1
A x B	C	each	Number	D	IND-425	RND	Number	D	IND-425	RND	Number	D	IND-425	RND
M6 x 15mm	3	2.4g	FC160206	1.4	-2610H	49.00	-	-	-	-	-	-	-	-
M6 x 25mm	3	3.8g	FC160306	1.4	-2610N	51.90	-	-	-	-	-	-	-	-
M8 x 12mm	4	3.2g	FC160408	1.9	-2615D	51.90	FC162208	0.6	-2645D	106.50	-	-	-	-
M8 x 20mm	4	5.8g	FC160508	1.9	-2615H	51.90	FC162308	0.6	-2645H	82.60	-	-	-	-
M8 x 30mm	4	9.0g	FC160608	1.9	-2615N	53.40	-	-	-	-	-	-	-	-
M10 x 15mm	5	6.7g	FC160710	2.4	-2620D	51.90	-	-	-	-	-	-	-	-
M10 x 25mm	5	11.2g	FC160810	2.4	-2620H	57.40	FC162610	0.7	-2650H	101.80	-	-	-	-
M10 x 35mm	5	16.2g	-	-	-	-	FC162710	0.7	-2650N	149.80	-	-	-	-
M12 x 30mm	6	20.0g	-	-	-	-	FC162912	0.9	-2655H	190.50	-	-	-	-
M12 x 50mm	6	40.0g	FC161312	2.9	-2625T	91.10	-	-	-	-	-	-	-	-
M16 x 55mm	8	55.0g	-	-	-	-	FC163516	1.0	-2660R	221.70	-	-	-	-
M16 x 65mm	8	65.0g	-	-	-	-	-	-	-	-	FC165416	1.0	-2690T	196.20

FC17 - Swivel Shoulder Clamping Screw



Material:
Body - Medium Carbon Steel **EN198**.
Point - Through Hardened Steel **EN 31**.
Hardness:
Body - HRC 32 - 38.
Point - HRC 62.
Surface finish:
Point - Hardened and Ground.

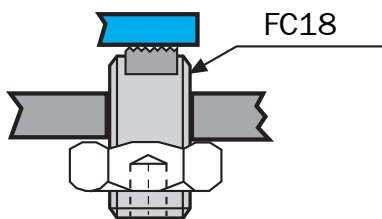
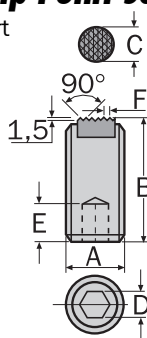


Ball Point Dog Point Serrated Point

Ball Point							Dog Point				Serrated Point				
Thread x L	Dimensions		Weight	Product	mm	Order Code	Price/1	Product	mm	Order Code	Price/1	Product	mm	Order Code	Price/1
A x B (mm)	D	E	F	Number	C	IND-425	RND	Number	C	IND-425	RND	Number	C	IND-425	RND
M8 x 40	8	13	6	24g	1.9	-2725N	53.40	-	-	-	-	-	-	-	-
M12 x 65	12	18	10	70g	2.9	-2735N	103.30	-	-	-	-	-	-	-	-
M16 x 40	16	24	14	90g	4.0	-2740D	112.00	-	-	-	-	-	-	-	-

INDEXA**FC18 -
Grip Point Screw****EXTENDED
RANGE**

Multipurpose work support and clamping unit, ideal for rough parts.



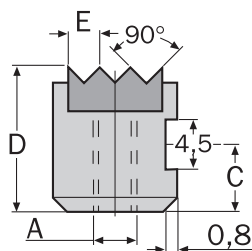
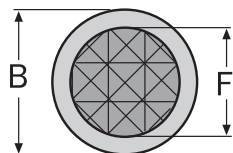
Material: Medium Carbon Steel EN19B.
Hardness: HRC 32 - 38.
Tooth plate HRC 60.
Serrated surface: Induction Hardened.
Surface finish: Black Oxide.



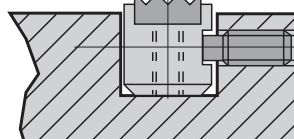
Product Number	Thread x Length A x B	Dimensions (mm)				Weight each	Order Code IND-425	Price/1 RND
FC180110	M10 x 25mm	C	D	E	F	15g	-2825D	81.40
FC180616	M16 x 50mm	11.5	8	6	3.0	78g	-2825R	92.60

FC21 - Round Grip Pad

Multipurpose work support and clamping unit, ideal for rough parts.

**EXTENDED
RANGE**

FC21



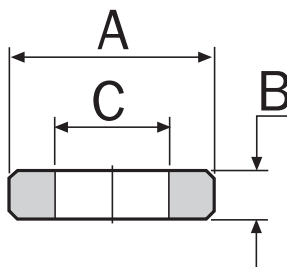
Material: Hardened Steel EN16M.
Hardness: HRC 60.
Surface finish: Black Oxide.



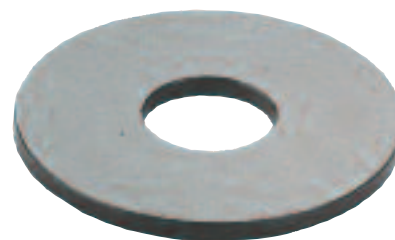
Product Number	Thread x Dia A x B	Dimensions (mm)				Weight each	Order Code IND-425	Price/1 RND
FC210110	M5 x 10mm	C	D	E	F	5g	-2840D	111.30
FC210212	M6 x 12mm	4.0	12	3.0	9.6	8g	-2840G	105.60
FC210525	M6 x 25mm	4.0	12	3.0	19.5	40g	-2840P	117.00

FC22 - Spacer

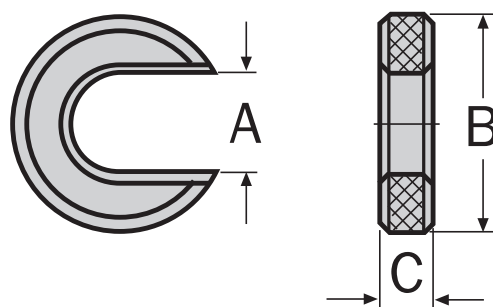
For use with jig components for increasing height or extending length.



Material: Medium Carbon Steel.
Hardness: HRC 40.



Product Number	Dimensions (mm)			Weight each	Order Code IND-425	Price/1 RND
FC220616	A	B	C	70g	-2845P	152.00
FC220716	50	10	17	350g	-2845T	161.50

FC23 - 'C' Washer

Material: Medium Carbon Steel.
Hardness: HRC 40.
Surface finish: Black Oxide.



Product Number	Dimensions (mm)			Weight each	Order Code IND-425	Price/1 RND
CC010212	A	B	C	150g	-2850G	155.00
	13	55	10			

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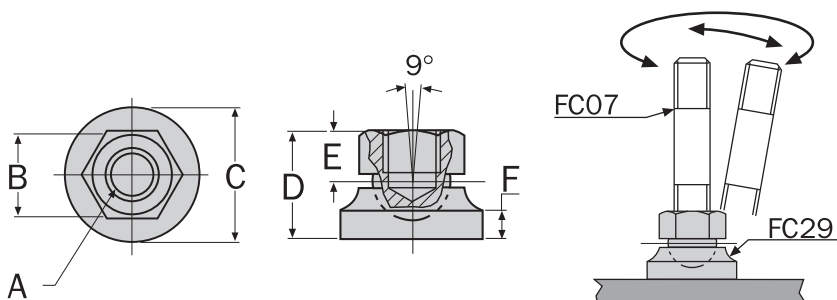
GROUP 425 CLAMPING FIXTURES

INDEXA FC29 - Swivel Foot

Used for supporting uneven surfaces.

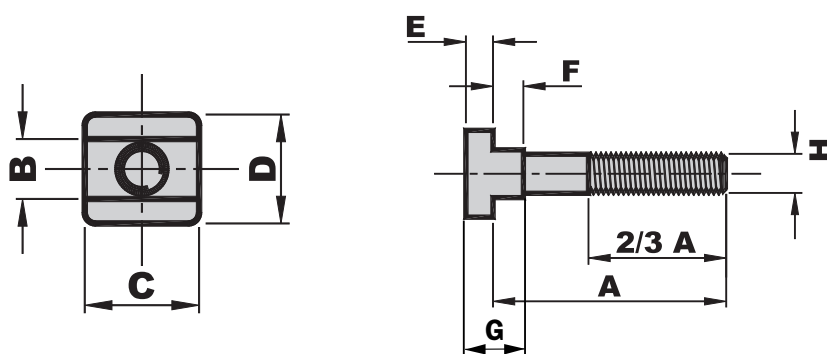


Material: Medium Carbon Steel.
Hardness: HRC 32 - 38.
Surface finish: Black Oxide.



Product Number	Size A	Dimensions (mm)						Weight each	Order Code	Price/1 RND
		B	C	D	E	F				
FC290112	M12	19	35	24	11	7	80g	-2870D	-2870D	273.00
FC290216	M16	24	40	29	13	8	150g	-2870G	-2870G	180.40

FC40 - T-Slot Bolt



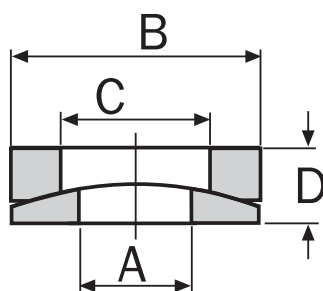
Material: Medium Carbon Steel.
Hardness: HRC 32 - 38.
Surface finish: Black Oxide.



Product Number	Dimensions (mm)								Weight each	Order Code	Price/1 RND
	A	B	C	D	E	F	G	H			
FC40-1250	50								54g	-2900D	67.50
FC40-1275	75								57g	-2900F	49.40
FC40-12100	100								110g	-2900H	71.80
FC40-12125	125	12	26	22	7	6	13	M12	125g	-2900K	57.70
FC40-12150	150								140g	-2900M	65.40
FC40-12175	175								170g	-2900P	69.20
FC40-12200	200								185g	-2900R	75.10
FC40-1650	50								130g	-2910D	56.20
FC40-1675	75								160g	-2910F	58.20
FC40-16100	100								200g	-2910H	99.20
FC40-16125	125	16	32	27	8	8	16	M16	230g	-2910K	73.40
FC40-16150	150								270g	-2910M	69.40
FC40-16175	175								305g	-2910P	95.10
FC40-16200	200								325g	-2910R	101.40
FC40-2075	75								290g	-2920F	82.60
FC40-20100	100								350g	-2920H	85.70
FC40-20125	125	20	40	30	11	11	22	M20	400g	-2920K	88.20
FC40-20150	150								455g	-2920M	102.30
FC40-20175	175								505g	-2920P	102.30
FC40-20200	200								560g	-2920R	117.80
FC40-24150	150	24	50	44	16	15	31	M24	775g	-2930M	344.90
FC40-24200	200								925g	-2930R	391.00

FC25 - Spherical Washer Set

2 piece washer set that compensates whenever a stud and clamping surface are not exactly perpendicular.



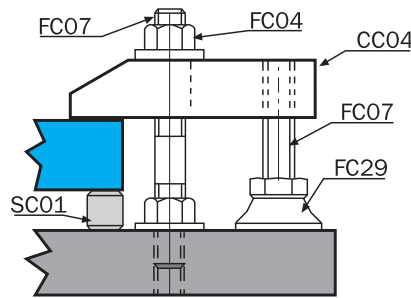
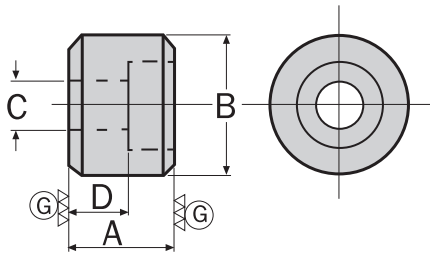
Material: Medium Carbon Steel.
Hardness: HRC 38.
Surface finish: Black Oxide.



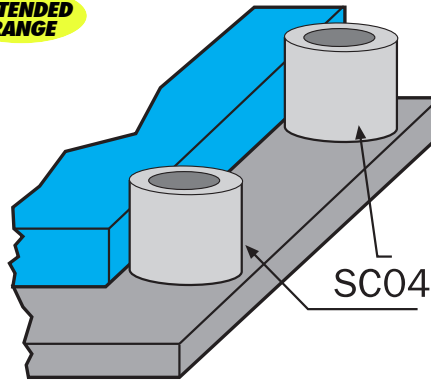
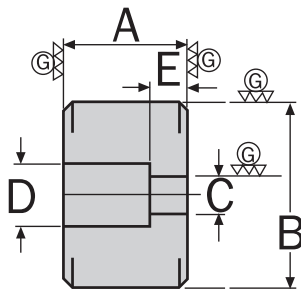
Product Number	Dimensions (mm)				Weight each	Order Code	Price/1 RND
	A	B	C	D			
FC250112	13	26	15	7.5	20g	-2860D	117.00
FC250216	17	32	19	9.0	30g	-2860G	149.00
FC250320	21	40	23	12.0	50g	-2860L	204.40

INDEXA**SC01 -
Support Spacer****CLAMPING FIXTURES**

Material: Medium Carbon Steel.
Hardness: HRC 40.
Surface finish: Black Oxide.

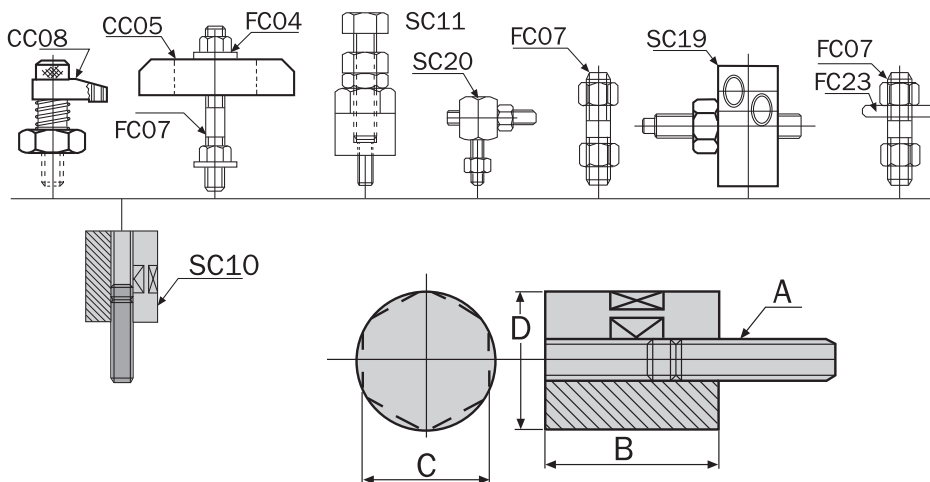


Product Number	Height x Diameter A (±0.01) x B	Dimensions (mm)		Weight each	Order Code IND-425	Price/1 RND
		C	D			
SC010112	30 x 40mm	M12	17	240g	-3005D	227.80

SC04 - Location Collar**EXTENDED RANGE**

Material: Medium Carbon Steel.
Hardness: HRC 40.
Surface finish: Black Oxide.

Product Number	Height x Diameter A (±0.01) x B (±0.01)	Dimensions (mm)			Weight each	Order Code IND-425	Price/1 RND
		C	D	E			
SC040112	30 x 40mm	Ø 12	Ø 20	12	240g	-3020D	388.80
SC040212	40 x 40mm	Ø 12	Ø 20	12	320g	-3020F	401.30

SC10 - Extension Pillar

Material: Medium Carbon Steel.
Hardness: HRC 40.
Surface finish: Black Oxide.



Product Number	Height x Diameter A x B	Dimensions (mm)		Weight each	Order Code IND-425	Price/1 RND
		C	D			
SC100265	M12 x 65	36	40	540g	-3050F	476.10
SC100450	M16 x 50	46	50	820g	-3050J	507.80

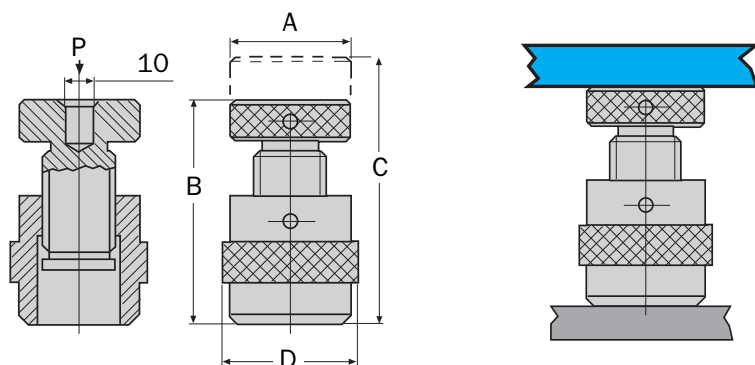
PRODUCTS ARE ONLY AVAILABLE VIA YOUR DISTRIBUTOR

GROUP 425 CLAMPING FIXTURES

INDEXA SC11A - Screw Jack

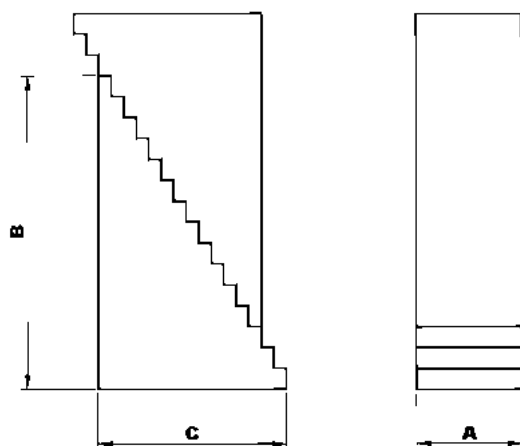


Material: Medium Carbon Steel.
Hardness: HRC 40.
Surface finish: Black Oxide.



Product Number	Diameter x Height A x B (Min)	Dimensions (mm)		Holding Load (kN)	Weight each	Order Code	Price/1 RND
		C	D			IND-425	
SC20032050	32 x 40mm	60	32	72	230g	-3057D	409.50
SC20070140	65 x 100mm	150	70	135	274g	-3057P	1627.00

SU25 - Step Block

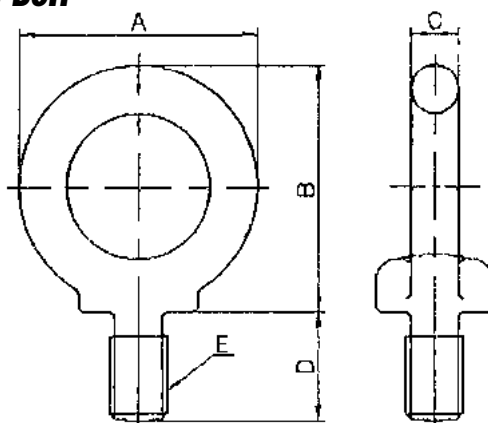


Material: Medium Carbon Steel.
Hardness: HRC 32 - 36.
Surface finish: Black Oxide.



Product Number	Supporting Height	Dimensions (mm)			Weight each	Order Code	Price/1 RND
		A	B	C		IND-425	
SU252530	19 - 49	25	29	17	0.05kg	-3125E	133.30
SU252545	28 - 68		45	27	0.12kg	-3125H	173.70
SU252597	58 - 150		97.5	57	0.50kg	-3125L	383.60
SU253259	38 - 90	32	59	35	0.24kg	-3132J	231.40
SU253297	58 - 150		97.5	57	0.62kg	-3132L	464.70
SU2532139	82 - 210		139	81	1.32kg	-3132P	697.00

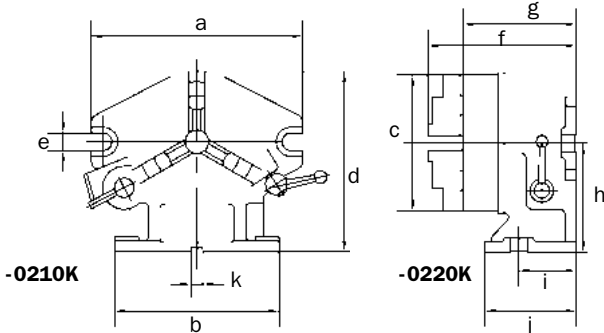
SEB - Shoulder Eye Bolt



Product Number	Thread (E)	Dimensions (mm)				Load	Weight each	Order Code	Price/1 RND
		A	B	C	D			IND-425	
SEB1017	M10	41	41.5	8	18	150kg	0.063kg	-3210S	29.50
SEB1220	M12	50	51	10	22	220kg	0.125kg	-3212S	45.40
SEB1525	M16	60	60	12.5	27	450kg	0.216kg	-3216S	69.20
SEB2030	M20	72	71	16	30	630kg	0.4kg	-3220S	133.50

INDEXA Horizontal & Vertical Index Unit Chucks

Ideal for indexing items to be machined in pre-set or manually set incremental angles. Indexing accuracy 25 seconds. Angular indexing through the graduation ring from 0 to 360 degrees in 1 degree increments. Basic indexing by means of a catch device permitting divisions of 2, 3, 4, 6, 8, 12 and 24 without disassembly. Fitted with standard three jaw self-centring scroll chuck with two sets of jaws, for inside and outside gripping.



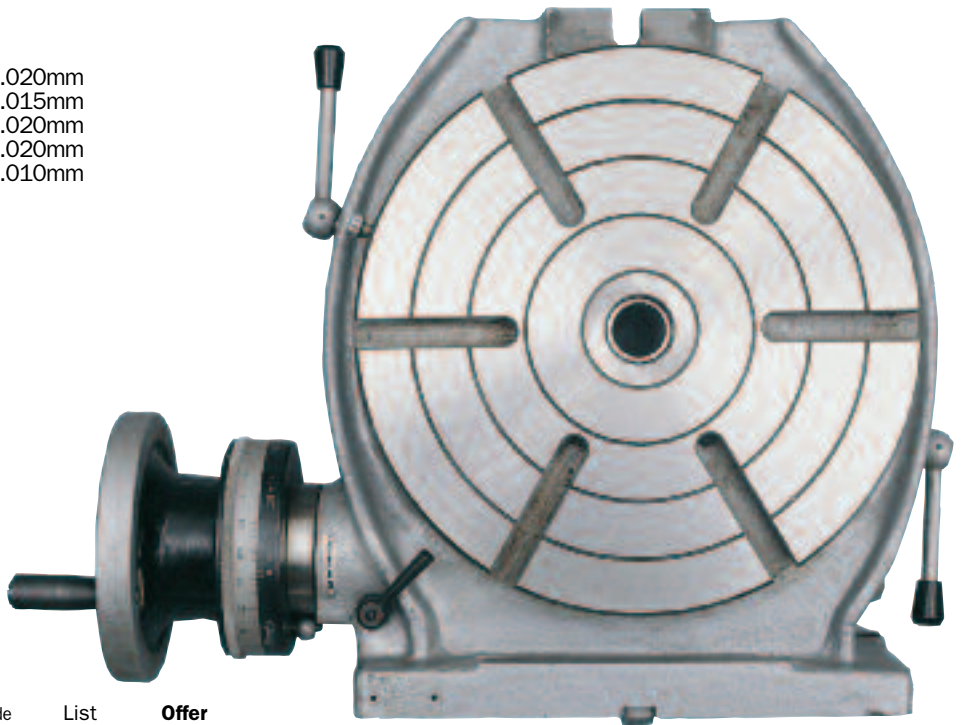
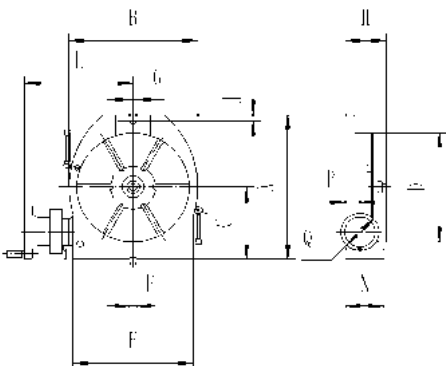
Chuck Diameter	Dimensions (mm)											Weight each	Order Code	Price/1 RND
	A	B	C	D	E	F	G	H	I	J	K		IND-437	
167mm	260	220	167	220.00	18	197.5	155.5	130.00	70	130	16	17.8kg	-0210K	7588.70
220mm	310	255	210	255.25	18	214.0	171.5	149.25	80	150	16	94.0kg	-0220K	9010.80

Type SOPP Horizontal & Vertical Rotary Tables

With a disengageable worm gear which allows rapid indexing. One rotation of handle equals four degrees on collar. The table is made of high grade cast iron. Works as an indexing unit in the vertical position as well as a conventional rotary table for circular cutting, boring or angle setting, etc. Optional dividing plates are available separately.

Accuracy:

Parallelism of clamping surface to base:	0.020mm
Flatness of clamping surface:	0.015mm
True running cylindrical centre bore:	0.020mm
True running of tapered centre bore:	0.020mm
Squareness of clamping surface to centre slot:	0.010mm



Optional Extras

Description	Order Code	List Price/1	Offer Price/1
Dividing Plate for INDEXA Rotary Tables	-1000K	2013.60	2013.60

Rotary Tables

Diameter D	Max. Capacity C	Centre Hole M	Dimensions (mm)											No. of T-slots	Weight each	Order Code	Price/1 RND
			A	B	E	F	G	H	J	L	N	P	Q			IND-437	
200mm	150	3 MT	285	236	14	208	14	100	15	211	99	48	125	4	42kg	-0500K	9617.30
250mm	170	3 MT	328	286	14	253	14	110	16	241	106	48	125	6	57kg	-0510K	11564.30
320mm	210	4 MT	410	360	18	320	18	120	16	273	118	48	140	6	92kg	-0520K	17774.00

PRODUCTS ARE ONLY AVAILABLE VIA YOUR DISTRIBUTOR

GROUP 440 CHUCKS

KENNEDY Clamping Keyless Drill Chuck

Allows quick tool change, while maintaining high precision and high concentricity. Fully hardened jaws, sleeve and retaining ring for durability and wear resistance. Self-tightening.

EXTENDED RANGE



Capacity (mm)	Mount	Maximum Diameter	Weight each	Order Code KEN-440	Price/1 RND
4.0	1JT	28.0	150g	-3010K	3442.00
8.0	1JT	38.0	440g	-3110K	2851.50
10.0	2JT	43.0	720g	-3220K	3001.70
10.0	33JT	43.0	740g	-3250K	1199.10
13.0	2JT	50.0	1000g	-3320K	3238.60
13.0	6JT	50.0	1000g	-3340K	3238.60
16.0	6JT	55.0	1200g	-3440K	3759.90

Clamping Industrial Keyless Drill Chuck

Fully hardened and ground working parts. The jaws are centre ground for alignment concentricity. Robustly designed for durability and wear resistance in the most arduous of industrial applications on stationary drilling machines. Unsuitable for reversing drills.



Capacity (mm)	Mount	Maximum Diameter	Weight each	Order Code KEN-440	Price/1 RND
10.0	DIN-B12	42.5	670g	-5220K	1487.20
13.0	6JT	46.0	920g	-4240K	2105.20
13.0	1/2" - 20F	46.0	660g	-4280K	1273.90
13.0	DIN-B12	46.0	900g	-5260K	1601.80
13.0	DIN-B16	46.0	940g	-5280K	1792.40
16.0	6JT	51.0	1100g	-4340K	2460.70
16.0	DIN-B16	51.0	1090g	-5300K	2105.20

KOBE Drill Chuck

Fully hardened and ground for durability and wear resistance. Suitable for use with portable power tools.



Capacity (mm)	Mount	Order Code KBE-440	Price/1 RND
1.0 - 10.0	3/8" - 24F	-2010A	172.10
1.5 - 13.0	3/8" - 24F	-2020B	256.00
1.5 - 13.0	1/2" - 20F	-2030C	150.60

Drill Chuck

For use with portable power tools. Female mount. Supplied with key. UNF keyed chuck, hardened and ground for durability and wear resistance. For use with reversible drills. Excellent value for money.



Capacity (mm)	Mount	Weight each	Order Code KBE-440	Price/1 RND
1.0 - 10.0	3/8" - 24F	135g	-1010A	82.60
1.5 - 13.0	3/8" - 24F	270g	-1020B	84.50
1.5 - 13.0	1/2" - 20F	270g	-1030C	84.50

KENNEDY Standard Duty Industrial Keyed Drill Chuck

Fully hardened and ground for durability and wear resistance. Suitable for use with portable power tools. Supplied with key.

Manufactured to DIN 6349.

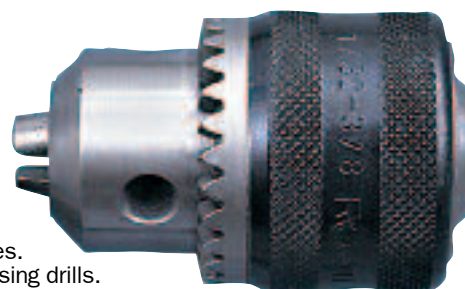


*Primarily for use with hand operated machines

Capacity (mm)	Mounting	Maximum Diameter	Weight each	Order Code KEN-440	Price/1 RND
0.8 - 10.0	3/8" x 24F	34.0	240g	-2360K	340.50
0.8 - 10.0*	1/2" x 20F	34.0	220g	-2380K	357.10
1.5 - 13.0	3/8" x 24F	42.7	390g	-2460K	443.10
1.5 - 13.0	3/8" x 24M	42.7	430g	-2470K	443.10
1.5 - 13.0	1/2" x 20F	42.7	390g	-2480K	443.10

Heavy Duty Industrial Keyed Drill Chuck

Fully hardened and ground working parts. The jaws are centre ground for alignment and concentricity. Key holes and teeth are fully hardened for durability and wear resistance. To correctly tighten your keyed drill chuck use all key holes in turn to guarantee even pressure and maximum grip. Suitable for use on machine tools and all types of industrial power tools. Supplied with key. Manufactured to DIN 6349.



* Primarily for use with hand operated machines.
† Not suitable for reversing drills.

Capacity (mm)	Mounting	Maximum Diameter	Weight each	Order Code KEN-440	Price/1 RND
0.5 - 4	0JT	26.0	110g	-1060K	983.90
0.5 - 6.5	1JT	30.0	140g	-1110K	602.70
0.5 - 6.5	3/8"-24F †	30.0	140g	-1160K	617.70
1.0 - 10.0	2JT	42.7	430g	-1320K	678.70
1.0 - 10.0*	3/8"-24F †	38.0	270g	-1360K	678.70
0.8 - 10.0	DIN-B12	42.7	400g	-5020K	683.00
1.0 - 13.0	6JT	52.0	730g	-1440K	935.20
1.0 - 13.0	33JT	52.0	740g	-1450K	945.80
1.5 - 13.0	DIN-B12	52.7	750g	-5060K	724.60
1.0 - 13.0	DIN-B16	52.7	780g	-5080K	892.50
1.0 - 16.0	3JT	56.5	970g	-1530K	1124.10
1.5 - 13.0	1/2"-20F	42.8	270g	-4640K	454.40
1.5 - 13.0	3/8"-24F †	42.5	420g	-1460K	839.00
1.5 - 13.0	1/2"-20F †	46.0	530g	-1480K	839.00
3.0 - 16.0	DIN-B16	56.5	890g	-5100K	1029.60
3.0 - 16.0*	1/2"-20F †	50.0	610g	-1580K	938.40
5.0 - 20.0	3JT	65.0	1300g	-1630K	1614.90
5.0 - 20.0	DIN-B22	65.0	1335g	-5120K	1754.30

Keyless Drill Chuck

Designed for use on cordless screwdrivers, cordless and corded drills. Unique gripping mechanism engages automatically when tightened. Fully hardened and ground jaws protect against work surface abrasion. Through drilled for use on reversible drills.



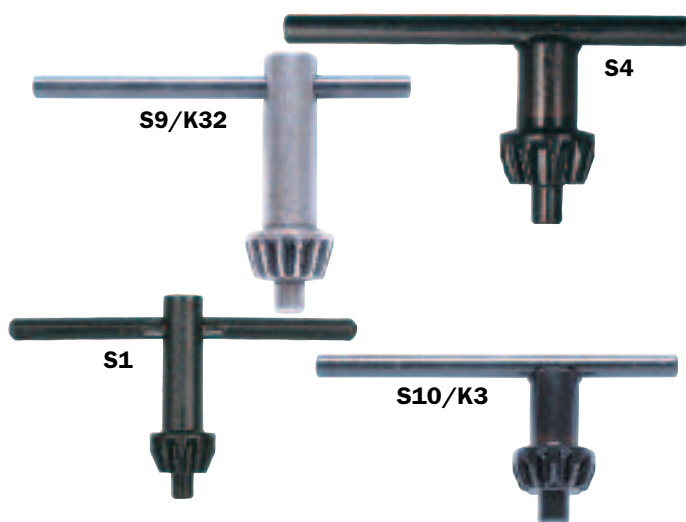
Capacity (mm)	Mount	Order Code KEN-440	Price/1 RND
1.5 - 13	1/2" - 20F	-4740K	602.70
1.5 - 13	3/8" - 24F	-4760K	602.70

KOBE **Chuck Keys**

Model Number	To Suit Drill Chuck	Weight each	Order Code KBE-441	Price/1 RND
10043KG	10mm	40g	-2010A	21.00
10038KK	13mm	50g	-2020B	21.00

KENNEDY **Chuck Keys**

Suitable for use with all industrial keyed chucks (including Rohm* and Jacobs).



Ref No.	For Use With Chuck Number	Jacobs Equivalent	Weight each	Order Code KEN-441	Price/1 RND
S1	440-106/111/116 & 226 *4, 6, 6M & 8M	-	20g	-0020K	54.40
S2	440-132/136/138/139/146/148/236/237/238/246/247/248 & all Supercraft Chucks *10S, 10, 10M, 13S & 13M	K8/10	50g	-0040K	47.60
S3	440-142/144/145/153 & 158	-	70g	-0060K	67.10
S4	440-163 *20 & 26	-	160g	-0080K	99.70
S7	1 Series	K1	20g	-0140K	37.70
S8	31 Series & 8½N	K30S	50g	-0160K	45.40
S9	32 & 33 Series, 11N	K32	60g	-0180K	52.40
S13	36 Series, 16, 18N	K4	150g	-0260K	65.60
S14	¼", ⅝", ⅜" Multicraft	KG	20g	-0280K	67.90
S18	7 Series	K7	30g	-0360K	92.40
S10	3 & 6 Series, 14N	K3	90g	-0400K	138.70
K2	2 Series	K2	40g	-1020K	50.30

Industrial Drill Chuck Arbors

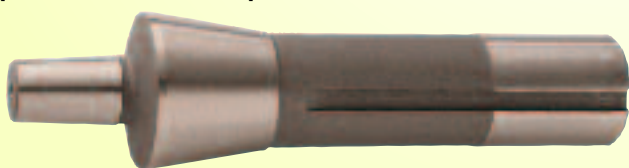
Precision machined, fully hardened and ground to give maximum surface contact.

Morse Taper Drive to Jacobs Taper



Description	Overall Length	Weight each	Order Code KEN-442	Price/1 RND
No.1 MT x 1JT	90mm	70g	-9110K	96.20
No.1 MT x 2JT	95mm	80g	-9120K	55.50
No.1 MT x 6JT	96mm	100g	-9160K	55.50
No.1 MT x 33JT	95mm	90g	-9190K	78.30
No.2 MT x 1JT	100mm	150g	-9210K	59.90
No.2 MT x 2JT	105mm	160g	-9220K	59.90
No.2 MT x 3JT	115mm	220g	-9230K	59.90
No.2 MT x 4JT	125mm	370g	-9240K	59.90
No.2 MT x 6JT	110mm	180g	-9260K	59.90
No.2 MT x 33JT	110mm	180g	-9290K	59.90
No.3 MT x 1JT	120mm	310g	-9310K	72.60
No.3 MT x 2JT	125mm	330g	-9320K	72.60
No.3 MT x 3JT	135mm	380g	-9330K	72.60
No.3 MT x 4JT	145mm	520g	-9340K	112.00
No.3 MT x 5JT	150mm	680g	-9350K	168.10
No.3 MT x 6JT	130mm	340g	-9360K	72.60
No.3 MT x 33JT	125mm	340g	-9390K	99.00
No.4 MT x 2JT	135mm	700g	-9420K	99.10
No.4 MT x 3JT	160mm	730g	-9430K	99.00
No.4 MT x 4JT	170mm	860g	-9440K	81.80
No.4 MT x 5JT	175mm	1000g	-9450K	120.40
No.4 MT x 6JT	155mm	690g	-9460K	206.10
No.4 MT x 33JT	155mm	680g	-9490K	206.10
No.5 MT x 3JT	190mm	1700g	-9530K	392.80
No.5 MT x 5JT	210mm	1900g	-9550K	264.40

Bridgeport Drive to Jacobs Taper



Description	Overall Length	Weight each	Order Code KEN-442	Price/1 RND
R8 x 1JT	130mm	420g	-9610K	553.40
R8 x 2JT	135mm	440g	-9620K	553.40
R8 x 3JT	145mm	510g	-9630K	553.40
R8 x 6JT	135mm	450g	-9660K	553.40
R8 x 33JT	135mm	460g	-9690K	553.40

Morse Taper Drive to Threaded



Description	Overall Length	Weight each	Order Code KEN-442	Price/1 RND
No.1 MT ½ x 20	92mm	100g	-1120K	164.20
No.1 MT ⅜ x 24	95mm	80g	-1380K	164.20
No.2 MT ½ x 20	105mm	170g	-2120K	189.70
No.2 MT ⅜ x 24	105mm	170g	-2380K	189.70
No.2 MT ⅝ x 16	105mm	180g	-2580K	189.70
No.3 MT ½ x 20	125mm	360g	-3120K	213.20
No.3 MT ⅝ x 16	125mm	370g	-3580K	213.20

KD Type - Morse Taper Shank to Din Taper Arbors
Fully hardened and ground Morse Taper to DIN 228.
Chuck taper to DIN 238.



Morse Taper	Chuck Taper	Overall Length	Order Code KEN-442	Price/1 RND
No.2 MT	B12	106.5mm	-5220K	35.60
No.2 MT	B16	111.5mm	-5260K	35.60
No.3 MT	B12	125.0mm	-5320K	62.50
No.3 MT	B16	134.0mm	-5360K	57.70
No.4 MT	B16	159.0mm	-5420K	98.80
No.4 MT	B22	176.0mm	-5460K	103.90

SDS Adaptor

Complete with retaining screw for reserve action.
Suitable for use in rotary mode only.



Description	Overall Length	Weight each	Order Code KEN-442	Price/1 RND
SDS ½" x 20	75mm	40g	-9000K	199.40



Selection - Clamp Type

Vertical

For general application in automotive and other heavy industries where trouble free life and robust construction are required. Force applied downward, 90° to bar.

Horizontal

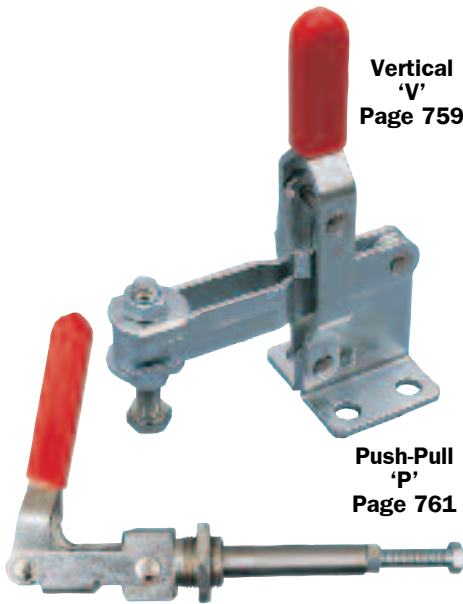
For general application in areas where a lower profile and unobstructiveness are required. Force applied downward, 90° to bar.

Push-Pull

Clamps lock in extended and retracted positions. Force applied in line with spindle (straight line action).

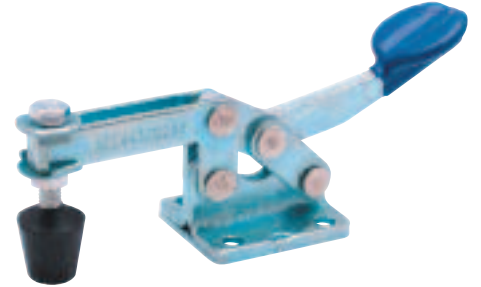
Latch

Suitable for applications such as sealing chamber doors, lids of mould closures. Latch bolts are threaded to allow easy adjustment.



Vertical 'V'
Page 759

Push-Pull 'P'
Page 761

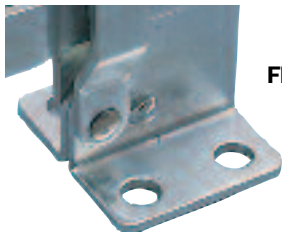
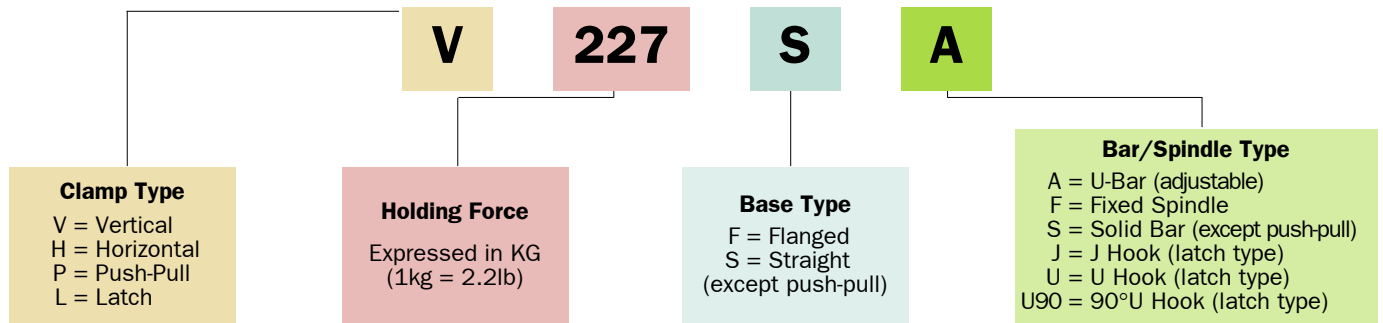


Horizontal 'H'
Page 763



Latch 'L'
Page 760

Selection by Product Number



Flanged 'F'

Selection - Base Type

Flanged

Suitable for bolting or welding the clamp on to a flat surface.

Straight

Suitable for mounting on to an outside face or edge of workpiece.



Straight 'S'

Selection - Bar/Spindle Type

U-Bar

Clamping spindle can be adjusted along length of bar.

Fixed Spindle

Clamping spindle is in a fixed position on the arm.

Solid Bar

Clamping spindle and retainer are supplied loose to allow the arm to be cut to length and welded in desired position.

Threaded Spindle

Used for push-pull type of clamp.

U-Hook

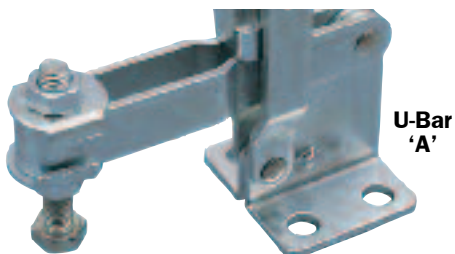
Threaded for easy adjustment.

J-Hook

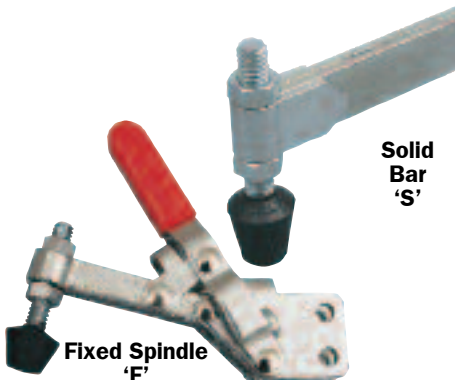
Locks directly regardless of angle of hook.

90° U Hook

Locks at 90° to clamp.



U-Bar 'A'



Solid Bar 'S'

Fixed Spindle 'F'



Threaded Spindle 'handle position'



U-Hook 'U'



90° U-Hook 'U90'



J-Hook 'J'

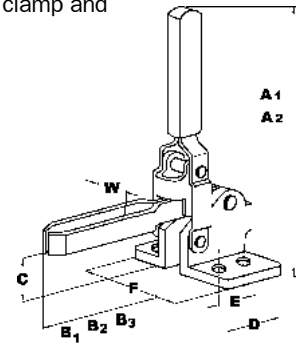
INDEXA Vertical Industrial Toggle Clamp

Designed to improve performance in fabrication and engineering clamping applications. The rapid clamping/unclamping made possible by the use of toggle clamps can greatly reduce machine/operator 'down-time' during all stages of production.

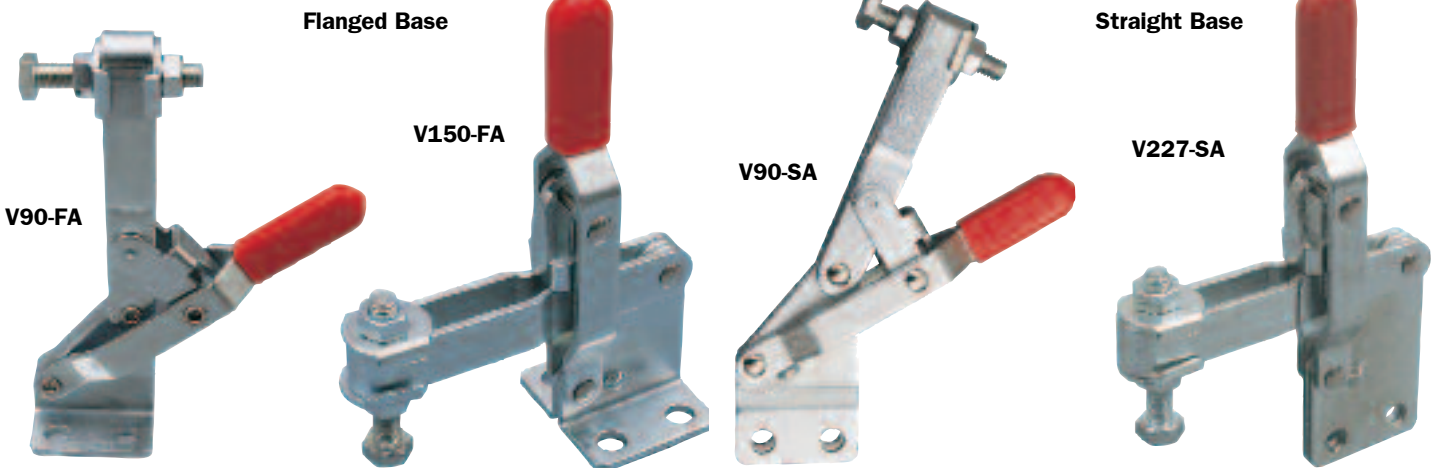
Clamping Capacity - the forces stated are the maximum loads that can be applied without causing permanent deformation. Due to leverage ratios, the holding capacity will be greatest at the point on the bar nearest to the handle of the clamp and forces stated have been achieved at this point.

Vertical Clamp Dimensions (mm)

Holding Capacity	A1 Flanged Base	A2 Straight Base	B1 Adj. Bar	B2 Fixed Bar	B3 Solid Bar	C Flanged Base	D	E	F Flanged Base	W
50kg	75.0	83.8	24.5	—	—	19.0	25.4	15.9	33.3	5.2
90kg	95.2	107.1	33.2	33.2	—	23.0	25.4	12.7	39.7	6.4
150kg	139.0	160.0	63.0	—	—	38.0	43.0	33.0	50.0	11.0
227kg	139.7	154.0	71.4	—	57.2	31.8	34.9	31.8	46.0	8.3
300kg	285.0	330.0	120.0	—	—	50.0	60.0	30.0	77.0	13.5
450kg	225.4	257.5	125.4	—	—	50.8	50.8	31.8	64.2	13.5
550kg	304.8	352.4	153.0	—	153.0	82.6	76.2	50.8	95.2	16.7

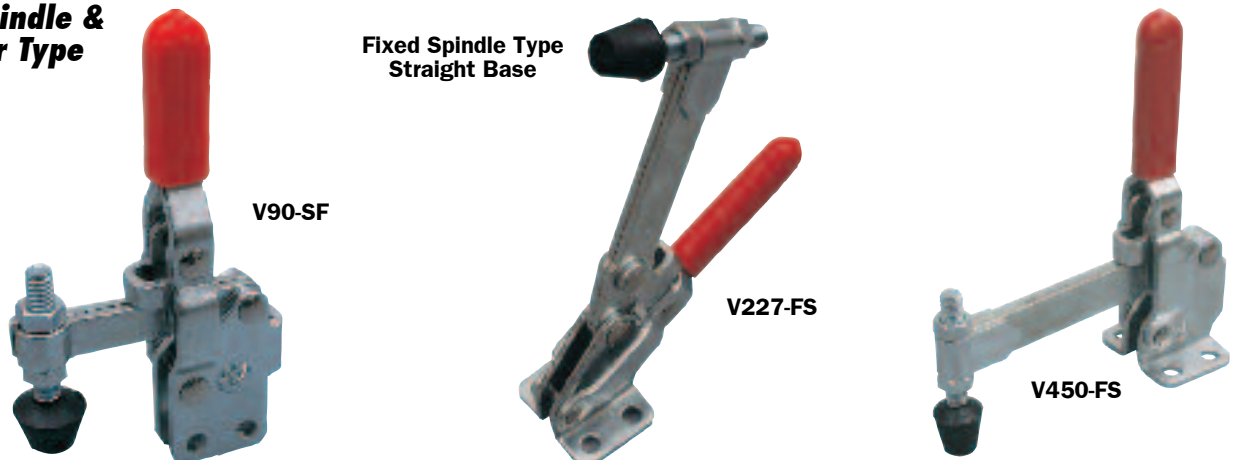


'U' Bar (Adjustable) Type



Product Number	Holding Capacity	Movement Handle	Bar	Base Type	Supplied With	Weight each	Order Code IND-443	Price/1 RND
V50-FA	50kg	56°	100°	Flanged	Tipped Spindle (No.10) and Flanged Washer	60g	-1020K	141.90
V90-FA	90kg	60°	100°		Spindle (1/4") and Flanged Washer	170g	-1220K	280.60
V150-FA	150kg	45°	94°		Hex Head Spindle (M8) and Bolt Retainer	320g	-1320K	188.20
V227-FA	227kg	60°	100°		Tipped Spindle (5/16") and Flanged Washer	355g	-1420K	201.80
V300-FA	300kg	67°	140°		Hex Head Spindle (M10)	1250g	-1620K	445.40
V450-FA	450kg	70°	135°		Hex Head Spindle (1/2") and Flanged Washer	1140g	-1720K	482.40
V550-FA	550kg	60°	140°		Hex Head Spindle (5/8") and Flanged Washer	2540g	-1920K	614.40
V340-FA	340kg	58°	105°	Straight	Tipped Spindle (3/8") and Flanged Washer	635g	-1590K	376.00
V90-SA	90kg	60°	100°		Spindle (1/4") and Flanged Washer	170g	-1270K	154.20
V150-SA	150kg	45°	94°		Hex Head Spindle (M8) and Bolt Retainer	320g	-1370K	188.20
V227-SA	227kg	60°	100°		Tipped Spindle (5/16") and Flanged Washer	355g	-1470K	201.80
V450-SA	450kg	70°	135°		Hex Head Spindle (5/8") and Flanged Washer	1250g	-1770K	400.30

Fixed Spindle & Solid Bar Type



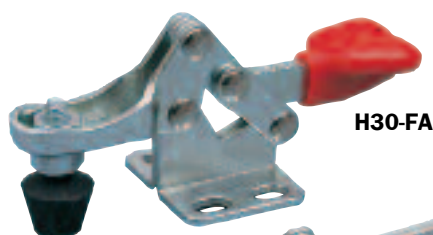
Product Number	Holding Capacity	Movement Handle	Bar	Base Type	Supplied With	Weight each	Order Code IND-443	Price/1 RND
V100-FF	90kg	60°	100°	Flanged	Fixed Spindle (1/4")	170g	-1120K	158.10
V90-SF	90kg	60°	100°	Straight	Fixed Spindle (1/4")	170g	-1170K	158.10
V227-FS	227kg	60°	100°	Flanged	Solid Bar Hex Head (5/16") and Bolt Retainer*	340g	-1520K	201.80
V450-FS	450kg	70°	135°		Solid Bar Hex Head Spindle (1/2") and Bolt Retainer*	1250g	-1820K	409.30
V550-FS	550kg	60°	140°		Solid Bar Hex Head Spindle (5/8") and Bolt Retainer*	2540g	-1940K	992.00
V227-SS	227kg	60°	100°	Straight	Solid Bar Tipped Spindle (5/16") and Bolt Retainer*	340g	-1570K	201.80
V450-SS	450kg	70°	135°		Solid Bar Hex Head Spindle (5/8") and Bolt Retainer*	1250g	-1870K	437.00

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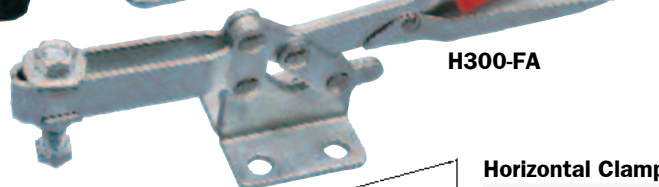
GROUP 443 TOGGLE CLAMPS

INDEXA Horizontal Industrial Toggle Clamp

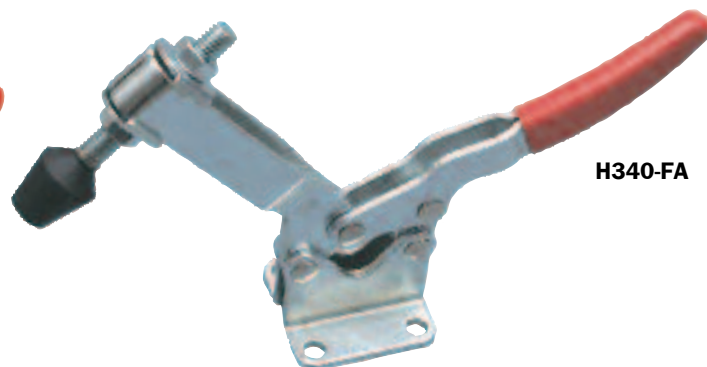
With a low profile design suitable for use in applications requiring increased access to the actual workpiece. Available in eight sizes for general application in areas where a lower profile is required. Force applied downwards 90° to bar.



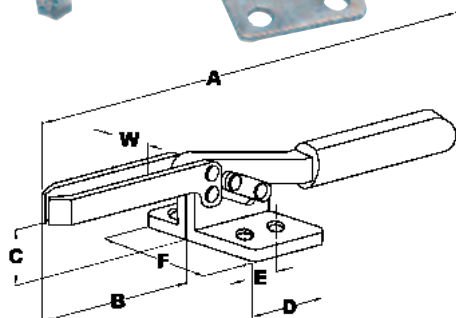
H30-FA



H300-FA



H340-FA



Horizontal Clamp Dimensions (mm)

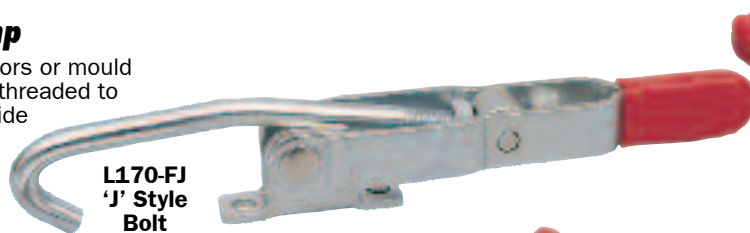
Holding Capacity	A	B	C	D	E	F	W
30kg	76.5	28.0	12.5	24.0	11.5	28.5	8.5
90kg	138.0	55.0	25.4	37.0	25.4	36.0	7.4
227kg	168.0	70.0	34.9	38.0	25.4	35.0	8.3
300kg	270.0	85.0	36.5	58.0	34.0	60.0	11.0
340kg	262.0	107.5	46.9	57.1	41.3	57.2	11.0
400kg	240.0	60.0	54.0	70.0	42.0	50.0	12.6
500kg	270.0	91.2	38.0	58.0	37.0	70.0	11.0
636kg	272.0	76.2	51.0	90.0		48.0	12.7

Product Number	Holding Capacity	Movement Handle	Bar	Base Type	Supplied with	Weight each	Order Code IND-443	Price/1 RND
H65-FA	75kg	76°	94°	Flanged	Hex Head Spindle (M5) Moulded PVC Handles	100g	-1960K	156.30
H86-FA	150kg	76°	94°		Hex Head Spindle (M6) Moulded PVC Handles	230g	-1970K	220.60
H217-FA	250kg	76°	94°		Hex Head Spindle (M8) Moulded PVC Handles	430g	-1980K	245.20
H30-FA	30kg	88°	80°		Tipped Spindle (M4)	40g	-2020K	156.10
H90-FA	90kg	60°	85°		Tipped Spindle (1/4") and Flanged Washer	130g	-2120K	177.00
H227-FA	227kg	65°	90°		Tipped Spindle (9/16") and Flanged Washer	255g	-2220K	199.60
H300-FA	300kg	85°	80°		Hexagon Head Spindle (3/8") and Flanged Washer	490g	-2320K	291.80
H340-FA	340kg	50°	85°		Tipped Spindle (3/8") and Flanged Washer	640g	-2420K	337.10
H400-FA	400kg	85°	84°	Flanged	Tipped Spindle (3/8") and Flanged Washer	600g	-2520K	330.50
H500-FA	500kg	85°	65°		Hexagon Head Spindle (M10) and Flanged Washer	450g	-2620K	378.40
H636-FA	636kg	94°	91°		Hexagon Head Spindle (1/2") and Flanged Washer**	1220g	-2720K	417.70

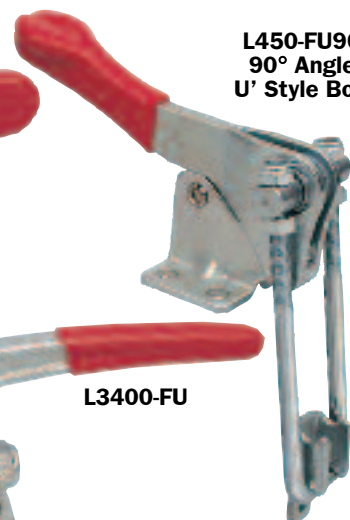
**Single mounting centre hole 13mm diameter for 'Tee' bolt mounting

Latch Type Toggle Clamp

Suitable for sealing chamber doors or mould closures. The latched bolts are threaded to allow easy adjustment and provide positive connection with latch plate.



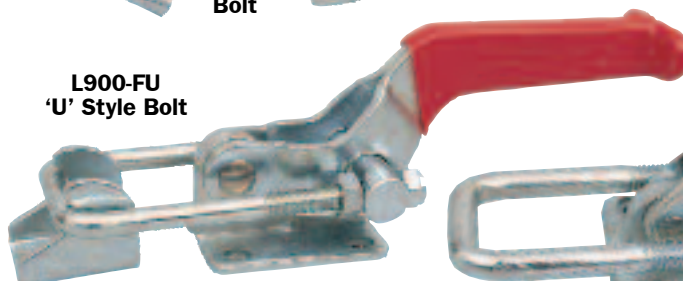
L170-FJ
'J' Style Bolt



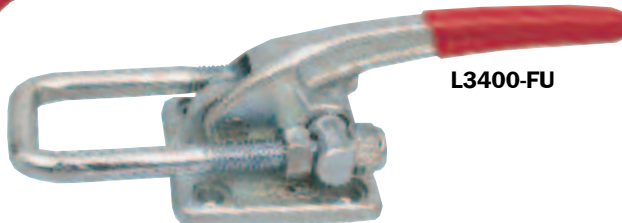
L450-FU90
90° Angle
U' Style Bolt



Group
732



L900-FU
'U' Style Bolt



L3400-FU

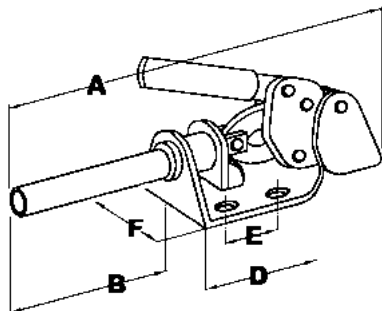
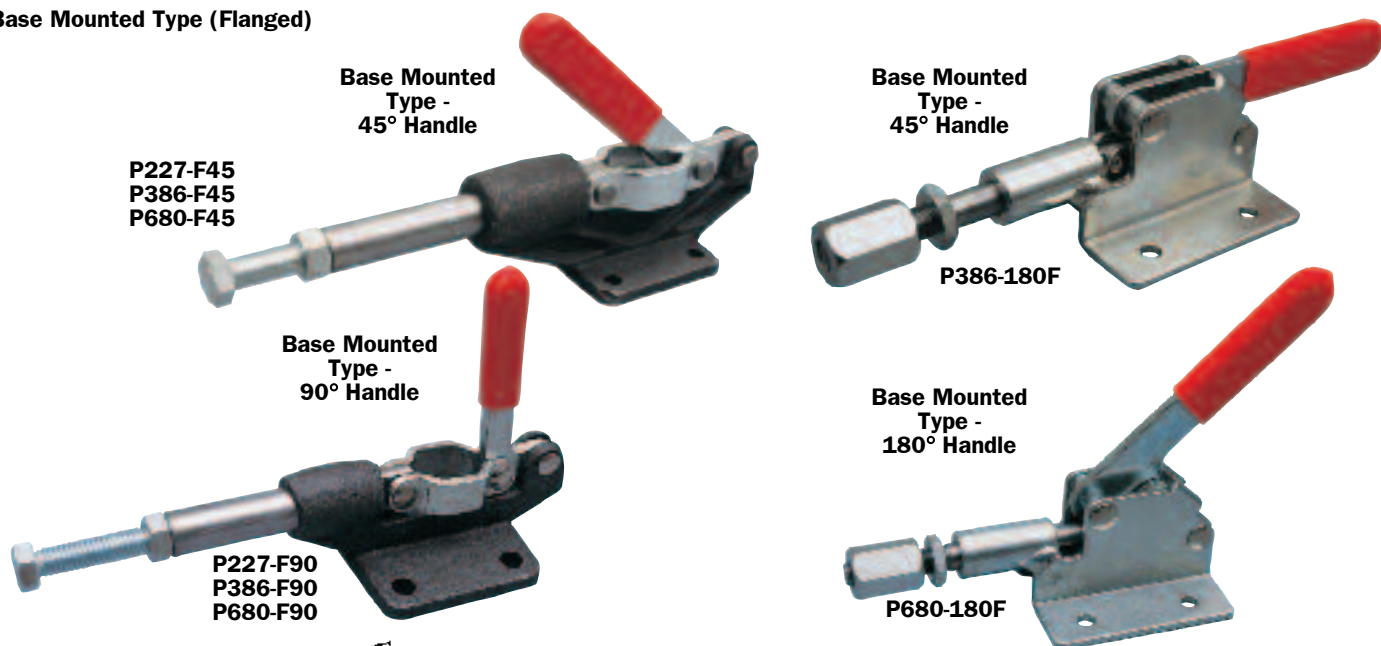
*Optional latch plate IND-443 -8000K

Product Number	Holding Capacity	Drawing Movement	Drawing Adjust	Base Type	Description	Weight each	Order Code IND-443	Price/1 RND
L164-FU	164kg	30mm	9.9mm	Flanged	U-Style Bolt	80g	-4070K	223.20
L318-FU	318kg	45mm	9.6mm		U-Style Bolt	225g	-4010K	226.50
L900-FU	900kg	80mm	23.8mm		U-Style Bolt	680g	-4130K	326.20
L1818-FU	1818kg	88.9mm	19mm		U-Style Bolt*	1260g	-4170K	930.60
L3400-FU	3400kg	55.6mm	28.6mm	Flanged	U-Style Bolt*	1480g	-4210K	1502.00
L170-FJ	170kg	100mm	6.5mm		J-Style Bolt	270g	-4030K	197.90
L170-FJ	170kg	105mm	35mm		J-Style Bolt	255g	-4050K	227.40
L340-FJ	340kg	140mm	40mm		J-Style Bolt	340g	-4190K	342.20
L225-FU90	225kg	25mm	15mm	Flanged	90° Angle U-Style Bolt	113g	-4090K	247.40
L450-FU90	450kg	65mm	33mm		90° Angle U-Style Bolt	250g	-4110K	241.10
L900-FU90	900kg	45mm	40mm		90° Angle U-Style Bolt	700g	-4150K	476.30

INDEXA *Push Pull
Industrial Toggle Clamp*

The straight line action which gives these plunger-style clamps extremely high loading capacities whilst maintaining compactness. These clamps also lock in the open position which allows a 'pull' to be exerted (for instance, in use with foam moulds). All models have tapped spindles for use with adjustable spindles.

Base Mounted Type (Flanged)

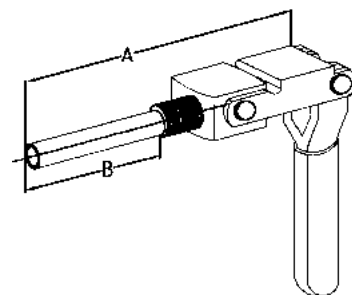
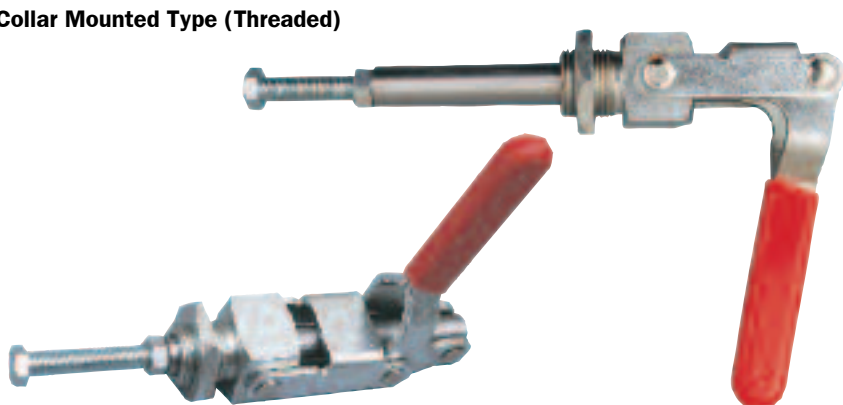


Dimensions (mm)

Holding Capacity	A —Excluding Handle	B	C	D	E	F
45kg	72.2	38.9	9.5	33.3	15.0	27.0
50kg	71.9	16.9	13.0	49.0	24.0	42.0
136kg	138.0	47.0	24.6	48.0	35.0	56.0
160kg	146.0	76.0	15.5	70.0	40.0	72.0
200kg	124.5	41.5	14.0	48.0	40.0	50.0
227kg	125.4	52.4	19.0	52.4	35.0	57.2
295kg	204.0	112.0	17.7	92.0	60.0	83.0
386kg	158.8	81.0	23.8	58.8	41.4	57.2
680kg	238.2	120.8	35.0	73.2	50.8	71.4
1136kg	178.6	50.8	12.5	127.8	34.9	56.2
1136kg	178.6	50.8	12.5	127.8	41.3 (6 holes)	56.2
1600kg	310.0	87.0	47.0	227.0	80.0	107.0

Product Number	Holding Capacity	Spindle Thread	Handle Movement	Handle Position	Base Type	Supplied With	Weight each	Order Code IND-443	Price/1 RND
P45-F45	45kg	1/4" UNC x 12 Deep	190°			Nylon Spindle	50g	-3030K	134.00
P136-F45	136kg	M8	180°			Hexagon Head Spindle	300g	-3060K	234.50
P200-F45	180kg	M8 x 1.25	144.5°			Hexagon Head Spindle	345g	-3090K	244.70
P180-FA	180kg	M8 x 1.25	145°	45°	Flanged	Hexagon Head Spindle	35g	-3100K	354.50
P227-F45	227kg	M8	180°	Extended		Hexagon Head Spindle	340g	-3120K	242.10
P386-F45	386kg	M10	180°			Hexagon Head Spindle	580g	-3180K	394.50
P680-F45	680kg	M12	180°			Hexagon Head Spindle	1480g	-3240K	634.80
P1136-F45	1136kg	M10	180°			Hexagon Head Spindle	935g	-3300K	553.00
P227-F90	227kg	M8 x 30 Deep	180°			Hexagon Head Spindle	340g	-3150K	235.50
P386-F90	386kg	M10 x 40 Deep	180°	90°	Flanged	Hexagon Head Spindle	580g	-3210K	365.50
P680-F90	680kg	M12 x 50 Deep	180°	Extended		Hexagon Head Spindle	1480g	-3270K	807.90
P50-180F	50kg	M5	66°			Hexagon Head Spindle	100g	-3700K	198.30
P386-180F	160kg	M10	45°	180°	Flanged	Hexagon Head Spindle	454g	-3730K	273.40
P680-180F	295kg	1/2" UNC	45°	Extended		Hexagon Head Spindle	1270g	-3760K	453.30

Collar Mounted Type (Threaded)



Dimensions (mm)

Holding Capacity	A —Excluding Handle	B
91kg	30.3	20.6
136kg	115.0	37.7
318kg	169.5	65.3

Product Number	Holding Capacity	Spindle Thread	Collar Thread	Handle Movement	Base Type	Supplied with	Weight each	Order Code IND-443	Price/1 RND
P91-FT	91kg	1/4" UNC	M16	180°		Nylon Spindle	113g	-3530K	200.50
P136-FT	136kg	5/16" UNC	M20	180°	Flanged	Hexagon Head Spindle	270g	-3560K	243.90
P318-FT	318kg	3/8" UNC	M27	180°		Hexagon Head Spindle	690g	-3590K	503.10

PRODUCTS ARE ONLY AVAILABLE VIA YOUR DISTRIBUTOR

GROUP 443 TOGGLE CLAMPS

ATLAS
WORKHOLDERS

Vertical Industrial Toggle Clamp

Designed to improve performance in fabrication and engineering clamping applications. The rapid clamping/unclamping made possible by the use of toggle clamps can greatly reduce machine/operator 'down-time' during all stages of production.



WORKSHOP EQUIPMENT



AV200-FA

'U' Bar
(Adjustable) Type
with Flanged
Base

AV217-FA

AV50-FA

'U' Bar
(Adjustable) Type
with Side Facing
Flanged Base

AV90-FA



AV150-FA



Group
732

AV450-FA

Fixed
Spindle
Type
with
Flanged
Base

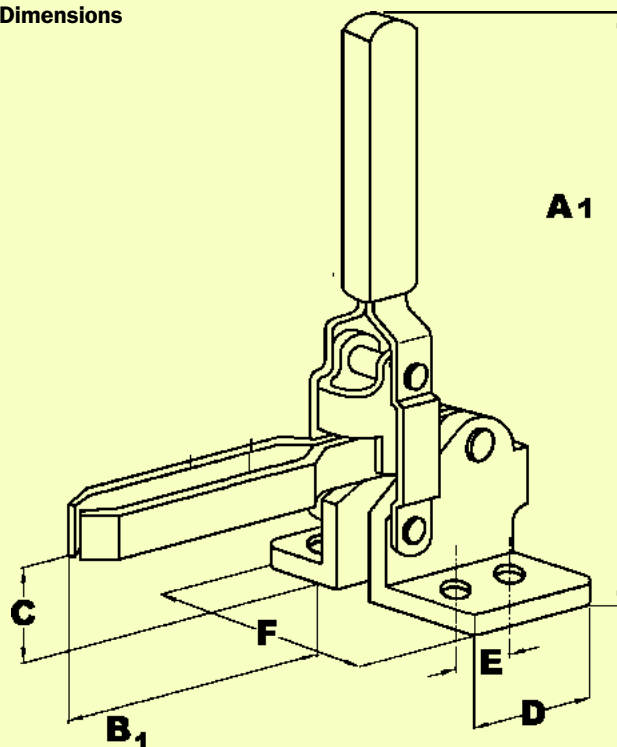
Solid Bar
Type
with
Flanged
Base

AV217-FS

AV80-FF



Dimensions



'U' Bar (Adjustable) Type with Flanged Base

Product Number	A1 Flanged Base	B1 Flanged Base	C Flanged Base	D	E	F Flanged Base
AV50-FA	75.0	24.5	19.0	25.4	15.9	39.7
AV90-FA	93.0	39.0	23.0	29.0	14.0	28.0
AV150-FA	143.0	44.0	31.0	19.0	12.7	42.0
AV200-FA	139.0	63.0	38.0	43.0	24.0	50.0
AV217-FA	139.7	71.4	31.8	34.9	19.0	46.0
AV450-FA	272.0	125.0	62.0	70.0	40.0	70.0

Fixed Spindle Type with Flanged Base

Product Number	A1 Flanged Base	B1 Flanged Base	C Flanged Base	D	E	F Flanged Base
AV80-FF	100.0	27.0	23.8	25.4	12.7	39.7
AV217-FS	139.7	57.2	31.8	34.9	19.0	46.0

'U' Bar (Adjustable) Type with Flanged Base

Product Number	Holding Capacity	Movement Handle	Bar	Base Type	Supplied With	Weight each	Order Code ATL-443	Price/1 RND
AV50-FA	50kg	56°	100°	Flanged	Tipped Spindle (M5) and Flanged Washers	60g	-1020K	68.40
AV90-FA**	90kg	60°	100°		Spindle (M6) and Bolt Retainer	115g	-1220K	61.10
AV150-FA	150kg	70°	108°		Hex Head Spindle (M6) Moulded PVC Handle	230g	-1970K	148.40
AV200-FA	200kg	45°	94°		Hex Head Spindle (M8) and Flanged Washers	370g	-1320K	194.00
AV217-FA	217kg	60°	100°		Tipped Spindle (M8) and Flanged Washers	310g	-1420K	156.90
AV450-FA	450kg	70°	135°		Hex Head Spindle (M12) and Flanged Washers	1220g	-1720K	371.00

** Model AV90-FA has Side Flange - All other FA models listed have Flat Flanges

Fixed Spindle Type with Flanged Base

Product Number	Holding Capacity	Movement Handle	Bar	Base Type	Supplied With	Weight each	Order Code ATL-443	Price/1 RND
AV80-FF	90kg	60°	100°	Flanged	Fixed Spindle (M8)	170g	-1120K	143.10
AV217-FS	217kg	60°	100°	Flanged	Solid Bar and Bolt Retainer (M8)*	310g	-1520K	167.80

*Please note that the bolt retainer supplied needs to be welded in to position by the user

With a low profile design suitable for use in applications requiring increased access to the actual workpiece. Available in eight sizes for general application in areas where a lower profile is required. Force applied downwards 90° to bar.



'U' Bar (Adjustable) Type with Flanged Base

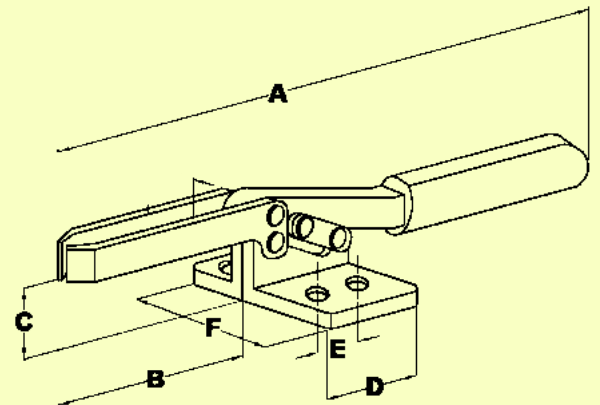
AH250-FA

AH20-FA

AH340-FA

AH80-FA

Dimensions



Product Number	A	B	C	D	E	F
AH20-FA	110.0	37.5	24.8	36.5	24.0	30.0
AH80-FA	138.1	55.0	25.4	36.5	25.4	38.0
AH217-FA	168.0	70.0	34.9	38.0	53.4	35.0
AH250-FA	274.0	108.0	45.0	59.0	41.2	59.0
AH340-FA	263.5	108.0	44.4	57.2	41.3	57.2

Product Number	Holding Capacity	Movement Handle	Bar	Base Type	Supplied with	Weight each	Order Code	Price/1 RND
AH20-FA	30kg	88°	80°	Flanged	Tipped Spindle (M6) and Flanged Washers	100g	-2020K	126.90
AH80-FA	80kg	60°	85°		Tipped Spindle (M6) and Flanged Washers	130g	-2120K	143.90
AH217-FA	217kg	65°	90°		Tipped Spindle (M8) and Flanged Washers	312g	-2220K	162.30
AH250-FA	250kg	94°	76°		Hexagon Head Spindle (M10) and Flanged Washers	500g	-2620K	307.60
AH340-FA	340kg	50°	85°		Tipped Spindle (M10) and Flanged Washers	265g	-2420K	273.90

Latch Type Toggle Clamps

Suitable for sealing chamber doors or mould closures. The latched bolts are threaded to allow easy adjustment and provide positive connection with latch plate.

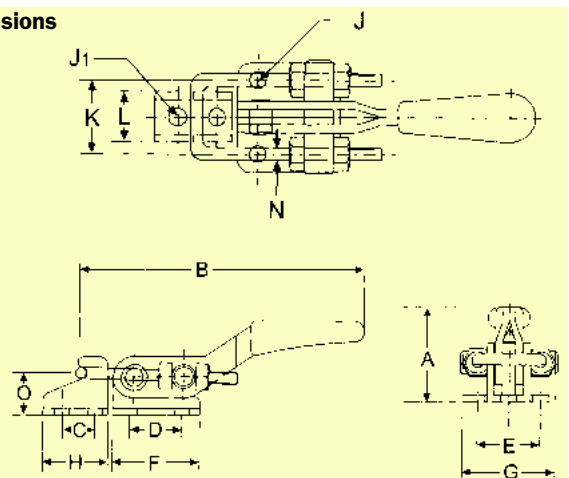
AL165-FU

AL320-FU

'U' Style Bolt Type with Flanged Base

AL900-FU

Dimensions



Product Number	A	B	C	D	E	F	G	H	J	J1	K	L	N	O
AL165-FU	36	88	9.9	16	19	26	28	45	4.3	4.3	19	13.2	3.3	12
AL320-FU	45	151.6	14	19	31.8	39.6	44.5	25	6.8	6.8	25.4	17.5	4	17
AL900-FU	70.6	190	19	41.4	38	60.5	54	38	8.4	8.4	44.5	30.0	8	24

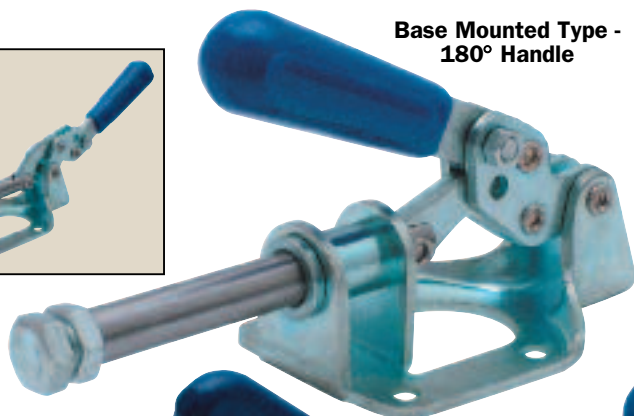
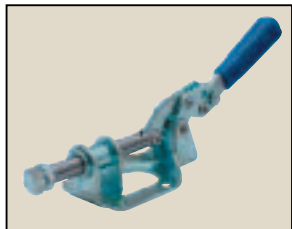
Product Number	Holding Capacity	Drawing Movement	Drawing Adjust	Base Type	Description	Weight each	Order Code	Price/1 RND
AL165-FU	165kg	30mm	9.9mm	Flanged	U-Style Bolt	68g	-4070K	181.40
AL320-FU	320kg	45mm	9.6mm		U-Style Bolt	225g	-4010K	184.10
AL900-FU	900kg	80mm	23.8mm		U-Style Bolt	650g	-4130K	265.20

PRODUCTS ARE ONLY AVAILABLE VIA YOUR DISTRIBUTOR

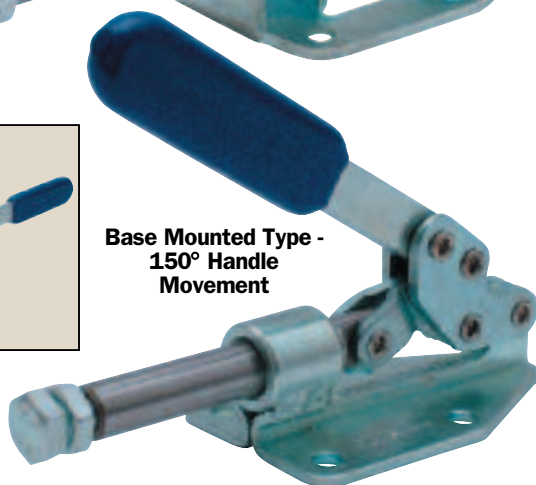
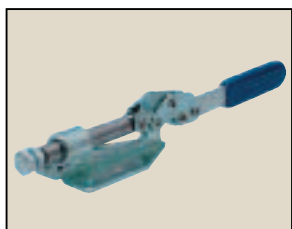
GROUP 443 TOGGLE CLAMPS

ATLAS WORKHOLDERS Push Pull Industrial Toggle Clamps

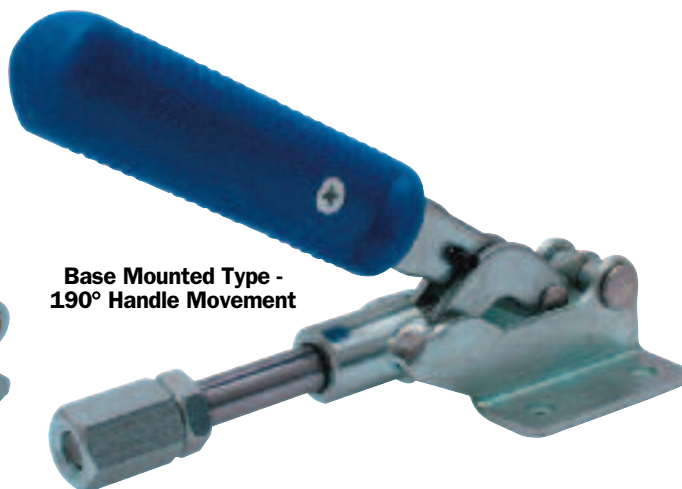
The straight line action which gives these plunger-style clamps extremely high loading capacities whilst maintaining compactness. These clamps also lock in the open position which allows a 'pull' to be exerted (for instance, in use with foam moulds). All models have tapped spindles for use with adjustable spindles.



Base Mounted Type - 180° Handle

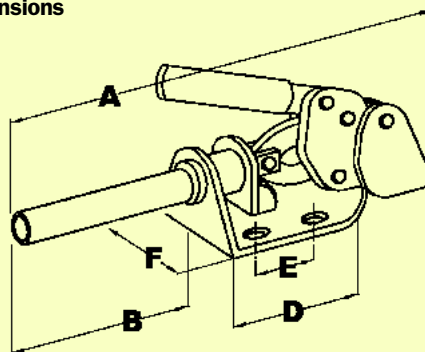


Base Mounted Type - 150° Handle Movement



Base Mounted Type - 190° Handle Movement

Dimensions



Product Number	A - Excl. Handle	B	C	D	E	F
AP136	138.1	49.2	24.6	88.9	34.9	55.6
AP200	124.5	41.5	14.0	83.0	40.0	50.0
AP227	151.0	63.0	15.0	88.0	32.0	63.0

Product Number	Holding Capacity	Spindle Thread	Handle Movement	Handle Position	Base Type	Supplied With	Weight each	Order Code ATL-443	Price/1 RND
AP136	136kg	M8	180°			Hexagon Head Spindle	285g	-3060K	224.30
AP200	200kg	M8 x 1.25	150°	45°	Flanged	Hexagon Head Spindle	330g	-3090K	234.00
AP227	227kg	M8 x 30 Deep	190°	Extended		Hexagon Head Spindle	540g	-3150K	225.20

INDEXA Heavy Duty Weldable Toggle Clamps

Hold down action suitable for high production automotive type applications. Heavy duty forged components with hardened and ground pivot points. The users provide their own handle and bar and weld them to the clamp which is then welded to a base. The flexible mounting of these clamps allows them to be used in situations where standard clamps are not effective.



Group 880



Holding Capacity	Base Width	Clamp Height with Handle	Weight each	Order Code IND-443	Price/1 RND
700kg	28mm	110mm	808g	-5010K	937.30
700kg	45mm	130mm	915g	-5030K	895.90
1100kg	35mm	140mm	1468g	-5050K	1126.70
1100kg	50mm	170mm	1574g	-5070K	1082.10

INDEXA Latch Plates

For use with latch type toggle clamps.



Base Size	Hook Width	Order Code IND-443	Price/1 RND
80 x 55mm	22mm	-8000K	184.60

Flanged Washers

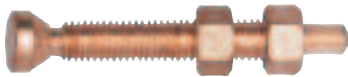
For use in conjunction with all spindles on clamps with adjustable 'U' bars.



To fit Spindle	Weight each	Order Code IND-443	Price/1 RND
5/32" (No.8/M4)	2g	-8700K	6.70
3/16" (No.10)	2g	-8720K	6.90
1/4"	4g	-8740K	10.40
5/16" (M8)	10g	-8780K	9.40
3/8" (M10)	15g	-8800K	8.30

Swivel Foot Spindles

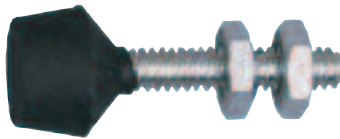
As Neoprene capped but suitable for clamping onto irregular shapes or angled workpieces.



Size	Length	Weight each	Order Code IND-443	Price/1 RND
1/4" UNC	2 1/4"	018g	-8500K	46.80
5/16" UNC	2 3/4"	031g	-8520K	53.80
3/8" UNC	3"	047g	-8540K	62.80
1/2" UNC	4"	115g	-8560K	69.80

Neoprene Capped Spindles

For use with adjustable 'U' bar type clamps and solid bar type clamps that have bolt retainers.



Size	Length	Weight each	Order Code IND-443	Price/1 RND
M4 x 0.7	25mm	5g	-8020K	18.40
M8 x 1.25	63mm	34g	-8100K	33.30
M10 x 1.5	85mm	64g	-8140K	36.20
No 10UNC	1 3/8"	9g	-8200K	19.40
1/4" UNC	1 3/4"	16g	-8220K	22.30
5/16" UNC	2 1/2"	31g	-8260K	25.10
3/8" UNC	3 1/2"	58g	-8300K	38.00
1/2" UNC	3 3/4"	125g	-8340K	44.40

Neoprene Caps

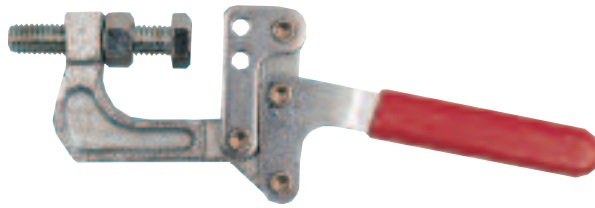
For standard adjustable spindles.



To fit Spindle	Weight each	Order Code IND-443	Price/1 RND
1/4"	8g	-8600K	10.80
5/16"	15g	-8620K	12.80
3/8"	24g	-8640K	16.10
1/2"	45g	-8660K	17.20

Cam Type Toggle G-Clamp (Pull Back Clamp)

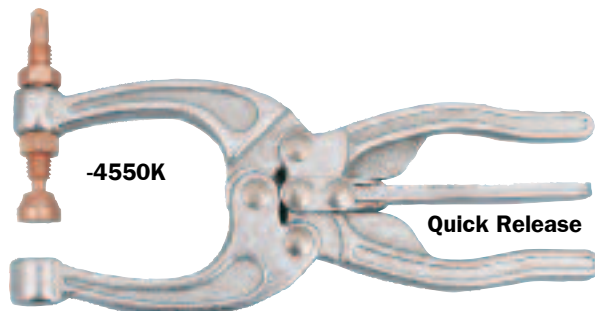
To securely fix the clamp into position the base can be welded to the work surface.



Holding Capacity	Jaw Opening	Jaw Movement	Handle Movement	Order Code IND-443	Price/1 RND
340kg	45.2mm	90°	50°	-5510K	396.40

Toggle Pliers

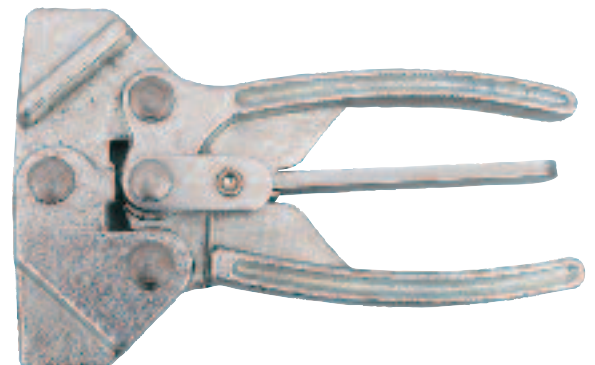
Toggle pliers have the advantage of a pivoting jaw mechanism to allow a deep throat depth to open and close easily when clamping awkward profiles such as steel angle section. The jaw spindle can be pre-set to achieve the optimum clamping distance and pressure and so is most useful for repetitive clamping applications.



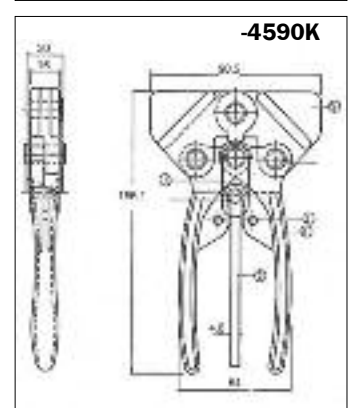
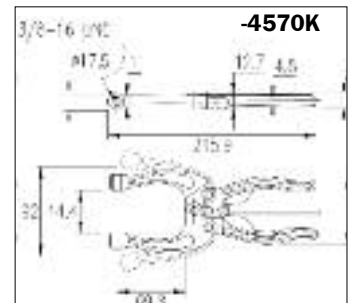
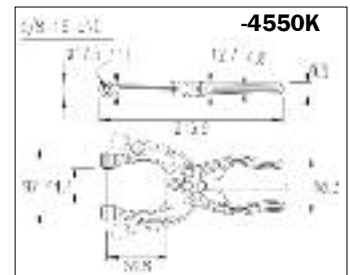
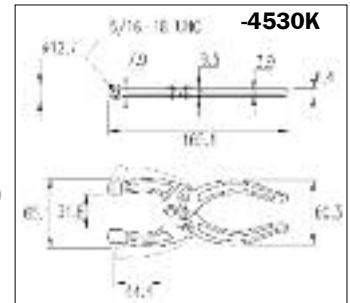
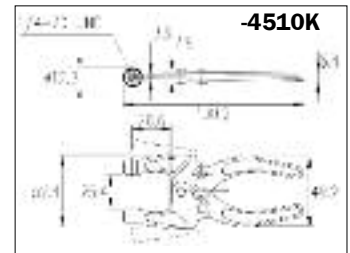
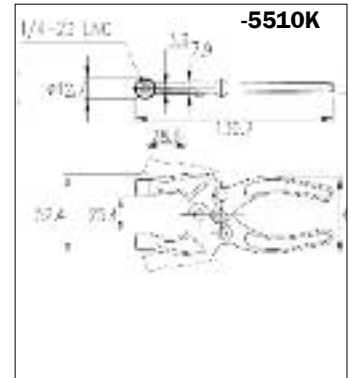
Holding Capacity	Jaw Opening Min	Jaw Opening Max	Standard Spindle Supplied	Order Code IND-443	Price/1 RND
90kg	25.4	52.4	Hex. Head	-4510K	261.50
159kg	31.8	65.1	Hex. Head	-4530K	297.00
318kg	44.4	92.0	Swivel	-4550K	532.80
318kg	76.2	123.8	Hex. Head & Swivel	-4570K	620.30

'Stub' Type Toggle Pliers

With two stub arms for easy linking to special jaw extensions.



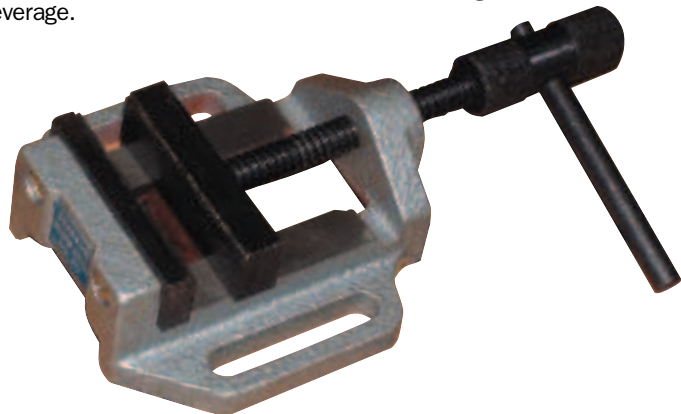
Holding Capacity	Closed Head Width (mm)	Overall Length	Order Code IND-443	Price/1 RND
500kg	95.6	156.1	-4590K	493.20



GROUP 445 MACHINE VICES

SENATOR Drill Press Vice

Suitable for use on pillar/bench drills to steady the workpiece in all light duty drilling applications for the garage or small workshop. Cast construction with machined slots which are spaced to fit all popular drill stand bases. Cross drilled handle with sliding T-bar for extra leverage.



Jaw Width	Maximum Opening	Jaw Height	Dimension Length x Height	Weight each	Order Code SEN-445	Price/1 RND
75mm	55	23	200 x 45	1.90kg	-0750K	204.40
100mm	95	25	250 x 55	3.25kg	-1000K	1305.10



ATLAS Machine Vices

Machine Vices without Swivel Base

Manufactured in accordance with high quality criteria. Designed for general purpose milling, planing and drilling applications.

Machine Vices with Swivel Base Type

Also available complete with a swivel base designed for milling, planing and drilling applications.

Graduated to 1°.



Swivel Base Type

Jaws are fully ground in pairs

Jaw Width	Max. Opening	Jaw Height	Dimension L x W x H	Weight each	Order Code ATL-445	Price/1 RND
Without Swivel Base						
100mm	80	35	245 x 115 x 89	8kg	-0100K	1311.90
160mm	125	51	411 x 187 x 120	34kg	-0150K	2258.20
200mm	160	63	440 x 220 x 140	46kg	-0200K	2888.30

With Swivel Base						
100mm	80	35	195 x 145 x 110	17kg	-1100K	1660.00
160mm	125	51	411 x 187 x 167	43kg	-1150K	3297.50
200mm	160	63	440 x 220 x 187	57kg	-1200K	4167.30

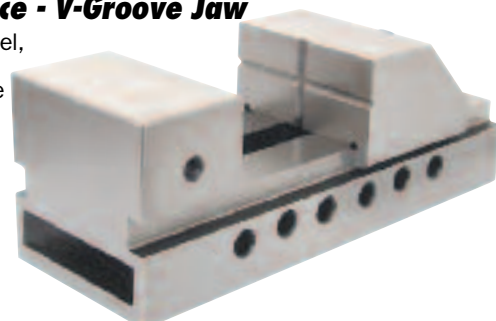
Spare Jaws to suit Atlas Machine Vices

Width	Order Code ATL-445	Price/1 RND
100mm	-1040K	162.30
160mm	-1060K	141.60
200mm	-1080K	148.30

Toolmakers Vice - V-Groove Jaw

Made from alloy steel, case hardened. With a quick release mechanism.

Accuracy: 0.005mm.



Jaw Dimension Width x Opening x Height	Overall Length	Weight each	Order Code ATL-445	Price/1 RND
50 x 65 x 25mm	135	3kg	-0310K	1257.70

INDEXA Quick Grip Drill Press Vices

Fixed Jaw

Quick acting cam can be set instantly to hold work. Fixed jaw with V-block to handle flat or round pieces, vertically or horizontally. Jaw inserts are hardened and ground. The heavy base can be clamped down to a milling machine or drill press.



Jaw Width	Jaw Height	Maximum Opening	Weight each	Order Code IND-445	Price/1 RND
80mm	30mm	80mm	5.2kg	-0170K	4248.90
100mm	35mm	100mm	8.9kg	-0180K	5943.00

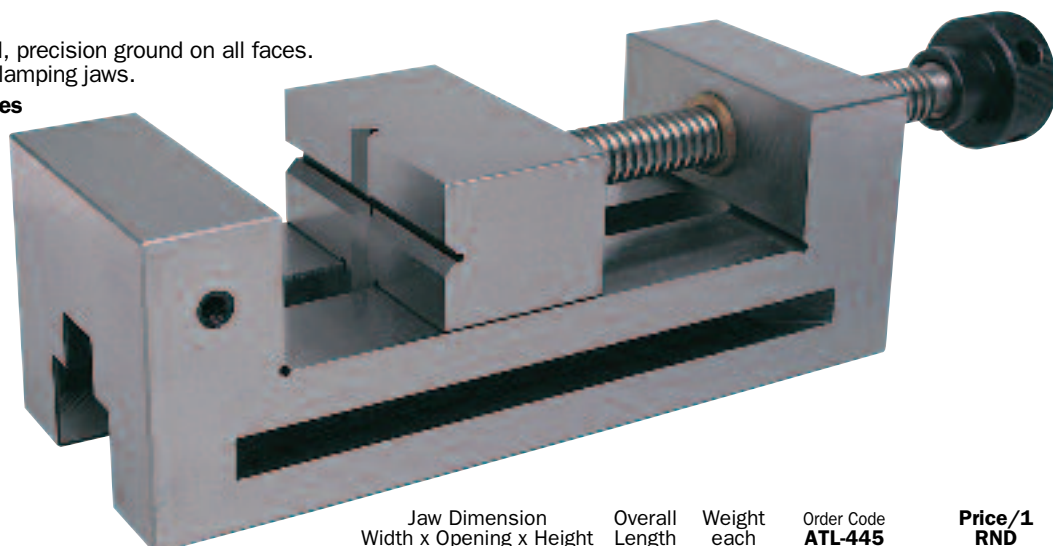


Toolmakers Vices

Manufactured from high carbon steel, precision ground on all faces. Phosphor bronze bush, 90° vee on clamping jaws.

Standard Precision Toolmaker's Vices

Squareness and parallelism to within 0.005mm.



Jaw Dimension Width x Opening x Height	Overall Length	Weight each	Order Code ATL-445	Price/1 RND
63 x 85 x 32mm	185	3.80kg	-2010K	2596.40
100 x 125 x 45mm	255	13.00kg	-2050K	3641.40

INDEXA Drill Press Vices

Available in four different jaw widths. For drilling, light milling, vertical and horizontal work. One grooved and one plain replaceable jaw for square and hexagonal shapes across flats or corners, thin strips and discs. Jaws and lead screw are hardened and ground.

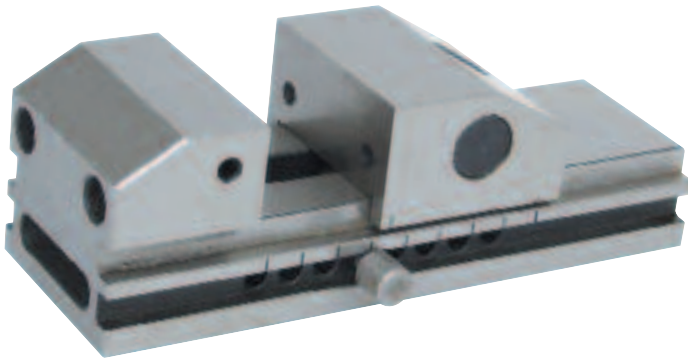


Jaw Width	Jaw Opening	Order Code IND-445	Price/1 RND
85mm	70mm	-0010K	1315.70
100mm	85mm	-0020K	1244.10
120mm	120mm	-0030K	2016.20
150mm	150mm	-0040K	2632.40

Toolmaker's Vices - Plain Jaw

Manufactured from high quality alloy steel, case hardened to HRC 58 - 62. For wire cutting, machining, measurement and inspection. With a dowel pin quick release mechanism with linear scale for accurate alignment.

Accuracy: 0.003mm.



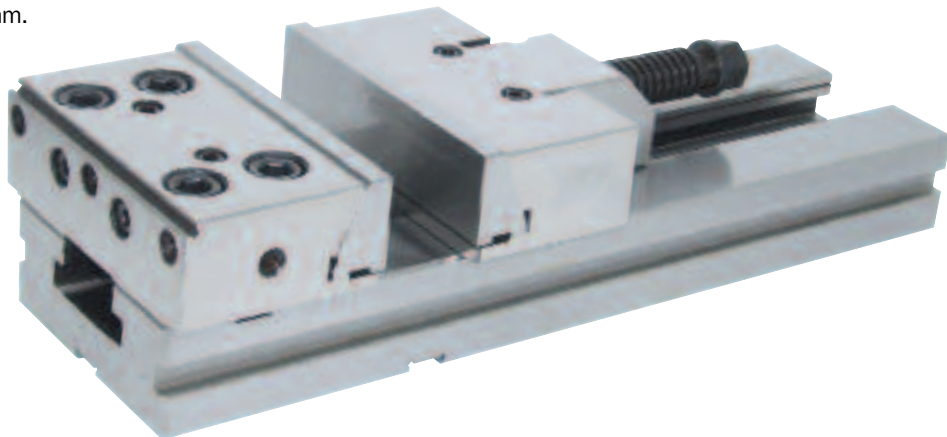
Jaw Dimension Width x Opening x Height	Overall Length	Weight each	Order Code IND-445	Price/1 RND
60 x 80 x 28mm	175mm	3.9kg	-0200K	5460.50
75 x 100 x 40mm	220mm	7.9kg	-0210K	7587.40

Modular Precision Machine Vices

Precision modular vices are designed to be used on standard and CNC machines for precision grinding and milling. The vice could be set up individually or work in multiples, on tables or palletised components depending on the machined material dimensions. Made from hardened high grade alloy steel.

Perpendicular accuracy: 0.005mm.

Parallelism: 0.005mm.

**Accessories:**

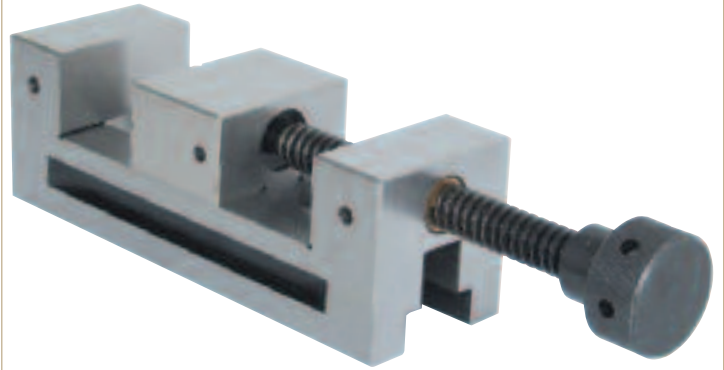
L-wrench, T-wrench, vice holding clamp, work stop with main bolt, positioning key-nuts etc.

Jaw Width x Opening x Height	Overall Length	Clamping Force	Weight each	Order Code IND-445	Price/1 RND
100 x 100 x 30mm	270mm	3000kg	7.00kg	-0600K	15012.00
125 x 150 x 40mm	345mm	3000kg	12.70kg	-0620K	17446.40
150 x 200 x 50mm	420mm	5000kg	25.60kg	-0640K	24344.80
150 x 300 x 50mm	520mm	5000kg	29.50kg	-0660K	25155.10
200 x 300 x 65mm	595mm	8000kg	86.00kg	-0690K	17805.40

Precision Toolmaker's Vices

Squareness and parallelism to within 0.003mm.

Designed for precision grinding and many other tool room applications.

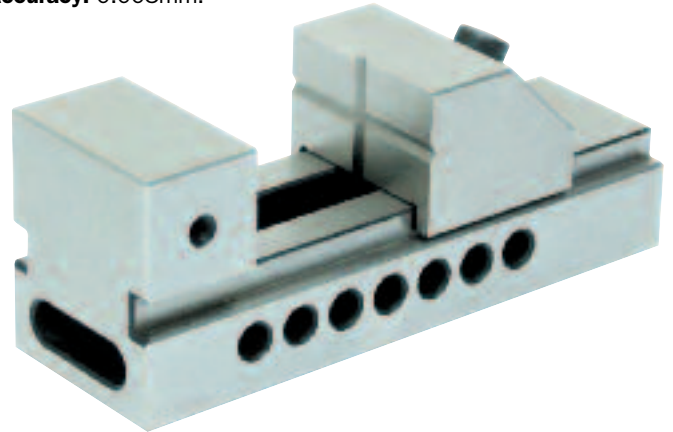


Jaw Dimension Width x Opening x Height	Overall Length	Weight each	Order Code IND-445	Price/1 RND
50 x 65 x 25mm	150	3.00kg	-0400K	9839.10
73 x 100 x 35mm	205	5.00kg	-0430K	10608.00
100 x 125 x 45mm	255	13.00kg	-0450K	12177.40

Toolmaker's Vice - V-Groove Jaw

Manufactured from high quality alloy steel, case hardened to HRC 58 - 62. With a rack quick release mechanism.

Accuracy: 0.003mm.



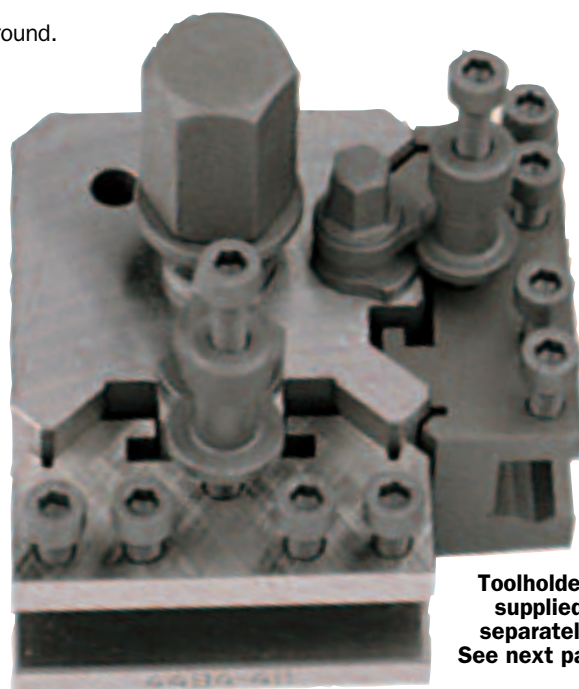
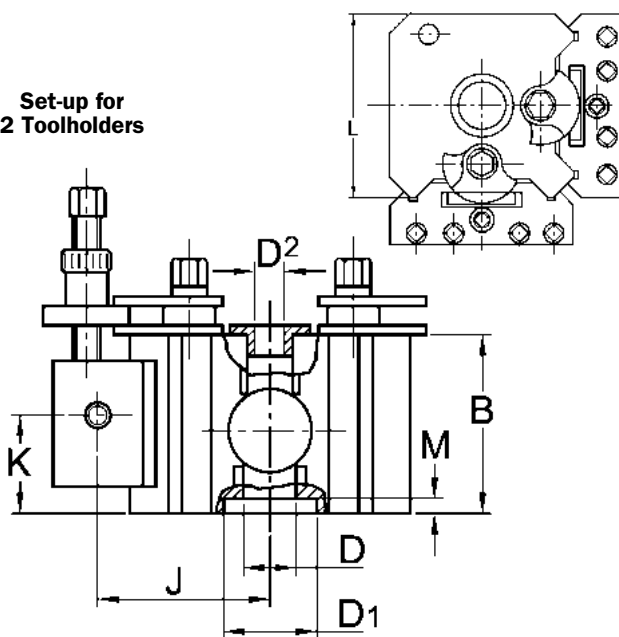
Jaw Dimension Width x Opening x Height	Overall Length	Weight each	Order Code IND-445	Price/1 RND
50 x 78 x 30mm	155mm	3.00kg	-0310K	6746.20

Made of alloy case steel. All working surfaces are hardened and precision ground.



Toolposts Type T.00 - T.0

Set-up for 2 Toolholders



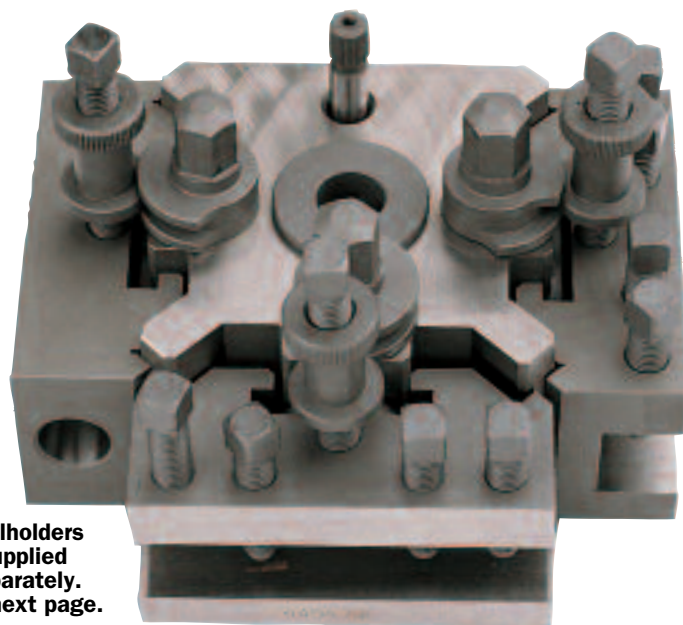
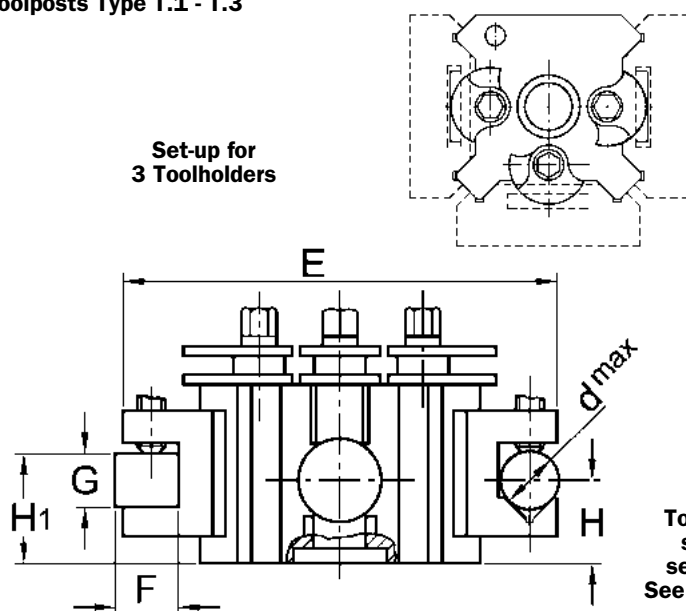
Toolholders supplied separately. See next page.

Type	No. of Toolholders	Lathe Capacity	B	D1 Dia.	M Depth	D	E	G	F	H1 Max	H1 Min.
T.00M	2	Up to 89mm	37.0	-	-	11.2	-	10	11	27	17
T.0	3	Up to 114mm	51.0	22.22	5.0	19.0	124	13	13	36.5	20.5

Type	Bar dia. d Max.	H Max.	H Min.	Taper	J	K Max.	K Min.	L	D2	Weight each	Order Code IND-445	Price/1 RND
T.00M	11.0	22.5	12.5	-	-	-	-	58.0	-	0.90kg	-4800K	3760.30
T.0	16.0	32.0	16.0	1	52.5	28.5	16.0	73.0	16.0	2.00kg	-4820K	4376.70

Toolposts Type T.1 - T.3

Set-up for 3 Toolholders

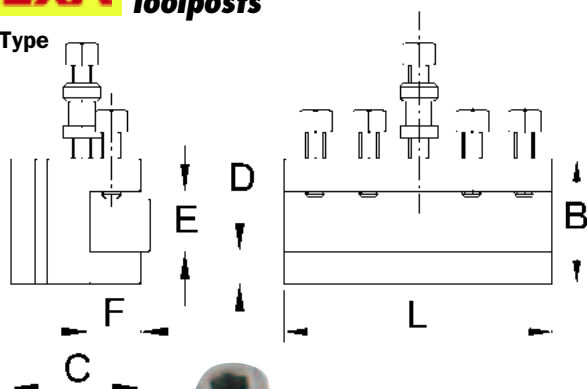


Toolholders supplied separately. See next page.

Type	No. of Toolholders	Lathe Capacity	B	D1 Dia.	M Depth	D	E	G	F	H1 Max	H1 Min.
T.1	3	114 to 127mm	63.5	31.75	6.5	19.0	124	19	13	46	30
T.1X	3	114 to 127mm	73.0	31.75	6.5	19.0	124	19	13	57	35
T.2	3	127 to 203mm	71.5	44.45	8.0	25.5	159	19	19	54	36.5
T.2T	3	127 to 203mm	76.0	44.45	8.0	25.5	168	25.5	25.5	58.5	39.5
T.3	3	203 to 292mm	92.0	50.80	9.5	25.5	203	31.5	22.5	73	51

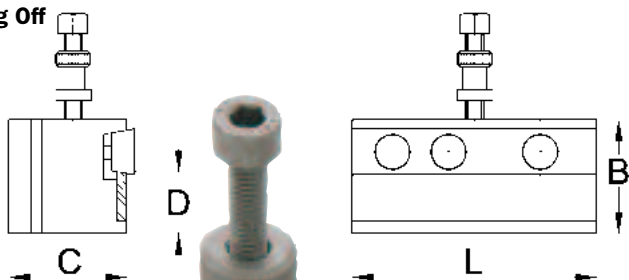
Type	Bar dia. d Max.	H Max.	H Min.	Taper	J	K Max.	K Min.	L	D2	Weight each	Order Code IND-445	Price/1 RND
T.1	16.0	44.5	25.5	1	52.5	41.0	22.0	73.0	16.0	2.30kg	-4830K	5193.30
T.1X	16.0	54.0	32.0	1 & 2	52.5	51.0	28.5	73.0	16.0	2.60kg	-4840K	5235.10
T.2	19.0	46.0	24.0	2	65.0	47.5	27.0	98.5	16.0	4.60kg	-4850K	6390.80
T.2T	19.0	50.0	24.0	2 & 3	70.0	47.5	27.0	106.5	16.0	5.80kg	-4860K	6929.40
T.3	25.5	51.0	28.5	3	85.5	58.5	36.5	125.5	22.0	10.8kg	-4870K	8997.10

Standard Type



Used On	L (mm)	B	C	D	E	F	Order Code IND-445	Price/1 RND
T.00	58.0	27.0	28.0	7.0	13.0	11	-5010K	948.30
T.0	73.0	35.0	32.0	8.0	16.0	14	-5020K	1298.30
T.1	73.0	44.5	32.0	11.0	22.0	14	-5030K	1789.60
T.2	98.5	50.0	40.0	12.0	22.0	19	-5040K	2148.60
T.2T	98.5	57.0	40.0	14.0	28.5	19	-5050K	2221.70
T.3	124.0	70.0	48.5	17.5	35.0	23	-5060K	2727.20

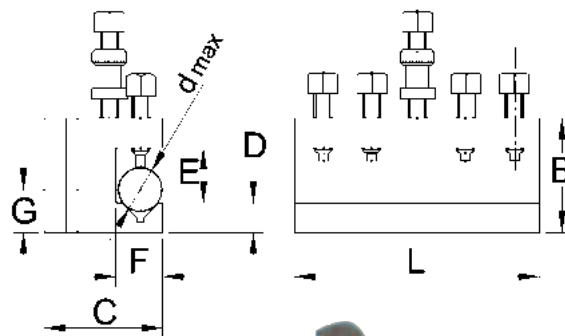
Parting Off Type



Used On	L (mm)	B	C	D	Order Code IND-445	Price/1 RND
T.0/T.1	73.0	47.5	32.0	27.0	-5370K	2134.80
T.2	98.5	57.0	39.5	33.5	-5380K	2766.50



Vee Type



Used On	L (mm)	B	C	D	E	F	G	d Max	Order Code IND-445	Price/1 RND
T.00	58.0	27.0	28.0	8.0	13.0	11	13.5	11.0	-5110K	1028.50
T.0	73.0	35.0	32.0	8.0	16.0	14	16.0	16.0	-5120K	908.40
T.1	73.0	44.5	32.0	16.0	17.0	14	24.0	16.0	-5130K	1876.70
T.2	98.5	50.0	40.0	14.0	22.0	19	24.0	19.0	-5140K	2120.30
T.2T	98.5	57.0	40.0	14.0	28.5	19	24.0	19.0	-5150K	2180.10
T.3	124.0	70.0	48.5	17.5	35.0	23	28.5	25.5	-5160K	2747.60

Industrial Lathe Carriers

Available with straight or bent tail. Manufactured from high grade, malleable cast iron with high tensile strength. Smooth action square head clamping screw.



Straight

Type	Capacity	Weight each	Order Code IND-445	Price/1 RND
Straight	12.5mm	0.10kg	-9000K	324.00
	19.0mm	0.15kg	-9010K	366.80
	25.0mm	0.30kg	-9020K	453.00
	38.0mm	0.70kg	-9040K	647.00
	50.0mm	1.50kg	-9060K	949.30



Bent

Type	Capacity	Weight each	Order Code IND-445	Price/1 RND
Bent	12.5mm	0.10kg	-9200K	387.90
	19.0mm	0.15kg	-9210K	431.30
	25.0mm	0.30kg	-9220K	517.70
	38.0mm	0.70kg	-9240K	712.00
	50.0mm	1.50kg	-9260K	1013.80

GROUP 445 BENCH VICES

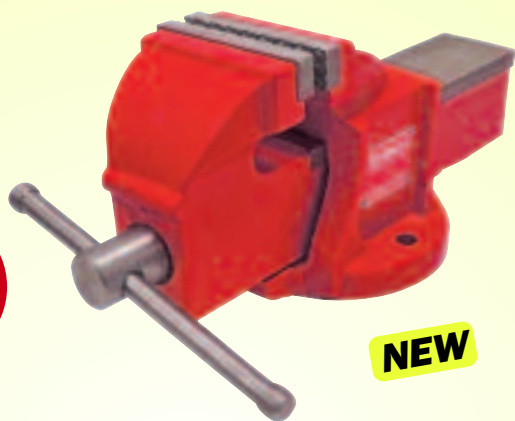
KENNEDY
QUALITY INDUSTRIAL TOOLING

Engineer's Vice

Manufactured from the highest quality castings with precision cut screw mechanisms and precision machined jaws. Suitable for workshop, automotive and engineering use.



Do Not Strike
With A Hammer



NEW

Model Number	Opening (mm)	Jaw Width (mm)	Weight each	Order Code KEN-445	Price/1 RND
KECV75	100 (4")	75 (3")	4.50kg	-0230K	500.00
KECV100	140 (5½")	100 (4")	9.50kg	-0240K	710.00
KECV125	170 (6¾")	125 (5")	18.0kg	-0250K	973.00
KECV150	190 (7½")	150 (6")	25.0kg	-0260K	1485.00

SENATOR
QUALITY TOOLING

Engineer's Vice



Manufactured from the highest quality castings with precision cut screw mechanisms and precision machined jaws. Suitable for workshop, automotive and engineering use.



Do Not Strike
With A Hammer



Opening (mm)	Jaw Width (mm)	Weight each	Order Code SEN-445	Price/1 RND
100 (4")	75 (3")	9.2kg	-1030K	385.30
140 (5½")	100 (4")	9.5kg	-1040K	603.90
170 (6½")	125 (5")	18.0kg	-1050K	812.50
190 (7½")	150 (6")	27.0kg	-1060K	1185.00

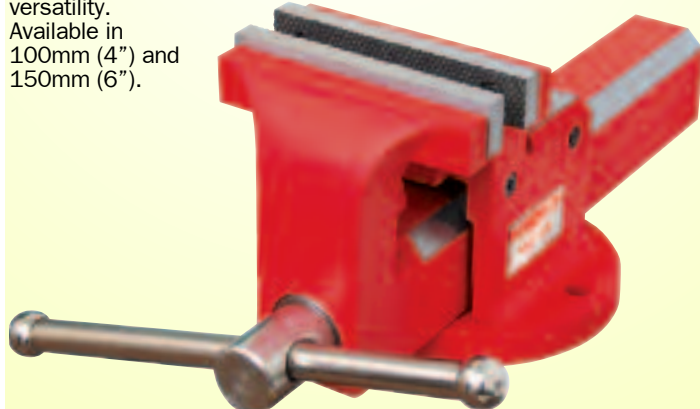
KENNEDY
PROFESSIONAL

Steel Bench Vices



These premium quality bench vices are as good as you get, made from solid steel with replaceable jaws, integral pipe jaws and anvil for versatility.

Available in
100mm (4") and
150mm (6").



Model Number	Opening (mm)	Jaw Width (mm)	Order Code KEN-445	Price/1 RND
VBS100	90 (3½")	100 (4")	-0500K	1674.30
VBS150	220 (8¾")	150 (6")	-0540K	3179.90

Workshop Vice



American pattern bench mounting, steel vice with anvil suitable for workshop, garage and machine-shop use. Fixed base directly mounts onto work bench. Cast iron body with steel jaws and a cross drilled threaded handle with adjustable T-bar for extra leverage.



Applicable to
6" version

Opening (mm)	Jaw Width (mm)	Weight each	Order Code SEN-445	Price/1 RND
145 (5¾")	100 (4")	13.5kg	-2040K	839.40
200 (8")	150 (6")	14.0kg	-2060K	1184.50

SENATOR
QUALITY TOOLING

Portable Bench Vice



Lightweight and portable with a swivel base and light duty anvil. Ideal for model makers, DIY and light industrial use. Can be fitted to any convenient work surface. Solid cast grey iron body with steel guide rods and main screw.

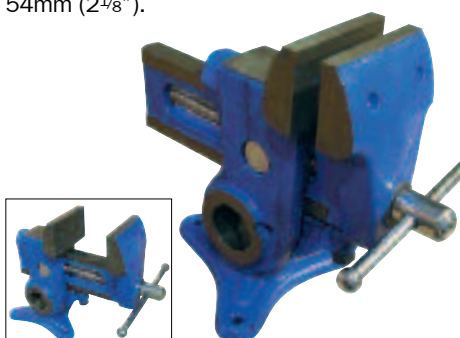


Opening (mm)	Jaw Width	Weight each	Order Code SEN-445	Price/1 RND
70 (2¾")	60	2.8kg	-0600K	187.00

Universal Vice

Can be bench mounted either vertically or horizontally, and on either side. Unique design permits the vice to rotate a full 360° then self-lock when jaws are tightened.

Jaw height:
54mm (2⅛").

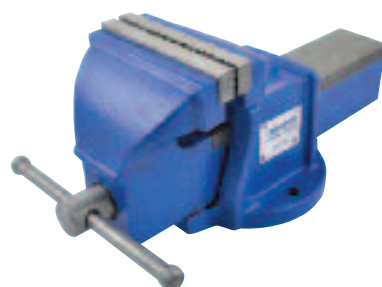


Opening (mm)	Jaw Width	Weight each	Order Code SEN-445	Price/1 RND
125 (5")	90 (3½")	8.2kg	-4050K	472.20

Light Duty Bench Vice

For light workshop, engineering and automotive use. Cast iron body with precision cut screw mechanism. The base bolts directly to the work bench surface for stability.

NEW



Opening (mm)	Jaw Width	Weight each	Order Code SEN-445	Price/1 RND
100 (4")	75 (3")	5.5kg	-0510K	285.50
170 (6½")	125 (5")	11.3kg	-0520K	509.80
190 (7½")	150 (6")	15.3kg	-0530K	600.50

INDEXA Modular Coolant Hose System

Modular coolant hose system is ideal for coolants, fluids and air lines. Suitable for all wet machining, spark erosion and air line operations up to 50PSI air and 30PSI liquid. Flow direction is easily and accurately positioned with no spring-back. All parts are fully interchangeable and fully replaceable if a single section is damaged. Manufactured from acetal - non-conductive and chemical resistant. Available with 1/4", 1/2" and 3/4" bore. Hose is green, all other fittings are orange. Threaded fittings are fully compatible with BSPT.



Starter Packs

Contents	Weight each	Order Code IND-447	Price/1 RND
1/4" Bore			
12" Hose			
4 Nozzles	40g	-6910K	318.90
2 Connectors			
1/2" Bore			
13" Hose			
3 Nozzles	91g	-7910K	399.60
2 Connectors			
3/4" Bore			
14" Hose			
2 Nozzles	126g	-8910K	352.30
1 Connectors			

Tube Segments



Bore Size	Weight each	Order Code IND-447	Price/1 RND
11" Lengths (Green)			
1/4"	40g	-6210K	164.30
1/2"	69g	-7210K	199.60
3/4"	102g	-8210K	235.80
11" Lengths (Blue)			
3/4"	102g	-8230K	158.90
25ft Bulk Pack (Green)			
1/4"	886g	-6250K	3941.70
1/2"	1637g	-7250K	4731.60
3/4"	2381g	-8250K	5677.60

Modular Manifold Kits



Description	Bore Size	Weight each	Order Code IND-447	Price/1 RND
4x T-Pieces,	1/4"	109g	-6450K	314.90
2x Plug,				
1x Bracket,	1/2"	98g	-7450K	378.60
4x Screws				

Modular Coolant Hose System

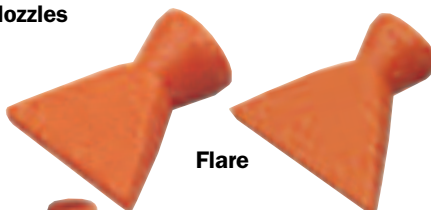
Threaded Spigots

Male Spigot



Bore Size	Inlet Size	Weight each	Order Code IND-447	Price/1 RND
1/4"	1/8" NPT Female	2g	-6710K	43.00
	1/4" NPT Female	2g	-6730K	43.00
1/4"	1/8" NPT Male	2g	-6170K	22.20
	1/4" NPT Male	2g	-6190K	22.20
1/2"	3/8" NPT Male	7g	-7170K	31.40
	1/2" NPT Male	7g	-7190K	31.40
	1/2" NPT Female	7g	-7730K	26.10
3/4"	3/4" NPT Male	10g	-8170K	37.60

Nozzles



Flare

Pointed

Type	Size	Weight each	Order Code IND-447	Price/1 RND
1/4" Bore				
Pointed	1/16"	5g	-6610K	24.90
	1/8"	5g	-6630K	24.90
	3/24"	5g	-6640K	24.90
	1/4"	5g	-6650K	24.90
Flare	1"	5g	-6670K	57.70
1/2" Bore				
Pointed	1/4"	5g	-7610K	31.40
	3/8"	5g	-7630K	31.40
	1/2"	5g	-7650K	31.40
Flare	1 3/4"	5g	-7670K	84.50
	2 1/2"	5g	-7690K	142.20
3/4" Bore				
Pointed	5/8"	10g	-8610K	37.60
	3/4"	10g	-8630K	37.60
Flare	3"	10g	-8650K	173.50

Plastic Valves

1/4 turn fitting.



Bore Size	Inlet Type	Weight each	Order Code IND-447	Price/1 RND
1/4"	In-line	10g	-6050K	113.90
1/2"	In-line	30g	-7050K	126.20

Metal Ball Valves

Threaded fitting 1/4 turn.

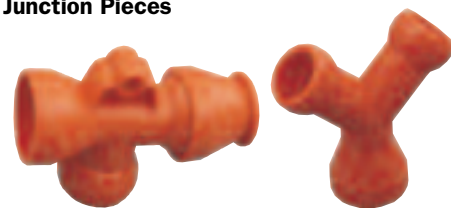


NPT Threads Male x Female	Weight each	Order Code IND-447	Price/1 RND
1/8" x 1/8"	81g	-6070K	113.90
1/4" x 1/4"	80g	-6090K	97.80
3/8" x 3/8"	76g	-7070K	85.50
1/2" x 1/2"	114g	-7090K	126.20
3/4" x 3/4"		-8070K	158.30

COOLANT HOSE

Modular Coolant Hose System

Junction Pieces



L-Piece

Y-Piece

Type	Weight each	Order Code IND-447	Price/1 RND
1/4" Bore			
Y-Piece	3g	-6310K	70.80
T-Piece	3g	-6350K	84.50
L-Piece	4g	-6370K	94.50
1/2" Bore			
Y-Piece	9g	-7310K	84.50
T-Piece	9g	-7350K	101.40
L-Piece	12g	-7370K	111.10

Junction Reducers

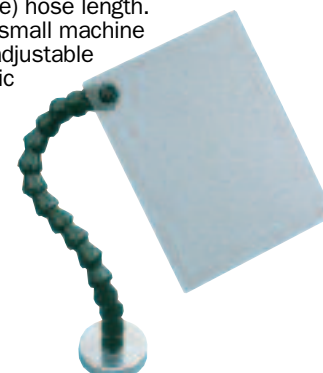


Type	Weight each	Order Code IND-447	Price/1 RND
1/2" Bore			
1/2" to 2 x 1/4"	4g	-7330K	101.40
1/2" to 1/4"	3g	-7510K	62.50
3/4" Bore			
3/4" to 1/2"	5g	-8510K	72.90

INDEXA

Quick Set Machine Shields

14" (3/4" bore) hose length. Suitable for small machine tools. Fully adjustable with magnetic base.



Visor Size	Weight each	Order Code IND-447	Price/1 RND
6" x 8"	500g	-0250K	1041.60
7 1/2" x 10"	570g	-0260K	1166.90

Quick Action Assembly Pliers

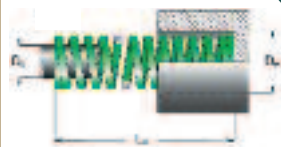


Bore Size	Order Code IND-447	Price/1 RND
1/4"	-0010K	599.10
1/2"	-0020K	599.10



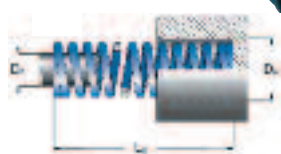
The heat and surface treatment plus the high quality of steel used in the manufacturing process ensure the springs will bear a high number of stresses without breaking or without appreciable loss of load. Every batch of springs is subject to a rigorous testing procedure to ensure that a consistent quality is maintained. Longer springs should be guided along their course.

Light Load Springs
Colour-Coded Green



Product Number	Diameter DH	Dd	L ₀ (mm)	Rigidity (N/mm)	Weight each	Order Code IND-460	Price/1 RND
V10 x 25	10	4.5	25	10	4g	-8000A	7.10
V10 x 32	10	4.5	32	8.5	6g	-8001B	18.50
V10 x 38	10	4.5	38	6.8	7g	-8002C	19.30
V10 x 44	10	4.5	44	6.0	7g	-8003D	19.70
V10 x 51	10	4.5	51	5.0	8g	-8004E	20.60
V10 x 64	10	4.5	64	4.3	10g	-8005F	23.40
V10 x 76	10	4.5	76	3.2	11g	-8006G	24.70
V10 x 305	10	4.5	305	1.1	45g	-8007H	89.00
V13 x 25	13	7.0	25	17.9	6g	-8108J	7.80
V13 x 32	13	7.0	32	16.4	7g	-8109K	8.30
V13 x 38	13	7.0	38	13.6	9g	-8110L	23.40
V13 x 44	13	7.0	44	12.1	11g	-8111M	24.70
V13 x 51	13	7.0	51	11.4	12g	-8112N	11.20
V13 x 64	13	7.0	64	9.3	14g	-8113P	32.00
V13 x 76	13	7.0	76	7.1	16g	-8114Q	34.10
V13 x 305	13	7.0	305	1.4	63g	-8115R	95.10
V16 x 25	16	8.0	25	23.4	9g	-8216S	23.40
V16 x 32	16	8.0	32	22.9	11g	-8217T	24.70
V16 x 38	16	8.0	38	19.3	13g	-8218V	27.20
V16 x 44	16	8.0	44	17.1	17g	-8219W	28.80
V16 x 51	16	8.0	51	15.7	18g	-8220X	30.80
V16 x 64	16	8.0	64	10.7	22g	-8221Y	35.30
V16 x 76	16	8.0	76	10.0	26g	-8222Z	37.70
V16 x 102	16	8.0	102	7.8	35g	-8224B	44.30
V20 x 25	20	10.0	25	55.8	15g	-8326D	13.50
V20 x 32	20	10.0	32	45.0	20g	-8327E	27.20
V20 x 38	20	10.0	38	33.30	22g	-8328F	28.80
V20 x 44	20	10.0	44	30.0	28g	-8329G	18.10
V20 x 51	20	10.0	51	24.5	31g	-8330H	32.00
V20 x 64	20	10.0	64	20.0	40g	-8331J	22.20
V20 x 76	20	10.0	76	16.0	47g	-8332K	41.40
V20 x 89	20	10.0	89	14.0	54g	-8333L	32.40
V20 x 102	20	10.0	102	12.0	110g	-8334M	50.10
V20 x 115	20	10.0	115	10.9	123g	-8335N	56.60
V20 x 127	20	10.0	127	9.5	135g	-8336P	59.40
V20 x 152	20	10.0	152	7.5	90g	-8338R	66.00
V25 x 25	26	12.5	25	100.0	27g	-8440T	14.40
V25 x 32	26	12.5	32	80.3	35g	-8441V	31.60
V25 x 38	26	12.5	38	62.0	44g	-8442W	36.10
V25 x 51	26	12.5	51	44.0	57g	-8444Y	44.80
V25 x 64	26	12.5	64	35.2	71g	-8445Z	49.20
V25 x 76	26	12.5	76	28.0	87g	-8446A	56.20
V25 x 89	26	12.5	89	29.0	96g	-8447B	66.50
V25 x 102	26	12.5	102	21.1	110g	-8448C	73.40
V25 x 115	26	12.5	115	18.7	125g	-8449D	81.20
V25 x 127	26	12.5	127	16.7	135g	-8450E	89.00
V25 x 152	26	12.5	152	14.0	165g	-8452G	106.60
V25 x 203	26	12.5	203	10.4	215g	-8454J	128.40
V32 x 38	32	16.0	38	94.0	60g	-8557M	45.90
V32 x 76	32	16.0	76	44.0	132g	-8561R	69.70
V32 x 102	32	16.0	102	32.0	173g	-8563T	90.20
V32 x 115	32	16.0	115	29.0	190g	-8564V	101.70
V32 x 127	32	16.0	127	25.0	215g	-8565W	115.20
V32 x 152	32	16.0	152	21.5	262g	-8567Y	133.20
V32 x 178	32	16.0	178	18.2	300g	-8568Z	151.70
V32 x 203	32	16.0	203	1.40	350g	-8569K	170.60
V40 x 64	40	20.0	64	73.0	165g	-8673E	105.00
V40 x 76	40	20.0	76	63.0	188g	-8674F	91.40
V40 x 102	40	20.0	102	43.0	247g	-8676H	125.10
V50 x 64	50	25.0	64	156.0	305g	-8785S	51.70
V50 x 76	50	25.0	76	125.0	450g	-8786T	213.60
V50 x 102	50	25.0	102	94.0	470g	-8788W	188.20
V50 x 115	50	25.0	115	81.0	590g	-8789X	208.30

Medium Load Springs
Colour-Coded Blue



Product Number	Diameter DH	Dd	L ₀ (mm)	Rigidity (N/mm)	Weight each	Order Code IND-460	Price/1 RND
B10 x 25	10	4.5	25	16.0	3g	-6000A	18.50
B10 x 32	10	4.5	32	13.0	4g	-6001B	19.70
B10 x 38	10	5.0	44	11.9	4g	-6002C	11.70
B10 x 44	10	4.5	44	10.3	5g	-6003D	23.40
B10 x 51	10	4.5	51	8.9	7g	-6004E	24.70
B10 x 64	10	4.5	64	7.5	9g	-6005F	28.80
B10 x 76	10	4.5	76	5.3	11g	-6006G	30.80
B10 x 305	10	4.5	305	1.6	45g	-6007H	125.10
B13 x 25	13	7.0	25	30.0	6g	-6108J	21.30
B13 x 32	13	7.0	32	24.8	8g	-6109K	23.40
B13 x 38	13	7.0	38	21.4	10g	-6110L	24.70
B13 x 44	13	7.0	44	18.5	12g	-6111M	27.20
B13 x 51	13	7.0	51	15.5	13g	-6112N	28.80
B13 x 64	13	7.0	64	12.1	15g	-6113P	34.10
B13 x 76	13	7.0	76	10.2	17g	-6114Q	37.00
B13 x 305	13	7.0	305	2.1	73g	-6115R	131.60
B16 x 25	16	8.0	25	49.4	12g	-6216S	11.90
B16 x 32	16	8.0	32	37.1	14g	-6217T	20.10
B16 x 38	16	8.0	38	33.9	15g	-6218V	30.80
B16 x 44	16	8.0	44	30.0	19g	-6219W	32.00
B16 x 51	16	8.0	51	26.4	21g	-6220X	34.10
B16 x 64	16	8.0	64	20.5	27g	-6221Y	38.60
B16 x 76	16	8.0	76	17.8	33g	-6222Z	41.40
B16 x 102	16	8.0	102	13.5	43g	-6224B	48.40
B20 x 25	20	10.0	25	98.0	19g	-6326D	28.30
B20 x 32	20	10.0	32	72.6	23g	-6327E	16.50
B20 x 38	20	10.0	38	56.0	26g	-6328F	33.20
B20 x 44	20	10.0	44	47.5	32g	-6329G	35.30
B20 x 51	20	10.0	51	41.7	35g	-6330H	23.10
B20 x 64	20	10.0	64	32.3	46g	-6331J	43.10
B20 x 76	20	10.0	76	25.1	55g	-6332K	30.80
B20 x 89	20	10.0	89	22.0	61g	-6333L	52.10
B20 x 102	20	10.0	102	19.8	68g	-6334M	56.20
B20 x 127	20	10.0	127	16.6	85g	-6336P	68.50
B20x152	20	10.0	152	1.30	103g	-6338R	81.20
B25 x 25	26	12.5	25	147.0	33g	-6440T	18.90
B25 x 32	26	12.5	32	118.0	42g	-6441V	34.10
B25 x 38	26	12.5	38	93.0	48g	-6442W	38.60
B25 x 44	26	12.5	44	80.8	56g	-6443X	43.10
B25 x 51	26	12.5	51	68.6	65g	-6444Y	26.70
B25 x 64	26	12.5	64	53.0	90g	-6445Z	37.00
B25 x 76	26	12.5	76	43.2	96g	-6446A	35.70
B25 x 89	26	12.5	89	38.2	118g	-6447B	68.50
B25 x 102	26	12.5	102	33.0	131g	-6448C	76.30
B25 x 152	26	12.5	152	20.8	190g	-6452G	109.90
B32 x 38	32	16.0	38	185.0	80g	-6557M	50.50
B32 x 44	32	16.0	44	158.0	90g	-6558N	57.10
B32 x 51	32	16.0	51	134.0	100g	-6559P	35.30
B32 x 64	32	16.0	64	99.0	130g	-6560Q	48.00
B32 x 76	32	16.0	76	80.5	152g	-6561R	75.90
B32 x 102	32	16.0	102	58.8	203g	-6563T	96.40
B32 x 115	32	16.0	115	51.5	223g	-6564V	113.60
B32 x 127	32	16.0	127	44.8	252g	-6565W	128.40
B32 x 152	32	16.0	152	37.8	292g	-6567Y	146.80
B32 x 178	32	16.0	178	32.5	320g	-6568Z	166.00
B40 x 51	40	20.0	51	181.6	157g	-6672D	72.60
B40 x 64	40	20.0	64	140.0	194g	-6673E	87.00
B40 x 89	40	20.0	89	90.7	265g	-6675G	118.50
B40 x 102	40	20.0	102	81.0	300g	-6676H	132.50
B50 x 64	51	25.0	65	209.0	340g	-6785S	151.70
B50 x 76	51	25.0	76	168.0	395g	-6786T	170.60

INDEXA Die Springs

EXTENDED RANGE



The heat and surface treatment plus the high quality of steel used in the manufacturing process ensure the springs will bear a high number of stresses without breaking or without appreciable loss of load. Every batch of springs is subject to a rigorous testing procedure to ensure that a consistent quality is maintained. Longer springs should be guided along their course.

Heavy-Load Springs
Colour Coded Red



Extra Heavy-Load Springs
Colour Coded Yellow



Product Number	Diameter D _H	D _d	L ₀ (mm)	Rigidity (N/mm)	Weight each	Order Code IND-460	Price/1 RND
R10 x 25	10	4.5	25	22.10	4g	-1000A	19.70
R10 x 32	10	4.5	32	17.50	5g	-1001B	9.90
R10 x 38	10	4.5	38	17.10	6g	-1002C	23.40
R10 x 44	10	5.0	180	15.00	8g	-1003D	13.30
R10 x 51	10	4.5	51	12.80	8g	-1004E	27.20
R10 x 64	10	4.5	64	10.7	11g	-1005F	32.00
R13 x 25	13	7.0	25	42.1	12g	-1108J	24.70
R13 x 38	13	7.0	38	29.3	13g	-1110L	28.80
R13 x 44	13	7.0	44	24.6	15g	-1111M	30.80
R13 x 51	13	7.0	51	19.6	17g	-1112N	31.60
R13 x 64	13	7.0	64	15.0	21g	-1113P	37.00
R13 x 76	13	7.0	76	13.2	24g	-1114Q	40.20
R16 x 25	16	8.0	25	75.7	12g	-1216S	21.80
R16 x 32	16	8.0	32	52.8	14g	-1217T	31.60
R16 x 38	16	8.0	38	48.5	17g	-1218V	34.10
R16 x 44	16	8.0	44	42.8	20g	-1219W	35.30
R16 x 51	16	8.0	51	37.1	23g	-1220X	25.90
R16 x 64	16	8.0	64	30.3	27g	-1221Y	41.80
R16 x 76	16	8.0	76	25.7	34g	-1222Z	45.20
R20 x 25	20	10.0	25	216.0	20g	-1326D	32.00
R20 x 32	20	10.0	32	168.0	28g	-1327E	18.50
R20 x 38	20	10.0	38	129.0	32g	-1328F	38.60
R20 x 44	20	10.0	44	112.0	38g	-1329G	41.80
R20 x 51	20	10.0	51	94.0	44g	-1330H	45.20
R20 x 64	20	10.0	64	72.1	54g	-1331J	29.10
R20 x 76	20	10.0	76	59.7	63g	-1332K	55.30
R20 x 89	20	10.0	89	50.5	75g	-1333L	64.40
R20 x 102	20	10.0	102	44.2	88g	-1334M	71.00
R20 x 127	20	10.0	127	34.1	107g	-1336P	86.10
R25 x 32	26	12.5	32	297.0	48g	-1441V	22.20
R25 x 38	26	12.5	38	219.0	56g	-1442W	46.40
R25 x 44	26	12.5	44	187.0	57g	-1443X	52.10
R25 x 51	26	12.5	51	156.0	63g	-1444Y	56.60
R25 x 64	26	12.5	64	123.0	85g	-1445Z	61.90
R25 x 76	26	12.5	76	99.0	110g	-1446A	68.50
R25 x 89	26	12.5	89	84.0	139g	-1447B	46.80
R25 x 102	26	12.5	102	73.0	144g	-1448C	84.10
R25 x 115	26	12.5	115	65.0	168g	-1449D	95.10
R25 x 127	26	12.5	127	57.7	182g	-1450E	106.60
R25 x 152	26	12.5	152	47.8	222g	-1452G	127.20
R25 x 178	26	12.5	178	41.0	256g	-1453H	145.50
R32 x 38	32	16.0	38	388.0	93g	-1557M	36.10
R32 x 44	32	16.0	44	324.0	105g	-1558N	67.20
R32 x 51	32	16.0	51	272.0	117g	-1559P	41.80
R32 x 64	32	16.0	64	212.0	148g	-1560Q	81.60
R32 x 76	32	16.0	76	172.0	178g	-1561R	93.50
R32 x 89	32	16.0	89	141.0	204g	-1562S	106.60
R32 x 102	32	16.0	102	122.0	230g	-1563T	118.10
R32 x 152	32	16.0	152	78.0	380g	-1567Y	179.50
R32 x 178	32	16.0	178	67.2	410g	-1568Z	205.40
R40 x 51	40	20.0	51	350.0	181g	-1672D	87.00
R40 x 64	40	20.0	64	269.0	220g	-1673E	103.00
R40 x 76	40	20.0	76	219.0	261g	-1674F	120.10
R40 x 89	40	20.0	89	190.0	315g	-1675G	143.90
R40 x 102	40	20.0	102	163.0	341g	-1676H	166.00
R40 x 127	40	20.0	127	128.0	420g	-1678K	214.00
R40 x 152	40	20.0	152	105.0	500g	-1680M	239.80
R50 x 64	51	25.0	64	413.0	416g	-1785S	170.60
R50 x 76	51	25.0	76	339.0	438g	-1786T	195.50

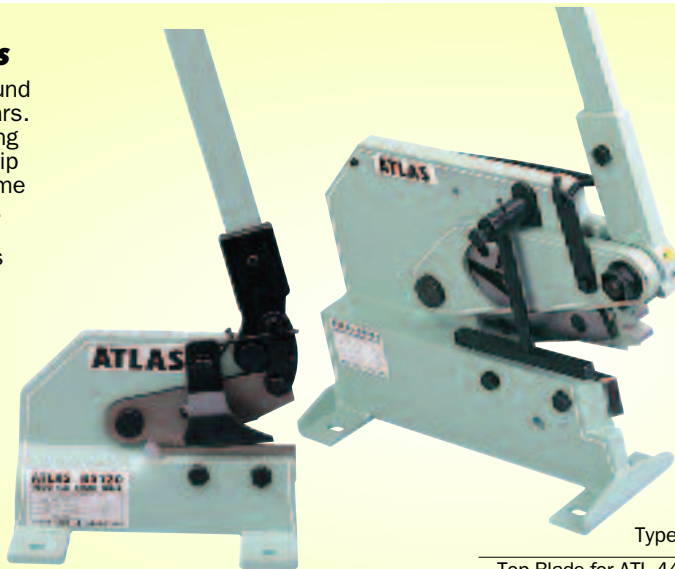
Product Number	Diameter D _H	D _d	L ₀ (mm)	Rigidity (N/mm)	Weight each	Order Code IND-460	Price/1 RND
G10 x 25	10	4.5	25	36.8	5g	-3000A	23.40
G10 x 32	10	4.5	32	27.9	7g	-3001B	26.30
G10 x 38	10	4.5	38	23.7	8g	-3002C	28.80
G10 x 44	10	4.5	44	19.2	9g	-3003D	31.20
G10 x 51	10	4.5	51	16.5	10g	-3004E	34.10
G10 x 64	10	5.0	64	13.2	11g	-3005F	17.90
G13 x 25	13	7.0	25	58.5	11g	-3108J	10.70
G13 x 32	13	7.0	32	43.9	11g	-3109K	31.20
G13 x 38	13	7.0	38	3.70	13g	-3110L	34.10
G13 x 44	13	7.0	44	30.3	15g	-3111M	14.00
G13 x 51	13	7.0	51	26.2	80g	-3112N	38.60
G13 x 64	13	7.0	64	21.2	22g	-3113P	44.30
G16 x 32	16	8.0	32	89.0	17g	-3217T	36.10
G16 x 38	16	8.0	38	72.1	22g	-3218V	38.60
G16 x 44	16	8.0	44	60.9	25g	-3219W	41.40
G16 x 51	16	8.0	51	52.3	29g	-3220X	44.30
G16 x 64	16	8.0	64	41.2	36g	-3221Y	48.40
G16 x 76	16	8.0	76	34.1	42g	-3222Z	50.10
G20 x 25	20	10.0	25	293.0	23g	-3326D	40.20
G20 x 32	20	10.0	32	224.0	28g	-3327E	44.30
G20 x 38	20	10.0	38	177.0	33g	-3328F	46.40
G20 x 44	20	10.0	44	149.0	39g	-3329G	49.20
G20 x 51	20	10.0	51	128.0	45g	-3330H	26.70
G20 x 64	20	10.0	64	99.0	56g	-3331J	57.80
G20 x 76	20	10.0	76	81.7	64g	-3332K	39.50
G20 x 89	20	10.0	89	69.5	73g	-3333L	71.30
G20 x 102	20	10.0	102	60.6	86g	-3334M	77.90
G25 x 32	26	12.5	32	374.4	48g	-3441V	23.80
G25 x 38	26	12.5	38	346.0	60g	-3442W	53.70
G25 x 44	26	12.5	44	244.0	70g	-3443X	28.30
G25 x 51	26	12.5	51	207.5	80g	-3444Y	64.40
G25 x 64	26	12.5	64	161.0	99g	-3445Z	70.10
G25 x 76	26	12.5	76	130.8	114g	-3446A	76.30
G25 x 89	26	12.5	89	110.5	134g	-3447B	50.10
G25 x 102	26	12.5	102	96.3	151g	-3448C	95.10
G25 x 115	25	12.5	115	85.7	174g	-3449D	105.80
G25 x 127	26	12.5	127	76.3	190g	-3450E	114.40
G32 x 38	32	16.0	38	528.2	98g	-3557M	71.80
G32 x 44	32	16.0	44	424.4	115g	-3558N	40.20
G32 x 51	32	16.0	51	353.0	131g	-3559P	84.10
G32 x 64	32	16.0	64	269.2	163g	-3560Q	93.50
G32 x 76	32	16.0	76	218.5	200g	-3561R	106.60
G32 x 89	32	16.0	89	180.3	226g	-3562S	121.00
G32 x 102	32	16.0	102	155.0	252g	-3563T	133.20
G32 x 140	32	16.0	140	112.3	350g	-3566X	185.30
G32 x 152	32	16.0	152	102.0	380g	-3567Y	199.60
G40 x 51	40	20.0	51	628.0	190g	-3672D	69.30
G40 x 64	40	20.0	64	487.0	238g	-3673E	115.20
G40 x 76	40	20.0	76	379.0	275g	-3674F	98.00
G40 x 89	40	20.0	89	321.0	330g	-3675G	168.10
G50 x 64	50	25.0	64	709.0	410g	-3785S	202.10
G50 x 89	51	25.0	89	475.0	593g	-3787V	144.30

PRODUCTS ARE ONLY AVAILABLE VIA YOUR DISTRIBUTOR

ATLAS
WORKHOLDERS

Bench Shears

Hand operated, compound lever action bench shears. Capable of rapidly cutting through metal plate, strip and bar. Solid steel frame for rigidity and strength. With hardened and precision ground blades for accurate cutting. Adjustable blade guard.



Model Number	Plate	Maximum Strip	Bar	Jaw Width	Weight each	Order Code	Price/1 RND
BS120	4mm	5 x 70	10	120	8.3kg	-1200K	2523.00
BS200	6mm	7 x 70	13	200	19.0kg	-2000K	3884.30
BS406	8mm	10 x 100	16	200	43.0kg	-3000K	8779.90

Type	Weight each	Order Code	Price/1 RND
Top Blade for ATL-448-1200K Shear	445g	-3100K	507.50
Bottom Blade for ATL-448-1200K Shear	250g	-3110K	298.50
Top Blade for ATL-448-2000K Shear	1.4kg	-3150K	1539.90
Bottom Blade for ATL-448-2000K Shear	790g	-3160K	779.40
Top Blade for ATL-448-3000K Shear	430g	-3200K	634.80
Bottom Blade for ATL-448-3000K Shear	220g	-3210K	828.20

JHL

Single Knurl Toolholder

Machine ground high grade steel, black mottle finish. Fitted as standard with medium pitch straight hand knurl. Right, left and checkered also available separately, see table below. For use with knurl size $\frac{3}{4}$ " x $\frac{1}{4}$ " x $\frac{1}{4}$ ".



Size	Knurls Fitted	Weight each	Order Code	Price/1 RND
1/2" x 1/2" x 4"	-1510B	140g	-8050F	1120.80

3/4" x 1/4" x 1/4" Knurls to suit Toolholder above					
Style	Weight each	Order Code JHL-450			Price/1 RND
		Coarse	Medium	Fine	
Straight	10g	-1500A	-1510B	-1520C	278.40
Right Hand	10g	-1600A	-1610B	-1620C	298.60
Left Hand	10g	-1700A	-1710B	-1720C	298.60
Checkered	10g	-1800A	-1810B	-1820C	298.60

Six Knurl Toolholder

Machine ground high grade steel, black mottle finish. Revolving head. For use with knurl size $\frac{3}{4}$ " x $\frac{3}{8}$ " x $\frac{1}{4}$ ".



Size	Knurls Fitted	Weight each	Order Code	Price/1 RND
$\frac{1}{2}$ " x $\frac{1}{8}$ " x $\frac{1}{4}$ "	-1110B & -1210B	640g	-8000A	3433.90

Two Knurl Toolholder

Machine ground high grade steel, black mottle finish. Self-adjusting head. For use with knurl size $\frac{3}{4}$ " x $\frac{3}{8}$ " x $\frac{1}{4}$ ".



Size	Knurls Fitted	Weight each	Order Code	Price/1 RND
$\frac{1}{2}$ " x $\frac{7}{8}$ " x $\frac{1}{4}$ "	-1110B & -1210B	290g	-8020C	3433.90

3/4" x 3/8" x 1/4" Knurls to suit Toolholders above					Price/1 RND
Style	Weight each	Order Code JHL-450			
		Coarse	Medium	Fine	
Straight	10g	-1000A	-1010B	-1020C	311.20
Right Hand	10g	-1100A	-1110B	-1120C	311.20
Left Hand	10g	-1200A	-1210B	-1220C	311.20
Checkered	10g	-1300A	-1310B	-1320C	370.20

Two Knurl Toolholder

Side knurling up to a face or shoulder. For use with knurl size 25 x 10 x 16mm.



Size	Knurls Fitted	Weight each	Order Code	Price/1 RND
20 x 25 x 85mm	-3110B & -3210B	900g	-8040E	3433.90

25 x 10 x 16mm Knurls to suit Toolholder above

Style	Weight each	Order Code JHL-450			Price/1 RND
		Coarse	Medium	Fine	
Straight	10g	-3000A	-3010B	-3020C	597.00
Right Hand	10g	-3100A	-3110B	-3120C	597.00
Left Hand	10g	-3200A	-3210B	-3220C	597.00

Two Knurl Toolholder

Machine ground high grade steel, black mottle finish. Self-adjusting head. For use with knurl size $\frac{5}{8}$ " x $\frac{5}{16}$ " x $\frac{7}{32}$ ".



Size	Knurls Fitted	Weight each	Order Code	Price/1 RND
$\frac{3}{8}$ " x $\frac{7}{8}$ " x $\frac{1}{2}$ "	Supplied separately	390g	-8030D	2111.00

$\frac{5}{8}$ " x $\frac{5}{16}$ " x $\frac{7}{32}$ " Knurls to suit Toolholder above

Style	Weight each	Order Code JHL-450			Price/1 RND
		Coarse	Medium	Fine	
Straight	10g	-2000A	-2010B	-2020C	298.60
Right Hand	10g	-2100A	-2110B	-2120C	298.60
Left Hand	10g	-2200A	-2210B	-2220C	298.60
Checkered	10g	-2300A	-2310B	-2320C	625.40

Six Knurl Toolholder

Machine ground high grade steel, black mottle finish. Revolving head. For use with knurl size $\frac{5}{8}$ " x $\frac{3}{16}$ " x $\frac{1}{4}$ ".



Size	Knurls Fitted	Weight each	Order Code	Price/1 RND
$\frac{1}{2}$ " x $\frac{7}{8}$ " x $\frac{1}{4}$ "	-2610B & -2710B	930g	-8010B	3433.90

5/8" x 3/16" x 1/4"		Knurls to suit Toolholder above			
Style	Weight each	Order Code JHL-450			Price/1 RND
		Coarse	Medium	Fine	
Straight	10g	-2500A	-2510B	-2520C	248.70
Right Hand	10g	-2600A	-2610B	-2620C	358.30
Left Hand	10g	-2700A	-2710B	-2720C	358.30
Checkered	10g	-2800A	-2810B	-	311.20

INDEXA Self-Centring Geared Scroll Lathe Chucks

EXTENDED RANGE



Universal. Scrolls are forged, balanced and hardened. Thread flanks are ground on both sides. All models have grease nipples for easy lubrication and are supplied with two sets of solid jaws - internal and external stepped.

Cast Iron 3 Jaw Plain Back Chuck

DIN 6350 (form A).

Three jaw plain back with adaptor recess.

Model 003-204

Rear mounting.

Model 003-274

Front mounting.



Chuck Size (mm)	Through Hole	Weight each	Order Code IND-475		Price/1 RND
			003-204 Rear Mount	003-274 Front Mount	
80	16	1.51kg	-1010K	-	3376.60
80	18	1.70kg	-	-1220K	3438.80
100	20	2.98kg	-1030K	-1230K	2494.50
125	32	4.84kg	-1040K	-1240K	2995.80
160	42	9.78kg	-1060K	-1260K	3651.30
200	55	16.0kg	-1070K	-1270K	4319.10
250	76	27.9kg	-1080K	-1280K	6821.40
315	103	47.5kg	-1090K	-1290K	11827.50

Cast Iron 3 Jaw Plain Back Chuck

DIN 6350 (form A).

Three jaw plain back with adaptor recess.

Model 003-275

Front mounting, reversible jaws.

EXTENDED RANGE



Chuck Size (mm)	Through Hole	Weight each	Order Code IND-475	Price/1 RND
125	32	5.0kg	-1450K	3224.50
160	42	10.8kg	-1460K	6158.20
200	55	17.5kg	-1470K	8232.70
250	76	29.2kg	-1480K	6766.50
315	103	50.0kg	-1490K	10475.30

Steel 3 Jaw Plain Back Chuck

DIN 6350 (form A).

Three jaw plain back with adaptor recess.

Model 003-504

Rear mounting.

NEW



Chuck Size (mm)	Through Hole	Weight each	Order Code IND-475	Price/1 RND
100	20	3.0kg	-1630K	3823.00
125	35	5.0kg	-1640K	5441.70
160	42	8.5kg	-1660K	5938.10
200	55	16.0kg	-1670K	7770.10
250	76	32.0kg	-1680K	10516.00
315	103	50.0kg	-1690K	15780.80

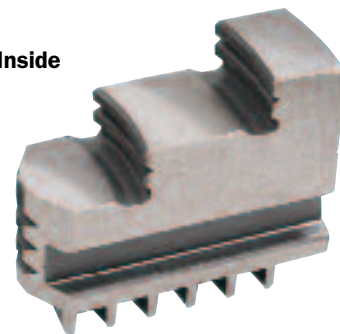
Lathe Chuck Jaws For Self-Centring Lathe Chucks

For self-centring lathe chucks (IND-475) - Indexa 3200 and 3500. Chuck jaws supplied in sets of three.

Hard Jaws

Inside

Fig.2



Size (mm)	Dimensions (mm)								Order Code IND-490	Price/1 RND
	A	B	C	D	E	F	G	H		
100	42	15	32	6	6	7	11	27	-1020K	714.80
125	51	20	40	8	8	8	13	33.5	-1030K	2202.70
160	70	20	53	8	8	10	19	45	-1050K	2527.50
200	85	25	54	9	10	12	23	57	-1060K	2791.20
250	105	28	63	11	12	14	28	69.5	-1070K	3667.40
315	125	32	73	12.7	12	18	34.5	83	-1080K	3700.60

Lathe Chuck Keys

Supplied as standard with all Indexa lathe chucks manufactured from high quality steel, ground finish body, sliding T-bar and spring return fitted to square drive. Suitable for use with all other makes of square drive adjusting lathe chucks.



Square (AF) Size (mm)	Use With Chucks	Weight each	Order Code IND-490	Price/1 RND
11	160/200	347g	-5930K	414.90
14	250/315	756g	-5950K	482.40

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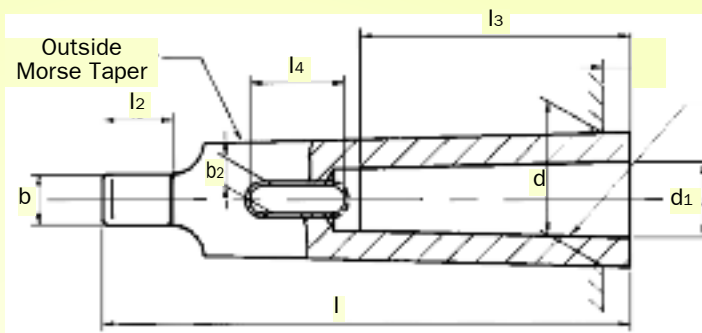
GROUP 482 MORSE TAPER SLEEVES

KENNEDY Morse Taper Tooling

A range of quality traditional workholding equipment. Manufactured from high quality steel and case hardened all over. All sleeves and sockets are fully hardened and ground internally and externally.

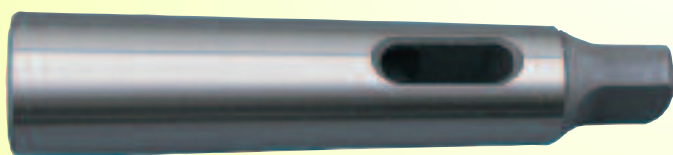
ISO 238 BS 1660 : 2.

Morse Taper Sleeve Data



MT		l	d	b	l2	d1	l3	l4	b2
Inside	Outside								
1	2	92.00	17.780	6.350	11.112	12.065	52.388	19.050	5.410
1	3	99.00	23.825	7.938	14.288	12.065	52.388	19.050	5.410
2	3	112.00	23.825	7.938	14.288	17.780	63.500	22.225	6.604
1	4	124.00	31.267	11.906	15.875	12.065	52.388	19.050	5.410
2	4	124.00	31.267	11.906	15.875	17.780	63.500	22.225	6.604
3	4	140.00	31.267	11.906	15.875	23.825	77.788	30.162	8.179
1	5	156.00	44.399	15.875	19.050	12.065	52.388	19.050	5.410
2	5	156.00	44.399	15.875	19.050	17.780	63.500	22.225	6.604
3	5	156.00	44.399	15.875	19.050	23.825	77.788	30.162	8.179
4	5	171.00	44.399	15.875	19.050	31.267	98.425	31.750	12.141
1	6	218.00	63.348	19.050	28.575	12.065	52.388	19.050	5.410
2	6	218.00	63.348	19.050	28.575	17.780	63.500	22.225	6.604
3	6	218.00	63.348	19.050	28.575	23.825	77.788	30.162	8.179
4	6	218.00	63.348	19.050	28.575	31.267	98.425	31.750	12.141
5	6	218.00	63.348	19.050	28.575	44.399	125.412	38.100	16.129

Drill Sleeves



Taper Inside x Outside	Length (mm)	Weight each	Order Code KEN-482	Price/1 RND
1 x 2 MT	95	110g	-2120K	80.40
1 x 3 MT	97	220g	-2130K	119.90
1 x 4 MT	120	560g	-2140K	182.70
1 x 5 MT	152	1500g	-2150K	307.80
2 x 3 MT	110	200g	-2230K	119.90
2 x 4 MT	123	490g	-2240K	182.70
2 x 5 MT	155	1500g	-2250K	307.80
3 x 4 MT	140	430g	-2340K	182.70
3 x 5 MT	155	1200g	-2350K	307.80
4 x 5 MT	170	1100g	-2450K	307.80
4 x 6 MT	215	3600g	-2460K	732.80
5 x 6 MT	225	2800g	-2560K	732.80

Drill Drifts

To release Morse Taper Tooling without damaging machine socket or tools.



To Release Morse Taper	Weight each	Order Code KEN-482	Price/1 RND
0	40g	-9500K	35.00
1 & 2	80g	-9520K	38.90
3	220g	-9530K	43.50
3 & 5	380g	-9540K	66.90
5 & 6	760g	-9560K	115.20

Extension Sockets



Taper Inside x Outside	Length (mm)	Weight each	Order Code KEN-482	Price/1 RND
1 x 1 MT	145	275g	-4110K	209.70
1 x 2 MT	160	290g	-4120K	224.50
2 x 1 MT	175	300g	-4210K	209.70
2 x 2 MT	175	390g	-4220K	224.50
2 x 3 MT	194	710g	-4230K	251.30
3 x 2 MT	194	620g	-4320K	335.20
3 x 3 MT	230	750g	-4330K	335.20
3 x 4 MT	255	1400g	-4340K	461.90
4 x 3 MT	255	1500g	-4430K	523.10
4 x 5 MT	300	3000g	-4450K	845.00
5 x 4 MT	300	2500g	-4540K	1103.20

Drill Sleeve & Drift Set

Set of three drill sleeves 1 - 2, 2 - 3, 3 - 4 MT. Fully hardened and ground inside and out. Two drill drifts to release 1 - 2 and 3 - 4 MT.

**5
PIECES**



No. of Pieces	Weight Set	Order Code KEN-482	Price/1 RND
5	995g	-9900K	679.90



Standard Duty Revolving Centres

Manufactured from high alloy steel hardened and tempered then precision ground externally. Precision bearings are fitted as standard and the centres have a 60° point. Mounting Tapers are accurate to **DIN228** Form A, Tolerance Class AT5.

Maximum runout:
No.1 to 4 taper: 0.005mm.
No.5 to 6 taper: 0.010mm.

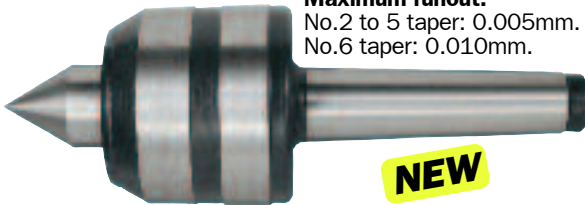


Morse Taper	Max rpm	Radial Load (rpm)		Axial Load (rpm)		Weight each	Order Code	Price/1 RND
		@100 (kgf)	@max (kgf)	@100 (kgf)	@3000 (kgf)		KEN-488	
No.1	7000	80	32	250	50	0.37kg	-1010K	1081.10
No.2	7000	200	55	275	60	0.43kg	-1020K	1667.80
No.3	6000	300	70	400	70	0.67kg	-1030K	1765.80
No.4	5000	600	75	500	125	1.23kg	-1040K	2436.70
No.5	4000	800	280	570	230	3.00kg	-1050K	3455.20

Heavy Duty Revolving Centres

Manufactured from high alloy steel, heat treated and precision ground. Fitted with heavy duty precision taper roller and thrust bearings to support both radial and axial loads. The 60° point is ground after assembly for absolute concentricity. Designed for heavy load and high production applications where durability is the main criteria. Mounting Tapers are accurate to **DIN228** Form A, Tolerance Class AT5.

Maximum runout:
No.2 to 5 taper: 0.005mm.
No.6 taper: 0.010mm.



NEW

Morse Taper	Max rpm	Radial Load (rpm)		Axial Load (rpm)		Weight each	Order Code	Price/1 RND
		@100 (kgf)	@max (kgf)	@100 (kgf)	@3000 (kgf)		IND-488	
No.1	5000	35	10	190	50	0.25kg	-2010K	1620.00
No.2	5000	85	20	350	100	0.35kg	-2020K	1829.60
No.3	4000	175	50	700	200	0.92kg	-2030K	1941.90
No.4	3000	350	125	700	200	1.45kg	-2040K	2700.00
No.5	2500	800	350	1200	500 ⁽¹⁾	3.55kg	-2050K	4212.00
No.6	2000	1250	600	3000	1000 ⁽²⁾	11.40kg	-2060K	4428.00
No.7	1000	3500	2000	4500	1800 ⁽³⁾	22.80kg	-2070K	4628.90

⁽¹⁾@2500rpm; ⁽²⁾@2000rpm; ⁽³⁾1000rpm

Industrial Solid Centres

Manufactured from high quality tool steel, hardened and ground with 60° point and spanner flats as standard. Mounting Tapers are accurate to **DIN228** Form A, Tolerance Class AT5.



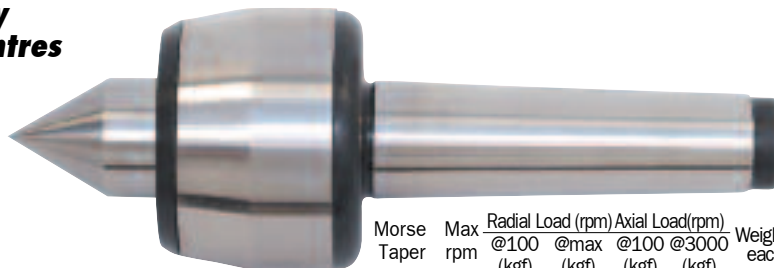
Morse Taper	Diameter (mm)	Across Flats	Length (mm)	Weight each	Order Code	Price/1 RND
					KEN-487	
No.1	12.20	10	78	60g	-1010K	90.20
No.2	18.00	13	90	200g	-1020K	86.10
No.3	24.10	19	138	300g	-1030K	119.50
No.4	31.60	24	138	450g	-1040K	400.10



Standard Duty Revolving Centres

Manufactured from high alloy steel hardened and tempered then precision ground externally. Precision bearings are fitted as standard and the centres have a 60° point.

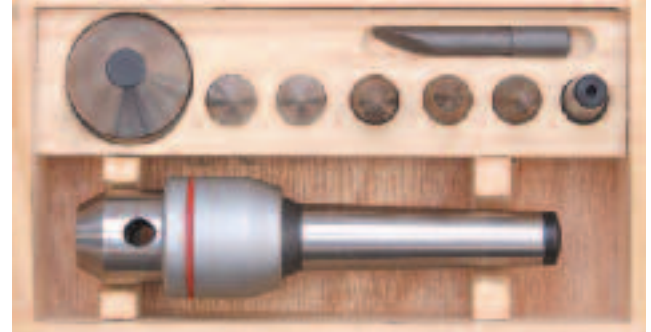
Maximum runout: 0.005mm.



REVOLVING & SOLID CENTRES

Standard Duty Interchangeable Revolving Centre Sets

Manufactured from high alloy steel, precision ground internally and externally with pre-lubricated bearings. A versatile revolving centre with interchangeable points for a wide variety of applications. Ideal for toolroom or manufacture of small turned components. Points fit into body by means of a taper and are removed by use of the drift key supplied. All mating surfaces are precision ground and the set is supplied in a varnished wooden storage box.

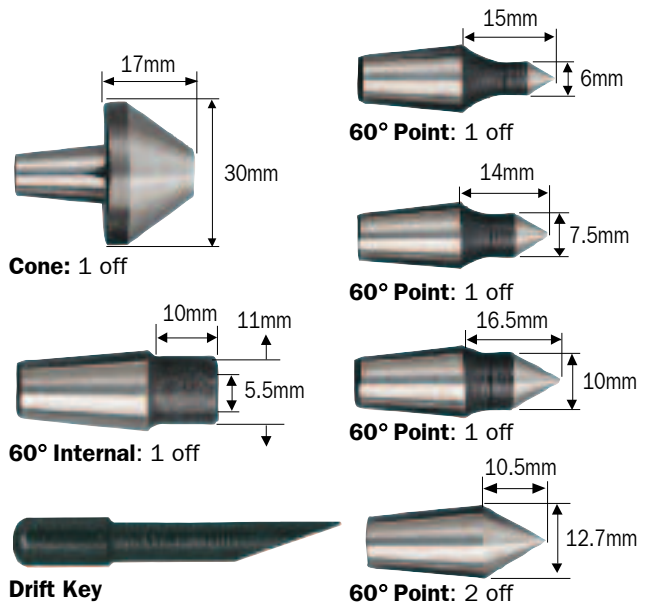


Morse Taper	Axial Load at 100rpm	Radial Load at 100rpm	Max rpm	Max Runout
No. 2	200Kgf	100Kgf	4000	0.005mm
No. 3	400Kgf	200Kgf	3000	0.005mm

Morse Taper	Length (mm)	Diameter (mm)	Weight each	Order Code	Price/1 RND
				KEN-488	
No.2	124	33	0.85kg	-1320K	2812.00
No.3	152	42	1.10kg	-1330K	3246.40

Interchangeable Points

A complete range of interchangeable points to complement the revolving centre sets.



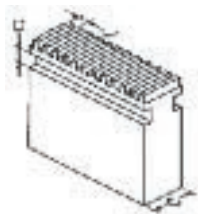
Description	Weight each	Order Code	Price/1 RND
		KEN-489	
60° Point x 6mm Dia.	20g	-1020K	170.70
60° Point x 7.5mm Dia.	20g	-1030K	170.70
60° Point x 10mm Dia.	25g	-1040K	230.00
60° Point x 12.7mm Dia.	20g	-1050K	230.00

GROUP 490 LATHE CHUCK JAWS

KENNEDY Scroll Jaws

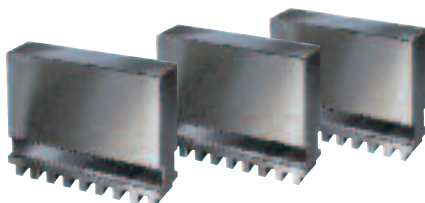
To Suit Pratt Burnard Chucks

For Standard, Super Precision, Griptru.
All steel (type 78), Pratt Burnard old type
(Inch) and Hardinge chucks.



Chuck Type	Jaw Code (Refer to Diameter)
Standard, Griptru, Super Precision	B, C, E, G, J, M, P, Q, R
All Steel (Type 78)	L, O
Burnard	I, K, N
Pratt Old Type	H
Hardinge/Pratt Type	F

3 Jaw Sets



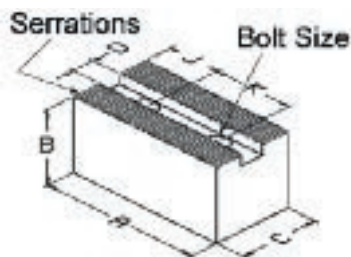
4 and 6 jaw sets available on request

Jaw Code	Chuck Diameter	Dimensions (mm)			Order Code	Price/1 RND
		C	D	J	KEN-490	
EJC	100mm	14.10	4.85	5.08	-1030K	864.60
EJE	125mm	15.75	8.03	6.35	-1050K	869.90
EJF	125mm	14.10	4.85	6.35	-1060K	1082.10
EJG	160mm	18.79	8.03	6.35	-1070K	989.90
EJJ	200mm	20.62	9.53	8.46	-1100K	1104.10
EJL	230mm	25.40	9.52	8.46	-1120K	1849.50
EJM	250mm	25.40	11.10	8.46	-1130K	1448.70
EJP	315mm	28.19	12.88	8.46	-1160K	1835.70

Serrated Soft Jaws

To suit metric serrated power chucks (Kitagawa/Howa/
Matsumoto/Pratt Burnard/
SMW/Autoblok etc.).

3 Jaw Sets

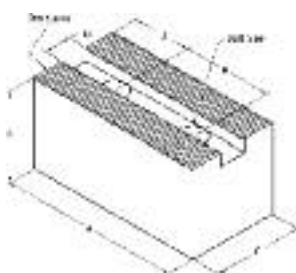


Jaw Code	Chuck Diameter	Dimensions (mm)				K/J Bolt	Serrations	Order Code	Price/1 RND
		A	B	C	D			KEN-490	
B006	165mm	72	38	32	12	20/15/M10	1.5mm x 60	-5560K	602.30
DJ06	165mm	72	57	32	12	20/15/M10	1.5mm x 60	-5860K	843.50
PT06	165mm	82	32	32	12	20/15/M10	1.5mm x 60	-2060K	781.10
B008	210mm	95	44	32	14	25/25/M12	1.5mm x 60	-5580K	665.50
DJ08	210mm	95	70	32	14	25/25/M12	1.5mm x 60	-5880K	1174.20
PT08	210mm	102	44	32	14	25/20/M12	1.5mm x 60	-2080K	993.30
B010	254mm	110	40	40	16	30/30/M12	1.5mm x 60	-5600K	740.60
DJ10	254mm	110	80	40	16	30/30/M12	1.5mm x 60	-5900K	1378.60
DK10	254mm	90	60	40	16	30/21/M12	1.5mm x 60	-5970K	836.60
PT10	254mm	125	40	40	16	30/30/M12	1.5mm x 60	-2100K	1118.00
DK11	254mm	110	60	40	16	30/21/M12	1.5mm x 60	-5980K	1494.40
B012	315mm	130	50	50	18	30/40/M14	1.5mm x 60	-5620K	1100.90
DJ12	315mm	130	80	50	18	30/40/M14	1.5mm x 60	-5920K	2009.20
BR13	315mm	130	50	50	21	30/40/M16	1.5mm x 60	-5700K	1065.60
DJ13	315mm	130	80	50	21	30/40/M16	1.5mm x 60	-5930K	2009.20
B015	380mm	165	76	64	22	43/37/M20	1.5mm x 60	-5650K	2587.80
DJ15	380mm	165	127	64	22	43/37/M20	1.5mm x 60	-5950K	5574.00
B018	454/530/610mm	180	76	64	25	60/40/M20	3.0mm x 60	-5660K	2504.90

Serrated Soft Jaws

To suit inch serrated power chucks
(Berg/Forkardt/Rohm/Pratt Burnard/
SMW/Autoblok etc.).

3 Piece Set



Jaw Code	Chuck Diameter	Dimensions (mm)				K/J Bolt	Serrations	Order Code	Price/1 RND
		A	B	C	D			KEN-490	
BN90	165/200mm	90	60	40	17.0	22/15/M12	1/16" x 90	-5090K	878.80
BN12	250/315mm	120	80	50	21.0	28/20/M16	1/16" x 90	-5120K	1474.80
BN23	400/500/630mm	155	89	64	25.5	35/30/M20	3/32" x 90	-5230K	3044.60

Scroll Jaws

To suit Pratt Burnard metric chucks
(Standard Accuracy and
Super Precision).

3 Jaw Sets



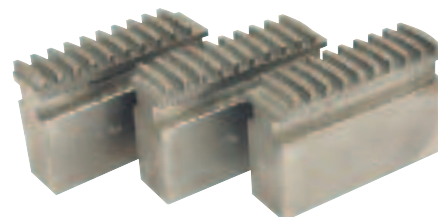
4 and 6 jaw sets available on request

Jaw Code	Chuck Diameter	Dimensions (mm)			Order Code	Price/1 RND
		C	D	J	KEN-490	
EK16	160mm	18	7	6	-6030K	961.50
EK20	200mm	22	8	8	-6040K	1062.70
EK25	250mm	25	8	8	-6050K	1394.00
EK32	315mm	32	12	10	-6060K	1782.50

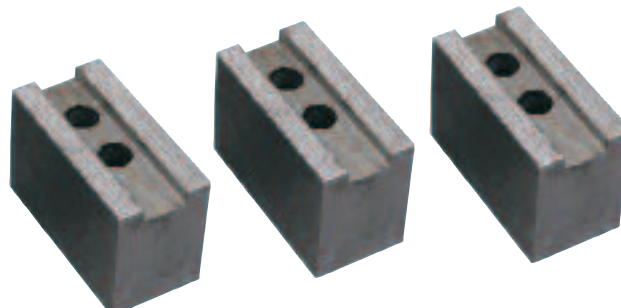
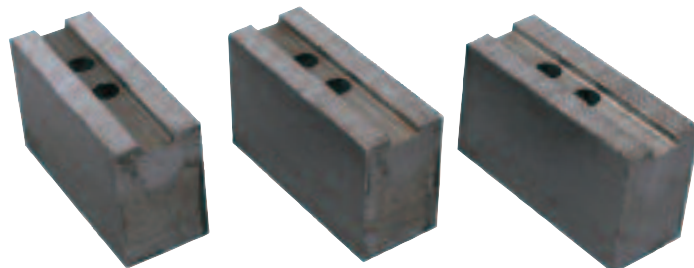
Scroll Jaws

To suit Toolmex/
Bison chucks.

3 Jaw Sets



Jaw Code	Chuck Diameter	Dimensions (mm)			Order Code	Price/1 RND
		C	D	J	KEN-490	
EN08	80mm	11	6	4	-6180K	566.20
EN10	100mm	15	6	6	-6200K	712.70
EN13	125mm	20	8	7	-6220K	850.40
EN16	160mm	20	8	8	-6230K	1000.60
EN20	200mm	25	10	8	-6240K	1147.00
EN25	250mm	28	12	9	-6250K	1498.10
EN32	315mm	32	12	10	-6260K	2014.20



KENNEDY® **Huntington Type Wheel Dressers**

With improved quick release cutter wheel design which reduces down-time when changing wheels. Ergonomically designed cast iron handle and case hardened, polished cutters. Suitable for cleaning, sharpening and truing grinding wheels.



Type	For Wheel Diameter	Weight each	Order Code KEN-495	Price/1 RND
No.0	Up to 510mm (20")	0.85kg	-0100K	260.10
No.1	Up to 760mm (30")	1.00kg	-0110K	333.40
No.2	Over 760mm (30")	2.50kg	-0120K	475.40



Replacement Wheel Sets



Description	Weight per 10 Sets	Order Code KEN-495	Price/1 RND
Spare Wheels for Type No.0	0.45kg	-1000K	57.50
Spare Wheels for Type No.1	0.53kg	-1010K	65.20
Spare Wheels for Type No.2	2.90kg	-1020K	147.90

Replacement Parts

Description	Weight per 10	Order Code KEN-495	Price/1 RND
Side Bush for Type No.0	79g	-2000K	190.50
Cutter Bush for Type No.1	110g	-2010K	210.20
Cutter Bush for Type No.2	234g	-2020K	250.00
Spare Spindle for Type No.0	130g	-3000K	115.60
Spare Spindle for Type No.1	310g	-3010K	288.40
Spare Spindle for Type No.2	310g	-3020K	353.50
Side Washer for Type No.1	70g	-4010K	180.00
Side Washer for Type No.2	50g	-4020K	197.60

KENNEDY® **Diamond Point Wheel Dressing Tools**

Single-Point Tools

For general use. The diamond point can be reset when it 'flats', giving extended tool life (resetting prices available on request). 1/2" x 6" holder size.



Product Number	Diamond Size, Carat	For use on Wheel	Weight each	Order Code KEN-496	Price/1 RND
SP50	0.50	180mm (7")	160g	-0050K	192.10
SP75	0.75	255mm (10")	160g	-0070K	244.50
SP100	1.00	355mm (14")	170g	-0100K	328.50
SP150	1.50	460mm (18")	170g	-0150K	567.00
SP200	2.00	600mm (24")	170g	-0200K	752.80

Chisel-Point Tools

Designed for dressing formed wheels. Similar to single point tools but more robust and no resetting required. 3/8" x 3" holder size.



Product Number	Included Angle	Nose Radius	Weight each	Order Code KEN-496	Price/1 RND
D605		0.005"	160g	-1000K	1315.40
D405		0.005"	170g	-1100K	1315.40

SENATOR® **Diamond Dressers**

For truing and dressing grinding wheels. Truing is the process of aligning the periphery of the grinding wheel so that it runs concentric with its axis of rotation. This allows accurate and precise relative motion between the grinding wheel and the part being ground. Dressing removes dulled abrasives and foreign material that has been embedded into the wheel. This allows the wheel to cut properly. These tools are mainly used to true straight-faced wheels.

3 Piece Set

For medium duty use. 1/2" dia. x 6" (-9100K).



Wheel Size (mm)	Carat Size	Weight each	Order Code SEN-496	Price/1 RND
Up to 150	0.25	149g	-0250K	188.70
Up to 180	0.50	150g	-0500K	188.70
Up to 250	0.75	150g	-0750K	240.10
Up to 350	1.00	151g	-1000K	304.10
Up to 500	1.50	149g	-1500K	557.10
Up to 600	2.00	150g	-2000K	741.70
3 Piece Set 0.5, 0.75 & 1 Carat Set			-9100K	514.20

PRODUCTS ARE ONLY AVAILABLE VIA YOUR DISTRIBUTOR