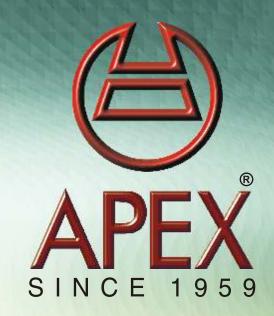
# WORK HOLDING EQUIPMENTS C A T A L O G U E

# Welcome To!



An ISO 9001-2008 Company

- Machine Vices
- Compound Sliding & Rotary Milling Tables
- Angle Plates & V-Blocks
- Magnetic Tools
- Bench & Wood Workers Vices
- Clamps & Clamping Elements



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## Company Profile Profile

1. Name & Address of the Unit: 1. APEX INDUSTRIES

2. APEX INDUSTRIES PVT. LTD. P.O.BOX 424, 54 DADA COLONY INDUSTRIAL AREA JALANDHAR - 144004

2. Telephone No.:- +91-181-2290586/2290631/3290687

3. Fax No. :- +91-181-2290421

4. Grams :- QUALITY

5. E-mail:- apexwali@jla.vsnl.net.in

6. Website: - www.apexmachinevices.com

7. Contact Executive: Mr. R.M. Walia



Dedicated to the memory of beloved Late **Sh. S.C. Walia** FOUNDER OF THE APEX GROUP OF INDUSTRIES

- 8. Products Manufactured: Machine Tools Accessories, like Machine Vices, Rotary Milling, Tilting & Compound Sliding Tables, Angle Plates, C.I. Vee Blocks, Steel Parallels, Clamping Elements & Devices, Assorted Bench Vices, Pipe Vices, Wood Working, Tool Makers Vices and other Engineering Tools.
- 9. Standard of Quality System Conforming to ISO 9001-2008
- 10. Brief History: Established in 1959 as SSI unit with a small set up to manufacture vices. With a qualified team of Mechanical Engineers and vast knowledge, experience in marketing and administration, the company has made rapid progress and expanded its activities to introduce a wide range of products. The company has become one of the leading manufacturers of Machine Tools Accessories and assorted Vices, which are available under Brands "APEX" and "ASTRA"

By virtue of sustained efforts to maintain high quality and competitive prices, backed with efficient delivery the company has established good market reputation and earned healthy goodwill all over the country.





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#### **APEX Code 701, SG701**▼

Tilting & Swiveling Vice (Size: 4", 6", 8")



#### Features:

- Manufactured to consistent accuracy to give prolonged reliable service.
- Bearing surface precision ground. Flatness within 0.0012" (30 microns)
- Once locked impossible to shift.
- Totally enclosed acme screw with three point location of operating in manganese Bronze Nut.
- · Tenon Slot machined in back as standard for CNC use.
- Swivel base graduated through 360°
- Vertical tilting capacity 90°

#### Application:

· Suitable for milling . Grinding . Shaping . Drilling and Jig Boring

#### Construction:

 These Vices are manufactured from close grained Hi-Tensile Seasoned Cast Iron

Jaws: Fully Hardened (50±3 HRC) and ground tool steel jaws with parallelism within 0.0012" (30 microns)

Spindle: Precisely cut ACME threads with pitch most suitable for firm gripping and smooth operations.

Nut: Hot stamped manganese bronze nut contained in totally enclosed sliding jaws.

Fasteners: All fasteners used in the vices are grade 10.8 which provide extended strength and rigidity to these vices

Supplied Complete with Steel Handle.

Finish: Amazon Green

Code SG701: SG Ductile Iron Body

Finish: Hammer tone metallic bule





**An ISO 9001-2008 Company** 

APEX Code 730 ▶

3 Way Universal Tilt & Swivel Angle Vice (Size: 4", 6")

Features: APEX 3 way universal Tilt & Swivel

Angle vice can tilt + 45° and circle 360°, and has all the built strength and rigidity

associated with APEX Vices.

Finish: Amazon Green





**◄** APEX Code 749, SG749

Preci Tilting & Swiveling Vice (Dovetailed Slide)

(Size: 4", 6")

#### Features:

- (Dovetailed Slide) Vee sideways adjustable for giving prolonged working life
- Manufactured to consistent accuracy to give prolonged reliable service.
- Bearing surface precision ground.
   Flatness within 0.0012" (30 microns)
- · Once locked impossible to shift.
- Totally enclosed acme screw with three point location of operating in Manganese Bronze Nut.
- Tenon Slot machined in back as standard for CNC use.
- Swivel base graduated through 360°
- Vertical tilting capacity 90°

Finish: Hammer tone Ash Grey.

SG749: SG Ductile Iron Body

Finish: Hammer tone metallic blue.

CODE		701 730		30	749		
Size in inches	4	6	8	4	6	4	6
Width of Jaws (in mm)	100	150	200	100	150	100	150
Depth of Jaws (in mm)	40	50	60	40	55	40	50
Opening of Jaws (in mm)	100	150	200	100	150	100	150
Length Overall (in mm)	345	510	620	390	545	345	510
Height Overall (in mm)	150	200	230	195	310	150	200
Width Overall (in mm)	180	250	280	230	275	180	250
Tenon Slot Size (in mm)	16	20	20	20	20	16	20
Weight (app. In Kgs.)	19	42	76	30	65	20	49



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APEX Code 704 ►

Compound Angle Table (Round Table)

(Size: 9")

Features: Movement on the table are indexed fully 360 degree in the Horizontal plane 90 degree in the vertical. So that any combination of angles may be obtained "T" Slots in the table are machined from the solid and a hole is bored centrally and fitted with a steel sleeves for receiving Spigots. The table swivel on a ground steel spigot and can be locked in any position by steel clamp shown.

Code 704R: With Rectangular table

Finish: Hammer tone mid grey.



#### ▼APEX Code 704R

Compound Angle Table (Rectangular Table)

(Size: 9" x 7")

CODE	704	704R
Size in inches	9"	9"x7"
Size of Table in (mm)	225	225x175
Height Overall (in mm)	190	200
Length Overall (in mm)	390	390
Tenon Slots Size (in mm)	20	20
T-Slots Size (in mm)	13	13
Weight (app. in Kgs.)	39	42







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#### VAPEX Code SG701A

Universal Precision Machine Vice (Size: 4", 6")



#### VAPEX Code SG720

Precision Machine Vice (Swivel Base)

(Size: 4", 6")



#### Construction:

S.G.Ductile Iron Frame

Finish: Hammer tone metallic blue

#### Features:

- The most versatile of all machine vices with all degrees of freedom, the Universal Vice allows the work piece to be set at any desired angle.
- The specific advantage of this Vice is its ability to be set perpendicular to the base, thereby allowing right angle machining on the same machine setting.
- Allows for the job to be set at low heights, particularly suitable for the most complicated grinding applications.
- Fully graduated 360° swivel base allows complete rotation along the vertical axis. The third angular side with a moving axis allows for any setting in the 3D plane.
- Sliding jaw runs on accurately ground surfaces fitted with hardened steel keep strips ensuring perfect alignment and rigidity.
- · All swivelling movements have positive locking.
- "Hold Down" Slots allow for secure clamping of the vice on the work table.

#### Application:

 Primarily designed for use on Surface, Universal and Tool and cutter Grinding Machines. Its sleek and slender design has endeared it to many engineers who look for precision and versatility.

#### Construction:

- S.G.Ductile Iron Frame
- Jaw plates are hardened steel with accurately ground surface.
- Use of hi tensile grade 10.8 fasteners provides strength and rigidity to these vices.
- Supplied complete with steel handle.

Finish: Hammer tone metallic blue

CODE	70	1A	72	20
Size in Inches	4	6	4	6
Width of Jaws (in mm)	100	150	100	150
Depth of Jaws (in mm)	25	40	25	40
Opening of Jaws (in mm)	65	115	65	115
Length Overall (in mm)	270	405	305	470
Height Overall (in mm)	170	225	100	120
Width Overall (in mm)	110	155	110	155
Tenon Slot Size (in mm)	16	16	16	16
Weight (app. in Kgs.)	10	25	7	18





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#### Features:

- Manufactured to consistent accuracy to give prolonged reliable service.
- Totally enclosed design prevents the ingress of foreign matter and damage to the screw and nut.
- Swivel base graduated fully 360°.
- Spares readily available...
- Tenon Slots in slide and swivel base.
- · Available as plain and swivel vice.

#### Construction:

- High tensile Stress Relieved quality casting, precision ground hardened & tempered steel jaws plates.
- ACME thread interchangeable screw, hot stamped manganese bronze nut contained in totally enclosed sliding iaw.
- · Complete with all steel handle.

#### Code 703 & 703P:

Finish: Amazon Green

#### Code 748 & 748P:

(Dovetailed Slide) Vee Sideways Adjustable for giving prolonged working life.

Finish: Hammer tone ash grey.

#### Code SG 703 - SG 703P - SG 748 & SG 748P:

SG Ductile Iron Body

Finish: Hammer tone metallic blue

#### **▼** APEX Code 703, SG703

Milling Machine Vice Swivel Model

(Size: 3",4",6",8",10",12")



#### ▼ APEX Code 748 & 748P, SG748 & 748P

Precision Milling Machine Vice (Dovetailed Slide) (748 - Swivel Model)

(748P - Plain Model) (Size : 4", 6", 8")



#### ▼APEX Code 703P, SG703P

Milling Machine Vice Plain Model

(Size: 3",4",6",8",10",12")



Specifications									
CODE		703 & 703P				748 & 748P			
Size in inches	3	4	6	8	10	12	4	6	8
Width of Jaws (in mm)	75	100	150	200	250	300	100	150	200
Depth of Jaws (in mm)	38	40	50	60	70	75	40	50	60
Opening of Jaws (in mm)	75	100	150	200	250	300	100	150	200
Length Overall (in mm)	285	320	460	570	725	820	317	480	615
Height Overall (in mm) (Plain Vice)	70	85	100	115	140	145	85	110	135
Height Overall (in mm) (Swivel Vice)	100	110	140	165	190	195	120	145	190
Width Overall (in mm) (Plain Vice)	135	155	240	290	350	425	155	245	300
Width Overall (in mm) (Swivel Vice)	155	180	255	310	370	445	170	280	325
Tenon Slot Size (in mm )	13	16	20	20			16	20	20
Weight (app. in Kgs.) Code 703	9.7	16.5	41	74	125	170			
Weight (app. in Kgs.) Code 703P	6.8	13	31	57	96	135			
Weight (app. in Kgs.) Code 748							18	46	86
Weight (app. in Kgs.) Code 748P							12	34	65



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#### APEX Code 745P ▶

Milling Machine Vice (Deluxe) Model (Plain Model)

(Size: 4", 6", 8")

#### ▼ APEX Code 745

Milling Machine Vice (Deluxe) Model (Swivel Model)



**Specifications** 

4	6	8
100	150	200
48	60	65
100	150	200
325	520	575
90	115	130
125	150	170
160	225	275
170	245	300
16	20	20
18	47	80
12	34	60
	100 48 100 325 90 125 160 170 16	100 150 48 60 100 150 325 520 90 115 125 150 160 225 170 245 16 20 18 47

#### Features:

- Tilt Lock Machine Vice design is beamlike with two vertical and horizontal rails connected to the base
- You can hold piece parts in the most immobile state possible.

#### Three Basics in precision Clamping

- 1. That the movable jaw does not lift off the bed.
- 2. That the body is rigid, and that a minimal amount of bending stresses are created in the clamping area.
- 3. That deflection of the stationary jaw is minimized.

Totally enclosed toughened Screw.

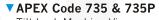
The bed is guaranteed flat and parallel .0001 per inch.

#### Construction:

- Graded Cast Iron dully stress relieved body. Tool steel hardened & ground Jaws.
- In addition to the rigid design characteristics, a large heavy nut is drawn up against the machined ways on the inside vice as the movable jaw is drawn down. This creates a heavy mass of material under compression and extremely resistant to bending stresses.
- 4 Jaws Plate positions allowing extra capacity with the jaw plates in the outside position.

Code 745 - 745P - 735 & 735P

Finish: Amazon Green



Tilt Lock Machine Vice (Size: 4", 5", 6", 8") (735-Swivel Model) (735P- Plain Model)



e pe e i i e a i e a i e a i e a i e a i e a i e a i e a i e a i e a i e a i e a i e a i e a i e a i e a i e a				
Size in inches	4	5	6	8
Width of Jaws (in mm)	100	125	150	200
Depth of Jaws (in mm)	30	38	45	60
Between Jaws position 1 (in mm)	100	108	140	180
Between Jaws position 2 (in mm)	150	165	200	275
Between Jaws position 3 (in mm)	220	250	300	390
Between Jaws position 4 (in mm)	270	300	368	470
Width Overall (in mm) Code 735	230	250	300	410
Width Overall (in mm) Code 735P	170	195	225	290
Height Overall (in mm) Code 735	130	150	170	200
Height Overall (in mm) Code 735P	90	105	125	140
Tenon Slot Size (in mm)	16	20	20	20
Length Overall (in mm)	350	395	465	565
Weight (app. in Kgs.) Code 735	21	30	48	105
Weight (app. in Kgs) Code 735P	16	22	36	67



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#### ▼ APEX Code 702

Shaper Vice (Swivel Model) (With Serrated Jaws) (Size: 6", 8", 10", 12")



#### Features:

Designed to permit maximum opening of Jaws. 360 degree swivel base indexed.

#### Construction:

- High tensile Stress Relieved quality casting.
- · High Tensile steel square thread screw with bronze nut.
- Hardened and precision ground high tensile serrated Jaws ensure firm grips on heavy cuts.

#### Code 702 - 702P & 761

Finish: Hammer Tone Mid Grey





#### **Specifications**

opcomoations				
Size in inches	6	8	10	12
Width of Jaws (in mm)	150	200	250	300
Opening of Jaws (in mm)	200	250	300	350
Depth of Jaws (in mm)	55	60	70	75
Length Overall (in mm) Code 702	550	680	770	870
Length Overall (in mm) Code 702P	490	635	710	810
Width Overall (in mm) Code 702	210	285	325	375
Width Overall (in mm) Code 702P	200	280	320	365
Height Overall (in mm) Code 702	160	175	205	230
Height Overall (in mm) Code 702P	120	130	155	175
Weight (app. in Kgs) Code 702	31	65	102	140
Weight (app. in Kgs) Code 702P	24	48	75	100

Size in inches	4"
Width of Jaws (in mm)	100
Opening of Jaws (in mm)	65
Depth of Jaws (in mm)	30
Length Overall (in mm)	300
Width Overall (in mm)	140
Height Overall (in mm)	60
Weight (app. in Kgs.)	7





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#### APEX Code SG 773, 773

Extra Grip Machine Vice



#### Features:

- Manufactured to consistent accuracy to give prolonged reliable service
- Swivel base graduated though 360°
- Tenon Slots in slide and swivel base
- Available as plain and swivel base.

#### Construction:

- High stress tensile stress Relieved quality casting, precision ground hardened and tempered steel jaws
- ACME Thread interchangeable screw, Steel nut contained in totally enclosed sliding jaws.
- Complete with steel handle

#### Finish:

773,773P - Amazon Green SG 773,SG 773P -SG Ductile Iron Body Hammer tone metallic Blue

#### APEX Code SG 773P, 773P

Extra Grip Machine Vice Plain Model Size; 4", 6"



Specifications		
Code	77	<b>'</b> 3
Size in inches	4	6
Width of Jaws (in mm)	105	160
Depth of Jaws (in mm)	40	50
Opening of Jaws	145	200
Length overall	460	540
Height overall (Plain) 773P	135	150
Height overall (with Base) 773	175	190
Width overall (Plain) 773P	125	170
Width overall (with Base) 773	135	180
Tenon Slot size	16	20
Weight (Plain) 773P (app. in Kgs)	21	40
Weight (with Base) 773 (app. in Kgs)	24	47







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#### Features:

- Manufactured to consistent accuracy to give prolonged reliable service
- Totally enclosed design prevents the ingress of foreign matter and damage to the screw and nut.
- Swivel base graduated through 360°
- Spares Readily available
- · Tenon Slots in slide and swivel base
- · Available as plain and swivel base.

#### Construction:

- High stress tensile stress Relieved quality casting, precision ground hardened and tempered steel jaws plate.
- ACME Thread interchangeable screw, Steel nut contained in totally enclosed sliding jaws.
- · Complete with steel handle

#### Finish:

CODE 774, 774P - Amazon Green CODE SG 774, SG 774P - Hammer tone metallic Blue

#### ▼ APEX Code SG 774, 774

Hi Grip Machine Vice Swivel Model Size: 4". 6"



#### APEX Code SG 774, 774

Hi Grip Machine Vice Plain Model

Size; 4", 6"



Code	77	'4
Size in inches	4	6
Width of Jaws (in mm)	105	160
Depth of Jaws (in mm)	40	52
Opening of Jaws	100	150
Length overall	480	650
Height overall (Plain) 774P	110	115
Height overall (with Base) 774	152	160
Width overall (Plain) 774P	185	240
Width overall (with Base) 774	210	260
Tenon Slot size	16	20
Weight (Plain) 774P (app. in Kgs)	23	42
Weight (with Base) 774 (app. in Kgs)	31	54





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#### Features:

- Free jaws setting for un-limited Vice opening allowing complete use of large machine table.
- The Jaw face gets access to the work piece as the slide slopes down on the slant by revolving the adjusting screws, and so the workpiece is clamped tightly pressed down to the table.
- Mechanical height limit is useful for attaining constant clamping pressure.
- Precise Dovetail slide in angle of 70 degree assures positive compound forward & downward clamping force.
- Slide clamping keeps full surface free for complete machining operation in one setting.
- · It is useful for job heights more than 60mm.

#### Construction:

- S.G. Ductile Iron Body.
- · Clamping Jaw made of Hardened Steel

Finish: Hammer tone metallic blue

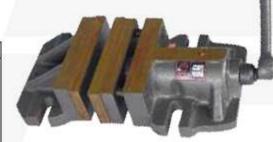
#### **Code 762**

· Body High Tensile Stress Relieved quality casting.

Finish: Hammer tone mid gray

#### **Specifications**

6
73
150
73
180
340
20
25
16



#### APEX Code SG736 ▼

Machine Clamps (Size: 2.1/2", 3", 4")





#### **Specifications**

Size in inches	2.1/2	3	4
Height (in mm) Min.	55	100	135
Max.	70	115	170
Width (in mm)	60	80	100
Length (in mm)	135	190	255
T-Slot Size (in mm)	12 to 18	20 to 26	28 to above
Weight (app. in Kgs)	3	7.7	22.5

#### ◀ APEX Code 762

Super Opening Adjustable 2-Piece Milling Vice (Size : 6")

#### APEX Code 724 ▼

Self Centering Shaft Vice

(Size: 4",7")



#### Features: Code 724

- Centering Vices are constructed to hold bars and tubes in firm concentric grip. They feature 4 point clamping contact so work pieces are held securely without hard clamping which can result in damage to delicate partsli Bearing Surface Precision ground. Flatness within 0.0012" (30 microns).
- The Vice is precisely manufactured of highest quality material, has an accuracy of parallelism of .006" per ft.li Totally enclosed acme screw with three point location of operating in Manganese Bronze Nut.

#### Construction:

- Close Grey Iron dully stress relieved body.
- The supporting tool steel V Block is hardened and ground and is reversible to accommodate a wide range of diameters.

Finish: Hammer tone mid gray

•		
Size in inches	4	7
Width of Jaws (in mm)	110	180
Round Bar Capacity (in mm)	10 to 80	50 to 150
Vee Jaws	Reversible	Reversible
Holding Capacity (in mm)	10 to 28	50 to 90
Holding Capacity (in mm)	20 to 80	90 to 150
(By reversing Vee Jaws)		
Weight (app. in Kgs)	23	61







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Features: Code 712

- Moving jaw is plain & fixed is provided with one vertical & two horizontal 90 degree V-grooves.
- The base and slides are precision ground for stability and accurate operation.
- Continuous Screw giving powerful grip on work.

#### Construction:

Body graded cast iron dully stress relieved. Lead Screw toughened selected steel. Precision ground hardened & tempered tool steel jaws

Finish: Amazon Green

#### **▼APEX Code 775, SG775**

Precision Drill Press Vice (Size: 4", 6")



#### APEX Code 709 ▼

Standard Rack Machine Vice (Heavy Duty) (Size: 4",5",6",8")



#### **Specifications**

Size in inches	4	5	6	8
Width of Jaws (in mm)	100	125	150	200
Depth of Jaws (in mm)	40	50	50	60
Opening of Jaws (in mm)	230	260	325	400
Length Overall (in mm)	460	490	560	725
Height Overall (in mm)	90	105	120	130
Width Overall (in mm)	205	235	260	345
Weight (app. in Kgs.)	16	26	34	69

APEX Code 712 ▼



#### **Features: Code 775, SG 775**

- The Ubiquitous Drill Vice is more than a fixture in any workshop. It is a necessity. These are specially designed for use by professionals who require a heavy
- This vice offers a ground vice bed for smooth & consistent jaw movement.

#### Construction:

- Manufactured from close grained cast iron.
- Jaws are hardened & ground.

Finish: Amazon Green

#### Code SG775:

SG Ductile Iron Body.

Finish: Hammer Tone Metallic Blue

**Specifications** 

	712		7	75
4	6	8	4	6
100	150	200	100	150
140	220	280	105	170
40	55	60	35	50
80	110	130	70	100
350	460	585	335	440
205	255	315	200	260
11	26	51	18	22
	100 140 40 80 350 205	4 6 100 150 140 220 40 55 80 110 350 460 205 255	4 6 8 100 150 200 140 220 280 40 55 60 80 110 130 350 460 585 205 255 315	4         6         8         4           100         150         200         100           140         220         280         105           40         55         60         35           80         110         130         70           350         460         585         335           205         255         315         200

#### Features: Code 709

- The cylindrical section of the lower part of the loose Jaw swivels allowing tapered or irregular work to be held rigidly.
- Jaws Plates Automatically pull work down.
- The positions of the loose Jaw is instantly adjustable to the full capacity of the vice.
- Jaw plate is serrated to give extra gripping power.
- Work can also be cut or drilled below the bottom of the jaw. This can not be done in the ordinary vice without injuring screw.
- Supplied complete with tommy bar.

Finish: Hammer tone mid grey.





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#### APEX Code 760 ▼



# PAPEX Code 713, SG713 Drill Machine Vice (Size: 3",4",5",6",8")

#### **Specifications**

CODE		760				713		
Size in inches	3	4	6	3	4	5	6	8
Width of Jaw (in mm)	75	100	150	75	100	125	150	200
Opening of Jaws (in mm)	80	115	160	100	130	140	175	225
Depth of Jaws (in mm)	50	65	70	35	40	50	55	70
Height overall (in mm)	72	95	119	70	75	90	95	112
Length overall (in mm)	235	285	350	265	310	320	380	495
Width overall (in mm)	145	185	245	130	172	190	222	270
Weight (app. in Kgs.)	5	9	18	4.5	7	10	15	26

#### Features:

- Small compact and indispensable Vices with steel jaws. on the face of which are grooved horizontal and vertical notches for holding, round, square, thin & irregular work for drilling & light milling.
- Vices are equipped with a convenient unigrip mechanism. Spindle moves inside the hollow hand grip allowing the vice to be used at a location away from table edge. This feature increase the scope of application of the range of vices.

Finish: Hammer tone mid grey.

Code SG710: SG Ductile Iron Bodys
Finish: Hammer tone metallic blue.

#### **Specifications**

Size in inches	3.1/4"	4	6
Width of Jaws (in mm)	80	100	150
Depth of Jaws (in mm)	25	25	40
Opening of Jaws (in mm)	80	115	140
(Lower Portion)			
Opening of Jaws (in mm)	85	120	160
(Upper Portion)			
Length Overall (in mm)	260	325	415
Height Overall (in mm)	50	55	60
Width Overall (in mm)	145	180	240
Weight (app. in Kgs.)	3	5	10
Weight (app. in Kgs.)	3	5	10

#### Features:

- · Continuous Screw giving powerful grip on work.
- No lifting of the sliding jaw.
- Moving jaw is plain & fixed is provided with one vertical
   one horizontal 90 degree V-grooves.

#### Construction:

Closed grained C.I. Body
 Finish: Hammer tone mid gray
 Code SG713: SG Ductile Iron Body.
 Finish: Hammer Tone Metallic Blue

- Code SG760:
- These Vices have all the features as said above except its UNIQUE DESIGN and specifications like ample depth of jaws.
- Slide Face is Machined, hence can be used upside down (Vertically)

Finish: Enameled opaline green







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#### APEX Code 717 ▼

**Empire Machine Vice** Size:(1.1/2", 2.1/2", 3", 4")



#### Features:

· All the sides of Body are Ground. Perfectly parallel and square to ensure complete alignment of Jaws. They can be used horizontal, Vertical and longitudinal positions.

#### Code 717A:

- For Holding components at any angle between 0 to 60 degrees.
- Rapid setting with protractor scale (0 degree -60 degree)
- Angle rigidly held with single strap clamp.

#### Code 717AS:

Code 717A is mounting on swivel base providing 360° bases have 5/8" key way and bolt slots for locating and mounting of machine.

#### Construction:

· Body side Base, cast iron of selected quality, Main Screw Handle and side plates, High quality steel.

Finish: Hammer tone mid gray.



#### **APEX Code 717AS** ▼

Empire Angle Machine Vice Having Graduated

(2.1/2", 3")



CODE		717			71	7A	717AS	
Size in inches	1.1/2	2.1/2	3	4	2.1/2	3	2.1/2	3
Width of Jaws (in mm)	40	65	75	100	65	75	65	75
Depth of Jaws (in mm)	22	30	40	45	30	40	30	40
Opening of Jaws (in mm)	35	65	85	100	65	85	65	85
Length Overall (in mm)	130	210	235	295	230	275	230	275
Height Overall (in mm)	45	60	75	80	85	100	115	130
Width Overall (in mm)	40	65	76	102	90	105	110	130
Weight (app. in Kgs.)	0.8	2.4	4	6.5	4	6	5	7





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#### APEX Code 719▶

Preci Self Centering Vice (Swivel Model)

(Size: 4", 6")

APEX Code 719P



 Fully graduated 360° swivel base allows the vice to be set at any angle along the vertical axis.

Finish: Amazon Green

#### **Specifications**

•		
CODE	7	19
Size in inches	4	6
Width of Jaws	100	150
Depth of Jaws	35	50
Opening of Jaws	100	150
Length overall (plain) 719P	250	310
Length overall (with base) 719	260	330
Height overall (plain) 719P	95	115
Height overall (with base) 719	130	160
Width overall (plain) 719P	155	205
Width overall (with base) 719	175	240
Tenon Slot size	16	20
Weight (plain) 719P (approx. in kgs.)	11	22
Weight (with base) 719 (approx. in kgs.)	14	29



Compound Sliding Table (With calibrated wheels & swivel graduated base) (Size: 6x6", 8x8")



**▲APEX Code 708S** 

Single Sliding Table (Having calibrated wheels) (Size: 6x6",8x8")

#### APEX Code 707 ▼

Compound Sliding Table (With calibrated wheels & swivel graduated base)

(Size: 12x8")



◆APEX Code 708 Jaws

Jaws for Compound

Sliding Tables

#### Features:

- The T-Slots are machined from Solid.
- Equipped with two axis positioning.
- Dovetailed slides have adjustable steel gibs to compensate for wear.
- The surface table can swivel all round and 0 degree is marked to show the angular movement.
- Base have bolt slots for machine mounting.

#### Application:

 These precision built standard slide tables are essential for accurate boring drilling, grinding, and milling operations

#### Constructuion:

- Casting are the close Grey Iron dully stress relieved accurately machined and ground surface provide tolerance well within 0.01 MM / 100 MM.
- Precision ACME feed screw is running in a hot stamped phosphor Bronze Nut thrust color for smooth operation and minimum back lash.

#### **Specifications**

Code	708	708	708S	708S	707
Size in inches	6x6	8x8	6x6	8x8	12x8
Table Size (in mm)	150x150	200x200	150x150	200x200	300x200
Height Overall (in mm)	102	102	57	62	120
Length Overall (in mm)	300	350	300	350	510
T-Slot Size (in mm)	10	10	10	10	13
Travel Bothways (in mm)	100x100	125x125	Single	Single	200x125
Sliding Travel (in mm)					
Swivel Graduation	360°	360°			360°
708 Jaws Width (in mm)	85	85	85	85	105
708 Jaws Depth (in mm)	45	45	45	45	45
Wheel Graduation (in inch)	.001	.001	.001	.001	.002
Weight (app. in Kgs)	18	19	11	12	40

**Code 708**: Top surface of the table has one longitudinal T-Slot and one cross T-Slot.

Code 708S: Single is one way travel only.

Code 707: Top surface of the table has two equally spaced cross T-Slots.

Code 707A: Top surface of the table has two equally spaced

cross T-Slots & one longitudinal T-Slot.

Code 708 Jaws: Suitable for Above.

Finish: Amazon Green





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#### **APEX Code 707T** ►

Compound Sliding Table (With calibrated wheels & swivel graduated base)

(Size: 12x12", 12x20", 16x16")

Code 707T: Top surface of the table has three equally

spaced T-Slots.

Code 732: Top surface of the table has one longitudinal T-Slot and three equally spaced cross Slots.

Code 711: Designed to fit on any Lathe, will enable you to

mill slots, Key ways, grooves, flats, squares, also drilling at any angle.

Finish: Amazon Green



•			
Size in inches	12x12	12x20	16x16
Table Size (in mm)	300x300	300x500	400x400
Height Overall (in mm)	110	143	143
Length Overall (in mm)	510	750	645
T-Slot Size (in mm)	13	16	16
Travel Bothways (in mm)	200x200	300x400	300x300
Sliding Travel (in mm)			
Swivel Graduation	360°	360°	360°
708 Jaws Width (in mm)	105	150	150
708 Jaws Depth (in mm)	45	50	50
Wheel Graduation (in inch)	.002	.002	.002
Weight (app. in Kgs)	45	95	105

#### ▼ APEX Code 707A

Compound Sliding Table (With calibrated wheels & swivel graduated base)

(Size: 12x12", 12x20", 16x16")



◆APEX Code 732

Compound Sliding Table (Having calibrated wheel) (Size: 12x6")

#### Specifications

732	711
12x6	7x10
300x150	175x250
115	270
440	465
13	13
200x115	
	180
	180°
85	
45	
.001	0.002
18	23.5
	12x6 300x150 115 440 13 200x115  85 45 .001

#### APEX Code 711 ►

Vertical Sliding Table (With calibrated wheel & swivel graduated base) (Size: 7x10")







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#### APEX Code 706 ►

Compound Sliding Table (Having swivel graduated Base)

(Size: 6x6", 8x8")

Features: These slide tables have all the features of the

standard slide range except the handles are plain

(with out calibrations)

Finish: Amazon Green





#### APEX Code 706S

Single Sliding Table (Having 3/8" cross slots) (Size: 6x6", 8x8")

#### APEX Code 705D

Compound Sliding Table (Having swivel graduated Base)

(Size: 12x8")



Code	706	706	706S	706S	705D
Size in inches	6x6	8x8	6x6	8x8	12x8
Table Size (in mm)	150x150	200x200	150x150	200x200	300x200
Height Overall (in mm)	102	102	57	62	120
Length Overall (in mm)	300	350	300	350	510
T-Slot Size (in mm)	10	10	10	10	13
Travel Bothways (in mm)	100x100	125x125	Single	Single	200x125
Swivel Graduation	360°	360°			360°
Weight (app. in Kgs)	16	18	9	10	35





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#### APEX Code 722▼



#### Features:

- The Longitudinal movement is applied manually and can be adjusted as per job requirement by the adjustment of two end stops provided.
- Cross Traverse movement is applied through screw action provided with graduated wheel.
- Table is provided with T-Slot or mounting indexing and dividing head grooves are provided for passing the used coolant liquid to the tank.

#### Application:

Versatile for use with many machines such as milling, slotting, drilling or shaping machines.

Finish: Amazon Green

#### Specifications

Specifications		
Code	722	722D
Size in inches	18x5	18x5
Size of Table (in mm)	450 x 125	450 x 125
Length of Stroke (in mm)	115	115
Longitudinal Travel (in mm)	230	230
Cross Travel (in mm)	135	135
Working Area of Table (in mm)	400x90	400x90
Size of T-Slot (in mm)	10	10
Height of Centre (in mm)		75
Between Centre (in mm)	/	215
Direct Dividing Plate Division		1-30,34,39,46,48
Wheel calibration (in inches)	.001	.001
Height Overall (in mm)	140	270
Weight (app. in Kgs.)	33	39

#### APEX Code 722D ▼

Profiling Milling & Slotting Slide (Having Indexing Dividing Head & Tail Stock) (Size: 18x5")



#### APEX Code 721 ▼

Universal Compound Vice

(Size: 5")



Use these Vices on your Drilling machines for cutting Keyways, doing light jobs, making milling attachment for your lathe, making cross-sides for your wood lathes and numerous other uses. Vice fits on any Drilling Machine.

Finish: Amazon Green

Code	721
Size in inches	5
Width of Jaws (in mm)	125
Depth of Jaws (in mm)	55
Opening of Jaws (in mm)	135
Overall Length (in mm)	440
Overall Height (in mm)	170
Overall Width (in mm)	420
Travel Bothways (in mm)	175x150
Weight (app. in Kgs)	19





APEX Code 715 ▼
Rotary Milling Table

(Size: 6",8",10",12",

15",18",20")

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#### Features:

- High accuracy, easy reading of all dias clear & functional arrangement of all operating elements, sturdy yet good looking practical design. These are widely used for circular cutting, angle setting, boring and spot facing with a milling machine.
- Works as an index center in the vertical position, as well as conventional Rotary Table, graduated 360°.
- · Provision for fine adjustments when setting work piece.
- · Efficient lock provided.
- · Worm drive disengagement is quick and precise.
- An eccentric sleeve with thrust Bearing races encases the worm shaft.
- End play in worm shaft is adjustable.

#### Application:

 APEX ROTARY TABLES have a sturdy design to suit many machining operations on Milling Machines including circular cutting, setting angles and indexing. They are available in a range of sizes to suit various machines and machining applications.

#### Construction:

 The table and base is manufactured from close grain shock resisting Cast Iron dully stress relieved
 Worm & center table bush made of selected steel.

#### APEX Code 715E ▼

Rotary Milling Table Horizontal & Vertical (Size:6",8",10",12",



#### Inspection:

- Direct reading to 2 minute for size 6",8" and 10" on hand wheel scale.
- Direct reading to 1 minute for size 12",15",18" and 20" on hand wheel scale.
- ACCURACY:- Maximum error 4 minutes of circular division using hand wheels.
- Table flat to within 0.01 mm / 100 mm.
- Working surface rotates in its own plane to within 0.030 mm
- Horizontal and Vertical supporting surface square with 0.01mm/100 mm.
- Centre bush bore is true to table axis within 0.03 mm.
- Maximum parallelism error through 360° rotation of table is .025 mm.
- 715: The Base is provided with two bolt slots in & Code
   715 E for both Horizontal & Vertical Mounting on Machine Table.

Finish: Hammer tone mid grey.

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#### APEX Code 715H▼

Indexing Device (For Rotary Tables Code 715 & 715E)

(Size: 6",8",10",12",15",18",20")



#### Features:

- 715H: Optional unit to enable the user to convert quickly Rotary Milling to using Indexing Plates.
- The dividing plate set consist of 2 indexing plates, a sector & a handle with plunger.
- Using this dividing plate set the indexing of 2 to 60 divisions can be attained quickly and accurately.

Size in Inches	6	8	10	12	15	18	20
Dia of Table (in mm)	150	200	250	300	375	450	500
Table T-Slot Size (in mm)	10	13	13	16	16	20	20
Centre Bush Bore (Morse Taper)	2	3	3	3	3	4	4
Worm & Gear Ratio	1:72	1:72	1:72	1:120	1:120	1:120	1:120
Wheel Calibration (In minutes)	2	2	2	1	1	1	1
Height Overall (in mm)	95	105	110	130	135	160	160
715 & 715E – Horizontal							
Height Overall (in mm)	240	300	365	425	530	620	620
715E – Vertical							
Base to Centre 715E	125	160	180	220	265	315	315
No of Indexing Holes 715H	19   27	30   33	41   47	19   27	30   33	41   47	53   61
	23   25	28 31	39   43	23   25	28   31	39   43	51   59
Weight (app. in Kgs.) 715	14	23	36	55	95	162	177
Weight (app. in Kgs.) 715E	16	27	42	65	100	175	187
Weight (app. in Kgs.) 715H	2.5	2.5	2.5	3.5	3.5	3.5	3.5





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#### Features:

- Adjustable locking levers ensure perfect vibration less working.
- The base plate is splash-proof and is provided with an inter-changeable index plate.
- Clamping and unclamping is fast, Indexing is quick and accurate. Hence one can achieve substantial increase in efficiency at the same time maintaining indexing accuracies.
- Ideal for batch and mass production, tool rooms and production shops.

#### Application:

- The Collet Fixture is developed for various production jobs. The standard collet of Traub A-25 or A-42 can be conveniently used on the fixture to perform various milling operations like slotting, gangmilling, square, hex milling and PCD Drilling.
- · Supplied without collet.

#### Finish:

· Black oxidized & Hammer tone mid grey..





#### ◆APEX Code 767

Indexing Milling Fixture (Having 3 Jaws Chuck Mounting)

(Size: 4", 6")

#### **Features**

- This is similar to Code766 but provided with 3 jaws self centring true chuck with reverse jaws for holding any diameter upto chuck capacity.
- Indexing Can Be carried out Directly by 360 graduated collar as well as by index plate and finger.

#### Finish:

Hammer tone mid grey.

Code	766	766	767	767
	A-25	A-42	4"	6"
Overall Length (inmm)	320	320	320	320
Overall Width (in mm)	230	230	230	230
Graduation	360	360	360	360
Distance Between Slots	295	295	295	295
Chuck Size (in mm)			100	160
Chuck Hole (in mm)			22	40
Weight (app. in Kgs.)	17	17	18	23





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#### APEX Code SG770 ►

Collet Fixture (For Traub A-25, A-42 &



#### Features:

- Split second clamping & unclamping of job.
- Most versatile application.
- Ideal & efficiency booster for mass production.

#### Construction:

SG Ductile Iron Body (Unbreakable). Collect holder made of selected steel hardened &

#### Finish:

Black oxidized & Hammer tone metallic blue.

#### **Specifications**

	·							
ſ	Code	Suitable for	Length	Width	Height	Collet Capacity	Weight	
			(in mm)	(in mm)	(in mm)	(in mm)	(app. in Kgs.)	
	SG770 - A25	Traub A-25 Collect	220	110	110	A25	6.50	
	SG770 - A42	Traub A-42 Collect	220	110	110	A42	7.50	
	SG770 - H2D	Herbert 2D Capstan	220	110	110	H2D	7.50	
L		Lathe Collets						

#### APEX Code 765 ▼ Tilting Indexing Device (Having 3 Jaws

(Size: 4", 8")



#### **Specifications**

Size in inches	4	8
Diameter Chuck (in mm)	100	200
Length (in mm)	250	300
Width (in mm)	220	280
Height (in mm)	190	270
Swivel	360°	360°
Tilting	90°	90°
Slots Distance (in mm)	170	275
Weight (app. in Kgs.)	16	62

#### Features:

- For bigger quantity work, rapid indexing is simplified by use of replaceable notched rings can be notched to individual requirements.
- Rapid direct indexing through 360 degree by means of scales graduated in units of one degree division on the flanges.
- Indirect indexing is by means of worm and worm wheel giving direct reading of one minute on handwheel scales.
- The chuck can be swivelled up to 90 degree
- Worm Gear is easily and quickly detachable for direct indexing.
- Three Jaws chuck is standard equipment with one set of reverse jaws.
- The Graduation ring on hand knob is adjustable./ul>

#### Application:

An ideal indexing device for mechanics, tool makers and engravers for speedy and precision milling, drilling, boring and grinding operations.

#### Finish:

Amazon Green







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#### APEX Code 723 ▼

Tilting Table (Size: 5x7", 7x10", 10x15")



#### Features:

- Special design for angle setting on various machine tools.
- · Low profile for larger working space.
- The table is set manually to the required Tilt and is locked in the set position by means of two locking clamps held through bolts.
- Can be adjusted by 45 degree on both right-hand and left- hand side.
- The angle marking are accurate and easy to read.

#### Application:

Useful accessory for setting work at an angle for milling or other operations.

#### Construction:

• Cast Iron Stress Relieved Tilting Table.

#### Finish:

Hammer tone mid grey.

#### Code 723S:

 The unique design on Connecting Plate and 360 degree Graduated Swivel Base, making it possible for the Angle Plate to do rotation at any angles.

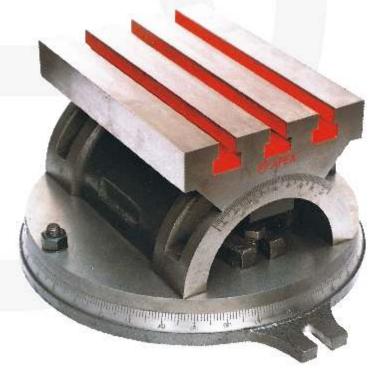
#### Finish:

· Hammer tone mid grey.

#### APEX Code 723S ▼

Tilting Table (Having Swivel Base) (Size: 5x7", 7x10", 10x15")

Size in inches	5x7	7x10	10x15
Size of Table (in mm)	125x175	175x250	250x375
Height overall (in mm)723	98	138	174
Height overall (in mm)723S	135	180	225
Width overall (in mm) 723S	230	320	470
Length overall (in mm) 723S	315	410	560
T-Slot Size (in mm)	13	16	16
Calibration 723	0 to 90°	0 to 90°	0 to 90°
Swivel Graduation 723S	360°	360°	360°
Weight (app. in Kgs.) 723	9	22	45
Weight (app. in Kgs.) 723S	14	35	84







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#### **APEX Code 771, 771T** ▶

All Steel Precision Grinding Vice

#### Features:

- All Vice surfaces are precision ground.
- The movable jaw is slightly narrow than the base enabling the vices to be used on either sides in addition to the base.
- Clamping and releasing is through a threaded spindle with precision cut square threads for smooth operation.
- Vice spindle moves in a specially designed gun metal bush which reduces wear thus enhancing the life of the
- Fix Jaw side threaded for clamp support 5/16"BSW.
- These are available in two models.

#### Application:

Used in tool manufacturing, on grinding, milling, and jig boring machines for measurement an inspection work and in manufacturing processes that require highest standards of clamping acuracy.

#### Construction 771:

Manufactured from Selected Carbon Steel, these soild one piece vices are fully hardened (45-50 HRC) and tempered to ensure stability and durability.

- Parallelism: 0.015 max (15 Microns)
- Perpendicularity: 0.015 max (15 Microns)

#### Construction 771T:

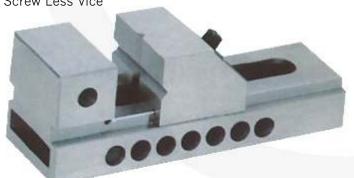
Manufactured from Tool Steel Body, these soild one piece vices are fully hardened (52-60 HRC) and tempered to ensure stability and durability.

#### Accuracy:

Parallelism: within 8 microns

#### ▼APEX Code 772, 772T

Tool Makers Precision Screw Less Vice



#### **Specifications**

- poomounomo		
Size in inches	3	4
Width of Jaws (in mm)	76	95
Depth of Jaws (in mm)	40	45
Opening of Jaws (in mm)	82	105
Length Overall (in mm)	200	235
Height Overall (in mm)	70	90
Weight app. (in Kgs.)	5.220	9.700

771- Carbon Steel body (Hardened 45-50 HRC)

Parallelism: within 15 Microns Perpendicularity: within 15 Microns

771T- Tool Steel body (Hardened 52-60 HRC)

Parallelism: within 8 Microns Perpendicularity: within 12 Microns

#### Features:

- · The rapid positioning notches allow the vice to be locked in any position by means of an allen key provided with the vice.
- Vee grooves in the sliding jaw, both horizontal and vertical, facilitate holding of round jobs.
- Jaw pressure on work piece is forward and downward for repeatable positioning and maximum holding power

#### Application:

The vices are particularly suitable for erosion work.

#### Construction 772:

Manufactured from Selected Carbon Steel, these soild one piece vices are fully hardened (45-50 HRC) and tempered to ensure stability and durability.

#### Accuracy:

- Parallelism: within (15 Microns)
- Perpendicularity: within (15 Microns)

#### Construction 772T:

Manufactured from Tool Steel Body, these soild one piece vices are fully hardened (52-60 HRC) and tempered to ensure stability and durability.

#### Accuracy:

Parallelism: within 8 microns Perpendicularity: within 12 microns

Specifications

Specifications						
Size in inches	3	4				
Width of Jaw (in mm)	75	97				
Depth of Jaws (in mm)	40	90				
Opening of Jaws (in mm)	105	130				
Length Overall (in mm)	74	94				
Height Overall (in mm)	196	245				
Weight app. (in Kgs.)	4	8				

772- Carbon Steel body (Hardened 45-50 HRC)

Parallelism: within 15 Microns Perpendicularity: within 15 Microns

772T- Tool Steel body (Hardened 52-60 HRC)

Parallelism: within 8 Microns Perpendicularity: within 12 Microns





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#### **◄ APEX Code 750**

Swivel Angle Table (Size: 5x6", 6x8", 8x10", 10x12",12x15")

#### Features:

These Tilting Angle Tables are available in a range of sizes. They are designed primarily of simple, quick angle adjustment and angle setting on Drilling and Milling Machines.

#### Finish:

· Wrincle Black.

#### **Specifications**

Size in inches	5x6	6x8	8x10	10x12	12x15
Size of Table (in mm)	125x150	150x200	200x250	250x300	300x375
Height overall (in mm)	110	130	165	210	230
T-Slot Size (in mm)	13	13	13	16	16
Weight (app. in Kgs)	6.50	11.50	23	42	70



#### Features:

- These angle plates offer a versatile means of holding work for layout. Machining and inspection and are also widely used as vertical reference.
- Supplied in two grades machined & precision ground.
- Code 751 machined recommended for General setup, Flat and square .002" per 6" (0.5 mm per 150mm)
- Code 752 precision Ground recommended for layout and square .0005" per 6"(.02 mm per 150 mm)

#### Construction:

 Made from high quality closed grained cast iron normalized stress relieved. With ample thickness and ribbed construction.

#### Finish:

Wrincle Black.

CODE 751	CODE 752	Size in Inches	Weight (app. in Kgs.)
Machined	Precision Ground		
751-2	752-2	2x2x2	0.5
751-3	752-3	3x3x3	1.3
751-4	752-4	4x4x4	3
751-5	752-5	5x5x5	5
751-6	752-6	6x6x6	8
751-8	752-8	8x8x8	17
751-10	752-10	10x10x10	29
751-12	752-12	12x12x12	47



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#### **APEX Code 753 & 753G**▶

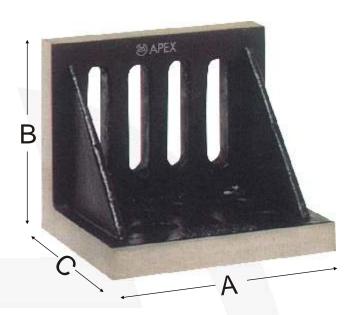
Slotted Angle Plates Webbed End (753-Machined) (753G - Precision Ground)

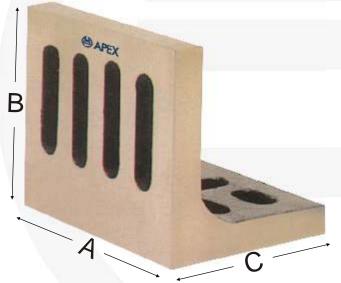
#### Features:

- These slotted angle plates have all the features of Code 751 except are provided with convenient clamping slots for mounting and are widely used for machining lay out and inspection.
- Spplied in two types webbed end have side webs & an open end.
- Code 753G Webbed End Precision Ground

#### Finish:

Wrincle black





#### **◄ APEX Code 754 & 754G**

Slotted Angle Plates Open End (754 - Machined) (754G- Precision Ground)

CODE 753	CODE 754	Length In Inches	First Angle In Inches	Second Angle In Inches	Weight In Kgs	Weight In Kgs
(Webbed End)	(Open End)	'A'	'B'	'C'	753	754
753-1	754-1	3	2.1/2	2	0.6	
753-2	754-2	3.1/2	3	2.1/2	0.8	
753-3	754-3	4.1/2	3.1/2	3	1.4	1.3
753-4	754-4	6	5	4.1/2	4	3
753-5	754-5	7	5	4.1/2	5	5
753-6	754-6	8	6	5	6	5
753-7	754-7	9	7	6	8	8
753-8	754-8	10	8	6	11	10
753-9	754-9	12	9	8	20	20





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## **APEX Code 755** ► Giant Slotted Angle

Plates Machined

#### Features:

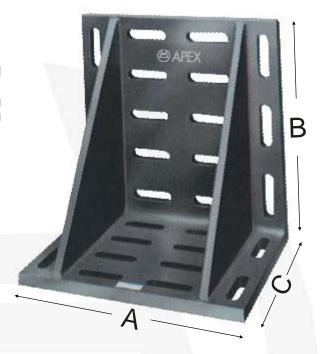
- Machined on outside faces and with cored slots arranged for maximum clamping versatility.
- APRX Giant Angle Plates are best suited for work mounting and set up on such larger Machine Tools as Planning Machines Radial Drilling machines and so on.

#### Finish:

Wrincle black

#### **Specifications**

CODE	Len	gth In Ir	Weight	
755	'A'	'B'	'C'	(app. in Kgs.)
755-1	16	12	9	31
755-2	20	16	12	61
755-3	24	24	18	161



# APEX Code 777 Stepped Angle Plates

#### **Specifications**

Size ( in inch)	3 x 3 x 3	4 x 4 x 4
Size (in mm)	75 x 75 x 75	100 x 100 x 100
Thread spec. of tapped holes	14" BSW	5/16" BSW

Flatness working faces (5 Microns)

Squareness exterior faces over height (10 Microns)

Parallelism opposite faces & edges over their length (5 Microns)

Squareness end faces w.r.t. Exterior faces as measured over length (10 Microns)

#### Features:

 A convenient step of 32 mm down from the top and a 12 mm seat alllows for use with smaller work pieces. Presence of 24 tapped hole allows for fastenings to fixtures & clamping work to the angle plate.

#### Application:

 An indispensable device for accurate work in tool room and in small production, jobs for checking flatness squareness and parallelism.

#### Construction:

- Manufactured from a single piece of hardened tools steel.
- Precision Ground, square and parallel.

#### Accuracy:

- Flat working faces (5 Microns)
- Squareness exterior faces over height (10 Microns)
- Parallelism opposite faces & edges over their length (5 microns)
- Squareness and faces w.r.t. Exterior faces as measured over length (10 microns)







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#### APEX Code 756 ▶

C.I.Vee Blocks (Machined)

#### Features:

 Supplied in Matched and numbered pairs, these Vee Blocks provide a useful means of holding cylindrical work for layout, inspection, drilling and machining. Each pair is accurately machined with 90 degree Vee which is centered in true and square and parallel with the base to within 001" (.03 mm) can be precision ground to .0005" (.01mm) if so desired.

#### Finish:

Wrincle black

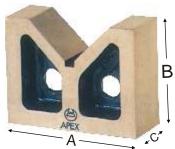
#### **Specifications 756**

- p					- p
CODE 756	Width in mm 'A'	Height in mm 'B'	Thickness in mm 'C'	Weight (app. in Kgs.)	Width in mm 'A
756-2	50	32	47	0.4	50
756-3	75	60	65	1.2	75
756-4	100	65	80	2	75
756-5	125	80	100	4	100
756-6	150	88	125	7	100
756-7	175	113	150	13	100
756-8	200	138	200	20	125
756-10	250	163	250	31	150
756-12	300	200	300	58	150

#### Specifications756G

	Specifi	cation	S756G
.)	Width in mm 'A'	Height in mm 'B'	Thickness in mm 'C'
	50	38	38
	75	38	38
	75	50	50
4	100	38	75
	100	63	63
	100	75	75
	125	44	88
	150	50	100
	150	100	100





**APEX Code 756G** C.I.Vee Blocks (Precision Ground)





#### APEX Code 779▶

Tool Maker's Vee Block & Clamping Sets-Precision

Permissible height difference between matched pairs (5 Microns)

Parallelism and Squareness of Vee Grooves with respect to all surfaces (8 Microns)

Parallelism of opposite faces of Vee Blocks (8 Microns)
Squareness of adjacent exterior faces of Vee Blocks (8 Microns)
Flatness of working faces (5 Microns)



#### **Specifications**

Code	Block Length	Block Width	Block Height	Width Small Vee	Width Large Vee	
	(in mm)	(in mm)	(in mm)	(in mm)		Capacity
779-1	40	32	32	11	20	25
779-2	45	40	36	14	28	32
779-3	50	37	37	13	28	37
779-4	60	40	50	17	25	30
779-5	70	45	40	17	33	37
779-6	75	55	55	17	35	40
779-7	80	65	65	22	45	50
779-8	100	75	75	30	68	75

#### Features:

- Manufactured and numbered in matched pairs, each pair has two 90 degree Vees of different capacities which are identical to the Vees of its matching block. The Vees are ground central, parallel and square with the ends and sides.
- Each pair of vee Blocks comes compete with a pair of rigid and robust clamps.

#### Application:

 Useful for holding work securely during drilling, milling and grinding operations and also in layout and inspection work.

#### Accuracy:

- Permissible height difference between matched pairs within 5 microns
- Parallelism and squareness of Vee Grooves with respect to all surfaces within 8 microns
- Parallelism of opposite faces of Vee Blocks within 8 microns
- Squareness of adjacent exterior faces of vee Blocks within 8 microns
- Flatness of working faces within 5 microns

#### Construction

 Made from finely selected tool steel fully hardened to 50-55 HRC.







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#### Features:

- Capable of being used on base, on end flat on either sides as the clamp is within the outside width of the block.
- Adjustable side screw with cap in the clamp supports the block and prevents tilting during drilling, milling or grinding operations.
- Four 3/8"-16 tapped holes, two in the base and one on each side allow attachment to an angle iron which can then be attached to a lathe face plate or held by a magnetic chuck
- Grooves at the stepped end, right angled to the base, provides handy means for holding shouldered stud, round Pins etc.

#### Construction:

 Manufactured from Selected Steel, Vee Blocks are fully hardened and ground.

#### **Specifications**

Code	Block Length	Block Height	Block Width	Clamping
	MM	MM	MM	Capacity
780	90	48	48	33

#### **▲APEX Code 778**

4 Way Vee Blocks-Cast Iron

#### Features:

- Manufactured and supplied in matched and numbered pairs
- Each Block incorporates 4 different sized Vee's thereby supporting a wide range of sizes. This enables a single block to be used as a workholding device for supporting different sized jobs.
- The larger sizes incorporate a cavity on either sides for convenience in handling during usage.

#### Application:

 These are very useful for making and checking of cylinderical parts.

#### Construction:

- Made from close grained cast iron.
- These vee block are precisely ground and machined square and parllel.

#### Accuracy:

 Squareness and Parallelism of vee grooves with respect to base (30 Microns)





Squareness and Parallelism of Vee grooves with respect to base (30 Microns)

Opcom	outions	•				
CODE 778	Width (in mm)	Length (in mm)	Height (in mm)	Vee Capacity (in mm)		
778-1	35	95	70	20x30x40x50		
778-2	30	100	100	20x30x40x50		
778-3	35	120	120	30x40x50x60		
778-4	60	120	120	30x40x50x60		
778-5	75	150	150	40x50x60x70		
778-6	100	200	200	60x70x80x100		





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- ◆APEX Code 769

  Magnetic Vee Blocks Soft(Pair)
- ◆APEX Code 769 H

  Magnetic Vee Blocks Hardened(Pair)

#### Features:

- Designed for versatility and accuracy, these Vee Blocks are ideal for holding round or irregular shapes for scribing, grinding measuring, machining and testing applications.
- These can be used either ways, up or standing on end. All Vee's and faces can be energized or de energized simultaneously by turning the rotary action control knob. This feature enables the Vee Block to hold both itself and the work on any flat ferrous surface including a permanent magnetic chuck (without energizing the chuck)
- For Applications require two Vee Block matched & numbered pairs are available.

#### **Specifications**

Co	de	Size of V-	Holding		
	A	Inch	mm	Capicity (mm)	
769-1	-	2.5/8x2x2.3/8	65x60x50	38	
769-2	769H-2	3.1/4x2.3/8x3.3/4	80x65x60	48	
769-3	769H-3	4x3x3.3/4	100x95x75	62	
769-4	769H-4	6x3x3.3/4	150x95x75	65	
769-5	-	8x4x6	200x150x100	90	

#### **APEX Code 743 & 743F** ▶

Permanent Magnetic Chucks Circular (Size: 3", 4", 4.3/4", 6", 8", 9", 10", 12", 14", 18", 24")

#### Features:

Code 743

Permanent Magnetic Chucks Circular

Code 743

Permanent Magnetic Chucks Circular



Size in inches	4	4.3/4	6	8	9	10	12	14	18	24
Dia of Table (in mm) 743	100	120	150	200	225	250	300	350	450	600
No of Poles 743	3	4	4	5	5	5	6	8	10	12
No of Poles 743F			5	6	6	7	9	11	12	16
Working area of Table 743	70	85	110	170	180	200	250	300	390	525
Weight (app. in Kgs.) 743	4	5	7	14	15	19	26	45	75	115
Weight (app. in Kgs.) 743F	4	5	7	14	15	19	26	45	75	115





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#### APEX Code 742 ▼

Permanent Magnetic Chucks Rectangular (Size: 4"x8" to 12"x24")

#### Features:

- Suitable to work both in drift or wet grinding process.
- Extra thick top plates ensure many years of life even after frequent re-grinding.
- Supplied with side & end stops.
- High performance at a competitive price.

#### Application:

 Designed for application on surface grinding machine as well as to serve as a working aid on various Engineering working sites.



### Features:

• Fine (close) Pole Pitch For High clamping.



•															
Size in inches	4x8	4x12	5x10	6x10	6x12	6x14	6x18	6x24	8x12	8x14	6x18	8x18	8x24	10x24	12x24
Width of Table (in mm)	100	100	125	150	150	150	150	150	200	200	150	200	200	250	300
Length of Table (in mm)	200	300	250	250	300	350	450	600	300	350	450	450	600	600	600
No of Poles (Code 742)	5	7	5	5	6	8	10	12	6	8	10	10	12	12	12
No of Poles (Code 742F)			7	7	9	11	12				12		16		
Working area of Table	70x	70x	95x	115x	115x	115x	115x	115x	165x	165x	115x	165x	165x	205x	255x
Code 742 & 742F	150	215	175	175	240	295	375	515	225	295	375	375	515	515	515
Weight (app. in Kgs.) Code 742	9	12	13	15	18	22	30	36	24	31	30	36	53	66	80
Weight (app. in Kgs.)Code 742F			13	15	18	22	30				30		53		





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#### APEX Code764▶

Dial Comparator Stand (Supplied without dial guage)

#### Features:

- This range of comparators with a round anvil are especially useful for fast and efficient dimansional inspection on production parts.
- The longitudinal slide can be adjusted to different positions using the knurled steel knob. It moves along the ground steel pillar which is at accurate right angles to the base.
- The round anvil with a diameter of 60 mm is hardened to 50-55 HRC and ground for high accuracy. The flatness of the working face of the anvil is controlled to within 0.00008") 2 Microns)

#### Construction:

 The Comparator stand comprises of heavy duty base made from close grained cast iron precisely ground and machined providing a totally flat surface.
 All models are supplied with in a dial gauge.



#### **Specifications**

Code	Throat Depth MM	Measuring Range MM	Fine Adjustment MM	Pillar Dia. MM	Weight app. Kgs									
764-3	75	120	3	25	3.250									
764-8	60	90		25	3.350									
				_										
764-5	45	30	\		2.250									

## APEX Code 781 ▼ Micrometer Stand



#### Features:

- An indispensable clamping device for precise and stable measurements, it is most useful to speed up production and quantity inspection jobs.
- Both clamping and positioning of the micrometer is achieved using a single clamp.
- It is highly useful for sorting parts in batch inspection and for incoming inspection purposes.
- the Stand allows the micrometer to be mounted in a stable manner for accurate undisturbed reading.

#### Construction:

- The body is made of close grained cast iron precisely machined to close accuracies.
- The swivel clamping pad is made from aluminium which helps eliminate any damage to the measuring device.

Finish: Powder Coated

Base Dia(in mm) Height (in mm) Weight app. (in kgs.)	110 100 1.500





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#### ▼APEX Code 741

Mechanic's Bench Vice (Fixed Base) (Size: 2.1/4", 2.1/2", 3", 3.1/2", 4", 4.1/2", 5", 6", 8", 10", 12")



#### Features:

- Industry's favorite Mechanic's Bench Vices for 40 years had been made better. It's more of a "workhorse" than ever and here are solid reasons why
- Massive Anvil: More anvil area than before and the largest of any Mechanic's Vice in the market.
- Precision machine component & bearing surface for smooth operation and reliability.
- Code-741S Swivel base rotates 360 degree can firmly be locked at any point.

#### Construction:

- Stressed Parts "Beefed up"! Areas of greatest stress have been strengthened with shock resisting C.I. casting for long dependable service.
- The large Diameter main screw fine pitched, square thread made of high grade steel.
- Long Forged Steel: Detachable and replaceable nut.
- Replaceable hardened steel serrated jaw plates guarantee a fast non-slip grip.

Finish: Enameled oxford blue

#### APEX Code 741S

Mechanic's Bench Vice (Swivel Base) (Size: 2.1/2", 3", 3.1/2",4",

4.1/2", 5", 6", 8")



No.	00	0	1	2	3	4	5	6	8	10	12
Size in inches	2.1/4	2.1/2	3	3.1/2	4	4.1/2	5	6	8	10	12
Width of Jaws (in mm)	60	65	80	90	100	115	125	150	200	250	300
Opening of Jaws (in mm)	60	65	90	100	120	140	170	200	235	300	365
Depth of Jaws (in mm)	45	50	55	60	70	80	85	90	110	120	140
Weight (app. In Kgs) 741	3.7	4.4	6	8.5	15	16	20	25	40	70	79
Weight (app. in Kgs) 741S		5.9	8.3	10.9	18	19	24.2	30	48		_



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#### APEX Code 740▶

Heavy Duty Bench Vice (Fixed Base) Deluxe (Double Rib)

(Size: 3", 3.1/2", 4", 4.1/2", 5", 6", 8")

#### Features:

 These vices have all the features of the Standard Mechanic's Vices Code 741 except its heavy duty & the slide is provided with double ribs to ensure long life accuracy.

#### Construction:

• Nut: S.G. iron. Acme fine pitched thread screw.

#### Finish:

· Enameled smoke grey.



#### **Specifications**

No.	1	2	3	4	5	6	8
Size in inches	3	3.1/2	4	4.1/2	5	6	8
Width of Jaws (in mm)	80	90	100	115	125	150	200
Opening of Jaws (in mm)	90	100	120	140	170	200	235
Depth of Jaws (in mm)	55	60	70	80	85	90	110
Weight (app. in Kgs)	7	11	16	20	23	30	44

#### APEX Code 740S▶

Heavy Duty Bench Vice Deluxe (Double Rib) Swivel Base

(Size: 3", 3.1/2", 4", 4.1/2", 5", 6", 8")

#### Features:

• **740S:** Swivel base rotates 360° can firmly be locked at any point.

#### Finish:

· Enameled smoke grey.



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No.	1	2	3	4	5	6	8
Size in inches	3	3.1/2	4	4.1/2	5	6	8
Width of Jaws (in mm)	80	90	100	115	125	150	200
Opening of Jaws (in mm)	90	100	120	140	170	200	235
Depth of Jaws (in mm)	55	60	70	80	85	90	110
Weight (app. in Kgs)	10.4	13.3	20	23	28	36	56





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### APEX Code 757▼

Tool Maker's Bench Vice (Fixed Base) (Size: 3",3.1/2", 4",5",6",8")



### Features:

 The whole mechanism is designed for safety in depth so that the handle will bend before the body is over stressed. A margin of safety which we build into every Apex Vice.

### Construction:

• Nut: bronze Acme Thread.

### Finish:

Enameled Opaline Green.

### APEX Code 757S ▼

Tool Maker's Bench Vice (Swivel Base) (Size: 3.1/2", 4", 5", 6", 8")



### Features:

 757S: Swivel base rotates 360° can firmly be locked at any point.

### Finish:

· Enameled Opaline Green.

No.	1	2	3	5	6	8
Size in inches	3	3.1/2	4	5	6	8
Width of Jaws (in mm)	80	90	100	125	150	200
Opening of Jaws (in mm)	90	100	120	170	200	235
Depth of Jaws (in mm)	55	60	70	85	90	110
Weight (app. in Kgs) 757	6.6	9	16.7	22	29	44
Weight (app. in Kgs) 757S		11	19.6	26.9	35.4	51



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### APEX Code SG734

Cross Rib Bench Vice (Fixed Base)



### Features:

- Undoubtedly the most popular of the lot, these are a common sight in almost all workshop and garages. These are available with a fixed base for regular usage or a swivel base that allows rotation through 360° with firm locking at any position. The swivel base allows the vice to be adjusted to accept work of varying length.
- The Swivel base can be easily removed and vice converted back to a regular fixed base vice.
- Warning: These vices are designed for gripping / holding jobs and should not be used where heavy hammering is anticipated.

### Finish:

### **APEX Code SG734S**

Cross Rib Bench Vice (Swivel Base)

(Size: 3", 4", 5", 6", 8")



### Finish:

Hammer tone metallic blue...



Size in inches	3	4	5	6	8
Width of Jaws (in mm)	75	100	125	150	200
Opening of Jaws (in mm)	85	100	130	155	200
Depth of Jaws (in mm)	50	60	70	85	100
Weight (app. in Kgs) 734	4.9	8.3	12.5	20	31
Weight (app. in Kgs) 734S	6.5	10.3	15.5	25	39





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### APEX Code 746▶

Machinist's Bench Vice As Per IS-2586-1986 (Size: 2", 2.1/2", 3", 4", 5", 6")

### Features:

- Made as per IS: Specification 2586-1986.
- NuT: C.I. confirming to minimum grade FG 200 of IS: 210-1978 or Phosphorus Nut Bronze confirming to IS: 28-1975.

### Finish:

Enameled smoke grey.



### **Specifications**

Size in inches	2	2.1/2	3	4	5	6
Width of Jaws (in mm)	60	65	75	100	125	150
Opening of Jaws (in mm)	55	70	110	140	170	205
Depth of Jaws (in mm)	44	50	65	80	85	90
Weight (app.in Kgs)	3	4.5	7	15	20	25

### APEX Code 739 ▼

Quick Action Bench Vice (Size: 4", 4.1/2", 5", 6")



### Features:

- The quick release mechanism disengages the main screw allowing rapid movement of the slide.
- Conventional plain screw may be used when desired.
- A time saving feature in repetitive work situations.
- Double rib slide High Quality fine pitched screw. Bronze nut for long life.

### Application:

 Designed for fitting, filing and large assembly work, this vice is standard equipment for many industrial and training workshops.

### Finish:

Enameled smoke grey.

•				
Size in inches	4	4.1/2	5	6
Width of Jaws (in mm)	100	115	125	150
Opening of Jaws (in mm)	120	140	165	235
Depth of Jaws (in mm)	65	75	85	90
Weight (app.in Kgs)	18.4	21	27	32





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### APEX Code 759▼

All Steel Bench Vice (Fixed Base)



### **Specifications**

Size in inches	3	4	5	6	8
Width of Jaws (in mm)	75	100	125	150	200
Opening of Jaws (in mm)	85	100	130	155	200
Depth of Jaws (in mm)	50	60	70	85	100
Weight (app.in Kgs) 759	3.5	6	9.5	10	15.5
Weight (app.in Kgs) 759S	4.3	7	11	12.5	18.5

### APEX Code 744 ▼

Engineer's Vice (Size: 4", 5", 6")



### **Specifications**

op com cations			
Size in inches	4	5	6
Width of Jaws (in mm)	100	125	150
Opening of Jaws (in mm)	60	90	125
Depth of Jaws (in mm)	45	70	75
Weight (app.in Kgs)	8.5	16	31

### Features:

- Designed to with-stand the more rigorous use-hot rolled-steel welded construction.
- Code 759S: With swivel base.

Finish: Amazon Green.



### Features:

- Accurate workmanship plus "APEX' design feature provide this vice great clamping strength and accuracy.
- Rear Jaw Sliding: The design of front jaw being stationary helps the additional muscular strength and never breaks like ordinary design.
- Dove Tail Guide Ways: Thus Positive locking to withstand heavy loads.
- Nut & Screw: Are held in Jig Bored Holes hence are within the perfect straight line and have no tension spring which provides free motion and does not strain the operator.
- Front Mounting: Holes are provided for Table and Mounts the vice with perfect rigidity.

### Construction:

- **Body** is made of special high grade Casting to withstand any Shock load.
- Forged Nut: The Nut and the screw has been machined from high tensile steel forging. The Tropi Zodial Threads are machined on Thread wherling and has the same degree of Angle which give life long performance.
- **Jaws** Hardened & Groung with "v" Grooves: The grip is much more rigid with less torque at handle lever.

Finish: Enameled smoke grey.







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### ▼ APEX Code 718

Table Vice (Size: 1", 1.5/8", 2", 2.3/8", 3", 4")



### **Specifications**

Size in inches	1	1.5/8	2	2.3/8	3	4
Width of Jaws (in mm)	25	40	50	60	75	100
Opening of Jaw (in mm)	20	20	30	30	35	35
Weight (app.in Kgs)	0.520	0.570	0.750	0.960	1.250	1.5

### Features:

• With integrated clamp which permits easy filing to work on bench or table.

### Applaication:

- CRAFTSMAN'S VICES
- Ideal for use by WATCH MAKERS GOLD SMITHS MODEL MAKERS AND DYE ENTHUSIASTS for any light duty jobs.

### Construction:

- Manufactured from high quality Grey iron casting, these are machined to close to tolerance resulting in smooth operation and reliablity.
- Screw, handle & guide rods of high quality steel in Chrome Plated finish.

Code 733S: With Swivel Base.
Code 718: Wrinkle Black

Code 733 & 733S

Metallic Silver & Silver Grey. Finish: Wrinkle Black

### APEX Code 733 ▼

Table Vice With Clamp (Fixed Base) (Deluxe Model) (Size: 1.1/4", 1.5/8", 2",





Size in inches	1.1/4	1.5/8	2	2.3/8	3
Width of Jaws (in mm)	30	40	50	60	75
Opening of Jaws (in mm)	15	20	25	30	35
Weight (app.in Kgs) 733	0.450	0.670	0.770	1.320	1.900
Weight (app.in Kgs) 733S	0.700	0.900	1.150	1.740	2.980





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### APEX Code 716▼

Table Vice (Fixed Base)

(Size: 1.1/4", 1.5/8",2", 2.3/8", 3")



### **Specifications**

Size in inches	1.1/4	1.5/8	2	2.3/8	3
Width of Jaws (in mm)	32	40	50	60	75
Opening of Jaws (in mm)	15	17	20	35	40
			0.800		
Weight (app.in Kgs) 716S	0.670	0.750	1.100	1.670	2.920



### Features:

The Vice can either be gripped in one hand or held between the jaws of a larger Vice thus allowing better access to the work peice. The jaws are tightened by means of a large wing nut.

### Application:

These vices are best suited for working on small jobs.

### Construction:

- Manufactured from S.G. Ductile Iron.
- The steel main screw is plated which prevents corrosion.

Finish: Metallic silver.

### Features:

- Code 716 Hobbyist Vice for application that involve working in confined spaces.
- Code 716S With Swivel Base.

Finish: Metallic Silver & Steel Grey.

### APEX Code 716S ▼

Table Vice (Swivel Base) (Size: 1.1/4", 1.5/8",



8", 10", 12")



Specifications	Code 726				Code 727						
Size in inches	3	4	5	6	8	4	5	6	8	10	12
Length Overall (in mm)	75	100	125	150	200	170	220	250	320	385	450
Opening of Jaws (in mm)	15	20	22	25	40						
Width of Jaws (in mm)	30	35	40	50	55	35	40	50	55	70	95
Weight (app.in Kgs)	0.180	0.280	0.430	0.530	0.830	1.100	1.470	1.900	2.700	4.900	6.200







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### **◄**APEX Code 729

Chain Pipe Vice (Size: 2",3",4",6",8")

### Features:

- If the main feature of the hinged vice is speed of operation, the feature which distinguishes the chain vice is very powerful grip. The Pipe rests on a "V" formed by the two sets of forged heat treated steel jaws.
- The High tensile steel chain is then looped over the pipe, locked into a slot between the jaws and tensioned by a handle and screw; a strong rigid three-point location which renders the pipe immovable.
- · Compact and easy to store away.

### Construction:

· Body SG ductile Iron.

### Finish:

Metallic Silver.

### **Specifications**

Pipe Dia Capacity (in inch.)	2	3	4	6	8	
Pipe Dia Capacity (in mm)	50	75	100	150	200	
Weight (app. in Kgs.)	1.7	2.5	4.1	8.4	10.5	

### Features:

- Hinged Pipe vice so called because the frame (containing the main screw and top jaw) and the base are hinged together.
- To grip a pipe the frame is hinged back and the pipe loacted on the lower jaw. When the frame is hinged own a locking hook automatically engages onto the side of the base holding the vice firmly shut. Ideal for fast repetitive work.

### Construction:

- The replaceable steal jaws are accurately machined, hardened and tempered.
- The handle and main screw is also made of steal while the frame and base is made of strong SG ductile Iron.

### Finish:

Enameled oxford blue.



Pipe Dia Capacity (in inch.)	1.1/2	2	2.1/2	3.1/2	4.1/2	6
Pipe Dia Capacity (in mm)	40	50	60	85	115	150
Weight (app. in Kgs.)	2.7	4.1	5.7	7	11	21





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### Features:

Apex Pipe Vices are designed to endure the heavist pipe work fitted with long jaws, these vices will hold pipes firmly without any crushing or bending.

The base is provided with three bolt holes to facilitate fastening to bench or post.

Graranteed against defect in material or workmanship.

### Construction:

- Frame & Jaws are made of shock resisting cast iron.
- Main screw is made of high grade steel.

Enameled oxford blue.

▼ APEX Code 747

(Square Pillar)

All Steel Pipe Vice

SG 728: SG Ductile Iron Body Finish:

Hammer tone metallic Blue

(Size: 1.1/2", 2",3",4",6")

All Steel Pipe Vice

### APEX Code 747R ▼

(Round Pillar) (Size: 1.1/2", 2", 3", 4")





### Features:

· AThe moveable jaw is running into square steel bars.

### Construction:

**Specifications** 

Pipe Dia Capacity Min (in mm)

Pipe Dia Capacity Max (in mm)

Weight (app. in Kgs.) SG 728

Weight (app. in Kgs.) 728

Size in inches

No.

· All steel body replaceable accurately machined hardened & tempered jaws.

2

2

7

50

8

6.5

1.1/4

3

30

5

3

3

7

75

14

11

4

10

100

18

15

6

6

50

150

44

8

50

200

92

Finish: Yellow

### Code 747R

These vices have all the features of Code 747 except the base is made of high graded cast Iron & moveable jaw is running into round steel bars.

Finish: Enameled oxford blue.

### **Specifications**

Pipe Dia Capacity (in inch.)	1.1/2	2	3	4	6
Pipe Dia Capacity (in mm)	40	50	75	100	150
Weight (app. in Kgs) 747	2	3.6	6	7.2	10
Weight (app. in Kgs) 747R	4.5	5.3	10	20	



**APEX Code SG 728** 

Pipe Vice (Open Type) (Size: 2", 3", 4")







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### Features:

- Accurately machined housing assure smooth sliding movement.
- Vice jaws equipped with a "TOE". IN" feature. When fully closed, the jaws meet only at the top to provide even clamping on the whole depth of the work peice.
- Square body seating provides easy fitment under the bench top so that jaws are flush with the bench top.
- Body and sliding jaw have provision for attaching wooden liners to protect the vice, work peice and working tools.

### Construction:

- These are manufactured from close-grained grey cast iron for long trouble free service.
- Accurately filled solid steel guide rods reduce wear and tear giving the vices a smooth and true parallel action, free of side or cross deflection.
- The steel main screw has buttress threads for smooth, accurate and responsive adjustment.

Finish: Enameled oxford blue.





### Features:

- · Equipped with the quick release mechanism.
- Squeeze the trigger and a quick release vice can be opened and closed without using the main screw.
   Large and small work peices can be quickly interchanged, while releasing the trigger returns the machanism to normal for fine adjustment.
- A very useful feature in repetitive work situations.

Finish: Enameled oxford blue.

### Features:

 Vices are equipped with an adjustable front dog which when used in conjunction with a bench stop allows oversize work peices too large to be held between the jaws, to be securely held. This useful addition provides a normal vice and a tail vice in one tool.

### Finish:

Hammer tone mid grey.

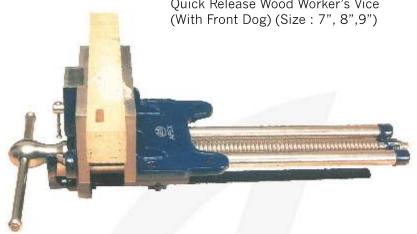




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### ▼ APEX Code 738QR

Quick Release Wood Worker's Vice (With Front Dog) (Size: 7", 8",9")



### APEX Code 758▼ **Economy Wood** Worker's Vice (Size: 6",7",8", 9",10", 12")

### Features: Code 738QR

- Equipped with the quick release mechanism.
- These vices have all the features of the Code 737QR except are equipped with an adjustable front dog.

Finish: Hammer tone mid grey.

### Code 758:

Range of light weight vices for Handy Man, who needs compact vice for smaller work.

Always: Use vice of proper size & capacity to hold the work object.

Finish: Hammer tone mid grey.

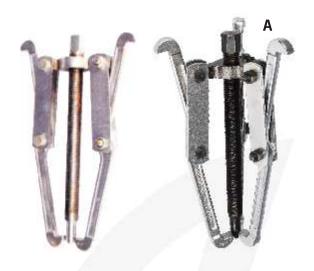
### Specifications for 737, 737QR, 738, 738QR, 758, 758T

Size in inches	6	7	8	9	10	12
Width of Jaws (in mm)	150	175	200	225	250	300
Opening of Jaws (in mm) 737 & 737QR	180	230	260	330		
Opening of Jaws (in mm) 738 & 738QR		230	260	330		
Opening of Jaws (in mm) 758	125	150	175	200	225	275
Weight (app. in Kgs) 737	4.6	8.1	10.5	15.3		
Weight (app. in Kgs) 737QR	5.5	8.7	11.3	15.8		_
Weight (app. in Kgs) 738		9.8	11.5	17.4		_
Weight (app. in Kgs) 738QR	_	10.3	12	17.9		_
Weight (app. in Kgs) 758	2.5	3.3	5.4	7.1	8.2	9





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### APEX CODE 502 ►

G. Clamps Malleable

### Features:

- Manufactured from ductile SG iron casting.
- · Fine thread screw.
- Suitable for wood working and metal working applications.

### Finish:

Burnished Oxford Blue.



### APEX CODE 503

Drop Forged G. Clamps

### **Specifications**

Size in inches	2	3	4	6	8	10	12
Weight in Kgs.	.320	.620	1.000	1.700	2.700	4.000	5.000

### APEX CODE 504 ▶

Adj. Tap Wrench (Auto Black Drop Forged Carbon Steel Hardened & Tempered)

### Features:

- Manufactured from Drop forged carbon steel hardened & tempered.
- Suitable for hand tapping Operations.

Finish: Auto Black

### ■ APEX Code 501

Bearing Puller 3 Legs Universal Drop Forged Steel

### ◀ APEX Code 501A

Bearing Puller 2 Legs Universal Drop Forged Steel

### Features:

- Reversible type pullers.
- Drop Forged chrome plated steel.
- Adjustable legs for internal and external pulling of gears and bearing etc.

### Finish:

Bright & Auto Black.

### **Specifications**

Size in inches	3	4	6	8	10	12
Weight in Kgs. 501	.490	.775	1.100	1.350	2.400	3.000
Weight in Kgs. 501A	.325	.525	1.000	1.200	2.000	2.500



### **Specifications**

Size in inches	2	3	4	5	6	8	10	12
Weight in Kgs.	.310	.490	1.000	.825	1.200	1.700	2.700	3.500

### Features:

- Drop forged steel body with ribs for added strength and rigidity.
- Fine thread screw
- These suitable for all industrial applications and construction jobs.

### Finish: Auto Black



Size in inches	1/4	3/8	1/2	3/4	1"	11/4	1½	2
Weight in Kgs.	.125	.135	.310	.600	1.100	1.200	3.500	4.000



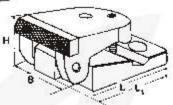




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APEX Code 901 ▼ Lever Clamp



### Features:

- Suitable for machining of large object where entire surface is to be kept free from obstruction.
- No limitation of job size because of two piece construction.
- Maximum clamping force with minimum effort.
- Radial serrated Jaw assures firm clamping.
- Used for clamping jobs having uneven & unmachined surface.
- To fix the job rigidly, long base plate with two T-Nuts is used. This avoids reduction of clamping pressure due to slippage.

### **Application:**

- Used on milling, shaping, drilling machines & surface grinders etc.
- Useful to clamp the job having height more than 60 mm.

### **Construction:**

 Main body of S. G. Iron, clamping Jaw & Base plate made of Hardened steel.

Finish: Black oxidized & powder coated.

### Specifications in mm

T - Slot Size	L	L1	В	Н	Height of Job MM		ssure x kN	Weight App. Kgs.
12 to 20	100	135	60	65	More than 60	15	7.5	2

### ▼ APEX Code 902 Flat Clamp



### Features:

- Positive clamping of flat jobs irrespective of the size.
- Low height & side clamping, leaving the entire top surface free for machining.
- Springs are provided for quick release of clamping force & jaw.
- Spherical washer is used in plate clamp to avoid it from swivelling.
- Useful for clamping the job whose height is one to two mm more than the thickness of plate clamp.
- Due to low height it is suitable for clamping work piece with small contact area e.g. plates, flats.
- Supplied with Screws and T-Nuts of respective sizes

### **Application:**

 For Side holding of thick plates on milling, shaping planing machine etc.

### **Construction:**

Made of Hardened steel.

Finish: Black Oxidized.

- 1	Code 902	T- Slot	L	В	Н	Allen Key	Appı Pressur		Weight App. Kgs.
ç	902-8	8	85	25	12	5	10	5	0.250
Ĉ	902-10	10	85	25	12	6	10	5	0.250
ç	902-12	12	115	30	15	8	15	7.50	0.500
ç	902-14	14	115	30	15	10	15	7.50	0.500
Š	902-16	16	135	40	20	10	20	10	1.000
ç	902-18	18	135	40	20	10	20	10	1.000
Š	902-20	20	200	50	25	12	30	15	2.250
Ğ	902-22	22	200	50	25	16	30	15	2.250





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### APEX Code 903 ▶

Taper Clamp

### Features:

- Low height side clamps which leave the entire surface free for machining.
- Improved design of the clamping jaw applies wedge type action thereby exerting equal side & downward pressure with maximum clamping force. The compound movement of the two jaws creates the drawing action.
- More than one pair employed to hold longer / wider work piece.
- Effective & rigid clamping of flat job is done irrespective of the size of job.
- Supplied with screws and T-Nuts of respective sizes.

### **Application:**

 Used on milling, planing & where high clamping force is required.

### **Construction:**

Made of Hardened steel.

Finish: Black Oxidized.

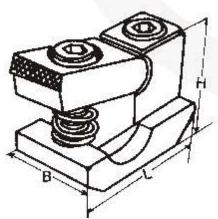
### Specifications in mm

Code 903	T- Slot	L	В	Н	Allen	Appro	X.	Weight App.
					Key	Pressur	re kN	Kgs.
903-8	8	75	25	12	5	10	5	0.250
903-10	10	75	25	12	6	10	5	0.280
903-12	12	110	30	15	8	15	7.50	0.500
903-14	14	110	30	15	10	15	7.50	0.500
903-16	16	115	40	20	10	20	10	1.000
903-18	18	115	40	20	10	20	10	1.000
903-20	20	160	50	25	12	30	15	1.750
903-22	22	160	50	25	16	30	15	1.750

## APEX Code 904 ▼

Slot Clamp





### Features:

- Useful to hold the thin plates from 5 to 9 mm thickness & clamp positively due to its very low height.
- Major part of clamp body occupied inside T-Slot to achieve low height advantage.
- Enables complete surface to be machined in one setting.
- Main body is made of brass to save the machine bed from rusting & clamping jaw is made of heat treated alloy steel for strength & durability.
- Suitable for jobs which require low to medium clamping force.
- Supplied with screws of respective sizes.

### **Application:**

• Used on milling, planing & where high clamping force is required.

### **Construction:**

 Body made of brass, clamping jaw made of hardened steel.

Finish: Black Oxidized.

- 1	Code	T- Slot	L	В	Н	Allen	Approx		Weight App.
	904					Key	Pressure	kN Kgs.	
	904-12	12	40	20	25	5	6	3.00	0.100
	904-14	14	43	23	28	5	7	3.50	0.125
	904-16	16	47	23	28	6	8	4.00	0.175
	904-18	18	50	29	35	6	10	5.00	0.225







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### Features:

- Stepless clamp Easy to use for fast coverage of several ranges of work height without additional supports. Low space requirement on machine table.
- Swiveling half piece assures perfect clamping.
- Heavy duty design and specially suitable for clamping of press and punching tools.
- Supplied with clamping pad, T-Bolt, Washer & Hex Nut.

### **Application:**

 Used where limited machine table space is available & milling, shaping, planing machine.

### Construction:

Main body of S.G. Iron T Bolts & Hex Nut made of Toughened C 45.

Finish: Yellow passivated & powder coated.



Specifications in mm

Specificat	10115 11				2.00
Code 905	B <sub>1</sub>	Clamping	В	L	Weight
		Height H			App. Kgs.
905-1212	17	0-50	50	138	1.500
905-1412	17	0-50	50	138	1.500
905-1616	17	0-65	50	138	1.500
905A-1616	21	0-75	60	175	2.740
905-1816	17	0-65	50	138	1.500
905A-1816	21	0-75	60	175	2.740
905-2020	21	0-85	60	175	3.000
905-2220	21	0-95	60	175	3.000





- Rapid clamping & unclamping of work piece by quick action of the eccentric lever.
- Downward & forward action of the jaw ensures the positive clamping of the workpiece.
- Possible to do machining operation in one setting over the whole area of the work piece without moving the clamp
- Supplied with one Screw & One T-Nut of choice suitable for 12,14,16,18 mm T-Slot (User to indicate the size)



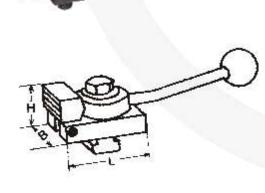
- Used in the construction of fixtures as standard, fast clamping & unclamping element to simplify the clamping system.
- Used on drilling, milling, cutting machines.

### Construction:

Made of hardened steel.

Finish: Black Oxidized.

Jaw mov	of vement MM	L	В	Н	T-slot	Pressure max kN	Weight App Kgs.
4		62	48	38	12 to 18	7	0.900

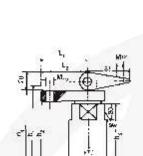






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# APEX Code 906 Down Thrust Clamp





APEX Code 906E Cylinder

### Specifications Code 906E (Separate Cylinder)

Code	Size	Н	D	Spanner	Weight
906E				Required	App. Kgs.
906E - 35	35	35	40	36 A/F	0.250
906E - 70	70	70	40	36 A/F	0.500

# Features :

- With the aid of support lugs / self aligning pads even small height jobs can be clamped
- Full 360° range rotation facilitates loading and unloading of work piece.

### **Application:**

- Used for jigs and Fixtures.
- Used for clamping of jobs from top where side clamping is likely to deform the component.
- Can mount in the fixture plates.

### **Construction:**

Heat Treated steel

Finish: Precision ground, black Oxidized.

### Features:

- Occupies very little space due to its compact construction.
- Rapid clamping & unclamping by hand with positive down thrust by means of threaded spindle & eccentric lever.
- Clamping height can be steplessly adjusted & increased simply by using height adjustment cylinders.
- Spring is provided for quick release of clamping pad.
- Eccentric lever gives clamping stroke of 1.5 mm to clamping pad which results downward thrust of 10 KN.
- Easy and quick clamping of work piece by swivelling away the clamping pad.
- Useful for mass production where clamping / declamping is to be done within a fraction of second.
- Code 906 E: Height adjustable cylinder for increasing the clamping height is available.

### Application:

- Due to fast clamping & unclamping with positive down ward force it is widely used on machine tool pallets, NC machines etc. with or without Tnut. Used as standard clamping element in the construction of fixtures.
- Any T slotted table or with hole having M 12 threading on any machine

### **Construction:**

Made of hardened steel.

Finish: Black Oxidized.

### Specifications in mm

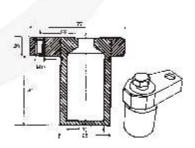
Code 906	Size	T-Slot	Job Hei	ght which	h2	hз	l1	12	Dia of	
	in mm		could be clamped						Cylinder	
			Min h1	Max h4						
906-105	105	14 to 18	70	105	72	93-128	55	43	40	
906-135	135	14 to 18	100	135	98	123-158	55	43	40	

Code 906	Maxi Ht.	Pressure	Spanner	Weight App.
	Of clamp	kN	required	Kgs.
906-105	140	10	36 A/F	1.400
906-135	170	10	36 A/F	1.700

### ▼ APEX Code 908

Low Down Thrust Clamp





Code 908	Size	11	12	Н	d1	d2	Т	М
908	50	43	77	31	19	28	20	M12



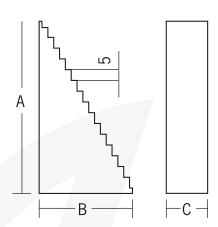




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### ▼ APEX Code 909 Step Blocks Universal



### Features:

- Used to obtain required supporting heights.
- Any combination keep the accurate parallelism.
- Positive locking.

### **Application:**

Used as supporting block on any machine.

### **Construction:**

 Hardened and tempered steel R=80/90 kg/mm<sup>2</sup>

### Finish .

Black Oxidized/Powder Coated.

**Code 909S**: Step block set (16 pcs) in metallic steel box

### Specifications in mm

Code	А	В	С	Fixing height	
909				Max.	Min.
909-1	33	24	30	51	22
909-2	66	40	30	107	39
909-3	131	73	30	208	71

### Code 909S Contents of Set

909-1 (4 Prs.), 909-2 (2 Prs.), 909-3 (2 Prs.) Total 16 Pcs.

# APEX Code 909S > Step Block Set



### APEX Code 910 ▶

Height plates Adjustable

### Features:

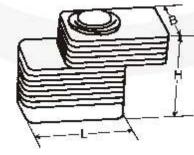
- Extra height could be achieved by stacking the blocks.
- Supporting height is achieved instantaneously with quick adjustment of plates.
- May be used with or without exact height setter.

### **Application:**

 Used on machines as supporting height block or spacers.

**Construction**: Carbon Steel **Finish**: Black Penetrated.





Code	Plate	Н	В	L	Weight
	thickness				App. Kgs.
910-225	2	25	35	50	0.350
910-250	2	50	35	50	0.650
910-275	2	75	35	50	1.000
910-2100	2	100	35	50	1.300
910-2125	2	125	35	50	1.600
910-2150	2	150	35	50	1.900
910-425	4	25	50	60	0.600
910-450	4	50	50	60	1.100
910-475	4	75	50	60	1.600
910-4100	4	100	50	60	2.100
910-4125	4	125	50	60	2.600
910-4150	4	150	50	60	3.100
910-4200	4	200	50	60	3.600



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### Specifications in mm

Code	Size (mm)	Parallelism
912-1	5 x 10 x 100	0.010
912-2	10 x 20 x 125	0.010
912-3	15 x 30 x 150	0.010
912-4	20 x 40 x 200	0.010
912-5	25 x 50 x 250	0.012
912-6	30 x 60 x 300	0.012
912-7	40 x 80 x 350	0.020
912-8	50 x 100 x 400	0.020

# Features: Useful for clamping the job from top or

bottom. The ball swivels and provides contact with no damage to uneven surface.

### **Application:**

Used as stops, supports & thrust elements in jigs & fixtures. They can also be fitted to existing clamping elements.

### Construction:

Body Steel Heat Treated - Ball Hardened.

Finish: Black Oxidized

### ■ APEX Code 912

Steel Parallels As Per IS 4241:1990

### Features:

- Ground in matched pairs for equal height support
- Matched pairs are marked with identical serial numbers.
- All sides are chamfered.

### Application:

 Used as precision packing supports under jobs or fixtures.

### **Construction:**

Suitable alloy steel, hardened & tempered to 55-60 HRC.

Finish: Ground

### **APEX Code 913** ►

Self Aligning Pad (With Ribbed ball)

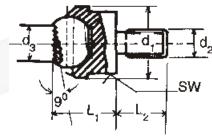
### APEX Code 913P ▼

Self Aligning Pad (With plain ball)





	With Male Thread C, F										
Code	Code	d1	d2	<b>d</b> 3	L <sub>1</sub>	L2	Ball	A/F	Max. Load Cap.	Weight	
913	Plain				1			SW	kN	app.	
Ribbed	913P								(For static load only)	Kgs.	
913-1	913P-1	13	M8	7.2	13	8	10	11	10	0.013	
913-2	913P-2	20	M10	10.5	18	10	16	17	25	0.040	
913-3	913P-3	20	M12	10.5	18	12	16	17	25	0.040	
913-4	913P-4	30	M16	20	27	16	25	27	90	0.100	
913-5	913P-5	50	M20	34.5	35	20	40	11	165	0.550	







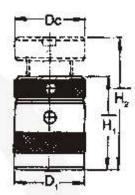
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### **APEX Code 911** ►

Screw Jack Having Steel Body and Flat Support

- Centering hole dia 12 mm provided for pads.
- Spindle: Trapezoidal Thread
- Material: Carbon Steel Heat Treated blackened.
- Self locking with end stop body.
- All types of pads can be used for numerous adaptions. Coupling pad P-6 useful to pile up height of screw jack Code 911-2 and 911-3.





### Specifications in mm

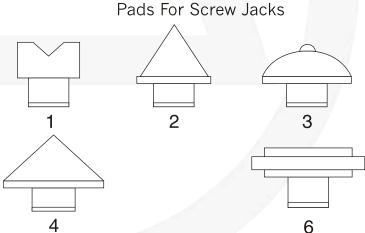
•					
Code	Range	Base	Cap	Static Load	Wt.
	H1 H2	Dia - D1	Dia DC	Max - Kn	Kg.
911-1	40-50	32	32	12	0.230
911-2	50-70	50	50	60	0.600
911-3	70-100	50	50	60	0.800
911-4	100-140	70	65	100	2.500
911-5	140-210	80	70	165	4.560
911-6	190-300	98	80	350	9.100

· Locating pin size of pads: 12 mm dia.

 Designed for wide range of application.

· Material : Medium carbon steel, heat treated to 25-30 HRC hardness, blackened.

Code
P911-1
P911-2
P911-3
P911-4
P911-6
P911-7
P911-8/14
P911-9/26



▼ APEX Code P911

9/26



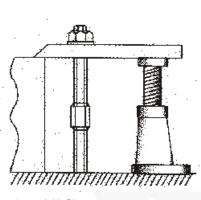


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### **APEX Code SF911** ▶

Screw Jack Having Single Side Flange (and Ring Lock Nut) (S.G. Iron Housing Carbon Steel Spindle)

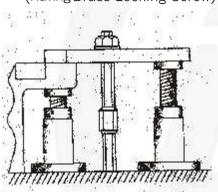
- Centering hole dia, 12 mm.
- Bottom Flange can be bolted to the T-Slot for stability.
- · Spindle: Carbon Steel Trapezoidal Thread
- Housing: High Tensile SG IRON.
- Pads Code P911-8/14 and 9/26 can be used for safe locating of U-Clamps.





### **APEX Code HD911 ▼**

Heavy Duty Screw Jack (Having Brass Locking Screw)





### **Specifications in mm**

Code	Range	Barrel	Slot	Base	Static	Wt.
	H1 H2	Dia	Width		Load-kN	Kg.
SF911-1	100-140	50	18	75x110	60	1.870
SF911-2	140-200	50	18	75x110	60	2.230

- Centering hole dia 12 mm
- Designed to be used for Heavy production shop.
- Useful completion for large clamping heights.
- Spindle: Carbon Steel Trapezoidal Thread
- Housing: High Tensile SG

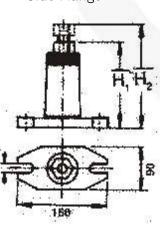
Pads Code P911-8/14 and 9/26 can be used for safe locating of U- Clamps.

### Specifications in mm

Code	Range	Barrel	Slot	Base	Static	Wt.
	H1 H2	Dia	Width		Load-kN	Kg.
HD911-1	200-300	70	26	190x220	80	9.500
HD911-2	280-460	70	26	190x220	60	10.750
HD911-3	430-750	70	26	190x220	50	14.950
HD911-4	320-450	90	26	190x220	80	15.950
HD911-5	410-720	90	26	190x220	60	19.200



Side Flange





- Centering hole dia 12 mm.
- More base area provided to compensate for height.
- Spindle: Carbon Steel Trapezoidal Thread
- Housing: High Tensile SG IRON.
- Pads Code P911-8/14 and 9/26 can be used for safe locating of U-Clamps.

Co	de	Range	Barrel	Slot	Base	Static	Wt.
		H1 H2	Dia	Width		Load-kN	Kg.
DS	911-1	200-320	50	22	90x160	40	4.000
DS	911-2	320-550	50	22	90x160	25	5.450





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### APEX Code 914 →

Strap Clamp as per IS 4292-1984 (In accordance with the DIN 6314 Standard)

### **Applications:**

- Widely used on most of machines for clamping work pieces of various sizes
- As illustrated

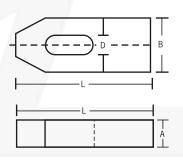
### **Construction:**

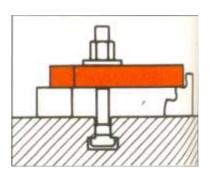
 Hardened and tempered steel R=80/90 kg/mm<sup>2</sup>

### Finish:

Black Oxidized/Powder Coated.







### Specifications in mm

Code	DxL	А	В	Suitable for Screw Size
914T-1	9x 60	12	25	M8
914T-2	11x 80	- 15	30	M10
914T-3	14 x 100	20	40	M12
914T-4	14 x 125	20	40	M12
914T-5	18 x 125	25	50	M16
914T-6	18 x 160	25	50	M16
914T-7	22 x 160	30	60	M20
914T-8	22 x 200	30	60	M20
914T-11	26 x 200	35	70	M24
914T-12	26 x 250	40	70	M24

### APEX Code 915 ►

Stepped Strap Clamp

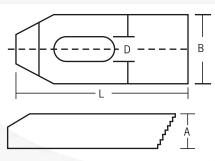


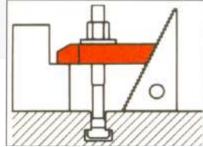
### **Construction:**

- Hardened and tempered steel R=80/90 kg/mm<sup>2</sup>
- Longer versions are used for large clamping distances due to large Tslot distance or enlarged work depth, i.e. on engraving Machines.

### Finish:

Black Oxidized/Powder Coated.





_					
	Code	DxL	А	В	Suitable for Screw Size
Γ	915-1	11x 80	15	30	M10
	915-2	14 x 100	20	40	M12
	915-3	14 x 125	20	40	M12
	915-4	18 x 125	25	50	M16
	915-5	18 x 160	25	50	M16
	915-6	22 x 160	30	60	M20
	915-7	22 x 200	30	60	M20
L	915-8	26 x 200	30	70	M24





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### **APEX Code 916** ►

Open-End Strap Clamp (As Per IS 4293-1984) (In accordance with the DIN 6315B Standard)

### Features:

- Widely used for repetitive clamping applications frequent insertion and removal of part being clamped.
- Holding of press-tool and huge castings / dies while machining
- As illustrated.

### **Construction:**

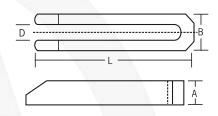
 Hardened and tempered steel R=80/90 kg/mm<sup>2</sup>.

Finish: Black Penetrated.

# (a) APEX

### Specifications in mm

- p				
Code	DxL	А	В	Suitable for
				Screw Size
916-1	11x 100	20	31	M10
916-2	14 x 125	25	38	M12
916-3	14 x 160	25	38	M12
916-4	14 x 200	25	38	M12
916-5	18 x 160	30	48	M16
916-6	18 x 200	30	48	M16
916-7	18 x 250	30	48	M16
916-8	22 x 200	40	62	M20
916-9	22 x 250	40	62	M20
916-10	22 x 315	40	62	M20
916-11	26 x 200	40	66	M24
916-12	26 x 250	40	66	M24
916-13	26 x 315	40	66	M24



### **Application:**

- Suitable to use as an off set clamp on most of the machines
- As illustrated.
- Holding of press-tool and huge castings / dies while machining

### **Construction:**

 Hardened and tempered steel R=80/90 kg/mm<sup>2</sup>.

### Finish:

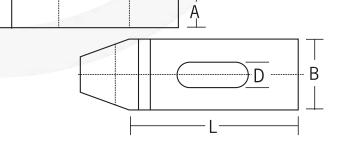
Black Oxidized/Powder Coated.

### APEX Code 917 ▶

Goose Neck Clamp (As Per IS 4279-1975)



opoom	epochications in film							
Code 917	DxL	А	В	Н	Suitable for Screw Size			
917-1	11 x 100	15	30	30	M10			
917-2	14 x 125	20	40	40	M12			
917-3	18 x 160	25	50	50	M16			
917-4	22 x 200	30	60	60	M20			
917-5	26 x 250	35	70	80	M24			







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### **APEX Code 935** ▶

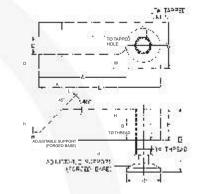
Open End Mould Clamp With Adjustable Support (For Plastic Injection Moulding & Pressure Die Casting Machines)

- Open end mould clamp straps having threaded adjustable support at the rear which can be adjusted to required height.
- Most useful where mould/die is clamped in vertical position.
- Convenient to the operator as other loose supports tend to fall down while setting.
- Large diameter forged base gives rigid clamping support and ensures machine bed safety.

### **Specifications in mm**

Code	Suitable	L	Α	W	Н	Н	ΤØ	DØ	В
	For Bolt		7				Tapped		
							Hole		
935-1	M-12	110	80	38	25	6	M-12	30	60
935-2	M-16	125	90	48	32	8	M-16	35	70
935-3	M-20	160	100	60	38	10	M-20	40	80
935-4	M-24	200	110	73	38	10	M-24	50	85



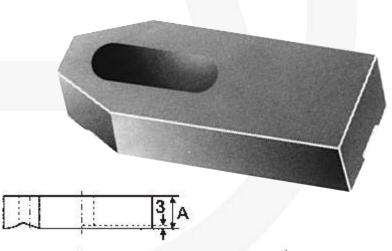


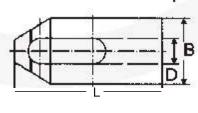
### APEX Code 936 ▶

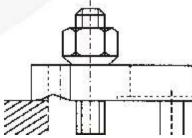
Slotted Clamp (As per IS:6082-1985)

- Material: Carbon Steel, hardened & tempered to 24-32 HRC hardness, chemically blackened.
- Application: Suitable as clamping element in work holding fixture.

DxL	Α	В	Suitable for				
			Screw Size				
11x75	16	30	M10				
11x95	16	30	M10				
14x100	20	40	M12				
14x115	20	40	M12				
18x120	25	50	M16				
18x135	25	50	M16				
22x140	30	60	M20				
22x150	30	60	M20				
26x200	35	70	M24				
26x240	35	70	M24				
	11x75 11x95 14x100 14x115 18x120 18x135 22x140 22x150 26x200	11x75 16 11x95 16 14x100 20 14x115 20 18x120 25 18x135 25 22x140 30 22x150 30 26x200 35	11x75 16 30 11x95 16 30 14x100 20 40 14x115 20 40 18x120 25 50 18x135 25 50 12x140 30 60 22x150 30 60 26x200 35 70				









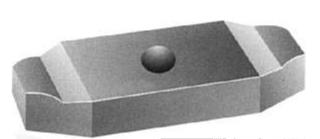


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- Material: Carbon Steel, hardened & tempered to 24-32 HRC hardness, chemically blackened.
- Application: For working holding on machine beds.

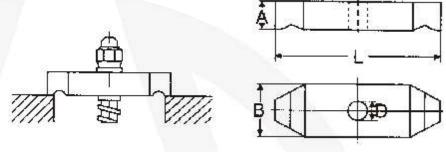
### **APEX Code 937** ►

Double Ended Clamp (As per IS:6080-1985)



### Specifications in mm

Code	DxL	А	В	Suitable for
				Screw Size
937-1	11x60	16	30	M10
937-2	11x85	16	30	M10
937-3	14x100	20	40	M12
937-4	14x125	20	40	M12
937-5	18x125	25	50	M16
937-6	18x150	25	50	M16
937-7	22x150	30	60	M20
937-8	22x200	30	60	M20

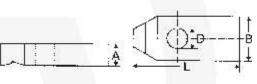


### APEX Code 938 ►

Plain Clamp (As Per IS:6081-1971)

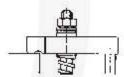
- Material: Carbon Steel, hardened & tempered to 24-32 HRC hardness, chemically blackened.
- Application: Working holding on machine beds.





### Specifications in mn

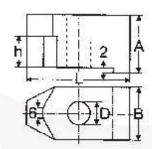
Specifications in min								
Code	DxL	А	В	Suitable for				
				Screw Size				
938-1	11x70	16	30	M10				
938-2	14x80	20	40	M12				
938-3	18x100	25	50	M16				
938-4	22x120	30	60	M20				
938-5	26x150	35	70	M24				



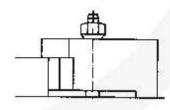
### APEX Code 939 ▼

Table Clamp (As per IS:5251-1984)





- Material: Carbon Steel, hardened & tempered to 24-32 HRC hardness, chemically blackened.
- Application: For tool plate holding and as holding element in jigs & fixtures.



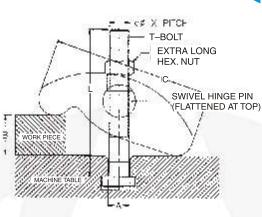
Code	DxL	L	В	Н	Suitable For			
					Screw Size			
939-1	11x23	50	25	13	M10			
939-2	11x30	50	25	20	M10			
939-3	14x26	60	30	13	M12			
939-4	14x33	60	30	20	M12			
939-5	18x35	75	40	20	M16			
939-6	18x40	75	40	25	M16			
939-7	22x40	90	45	20	M20			
939-8	22x45	90	45	25	M20			





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### APEX Code 933

Universal Strap Clamp (with T-bolt & Special Nut) (For Power Presses, Milling, Drilling, Shaping, Boring Machines Etc.)

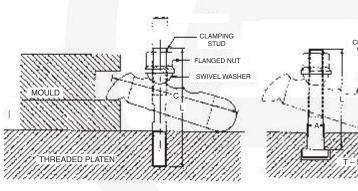
- Useful for job clamping on 'T' slot table of Drilling, Milling, Shaping, Boring and Power Press etc.
- No support is required at the rear of the clamp. Since the body of the clamp is self-positioning.
- The body positions itself with the help of swivel hinge according to the thickness of the workpiece.

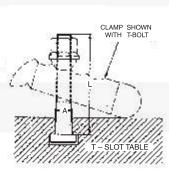
### Specifications in mm

Speci	ilcations i			
Code	T-slot	T-bolt	Clamping	Clamp
	Size	Size	Range	Size
933-1	12	M12x100	0-60	105x42
933-2	14	M12x100	0-60	105x42
933-3	16	M16x160	0-80	130x50
933-4	18	M16x160	0-80	130x50
933-5	20	M20x160	0-100	160x55
933-6	22	M20x160	0-100	160x55
933-7	24	M24x250	0-120	190x65
933-8	28	M24x250	0-120	190x65

### APEX Code 934 ▼

Mould Clamp (For Plastic Injection Moulding & Pressure Die Casting Machines.)





- Flanged nut is tightened on the swivel washer which takes care of the positioning of the clamp body.
- The positioning of forged swivel washer on required curved groove enables the operator to set the centre distance between the clamping portion and the clamping bolt as per the nearest tapped hole available on platen (where there are no T-slots).

- Specially designed for low height applications, such as clamping of moulds on plastic injection moulding machines & pressure die casting
- The compact front portion of the clamp enables it to penetrate in the limited area of the mould and clamp it.
- No support is required at the rear of the clamp as the rear portion rests on the platen and front holds the mould.

### With Clamping Stud & Flanged Nut

Code Stud Clam		Clamping	Clamp					
	Size	Range	Size					
934-1	12x100	0-35	110x50					
934-2	16x125	0-40	135x60					
934-3	20x175	0-50	160x70					
934-4	24x200	0-60	180x80					

### With T-bolt & Flanged Nut

	Code	T-slot	T-bolt	Clamping	Clamp
		Size	Size	Range	Size
П	934-5	12	M12x100	0-35	110x50
	934-6	14	M12x100	0-35	110x50
1	934-7	16	M16x160	0-40	135x60
1	934-8	18	M16x160	0-40	135x60
	934-9	20	M20x160	0-50	160x70
	934-10	22	M20x160	0-50	160x70
	934-11	24	M24x250	0-60	180x80
L	934-12	28	M24x250	0-60	180x80





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### APEX Code 920 ▶

Hex Nut (In accordance with the DIN 6330B)

### **Application:**

- Widely used on most of shopfloor machines, jigfixtures, hydraulic equipments etc.
- Additional thickness covers more thread length effecting better clamping, flat ent used with plain washer, spherical end used along with conical seal washer.

### **Construction:**

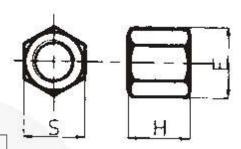
 Hardened and tempered steel R=80/90 kg/mm<sup>2</sup> Class 8.8 (8G).

Finish: Burnished.



### **Specifications in mm**

Specific	auviis iii ii			
Code 920	Screw Thread	S	E	Н
920-1	M8	13	15.0	12
920-2	M10	17	19.6	15
920-3	M12	19	20.9	18
920-4	M16	24	27.7	24
920-5	M20	30	34.6	30
920-6	M24	36	41.6	36
920-7	M30	46	53.1	45



### APEX Code 921 ►

Flanged Nut (As Per IS:7795-1975)

### Specifications in mm

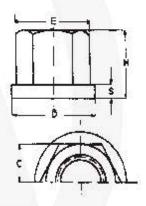
Code	Screw	С	Н	S	D	E
921	Thread					
921-1	M8	13	12	3.5	18	15.0
921-2	M10	17	15	4	22	19.6
921-3	M12	19	18	4	25	21.9
921-4	M16	24	24	5	31	27.7
921-5	M20	30	30	6	37	34.6
921-6	M24	36	36	6	45	41.6
	\					



### **Construction:**

 Hardened and tempered steel Class 8.8 (8G) R=80/90 kg/mm²

Finish: Burnished



### APEX Code 922

Coupling Nut

### **Application:**

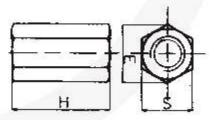
• To couple the studs for the purpose of increasing the length.

### **Construction:**

 Hardened and tempered steel Class 8.8 (8G) R=80/90 kg/mm<sup>2</sup>

Finish: Burnished.





Code 922	Screw Thread	S	Е	Н
922-1 922-2	M10 M12	17 19	19.6 21.9	30 36
922-3	M16	24	27.7	48
922-4 922-5	M20 M24	30 36	34.6 41.6	60 72
922-6	M30	46	53.1	90







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### APEX Code 923 ►

T-Slot Nut (As Per IS 2015-1977) (In accordance with DIN 508 Standard)

### Application:

- For use along with studs for work holding fixtures etc.
- Useful of the machines having 'T' Slots, jig fixtures, hydraulic elements, assorted setting elements and adopters.

### **Construction:**

Hardened and tempered steel Class 8.8 (8G)  $R=80/90 \text{ kg/mm}^2$ .

Finish: Burnished.

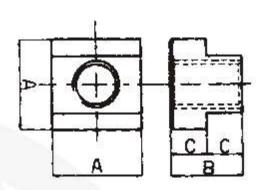


Spherical Washer with Conical Seat (As Per IS 4297-1996)



### Specifications in mm

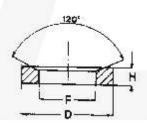
-	phecilic	audiis iii iiii	"			
- 1 -	Code 923	Screw	x slot	Α	В	С
~		Thread				
9	23-0	M6	8	13	10	6
ç	923-1	M8	10	15	12	6
ç	923-2	M10	12	18	14	7
Ĉ	923-3	M12	14	22	16	8
9	23-3A	M12	16	25	18	9
9	23-3B	M12	18	28	20	10
Ĉ	923-5	M16	18	28	20	10
9	23-5A	M16	20	32	24	12
9	23-5B	M16	22	35	28	14
ç	923-7	M20	22	35	28	14
ç	923-7A	M20	28	44	36	18
ć	923-9	M24	28	44	36	18



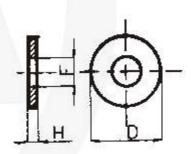
### APEX Code 925 ▼

Plain Washer (In Accordance with DIN 6340)









### Application:

It acts as a ball and socket in clamping system to correct minor misalignment of parts being clamped.

### **Construction:**

Hardened and tempered steel R=80/90 kg/mm<sup>2</sup> Class 8.8 (8G).

Finish: Burnished.

### Specifications in mm

Code 926	Size	F	D	Н
926-1	M8	8.4	17	3.5
926-2	M10	10.5	21	4.2
926-3	M12	13	24	5.0
926-4	M16	17	30	6.2
926-5	M20	21	36	7.5
926-6	M24	25	44	9.5
926-7	M30	31	56	12

### **Application:**

· Widely used in most of the clamping system

### **Construction:**

Hardened and tempered steel  $R=80/90 \text{ kg/mm}^2$ .

Finish: Burnished.

Code 925	For Screw	F	D	Н
925-1	M8	8.4	23	4
925-2	M10	10.5	28	4
925-3	M12	13	35	5
925-4	M16	17	45	6
925-5	M20	21	50	6
925-6	M24	25	60	8
925-7	M30	31	68	10



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### **APEX Code 928**▶

C-Washer As Per IS:4291:1996

### Features:

 Knurled outside Diameter for easy Gripping while insertion or removal.

### **Application:**

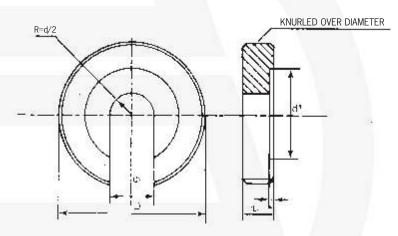
- In the construction of fixtures having special application as spacer or clamping element because it could be swung out of the way and the part can be inserted or removed quickly.
- As illustrated.

### **Construction:**

Steel Heat treated to 40 to 45 HRC.

Finish: Black Oxidized





Code	For Bolt	D	d	d1	t	
928	of					
928-1	M8	28	8.4	21	7	1
928-2	M10	34	10.5	25	8	1.2
928-3	M12	40	13	30	9	1.8
928-4	M16	56	17	37	12	1.8
928-5	M20	64	21	45	14	2
928-6	M24	75	25	52	16	2
928-7	M30	90	31	61	18	2

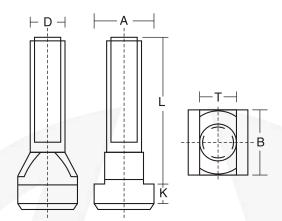


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### APEX Code 929 ▼

T-Bolts (As Per IS:2014-1977)





### **Application:**

• Suitable as clamping element on T-slotted heads.

### **Construction:**

 R=80/90 kg/mm<sup>2</sup> Highly resistant steel. Class 8.8 (8G)

Finish: Burnished

Codo	T Ciro v	Longth			Code	T. Size x Thread	Length mm	K	АхВ
Code	T. Size x Thread	Length mm	K	AxB	929-32	Tilload	80		
	Till Caa				929-33		100	A	
929-5		40			929-34		125	10	28x28
929-5A		50			929-35	18MM x M16	160		
929-6	10MM x M10	65	6	15x15	929-36		200		
929-7		80			929-37		250		
929-8		100			929-37A		320		
929-9		50			929-38		80		
929-10		65			929-39		100		
929-11		80			929-40		125		
929-12	12MM x M12	100	7	18x18	929-41	20MM x M20	160	12	32x32
929-13	12WW X WIZ	125			929-42	\ \ \	200		
929-14		160			929-43		250		17
929-15		200			929-43A	A	320		
929-15a		250			929-44		80		7
929-16		50			929-45		100		
929-17		65			929-46		125		
929-18		80			929-47	22MM x M20	160	14	35x35
929-19		100	8	22x22	929-48		200		
929-20	14MM x M12	125			929-49		250		
929-21		160			929-50		320		
929-22		200			929-51		100		
929-23		250			929-52		125		
929-23A		320			929-53	3.00	160		
929-24		65			929-54	24MM x M24	200	16	40x40
929-25		80			929-55	100	250		
929-26		100			929-56		320		
929-27	16MM x M16	125	9	25x25	929-57		400		
929-28	TOWN X WITO	160			929-58		100		
929-29		200			929-59		125		
929-30		250			929-60		160		
929-30A		320			929-61	24MM x M28	200	18	44x44
929-31	18MM x M16	65			929-62		250		
					929-63		320		
					929-64		400		





◀ APEX Code 930

Clamping Stud

Used in jig-fixtures,

one of the clamping

hydraulic equipments as

Hardened and tempered

steel R=80/90 kg/mm<sup>2</sup>

**Application:** 

elements.

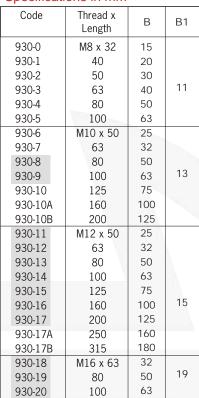
Construction:

Finish: Burnished

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# Specifications in mm



Thread x Length	В	B1
M16 x 125 160 200 250 315 M20 x 80 100 125 160 200 250 315 400	75 100 125 160 180 32 60 70 100 125 160 180 245 290	19
	315	
M24 x 100 125 160 200 250 315 400 450 500	45 70 100 125 160 200 250 315 315	35
	Length M16 x 125 160 200 250 315 M20 x 80 100 125 160 200 250 315 400 450 500 M24 x 100 125 160 200 250 315 400 450 500 450 500	Length         B           M16 x 125         75           160         100           200         125           250         160           315         180           M20 x 80         32           100         60           125         70           160         100           200         125           250         160           315         180           400         245           450         290           500         315           M24 x 100         45           125         70           160         100           200         125           250         160           315         200           400         250           450         315

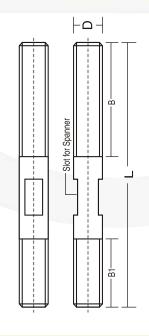
# APEX Code 930S ▶

<u>B</u>

Δ

Clamping Stud With Slot (Hardened & Tempered) For Machine Beds Having Tapped Holes.

- Have flattened middle portion for tightening and loosening with the help of an open ended spanner.
- Have longer threaded length on one side for longer insertion in the tapped holes of threaded platens of moulding machines.



Code	dE X L	B1	В
930S-1	M12 x 100	30	40
930S-2	M12 x 125		50
930S-3	M12 x 150		65
930S-4	M12 x 175		80
930S-5	M16 x 125	40	50
930S-6	M16 x 150		65
930S-7	M16 x 175		80
930S-8	M16 x 200		100
930S-8A	M20 x 125	50	50
930S-9	M20 x 150		60
930S-10	M20 x 175		70
930S-11	M20 x 200		80
930S-11A	M24 x 150	60	60
930S-12	M24 x 175		70
930S-13	M24 x 200		80
930S-14	M24 x 225		90





An ISO 9001-2008 Company



### ◀ APEX Code 931

Clamping Kit-34 Pcs. (with Adjustable Plates & Strap Clamps)

 Economical Housed in a elegent metallic steel box, following table shows the contents suitable for different T-slot size.

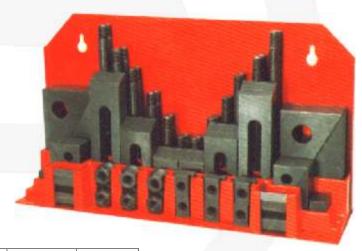
### Consists of:

Code	T-Slot Nuts Code 923	Clamping Studs Code 930	Flanged Nuts Code 921	Coupling Nuts Code 922	Strap Clamp Code 914	Height Plates Adjustable Code 910
	4 Pcs.	4 Pcs. Each	4 Pcs.	2Pcs.	2 Pcs. Each	2 Pcs. Each
931-1	14-12 M	M12x80				
931-2	16-12 M	M12x100 M12x160	M12	M12	12x100 12x125	
931-3	18-12 M	M12x200			TEXTEG	2-50
931-4	18-16 M	M16x80 M16x100 M16x160	M16	M16	16x125 16x160	2-100
		M16x200				

### APEX Code 932 ▼

Clamping Kit-58 Pcs. With step Block & Stepped Strap Clamps)

 Available in powder coated metallic steel rack which can be hanged or kept on the table. Each kit contains all important elements required to clamp a variety of work piece.



### Consist of:

Code	T-Slot Nuts Code 923 6 Pcs.	Clamping Studs Code 930 4 Pcs. Each	Flanged Nuts Code 921 6 Pcs.	Coupling Nuts Code 922 4 Pcs.	Stepped Strap Clamp Code 915 2Pcs. Each	Step Blocks Code 909 2 Pairs (4 Pcs.) Each
932-1	14-12 M	M12x63 M12x80			12x80	
932-2	16-12 M	M12x100 M12x125	M12	M12	12x100 12x125	
932-3	18-12 M	M12x160 M12x200				1 2 Pairs 2 2 Pairs
932-4	18-16 M	M16x80 M16x100 M16x125 M16x160 M16x200 M16x250	M16	M16	16x100 16x125 16x150	3 2 Pairs