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Threaded Arbors

Threaded arbors are manufactured from high quality steel. These arbors are case hardened to 54-58 HRC for increased resistance to wear.

These arbors are used for mounting chucks to spindles having threaded holes.

Accurately gauged self locking tapers ensure close tolerance fit.

Cat. No.	Shank Size	Thread
TA-6400	MT 1	3/8 - 24
TA-6401	MT 1	1/2 - 20
TA-6402	MT 2	3/8 - 24
TA-6403	MT 2	1/2 - 20
TA-6404	MT 2	5/8 - 16
TA-6405	MT 3	3/8 - 24
TA-6406	MT 3	1/2 - 20
TA-6407	MT 3	5/8 - 16
TA-6408	1/2" Straight	3/8 - 24
TA-6409	1/2" Straight	1/2 - 20





R-8 drill chuck arbors are manufactured from high quality steel.

These arbors are case hardened to 54-58 HRC for increased resistance to wear.

Accurately gauged self locking tapers ensure close tolerance fit.

Cat. No.	Shank Size	To Fit Drill Chunk
DCA-6290	R8-1	1
DCA-6291	R8-2	2
DCA-6292	R8-3	3
DCA-6293	R8-4	4
DCA-6294	R8-6	6
DCA-6295	R8-33	33





Manufactured to precision from case hardened steel.

Concentricity within 0.015mm.

	Cat. No.	Outside Taper	Inside Taper	
Ν	MTA-6039	R8	MT 2	
Ν	MTA-6040	R8	MT 3	



4 Straight Shank Arbors

Straight shank arbors are manufactured from high quality steel. These arbors are case hardened to 54-58 HRC for increased resistance to wear.

These arbors are used for mounting chucks to spindles having straight holes.

Accurately gauged self locking tapers ensure close tolerance fit.

Cat. No.	Shank Dia.	Shank Length	Jacob Taper
SSA-6420	3/8"	2-1/2"	0
SSA-6421	3/8'	2-1/2"	1
SSA-6422	3/8"	2-1/2"	2
SSA-6423	1/2"	2-1/2"	0
SSA-6424	1/2"	2-1/2"	1
SSA-6425	1/2"	2-1/2"	2
SSA-6426	1/2"	2-1/2"	3
SSA-6427	1/2"	2-1/2"	4
SSA-6428	1/2"	2-1/2"	6
SSA-6429	1/2"	2-1/2"	33
SSA-6430	5/8"	2-1/2"	0
SSA-6431	5/8"	2-1/2"	1
SSA-6432	5/8"	2-1/2"	2
SSA-6433	5/8"	2-1/2"	3
SSA-6434	5/8"	2-1/2"	4
SSA-6435	5/8"	2-1/2"	6
SSA-6436	5/8"	2-1/2"	33
SSA-6437	3/4"	3"	0
SSA-6438	3/4"	3"	1
SSA-6439	3/4"	3"	2
SSA-6440	3/4"	3"	3
SSA-6441	3/4"	3"	4
SSA-6442	3/4"	3"	6
SSA-6443	3/4"	3"	33
SSA-6444	1"	3"	0
SSA-6445	1"	3"	1
SSA-6446	1"	3"	2
SSA-6447	1"	3"	3
SSA-6448	1"	3"	4
SSA-6449	1"	3"	5
SSA-6450	1"	3"	6
SSA-6451	1"	3"	33
SSA-6452	1-1/2"	4"	3
SSA-6453	1-1/2"	4"	4
SSA-6454	1-3/4"	4"	3
SSA-6455	1-3/4"	4"	4



5 Drill Chuck Arbor - Taper Shank

Taper shank arbors are manufactured from high quality steel. These arbors are case hardened to 54-58 HRC for increased resistance to wear.

These arbors are used for mounting tapered back chucks or any other tool having a tapered back directly onto the machine spindle.

Accurately gauged self locking tapers ensure close tolerance fit.

Cat. No.	Morse Taper	Jacob Taper
TSA-6500	1	1
TSA-6501	1	2
TSA-6502	1	3
TSA-6503	1	4
TSA-6504	1	5
TSA-6505	1	6
TSA-6506	1	33
TSA-6507	2	0
TSA-6508	2	1
TSA-6509	2	2
TSA-6510	2	3
TSA-6511	2	4
TSA-6512	2	5
TSA-6514	2	6
TSA-6515	2	33
TSA-6516	3	1
TSA-6517	3	2
TSA-6518	3	3
TSA-6519	3	4
TSA-6520	3	5
TSA-6521	3	6
TSA-6522	3	33
TSA-6523	4	2
TSA-6524	4	3
TSA-6525	4	4
TSA-6526	4	5
TSA-6527	4	6
TSA-6528	4	33
TSA-6529	5	2
TSA-6530	5	3
TSA-6531	5	4
TSA-6532	5	5
TSA-6533	5	6
TSA-6534	5	33



Cat. No.	Morse Taper	Drill Chuck Taper
TSA-6540	1	B 10
TSA-6541	1	B 12
TSA-6542	2	B 12
TSA-6543	3	B 12
TSA-6544	1	B 16
TSA-6545	2	B 16
TSA-6546	3	B 16
TSA-6547	4	B 16
TSA-6548	1	B 18
TSA-6549	2	B 18
TSA-6550	3	B 18
TSA-6551	4	B 18
TSA-6552	2	B 22
TSA-6553	3	B 22
TSA-6554	4	B 22



Blank end arbors are manufactured from high quality steel.

Taper portion is ground & hardened.

These arbors are designed for applications where regular tapered & hardened arbors cannot be used.

Shank portion is soft & can be modified to suit individual requirements for mounting cutters etc.

Accurately gauged self locking tapers ensure close tolerance fit.

Cat. No.	Morse Taper
BEA-6280	1
BEA-6281	1
BEA-6282	2
BEA-6283	3





Drill Sleeves or reduction sleeves as the name suggests are used to adapt small morse taper shank size tools for use on machine spindles of larger sizes.

The sleeves have a precise connectivity & taper for allowing an exact matching with the tool held.

Available in both A-Grade as well as Workshop Grade.

<u>A-GRADE</u>: Hardened throughout. Accurately ground both internally & externally precisely to close limits.

WORKSHOP GRADE: Accurately grounded externally & reamed finish internally. Suitable for general workshop use.

Cat. No.	Cat. No.	Morse Taper	Morse Taper	Overall Length
Workshop Grade	A Grade	Outside	Inside	mm
DS6240	DS-6260	1	2	92
DS6241	DS-6261	1	3	99
DS6242	DS-6262	1	4	124
DS6243	DS-6263	1	5	171
DS6244	DS-6264	2	3	121
DS6245	DS-6265	2	4	124
DS6246	DS-6266	2	5	156
DS6247	DS-6267	3	4	140
DS6248	DS-6268	3	5	156
DS6249	DS-6269	4	5	171
DS6250	DS-6270	4	6	218
DS6251	DS-6271	5	6	218





Manufactured from high grade steel, body is hardened for extra strength & rigidity.

Consists of two anti-friction bearings, one taper roller bearing takes thrust & shares radial load with one ball bearing.

The spindle (nozzle) is hardened to within 60 - 62 HRC & is precisely ground to 60° tip angle. Knurled body for a firm grip.

Cat. No.	Morse	Body	Point	Di	a.	Overall	Length
Cal. NO.	Taper	Dia.	Foint	Inch	mm	Inch	mm
LC-6100	MT 1	1-5/16	34	11/16	18	4-3/4	121
LC-6101	MT 2	2	50	27/32	21	5-7/8	149
LC-6102	MT 3	2-5/16	60	15/16	24	7-1/4	185
LC-6103	MT 4	2-1/2	63	1-1/8	29	8-5/8	220
LC-6104	MT 5	3	75	1-1/2	38	10-1/4	260
LC-6105	MT 6	4	100	2-1/8	54	14	356



Live Center Heavy Duty – Triple Bearing

Manufactured from high grade steel, body is hardened for extra strength & rigidity.

Consists of three anti-friction steel bearings, one taper roller bearing takes thrust & shares radial load with two ball bearing.

The spindle (nozzle) is hardened to within 60 – 62 HRC & is precisely ground to 60° tip angle.

Bearings are pre-loaded to avoid starting shock loads.

Cat. No.	Morse	Body	Point	Di	a.	Overall	Length
Gal. NO.	Taper	Dia.	1 onit	Inch	mm	Inch	mm
LC-6090	MT 1	1-5/16	34	11/16	18	4-3/4	121
LC-6091	MT 2	2	50	27/32	21	5-7/8	149
LC-6092	MT 3	2-5/16	60	15/16	24	7-1/4	185
LC-6093	MT 4	2-1/2	63	1-1/8	29	8-5/8	220
LC-6094	MT 5	3	75	1-1/2	38	10-1/4	260
LC-6095	MT 6	4	100	2-1/8	54	14	356





Designed to hold pipe & hollow work.

Preloaded bearings to achieve good thrust & radial capacities.

Head made from heat treated hardened high carbon alloy steel.

Cat. No.	Morse	Head Dia.	Total Length	Nose Dia.	Angle	
	Taper	mm	mm	mm	Angle	
BLC-6500	MT 2	63	136	11.7	70°	
BLC-6501	MT 3	78	172	18	70°	
BLC-6502	MT 4	128	193	35	75°	
BLC-6503	MT 5	147	243	35	75°	





Manufactured from high grade alloy steel.

Covers broad range of applications like to hold conical ends, small diameter parts & bores up-to 1-1/8".

Special taper mount for quick change of points.

Sets are supplied in fine finished wooden stand.

Cat. No.	Size
MLC-6549	MT 2
MLC-6550	MT 3





Manufactured from high quality carbon steel. Solid construction with no moving parts, suitable for all machining as well as grinding applications.

Hardened & ground all over to precision limits, 60° included point angle.

Carbide tipped solid lathe centers are brazed with prescribed quality carbide tips offering maximum resistance & giving a longer tool life.

High speed steel tipped solid lathe centers also available.

Cat. No.	Cat. No.	Cat. No.	Morse	Overall Le	ength
Carbon Steel	H.S.S.	Carbibe Tipped	Taper	Inch	mm
SLC-6180	SLC-6190	SLC-6200	MT 0	2-7/8	73
SLC-6181	SLC-6191	SLC-6201	MT 1	3-5/16	84
SLC-6182	SLC-6192	SLC-6202	MT 2	4-3/16	106
SLC-6183	SLC-6193	SLC-6203	MT 3	5-1/4	133
SLC-6184	SLC-6194	SLC-6204	MT 4	6-1/2	165
SLC-6185	SLC-6195	SLC-6205	MT 5	8	203
SLC-6186	SLC-6196	SLC-6206	MT 6	10-5/8	270





Half Lathe Centers

60° included point angle half center. Precise ground & hardened.

Solid construction with no moving parts. Carbide tipped centers give longer tool life.

High speed steel tipped half lathe centers also available.

Cat. No.	Cat. No.	Cat. No.	Morse	Overall Le	ength
Carbon Steel	H.S.S.	Carbibe Tipped	Taper	Inch	mm
HLC-6520	HLC-6530	HLC-6540	MT 1	3-5/16	84
HLC-6521	HLC-6531	HLC-6541	MT 2	4-3/16	104
HLC-6522	HLC-6532	HLC-6542	MT 3	5-1/4	133
HLC-6523	HLC-6533	HLC-6543	MT 4	6-1/2	165
HLC-6524	HLC-6534	HLC-6544	MT 5	8	203





Manufactured from case hardened steel for maximum strength & rigidity.

The properly hardened jaws are equipped with spring tension & flat surfaces are accurately ground.

The tool is extremely useful for holding work together in tapping, drilling & grinding.

Screw heads are drilled, allowing use of pin for tightening.

Cat. No.	Jaw L	ength	Jaw Opening	
Cal. NO.	Inch	mm	Inch	mm
TPC-6020	2	50	1-1/4	31
TPC-6021	2-1/2	60	1-3/4	44
TPC-6022	3	75	2-1/4	57
TPC-6023	4	100	2-3/4	70
TPC-6024	5	125	3-1/2	89
TPC-6025	6	150	4-1/2	114
TPC-6026	8	200	6	150



Adjustable Mill Stop

Convenient & versatile accessory for use on milling machines, vertical or horizontal jig-borers.

Serves as a rigid placement stop on milling set-ups with vises or angle plates.

Has 1/2" (12.7 mm) clamping hole in base to allow secure t-slot machine mounting.

3/8" (9.50 mm) diameter rod with 1/4" (6 mm) step.

Base dimension 2 x 4-1/2" (50 x 114 mm).

Overall height 7-1/2" (190 mm).

Cat. No. AMS-6030



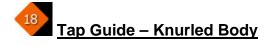
Fits most popular machine vices - Anglock Type of 5" & 6".

Bolt-on design, requires no modifications to vise.

Will work in left or right hand location.

Will work with any jaw height.

Cat. No. AMS-6030



Knurled for easy gripping.

Pin is hardened & is reversible for male & female hole centering of tip.

Adjustable spring.

Comes in an attractive vinyl pouch.

Cat. No.	Shank Dia.	Point Dia.
TGK-6110	1/2"	3/16"







Engineer's Steel Parallels

Manufactured from proper alloy steel & are furnished in matched pairs.

These are hardened & accurately ground on all four faces.

Generally used in layout work to raise the job to a suitable height & provide a solid seat.

The parallels are practically interchangeable because of their true accuracy.

Cet No.	Size
Cat. No.	Inch
ESP-6045	3 x 1/16 x 1
ESP-6046	3 x 1/8 x 1
ESP-6047	3 x 1/4 x 1
ESP-6048	3 x 1/2 x 1
ESP-6049	4 x 1/4 x 1/2
ESP-6050	6 x 1/8 x 1
ESP-6051	6 x 1/4 x 1-1/2
ESP-6052	6 x 1/4 x 2
ESP-6053	6 x 3/8 x 1/2
ESP-6054	6 x 3/8 x 3/4
ESP-6055	6 x 3/8 x 1
ESP-6056	6 x 1/2 x 3/4
ESP-6057	6 x 1 x 1
ESP-6058	6 x 1 x 1-1/4
ESP-6059	6 x 1 x 1-1/2
ESP-6060	6 x 1 x 2
ESP-6061	6 x 1-1/4 x 1-1/4
ESP-6062	8 x 1/2 x 3/4
ESP-6063	8 x 1 x 1-1/4
ESP-6064	8 x 1 x 1-1/2
ESP-6065	8 x 1 x 2
ESP-6066	9 x 1/2 x 1
ESP-6067	9 x 3/4 x 1-1/2
ESP-6068	10 x 1-1/2 x 1-1/2
ESP-6069	10 x 1-1/2 x 2
ESP-6070	12 x 3/4 x 1
ESP-6071	12 x 3/4 x 1-1/4
ESP-6072	12 x 3/4 x 1-1/2
ESP-6073	12 x 1-2/4 x 1/2
	ied as per specific orders entioned above.
Equivalent Metric Sizes can be s	supplied against specific orders.

ATECH



20 Single Ended Pin Vise

Pin vises are work-holding tools for hand or machine use.

Designed for holding small stock or taps, drills etc. securely & have a knurled body with a black finish.

Knurled end has smaller diameter than chuck.

These pin vises are available in individual sizes or as a set of 4.

Cat. No.	Сара	acity	Overall Length	
Gal. NO.	Inch	mm	Inch	mm
SPV-6080	0 to .04	0 to 1.0	3-3/8	85
SPV-6081	0.031 to .06	0.8 to 1.5	3-5/8	92
SPV-6082	.052 to .125	1.3 to 3.1	3-3/4	95
SPV-6083	.120 to .192	3.0 to 4.85	4-1/8	105
SPV-6084	4 PC Set - Consisting of One each from the above mentioned sizes.			





Manufactured from high grade cast Iron.

Available in both straight tail & bent tail.

Fixed with hardened screws, for heavy duty.

Sizes 3.1/2" to 6" (89mm to 152mm) are fitted with two screws instead of one.

Cat. No.	Cat. No.	Сара	city
Straight Type	Bent Type	Inch	mm
DC-6120	DC-6140	1/2	12.5
DC-6121	DC-6141	3/4	19
DC-6122	DC-6142	1	25
DC-6123	DC-6143	1-1/4	32
DC-6124	DC-6144	1-1/2	38
DC-6125	DC-6145	1-3/4	44
DC-6126	DC-6146	2	50
DC-6127	DC-6147	2-1/2	63
DC-6128	DC-6148	3	76
DC-6129	DC-6149	4	101
DC-6130	DC-6150	5	127
DC-6131	DC-6151	6	152





These are manufactured from fine steel. Hardened & tempered.

Helps in removing taper shank tools conveniently from drill sleeves & sockets.

Black mottle finish.

Cat. No.	Drift No.	To Suit
Cat. No.	Britt No.	Morse Taper
EDD-6160	1	MT 1-2
EDD-6161	2	MT 2-3
EDD-6162	3	MT 3-4
EDD-6163	4	MT 4-5
EDD-6164	5	MT 5-6





Sleeves are manufactured from special steel, properly heat treated & internally ground on 3 diameters.

Key operated guided jaw type.

Body manufactured from special steel.

Jaws & screw rings are properly hardened & ground.

Cat. No.	Chuk Capacity	Mount		
	Inch	Tapered	Threaded (T.P.I)	
PDC-6220	1/4	JT-1	3/8 x 24	
PDC-6221	3/8	JT-2, B-12	3/8 x 24, 1/2 x 20	
PDC-6222	1/2	JT-2, JT-6, JT-33, B-12, B-16	1/2 x 20, 5/8 x 16	
PDC-6223	5/8	JT-2, JT-3, JT-6, JT-33, B-16, B-18	1/2 x 20, 5/8 x 16	
PDC-6224	3/4	JT-3	5/8 x 16	
Other sizes can be supplied as per specific orders which are not mentioned above.				



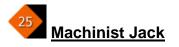
Solid Socket (Turret Socket)

Straight shank with morse taper hole. Hardened & ground.

For holding morse taper shank tools in straight turret & automatic lathes.

Cat. No.	Hole	Outside Dia.	Overall Length
SS-6560	MT-1	1"	3-1/2"
SS-6561	MT-1	1-1/4"	3-1/2"
SS-6562	MT-1	1-1/2"	3-1/2"
SS-6563	MT-2	1"	4"
SS-6564	MT-2	1-1/4"	4"
SS-6565	MT-2	1-1/2"	4"
SS-6566	MT-2	1-3/4"	4"
SS-6567	MT-2	2"	4"
SS-6568	MT-3	1-1/4"	4-3/4"
SS-6569	MT-3	1-1/2"	4-3/4"
SS-6570	MT-3	1-3/4"	4-3/4"
SS-6571	MT-3	2"	4-3/4"
SS-6572	MT-4	1-1/2"	6"
SS-6573	MT-4	1-3/4"	6"
SS-6574	MT-4	2"	6"
SS-6575	MT-5	2-1/4"	7-3/8"
SS-6576	MT-5	2-1/2"	7-3/8"
SS-6577	MT-6	3-1/4"	10-1/8"
SS-6578	MT-6	3-1/2"	10-1/8"





Manufactured from cast iron steel.

Adjustable screw & tilting swivel head.

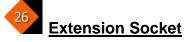
Lock nut facility for permanent positioning.

Used on shapers, milling machines, drill presses etc. or any area where leveling is required.

Can be adjusted up-to 1" (25.4 mm).

Cat. No. MJ-6170





Manufactured from high quality case hardened steel.

Used as an extension for all the taper shank tools.

Available in both A-Grade as well as Workshop Grade.

<u>A-GRADE</u>: Hardened throughout. Accurately ground both internally & externally precisely to close limits.

Cat. No.	Cat. No.	Morse Taper	Morse Taper
Workshop Grade - Unhardened	A Grade - Hardened	Inside	Outside
ES-6600	ES-6640	1	1
ES-6601	ES-6641	1	2
ES-6602	ES-6642	1	3
ES-6603	ES-6643	1	4
ES-6604	ES-6644	1	5
ES-6605	ES-6645	2	1
ES-6606	ES-6646	2	2
ES-6607	ES-6647	2	3
ES-6608	ES-6648	2	4
ES-6609	ES-6649	2	5
ES-6610	ES-6650	3	2
ES-6611	ES-6651	3	3
ES-6612	ES-6652	3	4
ES-6614	ES-6653	3	5
ES-6615	ES-6654	4	2
ES-6616	ES-6655	4	3
ES-6617	ES-6656	4	4
ES-6618	ES-6657	4	5
ES-6619	ES-6658	4	6
ES-6620	ES-6659	5	3
ES-6621	ES-6660	5	4
ES-6622	ES-6661	5	5
ES-6623	ES-6662	5	6
ES-6624	ES-6663	6	6



Adapter Pin Chuck Set

Adapter pin chucks are used for holding miniature drills.

The adapter is locked into a chuck to convert it for precise drilling.

Comes with two sets of jaws, Capacity 0 to 1/16" (0 to 1.60 mm) & 1/16" to 3/32" (1.60 mm to 2.40 mm).

Cat. No.	Shank Diameter		ank Diameter Shank length		Overall Length	
Cat. NO.	Inch	mm	Inch	mm	Inch	mm
APC-6470	3/32	2.4	1-3/8	35	2-5/8	67





Pin Chucks are designed for holding small drills. The pin chuck is gripped in the larger chuck that is already on the machine.

Also used on automatic lathes where pins chuck does not revolve.

Supplied with 3 interchangeable collets as one set.

Black shiny finish.

Cat. No.	One Pin Chuck with 3 collets of size
PCS-6480	0 to 1/32" (0 to 0.8 mm)
	1/32" to 1/16" (0.8 mm to 1.60 mm)
	1/16" to 3/32" (1.60 mm to 2.40 mm)





Holds work when driving pins, drilling, etc.

V-Groove accommodates round & odd shaped work.

Hardened & ground knurled body for a firm grip.

Recessed base for light weight.

Cat. No.	Block Dia.				Block Holes	
Cal. NO.	Inch	mm	Inch	mm	Inch	mm
BB-6490	3	76	1-1/2	38	1/8 to 5/8	3.2 to 16





Valve & seat cutters are manufactured from high grade carbon steel, hardened & tempered. Cutting edges of all the cutters are accurately ground for best results. Supplied in fine finished wooden box.

Cat. No.	Set	Size of Valve Seat & Face Cutter Included	Size Of Bore
Cat. NO.	Set	Inch	Cutter Included Inch
VSC-6000	3 PC Set	1-5/16 & 1-7/16 (45°) Supplied with 2 Guides, 1 Handle, Rod & Small Pin	1-3/8 (20°)
VSC-6001	4 PC Set	1-5/16, 1-7/16 & 1-3/8 (45°) Supplied with 2 Guides, 1 Handle, Rod & Small Pin	1-3/8 (20°)
VSC-6002	5 PC Set	1-5/16, 1-3/8, 1-1/2 & 1-11/16 (45°) Supplied with 2 Guides, 1 Handle, Rod & Small Pin	1-1/2 (20°)
VSC-6003	10 PC Set	1-3/16, 1-1/4, 1-5/16, 1-3/8, 1-1/2, 1-11/16, 1-3/4 (45°) & 1-9/16, 1-1/4 (20°) & 1-11/16 (30°) Supplied with 8 Guides, 2 Handle, 2 Rods & Small Pin	1-1/4 & 1-1/2 (20°)
VSC-6004	12 PC Set	1-3/16, 1-1/4, 1-5/16, 1-3/8, 1-1/2, 1-11/16, 1-3/4, 2-1/16 (45°) & 1-9/16, 1-1/4 (20°) & 1-11/16 (30°) Supplied with 8 Guides, 2 Handle, 2 Rods & Small Pin	1-1/4, 1-1/2 & 1-3/4 (20°)
VSC-6005	15 PC Set	1-3/16, 1-1/4, 1-5/16, 1-3/8, 1-1/2, 1-11/16, 1-3/4, 2-1/16, 1-7/16, 1-5/8, 2-1/8 (45°) & 1-9/16, 1-1/4 (20°) & 1-11/16 (30°) Supplied with 8 Guides, 2 Handle, 2 Rods & Small Pin	1-1/4, 1-1/2 & 1-3/4 (20°)
VSC-6006	20 PC Set	1-3/16, 1-1/4, 1-5/16, 1-3/8, 1-1/2, 1-11/16, 1-3/4, 2-1/16, 1-7/16, 1-5/8, 2-1/8, 1-1/8, 1-7/8, 2-1/4 (45°) & 1-9/16, 1-1/4 (20°) & 1-11/16 (30°) Supplied with 8 Guides, 2 Handle, 2 Rods & Small Pin	1-1/4, 1-1/2, 1-3/4 & 2 (20°)





Three jaw steel screw chuck.

Plastic handle.

Ideal tool for holding small drills, burs, wires, reamers & other miniature tools.

Cat. No.	Сар	Capacity		ll Length
Gal. NO.	Inch	mm	Inch	mm
APV-6759	0 to 1/4	0 to 6.35	6-3/16	155
APV-6760	1/8 to 1/2	3.2 to 12.7	6-1/2	165





Block properly heat treated. Accurately machined & precision ground to extreme accuracy.

These vee blocks will hold the job securely & accurately during drilling & milling operations. Suitable for tool-makers & machinist's.

Accurately finished in matched pairs, so that 90° vee in each block is always in alignment with the other block of the pair.

Clamp fitted with one steel screw for adjustment. Supplied in matched pairs, clamps included.

Cat. No.	Length x Widtl	h x Height	Clamping	Capacity
	Inch	mm	Inch	mm
VB-6715	1-5/8 x 1-1/4 x 1-1/4	40 x 32 x 32	1	25
VB-6716	2 x 1-1/2 x 1-1/2	50 x 38 x 38	1-1/2	38
VB-6717	1-3/4 x 1-5/8 x 1-3/8	45 x 40 x 35	1	25
VB-6718	2-3/4 x 1-3/4 x 1-5/8	70 x 45 x 40	1-1/2	38
VB-6719	2-1/2 x 2 x 2	63 x 50 x 50	2	50
VB-6720	3-1/8 x 2-1/2 x 2-1/2	80 x 63 x 63	2-1/2	63
VB-6721	2 x 1-5/8 x 2	50 x 40 x 50	1-1/4	30
VB-6722	3 x 2-1/8 x 2-1/8	75 x 55 x 55	2	50
VB-6723	4 x 3 x 3	100 x 75 x 75	2-3/4	70





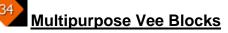
Manufactured from high quality casting, properly seasoned against any kind of distortion.

Are accurately machined square & parallel. 90° vee is centered true.

Supplied in matched pairs.

Cat. No.	Length		Width Of Vee	
	Inch	mm	Inch	mm
VB-6730	3	75	1-3/4	44
VB-6731	4	100	2	50
VB-6732	5	127	2	50
VB-6733	6	150	3-1/4	82
VB-6734	7	180	3-1/2	90
VB-6735	8	205	4	100
VB-6736	10	255	5	125
VB-6737	12	305	6-1/2	165





Stepped groove construction permits both low & high clamping.

Designed for holding square or round work-pieces with great accuracy.

Hardened steel, all side precision ground, parallel & square.

Features clamps within groves permit use on sides.

Supplied in matched pairs, clamps included.

Cat. No.	Length x Width x Height			
	Inch	mm		
VB-6745	2-3/8 x 2-3/4 x 2	60 x 70 x 50		





Block properly heat treated.

Accurately machined & precision ground to extreme accuracy.

Top clamping design allows the blocks to be used on the side faces also.

Accurately finished in matched pairs, so that 90° vee in each block is always in alignment with the other block of the pair.

Clamp fitted with one steel screw for adjustment.

Supplied in matched pairs, clamps included.

Cat. No.	Length x Widt	Clamping Capacity	
Cat. NO.	Inch	mm	mm
VB-6749	2-3/4 x 2-1/2 x 1-3/4	70 x 63 x 45	37
VB-6750	4-7/8 x 3-1/2 x 2-3/4	125 x 88 x 70	45





This particular tool does full justification to its name as it can be used on the base, on ends or flat on either side.

The clamp is within the outside width of the block. Fully hardened & precision ground.

Sides are ground parallel & the groove is ground central & parallel to the sides & the base.

Clamp has an adjustable side screw which supports the block and prevents it from tilting during various operations like drilling, milling or grinding.

A right angle groove at steeped end is handy for holding shouldered studs round pins etc.

Vee block has four tapped holes, two in the base & one each on sides so that the block can be attached to a working table or to a lathe face plate.

Cat. No.	Length x Widtl	h x Height	Clamping Capacity		
Cal. NO.	Inch	mm	Inch mm		
VB-6740	3-5/8 x 1-7/8 x 1-7/8	92 x 48 x 48	1-5/16	33	



Magnetic Vee Blocks

An indispensable tool for any engineering unit having three contact faces, all magnetized at the same time.

As such it will hold itself & the work piece at the same time on any flat ferrous surface.

It can even be used on the machines fitted with Magnetic Chuck (without energizing the chuck).

A powerful, permanent magnet is controlled by Rotary ON/OFF Switch. All working surfaces are precision ground.

Generally supplied in matched pairs but can be supplied in singles also.

Most suitable for holding round & irregular shapes for scribing, grinding, measuring & machining.

Cat	Cat. No. Length x Width x Height		Length x Width x Height		٧
Pair	Single	Inch	mm	Inch	mm
VB-6700	VB-6703	2-3/4 x 2-1/8 x 2-7/8	70 x 54 x 73	1-1/2	38
VB-6701	VB-6704	4 x 2-3/4 x 3-3/4	100 x 70 x 95	2	50
VB-6702	VB-6705	6 x 3 x 3-3/4	150 x 75 x 95	2-1/4	55



Carbide Tool Holders

Position of cutter is parallel to shank. This simplifies grinding cutter to correct rake & clearance.

SERIES ST: Straight LT: Left RT: Right.

Heat treated & hardened.

Supplied without tool bits, allen key / wrench provided.

Cat. No.	Cat. No.	Cat. No.	Holder Size	Tool Bit Size	Height From Bottom Shank To Cutter Point
Straight	Left	Right	Inch	Inch	Inch
TTH-2011	TTH-2021	TTH-2031	3/8 x 15/16 x 6	1/4	11/16
TTH-2012	TTH-2022	TTH-2032	1/2 x 1-1/4 x 7	5/16	7/8
TTH-2014	TTH-2023	TTH-2033	5/8 x 1-1/2 x 8	3/8	1
TTH-2015	TTH-2024	TTH-2034	3/4 x 1-3/4 x 9	7/16	1-1/8
TTH-2016	TTH-2025	TTH-2035	7/8 x 1-7/8 x 10	1/2	1-1/4
TTH-2017	TTH-2026	TTH-2036	1 x 2-1/8 x 12	5/8	1-3/8
TTH-2018	TTH-2027	TTH-2037	1-1/4 x 2-1/4 x 13	3/4	1-1/2



1

<u> Turning Tool Holder – American Pattern</u>

Accurately machined & ground finished in black mottle, heat treated & hardened.

Cutter bit hole assures proper seating of tool bits which reduces breakage.

Supplied without tool bits, allen key / wrench provided.

SERIES ST: Straight LT: Left RT: Right.

Cat. No.	Cat. No.	Cat. No.	Но	Tool Bit Size	
Straight	Left	Right	Inch	mm	Inch
TTH-2041	TTH-2051	TTH-2061	5/16 x 1/2 x 4	8 x 12.5 x 101	1/8
TTH-2042	TTH-2052	TTH-2062	5/16 x 3/4 x 4-1/2	8 x 19 x 114	3/16
TTH-2043	TTH-2053	TTH-2063	3/8 x 7/8 x 5	9.5 x 22 x 127	1/4
TTH-2044	TTH-2054	TTH-2064	1/2 x 1-1/8 x 6	12.5 x 28 x 152	5/16
TTH-2045	TTH-2055	TTH-2065	5/8 x 1-3/8 x 7	16 x 35 x 178	3/8
TTH-2046	TTH-2056	TTH-2066	3/4 x 1-5/8 x 8	19 x 41 x 203	7/16
TTH-2047	TTH-2057	TTH-2067	7/8 x 1-3/4 x 9	22 x 44 x 228	1/2





Turning Tool Holder – English Pattern

Accurately machined & ground finished in black mottle, heat treated & hardened.

Suitable for use on English type & European lathes.

SERIES ST: Straight LT: Left RT: Right.

3

Cutter bit hole assures proper seating of tool bits which reduces breakage.

Supplied without tool bits, allen key / wrench provided.

Cat. No.	Cat. No.	Cat. No.	Но	Tool Bit Size	
Straight	Left	Right	Inch	mm	Inch
TTH-2071	TTH-2081	TTH-2091	1/2 x 9/16 x 4-1/2	12.5 x 14 x 114	1/8
TTH-2072	TTH-2082	TTH-2092	1/2 x 5/8 x 5	12.5 x 16 x 127	3/16
TTH-2073	TTH-2083	TTH-2093	5/8 x 3/4 x 6	16 x 19 x 152	1/4
TTH-2074	TTH-2084	TTH-2094	3/4 x 7/8 x 7	19 x 22 x 178	5/16
TTH-2075	TTH-2085	TTH-2095	7/8 x 1 x 8	22 x 25 x 203	3/8
TTH-2076	TTH-2086	TTH-2096	1 x 1-1/8 x 9	25 x 28 x 228	7/16
TTH-2077	TTH-2087	TTH-2097	1-1/8 x 1-1/4 x 10	28 x 31 x 254	1/2



Machined to precise tolerances, ground finished in black mottle.

Supports the blade over a wide area which reduces the chance of blade breakage, carefully heat treated.

SERIES ST: Straight LT: Left RT: Right.

Supplied without tool bits, allen key / wrench provided.

Cat. No.	Cat. No.	Cat. No.	Holder Size		Tool B	it Size
Straight	Left	Right	Inch	mm	Inch	mm
TTH-2111	TTH-2121	TTH-2131	5/16 x 9/16 x 3-1/2	8 x 14 x 89	1/16 x 5/16	1.5 x 8
TTH-2112	TTH-2122	TTH-2132	5/16 x 3/4 x 4-1/2	8 x 19 x 114	3/32 x 1/2	2.3 x 12.5
TTH-2114	TTH-2123	TTH-2133	3/8 x 7/8 x 5	9.5 x 22 x 127	3/32 x 5/8	2.3 x 16
TTH-2115	TTH-2124	TTH-2134	1/2 x 1-1/8 x 6	12.5 x 29 x 152	1/8 x 3/4	3.2 x 19
TTH-2116	TTH-2125	TTH-2135	5/8 x 1-3/8 x 7	16 x 35 x 178	1/8 x 7/8	3.2 x 22
TTH-2117	TTH-2126	TTH-2136	3/4 x 1-5/8 x 8	19 x 41 x 203	3/16 x 1	4.5 x 25.4
TTH-2118	TTH-2127	TTH-2137	7/8 x 1-3/4 x 9	22 x 44 x 228	3/16 x 1-1/8	4.5 x 29
TTH-2119	TTH-2128	TTH-2138	1 x 2 x 10	25 x 50 x 250	1/4 x 1-1/4	6.4 x 32
TTH-2120	TTH-2129	TTH-2139	1-1/4 x 2-1/ 4 x 11	32 x 56 x 280	1/4 x 1-3/8	6.4 x 35







Parting Tool Holder – Eclipse Type

Precision machined & ground finished in black mottle.

Suitable for use on English type & European lathes.

SERIES ST: Straight LT: Left RT: Right.

Supplied without tool bits.

Allen key / Wrench provided.

Cat. No.	Cat. No.	Cat. No.	Holder Size		Tool Bit Size
Straight	Left	Right	Inch	mm	Inch
TTH-2141	TTH-2144	TTH-2147	1/2 x 1-1/8 x 6	12 x 28 x 150	1/2 x 5/8 width
TTH-2142	TTH-2145	TTH-2148	5/8 x 1-3/8 x 7	16 x 35 x 175	3/4 x 7/8 width
TTH-2143	TTH-2146	TTH-2149	3/4 x 1-3/4 x 7-1/2	19 x 45 x 190	1 x 1-1/8 width



Indexable Carbide Turning Tool Holder

Versatility of cutting in any direction.

Positive rake cutting & built in chip breaker groove.

Supplied without inserts.

Cat. No.	Shank Size Inch	Description
TTH-2151	3/8	5 PC Set
TTH-2152	1/2	5 PC Set
TTH-2153	5/8	5 PC Set
TTH-2154	3/4	5 PC Set
TTH-2155	1	5 PC Set





<u>Turning Tool Holder – Adjustable</u>

Accurately machined & ground finished in black mottle, heat treated & hardened.

SERIES ST: Straight LT: Left RT: Right.

Supplied without tool bits, allen key / wrench provided.

Cat. No.	Cat. No.	Cat. No.	Overall Length		Tool Bit Size	
Straight	Left	Right	Inch	mm	Inch	mm
TTH-2157	TTH-2167	TTH-2177	5	127	3/16 to 1/4	4.5 to 6.4
TTH-2158	TTH-2168	TTH-2178	5-1/2	140	1/4 to 5/16	6.4 to 8
TTH-2159	TTH-2169	TTH-2179	6	152	5/16 to 3/8	8 to 9.5
TTH-2160	TTH-2170	TTH-2180	8	203	3/8 to 1/2	9.5 to 12.5



Quick Clamp Parting Tool Holder

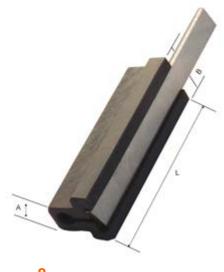
Single piece construction with 100% clamping power.

Holds & guides the bevelled blade in a way that it assures equal clearance on both sides.

It can be used both on front & rear tool post of the cross line. Supplied without blade.

Cat. No. Shank (A) x Wid		h (B) x Length (L)	Blade Size	
Cat. No	Inch	mm	Inch	mm
QCP-2234	1/2 x 7/8 x 2-9/16	12.5 x 22 x 64	3/32 x 1/2 x 4	2.3 x 12.5 x 100
QCP-2235	1/2 x 7/8 x 2-9/16	12.5 x 22 x 64	3/32 x 5/8 x 4	2.3 x 16 x 100
QCP-2236	3/4 x 1-1/8 x 3-3/8	19 x 29 x 85	1/8 x 3/4 x 5	3.2 x 19 x 125







Manufactured from high quality steel. Accurately machined & ground in black mottle finish.

Separately designed for English & American type lathes, supplied complete with H.S. knurls.

Knurling tool holders with Single Knurls are supplied in straight or diamond pitch in fine, medium or coarse.

Knurling tool holders with Two Knurls are supplied in left & right pitch in fine, medium or coarse.

Holders with Six Knurls are fitted with three pairs of knurls (one right & one left), in fine, medium & coarse pitches.

Cat. No.	Description	No. Of	Size Of	Holder	Knurl Dim (Dia. x Thickn	
		Knurls	Inch	mm	Inch	mm
KTH-1015	Revolving Head	6	1 x 1 x 6-1/2	25 x 25 x 165	3/4 x 3/8 x 1/4	19 x 9.5 x 6.4
KTH-1017	Pivot Head	2	1/2 x 1/2 x 4-1/2	12 x 12 x 112	3/4 x 3/8 x 1/4	19 x 9.5 x 6.4
KTH-1019	Single Knurl	1	1/2 x 1/2 x 4	12 x 12 x 100	3/4 x 1/4 x 1/4	19 x 6.4 x 6.4
KTH-1020	Single Knurl	1	3/4 x 3/4 x 5	19 x 19 x 125	3/4 x 3/8 x 1/4	19 x 9.5 x 6.4
KTH-1027	Revolving Head	6	1/2 x 7/8 x 6-1/2	12 x 22 x 165	5/8 x 3/16 x 1/4	16 x 4.5 x 6.4
KTH-1112	Revolving Head	6	5/16 x 3/4 x 5	8 x 19 x 125	5/8 x 5/16 x 7/32	16 x 8 x 5.5
KTH-1113	Revolving Head	6	3/8 x 7/8 x 5-1/2	9.5 x 22 x 138	5/8 x 5/16 x 7/32	16 x 8 x 5.5
KTH-1114	Revolving Head	6	1/2 x 1-1/8 x 6-1/2	12 x 29 x 165	3/4 x 3/8 x 1/4	19 x 9.5 x 6.4
KTH-1115	Revolving Head	6	5/8 x 1-3/8 x 7-1/2	16 x 35 x 190	3/4 x 3/8 x 1/4	19 x 9.5 x 6.4
KTH-1755	Self Adj. Head	2	5/16 x 3/4 x 5	8 x 19 x 125	5/8 x 5/16 x 7/32	16 x 8 x 5.5
KTH-1756	Self Adj. Head	2	3/8 x 7/8 x 5-1/2	9.5 x 22 x 138	5/8 x 5/16 x 7/32	16 x 8 x 5.5
KTH-1757	Self Adj. Head	2	1/2 x 1-1/8 x 6-1/2	12 x 29 x 165	3/4 x 3/8 x 1/4	19 x 9.5 x 6.4
KTH-1758	Self Adj. Head	2	5/8 x 1-3/8 x 7-1/2	16 x 35 x 190	3/4 x 3/8 x 1/4	19 x 9.5 x 6.4
KTH-1759	С Туре	2	5/8/ x 3/8 x 3	16 x 9.5 x 76	3/4 x 3/8 x 1/4	19 x 9.5 x 6.4

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Knurling Tool Holder – Quick Acting Type

Simple scissor & clamp design, extremely fast set-up.

Complete with one set of diamond shaped medium pitch knurls – 3/8" x 3/4" x 1/4" (9.5mm x 19mm x 6.35mm).

Depth of knurling impression can be pre-set for production work.

Cat. No.				Shank Size		pacity
Gat. NO.	Inch	mm	Inch	mm	Inch	mm
KTH-1400	6	150	1/2 x 5/8	12.5 x 16	1/16 - 2-1/4	1.5 - 56.4
KTH-1401	8-1/4	209	5/8 x 3/4	16 x 19	2-1/2 - 4-1/2	62 - 112





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Spare knurls are manufactured in complete variety of pitches & have precision cut teeth that are correctly hardened for producing clear-cut patterns over a long period.

All H.S. knurls are made of best quality cutting steel that has longer life. The holes of these knurls are made concentric to ensure uniform & clear results.

In general language the commonly used knurls are Fine, Medium & Coarse whereas Extra Fine & Extra Coarse is also required sometimes & can be supplied on request.

Cat. No.	Suitable For Knurling	Cut	Pitch	Knurl Dimensions (Dia. x Thickness x Hole)	
	Tool Holders			Inch	mm
SK-1500	KTH - 1015, 1017, 1020, 1114, 1115, 1757, 1758 & 1759	Extra Fine, Fine, Medium, Coarse & Extra Coarse	Straight, Right, Left & Diamond	3/4 x 3/8 x 1/4	19 x 9.5 x 6.4
SK-1501	KTH - 1019	Extra Fine, Fine, Medium, Coarse & Extra Coarse	Straight & Diamond	3/4 x 1/4 x 1/4	19 x 6.4 x 6.4
SK-1502	KTH - 1027	Extra Fine, Fine, Medium, Coarse & Extra Coarse	Right & Left	5/8 x 3/16 x 1/4	16 x 4.5 x 6.4
SK-1503	KTH - 1112, 1113, 1755 & 1756	Extra Fine, Fine, Medium, Coarse & Extra Coarse	Right & Left	5/8 x 5/16 x 7/32	16 x 8 x 5.5



Accurately machined & ground finished in black mottle, heat treated & hardened.

These can be used either straight, right or left hand & are most useful for light turning work.

Supplied without tool bits, allen key provided.

Cat. No.	Capacity		Holder Size (L x W x H)	
Cat. No.	Inch	mm	mm	
UTH-2801	1/4	6.4	110 x 12 x 16	
UTH-2802	3/8	9.5	120 x 14 x 18	
UTH-2803	1/2	12.5	145 x 18 x 20	
UTH-2804	5/8	16	175 x 20 x 25	
UTH-2805	3/4	19	250 x 25 x 32	

- 26 -







For holding taps, reamers, screw extractors & other hand turned tools.

Ground finished, jaws are hardened & tempered with knurled chuck for a better grip.

The four slotted jaws chuck provides firm grip to the piece making it rigid & less apt to become loose.

Cat. No. Model No.		Tap Capacity
Cat. No.	Model No.	Inch
TTW-2201	А	1/16 - 5/32
TTW-2202	В	5/32 - 1/4
TTW-2203	С	3/16 - 5/16
TTW-2204	D	1/4 - 1/2



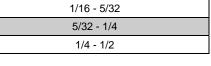


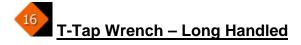
High quality tap wrenches for hand tapping, drilling & reaming operations.

Jaws are hardened & tempered, knurled chuck providing a better grip.

Split jaw & positive holding grip, ground finished.

Cat. No.	Tap Capacity Inch
TTW-2210	1/16 - 5/32
TTW-2211	5/32 - 1/4
TTW-2212	1/4 - 1/2





Designed with its long reach to simplify tapping operations in awkward situations, especially in depths.

Jaws are hardened & tempered with a shiny ground finish.

Cat. No.	Tap Capacity	Available Length
Cat. NO.	Inch	Inch
TTW-2221	5/32 - 1/4	6, 9 & 12
TTW-2222	1/4 - 1/2	6, 9 & 12





Light weight for precision & small tapping applications.

Cat. No.	Tap Capacity	
	Inch	
TTW-2224	1/4	
TTW-2225	1/2	



All steel construction with knurled grip chuck.

Available in ground finish as well as black mottle finish.







Tapping accessory for lathes or drill presses.

Suitable for threading drilled hole manually at one machine location without moving work-piece.

Shiny ground finish.

Jaws are hardened & tempered, reduces tap breakage.

Cat. No.	Tap Capacity Inch
TTW-2238	5/32 - 1/4
TTW-2239	1/4 - 1/2



Interchangeable Tap Wrench Holder Set

A very handy tool set which includes reversible ratchet mechanism.

Consists of two chucks & two handles having 4" (100 mm) & 7" (175 mm) length.

Both chucks as well as the handles are interchangeable, chrome plated body.

Cat. No.	Small Chuck Range	Big Chuck Range
TTW-2260	5/32" - 1/4"	1/4" - 1/2"





Precisely constructed & designed with a sliding T handle, for fitting into tight spaces with ease.

The ratchet can be set for right or left hand operations or direct engagement in neutral position.

For holding taps, reamers, screw extractors & other hand turned tools, jaws are hardened & tempered.

Cat. No.	Tap Capacity Inch
TTW-2247	1/16 - 5/32
TTW-2248	5/32 - 1/4
TTW-2249	1/4 - 1/2



Cat. No.	Tap Capacity	Available Length
Long Handled	Inch	Inch
TTW-2250	5/32 - 1/4	12
TTW-2251	1/4 - 1/2	12



High quality tool for hand tapping operations with accurately hardened & tempered steel jaws.

Supplied in drop forged, steel, malleable & die cast.

Cat. No.	Tap Capacity	ap Capacity Overall Length	
Cat. No.	Inch	Inch	mm
STW-2301	1/16 - 1/4	6	150
STW-2302	3/32 - 3/8	9	225
STW-2303	5/32 - 1/2	11	275
STW-2304	1/4 - 5/8	12	300
STW-2305	1/4 - 3/4	14	350
STW-2306	5/16 - 1	18	450
STW-2307	3/8 - 1.1/4	21	525
STW-2308	1/2 - 1.1/2	25	625
STW-2309	3/4 - 2	45	1125
STW-2310	3/4 - 2.1/2	47	1175



Round Stock Die Holder

Precision die holders of highest quality for holding adjustable round split dies.

Manufactured from selected steel, theses die stocks have a rugged construction. The handle ends are knurled for comfortable non-slip grip.

Four tapped holes are given, one for adjusting screw & three for grub screws.

Cat. No.	Outside Dia. Of Die	Length
	Inch	Inch
RDH-2320	5/8	5-1/2
RDH-2321	13/16	6-1/2
RDH-2322	1	8-1/2
RDH-2323	1-5/16	10
RDH-2324	1-1/2	12
RDH-2325	2	15
RDH-2326	2-1/2	19
RDH-2327	3	22
RDH-2328	4	29
RDH-2329	5	33



Floating Die Holder

Most suitable for short & medium run threading of shafts.

Most convenient for use on lathes, milling machine & tapping tool.

Manufactured from solid one piece of steel.

Cat. No.		Dia. Of ie	. Of Shank Dia.		Overall Length		Body Dia.	
	Inch	mm	Inch	mm	Inch	mm	Inch	mm
FDH-2337	13/16	20	1/2	12.5	3	75	1-1/2	37
FDH-2338	1	25	1/2	12.5	3	75	1-1/2	37
FDH-2339	1-1/2	37	3/4	19	3	75	2	50





Most useful for saws & cutters of following standard hole sizes: 1/2", 5/8",3/4", 7/8" & 1" with thickness up-to 3/16" & diameter up-to 4".

Spring loaded mechanism. Suitable for standard collets, cutters, chucks, various wheels & brushes etc.

Locked in telescopic centering assembly. Supplied complete with allen key.

Cat. No.	Shan	k Dia.	Overall Length		
Cat. NO.	Inch	mm	Inch	mm	
SHC-2340	1/2	12.5	2-1/2	62	





Offers flexibility in sawing operation.

Spring loaded mechanism accepts saw blades with hole diameter from $1/2"\ to\ 1".$

Blades are firmly secured in position with hex head screw.





Made of hardened steel, counter balanced for faster feed & smooth finishes.

For milling wide surfaces, combination of 2 sets of 3 pieces each available with wooden stand.

Machines up-to 6" wide surface with a standard tool bit.

Supplied without tool bits.

Cat. No.	Head Dia.		Shank Size		Tool Bit Size	
Cal. NO.	Inch	mm	Inch	mm	Inch	mm
FTC-2610	3/4	19	1/2	12.5	3/16	4.5
FTC-2611	1-1/8	29	1/2	12.5	1/4	6.4
FTC-2612	1-1/2	37	1/2	12.5	5/16	8
FTC-2614	1-1/2	37	3/4	19	5/16	8
FTC-2615	2	50	3/4	19	5/16	8
FTC-2616	2-1/2	62	3/4	19	5/16	8
FTC-2617	3 PC Set of 2610, 2611 & 2612					
FTC-2618	3PC Set of 2614, 2615 & 2616					



R- 8 Fly Cutter

Applicable for boring through holes with suitable tool bits. Counter-balanced & fully hardened.

Supplied without tool bits. Available in black mottle finish as well as ground finish.

Cat. No.	Head	d Dia.	Tool Bit Size	
Cal. No.	Inch	mm	Inch	mm
FTC-2620	2-1/2	62	5/16	8







Brazed Carbide Lathe Turning Tools

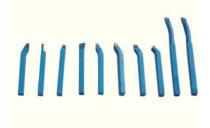
Shapes including Parting off, Boring, Right & Left Hand Turning, Facing & Chamfering.

Proper brazing of the carbide tips ensures no breakage or chipping of any sort while the tool is in use.

Extended tool life due to the thickened steel construction immediately behind the brazed on carbide tip for a heavier, chatter free cut, a deeper bore & more precise work.

Different forms can be supplied separately.

Cat. No.	Shank Size
LTT-2840	6 mm
LTT-2841	8 mm
LTT-2842	10 mm
LTT-2843	12 mm
LTT-2844	1/4"
LTT-2845	5/16"
LTT-2846	3/8"
LTT-2847	1/2"





Manufactured from high speed steel. Properly heat treated & grounded shanks.

These are a set of 8 HSS lathe tools including Parting, Boring, Threading, Corner Finishing, Straight Finishing, Right & Left Hand Turning, & Corner tools.

Different forms can be supplied separately.

Cat. No.	Shank Size
LTT-2820	3 mm
LTT-2821	6 mm
LTT-2822	8 mm
LTT-2823	10 mm
LTT-2824	12mm
LTT-2825	1/8"
LTT-2826	1/4"
LTT-2827	5/16"
LTT-2828	3/8"
LTT-2829	1/2"





Brazed Carbide Boring Bar Set

Rugged construction of these boring bars provides a longer tool life due to the thickened steel construction immediately behind the brazed on carbide tip for a heavier, chatter free cut, a deeper bore & more precise work.

Tip design allows flat-bottom holes or faces to be bored.

Each bar is of a different length to cover maximum applications.

Shanks are precision ground & hardened for greater rigidity.

Sets are supplied in fine finished wooden stand.

Cat. No.	Shank Size Inch	Description
BB-2808	3/8	9 PC Set
BB-2809	1/2	9 PC Set
BB-2810	5/8	12 PC Set
BB-2811	3/4	12 PC Set
BB-2812	1	7 PC Set



Single piece rugged construction.

Fully hardened having precision ground shanks & which suits many of today's popular boring heads.

Sets are supplied in fine finished wooden stand.

Cat. No.	Shank Size Inch	Description	
BB-2814	3/8	8 PC Set	
BB-2815	1/2	10 PC Set	
BB-2816	5/8	10 PC Set	
BB-2817	3/4	14 PC Set	



For saw blades from .001" to 3/16" thickness.

Sets are supplied in fine finished wooden stand.

Cat. No.	Flange Size	Shank Size	Suitable For Saw Blade Hole Dia.
CSA-2900	1/2"	1/2"	1/4"
CSA-2901	5/8"	1/2"	3/8"
CSA-2902	3/4"	1/2"	1/2"
CSA-2903 Set of a		e 3 Saw Arbors in	a Wooden Stand
CSA-2904	1"	5/8"	5/8"





44444



Machined from selected steel for greater strength, black mottle finish.

Hole to accept standard high speed steel or carbide tool bits held in place with allen screws.

Supplied with allen key but without tool bit.

Cat. No.		Diameter Of Bar	Overall Length	Bit Size
45°	90°	Inch	Inch	
BB-2750	BB-2762	1/4	2-1/2	5/32" Round
BB-2751	BB-2763	5/16	2-1/2	3/16" Round
BB-2752	BB-2764	3/8	3	3/16" Round
BB-2753	BB-2765	1/2	3	3/16" Square
BB-2754	BB-2766	9/16	4-1/2	3/16" Square
BB-2755	BB-2767	5/8	5	1/4" Square
BB-2756	BB-2768	3/4	6	1/4" Square
BB-2757	BB-2769	1	6	5/16" Square
BB-2758	BB-2770	1	6	3/8" Square
BB-2759	BB-2771	1-1/8	7	7/16" Square
BB-2760	BB-2772	1-1/4	8	1/2" Square
BB-2761	BB-2773	1-1/2	9	1/2" Square





Calibrated Boring Bars - Double Ended

Bars are permanently graduated in 1/4" calibration to speed production by indicating depth of bore.

Supplied without tool bits.

Allen key provided.

Cat. No.	Diameter Of Bar	Overall Length	Bit Size
BB-2740	3/8"	6"	3/16" Round
BB-2741	1/2"	6"	3/16" Square
BB-2742	1/2"	9"	3/16" Square
BB-2743	5/8"	10"	3/16" Square
BB-2744	3/4"	12"	1/4" Square
BB-2745	1"	12"	1/4" Square
BB-2746	1-1/4"	16"	3/8" Square
BB-2747	1-1/2"	18"	3/8" Square



One end is broached at a 90° angle & the opposite is broached at a 45° angle for square tool bits.

Black mottle finish. Supplied with allen key but without tool bit.

Broached holes to accept standard high speed steel or carbide tool bits held in place with allen screws.

Sets are supplied in fine finished wooden stand.

Cat. No.	Diameter Of Bar	Overall Length	Bit Size
BB-2701	1/4"	5"	5/32" Round
BB-2702	5/16"	5"	3/16" Round
BB-2703	3/8"	6"	3/16" Round
BB-2704	1/2"	6"	3/16" Square
BB-2705	1/2"	9"	3/16" Square
BB-2706	9/16"	6-3/4"	3/16" Square
BB-2707	9/16"	6-3/4"	1/4" Square
BB-2708	9/16"	9"	3/16" Square
BB-2709	5/8"	10"	1/4" Square
BB-2710	3/4"	8"	1/4" Square
BB-2711	3/4"	12"	1/4" Square
BB-2712	15/16"	9"	5/16" Square
BB-2714	1"	12"	1/4" Square
BB-2715	1"	12"	5/16" Square
BB-2716	1"	12"	3/8" Square
BB-2717	1-1/8"	14"	7/16" Square
BB-2718	1-1/4"	16"	1/2" Square
BB-2719	1-1/2"	18"	1/2" Square



Cat. No.	Double End Boring Bar Set Consisting	Case
BB-2720	3/8" ,1/2" ,5/8" ,3/4" & 1"	Wood Stand



Made from special steel & accurately machined.

Individually boxed, contains holder & one double ended boring bar.

Supplied without tool bits, black mottle finish.







Manufactured from tool steel & ground finished in black mottle. Bit hole angle 90° & $45^\circ.$

Double ended boring bars & holder comes complete with screws & allen keys.

Supplied without tool bits.



Cat. No.	Bar Size		Holder Size		Square Bit Size
	Dia.	Length	Length	Square	Inch
BB-2730	3/8"	4-1/2"	2-1/4"	1/2"	1/8"
BB-2731	7/16"	5-1/4"	2-1/2"	1/2"	3/16"
BB-2732	9/16"	6-3/4"	3"	5/8"	1/4"
BB-2733	3/4"	9-1/4"	3-3/4"	7/8"	5/16"
BB-2734	7/8"	11-1/2"	4-1/2"	1-1/4"	3/8"
BB-2735	1-1/8"	12-3/4"	4-1/2"	1-3/8"	7/16"
BB-2736	1-3/16"	13-3/4"	5"	1-5/8"	1/2"



Piston Type Quick Change Tool Post Set

All working parts are hardened & ground.

Completely sealed for maintenance-free operation.

Increases productivity of all lathe operations.

Holders included

- 2 Turning Tool Holders.
- 1 Knurling Tool Holder.
- 1 Parting Tool Holder.
- 1 Boring Blade Holder / Drill Chuck Holder.
- 2 Hex Keys.
- 1 Main Block with 2 Working Stations.







Boring head delivers the optimum in precision performance. Machined from high grade steel with tool blocks hardened & ground.

Rugged construction & maximum bearing surface between the sliding gib & the body. Superior rigidity for chatter free boring.

Non-Reflecting satin chrome body allows easy reading and adjustment. Threaded back for interchangeable shanks make it useful for machines with different tapers.

Cat. No.	Cat. No.	Head	Thread	Overall	Max Off	Center Distance	Cross Vertical
	R-8 Shank	Dia.	Size	Length	Set	Between Holes	Hole Size
BH-2930	BH-2934	2"	7/8" x 20	2-13/32"	5/8"	5/8"	1/2"
BH-2931	BH-2935	2"	1-1/2" x 18	2-13/32"	5/8"	5/8"	1/2"
BH-2932	BH-2936	3"	1-1/2" x 18	3-5/32"	1"	15/16"	3/4"
BH-2933	BH-2937	4"	1-1/2" x 18	3-3/4"	1-5/8"	1-1/4"	1"

Features .0005" graduation on dial for accurate hole sizing.











Boring Heads with Integrated Shank

Single Piece rugged construction for a smooth & chatter less operation.

Sturdy unit of extending boring range, capable of peeling off heavy roughing cut as well as tool of extreme sensitivity.

Black oxide finished with hardened steel slide.

Available in R8 & straight shanks.

Cat. No.	Shank Type	Head Dia.	Overall Length
BH-2940	R8	2-1/2"	7-3/16"
BH-2941	3/4 St. Shank	2-1/2"	7-3/16"





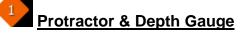
Manufactured from alloy steel, hardened & precision ground to ensure long life & accuracy. \mid

These shanks allow versatile use of boring heads.

Spare shanks also available on request.

Shank Tupo	Cat. No. For	Thread Size
Shank Type	7/8" x 20	1-1/2" x 18
R-8	SBH-2950	SBH-2960
MT-2	SBH-2951	SBH-2961
MT-3	SBH-2952	SBH-2962
MT-4	SBH-2953	SBH-2963
1/2" St	SBH-2954	SBH-2964
3/4" St	SBH-2955	SBH-2965
1" St	SBH-2956	SBH-2966
1-1/4 St	SBH-2957	SBH-2967
1-1/2 St	SBH-2958	SBH-2968





Manufactured from polished stainless steel.

Graduations are properly etched from 0° to 180°.

Easy to read gauge provides precise depth measurement in small slots & holes, as well as functions as a protractor for measuring angles.

Spring tensioned nut for easy depth & angle measurement & for locking purposes.

Fitted with narrow steel rule graduated 64th on one side & 0.5 mm on reverse.

Cat. No.	Description	
MMT-4000	Round	
MMT-4001	Rectangular	



Protractors are manufactured from polished stainless steel.

This is the most useful & accurate tool for machinists, draftsman & engineers to draw radial lines at any angle, setting bevels & transferring angles.

Available in semi-circular head & rectangular head with double graduations from 0° to 180° in opposite directions.

The Rectangular head protractors provide four working edges.

Available in riveted nut & brass nut.

Cat. No.	Description	
MMT-4003 Round Head - Riveted Nut		
MMT-4004	Round Head - Brass Nut	
MMT-4005	Rectangular Head - Riveted Nut	
MMT-4006	Rectangular Head - Brass Nut	



6" (150 mm) long hexagonal body with clip, point covered with plastic cap.

Can be used on any surface including hard as well as carbide.

Cat. No.	Description
MMT-4042	Chrome finished Steel Body







Depth & Angular Gauge

Spring tension knurled nut for easy depth measurement & locking.

Top & bottom locating faces of the body are accurately ground.

Fitted with narrow steel rule graduated 64th on one side & 0.5 mm on reverse.

Depth & angular gauge has an additional feature permitting its use also as a protractor for measuring angles.

Cat. No.	Description	Length	
Gal. NO.	Description	Inch	mm
MMT-4008	Plain Depth Gage	6	152
MMT-4009	Plain Depth Gauge	12	304
MMT-4010	Angular Depth Gage	6	152



Manufactured from polished stainless steel.

All gauges are surface ground.

Permanently deep etched graduations.

Available in S.W.G. standard & A.S.G. standard.



Cat. No.	Description
MMT-4015	Round
MMT-4016	Rectangular



Handy tool for measuring purposes.

Available in both, metric & Inch size.

Cat. No.	Range
MMT-4020	0 - 1"
MMT-4021	1-2"
MMT-4022	2-3"
MMT-4023	3-4"
MMT-4024	0 - 25 mm
MMT-4025	25 - 50 mm
MMT-4026	50 - 75 mm
MMT-4027	75 - 100 mm





These gauges are made of high grade polished steel.

Gauge features leafs for measuring both concave & convex radius.

All leafs are clearly marked with radius size.

Handy device for checking radius of tools & dies easier & faster.

Cat. No.	Range	No. Of Leafs
MMT-4030	1/32 to 1/4 by 1/64"	30
MMT-4031	17/64 to 1/2 by 1/64"	32
MMT-4032	1 to 7 mm	34
MMT-4033	7.5 to 15 mm	32
MMT-4034	15.5 to 25 mm	30
MMT-4035	0.75 to 5 by 0.25 mm	18
MMT-4036	5.5 to 13 by 0.5 mm	16



RADIUS GAUGE – RING TYPE

Cat. No.	Range	No. Of Leafs
MMT-4037	1/32 to 17/64 by 1/64"	16
MMT-4038	9/32 to 33/64 by 1/64"	16
MMT-4039	0.75 to 5 by 0.25 mm	18
MMT-4040	5.5 to 13 by 0.5 mm	16





Manufactured from stainless steel.

For twist drills having an acute angle of 118° up-to 2" (50mm) diameter.

Cat. No.	Overall Length	
	Inch	mm
MMT-4045	4-1/2	114



Vernier Calipers

Handy tool for external, internal & depth measurement.

Precision type features a thumb controlled ball movement & is nickel-plated.

Columbus type features thumb-controlled movement with locking device.

Graduations in metric & imperial both.

Brass calipers are available in 4" (100mm) only.

Cat. No.	Rai	nge	Description
Cat. NO.	Inch	mm	Description
MMT-4050	0-5	0-125	Columbus Type
MMT-4051	0-6	0-150	Columbus Type
MMT-4052	0-6	0-150	Precision Type



Manufactured from stainless steel & surfaces are properly ground.

Permanently deep etched graduations.

Used for checking the angles when grinding the profiles of lathe screw cutting tools.

Accurate thread profiles 47-1/2° British Association, 14-1/2° Acme, 60° American & metric, 55° Whitworth & BSF.

Cat. No.	Overall Length		
	Inch	mm	
MMT-4065	2	50	







Accurately & quickly locates center on round work-pieces.

Simple to use, just place the tool in drill chuck or collets & line up pointer to scribed line on shaft.

Cat. No.	Shank Dia. Inch mm		Overall Length	
Cal. NO.			Inch	mm
MMT-4250	3/8	9.5	4-1/8	105



Screw Pitch Gauge

These gauges are made of high grade polished steel.

All leafs are clearly marked with size.

A durable tool that provides maximum accuracy and is easy to use on all types of threads to determine their pitch.

Lock nut feature at both the ends to securely lock the leafs.

Cat. No.	TPI. Range	No. Of Leafs	Thread Type
MMT-4070	4-42	31	American National – 60°
MMT-4071	4-84	52	American National – 60°
MMT-4072	4-42 & 0.25 to 6.0 mm	31 + 24 = 55	Combination of American National 60° and Metric 60° threads.
MMT-4073	0.25 to 2.5mm	28	International Metric Standard 60°
MMT-4074	0.4 to 7.0mm	23	International Metric Standard 60°
MMT-4075	4 to 62 & 0.25 to 6.0 mm	28 + 24 = 52	Combination of Whitworth Standard 55° and Metric Standard 60°
MMT-4076	4 - 62 G	28	Whitworth Standard 55°





These gauges comprise a set of thin steel leafs which are manufactured from high grade polished steel.

The approximate thickness is marked on each leaf.

The leafs are housed with a steel case with lock nut which serves as a protection when the leafs are folded inside & a handle when the gauge is in use.

The lock nut holds the leafs in any desired position.

These gauges are applied to various operations such as measuring the gap between a shaft & its bearings, gauging the gap between electrical contacts or in measuring the flatness of jigs or fixtures when resting on a marking-out table or surface plate.

Available loose, without lock nut also.

Cat. No.	No. Of Leafs	Leafs Thickness Range	
MMT-4080	9	.0015"015"	
MMT-4081	26	.0015"025"	
Single Leaf can be supplied on request			





Manufactured from good quality stainless steel.

Graduations are properly etched for true valuations.

Cat. No.	Size
MMT-4085	No. 1 - 60
MMT-4086	1/16" - 1/2"
MMT-4087	1 - 13 mm
MMT-4088	A - Z





<u> Square Leg Dividers – Heavy Duty Compass</u>

Manufactured from high quality steel & have a riveted head.

Overall thickened including the points.

Square legs for a better balance & grip.

Hardened & ground edges for rigid jobs.

Cat. No.	Nominal Size	
	Inch	mm
MMT-4100	6	152
MMT-4101	8	203
MMT-4102	10	254
MMT-4103	12	304
MMT-4104	14	355
MMT-4105	16	406
MMT-4106	18	457
MMT-4107	20	508
MMT-4108	24	609





Universal Transfer Punch & Aligner

Manufactured from hardened steel.

Precision ground punch.

Perfect hole center alignment.

Ideal for toolmakers, machine & model engineers.

Cat. No.	Rang	e
Cal. NO.	Inch	mm
MMT-4140	3/16 to 5/8	5 to 16
MMT-4141	3/16 to 1-3/16	5 to 30



Wing Compass

These are manufactured from good quality steel & have a riveted head.

Overall thickened including the points.

Square legs for a better balance & grip.

Hardened & ground edges for rigid jobs.

Cat. No.	Nominal	Size
Cat. No.	Inch	mm
MMT-4120	6	152
MMT-4121	8	203
MMT-4122	10	254
MMT-4123	12	304
MMT-4124	14	355
MMT-4125	16	406
MMT-4126	18	457
MMT-4127	20	508
MMT-4128	24	609





Comes in Divider, Inside & Outside.

All are manufactured from high grade polished steel.

Firm joint to adjust tension as desired.

Legs are well balanced with uniform tension.

All are measured from the joint to the point.

Cat. No.	Cat. No.	Cat. No.		Length
Inside	Outside	Divider	Inch	mm
MMT-4150	MMT-4162	MMT-4174	3	76
MMT-4151	MMT-4163	MMT-4175	4	101
MMT-4152	MMT-4164	MMT-4176	6	152
MMT-4153	MMT-4165	MMT-4177	8	203
MMT-4154	MMT-4166	MMT-4178	10	254
MMT-4155	MMT-4167	MMT-4179	12	304
MMT-4156	MMT-4168	MMT-4180	16	406
MMT-4157	MMT-4169	MMT-4181	18	457
MMT-4158	MMT-4170	MMT-4182	20	508
MMT-4159	MMT-4171	MMT-4183	24	609
MMT-4160	MMT-4172	MMT-4184	30	762
MMT-4161	MMT-4173	MMT-4185	36	914





Comes in Divider, Inside, Outside & Jenny.

All are manufactured from high grade polished steel.

Legs are well balanced with uniform tension.

The spring & the points are hardened & tempered.

Adjusting nuts for faster handling.

All are measured from the joint to the point.

Cat. No.	Cat. No.	Cat. No.	Cat. No.	Len	igth
Inside	Outside	Divider	Jenny	Inch	mm
MMT-4200	MMT-4212	MMT-4225	MMT-4237	3	76
MMT-4201	MMT-4214	MMT-4226	MMT-4238	4	101
MMT-4202	MMT-4215	MMT-4227	MMT-4239	6	152
MMT-4203	MMT-4216	MMT-4228	MMT-4240	8	203
MMT-4204	MMT-4217	MMT-4229	MMT-4241	10	254
MMT-4205	MMT-4218	MMT-4230	MMT-4242	12	304
MMT-4206	MMT-4219	MMT-4231	MMT-4243	16	406
MMT-4207	MMT-4220	MMT-4232	MMT-4244	18	457
MMT-4208	MMT-4221	MMT-4233	MMT-4245	20	508
MMT-4209	MMT-4222	MMT-4234	MMT-4246	24	609
MMT-4210	MMT-4223	MMT-4235	MMT-4247	30	762
MMT-4211	MMT-4224	MMT-4236	MMT-4248	36	914



Surface Gauge – Round Fixed Base

Fixed surface gauges are well proportioned & rigid with accurately machined close grain cast Iron round base having a fixed spindle.

Consists of adjusting knob & hardened scriber.

Scriber can be rigidly secured at any angle of the spindle.

Very handy for simple marking operations.

Cat. No.	Diamete	er Of Base	Lengt	ength Of Spindle	
Gal. NO.	Inch	mm	Inch	mm	
MMT-4260	2-7/8	72	9	225	
MMT-4261	2-7/8	72	12	300	
MMT-4262	3-1/8	80	18	450	
MMT-4263	3-1/8	80	20	500	
MMT-4264	5	125	40	1000	



Toolmakers Surface Gauge – Steel Base

This is an ideal tool in mechanics kit & is most useful for accurately transferring measurements or scribing lines on horizontal & vertical surfaces.

The steel base is precision ground & properly hardened on all contact faces, which serves as an accurate reference surface.

Hardened & ground vee-grooved base for cylindrical work.

Having fine adjustment & hard scriber point.

Provided with two retraceable gauge pins in the base to set against edge of a Surface Plate.

Spindle is adjustable to any angle even above or below the base level.

Cat. No.	Base Dimension L x W x H		Length	Of Spindle	Dia. Of Spindle		
	Inch	mm	Inch	mm	Inch	mm	
MMT-4266	2-3/16 x 1-5/8 x 3/4	55 x 40 x 20	4 & 7	100 & 175	1/4	6.35	
MMT-4267	3-1/4 x 2-1/2 x 1	82 x 63 x 25	9 & 12	225 & 300	3/8	9.5	
MMT-4268	4 x 3-1/2 x 1-1/8	100 x 90 x 30	12 & 18	300 & 450	3/8	9.5	
MMT-4269	3-1/4 x 2-1/2 x 1	82 x 63 x 25	9	225	3/8	9.5	
MMT-4270	3-1/4 x 2-1/2 x 1	82 x 63 x 25	12	300	3/8	9.5	





Manufactured from close grained cast Iron & properly seasoned to avoid any kind of distortion.

These are for performing convenient set-ups in tooling, production & for inspection work.

Sides & ends are precision ground, flat & square.

Are 90° true to one another.

Webbed Angle Plates can also be supplied on request.

Cat. No.	Size				
Cal. NO.	Inch	mm			
MMT-4280	1x1x1x1	25x25x25			
MMT-4281	2 x 2 x 2	50 x 50 x 50			
MMT-4282	3 x 3 x 3	75 x 75 x 75			
MMT-4283	4 x 4 x 4	100 x 100 x100			
MMT-4284	5 x 5 x 5	125 x 125 x125			
MMT-4285	6 x 6 x 6	150 x 150 x150			
MMT-4286	8 x 8 x 8	200 x 200 x200			
MMT-4287	10 x 10 x 10	250 x 250 x250			
MMT-4288	12 x 12 x 12	300 x 300 x300			



Slotted Angle Plates

Manufactured from close grained cast iron & seasoned to eliminate any kind of distortion.

Clamping slots for easy mounting of work pieces for setting up jigs & fixtures on drill presses, milling machines, planing machines etc.

90° true to one another. Available in:

- a) Webbed End: Machined on outside surfaces & edges.
- b) **<u>Open End</u>** : Machined all over except slots.

Cat. No.	Cat. No.	Length		Length Width		Height	
Webbed End	Open End	Inch	mm	Inch	mm	Inch	mm
MMT-4290	MMT-4300	3	75	2-1/2	63	2	50
MMT-4291	MMT-4301	3-1/2	90	3	75	2-1/2	63
MMT-4292	MMT-4302	4-1/2	115	3-1/2	90	3	75
MMT-4293	MMT-4303	6	150	5	125	4-1/2	115
MMT-4294	MMT-4304	7	175	5-1/2	140	4-1/2	115
MMT-4295	MMT-4305	8	200	6	150	5	125
MMT-4296	MMT-4306	9	225	7	175	6	150
MMT-4297	MMT-4307	10	250	8	200	6	150
MMT-4298	MMT-4308	12	300	9	225	8	200





An extremely versatile angle plate having tapped holes for clamping work in any position required & a step for holding a wide variety of work-pieces.

Single piece rigid construction.

These angle plates are hardened & precision ground, square & parallel.

24 tapped holes allow fastening to fixtures & clamping work to the angle plate.

Cat. No.		Size	Tapped Holes Threads	
Gal. NO.	Inch	mm	Tapped Holes Threads	
MMT-4310	3 x 3 x 3	75 x 75 x 75	1/4" BSW	
MMT-4311	4 x 4 x 4	100 x 100 x 100	5/16" BSW	





Manufactured from finest quality ground steel.

Precision ground with hardened & tempered blade as well as stock to ensure straightness & parallelism.

Squares are accurate both inside &outside.

These are particularly useful for setting up & checking jobs where extreme accuracy is required.

Cat. No.	Blade	Length	Sto	ck Length
Gal. NO.	Inch	mm	Inch	mm
MMT-4320	2	50	2	50
MMT-4321	3	75	2.5	60
MMT-4322	4	100	3	75
MMT-4323	6	150	4	100
MMT-4324	8	200	5	125
MMT-4325	9	225	6	150
MMT-4326	10	250	6	150
MMT-4327	12	300	8	200
MMT-4328	18	450	10	250
MMT-4329	24	600	13	330
MMT-4330	36	915	17.5	445





Tempered marking edge with metric graduations.

Graduations are properly etched & provide accurate measurements.

Polished steel finish.

Cat. No.	Range
MMT-4314	200 mm
MMT-4315	250 mm
MMT-4316	300 mm





28 Knife Straight Edge

Manufactured from selected steel, hardened & ground all over to precision.

One working end beveled.

Cat. No.	Length Width		Thickness			
Cal. NO.	Inch	mm	Inch	mm	Inch	mm
MMT-4336	2	50	1	25	1/8	3
MMT-4337	3	75	1-1/8	28	5/32	3.5
MMT-4338	4	100	1-1/8	28	5/32	3.5
MMT-4339	6	150	1-3/8	35	1/4	6
MMT-4340	8	200	1-3/8	35	1/4	6





Both sine & rolls are hardened & ground for extreme accuracy.

Ideal tool for angular inspection & measurement purposes.

Various size holes are furnished for clamping purposes.

Cat. No.	Width	Distance Between Rollers
MMT-4344	15/16"	5"
MMT-4345	1"	10"
MMT-4346	1"	2-1/2"
MMT-4347	1"	5"
MMT-4348	30 mm	100 mm
MMT-4349	30 mm	200 mm
MMT-4350	7/32"	3"





Manufactured from ground tool steel, hardened & tempered blade for a longer tool life.

An extremely useful tool for the tool maker at the bench or the machinist on the lathe for locating centers of round stocks / parts quickly & easily.

Cat. No.	Work Diameter		
	Inch	mm	
MMT-4354	1-1/2	38	
MMT-4355	3	75	





Used for accurately locating working points on lathes, drill presses, milling & other machines.

Set includes Disc contact attachment, Ball contact attachment, Needle point attachment, Off-set indicator holder & a Snap-In Chuck.

Body & balls are hardened.

Knurled collar adjusts chuck, spring tension & maintains adjustment.

Interchangeable shafts easily & quickly snap into place.

Cat. No.	Description	
MMT-4356	Needle point attachment	
MMT-4357	Ball contact attachment	
MMT-4358	Disc contact attachment	
MMT-4359	Off-set indicator holder	
MMT-4360	Set complete with 4 attachments	





Edge & Center Finders are hardened all over & ground on all working surfaces.

Accurately locates the starting point for all types of machine work & jig boring.

Locate working edges like grooves, scribed lines, shoulders & centering points easily & accurately.

Cat. No.	Description	Tip Diameter	Description
MMT-4361	1/2"	.2000" & .5000"	Combination Edge & Center Finder
MMT-4362	3/8"	.2000" & .3730"	Combination Edge & Center Finder
MMT-4363	3/8"	.3750"	Center Finder Single End
MMT-4364	1/2"	.5000"	Center Finder Single End
MMT-4365	1/2"	.5000"	Plain Edge Finder Single End
MMT-4366	1/2"	.2000"	Edge Finder Double End
MMT-4367	3/8"	.2000"	Edge Finder Single End
MMT-4368	1/2"	.2000"	Edge Finder Single End
MMT-4369	10mm	10 mm	Plain Edge Finder Single End
MMT-4370	12mm	5 mm	Edge Finder Single End



Beam Trammels

These are manufactured from chrome finished steel & are ideal for toolmakers, engineers, metalworkers for layout, scribing & measuring.

The top of the beam is partially flattened so that the trams would not twist from point pressure.

Also the heads are spring secured so they would not slide when adjusting nuts are loosened.

Cat. No.	Scribes	Circle Dia.	Beam Size		
Gal. NO.	Inch	mm	Inch	mm	
MMT-4373	18	450	10-1/2	265	
MMT-4374	26	650	14-1/2	365	
MMT-4375	36	900	20	500	





When mounted on a beam of suitable thickness, provides an efficient & convenient means of measuring the distance between two points that are too great to be reached with dividers & are also applicable for scribing or marking arcs & circles.

The right head additionally can take a pencil for rough marking initially.

The heads are die cast with black mottle finish.

Have hardened, forged steel scribing pins which are sharpened exceedingly well.

Unlimited radius lengths with your shop-made beam.

Supplied in pairs.

Supplied without beam.

	Capacity Of Clamp		
Cat. No.	Beams In Width		
	Inch	mm	
MMT-4380	3/4 - 1-1/2	19 - 38	





<u> Straight Edges – (Square & Bevelled Edges)</u>

Finished ground on both sides & edges, having sight hole at one end.

This range of general purpose straight edges are made of hardened steel up-to size 12" (300 mm)

Sizes above 12" are made of high grade carbon steel & are unhardened.

Bevelled edge straight edges have an angle of 30°.

Supplied in light as well as heavy sections.

NOTE: Sizes upwards 24" supplied in heavy square edge section only

Cat. No.	Cat. No.	Size		Light S			Section
Call Hor	out Hor	0		Width	Thick	Width	Thick
Square Edge	Bevelled Edge	Inch	mm	mm	mm	Inch	mm
MMT-4400	MMT-4420	6	150	25	3	30	4.5
MMT-4401	MMT-4421	10	250	30	4.5	45	6
MMT-4402	MMT-4422	12	300	30	4.5	45	6
MMT-4403	MMT-4423	18	450	45	6	55	8
MMT-4404	MMT-4424	20	500	45	6	55	8
MMT-4405	MMT-4425	24	600	55	8	70	10
MMT-4406	MMT-4426	30	750			70	11
MMT-4407	MMT-4427	36	900			75	11
MMT-4408	MMT-4428	40	1000			75	11
MMT-4409	MMT-4429	48	1200			88	12





Manufactured from stainless steel, these are very useful for grinding and setting thread cutting tools.

Also can be applied for checking the pitch of threads through the permanently deep etched graduations in 14ths, 20ths, 24ths and 32nds of an inch.

These gauges meet the American National or US 60°, Whitworth or English 55° specifications.

Cat. No.	Specification	
MMT-4389	55° Whitworth (English Standard)	
MMT-4390	60° American National (US Standard)	





Manufactured from polished stainless steel. Graduations are properly etched for true valuations.

Measures square & hexagonal angles of 120°, 118°, 90°, 60°, 55°.

Also used as a twist drill gauge & thread gauge.

Cat. No.	Overall Length		
	Inch	mm	
MMT-4395	3-3/4	95	

Bore Gauge (Taper Gauge)

Manufactured from fine quality stainless steel.

Accurate & clear markings are given for precise measurement.

Useful tool for measuring cylindrical bores & for gauging slots.

Cat. No.	Range
MMT-4384	1-15 mm
MMT-4385	1/32" – 5/8"



Manufactured out of selected black granite having uniform texture & colour.

Accurately machined on tops, sides and ends, helps in checking parallelism & angles.

Their degree of flatness & overall quality makes them ideal bases for mounting mechanical, electronic & optical gauging systems.

Distortion free, good temperature stability, lapped to a velvet top finish no wringing.

Non-magnetic, non glaring, economical, lesser wear, no oiling, no rust.

Supplied with Rexin Cover, bigger sizes on request.

Cat. No.	Size	Flatness Tolerance in µm		
	mm	Grade - 0	Grade - 1	
MMT-4442	250 x 250 x 50	3.5	7	
MMT-4443	400 x 250 x 50	4	8	
MMT-4444	400 x 400 x 60	4.5	9	
MMT-4445	630 x 400 x 80	5	10	
MMT-4446	630 x 630 x 80	5	10	
MMT-4447	1000 x 630 x 80	6	12	
MMT-4448	1000 x 1000 x 150	7	14	
MMT-4449	1600 x 1000 x 200	8	16	
MMT-4450	2000 x 1000 x 250	9.5	19	







Cast Iron Surface Plate

Manufactured from high quality close grained cast-iron, heat treated for stress relief, stability & wear resistance.

Precisely finished by planing & hand scraping which results in providing the reference plane for work layout & work inspection purposes like checking angles & parallelism.

Strongly webbed with solid face.

Furnished with lifting handles.

Accurately machined on tops, sides & ends.

Supplied with Rexin Cover, bigger sizes on request.



Cat. No.	Size	Flatness	Tolerance in µm
Gat. NO.	Size	Grade - 0	Grade - 1
MMT-4459	160 x 100	3	6
MMT-4460	250 x 160	3.5	7
MMT-4461	250 x 250	3.5	7
MMT-4462	400 x 250	4	8
MMT-4463	400 x 400	4.5	9
MMT-4464	630 x 400	5	10
MMT-4465	630 x 630	5	10
MMT-4466	1000 x 630	6	12
MMT-4467	1000 x 1000	7	14
MMT-4468	1600 x 1000	8	16
MMT-4469	2000 x 1000	10	19
MMT-4470	300 x 200 (12" x 8")	3	6
MMT-4471	300 x 300 (12" x 12")	4	8
MMT-4472	450 x 300 (18" x 12")	4	8
MMT-4473	450 x 450 (18" x 18")	4	8
MMT-4474	600 x 450 (24" x 18")	5	10
MMT-4475	600 x 600 (24" x 24")	5	10
MMT-4476	900 x 600 (36" x 24")	6	12
MMT-4477	750 x 750 (30" x 30")	6	12
MMT-4478	900 x 900 (36" x 36")	7	14
MMT-4479	1200 x 900 (48" x 36")	7	14
MMT-4480	1500 x 900 (60" x 36")	8	16



These are made of carbon steel, properly heat treated & tempered.

Used for scribing layout lines on hardened steel, glass, wood , plastic surface etc.

For accurate marking out.

Cat. No.	Description	Ler	ngth
		Inch	mm
MMT-4485	Double end scriber with knurled body.	7-1/2	190
	Double ended scriber with three detachable		
MMT-4486	points - One Straight 75mm & Two Bent	9 & 12	225 & 300
	75mm and 150mm.		
MMT-4487	Double end scriber with twisted body for a	7	475
101011-1407	firm grip.	7	175
MMT-4488	Heavy duty double ended scriber with knurled body	9	225
MMT-4489	Machinist's scriber - Light duty single	4.4.9	
101011-4409	ended scriber with knurled body.	4-1/2	114
	Handy scriber - A double ended scriber		
MMT-4490	which is pointed at one end & has a knife	7	175
	edge at the opposite end.		









A round permanent magnet is gathered concentrically in a mild steel pot.

These are the best gripping magnets having wide & varied applications such as magnetic fasteners, displays, holding maps etc.

Has tapped hole of 1/4" - 20.

Each piece is supplied with a plated keeper.

Cat. No.	Dian	neter	Hei	ght	Minimum Pull	
Cal. NO.	Inch	mm	Inch	mm	Lbs.	Kgs.
PM-831	11/16	17.5	5/8	16	6	2.7
PM-832	13/16	20.5	3/4	19	10	4.5
PM-833	1-1/16	27	1	25	14	6.0
PM-834	1-3/8	35	1-3/16	30	30	13.5
PM-835		4PC Set o	f the above r	nentioned Po	t Magnets	





Shallow depth permits use in confined areas.

Permanent, powerful magnets to hold, lift & attract metal parts.

Large sizes have 3/8" clearance holes for fastening with rods or bolts.

Cat. No.	Dian	neter	Height Minimum Pu			ım Pull
Cal. NO.	Inch	mm	Inch	mm	Lbs.	Kgs.
SPM-851	1-3/4	44	1/4	6.4	10	4.5
SPM-852	2	50	3/8	9.5	20	9.0
SPM-853	2-3/4	69	7/16	11.1	35	15.5
SPM-854	3-1/8	78.2	1/2	12.5	50	22.0
SPM-855	4F	PC Set of the	above menti	ioned Shallov	v Pot Magne	ts.



3 Magnetic Holdfasts

This extra heavy duty pot magnets are mainly used where best possible grip is required but not attraction from a distance.

Basically work-holding & work-handling tools.

Because of their exceptionally great grips each has a jack-off screw, which also serves as a handle.

Can be used singly or in multiple to hold work for welding, grinding & are ideal for making inexpensive lifting devices & jigs.

Each piece is supplied with a plated keeper which retains & protects the magnetic field.

Cat. No.	Diameter		Magnetic Pull		
Cal. NO.	Inch	mm	Lbs.	Kgs.	
MH-939	1-3/4	44	45	20	
MH-940	2-1/8	54	70	30	
MH-941	2-3/4	70	110	50	



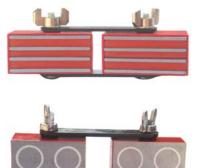


The Magnetic Adjustable Link is a twin unit possessing a multi-angle capability.

By adjustment & locking of the wing-nuts the magnetic blocks can be set at any angle, thus providing the simplest & the most rapid means of clamping together two lightweight ferrous parts.

Being compact in size they are ideal for holding steel parts & welding application in confined areas.

Cat. No.	Overall	Length	Overa	II Width
Cal. NO.	Inch	mm	Inch	mm
ML-920	4-5/8	116	2	50



Magnetic Base – Medium Duty Push Button

These magnetic bases are very useful for light to medium duty applications.

Designed to use with dial gauges to work on surface plates & machine tables.

The base & two sides are energized which allow these to be used vertically, horizontally or upside down.

V slot in the base facilitates gripping on cylindrical surfaces.

Magnetic pull: up-to 20 Kg (approx.)

Available with or without fine adjustment fitting.

Easy push On/Off button.

Supplied without a dial gauge.

Cat. No.	Description	Overall	Height	Base Dim (L x W	
		Inch	mm	Inch	mm
MBP-900 A	Without Fine Adjustment	9-1/4	235	1-7/8 x 1-3/4 x 2	47 x 45 x 50
MBP-900 C	With Fine Adjustment	9-1/4	235	1-7/8 x 1-3/4 x 2	47 x 45 x 50





These magnetic bases equipped with powerful permanent magnets can be readily located on any ferrous surface.

The base & one side are energized for attachment to flat surfaces & a V slot in the base facilitates gripping on cylindrical surfaces.

Available with or without fine adjustment fitting.

Magnetic pull: 40 - 45 Kg (approx).

Easy On/Off rotating switch.

Supplied without a dial gauge.

Cat. No.	Description	Overall	erall Height Base Dimension (L x W x H)		
		Inch	mm	Inch	mm
MBH-7010	Without fine Adjustment	9-1/2	240	2-1/2 x 1-7/8 x 2-1/8	63 x 48 x 54
MBH-7010 A	With fine Adjustment	9-1/2	240	2-1/2 x 1-7/8 x 2-1/8	63 x 48 x 54



Magnetic Base – Flexible Arm

These magnetic bases equipped with powerful permanent magnets can be readily located on any ferrous surface.

The base & one side are energized for attachment to flat surfaces & a V slot in the base facilitates gripping on cylindrical surfaces.

Magnetic pull: 40 - 45 Kg (approx).

Easy On/Off rotating switch & central locking knob to tighten both arms.

Includes two ball joints & one central cylindrical joint.

Dial Gauge Holder includes fine adjustment & full 360° swivel.

Suitable for all type of dial gauges with stem, backlog or dove tail.

Supplied without a dial gauge.



Cat. No.	Maximu	m Height	Base Dimension (L x W x H)	
	Inch	mm	Inch mm	
MBF-7010 B	14	355	2-1/2 x 1-7/8 x 2-1/8	63 x 47 x 53



Wing nut adjustment.

No clamp required.

Designed for separating ferrous sheets or particles.

Very useful in workshops for cleaning machine beds also.

Demagnetize it by simply pulling up the handle.

Consists of two heavy magnetic blocks 2-3/8" (59mm) long x 1-1/8" (28mm) square linked together for easy & convenient adjustment.

Cat. No.	Length x Width x Thickness				
Gal. NO.	Inch	mm			
MS-918	9-1/4 x 5-1/4 x 1	235 x 134 x 25			





Welders Magnetic Ground Clamp are commonly used to hold ground wires to your ferrous metal work surfaces where no edge is available, such as tanks, pipes etc. & makes rotating applications easy.

This powerful magnet has strong gripping power & magnetically pulls the spring loaded stud firmly onto the ferrous metal work surface for excellent electrical connectivity & conductivity by delivering the entire current through the spring loaded stud.

Rotating stud assembly allows ground wire to rotate 360°, free of work area.

Simple to connect & use.

3-1/2" dia. Heavy duty steel housing in two models.



Cat. No.	Stud Type	Amporado	Dia.	Holding	g Value
Cat. NO.	Stud Type	Amperage	Lbs.		Kgs.
MGC-965	Brass	250 amp.	3-1/2"	25	11.4
MGC-966	Copper	800 amp.	3-1/2"	25	11.4



This tool is your perfect helper for picking up nuts, bolts, screws, nails, spanners, scrap metal etc. from work areas & hard to reach places.

Its 36" (914mm) long steel handle allows the users to reach under vehicles, workbenches, tables etc. preventing any sort of injury.

High visibility orange rubber handle with a 3" (75mm) magnetic head.

A very strong, durable & a light-weight tool.

Cat. No.	
MPT-915	





Helps you to pick up dropped screws & other small metal parts from hard to reach places or floor without the need to bend over & also helps in removing burrs from machines.

Includes handy pocket clip & extends to 24" (600mm).

Cat. No.	
MPT-916	





Helps you to pick up dropped screws & other small metal parts from hard to reach places & also helps in removing burrs from machines.

Can be bent to reach almost any location to help you solve difficult retrieving problem.

Cat. No.	
MPT-917	





This is a great tool for carpenters, electricians, mechanics & do-it-yourselfers.

You can set it to your waist belt conveniently with the help of a clip & is commonly used to hold small hardware like nails, screws, nuts etc. securely.

Cot No	Outsic	le Dia.	Thickness		
Cat. No.	Inch	mm	Inch	mm	
BCM-919	2-1/4	57	1/2	12.5	





The basic function of this tool is that it acts as a replacement to the backs of dial indicators.

Simply remove the back of a dial indicator by un-screwing its four screws, then replace the back of this tool to the dial indicator.

The strong magnet on the front side of this tool then allows the dial indicator to attach itself to any magnetized surface.

.50" Thick, 2.38" Outside Diameter, 1.86" Diameter of Mounting Hole Centers.





Magnetic Quick Clamps

Designed as a multi-angle to enable fast & accurate holding of ferrous metals for welding & assembly jobs.

It can hold both sheet & tube at angles of degrees 30°, 45°, 60°, 75°, 90°.

Two body holes enable the clamp to be easily attached to jigs & fixtures or hung up when not in use.

Cat. No.	Si	ze	Angles
Cal. NO.	Inch	mm	Aligies
MQC-951	4 x 2-5/8	102 x 67	30°, 45°, 60°, 75° & 90°



Designed for fast & accurate holding of ferrous metals for welding & assembly jobs.

It can hold both sheet & tube at angles of degrees 45° , 90° & 135° .

Cat. No.	Si	ze	Angles	
Cal. NO.	Inch	mm	Aligies	
MWS-952	4-3/8 x 3-3/4	111 x 95	45°, 90° & 135°	







	<u>Welders</u>	Magnetic	Square –	Compact
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Small compact design with powerful magnet.

Welders use it for clamping smaller work-pieces like small diameter pipe $\&\ bar$ or brackets etc.

Available in two styles, Single Medium & Double Medium.

Single Medium style clamps work-pieces at 45°, 90° & 135° angles.

Double Medium style clamps work-pieces at any desired angle.

Cat. No.	Туре	Clamping Edges		Magnetic Width		Angles
		Inch	mm	Inch	mm	
MWS-953	Single Medium	3-3/8 x 3-3/8	85 x 85	5/8	16	45°, 90° & 135°
MWS-954	Double Medium	3-3/8 x 3-3/8	85 x 85	5/8	16	Clamps work-pieces at any desired angle.



Holds work at 45°, 90° & 135°.

Holds ferrous metals at fixed angles for welding, assembly, soldering & many other applications.

Body Holes enable the clamp to be easily attached to jigs & fixtures or hung up when not in use.

Strong powerful magnet is reinforced by two steel plates.

Cat. No.	Clamping	Angles	
Cat. NO.	Inch	mm	Angles
MWS-955	4-3/4 x 5/8 x 3-1/4	120 x 15 x 80	45°, 90° & 135°





Must for every welder's toolbox.

Designed to clamp round pipes & tubes etc. It has twice the width of a standard magnetic square.

Provided with a release handle to help remove it from the work piece & with laminated pole plates.

Cat. No.	Clampin	g Edges	Magnetic Width		
Gal. NO.	Inch	mm	Inch	mm	
MSW-956	4.3 x 3.7	110 x 95	1.60	40	





Strongest magnetic clamps available for heavy duty magnetic clamping.

Provided with a release handle to help remove it from the work piece & with laminated pole plates.

Robust & accurate construction to prevent wobble.

Cat. No.	Clampin	g Edges	Magneti	c Width
Gal. NO.	Inch	mm	Inch	mm
MWS-957	8 x 8	203 x 203	1.65	42





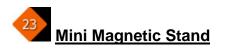
Heavy duty magnetic base.

Magnet is moulded in a plastic base.

Grips flat & cylindrical metal surfaces.

Cat. No.	Description		Base
		Inch	mm
MHB-975	Magnetic Base Complete With Assembly	2 x 1-1/2 x 1-1/4	50 x 38 x 32
MHB-976	Magnetic Base Holder Only	2 x 1-1/2 x 1-1/4	50 x 38 x 32





Small size & compact design.

For small dial indicators having quick adjustment lever.

Powerful magnetic grip affords maximum rigidity.

Includes disc on base to neutralize the magnet when not in use.

Available with or without fine adjustment fitting.

Cat. No.	Description	Base Dia.		Total Height	
Cal. NO.	Cat. No. Description	Inch	mm	Inch	mm
MMS-979	Without Fine Adjustment	1-1/8	28	5	125
MMS-980	With Fine Adjustment	1-1/8	28	5-3/8	135





Compact & small universal permanent magnetic stand.

Clamps indicator with stem as well as dove tail.

Available with or without fine adjustment fitting.

Cat. No. Description	Description	Base Dia.		Total I	Height
	Inch	mm	Inch	mm	
MMB-981	Without Fine Adjustment	1-1/8	28	3-1/8	80
MMB-982	With Fine Adjustment	1-1/8	28	5-3/8	135





Manufactured from high speed steel. For reaming holes for standard taper pins.

Have a 1/4" per foot taper.

Available in Straight, Spiral or Helical Flutes.

Straight Flute for hand reaming of most materials. Helical Flute for machine reaming of most materials. Spiral Flute for hand reaming of difficult-to-ream materials.

Cat. No.		Size Shar	Shank Dia	Diameter		Flute	Overall	
Straight Flute	Spiral Flute	Helical Flute	5120	Shank Dia.	Small End	Large End	Length	Length
CT-8001	CT-8031	CT-8061	7/0	5/64"	.0497"	.0666"	13/16"	1-13/16"
CT-8002	CT-8032	CT-8062	6/0	3/32"	.0611"	.0806"	15/16"	1-15/16"
CT-8003	CT-8033	CT-8063	5/0	7/64"	.0719"	.0966"	1-3/16"	2-3/16"
CT-8004	CT-8034	CT-8064	4/0	1/8"	.0869"	.1142"	1-5/16"	2-5/16"
CT-8005	CT-8035	CT-8065	3/0	9/64"	.1029"	.1302"	1-5/16"	2-5/16"
CT-8006	CT-8036	CT-8066	2/0	5/32"	.1137"	.1462"	1-9/16"	2-9/16"
CT-8007	CT-8037	CT-8067	0	11/64"	.1287"	.1638"	1-11/16"	2-15/16"
CT-8008	CT-8038	CT-8068	1	3/16"	.1447"	.1798"	1-11/16"	2-15/16"
CT-8009	CT-8039	CT-8069	2	13/64"	.1605"	.2008"	1-15/16"	3-3/16"
CT-8010	CT-8040	CT-8070	3	15/64"	.1813"	.2294"	2-5/16"	3-11/16"
CT-8011	CT-8041	CT-8071	4	17/64"	.2071"	.2604"	2-9/16"	4-1/16"
CT-8012	CT-8042	CT-8072	5	5/16"	.2409"	.2994"	2-13/16"	4-5/16"
CT-8014	CT-8043	CT-8073	6	23/64"	.2773"	.3540"	3-11/16"	5-7/16"
CT-8015	CT-8044	CT-8074	7	13/32"	.3297"	.4220"	4-7/16"	6-5/16"
CT-8016	CT-8045	CT-8075	8	7/16"	.3971"	.5050"	5-3/16"	7-3/16"
CT-8017	CT-8046	CT-8076	9	9/16"	.4805"	.6066"	6-1/16"	8-5/16"
CT-8018	CT-8047	CT-8077	10	5/8"	.5799"	.7216"	6-13/16"	9-5/16"
CT-8019	CT-8048	CT-8078	11	3/4"	.7060"	.8780"	8-1/4"	11-1/4"
CT-8020	CT-8049	CT-8079	12	7/8"	.8420"	1.0500"	10"	13-5/8"
CT-8021	CT-8050	CT-8080	13	1-1/4"	1.0090"	1.2590"	12"	16"
CT-8022	CT-8051	CT-8081	14	1-1/2"	1.2500"	1.5420"	14"	18-1/4"





Removes burrs from small holes.

Enlarges & countersinks holes in soft metals.

Handy tool for mechanics, electricians, plumbers, machinists & carpenters.

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Cat. No.	Range				
	Inch	mm			
CT-8349	1/8 to 1/2	3.2 to 12.5			
CT-8350	1/8 to 5/8	3.2 to 16			



Manufactured from high speed steel.

Designed for countersinking holes for rivets, flat head screws & centers or for enlarging existing hole.

Available in 60°, 82° or 90°.

Cat. No.			Size	Shank Dia.	Overall
60°	82°	90°	Size	Shank Dia.	Length
CT-8450	CT-8470	CT-8490	1/4"	3/16"	1-1/2"
CT-8451	CT-8471	CT-8491	3/8"	1/4"	1-3/4"
CT-8452	CT-8472	CT-8492	1/2"	3/8"	2"
CT-8453	CT-8473	CT-8493	5/8"	3/8"	2-1/4"
CT-8454	CT-8474	CT-8494	3/4"	1/2"	2-5/8"
CT-8455	CT-8475	CT-8495	1"	1/2"	2-3/4"
CT-8456	CT-8476	CT-8496	1-1/4"	3/4"	3-1/2"
CT-8457	CT-8477	CT-8497	1-1/2"	3/4"	3-1/2"
CT-8458	CT-8478	CT-8498	2"	3/4"	3-3/4"



Chucking Reamers - Straight Shank

Manufactured from high speed steel.

Design for use in turret lathes, screw machines, drill presses & all type of machine tool equipment.

45° chamfer for reaming of most materials.

Available in Straight or Spiral Flute.

Used for difficult to ream materials.

Cat. No.			Decimal	Flute		
Straight Flute	Spiral Flute	Size	Equivalent	Length	Overall Length	No. Of Flute
CT-8150	CT-8250	1/8"	.1250"	7/8"	3-1/2"	4
CT-8151	CT-8251	9/64"	.1406"	1"	4"	4
CT-8152	CT-8252	5/32"	.1562"	1"	4"	4
CT-8153	CT-8253	11/64"	.1719"	1-1/8"	4-1/2"	6
CT-8154	CT-8254	3/16"	.1875"	1-1/8"	4-1/2"	6
CT-8155	CT-8255	13/64"	.2031"	1-1/4"	5"	6
CT-8156	CT-8256	7/32"	.2188"	1-1/4"	5"	6
CT-8157	CT-8257	15/64"	.2344"	1-1/2"	6"	6
CT-8158	CT-8258	1/4"	.2500"	1-1/2"	6"	6
CT-8159	CT-8259	17/64"	.2656"	1-1/2"	6"	6
CT-8160	CT-8260	9/32"	.2812"	1-1/2"	6"	6
CT-8161	CT-8261	19/64"	.2969"	1-1/2"	6"	6
CT-8162	CT-8262	5/16"	.3125"	1-1/2"	6"	6
CT-8163	CT-8263	21/64"	.3281"	1-1/2"	6"	6
CT-8164	CT-8264	11/32"	.3438"	1-1/2"	6"	6
CT-8165	CT-8265	23/64"	.3594"	1-3/4"	7"	6
CT-8166	CT-8266	3/8"	.3750"	1-3/4"	7"	6
CT-8167	CT-8267	25/64"	.3906"	1-3/4"	7"	6
CT-8168	CT-8268	13/32"	.4062"	1-3/4"	7"	6
CT-8169	CT-8269	27/64"	.4219"	1-3/4"	7"	6
CT-8170	CT-8270	7/16"	.4375"	1-3/4"	7"	6
CT-8171	CT-8271	29/64"	.4531"	1-3/4"	7"	6
CT-8172	CT-8272	15/32"	.4688"	1-3/4"	7"	6
CT-8173	CT-8273	31/64"	.4844"	2"	8"	6
CT-8174	CT-8274	1/2"	.5000"	2"	8"	6
CT-8175	CT-8275	17/32"	.5312"	2"	8"	6
CT-8176	CT-8276	9/16"	.5625"	2"	8"	6
CT-8177	CT-8277	19/32"	.5938"	2"	8"	6
CT-8178	CT-8278	5/8"	.6250"	2-1/4"	9"	8
CT-8179	CT-8279	21/32"	.6562"	2-1/4"	9"	8
CT-8180	CT-8280	11/16"	.6875"	2-1/4"	9"	8
CT-8181	CT-8281	23/32"	.7188"	2-1/4"	9"	8
CT-8182	CT-8282	3/4"	.7500"	2-1/2"	9-1/2"	8
CT-8183	CT-8283	25/32"	.7812"	2-1/2"	9-1/2"	8
CT-8184	CT-8284	13/16"	.8125"	2-1/2"	9-1/2"	8
CT-8185	CT-8285	27/32"	.8438"	2-1/2"	9-1/2"	8
CT-8186	CT-8286	7/8"	.8750"	2-5/8"	10"	8
CT-8187	CT-8287	29/32"	.9062"	2-5/8"	10"	8
CT-8188	CT-8288	15/16"	.9375"	2-5/8"	10"	8

Cat. No.		0 in a	Decimal	Flute	Overall Length		
Straight Flute	Spiral Flute	Size	Equivalent	Length	Overall Length	No. Of Flute	
CT-8189	CT-8289	31/32"	.9688"	2-5/8"	10"	8	
CT-8190	CT-8290	1"	1.0000"	2-3/4"	10-1/2"	8	
CT-8191	CT-8291	1-1/16"	1.0625"	2-3/4"	10-1/2"	10	
CT-8192	CT-8292	1-1/8"	1.1250"	2-7/8"	11"	10	
CT-8193	CT-8293	1-3/16"	1.1875"	2-7/8"	11"	10	
CT-8194	CT-8294	1-1/4"	1.2500"	3"	11-1/2"	10	
CT-8195	CT-8295	1-5/16"	1.3125"	3-1/4"	12"	10	
CT-8196	CT-8296	1-3/8"	1.3750"	3-1/4"	12"	12	
CT-8197	CT-8297	1-7/16"	1.4375"	3-1/2"	12-1/2"	12	
CT-8198	CT-8298	1-1/2"	1.5000"	3-1/2"	12-1/2"	12	

Straight Flute

Adjustable Hand Reamers

Reamer blades are manufactured from high speed steel, accurately hardened & ground.

Reamers are used for light cut, repair work, removing stock or simply for enlarging holes.

Can be hand operated by use of wrenches.

The size can be adjusted by moving the blades in tapered slots by means of loosening one nut & tightening the other.

Cat. No. Size		Rai	nge	No. Of
Cal. NO.	Size	Inch	mm	Blades
CT-8400	8/A	1/4 to 9/32	6.35 to 7.14	4
CT-8401	7/A	9/32 to 5/16	7.14 to 7.94	4
CT-8402	6/A	5/16 to 11/32	7.94 to 8.73	4
CT-8403	5/A	11/32 to 3/8	8.73 to 9.52	5
CT-8404	4/A	3/8 to 13/32	9.52 to 10.32	6
CT-8405	3/A	13/32 to 7/16	10.32 to 11.11	6
CT-8406	2/A	7/16 to 15/32	11.11 to 11.91	6
CT-8407	A	15/32 to 17/32	11.91 to 13.49	6
CT-8408	В	17/32 to 19/32	13.49 to 15.08	6
CT-8409	С	19/32 to 21/32	15.08 to 16.67	6
CT-8410	D	21/32 to 23/32	16.67 to 18.26	6
CT-8411	E	23/32 to 25/32	18.26 to 19.84	6
CT-8412	F	25/32 to 27/32	19.84 to 21.43	6
CT-8414	G	27/32 to 15/16	21.43 to 23.81	6
CT-8415	Н	15/16 to 1-1/16	23.81 to 26.99	6
CT-8416	I	1-1/16 to 1-3/16	26.99 to 30.16	6
CT-8417	J	1-3/16 to 1-11/32	30.16 to 34.13	6
CT-8418	К	1-11/32 to 1-1/2	34.13 to 38.10	6
CT-8419	L	1-1/2 to 1-13/16	38.10 to 46.04	6
CT-8420	М	1-13/16 to 2-7/32	46.04 to 56.36	6
CT-8421	N	2-7/32 to 2-3/4	56.36 to 69.85	6
CT-8422	0	2-3/4 to 3-11/32	69.85 to 84.93	6





Manufactured from high speed steel. Available in 45° or 60°.

Use for chamfers & other angular milling operations.

Cat.	No.	Size	Cutter	Width	Shank	Overall
45°	60°	5120	45°	60°	Dia.	Length
CT-8941	CT-8951	1/2"	1/8"	7/32"	3/8"	2-1/8"
CT-8942	CT-8952	3/4"	3/16"	5/16"	3/8"	2-1/8"
CT-8943	CT-8953	1"	5/16"	7/16"	1/2"	2-1/2"
CT-8944	CT-8954	1-1/2"	1/2"	5/8"	3/4"	2-3/4"





Combined Drill & Countersinks

Manufactured from high speed steel, also called center drills.

Designed for drilling center holes in the ends of work pieces to be held between standard 60° centers.

Available in Plain type & Bell type.

60°, 82° & 90° angles in Plain Type are available.

Bell Type features an additional 120° chamfer at the body diameter to form a protected 60° center hole.









	Cat. No.		Size Body		Drill Dia.	Overall
60°	82°	90°	Size	Dia.		Length
CT-8500	CT-8520	CT-8540	00	1/8"	.025"	1-1/8"
CT-8501	CT-8521	CT-8541	0	1/8"	1/32"	1-1/8"
CT-8502	CT-8522	CT-8542	1	1/8"	3/64"	1-1/4"
CT-8503	CT-8523	CT-8543	2	3/16"	5/64"	1-7/8"
CT-8504	CT-8524	CT-8544	3	1/4"	7/64"	2"
CT-8505	CT-8525	CT-8545	4	5/16"	1/8"	2-1/8"
CT-8506	CT-8526	CT-8546	4-1/2	3/8"	9/64"	2-1/2"
CT-8507	CT-8527	CT-8547	5	7/16"	3/16"	2-3/4"
CT-8508	CT-8528	CT-8548	6	1/2"	7/32"	3"
CT-8509	CT-8529	CT-8549	7	5/8"	1/4"	3-1/4"
CT-8510	CT-8530	CT-8550	8	3/4"	5/16"	3-1/2"
CT-8511	CT-8531	CT-8551	9	7/8"	11/32"	3-5/8"
CT-8512	CT-8532	CT-8552	10	1"	3/8"	3-3/4"

PLAIN TYPE



BELL TYPE 60°

Cat. No.	Size	Body Dia. Inch	Drill Dia. Inch	Bell Dia. Inch	Overall Length
CT-8580	11	1/8	3/64	.100	1-1/4"
CT-8581	12	3/16	1/16	.150	1-7/8"
CT-8582	13	1/4	3/32	.200	2"
CT-8583	14	5/16	7/64	.250	2-1/8"
CT-8584	15	7/16	5/32	.350	2-3/4"
CT-8585	16	1/2	3/16	.400	3"
CT-8586	17	5/8	7/32	.500	3-1/4"
CT-8587	18	3/4	1/4	.600	3-1/2"

Zero Flute Countersinks & Deburring Tool

Manufactured from high speed steel. For countersinking and deburring in a wide range of ferrous & non-ferrous materials.

Relieved single cutting edge removes stock quickly & greatly reduces chatter.

Longer tool life in all production applications.

Each set supplied in fine finished wooden stand.

Cat. N	Cat. No 82°		[Diamete		Shank	Shank Dia.	
Inch	mm	Size	Small		Large		Inch	mm
			Inch	mm	Inch	mm		
CT-8600	CT-8615	0 Double End	1/16	2	15/64	5	1/4	6
CT-8601	CT-8616	1 Single End	5/32	5	13/32	10	1/4	8
CT-8602	CT-8617	2 Single End	3/16	10	17/32	15	1/4	10
CT-8603	CT-8618	3 Single End	5/16	15	25/32	20	1/2	12
CT-8604	CT-8619	4 Single End	9/16	20	1-1/16	25	1/2	15
CT-8605	CT-8620	5 PC Set - Consisting of One each from the above mentioned sizes				ioned		





Manufactured from high speed steel. For chamfering, deburring, & countersinking. Also to enlarge existing holes in thin sheet metal.

Designed for light portable work as well as machine use.

Single flute construction & low controlled relief provide chatter-less operation.

	Cat. No.	Size	Shank Dia.	
60°	82°	90°	Inch	Inch
CT-8650	CT-8660	CT-8670	1/4	1/4
CT-8651	CT-8661	CT-8671	3/8	1/4
CT-8652	CT-8662	CT-8672	1/2	1/4
CT-8653	CT-8663	CT-8673	5/8	1/2
CT-8654	CT-8664	CT-8674	3/4	1/2
CT-8655	CT-8665	CT-8675	1	1/2



Six Flute Countersinks

Manufactured from high speed steel. Designed for economical, general purpose countersinking, chamfering or deburring.

Chip loads are generally smaller & chatter free machining is possible.

Available in 60°, 82° & 90°.

	Cat. No.		Size	Shank Dia.	Overall Length
60°	82°	90°	Inch	Inch	Inch
CT-8700	CT-8720	CT-8740	3/16	3/16	1-1/2
CT-8701	CT-8721	CT-8741	1/4	1/4	2
CT-8702	CT-8722	CT-8742	5/16	1/4	2
CT-8703	CT-8723	CT-8743	3/8	1/4	2
CT-8704	CT-8724	CT-8744	1/2	1/4	2
CT-8705	CT-8725	CT-8745	5/8	1/2	2-3/4
CT-8706	CT-8726	CT-8746	3/4	1/2	2-3/4
CT-8707	CT-8727	CT-8747	7/8	1/2	2-3/4
CT-8708	CT-8728	CT-8748	1	1/2	2-3/4
CT-8709	CT-8729	CT-8749	1-1/4	3/4	3-3/8
CT-8710	CT-8730	CT-8750	1-1/2	3/4	3-1/2
CT-8711	CT-8731	CT-8751	1-3/4	1	4-1/4
CT-8712	CT-8732	CT-8752	2	1	4-3/8





Manufactured from high speed steel. Suitable for use in a wide range of ferrous & non-ferrous materials.

Available in 45° or 60°.

Use to produce dovetail slides for machine tool tables, jigs & fixtures.

Cat	. No.	Size	Cutter Width		Shank Dia.	Overall Length
45°	60°	Inch	45°	60°	Inch	Inch
CT-8901	CT-8921	3/8	1/8"	3/16"	3/8	2-1/8
CT-8902	CT-8922	1/2	5/32"	1/4"	3/8	2-1/8
CT-8903	CT-8923	3/4	1/4"	5/16"	3/8	2-1/8
CT-8904	CT-8924	1	1/4"	7/16"	1/2	2-1/2
CT-8905	CT-8925	1-3/8	7/16"	9/16"	5/8	2-7/8
CT-8906	CT-8926	1-7/8	9/16"	13/16"	7/8	3-1/4
CT-8907	CT-8927	2-1/4	5/8"	1-1/16"	1	3-3/4
CT-8908	CT-8928	2-1/2	3/4"	1-1/8"	1	3-3/4





Manufactured from high speed steel.

Concave design cutters are used for milling male half circles.

Convex design cutters are used for milling female half circles.

CONCAVE RADIUS CUTTERS

Cat. No.	Radius	Cutter	Shank Dia.	No. Of	Overall Length
	Inch	Inch	Inch	Flutes	Inch
CT-8960	1/32	3/4	1/2	6	3
CT-8961	1/16	3/4	1/2	6	3
CT-8962	3/32	3/4	1/2	6	3
CT-8963	1/8	1	3/4	6	3-1/2
CT-8964	5/32	1	3/4	6	3-1/2
CT-8965	3/16	1	3/4	6	3-1/2
CT-8966	1/4	1-1/4	3/4	4	4
CT-8967	5/16	1-1/4	3/4	4	4
CT-8968	3/8	1-1/2	3/4	4	4-3/16



CONVEX RADIUS CUTTERS

Cat. No.	Radius	Cutter	Shank Dia.	No. Of Flutes	Overall Length
	Inch	Inch	Inch		Inch
CT-8970	1/32	3/4	1/2	6	3
CT-8971	1/16	3/4	1/2	6	3
CT-8972	3/32	7/8	1/2	6	3
CT-8973	1/8	1-1/4	3/4	6	3-1/2
CT-8974	5/32	1-5/16	3/4	6	3-1/2
CT-8975	3/16	1-3/8	3/4	6	3-1/2
CT-8976	1/4	1-1/2	3/4	4	4
CT-8977	5/16	1-5/8	3/4	4	4
CT-8978	3/8	1-3/4	3/4	4	4





Manufactured from high speed steel. Recommended for milling slots, pockets & keyways.

Suitable for use in wide range of ferrous & non-ferrous materials.

Provides excellent chip evacuation. Available in 2 Flute & 4 Flute.

SINGLE END 2 FLUTE

Cat. No.	Size	Shank Dia.	Flute Length	Overall Length
out. No.	Inch	Inch	Inch	Inch
CT-8800	1/8	3/8	3/8	2-5/16
CT-8801	5/32	3/8	7/16	2-5/16
CT-8802	3/16	3/8	7/16	2-5/16
CT-8803	7/32	3/8	1/2	2-5/16
CT-8804	1/4	3/8	1/2	2-5/16
CT-8805	9/32	3/8	9/16	2-5/16
CT-8806	5/16	3/8	9/16	2-5/16
CT-8807	11/32	3/8	9/16	2-5/16
CT-8808	3/8	3/8	9/16	2-5/16
CT-8809	13/32	3/8	13/16	2-1/2
CT-8810	7/16	3/8	13/16	2-1/2
CT-8811	15/32	1/2	1	3
CT-8812	1/2	3/8	13/16	2-1/2
CT-8814	1/2	1/2	1	3
CT-8815	17/32	1/2	1-1/8	3-1/8
CT-8816	9/16	1/2	1-1/8	3-1/8
CT-8817	19/32	1/2	1-1/8	3-1/8
CT-8818	5/8	1/2	1-1/8	3-1/8
CT-8819	5/8	5/8	1-5/16	3-7/16
CT-8820	21/32	1/2	1-5/16	3-5/16
CT-8821	11/16	1/2	1-5/16	3-5/16
CT-8822	11/16	5/8	1-5/16	3-7/16
CT-8823	23/32	1/2	1-5/16	3-5/16
CT-8824	3/4	1/2	1-5/16	3-5/16
CT-8825	3/4	5/8	1-5/16	3-7/16
CT-8826	3/4	3/4	1-5/16	3-7/16



SINGLE END 4 FLUTE

Cat. No.	Size	Shank Dia.	Flute Length	Overall Length
out not	Inch	Inch	Inch	Inch
CT-8840	1/8	3/8	3/8	2-5/16
CT-8841	5/32	3/8	7/16	2-3/8
CT-8842	3/16	3/8	1/2	2-3/8
CT-8843	7/32	3/8	5/8	2-1/2
CT-8844	1/4	3/8	5/8	2-1/2
CT-8845	9/32	3/8	5/8	2-1/2
CT-8846	5/16	3/8	3/4	2-1/2
CT-8847	11/32	3/8	3/4	2-1/2
CT-8848	3/8	3/8	3/4	2-1/2
CT-8849	13/32	3/8	1	2-11/16
CT-8850	7/16	3/8	1	2-11/16
CT-8851	15/32	3/8	1	2-11/16
CT-8852	1/2	3/8	1	2-11/16
CT-8853	1/2	1/2	1-1/4	3-1/4



Letter & Figure Punch Set

Manufactured from finest grade carbon steel, furnished in black / grey finish.

Induction hardened to provide outstanding toughness & longer life even after repeated use & also to give a solid impression.

Stamping end is Hardened at 58-62 HRC.

Letter Sets consists of 27 sticks, A to Z with &.

Figure Sets consists of 9 sticks 0 - 8, No.6 is inverted to make No.9.

Cat. No.	Cat. No. Cat No.		Marking P	unch Size
Figure Punch	Letter Punch	Combination of Letter & Figure Punch Set	Inch	mm
FP-5001	LP-5021	LFP-5031	1/16	1.5
FP-5002	LP-5022	LFP-5032	3/32	2.3
FP-5003	LP-5023	LFP-5033	1/8	3
FP-5004	LP-5024	LFP-5034	5/32	3.9
FP-5005	LP-5025	LFP-5035	3/16	4.5
FP-5006	LP-5026	LFP-5036	1/4	6.4
FP-5007	LP-5027	LFP-5037	5/16	8
FP-5008	LP-5028	LFP-5038	3/8	9.5
FP-5009	LP-5029	LFP-5039	1/2	12.5



Letter Punch Set



Figure Punch Set



Ideally suitable for tool-makers & machinists. Punches are made of hardened & tempered tool steel with black oxide finish.

Set includes 28 punches ranging from 3/32" to 1/2"by 64ths plus handy 17/32" size.

Length -4-7/8". Set includes an indexed stand.

Diameter .0025 undersize to facilitate use.

Cat. No.	Description
TPS-5200	28 Pcs. Transfer Punch Set





Manufactured from tool steel, hardened & center-less ground to withstand the hardest use. Knurled Body for better grip with black mottle finish.

Knurled body is 4.1/2" (114mm) long & the drive pin section is 3.1/2" (89mm) long. Tip Hardened to HRC 45 - 52.

Also available in half round head type for longer durability.

Available in individual sizes & also as a set of 5 pieces in attractive plastic pouch.

Cat. No.	Cat. No.	Punch Diameter	
Flat Head	Semi Circular Head	Inch	mm
DPP-5070	DPP-5076	1/8	3.2
DPP-5071	DPP-5077	3/16	4.5
DPP-5072	DPP-5078	1/4	6.4
DPP-5073	DPP-5079	5/16	8.0
DPP-5074	DPP-5080	3/8	9.5
DPP-5075	DPP-5081	5 PC Set - Consisting o above mentio	



🔁 <u>Drive Pin Punch – 4" (100mm)</u>

Tool steel punches are uniformly heat treated & center-less ground to withstand the hardest use.

4" long with knurled bodies for a better grip. Black mottle finish. Single piece make.

Available in individual sizes & also as a set of 8 pieces in attractive plastic pouch.

Cat. No.	Punch Diameter				
Gat. NO.	Inch	mm			
DPP-5091	1/16	1.5			
DPP-5092	3/32	2.3			
DPP-5093	1/8	3.2			
DPP-5094	5/32	3.9			
DPP-5095	3/16	4.5			
DPP-5096	7/32	5.5			
DPP-5097	1/4	6.4			
DPP-5098	5/16	8			
DPP-5099	8 PC Set - Consisting of One each from the above mentioned sizes.				



Nail Punch – Round Head

5

Hardened & tempered tool steel with black mottle finish. Knurled body for better grip.

Available in individual sizes & also as a set of 5 pieces in attractive plastic pouch.

Cat. No.	Size Of		of Tip Length		Body	Dia.
Cal. NO.	Inch	mm	Inch	mm	Inch	mm
NPR-5100	1/16	1.5	4	100	3/8	9.5
NPR-5101	3/32	2.3	4	100	3/8	9.5
NPR-5102	1/8	3.2	4	100	3/8	9.5
NPR-5103	5/32	3.9	4	100	3/8	9.5
NPR-5104	3/16	4.5	4	100	3/8	9.5
NPR-5105	5 PC Se	et - Consisting	5 PC Set - Consisting of One each from the above mentioned sizes			





Hardened & tempered tool steel with black mottle finish. Knurled body for a better grip.

Square Head design prevents the punches from rolling & also provides a larger face while striking.

Available in individual sizes & also as a set of 5 pieces in attractive plastic pouch.

Cat. No.	Size Of		Df Tip Length		Body Dia.	
Gat. NO.	Inch	mm	Inch	mm	Inch	mm
NPS-5106	1/16	1.5	4	100	3/8	9.5
NPS-5107	3/32	2.3	4	100	3/8	9.5
NPS-5108	1/8	3.2	4	100	3/8	9.5
NPS-5109	5/32	3.9	4	100	3/8	9.5
NPS-5110	3/16	4.5	4	100	3/8	9.5
NPS-5111	5 PC Se	5 PC Set - Consisting of One each from the above mentioned sizes				





Manufactured from tool steel, points are hardened & ground. Knurled body for a better grip. Black mottle finish.

Available in individual sizes & also as a set of 5 pieces in attractive plastic pouch.

Cat. No.	Dia. at Top of Tapered Point		Length		Body Dia.					
	Inch	mm	Inch	mm	Inch	mm				
CPR-5120	1/16	1.5	3	75	1/4	6.4				
CPR-5121	5/64	2	4	100	5/16	8				
CPR-5122	3/32	2.3	4	100	5/16	8				
CPR-5123	9/64	3.6	4	100	3/8	9.5				
CPR-5124	5/32	3.9	4	100	3/8	9.5				
CPR-5125	5 PC Se	et - Consisting	g of One e	ach from the	above mention	5 PC Set - Consisting of One each from the above mentioned sizes				





Manufactured from tool steel, points are hardened & ground. Knurled Body for a better grip. Black mottle finish.

Square head design prevents the punches from rolling & also provides a larger face while striking.

Available in individual sizes & also as a set of 5 pieces in attractive plastic pouch.

Cat. No.	Dia. at Top of Tapered Point		Length		Body Dia.	
	Inch	mm	Inch	mm	Inch	mm
CPS-5126	1/16	1.5	4	100	3/8	9.5
CPS-5127	5/64	2	4	100	3/8	9.5
CPS-5128	3/32	2.3	4	100	3/8	9.5
CPS-5129	9/64	3.6	4	100	3/8	9.5
CPS-5130	5/32	3.9	4	100	3/8	9.5
CPS-5131	5 PC Se	et - Consisting	5 PC Set - Consisting of One each from the above mentioned sizes			





Manufactured from aluminum, tough drill stand has easy to read raised & marked number index for 29 bits.

Takes Drills 1/16" - 1/12".

Metric 1mm – 10mm.

Cat. No.	Drill Size
Cal. NO.	Inch
ADS-5045	1/16 - 1/2





These are manufactured from alloy steel.

Properly heat treated.

Cat. No.	Sets	Range
AK-5050	10 Pcs. Set	Size In mm - 1.5, 2, 2.5, 3, 4, 5, 5.5, 6, 8 & 10
AK-5051	10 Pcs. Set	1/16", 5/64", 3/32", 1/8", 5/32", 3/16", 7/32", 1/4", 5/16" & 3/8"







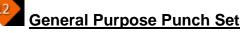
Have two double-end collets with a large free wheeling swivel head being at one end.

Reversible with two size capacities at each end & either end can be used to suit work requirements.

Screw chuck tightly holds small drills, burrs, wire & miniature tools. Precision made with nickel-plated finish.

Cat. No.	Сара	Capacity		Length
Inch		mm	Inch	mm
PV-5060	0 to 1/8	0 to 3.2	3-3/4	94





Hardened & ground body for a longer tool life. Knurled body for a better grip.

Body length - 4" (100 mm) with black mottle finish.

Available as a set of 3 pieces in attractive plastic pouch.

Cat. No. Round Head	Cat. No. Square Head	Description	Range / Type Of Punch
			Center Punch - 3/16" (4.5 mm)
GPP-5085	GPP-5086	3 PC Set	Solid Punch / Pin Punch - 1/8" (3.2 mm)
			Prick Punch - 1/32" (.79 mm)





Fully automatic single hand operation.

Hardened & ground punch point. Heavy knurled body for better grip with a black mottle finish.

The depth of the impression is variable $\&\ \mbox{can}\ \mbox{be}\ \mbox{adjusted}\ \mbox{by turning the knurled top.}$

Used for marking, punching & riveting.

Cat. No.	Body I	Body Length		Diameter
Cal. NO.	Inch	mm	Inch	mm
ACP-5140	5	127	5/8	16





Manufactured from high carbon steel, powder coated.

For pulling out of nails, available with or without grip.

Both ends are properly heat treated.

Cat. No.	Length	Hex
Gal. No.	Inch	mm
NP-5260	12	12
NP-5261	12	14
NP-5262	18	16



C Clamp - Drop Forged

Drop forged steel clamp with strong ribbed body.

General purpose clamp for application in metal, working, fabrication & welding works.

Quality steel screws & drop handles.

Cat. No.	Capacity		
	Inch	mm	
CC-5215	2	50	
CC-5216	3	75	
CC-5217	4	100	
CC-5218	6	150	
CC-5219	8	200	
CC-5220	12	305	





Manufactured from malleable casting. Heavy duty swivel head screw.

General purpose carriage clamps for woodworking or light metal fabrication where the strength of a drop forged clamp is not required.

V-slot in the anvil permits clamping small rounds or on corners.

Cat. No.	Capacity			
	Inch	mm		
CC-5225	2	50		
CC-5226	3	75		
CC-5227	4	100		
CC-5228	6	150		
CC-5229	8	200		
CC-5230	10	250		
CC-5231	12	300		



18 Wrecking Bars

Manufactured from high carbon steel, powder coated.

For opening of wooden cases, packing boxes. Dismantling of wooden crates.

Both ends are properly heat treated.

Cat. No.	Length	Hex	
	Inch	mm	
WB-5240	12	12	
WB-5241	18	16	
WB-5242	24	16	
WB-5243	18	18	
WB-5244	24	18	
WB-5245	30	18	
WB-5246	36	18	
WB-5247	24	22	
WB-5248	36	22	
WB-5249	48	25	
WB-5250	60	25	





Manufactured from high carbon steel, chrome plated finish.

Most useful for working on stones & chipping of reinforced concrete.

Cat. No.	Ler	igth	Hex
	Inch	mm	Inch
FC-5265	6	150	10
FC-5266	6	150	12
FC-5267	6	150	16
FC-5268	8	200	18
FC-5269	8	250	22
FC-5270	12	300	25

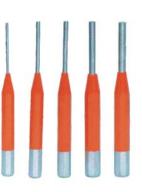




Pin Punch Set - 6" (Hex / Octagonal)

Manufactured from high carbon steel, powder coated.

Cat. No.	Pin Dia.		
Cal. NO.	Inch	mm	
PPS-5276	1/8	3	
PPS-5277	5/32	4	
PPS-5278	3/16	5	
PPS-5279	1/4	6	
PPS-5280	5/16	8	





Manufactured from high carbon steel, powder coated.

Six pieces set comprising of three chisels, one center punch, one nail punch & one pin punch.

Cat. No.	Set Compromising Of	mm
		10 x 150 x 10
	3 Chisels	12 x 150 x 12
		16 x 150 x 16
CPS-5290	1 Center Punch	12 x 150 x 5
	1 Nail Punch	10 x 150 x 5
	1 Pin Punch	12 x 150 x 5





Good quality wooden handle with wing nut adjustment.

Very useful for model makers, jewelers, tool makers, machine shops & for general assembly work.

Cat. No.	Jaw Opening		Jaw Opening Jaw Width		Total Length	
Cat. NO.	Inch	mm	Inch	mm	Inch	mm
WHV-5295	5/8	16	1	25	6-1/2	165





For trueing, cleaning, shaping & sharpening grinding wheels.

Dresser handles are manufactured from malleable iron, accurately machined finished & painted.

Cutters are manufactured from steel, case hardened & polished.

Washers are manufactured from mild steel.

Cat. No.	Description	
EWD-3100	No. 0 for Wheels up to 10" (250 mm) Dia. x 2" (50 mm)	
EWD-3101	No.1 for Wheels up to 15" (381 mm) Dia. x 3" (75 mm)	
EWD-3102	No. 2 for Higher Sizes Wheels.	
EWD-3103	Spare Cutter for No. 0 Dresser.	
EWD-3104	Spare Cutter for No. 1 Dresser.	
EWD-3105	Spare Cutter for No. 2 Dresser.	





Ideal tool for dressing operations on abrasive wheels of all types of grinding machines like surface grinders, universal grinders etc.

These dressers are fitted with a plastic handle to give a firm grip.

Carefully selected high quality diamonds.

Beautiful chrome finish. Includes protective end cap.

Cat. No.	Diamond Size	
DD-3015	1/4 Carat	
DD-3016	1/3 Carat	
DD-3017	1/2 Carat	
DD-3018	3/4 Carat	
DD-3019	1 Carat	
DD-3020	1-1/2 Carat	
DD-3021	2 Carat	
DD-3022	3 Carat	
DD-3023	4 Carat	
DD-3024	5 Carat	





Diamond Dressers With Knurled Body

Ideal tool for dressing wheels for universal grinders, surface grinders, cylindrical grinders, etc.

Long round body with knurled grip for maximum control.

Carefully selected high quality diamonds are used to give proper dressing to the wheels.

Beautiful chrome finish. Includes protective end cap.

Cat. No.		f Shank Length)	Diamond Size
	Inch	mm	
DD-3025	1/2 x 8	12.5 x 200	1/4 Carat
DD-3026	1/2 x 8	12.5 x 200	1/2 Carat
DD-3027	1/2 x 8	12.5 x 200	3/4 Carat
DD-3028	1/2 x 8	12.5 x 200	1 Carat
DD-3029	1/2 x 8	12.5 x 200	1-1/2 Carat
DD-3030	1/2 x 8	12.5 x 200	2 Carat
DD-3031	1/2 x 8	12.5 x 200	3 Carat
DD-3032	1/2 x 8	12.5 x 200	4 Carat
DD-3033	1/2 x 8	12.5 x 200	5 Carat





Ideally designed for use on all grinding machines.

Dress overall diameter & face of wheels.

Can be easily adjusted to 7" (175mm) height. Dress any width.

Includes diamond dresser.

Cat. No.	Description		
AD-3005	Complete - With Diamond Dresser		
AD-3006	Replacement Diamond Dresser Of 1/4 Carat Only - 3/8" x 3" (9.5 mm x 75 mm)		



ATECH



Ideal tool for dressing operations on abrasive wheels of all types of grinding machines like surface grinders, universal grinders etc.

These are manufactured from carefully selected high quality diamonds, individually mounted in holders by means of special bonds.

A single cutting edge is presented to the grinding wheel. Beautiful chrome finish.

Available in any shank size. Includes protective end cap.

	Size Of Shank		Diaman I Oire
Cat. No.	Inch	mm	Diamond Size
DD-3035	1/4 x 1-1/2	6.4 x 37.5	1/4 Carat
DD-3036	3/8 x 2	9.5 x 50	1/4 Carat
DD-3037	3/8 x 3	9.5 x 75	1/4 Carat
DD-3038	3/8 x 3	9.5 x 75	1/3 Carat
DD-3039	3/8 x 3	9.5 x 75	1/2 Carat
DD-3040	3/8 x 3	9.5 x 75	3/4 Carat
DD-3041	3/8 x 3	9.5 x 75	1 Carat
DD-3042	3/8 x 3	9.5 x 75	1-1/2 Carat
DD-3043	3/8 x 3	9.5 x 75	2 Carat
DD-3044	3/8 x 3	9.5 x 75	3 Carat
DD-3045	7/16 x 2	11.1 x 50	1/4 Carat
DD-3046	7/16 x 3	11.1 x 75	1/4 Carat
DD-3047	7/16 x 3	11.1 x 75	1/3 Carat
DD-3048	7/16 x 3	11.1 x 75	1/2 Carat
DD-3049	7/16 x 3	11.1 x 75	3/4 Carat
DD-3050	7/16 x 3	11.1 x 75	1 Carat
DD-3051	7/16 x 3	11.1 x 75	1-1/2 Carat
DD-3052	7/16 x 3	11.1 x 75	2 Carat
DD-3053	7/16 x 3	11.1 x 75	3 Carat
DD-3054	1/2 x 3	12.5 x 75	1/4 Carat
DD-3055	1/2 x 3	12.5 x 75	1/3 Carat
DD-3056	1/2 x 3	12.5 x 75	1/2 Carat
DD-3057	1/2 x 3	12.5 x 75	3/4 Carat
DD-3058	1/2 x 3	12.5 x 75	1 Carat
DD-3059	1/2 x 3	12.5 x 75	1-1/2 Carat
DD-3060	1/2 x 3	12.5 x 75	2 Carat
DD-3061	1/2 x 3	12.5 x 75	3 Carat
DD-3062	3/8 x 6	9.5 x 150	1/4 Carat
DD-3063	3/8 x 6	9.5 x 150	1/3 Carat
DD-3064	3/8 x 6	9.5 x 150	1/2 Carat
DD-3065	3/8 x 6	9.5 x 150	3/4 Carat
DD-3066	3/8 x 6	9.5 x 150	1 Carat
DD-3067	3/8 x 6	9.5 x 150	1-1/2 Carat
DD-3068	3/8 x 6	9.5 x 150	2 Carat

Cat. No.	Size C	of Shank	Diamond Circ
	Inch	mm	Diamond Size
DD-3069	3/8 x 6	9.5 x 150	2-1/2 Carat
DD-3070	3/8 x 6	9.5 x 150	3 Carat
DD-3071	3/8 x 6	9.5 x 150	4 Carat
DD-3072	3/8 x 6	9.5 x 150	5 Carat
DD-3073	7/16 x 6	11.1 x 150	1/4 Carat
DD-3074	7/16 x 6	11.1 x 150	1/3 Carat
DD-3075	7/16 x 6	11.1 x 150	1/2 Carat
DD-3076	7/16 x 6	11.1 x 150	3/4 Carat
DD-3077	7/16 x 6	11.1 x 150	1 Carat
DD-3078	7/16 x 6	11.1 x 150	1-1/4 Carat
DD-3079	7/16 x 6	11.1 x 150	1-1/2 Carat
DD-3080	7/16 x 6	11.1 x 150	1-3/4 Carat
DD-3081	7/16 x 6	11.1 x 150	2 Carat
DD-3082	7/16 x 6	11.1 x 150	2-1/2 Carat
DD-3083	7/16 x 6	11.1 x 150	3 Carat
DD-3084	7/16 x 6	11.1 x 150	4 Carat
DD-3085	7/16 x 6	11.1 x 150	5 Carat
DD-3086	1/2 x 6	12.5 x 150	1/4 Carat
DD-3087	1/2 x 6	12.5 x 150	1/3 Carat
DD-3088	1/2 x 6	12.5 x 150	1/2 Carat
DD-3089	1/2 x 6	12.5 x 150	3/4 Carat
DD-3090	1/2 x 6	12.5 x 150	1 Carat
DD-3091	1/2 x 6	12.5 x 150	1-1/2 Carat
DD-3092	1/2 x 6	12.5 x 150	2 Carat
DD-3093	1/2 x 6	12.5 x 150	2-1/2 Carat
DD-3094	1/2 x 6	12.5 x 150	3 Carat
DD-3095	1/2 x 6	12.5 x 150	4 Carat
DD-3096	1/2 x 6	12.5 x 150	5 Carat



Ideally designed for use on surface grinders.

Holds diamond dresser at a proper angle of 15°.

Includes diamond dresser.

Cat. No.	Description		
DNH-3001	Holder Only - Without Diamond Dresser		
DNH-3002	Complete - With Diamond Dresser		
DNH-3003	Replacement Diamond Dresser Of 1/4 Carat Only - 7/16" x 2" (11.1 mm x 50 mm)		
Overall Base Dimension - 2-1/2" x 6" (62.5 mm x 150 mm)			

