



# PRICE LIST

MT-1218



Hand & Power Hacksaws



Metal Cutting Carbon Bandsaws



HSS Bi-Metal Bandsaws

HSS Toolbits



HSS Drills



HSS Endmills

HSS Reamers



HSS Core Drills

HSS & TCT Annular Cutters



HSS Taps

Carbide Tipped Tools



Tungsten Carbide Rotary Burrs

Solid Carbide Drills



Solid Carbide End Mills





W.E.F 15.12.2018

**MIRANDA TOOLS**  
Premium quality cutting tools

## Terms & Conditions

1. All Govt. taxes and levies are extra.
2. Delivery F.O.R Destination
3. This price list is effective from 15.12.2018 and super ceeds our previous Price list, Prices are subject to revision without any notice.
4. For unlisted intermediate sizes, the prices of next listed size in inch or mm will apply.
5. We also manufacture special products as per your requirements.
6. All MTO items required in minimum order value of Rs.10,000/- net or MOQ as per size whichever is higher.
7. If coating (TiN, TiCN, TiAlN) required while ordering will be charged extra if not included in price list. Minimum Order Value should be Rs.10,000 in each size or minimum order qty. as mentioned.

Jobber, Stub &	:	All sizes upto Dia 13.00mm to be ordered
Long Series Drills	:	In multiple of 10 Nos.
Centre Drills	:	Upto ½”(12.50 mm) to be ordered in multiple of 100 Nos.
Hand Hacksaws	:	To be ordered in multiple of 100Nos.
Power Hacksaws	:	Upto 18” to be ordered multiple of 10 Nos. Above 20” to be ordered in multiple of 5 Nos.
ToolBits	:	Upto 1/2” (12.50 mm)to be ordered in multiple of 10Nos.
Parallel Shank Endmills	:	Upto 1/2” (12.50 mm)to be ordered in multiple of 10Nos

# Content

DESCRIPTION	Page No
<b>SAWS</b>	<b>1 - 4</b>
HAND & POWER HACKSAW BLADES	
METAL CUTTING BANDSAW & BI-METAL BANDSAW BLADES	
BI-METAL BANDSAW BLADE SPARK	
<b>HSS TOOLBIT BLANKS</b>	<b>5 - 10</b>
HSS TOOLBIT BLANKS,HSS FLAT (RECTANGULAR) & PARTING TOOLBITS	
ZEDD ++ TB SUPER	
<b>HSS DRILLS</b>	<b>11-22</b>
HSS PARALLEL SHANK JOBBER SERIES	
I-DRILL	
DRILL SET & HSS PARALLEL SHANK STUB SERIES, LONG & EXTRA LONG SERIES	
CENTRE DRILLS, HSS TAPER SHANK DRILLS, LONG & EXTRA LONG SERIES	
MASONRY DRILLS	
<b>HSS ENDMILLS &amp; REAMERS</b>	<b>23 - 25</b>
HSS PARALLEL SHANK ENDMILLS, SLOT DRILLS, LONG SERIES	
ROUGHING ENDMILLS M42 & ANNULAR CUTTER	
HSS REAMERS & TAPER PIN REAMERS ( TAPER 1 IN 50 ) & ( TAPER 1 IN 48 )	
<b>CORE DRILLS</b>	<b>26</b>
HIGH SPEED STEEL TAPER SHANK CORE DRILLS	
<b>HSS &amp; TCT ANNULAR CUTTERS</b>	<b>27 - 28</b>
HSS & TCT ANNULAR CUTTER	
<b>HSS TAPS</b>	<b>29 - 37</b>
HSS TAPS COARSE PITCH & FINE PITCH	
HSS HAND TAPS - BSW,BSF,UNC,UNF,BSCy, BA & PIPE TAPS	
HSS NIB TAPS & UN TAPS	
HSS GROUND THREAD HAND TAPS - COARSE PITCH - HELICOIL	
HIGH PERFORMANCE PLATINUM CUT (EDGE)	
<b>TUNGSTEN CARBIDE TIPPED TOOLS</b>	<b>38 - 44</b>
STRAIGHT ROUND & GROOVING TOOLS, STRAIGHT THREADING TOOLS, INTERNAL & EXTERNAL THREADING TOOLS, THREADING TOOLS WITH "V" PROFILE	
<b>TUNGSTEN CARBIDE ROTARY BURRS</b>	<b>45 - 47</b>
CONICAL,CYLINDRICAL RADIUS END, CYLINDRICAL FLAME,CONE,OVAL,RIM,BALL, TREE POINTED END,TREE RADIUS END, INVERTED CONE,SET OF FIVE PIECES	
<b>SOLID CARBIDE DRILLS &amp; ENDMILLS</b>	<b>48 - 50</b>
STRAIGHT SHANK SOLIDE CARBIDE DRILLS ( JOBBER & STUB SERIES )	
2/4 FLUTE CENTRE CUTTING UNCOATED & TIALN COATED,BALL NOSE ENDMILLS, LONG /EXTRA LONG LENGTH 4 FLUTE CENTRE CUTTING TIALN COATED	
<b>SUGGESTED SPEED AND FEED DATA DOR SOLID CARBIDE ENDMILLS &amp; DRILLS</b>	<b>51</b>



**SAWS**

**HAND HACKSAW BLADES**



NOMINAL SIZE (Length x Width x Thickness)		HSS - ALL HARD		HSS - BIMETAL		LOW ALLOY
Inches	Millimeters	Teeth Per Inch (TPI)	HSS Regular Rs. /Piece	Teeth Per Inch (TPI)	HSS Regular Rs. /Piece	Rs. /Piece
12 x 1/2 x 0.025 (23 G)	300 x 12.5 x 0.63	14 18 24 32	73.00	14 18 24 32	63.50	7.00

**POWER HACKSAW BLADES**

NOMINAL SIZE (Length x Width x Thickness)		HSS - ALL HARD		HSS - BIMETAL		LOW ALLOY
Inches	Millimeters	Teeth Per Inch (TPI)	HSS Regular Rs. /Piece	Teeth Per Inch (TPI)	HSS Regular Rs. /Piece	Rs. /Piece
12 X 1 X 0.050 (18 G)	300 X 25 X 1.25	10* 14*	329	10 14	253	31
14 X 1 X 0.050 (18 G)	350 X 25 X 1.25	6 10* 14*	370	6 10 14	287	37
16 X 1 X 0.050 (18 G)	400 X 25 X 1.25	10 14	488	10 14	395	42
17 X 1 X 0.050 (18 G)	425 X 25 X 1.25	10 14	551	10 14	429	
18 X 1 X 0.050 (18 G)	450 X 25 X 1.25	10* 14	558	10 14	439	53
14 X 1 1/4 X 0.062 (16 G)	350 X 32 X 1.60	6 10	630	6 10	481	51
16 X 1 1/4 X 0.062 (16 G)	400 X 32 X 1.60	6 10	726	6 10	550	59
17 X 1 1/4 X 0.062 (16 G)	425 X 32 X 1.60	6 10	782	6 10	621	
18 X 1 1/4 X 0.062 (16 G)	450 X 32 X 1.60	6 10	807	6 10	630	69
18 X 1 1/4 X 0.080 (14 G)	450 X 32 X 2.00	4 6 10	1005	-	-	
18 X 1 1/2 X 0.062 (16 G)	450 X 40 X 1.60	6 10	1077	-	-	86
18 X 1 1/2 X 0.080 (14 G)	450 X 40 X 2.00	4 6 10	1190	6	911	
20 X 1 1/2 X 0.080 (14 G)	500 X 40 X 2.00	4 6 10	1323	6	1,005	
21 X 1 1/2 X 0.080 (14 G)	525 X 40 X 2.00	4 6 10	1397	4 6	1,116	
22 X 1 1/2 X 0.080 (14 G)	550 X 40 X 2.00	4 10	1461	4 6	1,213	
24 X 1 1/2 X 0.080 (14 G)	600 X 40 X 2.00	4 6 10	1603	4 6	1,309	
24 X 1 1/2 X 0.100 (12 G)	600 X 40 X 2.50	4 6	1903	-	-	
28 X 1 1/2 X 0.100 (12 G)	700 X 40 X 2.50	4 6	2294	-	-	
30 X 1 1/2 X 0.100 (12 G)	750 X 40 X 2.50	4 6	2553	-	-	
24 X 2 X 0.080 (14G)	600 X 50 X 2.00	4 6	2248	-	-	
24 X 2 X 0.100 (12G)	600 X 50 X 2.50	4 6	2661	4 6	2,024	
28 X 2 X 0.100 (12G)	700 X 50 X 2.50	4 6	3101	4 6	2,331	
30 X 2 X 0.100 (12G)	750 X 50 X 2.50	4 6	3457	4 6	2,688	
32 X 2 X 0.100 (12G)	800 X 50 X 2.50	4 6	3542	4 6	2,754	
36 X 2 X 0.100 (12G)	900 X 50 X 2.50	4 6	4176	4 6	3,243	
36 X 2 1/2 X 0.100 (12G)	800 X 55 X 2.50	-		4	3,460	

• Width specification are approximate and depend upon availability of RM steel.  
• Any other dimensional variability may occur due to RM Steel availability, but adequate rigidity in cutting is assured.

## METAL CUTTING BANDSAW BLADES

NOMINAL SIZE (WIDTH X THICKNESS)		TEETH PER INCH (TPI)		Price For 30.5 Mtrs. Long Roll
Inches	Millimeters	RACKER SET	WAVY SET	Rs./Roll
1/4 x 0.025 (23 G)	6.35 X 0.63	10 14	18 24	1981
3/8 x 0.025 (23 G)	9.53 X 0.63	6 8 10 14	18 24	1358
1/2 x 0.025 (23 G)	12.70 X 0.63	6 8 10 14	18 24	1642
1/2 x 0.025 (23 G) (SKIP)	12.70 X 0.63	'6		1751
5/8 X 0.032 (21 G)	15.88 X 0.80	6 8 10 14	18 24	2134
3/4 X 0.032 (21 G)	19.05 X 0.80	4 6 8 10 14	18 24	2242
3/4 X 0.032 (21 G) (SKIP)	19.05 X 0.80	'6		2505
1 X 0.035 (20 G)	25.40 X 0.90	4 6 8 10 14	18 24	2980

## METAL CUTTING BANDSAW WELDED COILS

NOMINAL SIZE (WIDTH X THICKNESS)		TEETH PER INCH (TPI)		Price
Inches	Millimeters	RACKER SET	WAVY SET	Rs./Loop
3/4 X 0.032 (21G) X 8' 3"	19.05 X 0.80 X 2515	4 6 8 10 14	18 24	248
3/4 X 0.032 (21G) X 9' 10"	19.05 X 0.80 X 2997	4 6 8 10 14	18 24	282
3/4 X 0.032 (21G) X 11' 7 1/2"	19.05 X 0.80 X 3544	4 6 8 10 14	18 24	325

\* Welded Coils (Loops) are available in any size, Prices given are for three popular sizes.

## BIMETAL BANDSAW BLADES

GRADE	SIZE	TEETH (TPI)	CPL RS./METER
FURIA -N/VN (M 42)	13 X 0.65	8,10,14,18,24/6,6/10,8/12,10/14	581
	13 X 0.90	6,8,10,14,18,5/8,6/10,8/12,10/14	627
	20 X 0.90	6,8,10,14,4/6,5/8,6/10,8/12,10/14	649
	27 X 0.90	4,6,8,10,14,3/4,4/6,5/8,6/10,8/12,10/14	670
	34 X 1.10	6,3/4,4/6,5/8,6/10	710
	41 X 1.30	6,3/4,4/6	1001
FURIA -VI (M 42)	27 X 0.90	2/3,3/4,4/6,5/8,6/10	670
	34 X 1.10	2/3,3/4,4/6	710
	41 X 1.30	1.2/2,2/3,3/4,4/6	1001
	54 X 1.60	0.75/1.2,1.2/2,2/3,3/4,4/6	1580
ALUMINA-CI(M-42)	67 X 1.60	0.75/1.2,1.2/2,2/3,3/4	2576
	20 X 0.90	3	737
	27 X 0.90	2,3	759
	34 X 1.10	1.2,2,3	805
	41 X 1.30	1.2,2	1242
KATANA-VX	27 x 0.90	3/4,4/6	759
	34 X 1.10	2/3,3/4	805
	41 X 1.30	1.2/2,2/3,3/4	1188
	54 X 1.60	0.75/1.25,1.2/2,2/3	1802
TITAN-VX(M 51)	67 X 1.60	0.75/1.25,1.2/2,2/3	2928
	27 X 0.90	2/3,3/4,4/6	848
	34 X 1.10	2/3,3/4,4/6	901
	41 X 1.30	1.2/2,2/3,3/4	1402
	54 X 1.60	1.2/2,2/3	2146

\* Length & TPI of Bimetal Loop as per requirement.





**MIRANDA TOOLS**

Premium quality cutting tools



ASHOK  
PIRAMAL  
GROUP

**MIRANDA**  
*spark*  
Premium quality Bimetal Band saw blades

**NEW  
LAUNCH**

**PREMIUM BI-METAL  
BAND SAW BLADE  
(M-42)**



**MIRANDA *spark* VI M-42**

[www.mirandatools.in](http://www.mirandatools.in)



**PREMIUM BI-METAL BAND SAW BLADE (M-42)**

PREMIUM BIMETAL BANDSAW BLADE SPARK			
Grade	Size	Teeth(TPI)	CPL/metre
Spark VN	20 x 0.9	4/6,5/8,6/10,8/12,10/14	681
	27 x 0.9	4/6,5/8,6/10,8/12,10/14	704
	34 x 1.1	5/8,6/10	759
Spark VI	27 x 0.9	2/3,3/4,4/6,5/8,6/10	704
	34 x 1.1	2/3,3/4,4/6	759
	41 x 1.3	2/3,3/4,4/6	1071

**TYPE VI**

**TYPE VN**

**APPLICATIONS**

- Steel
- Cast Iron
- Brass
- Aluminium
- Non-ferrous metal
- Forged Industries



**SPARK VI ideal for :**

- Steel with low carbon content
- Cr-Ni alloys
- Large cross sections for serial cuts in automatic operation
- Maximize Tooth Penetration
- High Rake Angle
- Increase in Efficiency By 30%

**SPARK VN ideal for :**

- Low alloyed materials
- Small and medium cross section of solids tubes & profiles
- Structural materials
- Non-Ferrous metals



### HSS TOOLBIT BLANKS

MM	INCH	EQUIVALENT MM	ZEDD M2 SQ. Price Each Rs.	S100 M35 SQ./RD Price Each Rs.	S200 M42 SQ./RD Price Each Rs.	S400 T42 SQ./RD Price Each Rs.	S400E M35 SQ./RD Price Each Rs.	S500 T 42 SQ./RD Price Each Rs.	S600 T 45 SQ. Price Each Rs.	PKT. QTY.
-	3/32 x 2.1/2	2.38 x 63.50	104	231	324	342	272	363		10
-	3/32 x 3	2.38 x 76.20	121	373	522	548	438	581		10
3 x 75	1/8 x 3	3.18 x 76.20	121	255	360	379	299	395	474	10
3 x 100	1/8 x 4	3.18 x 101.60	160	461	662	695	547	722	869	10
4 x 75	5/32 x 3	3.97 x 76.20	121	259	369	387	306	396		10
4 x 100	5/32 x 4	3.97 x 101.60	164	401	573	602	477	618		10
5 x 75	3/16 x 3	4.76 x 76.20	105	205	268	281	239	291	352	10
5 x 100	3/16 x 4	4.76 x 101.60	137	301	391	411	355	431	513	10
5 x 150	3/16 x 6	4.76 x 152.40	213	544	834	881	637	882	1,101	10
6 x 75	1/4 x 3	6.35 x 76.20	119	259	360	379	306	396	474	10
6 x 100	1/4 x 4	6.35 x 101.60	140	351	477	504	411	524	630	10
6 x 150	1/4 x 6	6.35 x 152.40	202	575	781	823	677	854	1,030	10
6 x 200	1/4 x 8	6.35 x 203.20	288	954	1,321	1,390	1,118	1,463	1,738	10
8 x 75	5/16 x 3	7.94 x 76.20	133	339	462	489	401	519	611	10
8 x 100	5/16 x 4	7.94 x 101.60	172	467	634	665	549	710	832	10
8 x 150	5/16 x 6	7.94 x 152.40	284	746	1,018	1,071	882	1,136	1,338	10
8 x 200	5/16 x 8	7.94 x 203.20	361	1,062	1,440	1,518	1,253	1,619	1,897	10
-	3/8 x 3	9.53 x 76.20	166	395	548	580	462	616	726	10
-	3/8 x 4	9.53 x 101.60	202	528	724	763	623	829	954	10
-	3/8 x 6	9.53 x 152.40	314	833	1,166	1,226	985	1,309	1,532	10
-	3/8 x 8	9.53 x 203.20	425	1,187	1,654	1,743	1,392	1,857	2,180	10
-	3/8 x 10	9.53 x 254.00	548	1,572	2,191	2,306	1,849	2,459	2,882	10
10 x 75	-	-	184	431	598	628	505	673		10
10 x 100	-	-	219	575	802	844	676	900	1,055	10
10 x 150	-	-	338	900	1,256	1,323	1,062	1,406		10
10 x 200	-	-	474	1,269	1,766	1,858	1,494	1,982		10
10 x 250	-	-	597	1,675	2,333	2,454	1,964	2,613		10
12 x 75	1/2 x 3	12.70 x 76.20	249	624	895	941	736	980	1,176	10
12 x 100	1/2 x 4	12.70 x 101.60	314	833	1,167	1,228	985	1,314	1,534	10
12 x 150	1/2 x 6	12.70 x 152.40	479	1,283	1,830	1,930	1,511	2,018	2,413	10
12 x 200	1/2 x 8	12.70 x 203.20	628	1,794	2,554	2,688	2,111	2,813	3,361	10
12 x 250	1/2 x 10	12.70 x 254.00	957	2,511	3,511	3,701	2,954	3,926	4,626	10
14 x 100	9/16 x 4	14.29 x 101.60	386	1,071	1,440	1,518	1,263	1,619		1
14 x 150	9/16 x 6	14.29 x 152.40	593	1,619	2,175	2,288	1,899	2,438		1
14 x 200	9/16 x 8	14.29 x 203.20	814	2,248	3,025	3,184	2,643	3,389		1
16 x 100	5/8 x 4	15.88 x 101.60	497	1,373	1,964	2,069	1,620	2,152	2,585	1
16 x 150	5/8 x 6	15.88 x 152.40	731	2,066	2,877	3,025	2,426	3,222	3,781	1
16 x 200	5/8 x 8	15.88 x 203.20	989	2,823	4,032	4,246	3,322	4,411	5,307	1
-	3/4 x 4	19.05 x 101.60	686	1,912	2,696	2,838	2,247	2,993	3,549	1
-	3/4 x 6	19.05 x 152.40	1,003	2,861	3,956	4,167	3,369	4,483	5,209	1
-	3/4 x 8	19.05 x 203.20	1,372	3,840	5,422	5,707	4,515	6,010	7,134	1
20 x 100	-	-	749	2,083	2,941	3,097	2,448	3,260		1
20 x 150	-	-	1,092	3,117	4,407	4,642	3,672	4,890		1
20 x 200	-	-	1,492	4,154	5,877	6,188	4,895	6,516		1
25 x 150	1 x 6	25.40 x 152.40	1,688	4,751	6,637	6,990	5,589	7,427	8,737	1
25 x 200	1 x 8	25.40 x 203.20	2,295	6,335	8,849	9,315	7,452	9,903	11,645	1

- ZEDD = (HSS with % Cobalt) (62-65 HRC)
- S100 = M35 (HSS with 5% Cobalt) (63-66 HRC)
- S200 = M42 (HSS with 8% Cobalt) (65-68 HRC)
- S400 = T42 (HSS with 10% Cobalt) (64-67 HRC)
- S400E = M35 with Cryogenic (Ultra Low) Heat Treatment (64-67 HRC)
- S500 = T42 with Cryogenic (Ultra Low) Heat Treatment (65-69 HRC)
- S600 = T45 (HSS with 11% Cobalt) (67-70 HRC)

(Square Toolbit Blanks are with bevelled ends)



## HSS FLAT (RECTANGULAR) TOOLBIT BLANKS

NOMINAL SIZE			GRADES		PKT. QTY.
MM	INCH	EQUIVALENT MM	MARK III	T42	
			Price Each Rs.	Price Each Rs.	
3 x 20 x 150	1/8 x 3/4 x 6	3.18 x 19.05 x 152.40	787	1,228	10
3 x 25 x 150	1/8 x 1 x 6	3.18 x 25.40 x 152.40	1,123	1,757	10
5 x 25 x 150	3/16 x 1 x 6	4.76 x 25.40 x 152.40	1,234	2,155	10
6 x 12 x 100	1/4 x 1/2 x 4	6.35 x 12.70 x 101.60	475	741	10
6 x 12 x 150	1/4 x 1/2 x 6	6.35 x 12.70 x 152.40	726	1,141	10
6 x 16 x 150	1/4 x 5/8 x 6	6.35 x 15.88 x 152.40	865	1,402	10
6 x 20 x 150	1/4 x 3/4 x 6	6.35 x 19.05 x 152.40	1,026	1,607	10
6 x 25 x 150	1/4 x 1 x 6	6.35 x 25.40 x 152.40	1,253	1,959	10
10 x 12 x 100	3/8 x 1/2 x 4	9.53 x 12.70 x 101.60	713	1,117	10
10 x 16 x 100	3/8 x 5/8 x 4	9.53 x 15.88 x 101.60	791	1,241	10
10 x 16 x 150	3/8 x 5/8 x 6	9.53 x 15.88 x 152.40	1,236	1,930	10
10 x 20 x 150	3/8 x 3/4 x 6	9.53 x 19.05 x 152.40	1,425	2,224	10
10 x 25 x 150	3/8 x 1 x 6	9.53 x 25.40 x 152.40	2,443	3,817	10
12 x 16 x 150	1/2 x 5/8 x 6	12.70 x 15.88 x 152.40	1,524	2,707	1
12 x 20 x 150	1/2 x 3/4 x 6	12.70 x 19.05 x 152.40	1,686	2,993	1
12 x 25 x 150	1/2 x 1 x 6	12.70 x 25.40 x 152.40	2,212	3,464	1
16 x 20 x 150	5/8 x 3/4 x 6	15.88 x 19.05 x 152.40	2,297	3,924	1
20 x 25 x 150	3/4 x 1 x 6	19.05 x 25.40 x 152.40	3,235	6,208	1

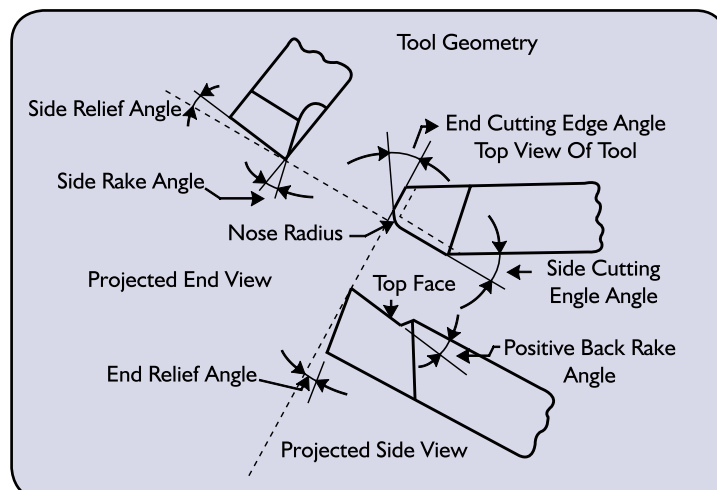
• Mark II - M35 (HSS with 5% Cobalt) (63-66 HRC), T42 (HSS with 10% Cobalt)

## HSS PARTING TOOLBITS

NOMINAL SIZE		GRADES		PKT. QTY.
INCH	EQUIVALENT MM	MARK II	T42	
		PRICE EACH RS.	PRICE EACH RS.	
3/32 x 1/2 x 4	2.38 x 12.70 x 101.60	621	1,089	10
3/32 x 5/8 x 5	2.38 x 15.88 x 127.00	778	1,432	10
1/8 x 3/4 x 6	3.18 x 19.05 x 152.40	992	1,759	10
1/8 x 7/8 x 6	3.18 x 22.23 x 152.40	1,161	2,148	10
3/16 x 1 x 6	4.76 x 25.40 x 152.40	1,444	2,461	10

• Mark II - M2 (HSS with 0% Cobalt) (62-65 HRC), T42 (HSS with 10% Cobalt)

### ToolBit Terms-General Features





# MIRANDA TOOLS

Premium quality cutting tools



ASHOK  
PIRAMAL  
GROUP

**MIRANDA**  
**ZEDD+**

## HSS TOOL BIT BLANK

**NEW  
LAUNCH**

(1/4"x4") 6.35x101.60 mm

(3/8"x4") 9.53x101.60mm

5 MIRANDA ZEDD PLUS

5 MIRANDA ZEDD PLUS



[www.mirandatools.in](http://www.mirandatools.in)



### HSS TOOL BIT BLANK

PRODUCT CODE	DESCRIPTION	PRICE / EACH	PACKING QTY
MIRTSAI05CI0505100	TOOLBIT BLANK SQ 3/16"X4" H SS ZEDD+	145	10
MIRTSAI05CI0505150	TOOLBIT BLANK SQ 3/16"X6" H SS ZEDD+	224	10
MIRTSAI05CI0606075	TOOLBIT BLANK SQ 1/4"X3" ZEDD +	126	10
MIRTSAI05CI0606100	TOOLBIT BLANK SQ 1/4"X4" ZEDD +	147	10
MIRTSAI05CI0606150	TOOLBIT BLANK SQ 1/4"X6" ZEDD +	211	10
MIRTSAI05CI0808075	TOOLBIT BLANK SQ 5/16"X3" H SS ZEDD+	139	10
MIRTSAI05CI0808100	TOOLBIT BLANK SQ 5/16"X4" H SS ZEDD+	181	10
MIRTSAI05CI0808150	TOOLBIT BLANK SQ 5/16"X6" H SS ZEDD+	298	10
MIRTSAI05CI1010075	TOOLBIT BLANK SQ 3/8"X3" ZEDD +	174	10
MIRTSAI05CI1010100	TOOLBIT BLANK SQ 3/8"X4" ZEDD +	211	10
MIRTSAI05CI1010150	TOOLBIT BLANK SQ 3/8"X6" ZEDD +	330	10
MIRTSAI05CI1010200	TOOLBIT BLANK SQ 3/8"X8" ZEDD +	447	10
MIRTSAI05CI1212075	TOOLBIT BLANK SQ 1/2"X3" ZEDD +	262	10
MIRTSAI05CI1212100	TOOLBIT BLANK SQ 1/2"X4" ZEDD +	330	10
MIRTSAI05CI1212150	TOOLBIT BLANK SQ 1/2"X6" ZEDD +	503	10
MIRTSAI05CI1212200	TOOLBIT BLANK SQ 1/2"X8" ZEDD +	658	10
MIRTSAI05CI1616100	TOOLBIT BLANK SQ 5/8"X4" ZEDD +	522	1
MIRTSAI05CI1616150	TOOLBIT BLANK SQ 5/8"X6" ZEDD +	768	1
MIRTSAI05CI2020150	TOOLBIT BLANK SQ 3/4"X6" ZEDD +	1,053	1
MIRTSAI05CI2525150	TOOLBIT BLANK SQ 1"X6" ZEDD +	1,773	1
MIRTSAI05CI2525200	TOOLBIT BLANK SQ 1"X8" ZEDD +	2,410	1

#### FEATURE

- Superior Performance
- Improved Wear Resistance
- Extended Pointing Frequency
- Special Surface Treatment
- Excellent Performance on Critical Application



# MIRANDA TOOLS

Premium quality cutting tools



ASHOK  
PIRAMAL  
GROUP

**MIRANDA**  
**TB SUPER**  
S S S S

**NEW  
LAUNCH**

## PREMIUM HSS TOOL BIT BLANK S-600

STS S S S S (1/4"x4") 6.35x101.60 mm

STS S S S S (3/8"x4") 9.53x101.60mm

S MIRANDA S 600

S MIRANDA S 600



[www.mirandatools.in](http://www.mirandatools.in)



**HSS TOOLBIT S-600**

PART CODE	PART DESCRIPTION	PRICE / EACH	PKT QTY
MIRTSKI01BI0303075	TOOLBIT BLANK SQ 1/8"X3" S600	474	10
MIRTSKI01BI0303100	TOOLBIT BLANK SQ 1/8"X4" HS SS600	869	10
MIRTSKI01BI0505075	TOOLBIT BLANK SQ 3/16"X3" H SSS600	352	10
MIRTSKI01BI0505100	TOOLBIT BLANK SQ 3/16"X4" H SSS600	513	10
MIRTSKI01BI0505150	TOOLBIT BLANK SQ 3/16"X6" H SSS600	1101	10
MIRTSKI01BI0606075	TOOLBIT BLANK SQ 1/4"X3" HS SS600	474	10
MIRTSKI01BI0606100	TOOLBIT BLANK SQ 1/4"X4" HS SS600	630	10
MIRTSKI01BI0606150	TOOLBIT BLANK SQ 1/4"X6" HS SS600	1030	10
MIRTSKI01BI0606200	TOOLBIT BLANK SQ 1/4"X8" S600	1738	10
MIRTSKI01BI0808075	TOOLBIT BLANK SQ 5/16"X3" H SSS600	611	10
MIRTSKI01BI0808100	TOOLBIT BLANK SQ 5/16"X4" H SSS600	832	10
MIRTSKI01BI0808150	TOOLBIT BLANK SQ 5/16"X6" H SSS600	1338	10
MIRTSKI01BI0808200	TOOLBIT BLANK SQ 5/16"X8" H SSS600	1897	10
MIRTSKI01BM0808100	TOOLBIT BLANK SQ 8X100MM S600	832	10
MIRTSKI01BM0808075	TOOLBIT BLANK SQ 8X75MM S600	611	10
MIRTSKI01BI1010250	TOOLBIT BLANK SQ 3/8"X10" H SSS600	2882	10
MIRTSKI01BI1010075	TOOLBIT BLANK SQ 3/8"X3" HS SS600	726	10
MIRTSKI01BI1010100	TOOLBIT BLANK SQ 3/8"X4" HS SS600	954	10
MIRTSKI01BI1010150	TOOLBIT BLANK SQ 3/8"X6" HS SS600	1532	10
MIRTSKI01BI1010200	TOOLBIT BLANK SQ 3/8"X8" HS SS600	2180	10
MIRTSKI01BM1010100	TOOLBIT BLANK SQ 10X100MMS600	1055	10
MIRTSKI01BI1212250	TOOLBIT BLANK SQ 1/2"X10" H SSS600	4626	10
MIRTSKI01BI1212075	TOOLBIT BLANK SQ 1/2"X3" HS SS600	1176	10
MIRTSKI01BI1212100	TOOLBIT BLANK SQ 1/2"X4" HS SS600	1534	10
MIRTSKI01BI1212150	TOOLBIT BLANK SQ 1/2"X6" HS SS600	2413	10
MIRTSKI01BI1212200	TOOLBIT BLANK SQ 1/2"X8" HS SS600	3361	10
MIRTSKI01BI1616100	TOOLBIT BLANK SQ 5/8"X4" HS S S600	2585	1
MIRTSKI01BI1616150	TOOLBIT BLANK SQ 5/8"X6" HS S S600	3781	1
MIRTSKI01BI1616200	TOOLBIT BLANK SQ 5/8"X8" HS SS600	5307	1
MIRTSKI01BI2020100	TOOLBIT BLANK SQ 3/4"X4" HS SS600	3549	1
MIRTSKI01BI2020150	TOOLBIT BLANK SQ 3/4"X6" HS SS600	5209	1
MIRTSKI01BI2020200	TOOLBIT BLANK SQ 3/4"X8" HS SS600	7134	1
MIRTSKI01BI2525150	TOOLBIT BLANK SQ 1"X6" HSS S600	8737	1
MIRTSKI01BI2525200	TOOLBIT BLANK SQ 1"X8" HSS S600	11645	1

**Feature**

- High Hardness
- Improved Wear Resistance
- Longer Edge Retention
- High Speed Cutting
- Finishing and Hard Alloy Application

**Application**

- Turning
- Parting
- Grooving
- Slotting
- Shaping





# MIRANDA TOOLS

Premium quality cutting tools



ASHOK  
PIRAMAL  
GROUP



## MIRANDA Gold Drills



## MIRANDA Super Drills

### MIRANDA Gold Drills

#### SIZE RANGE: GOLD JOBBER DRILL

- Metric size : 1.0 mm to 20.0 mm
- Inch size : 3/64" to 25/32"

#### APPLICATION:

- Suitable for non ferrous metals.
- Suitable for aluminium alloy & Cast steel material.
- Suitable for material up to 25HRc
- Suitable for general application

### MIRANDA Super Drills

#### SIZE RANGE: SUPER DRILLS

- Metric size : 1.0 mm to 16.0 mm
- Inch size : 3/64" to 5/8"

#### APPLICATION:

- Drilling alloy up to 28-35 HRc
- Suitable for drilling all types of stainless steel materials
- Suitable for forged steel components.
- All Titanium alloys, Hastelloy, Inconel and Heat Resistant steels.



**HSS DRILLS**

**HSS PARALLEL SHANK JOBBER SERIES**

IS : 5101 - 1991

SIZES			PRICE RS./10 NOS.		
MM	INCH	DG	STD. JOBBER DRILLS	GOLD JOBBER DRILLS	SUPER JOBBER DRILLS
1.00			337	375	482
1.02		60	337	375	482
1.04		59	337	375	482
1.07		58	337	375	482
1.09		57	337	375	482
1.10			337	375	482
1.18		56	337	375	482
1.19	3/64		337	375	482
1.20			337	375	482
1.30			337	375	482
1.32		55	337	375	482
1.40		54	337	375	482
1.50			337	375	482
1.51		53	337	375	482
1.59	1/16		337	375	482
1.60			337	375	482
1.61		52	354	392	504
1.70		51	354	392	504
1.78		50	354	392	504
1.80			354	392	504
1.85		49	354	392	504
1.90			354	392	504
1.93		48	354	392	504
1.98	5/64		354	392	504
1.99		47	354	392	504
2.00			354	392	504
2.06		46	354	392	504
2.08		45	354	392	504
2.10			354	392	504
2.18		44	354	392	504
2.20			354	392	504
2.26		43	354	392	504
2.30			354	392	504
2.37		42	354	392	504
2.38	3/32		354	392	504
2.40			354	392	504
2.44		41	354	392	504
2.49		40	354	392	504
2.50			354	392	504
2.53		39	354	392	504
2.58		38	354	392	504
2.60			354	392	504
2.64		37	354	392	504
2.70			354	392	504
2.71		36	354	392	504
2.78	7/64		354	392	504
2.79		35	363	402	516
2.80			363	402	516
2.82		34	363	402	516
2.87		33	363	402	516
2.90			363	402	516

SIZES			PRICE RS./10 NOS.		
MM	INCH	DG	STD. JOBBER DRILLS	GOLD JOBBER DRILLS	SUPER JOBBER DRILLS
2.95		32	363	402	516
3.00			363	402	516
3.05		31	475	528	676
3.10			475	528	676
3.17	1/8		475	528	676
3.20			488	541	696
3.26		30	488	541	696
3.30			488	541	696
3.40			488	541	696
3.45		29	488	541	696
3.50			488	541	696
3.57	9/64	28	488	541	696
3.60			728	807	1037
3.66		27	728	807	1037
3.70			728	807	1037
3.73		26	728	807	1037
3.80		25	728	807	1037
3.86		24	728	807	1037
3.90			728	807	1037
3.91		23	728	807	1037
3.97	5/32		728	807	1037
3.99		22	728	807	1037
4.00			728	807	1037
4.04		21	876	970	1249
4.09		20	876	970	1249
4.10			876	970	1249
4.20			876	970	1249
4.22		19	876	970	1249
4.30		18	876	970	1249
4.37	11/64		876	970	1249
4.39		17	876	970	1249
4.40			876	970	1249
4.50		16	1,151	1,278	1640
4.57		15	1,151	1,278	1640
4.60			1,151	1,278	1640
4.62		14	1,151	1,278	1640
4.70		13	1,151	1,278	1640
4.76	3/16		1,151	1,278	1640
4.80		12	1,151	1,278	1640
4.85		11	1,264	1,403	1801
4.90			1,264	1,403	1801
4.92		10	1,264	1,403	1801
4.98		9	1,264	1,403	1801
5.00			1,264	1,403	1801
5.06		8	1,264	1,403	1801
5.10			1,264	1,403	1801
5.11		7	1,264	1,403	1801
5.16	13/64		1,264	1,403	1801
5.18		6	1,264	1,403	1801
5.20			1,264	1,403	1,801
5.22		5	1,365	1,515	1,948
5.30			1,365	1,515	1,948
5.31		4	1,365	1,515	1,948
5.40			1,365	1,515	1,948



### HSS DRILLS

#### HSS PARALLEL SHANK JOBBER SERIES

IS : 5101 - 1991

SIZES			PRICE RS./10 NOS.		
MM	INCH	DG	STD. JOBBER DRILLS	GOLD JOBBER DRILLS	SUPER JOBBER DRILLS
5.41		3	1,365	1,515	1,948
5.50			1,365	1,515	1,948
5.56	7/32		1,365	1,515	1,948
5.60			1,365	1,515	1,948
5.61		2	1,520	1,688	2,168
5.70			1,520	1,688	2,168
5.79		1	1,520	1,688	2,168
5.80			1,520	1,688	2,168
5.90			1,520	1,688	2,168
5.95	15/64		1,520	1,688	2,168
6.00			1,520	1,688	2,168
6.04		B	1,666	1,851	2,376
6.10			1,666	1,851	2,376
6.15		C	1,666	1,851	2,376
6.20			1,666	1,851	2,376
6.30			1,666	1,851	2,376
6.35	1/4	E	1,666	1,851	2,376
6.40			1,666	1,851	2,376
6.50			2,127	2,361	3,034
6.60			2,127	2,361	3,034
6.63		G	2,127	2,361	3,034
6.70			2,127	2,361	3,034
6.75	17/64	H	2,127	2,361	3,034
6.80			2,127	2,361	3,034
6.90			2,327	2,582	3,317
7.00		J	2,327	2,582	3,317
7.10			2,327	2,582	3,317
7.14	9/32	K	2,327	2,582	3,317
7.20			2,327	2,582	3,317
7.30			2,459	2,731	3,508
7.40			2,459	2,731	3,508
7.50			2,459	2,731	3,508
7.54	19/64		2,671	2,964	3,808
7.60			2,671	2,964	3,808
7.70			2,671	2,964	3,808
7.80			2,671	2,964	3,808
7.90			2,918	3,239	4,161
7.94	5/16		2,918	3,239	4,161
8.00			2,918	3,239	4,161
8.03		O	2,918	3,239	4,161
8.10			2,918	3,239	4,161
8.20			2,918	3,239	4,161
8.30			3,530	3,918	5,033
8.33	21/64		3,530	3,918	5,033
8.40			3,530	3,918	5,033
8.50			3,530	3,918	5,033
8.60			3,530	3,918	5,033
8.70			3,530	3,918	5,033
8.73	11/32		3,764	4,178	5,367
8.80			3,764	4,178	5,367
8.90			3,764	4,178	5,367
9.00			3,764	4,178	5,367
9.10			3,885	4,315	5,543
9.13	23/64		3,885	4,315	5,543
9.20			3,885	4,315	5,543
9.30			3,885	4,315	5,543

SIZES			PRICE RS./10 NOS.		
MM	INCH	DG	STD. JOBBER DRILLS	GOLD JOBBER DRILLS	SUPER JOBBER DRILLS
9.34		U	3,885	4,315	5,543
9.40			3,885	4,315	5,543
9.50			3,885	4,315	5,543
9.52	3/8		4,421	4,909	6,307
9.60			4,421	4,909	6,307
9.70			4,421	4,909	6,307
9.80			4,421	4,909	6,307
9.90			4,928	5,470	7,027
9.92	25/64		4,928	5,470	7,027
10.00			4,928	5,470	7,027
10.10			4,928	5,470	7,027
10.20			4,928	5,470	7,027
10.30			5,362	5,952	7,644
10.32	13/32		5,362	5,952	7,644
10.40			5,362	5,952	7,644
10.50			5,362	5,952	7,644
10.60			5,362	5,952	7,644
10.70			5,667	6,292	8,081
10.72	27/64		5,667	6,292	8,081
10.80			5,667	6,292	8,081
10.90			5,667	6,292	8,081
11.00			5,667	6,292	8,081
11.10			6,325	7,020	9,019
11.11	7/16		6,325	7,020	9,019
11.20			6,325	7,020	9,019
11.30			6,325	7,020	9,019
11.40			6,325	7,020	9,019
11.50			6,664	7,396	9,502
11.51	29/64		6,664	7,396	9,502
11.60			6,664	7,396	9,502
11.70			6,664	7,396	9,502
11.80			6,664	7,396	9,502
11.90			7,123	7,909	10,158
11.91	15/32		7,123	7,909	10,158
12.00			7,123	7,909	10,158
12.10			7,123	7,909	10,158
12.20			7,123	7,909	10,158
12.30	31/64		7,554	8,387	10,772
12.40			7,554	8,387	10,772
12.50			7,554	8,387	10,772
12.60			7,554	8,387	10,772
12.70	1/2		7,972	8,849	11,369
12.80			7,972	8,849	11,369
12.90			7,972	8,849	11,369
13.00			7,972	8,849	11,369
13.10	33/64		9,919	11,011	14,147
13.20			9,919	11,011	14,147
13.30			9,919	11,011	14,147
13.40			9,919	11,011	14,147
13.49	17/32		10,549	11,711	15,045
13.50			10,549	11,711	15,045
13.60			10,549	11,711	15,045
13.70			10,549	11,711	15,045
13.80			10,549	11,711	15,045
13.90	35/64		11,456	12,719	16,339

SIZES			PRICE RS./10 NOS.		
MM	INCH	DG	STD. JOBBER DRILLS	GOLD JOBBER DRILLS	SUPER JOBBER DRILLS
13.90			11,456	12,719	16,339
14.00			11,456	12,719	16,339
14.25			11,456	12,719	16,339
14.29	9/16		12,009	13,331	17,127
14.50			12,930	14,353	18,439
14.68	37/64		12,930	14,353	18,439
14.75			12,930	14,353	18,439
15.00			12,930	14,353	18,439
15.08	19/32		12,930	14,353	18,439
15.25			12,930	14,353	18,439

SIZES			PRICE RS./10 NOS.		
MM	INCH	DG	STD. JOBBER DRILLS	GOLD JOBBER DRILLS	SUPER JOBBER DRILLS
15.50			14,035	15,579	20,013
15.75			14,035	15,579	20,013
15.87	5/8		14,035	15,579	20,013
16.00			14,035	15,579	20,013
17.00			14,857	16,493	
17.46	11/16		14,857	16,493	
18.00			16,080	17,851	
19.00			17,001	18,872	
19.05	3/4		17,001	18,872	
20.00			20,313	22,548	

**DRILL SET**  
IS:5101 - 1991

DRILL SET	STD. JOBBER DRILLS	GOLD JOBBER DRILLS
1.50 TO 6.50 MM (13 Pc.)	1,318	1,464
1.00 TO 10.00 MM(19 Pc.)	3,671	4,077
1.00 TO 13.00 MM(25Pc.)	7,773	8,627
1/16 TO ¼ INCH (13 Pcs.)	1,318	1,464
1/16 TO 3/8 INCH (21PCs.)	3,917	4,354
1/16 TO ½ INCH (29 PCs)	8,639	10,112

**HSS PARALLEL SHANK STUB SERIES**  
IS : 5100 - 1969

SIZES		PRICE RS./10 NOS.		
MM	INCH	STD STUB DRILLS	GOLD STUB DRILLS	SUPER STUB DRILLS
1.50		349	387	
1.60		349	387	
1.90		349	387	
2.00		349	387	
2.20		349	387	
2.50		349	387	
2.78	7/64	349	387	
2.90		380	423	
3.00		391	436	560
3.17	1/8	464	515	661
3.20		488	542	695
3.50		488	542	695
3.57	9/64	488	542	695
3.97	5/32	694	769	990
4.00		694	769	990
4.20		780	866	1,112
4.50		1,032	1,147	1,473
4.76	3/16	1,032	1,147	1,473
5.00		1,105	1,226	1,574
5.16	13/64	1,105	1,226	1,574
5.50		1,197	1,329	1,705
5.56	7/32	1,197	1,329	1,705
6.00		1,355	1,502	1,929

SIZES		PRICE RS./10 NOS.		
MM	INCH	STD STUB DRILLS	GOLD STUB DRILLS	SUPER STUB DRILLS
6.35	1/4	1,513	1,680	2,158
6.50		1,856	2,060	2,646
6.75	17/64	1,856	2,060	2,646
6.80		1,856	2,060	2,646
7.00		2,039	2,262	2,907
7.14	9/32	2,039	2,262	2,907
7.50		2,113	2,346	3,014
7.94	5/16	2,560	2,842	3,651
8.00		2,560	2,842	3,651
8.50		3,204	3,557	4,570
9.00		3,347	3,715	4,772
9.50		3,531	3,919	5,033
9.52	3/8	3,688	4,093	5,258
10.00		4,513	5,011	6,437
10.50		4,855	5,390	-
11.00		5,467	6,069	7,795
11.11	7/16	6,069	6,322	8,121
12.00		6,451	7,162	9,199
12.70	1/2	7,144	7,929	10,187
13.00		7,144	7,929	10,187
14.00		9,737	10,806	-
15.00		10,964	12,170	-
16.00		11,886	13,195	-

• Standard, Gold - Stub & Jobber Series = M2

• Super Stub & Jobber = M35

**HSS DRILLS**  
**HSS PARALLEL SHANK-LONG SERIES**  
IS : 5102 : 1969

SIZE		PRICE/RS. PC
MM	INCH	
1.00		210
1.10		210
1.19		210
1.20		210
1.30		210
1.40		210
1.50		210
1.59	1/16	210
1.60		210
1.70		210
1.80		210
1.90		210
1.98	5/64	210
2.00		210
2.10		210
2.20		210
2.30		269
2.38	3/32	269
2.40		269
2.50		269
2.60		269
2.70		269
2.78	7/64	269
2.80		269
2.90		269
3.00		273
3.10		273
3.17	1/8	273
3.20		273
3.30		273
3.50		273

SIZE		PRICE/RS. PC
MM	INCH	
3.57	9/64	273
3.70		296
3.80		296
3.97	5/32	296
4.00		296
4.10		296
4.20		296
4.30		296
4.50		296
4.76		296
4.80		296
4.90		342
5.00		342
5.10		342
5.16	13/64	342
5.20		342
5.30		401
5.50		401
5.56	7/32	401
5.60		434
5.80		434
5.90		434
5.95	15/64	434
6.00		434
6.10		491
6.35	1/4	450
6.50		631
6.60		762
6.75	17/64	762
6.80		762
6.90		762

SIZE		PRICE/RS. PC
MM	INCH	
7.00		762
7.20		762
7.50		762
7.80		762
7.94	5/16	785
8.00		785
8.10		785
8.20		785
8.50		785
9.00		869
9.50		869
9.52	3/8	869
9.80		1,012
10.00		1,093
10.20		1,145
10.50		1,178
11.00		1,335
11.50		1,217
11.80		1,217
12.00		1,217
12.50		1,687
12.70	1/2	1,875
13.00		1,875
13.50		1,875
14.00		1,875
14.29	9/16	1,875
14.50		1,961
15.00		1,961
15.50		2,039
15.87	5/8	2,039
16.00		2,066

Note: Minimum order value required is Rs 10000/ nett.

**HSS PARALLEL SHANK-EXTRA LONG SERIES**

SIZES		PRICE RS. / PIECE							
		OAL MM	150	175	200	225	250	300	350
MM	INCH	FL MM	100	120	150	175	200	250	300
3.00	1/8		793	955	1,092	1,287	1,543	1,850	-
3.50			824	961	1,098	1,490	1,654	2,182	-
4.00	5/32		792	961	1,098	1,492	1,659	2,182	3,005
4.50			798	983	1,124	1,494	1,662	2,340	3,081
5.00	3/16		817	1,006	1,151	1,523	1,697	2,393	3,140
5.50	7/32		864	1,059	1,217	1,634	1,811	2,398	3,159
6.00			864	1,085	1,237	1,674	1,862	2,461	3,663
6.50	1/4		-	-	1,497	-	2,163	2,788	3,663
7.00			-	-	1,572	-	2,352	2,822	4,098
7.50	9/32		-	-	1,659	-	2,486	2,986	4,114
8.00	5/16		-	-	1,754	-	2,634	3,035	4,208
8.50	11/32		-	-	1,815	-	2,681	3,125	3,829
9.00			-	-	1,820	-	2,681	3,125	3,829
9.50	3/8		-	-	1,873	-	2,686	3,222	3,947
10.00			-	-	1,902	-	2,745	3,641	4,472
10.50	13/32		-	-	2,066	-	2,851	3,829	4,854
11.00	7/16		-	-	-	-	2,875	3,914	5,062
11.50			-	-	-	-	3,014	3,988	5,260
12.00	15/32		-	-	-	-	3,022	4,000	5,393
12.50	1-Feb		-	-	-	-	3,201	4,240	5,717

Note: Other details will be maintained as per IS : 7823 - 2005

- MOQ upto 6 mm - 30 Nos.
- MOQ above to 6 mm - 15 Nos.



**MIRANDA**  
-Drill

**NEW  
LAUNCH**

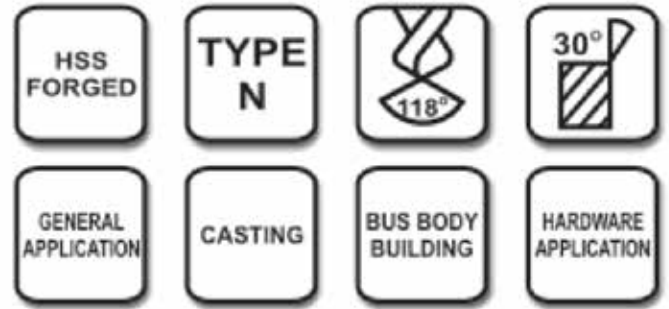
**HSS PARALLEL SHANK  
TWIST JOBBER DRILLS,  
(FORGED FORM)**



**HSS DRILLS**

**HSS PARALLEL SHANK JOBBER SERIES (IS : 5101 - 1991)  
(FORGED FORM)**

Dia	FL	OAL	Price Rs./10 Nos.
2.00-2.10	24	49	368
2.20-2.30	27	53	368
2.40-2.60	30	57	368
2.70-2.78	33	61	368
2.80-3.00	33	61	409
3.10-3.20	36	65	482
3.30	36	65	501
3.40-3.50	39	70	501
3.60-3.70	39	70	706
3.80-4.00	43	75	706
4.10-4.20	43	75	859
4.30-4.40	47	80	1,120
4.50-4.70	47	80	1,120
4.80	52	86	1,120
4.90-5.00	52	86	1,218
5.00-5.30	52	86	1,485
5.40-5.60	57	93	1,485
5.70-6.00	57	93	1,485
6.10-6.40	63	101	1,617
6.50-6.70	63	101	2,057
6.80	69	109	2,057
6.9-7.00	69	109	2,252
7.10-7.50	69	109	2,824
7.60-8.00	75	117	2,824
8.10-8.20	75	117	3,428
8.30-8.50	75	117	3,428
8.60-8.70	81	125	4,769
8.80-9.00	81	125	4,769
9.10-9.50	81	125	4,769
9.60-9.80	87	133	4,769
9.90-10.00	87	133	4,769



**Feature**

- Optimise Geometry for Casting Application
- Faster Chips Evacuation
- Longer Drill Point Life

**Application**

- Steel
- Cast Iron
- Brass
- Aluminium
- Non - ferrous metal

Size Range	Packing Type	Qty.
2.0 mm - 5.30 mm	Pouch & Carbon	100 nos (10 x 10)
5.50 mm - 10 mm	Blister	10 nos.

**HSS DRILLS**  
**HSS CENTER DRILLS**

TYPE 'A' & 'R' IS: 6708/6710 - 1977			TYPE 'B' IS: 6709 - 1977			B.S 328 (Part 2) 1950			
PILOT DIA MM	BODY DIA MM	PRICE RS/PIECE	PILOT DIA MM	BODY DIA MM	PRICE RS/PIECE	SIZE BS NO	PILOT DIA INCH	BODY DIA INCH	PRICE RS/PIECE
1.00	3.15	187	1.00	4.00	307	BS-1	3/64"	1/8"	187
1.25	3.15	187	1.25	5.00	331	BS-2	1/16"	3/16"	187
1.60	4.00	187	1.60	6.30	386	BS-3	3/32"	1/4"	214
2.00	5.00	187	2.00	8.00	544	BS-4	1/8"	5/16"	334
2.50	6.30	214	2.50	10.00	693	BS-5	3/16"	7/16"	441
3.15	8.00	334	3.15	11.20	927	BS-6	1/4"	5/8"	829
4.00	10.00	413	4.00	14.00	1,242	BS-7	5/16"	3/4"	1,282
5.00	12.50	703	5.00	18.00	1,773		-	-	
6.30	16.00	829	6.30	20.00	2,088		-	-	
8.00	20.00	1,282	-	-			-	-	

**HSS TAPER SHANK DRILL**  
IS: 5103 : 1969

SIZE		PRICE RS/PIECE	
MM	INCH	REGULAR	SUPER
3.00		330	483
3.20		347	507
3.50		330	483
3.80		347	507
4.00		330	483
4.20		445	651
4.50		445	651
4.76	3/16	445	651
4.80		458	671
5.00		445	651
5.20		458	671
5.50		445	651
5.80		458	671
6.00		445	651
6.20		505	738
6.35	1/4*	496	728
6.50		507	741
6.75	17/64*	514	752
6.80		514	752
7.00		507	741
7.20		514	752
7.50		507	741
7.80		514	752
7.94	5/16*	507	741
8.00		507	741
8.20		728	1,065
8.50		660	967
8.80		799	1,169
9.00		728	1,065
9.20		799	1,169
9.50		728	1,065
9.52	3/8*	728	1,065
9.80		856	1,254
10.00		773	1,177

SIZE		PRICE RS/PIECE	
MM	INCH	REGULAR	SUPER
10.20		865	1,266
10.50		1,024	1,501
10.80		1,071	1,569
11.00		1,071	1,569
11.11	7/16*	1,071	1,569
11.20		1,101	1,613
11.50		1,101	1,613
11.80		1,101	1,613
12.00		1,118	1,638
12.20		1,118	1,638
12.50		1,118	1,638
12.70	1/2*	1,118	2,269
12.80		1,548	2,269
13.00		1,548	2,269
13.20		1,621	2,375
13.49	17/32*	1,621	2,375
13.50		1,736	2,543
13.80		1,736	2,543
14.00		1,736	2,543
14.25		1,858	2,724
14.29	9/16*	1,858	2,724
14.50		1,940	2,843
14.75		1,940	2,843
15.00		1,940	2,843
15.25		1,971	2,887
15.50		1,971	2,887
15.75		1,971	2,887
15.87	5/8*	1,971	2,887
16.00		2,016	2,954
16.25		2,016	2,954
16.50		2,155	3,157
16.67	21/32*	2,155	3,157
16.75		2,155	3,157
17.00		2,155	3,157

SIZE		PRICE RS/PIECE	
MM	INCH	REGULAR	SUPER
17.25		2,184	3,200
17.46	11/16*	2,184	3,200
17.50		2,265	3,319
17.75		2,291	3,358
18.00		2,396	3,511
18.25		2,396	3,511
18.26	23/32	2,396	3,511
18.50		2,396	3,511
18.75		2,418	3,543
19.00		2,418	3,543
19.05	3/4*	2,418	3,543
19.25		2,540	3,721
19.50		2,540	3,721
19.75		2,540	3,721
19.84	25/32	2,540	3,721
20.00		2,729	3,999
20.25	51/64	2,757	4,041
20.50		2,757	4,041
20.64	13/16	2,757	4,041
20.75		2,883	4,224
21.00		2,883	4,224
21.25		2,959	4,336
21.43	27/32	2,959	4,336
21.50		3,039	4,453
21.75		3,039	4,453
22.00		3,098	4,541
22.22	7/8	3,098	4,541
22.25		3,377	4,949
22.50		3,377	4,949
22.75		3,442	5,043
23.00	29/32	3,442	5,043
23.25		3,611	5,291
23.50		4,109	6,020
23.75		4,109	6,020

Note: • Minimum order value required is Rs 10000/-

• MOQ in Super Series : From 3mm to 10mm - 50 Nos.  
From 10 mm to 20mm 30 Nos.

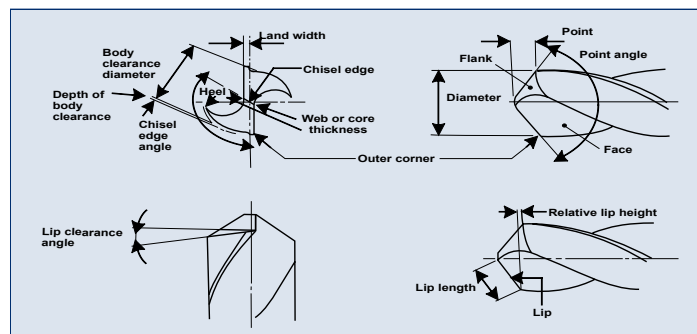
From 20mm to 32mm - 10 Nos.  
From 32mm to 50mm - 5 Nos.

Above 50mm - 2 Nos.

SIZE		PRICE RS/PIECE	
MM	INCH	REGULAR	SUPER
24.00		4,216	6,178
24.25		4,293	6,292
24.50		4,293	6,292
24.75		4,494	6,585
25.00	63/64	4,494	6,585
25.40	1*	4,554	6,674
25.50		4,945	7,246
25.75		4,945	7,246
26.00		4,989	7,311
26.25		5,364	7,860
26.50		5,485	8,038
27.00		5,661	8,295
27.25		5,673	8,313
27.50		5,673	8,313
27.75		5,673	8,313
28.00		6,232	9,132
28.25		6,232	9,132
28.50		6,232	9,132
28.58	1.1/8	6,232	9,132
28.75		6,416	9,401
29.00		6,509	9,540
29.25		6,509	9,540
29.50		6,543	9,589
29.75		6,543	9,589
30.00		6,680	9,789
30.25		7,594	11,128
30.50		7,594	11,128
30.75		7,716	11,307
31.00		8,586	12,582
31.50		8,973	13,149
31.75	1.1/4	8,973	13,149
32.00		9,824	14,397
32.50		9,824	14,397
33.00		10,069	14,756
33.34	1.5/16	10,069	14,756
33.50		10,415	15,263
34.00		10,618	15,560
34.50		11,623	17,033
34.93	1.3/8	11,717	17,171
35.00		11,717	17,171
35.50		12,430	18,215
36.00		12,615	18,486

SIZE		PRICE RS/PIECE	
MM	INCH	REGULAR	SUPER
36.50	1.7/16	12,860	18,846
37.00		13,169	19,299
37.50		14,040	20,574
38.00		14,258	20,894
38.10	1.1/2	14,258	20,894
38.50	1.33/64	14,689	21,525
39.00		15,559	22,801
39.50		15,559	22,801
39.69	1.9/16	15,559	22,801
40.00		15,964	23,393
40.50		16,888	24,748
41.00		16,888	24,748
41.27	1.5/8	16,888	24,748
41.50		17,549	25,717
42.00		17,549	25,717
42.50		17,996	26,371
43.00		18,647	27,325
43.50		18,647	27,325
44.00		19,305	28,290
44.45	1.3/4	19,305	28,290
44.50		19,305	28,290
45.00		19,757	28,951
45.50		20,652	30,264
46.00		20,652	30,264
46.50		21,690	31,785
47.00		21,690	31,785
47.50		22,146	32,452
47.62	1.7/8	22,146	32,452
48.00		24,149	35,390
48.50		24,330	35,654
49.00		24,330	35,654
49.50		24,586	36,030
50.00		24,586	36,030
50.50		25,898	37,951
50.80	2	25,898	37,951
51.00		35,157	51,520
52.00		35,157	51,520
52.50		45,757	67,053
53.00		45,757	67,053
53.50		45,757	67,053
53.97	2.1/8	45,757	67,053
54.00		45,757	67,053

SIZE		PRICE RS/PIECE	
MM	INCH	REGULAR	SUPER
54.50		44,922	70,438
55.00		44,922	70,438
55.50		44,922	70,438
55.56	2.3/16	44,922	70,438
56.00		46,809	73,395
56.50		46,809	73,395
57.00		46,809	73,395
57.15	2.1/4	46,809	73,395
57.50		51,087	80,104
58.00		51,087	80,104
58.50		51,087	80,104
58.74	2.5/16	51,087	80,104
59.00		52,061	81,630
59.50		52,061	81,630
60.00		52,061	81,630
60.32	2.3/8	52,061	81,630
60.50		55,338	86,770
61.00		55,338	86,770
61.50		55,338	86,770
62.00		55,338	86,770
62.50		55,338	86,770
63.00		56,270	88,230
63.50	2.1/2	56,270	88,230
64.00		62,187	97,510
65.00		62,187	97,510
65.09	2.9/16	62,187	97,510
66.00		62,653	98,241
66.67	2.5/8	62,653	98,241
67.00		64,180	100,635
68.00		68,782	107,849
69.00		74,560	116,911
69.85	2.3/4	74,560	116,911
70.00		74,560	116,911
71.00		80,441	126,131
71.50		80,441	126,131
72.00		82,023	128,612
73.00		82,023	128,612
73.02	2.7/8	82,023	128,612
74.00		87,284	136,862
75.00		88,415	138,634
76.00		88,415	138,634
76.20	3	88,415	138,634



Note: • Minimum order value required is Rs 10000/- • Tax extra as applicable on date of supply • Price are subjected to changes without notice

• MOQ in Super Series : From 3mm to 10mm - 50 Nos. From 20mm to 32mm - 10 Nos. Above 50mm - 2 Nos.  
From 10 mm to 20mm 30 Nos. From 32mm to 50mm - 5 Nos.

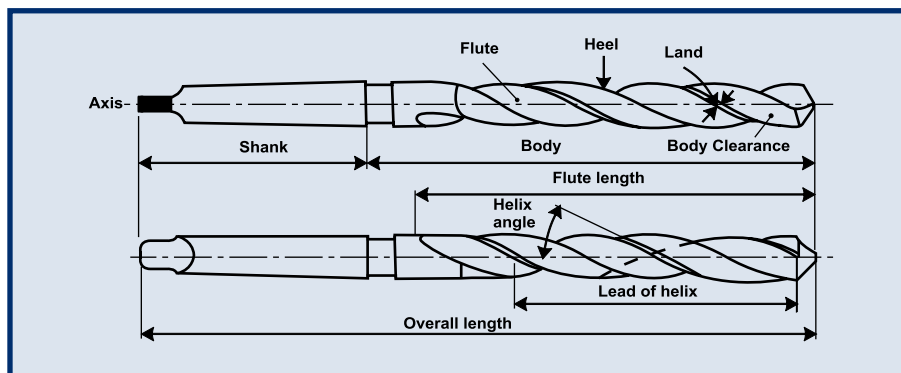
**HSS DRILLS**

**HSS TAPER SHANK TWIST DRILLS (LONG SERIES)**

IS : 8305 - 1976 (Type N)

SIZE		OAL	PRICE RS/PIECE
MM	INCH	MM	
5.00		155	1,087
5.16	13/64	155	1,087
5.56	7/32	161	1,213
6.00		161	1,213
6.35		167	1,357
6.50		167	1,357
7.00		174	1,458
7.50		174	1,506
7.94	5/16	181	1,592
8.00		181	1,592
8.50		181	1,625
9.00		188	1,760
9.50		188	1,801
9.52	3/8	197	1,801
10.00		197	2,047
10.50		197	2,106
11.00		206	2,151
11.11	7/16	206	2,230
11.50		206	2,230
12.00		215	2,647
12.50		215	2,791
12.70	1/2	215	2,791
13.00		215	2,791
13.49	17/32	223	3,055
13.50		223	3,055
14.00		223	3,179
14.29		245	3,968
14.50		245	3,968
15.00		245	3,976
15.50		251	4,152
15.87	5/8	251	4,259
16.00		251	4,259
16.50		257	4,333
17.00		257	4,424
17.50		263	4,804
18.00		263	4,814
18.50		269	4,892
19.00		269	4,970
19.05	3/4	275	4,970

SIZE		OAL	PRICE RS/PIECE
MM	INCH	MM	
19.50		275	5,106
20.00		275	5,192
20.50		282	5,278
21.00		282	5,376
21.43	27/32	289	6,245
21.50		289	6,245
21.75		289	6,372
22.00		289	6,372
22.22	7/8	289	6,804
22.50		296	6,804
23.00		296	7,131
23.50		319	8,713
24.00		327	8,713
24.50		327	9,095
25.00		327	9,424
25.40	1	327	9,424
25.50		335	9,424
26.00		335	9,801
26.50		335	10,085
27.00		343	11,954
27.50		343	12,334
28.00		343	12,717
28.50		351	13,124
29.00		351	13,494
29.50		351	13,869
30.00		351	14,262
30.50		360	14,639
31.00		360	14,639
31.50		360	14,745
32.00		397	17,641
32.50		397	18,401
33.00		397	18,401
34.00		406	19,203
34.50		406	20,045
35.00		406	20,045
36.00		416	21,967
38.00		426	24,679
38.10	1.1/2	426	25,487
40.00		426	26,497







**HSS DRILLS**  
**HSS TAPER SHANK TWIST DRILLS (EXTRA LONG SERIES)**  
IS : 7822 - 2005

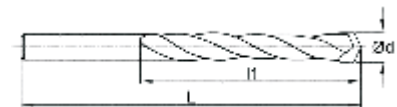
SIZES		PRICE RS/PIECE									
MM	INCH	OVERALL LENGTH IN MM									
		200	225	250	275	300	315	325	350	375	400
10.00	-	2,046	2,317	2,614	3,053	3,516	3,839				
10.50	-	2,106	2,404	2,791	3,226	3,697	4,003	4,206	4,811		
11.00	-	2,151	2,480	2,816	3,276	3,766	4,135	4,317	4,897		
11.50	7/16	2,230	2,531	2,890	3,361	3,857	4,206	4,396	5,031		
12.00	-		2,647	3,014	3,492	4,001	4,371	4,592	5,192		
12.50	1/2		2,791	3,117	3,619	4,125	4,509	4,716	5,438		

SIZES		PRICE RS/PIECE									
MM	INCH	OVERALL LENGTH IN MM									
		250	275	300	315	325	350	375	400	450	500
13.00		3,697	4,236	5,040	5,469	5,494	6,251				
13.50		3,816	4,322	5,176	5,604	5,590	6,368				
14.00		3,944	4,451	5,271	5,718	5,682	6,495	7,338	8,235		
14.50	9/16	3,968	4,510	5,346	5,748	5,763	6,617	7,463	8,383	11,000	13,880
15.00		4,058	4,611	5,478	5,870	5,903	6,751	7,571	8,516	11,131	14,022
15.50		4,152	4,715	5,529	5,987	5,983	6,855	7,716	8,630	11,239	14,144
16.00	5/8	4,259	4,795	5,639	6,071	6,094	6,954	7,833	8,809	11,432	14,299
16.50		4,332	4,860	5,748	6,184	6,189	7,075	7,979	8,994	11,554	14,387
17.00		4,423	4,975	5,807	6,260	6,272	7,189	8,088	9,095	11,695	14,521
17.50	11/16			5,952	6,381	6,394	7,328	8,223	9,201	11,831	14,658
18.00				6,038	6,522	6,496	7,445	8,367	9,371	11,954	14,800
18.50				6,133	6,602	6,613	7,510	8,466	9,517	12,090	14,942

SIZES		PRICE RS/PIECE									
MM	INCH	OVERALL LENGTH IN MM									
		300	315	325	350	375	400	425	450	475	500
19.00	3/4	5,959	6,394	6,710	7,637	8,596	9,642	10,861	12,231	13,543	14,901
19.50		6,033	6,465	6,777	7,776	8,767	9,839	11,000	12,319	13,705	15,173
20.00		6,137	6,573	6,906	7,865	8,884	9,980	11,214	12,560	13,857	15,344
20.50		6,252	6,693	7,003	7,996	8,994	10,131	11,351	12,715	14,069	15,580
21.00	13/16	6,363	6,822	7,121	8,764	9,182	10,298	11,596	12,923	14,329	15,827
21.50		6,496	6,935	7,240	8,310	9,356	10,494	11,767	13,179	14,587	16,144
22.00		6,635	7,119	7,446	8,467	9,519	10,670	11,954	13,388	14,818	16,403
22.50	7/8	6,804	7,268	7,607	8,608	9,642	10,783	12,158	13,586	15,076	16,680
23.00		7,131	7,609	7,890	8,894	9,855	10,976	12,334	13,845	15,298	16,927
23.50		7,833		8,712	9,549	10,497	11,350	12,753	14,236	15,758	17,452
24.00	15/16	7,833		8,712	9,643	10,632	11,747	13,156	14,687	16,186	17,916
24.50		8,078		9,095	10,084	11,000	12,151	13,586	15,105	16,662	18,401
25.00				9,425	10,452	11,432	12,523	13,971	15,542	17,124	18,914
25.50	1				10,778	11,767	12,895	14,373	15,952	17,584	19,360
26.00					11,215	12,196	13,316	14,800	16,421	18,041	19,872
26.50					11,554	12,549	13,685	15,210	16,843	18,466	20,359
27.00	1.1/16				11,954	12,991	14,091	15,614	17,265	18,947	20,837
27.50					12,334	13,320	14,440	16,027	17,697	19,387	21,305
28.00					12,717	13,705	14,864	16,421	18,126	20,261	21,821
28.50	1.1/8				13,124	14,109	15,233	16,802	18,569	20,329	22,269

SIZES		PRICE RS/PIECE									
MM	INCH	OVERALL LENGTH IN MM									
		300	315	325	350	375	400	425	450	475	500
29.00					13,494	14,498	15,646	17,231	19,011	20,757	22,774
29.50					13,864	14,864	16,017	17,640	19,415	21,224	23,275
30.00	1.3/16				14,261	15,262	16,412	18,041	19,853	21,673	23,732
31.00	1.1/4				14,639	15,644	16,811	18,487	20,368	22,238	24,401
32.00					14,745	15,952	17,640	19,387	21,353	23,275	25,534
33.00	1.5/16						18,401	20,249	22,305	24,312	26,648
34.00							19,205	21,108	23,262	25,366	27,794
35.00	1.3/8						20,045	22,036	24,220	26,429	28,929
36.00							20,837	22,872	25,154	27,447	30,060
37.00	1.7/16						21,627	23,732	26,110	28,477	31,156
38.00	1.1/2						22,453	24,678	27,124	29,544	32,340
39.00							23,275	25,757	27,989	30,484	33,304
40.00							24,246	26,496	28,972	31,514	34,399
41.00	1.5/8										35,537
42.00											37,119
43.00											38,762
44.00											40,382
45.00	1.3/4										42,027
46.00	1.13/16										43,804
47.00											45,576
48.00	1.7/8										47,353
49.00	1.15/16										49,096
50.00											51,075

**MASONRY DRILLS - CARBIDE TIPPED  
(GROUND FLUTED & BRIGHT PLATED)**



SIZES		FLUTE LENGTH	OVER ALL LENGTH	PRICE RS. / PIECE
MM	INCH			STD DRILLS
3	1/8	40	76	42
4	5/32	45	85	48
5	3/16	45	90	53
5.5	7/32	45	90	64
6	15/64	60	110	69
6.5	1/4	60	110	69
7	9/32	60	110	129
8	5/16	80	120	112
9	11/32	80	120	130
10	3/8	80	120	130
11	7/16	115	160	182
12	15/32	115	160	162
13	1/2	115	160	162

### HSS ENDMILLS

#### HSS PARALLEL SHANK ENDMILLS

IS 6353 - 1991 & BS - 122 (PART -1) 1953

DIA		PRICE EACH RS.		DIA		PRICE EACH RS.		DIA		PRICE EACH RS.		DIA		PRICE EACH RS.	
MM	INCH	M2	M42	MM	INCH	M2	M42	MM	INCH	M2	M42	MM	INCH	M2	M42
3	1/8	541	865	15	.	1,019	1,632	27	.	2,227	3,560	40	-	5,313	8,500
4	5/32	541	865	16	5/8	1,025	1,640	28	1.1/8	2,599	4,156	41	1.5/8	5,313	8,500
5	3/16	541	865	17	-	1,121	1,796	29	-	2,599	4,156	42	-	6,044	9,671
6	1/4	606	968	18	-	1,244	1,991	30	-	2,858	4,575	43	-	6,044	9,671
7	-	684	1,095	19	3/4	1,244	1,991	32	1.1/4	3,117	4,988	45	1.3/4	6,771	10,831
8	5/16	684	1,095	20	13/16	1,377	2,203	33	-	3,452	5,523	46	-	6,771	10,831
9	3/8	684	1,095	21	-	1,550	2,483	34	1.3/8	3,764	6,022	47	1.7/8	7,467	11,947
10	-	684	1,095	22	7/8	1,563	2,499	35	-	3,764	6,022	48	-	7,467	11,947
11	7/16	684	1,095	23	-	1,697	2,714	36	-	4,104	6,567	49	-	7,467	11,947
12	1/2	707	1,131	24	-	1,697	2,714	37	-	4,421	7,071	50	-	8,192	13,105
13	-	805	1,285	25	1.0	1,821	2,912	38	-	4,714	7,541	-	-	-	-
14	9/16	876	1,405	26	-	1,893	3,027	39	-	4,998	7,996	-	-	-	-

#### HSS PARALLEL SHANK SLOT DRILLS

IS 6352 - 1991 & BS (PART -1) 1953

DIA		PRICE EACH RS.		DIA		PRICE EACH RS.		DIA		PRICE EACH RS.		Dia		Price Each Rs.	
MM	INCH	M2	M42	MM	INCH	M2	M42	MM	INCH	M2	M42	MM	INCH	M2	M42
3	1/8	659	1,055	14	9/16	1,025	1,640	26	-	2,779	4,446	43	-	6,393	10,229
4	5/32	659	1,055	15	-	1,155	1,850	30	-	3,412	5,458	44	-	6,393	10,229
5	3/16	659	1,055	16	5/8	1,153	1,846	32	1.1/4	3,412	5,458	45	1.3/4	6,393	10,229
6	1/4	707	1,133	18	-	1,418	2,268	34	1.3/8	4,104	6,567	46	-	7,097	11,355
7	-	707	1,133	20	3/4	1,418	2,268	35	-	4,104	6,567	47	1.7/8	7,097	11,355
8	5/16	707	1,133	21	13/16	1,656	2,649	36	-	4,405	7,049	48	-	7,097	11,355
9	3/8	707	1,133	22	7/8	1,656	2,649	38	1.1/2	4,753	7,603	49	-	7,784	12,455
10	-	731	1,168	23	-	1,967	3,149	40	-	5,081	8,130	50	2.0	7,784	12,455
11	-	731	1,168	24	-	1,967	3,149	41	-	5,751	9,201	-	-	-	-
12	1/2	801	1,282	25	1.0	1,967	3,149	42	-	5,751	9,201	-	-	-	-

#### HSS PARALLEL SHANK ENDMILLS - : LONG SERIES

IS 6353 - 1991

DIA	PRICE EACH RS.		DIA	PRICE EACH RS.		DIA	PRICE EACH RS.		DIA	PRICE EACH RS.	
MM	M2	M42	MM	M2	M42	MM	M2	M42	MM	M2	M42
3	703	1,125	9	890	1,422	20	1,791	2,866	32	4,052	6,483
4	703	1,125	10	890	1,422	22	2,032	3,250	33	4,488	7,180
5	703	1,125	12	919	1,470	25	2,368	3,788	36	5,336	8,538
6	788	1,261	14	1,142	1,825	26	2,460	3,936	40	6,907	11,048
7	890	1,422	16	1,332	2,130	28	3,379	5,405	45	8,800	14,082
8	890	1,422	18	1,617	2,587	30	3,717	5,948	50	10,649	17,038

#### HSS PARALLEL SHANK ROUGHING ENDMILLS - : M42

4 FLUTES -COARSE PITCH

IS : 6353 - 1991/BS:122

SIZE		PRICE RS. / PIECE	
MM	INCH	STANDARD SERIES	LONG SERIES
6	1/4	1,956	2,659
8	5/16	1,956	2,659
10	3/8	1,956	2,659
12	1/2	1,956	2,659
14	-	2,973	4,045
16	5/8	3,460	4,713
18	-	4,217	5,260
20	3/4	4,707	6,409
22	7/8	5,049	6,878
25	1	5,953	8,115
28	1.1/8	8,028	10,937
30	-	9,638	13,136

**HSS REAMERS**

REFERENCE STANDARDS

HSS HAND REAMERS WITH PARALLEL SHANK  
HSS MACHINE REAMERS WITH TAPER SHANK  
HSS CHUCKING REAMERS WITH PARALLEL SHANK  
HSS CHUCKING REAMERS WITH TAPER SHANK

**MM SIZE**  
IS : 5444 - 1978  
IS : 5445 - 1978  
IS : 5446 - 1978  
IS : 5447 - 1978

**INCH SIZES**  
BS 328 part - 4 1983

SIZE		PRICE RS./PIECE
DIAMETER		
MM	INCH	
4.00	-	935
(4.76)	3/16	935
4.50	-	935
5.00	-	935
(5.56)	7/32	935
6.00	-	1,089
(6.35)	1/4	1,089
7.00	-	1,089
(7.14)	9/32	1,089
(7.94)	5/16	1,240
8.00	-	1,240
(8.73)	11/32	1,303
9.00	-	1,303
9.52	3/8	1,416
10.00	-	1,570
(10.32)	13/32	1,570
11.00	-	1,758
(11.11)	7/16	1,758
(11.91)	15/32	1,833
12.00	-	1,833
(12.70)	1/2	1,895
13.00	-	2,311
(13.49)	17/32	2,311
14.00	-	2,311
(14.29)	9/16	2,311
15.00	-	2,325
(15.08)	19/32	2,325
(15.87)	5/8	2,325
16.00	-	2,325
(16.67)	21/32	2,684
17.00	-	2,684
(17.46)	11/16	2,684
18.00	-	2,872
(18.26)	23/32	3,047
19.00	-	3,047
(19.05)	3/4	3,047
20.00	-	3,407
(20.64)	13/16	3,473
21.00	-	3,846
22.00	-	3,846
(22.22)	7/8	3,846
23.00	-	4,500
(23.81)	15/16	4,982

SIZE		PRICE RS./PIECE
DIAMETER		
MM	INCH	
24.00	-	4,982
25.00	-	4,996
(25.40)	1	5,091
26.00	-	6,170
(26.99)	1.1/16	7,065
27.00	-	7,065
28.00	-	7,065
(28.57)	1.1/8	7,065
29.00	-	7,491
30.00	-	8,081
(30.16)	1.3/16	8,081
31.00	-	8,922
(31.75)	1.1/4	8,922
32.00	-	8,922
33.00	-	10,138
(33.34)	1.5/16	10,138
34.00	-	11,380
(34.92)	1.3/8	12,450
35.00	-	12,450
36.00	-	12,450
(36.51)	1.7/16	12,554
37.00	-	13,674
38.00	-	13,674
(38.10)	1.1/2	13,674
39.00	-	15,120
(39.69)	1.9/16	16,508
40.00	-	16,508
41.00	-	16,668
(41.27)	1.5/8	16,668
42.00	-	19,630
(42.86)	1.11/16	19,630
43.00	-	19,630
44.00	-	19,630
(44.45)	1.3/4	19,630
45.00	-	22,998
46.00	-	22,998
47.00	-	24,842
(47.62)	1.7/8	26,680
48.00	-	26,680
49.00	-	26,680
(49.21)	1.15/16	26,680
50.00	-	26,680
(50.80)	2	26,680

**HSS TAPER PIN REAMERS (TAPER 1 IN 50)**

**HAND - IS : 5881 - 1984**

**MACHINE - IS : 5918 - 1984**

DIA MM	PRICE RS. / PIECE	
	HAND	MACHINE
6	2,025	2,025
8	2,741	2,741
10	3,031	3,031
12	3,667	3,667
14	4,128	4,128

DIA MM	PRICE RS. / PIECE	
	HAND	MACHINE
16	4,595	4,595
20	7,147	7,147
25	7,574	7,574
30	10,203	10,203
32	11,191	11,191

DIA MM	PRICE RS. / PIECE	
	HAND	MACHINE
40	20,034	20,034
50	34,722	34,722

**HSS TAPER PIN REAMERS (TAPER 1 IN 48)**

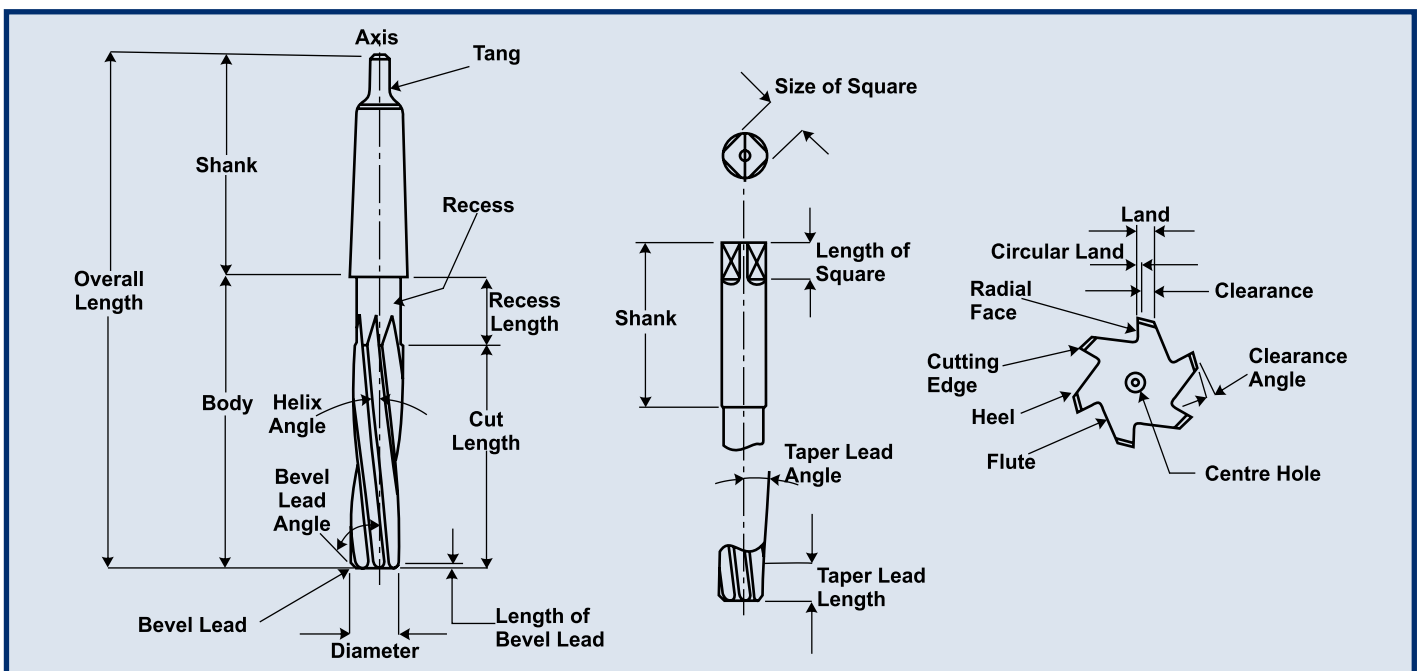
**HAND/MACHINE - BS 328 (PART 4) 1983**

DIA INCH	PRICE RS. / PIECE	
	HAND	MACHINE
1/4	1,884	1,884
9/32	2,060	2,060
5/16	2,288	2,288
11/32	2,578	2,578

DIA INCH	PRICE RS. / PIECE	
	HAND	MACHINE
3/8	2,630	2,630
13/32	2,945	2,945
7/16	3,031	3,031
1/2	3,439	3,439

DIA INCH	PRICE RS. / PIECE	
	HAND	MACHINE
9/16	3,968	3,968
5/8	4,421	4,421
3/4	5,473	5,568
7/8	6,878	6,878

**REAMER TERMS - GENERAL FEATURES**





**HIGH SPEED STEEL**  
**TAPER SHANK CORE DRILLS**



Specifications conform to : IS 5366 - 1978, ISO 7079 - 1981

DIN 343 - 1981, BS 328 - 1959

Dimensions in mm / inch

DIA		PRICE RS. / PIECE	DIA		PRICE RS. / PIECE	DIA		PRICE RS. / PIECE
MM	INCH		MM	INCH		MM	INCH	
14.00		1902	31.75	1.1/4	8753	52.39	2.1/16	31835
14.29	9/16	1956	32.00		9591	53.00		37188
15.00		2041	32.54	1.9/32	9591	53.97	2.1/8	37188
15.08	19/32	2041	33.00		9790	54.00		37188
15.87	5/8	2061	33.34	1.5/16	9790	55.00		38979
16.00		2061	34.00		10676	55.56	2.3/16	38979
16.67	21/32	2199	34.13	1.11/32	10676	56.00		40630
17.00		2199	34.92	1.3/8	11344	57.00		40630
17.46	11/16	2375	35.00		11344	57.15	2.1/4	40630
18.00		2554	35.72	1.13/32	12201	58.00		44399
18.26	23/32	2554	36.00		12201	58.74	2.5/16	44399
19.00		2920	36.51	1.7/16	12871	59.00		45220
19.05	3/4	2920	37.00		12871	60.00		45220
19.84	25/32	2931	37.31	1.15/32	13236	60.32	2.3/8	45220
20.00		2931	38.00		14160	61.00		48192
20.64	13/64	3136	38.10	1.1/2	14160	61.91	2.7/16	48192
21.00		3136	39.00		15529	62.00		48192
21.43	27/32	3314	39.69	1.9/16	15529	63.00		53039
22.00		3314	40.00		15529	63.50	2.1/2	53039
22.22	7/8	3516	41.00		17115	64.00		57913
23.00		3723	41.27	1.5/8	17115	65.00		57913
23.02	29/32	3723	42.00		17623	65.09	2.9/16	57913
23.81	15/16	4063	42.07	1.21/32	17623	66.00		60720
24.00		4246	42.86	1.11/16	18188	66.67	2.5/8	60720
24.61	31/32	4246	43.00		18188	67.00		63255
25.00		4934	44.00		19225	68.00		66327
25.40	1	4934	44.45	1.3/4	19225	68.26	2.11/16	66327
26.00		5324	45.00		19904	69.00		69567
26.19	1.1/32	5324	45.24	1.25/32	19904	69.85	2.3/4	70871
26.99	1.1/16	5877	46.00		20642	70.00		70871
27.00		5877	46.04	1.13/16	20642	71.00		72275
27.78	1.3/32	6100	47.00		21450	71.44	2.13/16	72275
28.00		6462	47.62	1.7/8	22556	72.00		75578
28.57	1.1/8	6464	48.00		22556	73.00		78381
29.00	1.5/32	6758	49.00		24086	73.02	2.7/8	78381
29.37		6758	49.21	1.15/16	24086	74.00		81344
30.00	1.3/16	7186	50.00		25918	74.61	2.15/16	81344
30.16	1.7/32	7186	50.80	2	28658	75.00		84342
30.96		7458	51.00		28907	76.00		88392
31.00		8386	52.00		31835	76.20	3	88392



## ANNULAR CUTTERS (HSS & TCT)



### SIZE RANGE

- Size : 11.0 mm to 60.0 mm
- Depth of Cut : 50.00 mm
- Special size / shank on request
- Coating on request

### FEATURE:

- |                               |  |
|-------------------------------|--|
| Reduced Torque and thrust     | : Due to peripheral cutting                              |
| Minimizes kerf area           | : Unique center free design                              |
| Reducing HP and feed pressure | : Alternating tooth geometry                             |
| Faster feed, less friction    | : Evenly distributes chip load to multiple cutting edges |
| Longer tool life              | : Special Heat treatment / surface treatment             |
| Single pass-cutting           | : No pre drilling required                               |
| High accuracy                 | : Less Drifting - Precise Center locating                |
| Smooth hole finish            | : Evenly distributes chip load to multiple cutting edges |

**HSS & TCT**  
**ANNULAR CUTTER**



SIZE DIA. MM	HSS M2 - PRICE RS. / PIECE		HSS M42	TCT
	LENGTH 25 MM	LENGTH 50 MM	LENGTH 25 MM	LENGTH 50 MM
12-13				3,461
14-15				3,461
16*-17	1,701	2138	2,779	3,461
18-19	1,774	2219	2,886	3,461
20*-21	1,864	2310	3,003	3,461
22*-23	2,219	2629	3,417	3,569
24*-25	2,302	2783	3,619	3,569
26*-27	2,437	2938	3,819	4,031
28-29	2,629	3201	4,162	4,031
30*-31	2,756	3362	4,371	4,031
32*-33	2,883	3592	4,670	4,786
34-35	3,037	3830	4,977	4,786
36-37	3,447	4338	5,639	5,443
38-39	3,692	4602	5,983	5,443
40-41	4,047	5039	6,549	5,443
42-43	4,375	5448	7,081	6,647
44-45	4,802	5985	7,780	6,647
46-47	5,166	6431	8,358	7,173
48-49	5,448	6793	8,832	7,173
50-51	5,821	7666	9,966	7,523
52	6,203	7876	10,239	8,059
53	6,394	8131	10,569	8,399
54	6,594	8403	10,924	8,564
55	6,753	8631	11,219	8,772
56	6,993	8894	11,563	9,154
57	7,248	9108	11,841	9,439
58	7,431	9358	12,165	9,559
59	7,658	9567	12,437	9,724
60	7,890	9840	12,792	9,926

**EJECTOR PIN**

SIZE	TYPE	PRICE RS. / PEICE
6.34 X 73	CL 25	258
6.34 X 98	CL 50	348



## HSS TAPS



### PRODUCT RANGE

<b>TYPE</b>	: Hand & Machine, Straight Flut, Spiral, Spiral Point, Nib, Ring Taps
<b>RANGE</b>	: 2.0 mm to 140.0 mm
<b>GRADE OF STEEL</b>	: M2, M35 & M42
<b>PRODUCT STANDARD</b>	: ISO 529, IS 6175, BS 949, DIN, ANSI, JIS
<b>THREAD FORM</b>	: Metric, BSW, BSF, BA, BSP, UNF, UNC, NPT...

### APPLICATIONS

- Steel
- Stainless Steel
- Forged Steel
- Titanium & Nickel Alloy
- Aluminium

### INDUSTRIES

- Automotive & Auto components
- Aerospace
- Heavy Engineering
- Power & Energy
- Railways
- Electronics & Electrical

**HSS TAPS**

HSS GROUND THREAD HAND TAPS - COARSE PITCH		IS 6175 - PART 1,2 & 3 - 1992												
HSS GROUND THREAD MACHINE TAPS - COARSE PITCH		IS 6175 - PART 4 - 1991												
HSS GROUND THREAD NUT TAPS - COARSE PITCH		IS 6175 - PART 5 - 1992												
Code	Size	HAND & SHORT MACHINE TAPS									LONG SHANK MACHINE TAPS			NUT TAPS
		IS 6175 Part 1			IS 6175 Part 2			IS 6175 Part 3			IS 6175 Part 4			IS 6175 Part 5
		WTC_M	WTCPM	WHC_M	WHCPM	WHCTM	WUC_M	WUCPM	WUCTM	WMC_M	WMCPM	WMCTM	WVCNM	
		STR. FLUTE	SPIRAL POINT	STR. FLUTE	SPIRAL POINT	SPIRAL FLUTE	STR. FLUTE	SPIRAL POINT	SPIRAL FLUTE	TYPE A.C.D.	TYPE B	SPIRAL	NUT TAP	
PRICE EACH RS.														
010253A	M1.0 x 0.25	828												
110253A	M1.1 x 0.25	828												
120253A	M1.2 x 0.25	828												
140303A	M1.4 x 0.30	704												
160353A	M1.6 x 0.35	704												
180353A	M1.8 x 0.35	704												
020403A	M2.0 x 0.40	506	591											
220453A	M2.2 x 0.45	506	591											
230453A	M2.3 x 0.40	506	591											
250453A	M2.5 x 0.45	506	591											
260453A	M2.6 x 0.45	506	591											
030503A	M3.0 x 0.50			304	382	415	342	405	470	670	791	556		
350603A	M3.5 x 0.60			304	382	415	342	405	470	670	791	556		
040703A	M4.0 x 0.70			304	382	415	342	405	470	670	791	556		
450753A	M4.5 x 0.75			325	403	436	363	430	485	493	586	591		
050803A	M5.0 x 0.80			325	403	436	363	430	485	480	586	591		
061003A	M6.0 x 1.00			325	403	444	363	430	493	514	626	645	670	
081253A	M8.0 x 1.25			391	466	492	436	531	607	559	681	702	759	
101503A	M10 x 1.50			472	583	619	501	614	691	716	857	876	1008	
121753A	M12 x 1.75						740	893	983	1,016	1,203	1,266	1549	
142003A	M14 x 2.00						1,079	1,306	1,494	1,477	1,749	1,921	2145	
162003A	M16 x 2.00						1,079	1,306	1,494	1,477	1,749	1,921	2145	
182503A	M18 x 2.50						1,632	1,958	2,175	2,168	2,555	2,755	3277	
202503A	M20 x 2.50						2,085	2,498	2,901	2,669	3,141	3,283	4385	
222503A	M22 x 2.50						2,233	2,677	3,006	2,985	3,519	3,283	4441	
243003A	M24 x 3.00						2,487	2,987	3,266	3,237	3,818	4,147	5041	
253003A	M25 x 3.00						3,037	3,954	-	4,059			6031	
273003A	M27 x 3.00						3,770	4,524	4,875	4,661			7743	
303503A	M30 x 3.50						4,217	5,065	5,449	5,357			9758	
333503A	M33 x 3.50						5,139	6,654	7,341	6,290			10762	
364003A	M36 x 4.00						7,154	8,584	9,254	8,908			13933	
394003A	M39 x 4.00						8,407	10,075		9,898			16603	
424503A	M42 x 4.50						9,793	11,746		12,767			19776	
454503A	M45 x 4.50						13,188	15,826		15,144			23852	
485003A	M48 x 5.00						14,066	16,878		17,051			27749	
525003A	M52 x 5.00						17,656	21,183		19,732				
565503A	M56 x 5.50						25,128	30,148		27,629				
605503A	M60 x 5.50						26,483	31,776		29,965				
646003A	M64 x 6.00						27,857	33,431		33,819				
686003A	M68 x 6.00						34,750	41,700		47,120				
726003A	M72 x 6.00						46,642							
766003A	M76 x 6.00						57,043							
806003A	M80 x 6.00						68,902							
856003A	M85 x 6.00						85,094							
906003A	M90 x 6.00						106,204							
956003A	M95 x 6.00						133,717							
100603A	M100 x 6.00						165,234							

A set of Non-serial taps consists of Taper, Second, Bottoming  
 IS 6175 Part 1: Design will be supplied upto and including 2.6 mm  
 IS 6175 Part 2: Design will be supplied from 3 mm to 10 mm including 10 mm  
 IS 6175 Part 3: Design will be supplied above 10 mm

Type "A" - 5 Deg. Taper with long taper lead  
 Type "B" - 10 Deg. Taper lead angle with spiral point  
 Type "C" - 20 Deg. Taper angle with short lead  
 Type "D" - 10 Deg. Taper angle without spiral point

Item marked with \*are stockable items. Remaining all items required minimum order value of Rs. 15000/- NETT or  
**1mm to 6mm 100 Nos.      7mm to 16mm 50 Nos.      18mm to 24mm 10 Nos.      26mm to 36mm 05 Nos. & corresponding inch size.**  
 The tap sizes up to M6 will be supplied with male centers on both sides. Above M6 taps will be supplied with female centers on both sides.  
 Serial Taps a 5% extra      M35 Material 35% extra      Left Hand Taps at 25% extra      M42 Material 55% extra



**HSS TAPS**

HSS GROUND THREAD HAND TAPS - FINE PITCH		IS 6175 - PART 1,2 & 3 - 1992									
HSS GROUND THREAD MACHINE TAPS - FINE PITCH		IS 6175 - PART 4 - 1991									
HSS GROUND THREAD NUT TAPS - FINE PITCH		IS 6175 - PART 5 - 1992									
Code	Size	HAND & SHORT MACHINE TAPS				LONG SHANK MACHINE TAPS				NUT TAPS	
		IS 6175 Part 1	IS 6175 Part 2			IS 6175 Part 3			IS 6175 Part 4		IS 6175 Part 5
		WTF_M	WHF_M	WHFPM	WHFTM	WUF_M	WUFPM	WUFTM	WMF_M	WMF_M	WVFNM
		STR.FLUTE	STR.FLUTE	SPIRAL POINT	STR.FLUTE	STR.FLUTE	SPIRAL POINT	STR.FLUTE	TYPE A.C.D.	TYPE B	NUT TAP
010023A	M1.0 x 0.20	870									
110203A	M1.1 x 0.20	870									
140203A	M1.4 x 0.20	790									
160203A	M1.6 x 0.20	790									
180203A	M1.8 x 0.20	790									
020253A	M2.0 x 0.25	668									
222503A	M2.2 x 0.25	668									
250303A	M2.5 x 0.30	668									
260303A	M2.6 x 0.30	668									
030353A	M3.0 x 0.35		438	545	589	455	520	581	579	736	
350353A	M3.5 x 0.35		438	545	589	455	520	581	616	685	
040503A	M4.0 x 0.50		455	545	552	455	520	581	579	658	
450503A	M4.5 x 0.50		423	524	569	461	533	581	914	1,022	
050503A	M5.0 x 0.50		445	531	589	464	533	581	585	685	
060753A	M6.0 x 0.75		445	531	564	464	560	581	585	685	
070753A	M7.0 x 0.75		512	-	687	529	637	660	670	790	
080753A	M8.0 x 0.75		512	-	687	529	637	660	670	790	
081003A	M8.0 x 1.00		464	556	599	512	577	660	618	733	
091003A	M9.0 x 1.00		575	731	712	569	656	746	794	936	
101003A	M10 x 1.00		522	639	712	569	656	746	773	861	
101253A	M10 x 1.25		522	639	686	569	656	746	773	872	
121003A	M12 x 1.00					870	984	1,161	1,113	1,310	
121253A	M12 x 1.25					870	984	1,112	1,113	1,310	
121503A	M12 x 1.50					870	984	1,112	1,113	1,310	
141003A	M14 x 1.00					1,119	1,341	1,594	1,437	1,702	
141253A	M14 x 1.25					1,142	1,376	1,560	1,466	1,730	
141503A	M14 x 1.50					1,083	1,331	1,486	1,378	1,628	
161003A	M16 x 1.00					1,116	1,374	1,560	1,548	1,829	
161503A	M16 x 1.50					1,084	1,331	1,486	1,378	1,749	
181003A	M18 x 1.00					2,038	2,277	2,427	2,529	2,983	
181503A	M18 x 1.50					1,859	2,080	2,427	2,320	2,951	
182003A	M18 x 2.00					2,038	2,277	2,427	2,529	2,983	
201503A	M20 x 1.50					2,352	2,625	3,098	3,027	3,576	
202003A	M20 x 2.00					2,341	3,027	3,098	3,335	4,232	
221503A	M22 x 1.50					2,566	2,862	3,329	3,142	3,710	
222003A	M22 x 2.00					2,760	3,321	3,329	3,386	4,292	
241503A	M24 x 1.50					2,807	3,132	3,684	3,507	4,139	
242003A	M24 x 2.00					2,802	3,609	3,684	3,696	4,688	
251503A	M25 x 1.50					3,004	3,839		4,472	5,298	
252003A	M25 x 2.00					2,974	3,839		4,472	5,298	
261503A	M26 x 1.50					3,132	3,924		4,596	5,425	
262003A	M26 x 2.00					3,132	3,924		4,596	5,425	
271503A	M27 x 1.50					4,184	5,048		5,512	6,703	
272003A	M27 x 2.00					4,184	5,048		5,512	6,703	
281503A	M28 x 1.50					4,198	5,250		5,941	8,159	
282003A	M28 x 2.00					4,198	5,250		5,941	8,159	
301503A	M30 x 1.50					4,710	5,662		6,198	8,038	
302003A	M30 x 2.00					4,710	5,668		6,198	8,038	
303003A	M30 x 3.00					4,720	5,668		6,198	8,038	
321503A	M32 x 1.50					5,017	6,213		6,846	8,856	
322003A	M32 x 2.00					5,017	6,213		6,846	8,856	



**HSS TAPS**

HSS GROUND THREAD HAND TAPS - FINE PITCH											IS 6175 - PART 1,2 & 3 - 1992	
HSS GROUND THREAD MACHINE TAPS - FINE PITCH											IS 6175 - PART 4 - 1991	
HSS GROUND THREAD NUT TAPS - FINE PITCH											IS 6175 - PART 5 - 1992	
Code	Size	HAND & SHORT MACHINE TAPS							LONG SHANK MACHINE TAPS		NUT TAPS	
		IS 6175 Part 1	IS 6175 Part 2				IS 6175 Part 3			IS 6175 Part 4		IS 6175 Part 5
		WTF_M	WHF_M	WHFPM	WHFTM	WUF_M	WUFPM	WUFTM	WMF_M	WMF_M	WVFNM	
		STR.FLUTE	STR.FLUTE	SPIRAL POINT	STR.FLUTE	STR.FLUTE	SPIRAL POINT	STR.FLUTE	TYPE A.C.D.	TYPE B	NUT TAP	
PRICE EACH RS.												
331503A	M33 x 1.50					5,756	7,200		7,495	9,344		
332003A	M33 x 2.00					5,756	7,200		7,495	9,344		
333003A	M33 x 3.00					5,756	7,200		7,495	9,344		
351503A	M35 x 1.50					8,000	9,959		10,322	13,005		
361503A	M36 x 1.50					7,997	9,959		10,322	13,005		
362003A	M36 x 2.00					7,997	9,959		10,322	13,005		
363003A	M36 x 3.00					7,987	9,959		10,322	13,005		
391503A	M39 x 1.50					9,966						
392003A	M39 x 2.00					9,966						
393003A	M39 x 3.00					9,966						
421503A	M42 x 1.50					11,076						
422003A	M42 x 2.00					11,076						
423003A	M42 x 3.00					11,076						
424003A	M42 x 4.00					11,076						
451503A	M45 x 1.50					15,354						
452003A	M45 x 2.00					15,354						
453003A	M45 x 3.00					15,354						
454003A	M45 x 4.00					15,354						
481503A	M48 x 1.50					14,917						
482003A	M48 x 2.00					14,917						
483003A	M48 x 3.00					14,917						
484003A	M48 x 4.00					14,917						
501503A	M50 x 1.50					17,637						
502003A	M50 x 2.00					17,637						
503003A	M50 x 3.00					17,637						
521503A	M52 x 1.50					19,878						
522003A	M52 x 2.00					19,878						
523003A	M52 x 3.00					19,878						
524003A	M52 x 4.00					19,878						
561503A	M56 x 1.50					25,937						
562003A	M56 x 2.00					25,937						
563003A	M56 x 3.00					25,937						
564003A	M56 x 4.00					25,937						
601503A	M60 x 1.50					28,938						
602003A	M60 x 2.00					28,938						
603003A	M60 x 3.00					29,592						
604003A	M60 x 4.00					29,592						
641503A	M64 x 1.50					30,831						
642003A	M64 x 2.00					30,831						
643003A	M64 x 3.00					31,387						
644003A	M64 x 4.00					31,387						
681503A	M68 x 1.50					39,040						
682003A	M68 x 2.00					39,040						
683003A	M68 x 3.00					29,066						
684003A	M68 x 4.00					39,539						
724003A	M72 x 4.00					43,530						

A set of Non-serial taps consists of Taper, Second, Bottoming  
 IS 6175 Part 1: Design will be supplied upto and including 2.6 mm  
 IS 6175 Part 2: Design will be supplied from 3 mm to 10 mm including 10 mm  
 IS 6175 Part 3: Design will be supplied above 10 mm

Type "A" - 5 Deg. Taper with long taper lead  
 Type "B" - 10 Deg. Taper lead angle with spiral point  
 Type "C" - 20 Deg. Taper angle with short lead  
 Type "D" - 10 Deg. Taper angle without spiral point

The tap sizes up to M6 will be supplied with male centers on both sides. Above M6 taps will be supplied with female centers on both sides.  
 Serial Taps a 5% extra      M35 Material 35% extra      Left Hand Taps at 25% extra      M42 Material 55% extra

Item marked with \*are stockable items. Remaining all items required minimum order value of Rs. 15000/- NETT or  
 1mm to 6mm 100 Nos.      7mm to 16mm 50 Nos.      18mm to 24mm 10 Nos.      26mm to 36mm 05 Nos. & corresponding inch size.



HSS HAND TAPS - BSW(WTK_) & BSF (WTL-)						BS949 (Part 1) - 1992
PART CODE		SIZE	STRAIGHT FLUTE	SPIRAL POINT	SPIRAL FLUTE	NUT TAPS
BSW(WTK_)	BSF(WTL_)					
I018406A*		1/8"	317	382	449	
I316246A*	I316326A	3/16"	317	398	429	
I014206A*	I014266A	1/4"	332	398	473	694
I516186A*	I516226A	5/16"	372	468	497	757
I038166A*	I038206A	3/8"	455	560	611	920
I716146A*	I716186A	7/16"	585	725	809	1,239
I012126A*	I012166A	1/2"	744	893	981	1,544
I916126A	I916166A	9/16"	1,083	1,306	1,510	2,145
I058116A*	I058146A	5/8"	1,083	1,306	1,510	2,145
1116116A	1116146A	11/16"	1,582	1,951	2,132	2,757
I034106A*	I034126A	3/4"	1,645	1,980	2,191	3,283
I078096A	I078116A	7/8"	2,273	2,724	3,006	4,439
I100086A*	I100106A	1"	2,849	3,423	3,616	5,785
I118076A	I118096A	1.1/8"	3,827	4,593		7,789
I114076A*	I114096A	1.1/4"	4,614	5,537		11,585
I138066A	I138086A	1.3/8"	5,952	7,142		13,899
I112066A	I112086A	1.1/2"	7,154	8,578		

HSS HAND TAPS - UNC(WTG_)&UNF(WTJ_)						BS949 (Part 1) - 1992
PART CODE		SIZE	STRAIGHT FLUTE	SPIRAL POINT	SPIRAL FLUTE	NUT TAPS
UNC(WTG_)	UNF(WTJ_)					
	N000806A	No.0	744			
N001646A	N001726A	No.1	744			
N002566A	N002646A	No.2	524			
N004406A	N004486A	No.4	356			
N005406A	N005446A	No.5	356	430	429	
N006326A	N006406A	No.6	356	430	429	
N008326A	N008366A	No.8	356	430	429	
N010246A	N010326A	No.10	356	430	429	
N012246A	N012286A	No.12	440	524	461	
I018286A	I018406A	1/8"	317	382	449	
I316246A	I316326A	3/16"	317	398	429	
I014206A*	I014286A	1/4"	329	405	473	694
I516186A*	I516246A	5/16"	373	468	497	757
I038166A*	I038246A	3/8"	455	560	612	920
I716146A	I716206A	7/16"	585	725	809	1,239
I012136A*	I012206A	1/2"	744	893	981	1,544
I916126A	I916186A	9/16"	1,083	1,306	1,510	2,145
I058116A*	I058186A*	5/8"	1,083	1,306	1,510	2,145
1116116A	1116116A	11/16"	1,582	1,951	2,132	2,757
I034106A*	I034166A	3/4"	1,645	1,980	2,191	3,282
I078096A	I078146A	7/8"	2,273	2,723	3,006	4,439
I100086A*	I100126A*	1"	2,849	3,423	3,616	5,785
I118076A	I118126A	1.1/8"	3,827	4,590		7,789
I114076A	I114126A	1.1/4"	4,613	5,535		11,585
I138066A	I138126A	1.3/8"	5,952	7,143		13,899
I112066A	1.12126A	1.1/2"	7,154	8,576		

\* Serial Taps at 5% extra / Left Hand Taps at 25% extra

\* M35 Material 35% extra / M42 Material 55% extra

HSS HAND TAPS - BSCy (Code : WHQ)					BS949 (Part II) -1951
CODE	SIZE	STRAIGHT FLUTE	CODE	SIZE	STRAIGHT FLUTE
		PRICE EACH RS.			
N11SWG6A	14 Swg	577	I516306A	5/16"	493
N10SWG6A	10 Swg	306	I716266A	7/16"	743
N09SWG6A	9 Swg	306	I012266A	1/2"	928
I532326A	5/32"	359	I916206A	9/16"	1,473
I316326A	3/16"	359	I100246A	1"	2,921
I732266A	7/32"	384	O167096A	1.370"	6,152
I014266A	1/4"	405	O137596A	1.375"	6,152

- The manufacturing range of BSCy taps is 14 Swg upwards
- M35 Material 35% extra
- M42 Material 55% extra

HSS HAND TAPS - BA (Code : WTM_)								BS949 (Part I) -1992
CODE	SIZE	STRAIGHT FLUTE	SPIRAL POINT	CODE	SIZE	STRAIGHT FLUTE	SPIRAL POINT	
PRICE EACH RS.								
NOBA106A	No.0	392	470	N8BA436A	No.8	642	618	
N1BA906A	No.1	392	470	10BA356A	No.10	767	891	
N2BA816A	No.2	346	424	11BA316A	No.11	1,188	1,427	
N3BA736A	No.3	346	424	12BA286A	No.12	1,188	1,427	
N4BA666A	No.4	346	424	13BA256A	No.13	1,247	-	
N5BA596A	No.5	346	424	14BA236A	No.14	1,247	-	
N6BA536A	No.6	382	424	-	-	-	-	

- All the tap sizes will be supplied with male centers on both sides.

HSS PIPE TAPS								BS949 (Part II) -1969
PARALLEL THREAD				TAPER THREAD				
CODE	SIZE	WHP_	NPS	WHU_	WHR_	WHS_	WHT_	
		BSP		NPSF	BSPT	NPT	NPTF	
PRICE EACH RS.								
I018286A	1/8"	490	579	696	715	733	769	
I014196A	1/4"	763	1,003	1,224	1,247	1,283	1,445	
I038196A	3/8"	1,148	1,287	1,553	1,603	1,630	1,885	
I012146A	1/2"	1,676	1,871	2,251	2,399	2,451	2,755	
I058146A	5/8"	1,901	-	-	-	-	-	
I034146A	3/4"	2,504	2,755	3,292	3,556	3,631	4,064	
I078146A	7/8"	3,179	-	-	-	-	-	
I100116A	1"	3,948	4,653	5,568	5,530	5,669	6,331	
I114116A	1.1/4"	6,089	7,192	8,630	7,914	8,094	9,332	
I112116A	1.1/2"	7,613	8,970	10,759	9,680	10,042	-	
I134116A	1.3/4"	9,521	11,188	13,421	-	-	-	
I200116A	2"	13,895	16,033	19,238	17,726	18,151	-	
I214116A	2.1/4"	23,701	-	-	-	-	-	
I212116A	2.1/2"	33,816	-	-	51,692	51,692	-	
I234116A	2.3/4"	38,018	-	-	-	-	-	
I300116A	3"	42,850	-	-	67,275	67,275	-	
I312116A	3.1/2"	56,313	-	-	89,824	89,824	-	
I400116A	4"	70,868	-	-	113,332	113,332	-	

Item marked with \*are stockable Items. Remaining all Items required minimum order value of Rs. 15000/- NETT

From Size 1/8" to 5/8" 50 Nos. each

3/4" to 1" 10 Nos. each

1.1/4" to 2.1/4" 5 Nos. each

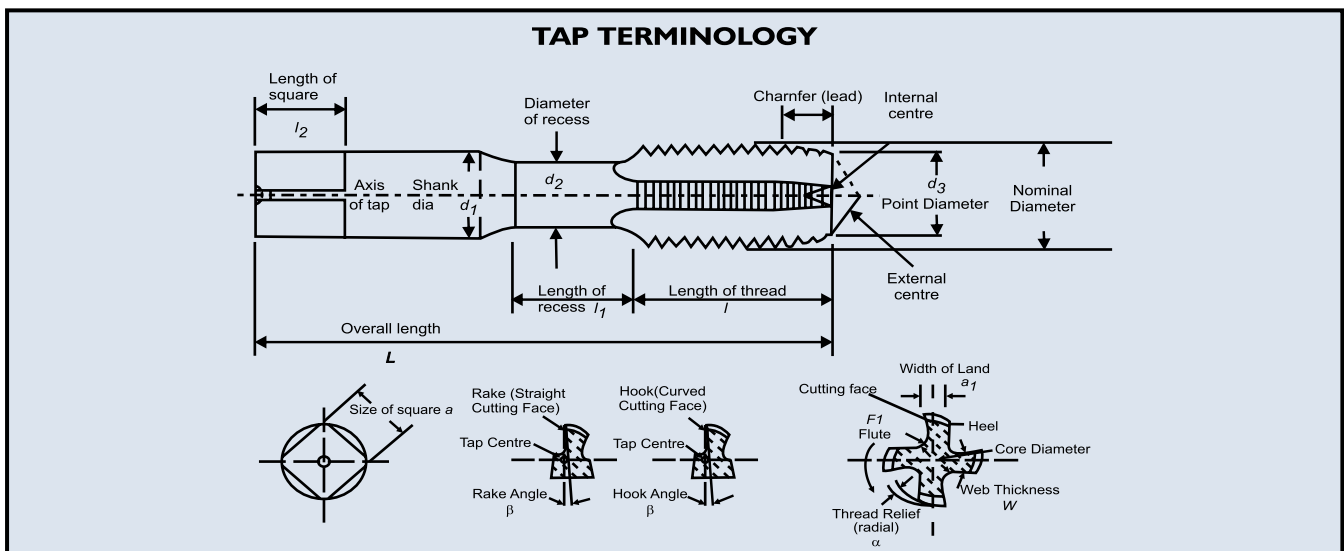
HSS NIB TAPS TO OUR STANDARD (Code : XNC )						PRICE EACH RS.	
CODE	SIZE	STRAIGHT FLUTE		CODE	SIZE	STRAIGHT FLUTE	
		M35	GV 3			M35	GV 3
M030503D	M3 x 0.5	552	664	M81253D	M8 x 1.25	718	873
M040703D	M4 x 0.7	563	681	M101503D	M10 x 1.5	908	1,073
M050803D	M5 x 0.8	597	704	M121753D	M12 x 1.75	1,067	1,223
M061003D	M6 x 1.0	663	704	-	-	-	-

- The above taps will be supplied with TiCN / TiAlN Coating
- The tap sizes upto M6" will be supplied with malecenters on both sides, above M6 taps will be supplied with female centers on both sides
- The tap sizes upto M6" will be supplied with 3 flutes, above M6" will be supplied with 5 flute. Any other style of Nib taps can be offered on specific request.
- Items marked with \* are stockable Items. Remaining all items required Minimum order value of Rs. 15000/Nett. or 5 Nos. for size whichever is higher.
- The manufacturing range of Nib taps is M3 upwards, for the sizes above M12, quotation will be given on Specific request.

UN TAPS (WTV )				BS949 (Part-1)-1992		
PART CODE	SIZE	PRICE EACH RS.	PART CODE	SIZE	PRICE EACH RS.	
I118086A	1.1/8" x 8	3,827	I134086A	1.3/4" x 8	9,787	
I114086A	1.1/4" x 8	4,613	I178086A	1.7/8" x 8	11,829	
I138086A	1.3/8" x 8	5,952	I200086A	2" x 8	15,426	
I112086A	1.1/2" x 8	7,154	I214086A	2.1/4" x 8	21,249	
I158086A	1.5/8" x 8	8,365	I212086A	2.1/2" x 8	27,009	

HSS GROUND THREAD HAND TAPS-COARSE PITCH - HELICOIL (WHR )						IS 6175 : 1992
PART CODE	SIZE	PRICE EACH RS.	PART CODE	SIZE	PRICE EACH RS.	
M030503A	M3 x 0.50	304	M142003A	M14 x 2.00	1,632	
M040704A	M4 x 0.70	323	M162003A	M16 x 2.00	1,632	
M050805A	M5 x 0.80	388	M182503A	M18 x 2.50	2,085	
M061006A	M6 x 1.00	388	M202503A	M20 x 2.50	2,233	
M081253A	M8 x 1.25	472	M222503A	M22 x 2.50	2,487	
M101503A	M10 x 1.50	740	M243003A	M24 x 3.00	3,770	
M121753A	M12 x 1.75	1,079	M273003A	M27 x 3.00	4,217	
-	-	-	M303503A	M30 x 3.50	4,929	

- Taps with different coating can be provided with additional cost at actuals.
- Taps for various application like cast iron, Aluminium, Brass etc. can be supplied on demand.
- Taps of DIN 371, DIN 374, DIN 2184, JIS 4430 1998, ISO 529 1993 can be supplied on demand.



MIRANDA  
EDGE

NEW  
LAUNCH

HIGH  
PERFORMANCE  
PLATINUM  
CUT TAPS






MIRANDA EDGE - PLATINUMCUT TAPS									PRICE EACH RS.
SIZE	SPPT			SPIREX			BOT		
	UNCOATED	TIN	TIALN	UNCOATED	TIN	TIALN	UNCOATED	TIN	TIALN
	MA1	MA2	MA3	MB1	MB2	MB3	MC1	MC2	MC3
M3 x 0.5	536	616	643	615	706	737	447	514	537
M4 x 0.7	536	616	643	615	706	737	447	514	537
M5 x 0.8	562	645	674	644	740	772	470	541	564
M6 x 1.0	562	645	674	644	740	772	470	541	564
M8 x 1.0	-	-	-	800	920	960	-	-	-
M8 x 1.25	630	724	756	722	829	865	527	604	631
M10 x 1.0	906	1,041	1,086	1,037	1,193	1,245	-	-	-
M10 x 1.25	906	1,041	1,086	1,037	1,193	1,245	756	870	908
M10 x 1.5	779	896	935	893	1,026	1,072	651	748	781
M12 x 1.0	1,401	1,611	1,682	1,604	1,845	1,924	-	-	-
M12 x 1.25	1,401	1,611	1,682	1,604	1,845	1,924	1,166	1,341	1,399
M12 x 1.50	1,401	1,611	1,682	1,604	1,845	1,924	1,166	1,341	1,399
M12 x 1.75	1,202	1,381	1,441	1,376	1,583	1,651	1,002	1,152	1,203

HIGH PERFORMANCE PLATINUM CUT TAPS									
TYPE	PICTURE	RANGE	SERIES	THREAD FORM	BLANK STANDARD	TREATMENT	MATERIAL	TAPPING TYPE	APPLICATION
Straight Flute		M3-M12	MC 1	M	IS -6175/ISO 529	Bright	HSS-E	Blind/Through	Medium to high tensile steel, Alloy steel, MS, general application
			MC 2	M	IS -6175/ISO 529	TiN			
			MC 3	M	IS -6175/ISO 529	TiAlN			
Straight Flute for cast iron		M3-M12	CI MC 1	M	IS -6175/ISO 529	Bright	HSS-E	Blind/Through	Cast iron , SG iron, abrasive type steel
			CI MC 2	M	IS -6175/ISO 529	TiN			
			CI MC 3	M	IS -6175/ISO 529	TiAlN			
Spiral Point		M3-M12	MA 1	M	IS -6175/ISO 529	Bright	HSS-E	Through holes	Medium to high tensile steel, Alloy steel , MS , general application
			MA 2	M	IS -6175/ISO 529	TiN			
			MA 3	M	IS -6175/ISO 529	TiAlN			
Spiral Flute		M3-M12	MB 1	M	IS -6175/ISO 529	Bright	HSS-E	Blind Holes	Medium to high tensile steel, Alloy steel , MS , general application
			MB 2	M	IS -6175/ISO 529	TiN			
			MB 3	M	IS -6175/ISO 529	TiAlN			


RECOMMENDED PARAMETER				
MATERIAL	RC VALUE	HB VALUE	RECOMMENDED MTR / MIN	
			HSS-E	
			UNCOATED	COATED
Structural steels, free-cutting steels Case hardened steels, heat-treatable steels	<20	<236	9-15	12-20
	<25	<256	9-13	11-18
	<30	<286	6-9	9-16
	<35	<326	5-8	6-10
	<38	<386	4-8	6-12
Stainless- and acid-resistant steels, sulphured austenitic martensitic		<186	8-13	12-16
	<25	<256	6-9	9-12
	<36	<286	6-9	7-12
	<35	<326	3-6	6-9
Alloyed case hardened steels Alloyed heattreatable steels Alloyed tool steels High speed tool steels	<25	<256	3-6	9-12
	<36	<286	8-10	9-15
	<35	<326	5-8	6-9
	<38	<386	3-5	4-9
Cast iron Spheroidal graphite iron Malleable cast iron		<186	15-20	18-25
	<25	<256	9-12	14-18
	<35	<326	5-10	6-12
Brass			9-13	-
			9-15	-











**TUNGSTEN CARBIDE TIPPED TOOLS**







ISO 1 ( 110 ) - BAR TURNING TOOLS	SHANK SIZE H X B (mm)	L (mm)	RIGHT HAND ( RH )		LEFT HAND ( LH )		PRICE RS./ PIECE
			ORDER CODE - MIR100				
			P30	K20	P30	K20	
	1010	90	1004RC	1001RC	1004LC	1001LC	301
	1212	100	1014RC	1011RC	1014LC	1011LC	328
	1616	110	1034RC	1031RC	1034LC	1031LC	443
	2020	125	1054RC	1051RC	1054LC	1051LC	706
	2525	140	1074RC	1071RC	1074LC	1071LC	1,058
	3232	170	1094RC	1091RC	1094LC	1091LC	1,726
	4040	200	1114RC	1111RC	1114LC	1111LC	3,557
	5050	240	1134RC	1131RC	1134LC	1131LC	7,274
	1610	110	1024RC	1021RC	1024LC	1021LC	352
	2012	125	1044RC	1041RC	1044LC	1041LC	488
	2516	140	1064RC	1061RC	1064LC	1061LC	654
	3220	170	1084RC	1081RC	1084LC	1081LC	1,115
	4025	200	1104RC	1101RC	1104LC	1101LC	1,792
	5032	240	1124RC	1121RC	1124LC	1121LC	4,086
	6040	280	1144RC	1141RC	1144LC	1141LC	7,433
<b>ISO 2 ( 111 ) - CRANKED TURNING &amp; FACING TOOLS</b>	1010	90	1204RC	1201RC	1204LC	1201LC	328
	1212	100	1214RC	1211RC	1214LC	1211LC	360
	1616	110	1234RC	1231RC	1234LC	1231LC	498
	2020	125	1254RC	1251RC	1254LC	1251LC	691
	2525	140	1274RC	1271RC	1274LC	1271LC	1,038
	3232	170	1294RC	1291RC	1294LC	1291LC	1,787
	4040	200	1314RC	1311RC	1314LC	1311LC	3,479
	5050	240	1334RC	1331RC	1334LC	1331LC	7,382
	1610	110	1224RC	1221RC	1224LC	1221LC	389
	2012	125	1244RC	1241RC	1244LC	1241LC	526
	2516	140	1264RC	1261RC	1264LC	1261LC	706
	3220	170	1284RC	1281RC	1284LC	1281LC	1,122
	4025	200	1304RC	1301RC	1304LC	1301LC	2,008
	5032	240	1324RC	1321RC	1324LC	1321LC	4,168
	6040	280	1344RC	1341RC	1344LC	1341LC	7,566
<b>ISO 3 ( 123 ) - CRANKED FINISHING TOOLS</b>	1010	90	2204RC	2201RC	2204LC	2201LC	328
	1212	100	2214RC	2211RC	2214LC	2211LC	360
	1616	110	2234RC	2231RC	2234LC	2231LC	498
	2020	125	2254RC	2251RC	2254LC	2251LC	691
	2525	140	2274RC	2271RC	2274LC	2271LC	1,038
	3232	170	2294RC	2291RC	2294LC	2291LC	1,787
	4040	200	2314RC	2311RC	2314LC	2311LC	3,479
	5050	240	2334RC	2331RC	2334LC	2331LC	7,382
	1610	110	2224RC	2221RC	2224LC	2221LC	389
	2012	125	2244RC	2241RC	2244LC	2241LC	526

ISO 3 ( 123 ) - CRANKED FINISHING TOOLS	SHANK SIZE H X B (mm)	L (mm)	RIGHT HAND ( RH )		LEFT HAND ( LH )		PRICE RS./PIECE
			ORDER CODE - MIR100				
			P30	K20	P30	K20	
	2516	140	2264RC	2261RC	2264LC	2261LC	706
	3220	170	2284RC	2281RC	2284LC	2281LC	1,122
	4025	200	2304RC	2301RC	2304LC	2301LC	2,008
	5032	240	2324RC	2321RC	2324LC	2321LC	4,168
	6040	280	2344RC	2341RC	2344LC	2341LC	7,566
ISO 4 ( 127 ) - RECESSING TOOLS	NEUTRAL (NH)						
	1010	90	2604SC	2601SC			328
	1212	100	2614SC	2611SC			404
	1616	110	2634SC	2631SC			600
	2020	125	2654SC	2651SC			902
	2525	140	2674SC	2671SC			1,471
	3232	170	2694SC	2691SC			2,902
	4040	200	2714SC	2711SC			7,173
	5050	240	2076SC	2731SC			12,879
	1610	110	2624SC	2621SC			443
	2012	125	2644SC	2641SC			473
	2516	140	2664SC	2661SC			695
	3220	170	2684SC	2681SC			1,342
	4025	200	2704SC	2701SC			2,330
	5032	240	2724SC	2721SC			4,431
	ISO 5 ( 126 ) - CRANKED FACING TOOLS			RIGHT HAND ( RH )		LEFT HAND ( LH )	
	1010	90	2404RC	2401RC	2404LC	2401LC	328
	1212	100	2414RC	2411RC	2414LC	2411LC	360
	1616	110	2434RC	2430RC	2434LC	2431LC	498
	2020	125	2454RC	2451RC	2454LC	2451LC	691
	2525	140	2474RC	2471RC	2474LC	2471LC	1,038
	3232	170	2494RC	2491RC	2494LC	2491LC	1,787
	4040	200	2426RC	2511RC	2426LC	2511LC	3,479
	5050	240	2428RC	2531RC	2428LC	2531LC	7,382
	1610	110	2424RC	2421RC	2424LC	2421LC	389
	2012	125	2444RC	2441RC	2444LC	2441LC	526
	2516	140	2464RC	2461RC	2464LC	2461LC	706
	3220	170	2484RC	2481RC	2484LC	2481LC	1,122
	4025	200	2504RC	2501RC	2504LC	2501LC	2,011
	5032	240	2524RC	2521RC	2524LC	2521LC	4,168
	ISO 6 ( 117 ) - CRANKED KNIFE TOOLS	1010	90	2004RC	2001RC	2004LC	2001LC
	1212	100	2014RC	2011RC	2014LC	2011LC	360
	1616	110	2034RC	2031RC	2034LC	2031LC	498
	2020	125	2054RC	2051RC	2054LC	2051LC	691
	2525	140	2074RC	2071RC	2074LC	2071LC	1,038
	3232	170	2094RC	2091RC	2094LC	2091LC	1,787
	4040	200	2114RC	2111RC	2114LC	2111LC	3,479


ISO 6 ( 117 ) - CRANKED KNIFE TOOLS	SHANK SIZE H X B (mm)	L (mm)	RIGHT HAND ( RH )		LEFT HAND ( LH )		PRICE RS./ PIECE
			ORDER CODE - MIR100				
			P30	K20	P30	K20	
	5050	240	2134RC	2131RC	2134LC	2131LC	7,382
	1610	110	2024RC	2021RC	2024LC	2021LC	389
	2012	125	2044RC	2041RC	2044LC	2041LC	526
	2516	140	2064RC	2061RC	2064LC	2061LC	706
	3220	170	2084RC	2081RC	2084LC	2081LC	1,328
	4025	200	2104RC	2101RC	2104LC	2101LC	2,016
	5032	240	2124RC	2121RC	2132LC	2121LC	4,174
	ISO 7 ( 150 ) - PARTING OFF TOOLS	1010	90	5103RC	5201RC	5204LC	5201LC
1212		100	5214RC	5211RC	5214LC	5211LC	445
1616		110	5314RC	5231RC	5314LC	5231LC	495
2020		125	5254RC	5180RC	5254LC	5180LC	546
2525		140	5071RC	5061RC	5071LC	5061LC	732
3232		170	5274RC	5271RC	5274LC	5271LC	1,163
1006		90	5104RC	5101RC	5104LC	5101LC	328
1208		100	5114RC	5111RC	5114LC	5111LC	389
1610		110	5124RC	5121RC	5124LC	5121LC	413
2012		125	5134RC	5131RC	5134LC	5131LC	457
2516		140	5144RC	5141RC	5144LC	5141LC	605
3220		170	5154RC	5151RC	5154LC	5151LC	973
4025		200	5164RC	5161RC	5164LC	5161LC	1,607
5032		240	5166RC	5301RC	5304LC	5301LC	2,274
ISO 8 ( 130 )- BORING TOOLS ( SQUARE )		0808	125	2804RC	2801RC	2804LC	2801LC
	1010	150	2814RC	2811RC	2814LC	2811LC	647
	1212	180	2827RC	2823RC	2827LC	2823LC	706
	1616	210	2834RC	2831RC	2834LC	2831LC	848
	2020	250	2844RC	2841RC	2844LC	2841LC	1,038
	2525	300	2854RC	2851RC	2854LC	2851LC	1,939
	3232	355	2864RC	2861RC	2864LC	2861LC	2,521
	4040	400	2874RC	2871RC	2874LC	2871LC	3,662
	5050	450	2878RC	2877RC	2878LC	2877LC	6,724
ISO 8 ( 131 ) - BORING TOOLS ( ROUND )	Ø8	125	2904RC	2901RC	2904LC	2901LC	560
	Ø10	150	2914RC	2911RC	2914LC	2911LC	604
	Ø12	180	2924RC	2921RC	2924LC	2921LC	647
	Ø16	210	2934RC	2931RC	2934LC	2931LC	744
	Ø20	250	2944RC	2941RC	2944LC	2941LC	908
	Ø25	300	2954RC	2951RC	2954LC	2951LC	1,726
	Ø32	355	2964RC	2961RC	2964LC	2961LC	2,198

ISO 9 ( 135 ) - BORING TOOLS ( SQUARE )	SHANK SIZE H X B (mm)	L (mm)	RIGHT HAND ( RH )		LEFT HAND ( LH )		PRICE RS./PIECE
			ORDER CODE - MIR100				
			P30	K20	P30	K20	
	0808	125	3004RC	3001RC	3004LC	3001LC	604
	1010	150	3014RC	3011RC	3014LC	3011LC	647
	1212	180	3024RC	3021RC	3024LC	3021LC	706
	1616	210	3034RC	3031RC	3034LC	3031LC	848
	2020	250	3044RC	3041RC	3044LC	3041LC	1,038
	2525	300	3054RC	3051RC	3054LC	3051LC	1,939
	3232	355	3064RC	3061RC	3064LC	3061LC	2,521
	4040	400	3068RC	3062RC	3068LC	3062LC	3,662
ISO 9 ( 136 ) - BORING TOOLS ( ROUND )							
	008	125	3104RC	3101RC	3104LC	3101LC	560
	010	150	3114RC	3111RC	3114LC	3111LC	604
	012	180	3124RC	3121RC	3124LC	3121LC	647
	016	210	3134RC	3131RC	3134LC	3131LC	744
	020	250	3144RC	3141RC	3144LC	3141LC	908
	025	300	3154RC	3151RC	3154LC	3151LC	1,726
	032	355	3164RC	3161RC	3164LC	3161LC	2,198
113 - STRAIGHT ROUND NOSE TURNING TOOL			NEUTRAL (NH)				
	1010	90	1404SC	1401SC			328
	1212	100	1414SC	1411SC			360
	1616	110	1434SC	1431SC			506
	2020	125	1454SC	1451SC			785
	2525	140	1474SC	1471SC			1,133
	3232	170	1494SC	1491SC			2,106
	4040	200	1614SC	1506SC			3,905
	1610	110	1424SC	1421SC			392
	2012	125	1444SC	1441SC			480
	2516	140	1464SC	1461SC			656
	3220	170	1484SC	1481SC			913
	4025	200	1504SC	1501SC			1,832
	5032	240	0057AC	0057SC			3,437
115 - CRANKED ROUND NOSE TURNING TOOLS.			RIGHT HAND ( RH )		LEFT HAND ( LH )		
	1010	90	1604RC	1601RC	1604LC	1601LC	360
	1212	100	1614RC	1611RC	1614LC	1611LC	384
	1616	110	1634RC	1631RC	1634LC	1631LC	526
	2020	125	1654RC	1651RC	1654LC	1651LC	785
	2525	140	1674RC	1671RC	1674LC	1671LC	1,133
	3232	170	1694RC	1691RC	1694LC	1691LC	2,198
	4040	200	1714RC	1711RC	1714LC	1711LC	4,073
	1610	110	1624RC	1621RC	1624LC	1621LC	432
	2012	125	1644RC	1641RC	1644LC	1641LC	506
	2516	140	1664RC	1661RC	1664LC	1661LC	691
	3220	170	1684RC	1681RC	1684LC	1681LC	960
	4025	200	1704RC	1701RC	1704LC	1701LC	1,914



116 - BAR TURNING TOOLS	SHANK SIZE H X B (mm)	L (mm)	RIGHT HAND ( RH )		LEFT HAND ( LH )		PRICE RS./PIECE
			ORDER CODE - MIR100				
			P30	K20	P30	K20	
	1010	90	1804RC	1801RC	1804LC	1801LC	296
	1212	100	1814RC	1811RC	1814LC	1811LC	328
	1616	110	1834RC	1831RC	1834LC	1831LC	437
	2020	125	1854RC	1851RC	1854LC	1851LC	647
	2525	140	1874RC	1871RC	1874LC	1871LC	1,002
	3232	170	1894RC	1891RC	1894LC	1891LC	1,731
	4040	200	1914RC	1911RC	1914LC	1911LC	3,419
	5050	240	1934RC	1931RC	1934LC	1931LC	7,269
	1610	110	1824RC	1821RC	1824LC	1821LC	352
	2012	125	1844RC	1841RC	1844LC	1841LC	569
	2516	140	1864RC	1861RC	1864LC	1861LC	812
	3220	170	1884RC	1881RC	1884LC	1881LC	1,114
	4025	200	1904RC	1901RC	1904LC	1901LC	1,787
122 - POINTED TURNING TOOLS	NEUTRAL (NH)						
	1010	90	0805SC	0801SC			328
	1212	100	0815SC	0811SC			401
	1616	110	0835SC	0831SC			443
	2020	125	0855SC	0851SC			605
	2525	140	0875SC	0871SC			862
	3232	170	0895SC	0891SC			2,138
	4040	200	0902SC	0903SC			3,924
	5050	240	0925SC	0926SC			4,278
	1610	110	0825SC	0821SC			437
	2012	125	0845SC	0841SC			464
	2516	140	0865SC	0861SC			605
	3220	170	0885SC	0881SC			902
	4025	200	0905SC	0901SC			1,507
	5.032	240	0906SC	0907SC			3,163
140 ( 60° ) - BORING TOOLS ( SQUARE )			RIGHT HAND ( RH )		LEFT HAND ( LH )		
	0808	24	3604RC	3601RC	3604LC	3601LC	377
	1010 & 3/8"	50	3614RC	3611RC	3614LC	3611LC	377
	1212 & 1/2"	60	3624RC	3621RC	3624LC	3621LC	433
	1616 & 5/8"	90	3634RC	3631RC	3634LC	3631LC	605
	2020 & 3/4"	120	3644RC	3641RC	3644LC	3641LC	962
	2525 & 1"	175	3654RC	3651RC	3654LC	3651LC	1,268
140 ( 60° ) - BORING TOOLS ( ROUND )							
	Ø08	24	3504RC	3501RC	3504LC	3501LC	328
	Ø10 & 3/8"	50	3514RC	3511RC	3514LC	3511LC	328
	Ø12 & 1/2"	60	3524RC	3521RC	3524LC	3521LC	384
	Ø16 & 5/8"	90	3534RC	3531RC	3534LC	3531LC	498
	Ø20 & 3/4"	120	3544RC	3541RC	3544LC	3541LC	893
	Ø25 & 1"	175	3554RC	3551RC	3554LC	3551LC	1,158

141 (90°) - BORING TOOLS ( SQUARE ) 	SHANK SIZE H X B (mm)	L (mm)	RIGHT HAND ( RH )		LEFT HAND ( LH )		PRICE RS./PIECE
			ORDER CODE - MIR100				
			P30	K20	P30	K20	
	0808	24	4104RC	4101RC	4104LC	4101LC	377
	1010 & 3/8"	50	4114RC	4111RC	4114LC	4111LC	377
	1212 & 1/2"	60	4124RC	4121RC	4124LC	4121LC	433
	1616 & 5/8"	90	4134RC	4131RC	4134LC	4131LC	605
	2020 & 3/4"	120	4144RC	4141RC	4144LC	4141LC	962
	2525 & 1"	175	4154RC	4151RC	4154LC	4151LC	1,268
141 (90°) - BORING TOOLS ( ROUND ) 	008	24	4004RC	4001RC	4004LC	4001LC	328
	010 & 3/8"	50	4014RC	4011RC	4014LC	4011LC	328
	012 & 1/2"	60	4024RC	4021RC	4024LC	4021LC	384
	016 & 5/8"	90	4034RC	4031RC	4034LC	4031LC	498
	020 & 3/4"	120	4044RC	4041RC	4044LC	4041LC	893
	025 & 1"	175	4054RC	4051RC	4054LC	4051LC	1,158
142 (45°) - BORING TOOLS ( SQUARE ) 	0808	24	4604RC	4601RC	4604LC	4601LC	377
	1010 & 3/8"	50	4614RC	4611RC	4614LC	4611LC	377
	1212 & 1/2"	60	4624RC	4621RC	4624LC	4621LC	433
	1616 & 5/8"	90	4634RC	4631RC	4634LC	4631LC	605
	2020 & 3/4"	120	4644RC	4641RC	4644LC	4641LC	962
	2525 & 1"	175	4654RC	4651RC	4654LC	4651LC	1,268
142 (45°) - BORING TOOLS ( ROUND ) 	008	24	4504RC	4501RC	4504LC	4501LC	328
	010 & 3/8"	50	4514RC	4511RC	4514LC	4511LC	328
	012 & 1/2"	60	4524RC	4521RC	4524LC	4521LC	384
	016 & 5/8"	90	4534RC	4531RC	4534LC	4531LC	498
	020 & 3/4"	120	4544RC	4541RC	4544LC	4541LC	893
	025 & 1"	175	4554RC	4551RC	4554LC	4551LC	1,158
156 - CRANKED INTERNAL RECESSING TOOLS 	1010	90	5404RC	5401RC	5404LC	5401LC	619
	1212	100	5414RC	5411RC	5414LC	5411LC	706
	1616	110	5424RC	5421RC	5424LC	5421LC	791
	2020	125	5434RC	5431RC	5434LC	5431LC	1,022
	2525	140	5444RC	5441RC	5444LC	5441LC	1,399
	3232	170	5454RC	5451RC	5454LC	5451LC	1,991
	4040	315	5464RC	5461RC	5464LC	5461LC	3,303
163 - STRAIGHT TURNING & GROOVING TOOLS 	NEUTRAL (NH)						
	1010	90	5704SC	5701SC			401
	1212	100	5714SC	5711SC			457
	1616	110	5734SC	5731SC			691
	2020	125	5754SC	5751SC			1,006
	2525	140	5774SC	5771SC			1,681
	3232	170	5794SC	5791SC			3,663
	4040	200	5798SC	5762SC			7,031
	1610	110	5724SC	5721SC			392
	2012	125	5744SC	5741SC			500
	2516	140	5764SC	5761SC			757
	3220	170	5784SC	5781SC			1,241



165 - STRAIGHT THREADING TOOLS ( 60°)	SHANK SIZE H X B (mm)	L (mm)	RIGHT HAND ( RH )		LEFT HAND ( LH )		PRICE RS./PIECE
			ORDER CODE - MIR100				
			P30	K20	P30	K20	
	1010	90	6002RC	6001RC	6002LC	6001LC	433
	1212	100	6012RC	6011RC	6012LC	6011LC	458
	1616	110	6044RC	6031RC	6044LC	6031LC	596
	2020	125	6054RC	6051RC	6054LC	6051LC	812
	2525	140	6074RC	6071RC	6074LC	6071LC	1,207
	3232	170	6094RC	6091RC	6094LC	6091LC	1,597
166 - INTERNAL THREADING TOOLS ( 60°)	1010	90	6204RC	6201RC	6204LC	6201LC	715
	1212	100	6214RC	6211RC	6214LC	6211LC	808
	1616	110	6224RC	6221RC	6224LC	6221LC	877
	2020	125	6234RC	6231RC	6234LC	6231LC	1,076
	2525	140	6256RC	6241RC	6256LC	6241LC	1,409
	3232	170	6254RC	6251RC	6254LC	6251LC	2,125
IND-2-EXTERNAL THREADING TOOLS	1010	90	0905RC	0901RC	0905LC	0901LC	508
	1212	100	0915RC	0911RC	0915LC	0911LC	600
	1616	110	0935RC	0931RC	0935LC	0931LC	638
	2020	125	0955RC	9101RC	0955LC	9101LC	708
	2525	140	0975RC	0971RC	0975LC	0971LC	1,184
THREADING TOOLS WITH "V" PROFILE	NEUTRAL (NH)						
	166 - 11	140	6264RC	6261RC			654
	166 - 12	160	6274RC	6271RC			798
	166 - 13	180	6284RC	0114RC			1,114
	166 - 14	200	6294RC	6292RC			1,554

**Indian Standard Application of Carbides for Machining, Ranges of application and Colour Code Selection Guideline for Tip Grade**

Identification Colour	Designation	Material to be Machined
	P20	Steel, steel casting, Malleable cast iron forming long chips Machining Conditions Turning & Milling-Medium cutting speed and medium chip section, Planing with small chip section
	P30	Steel, steel casting, Malleable cast iron forming long chips Machining Conditions Turning, Milling & Planning-Medium or low cutting speed, medium or large chip section and machining under unfavourable conditions such as heat erogenous materials, changing hardness or chip section,intermittent turning or subject to vibrations.
	P40	Steel, steel casting with sand inclusions or shrinkage cavities Machining Conditions Turning, Planning & Shapping-Low cutting speed, large chip section with possibility of using large rake angle for machining under unfavourable conditions, such as heat erogenous materials, changing hardness or chip sections, intermillent turning or subject to vibrations; and work on automatic machines.
	K10	Grey cast iron of hardness more than 220 HB, Malleable cast iron forming short chips, Tempered steel, Aluminium alloys containing silicon, copper alloys, plastics, glass, hard rubber, hard carboard, porcelain, stone. Machining Conditions Turning, Milling, Boring, Scraping
	K20	Grey cast iron of hardness up to 220 HB, Non-ferrous metals, such as Copper, Brass, . Aluminium, Laminated wood of abrasive type Machining Conditions Turning, Milling, planning, requiring high toughness.



## TUNGSTEN CARBIDE ROTARY BURRS



### PRODUCT RANGE

- TYPE** : Cylindrical & with Radius Flame, Rim & Inverted Cone  
Tree shape - Radius / Pointed end  
Cone shape - Radius / Pointed end
- RANGE** : Diameter 3.0 mm to 25.0 mm, Shank 3.0 mm, 6.0 mm & 8.0 mm  
Single cut, Double cut, Diamond cut & Aluma cut






### APPLICATIONS

- Cast Iron
- Mild Steel
- Stainless Steel
- Forged Steel
- Titanium
- Aluminium

### INDUSTRIES

- Foundry, Casting & Fabrication
- Marine & Ship building
- Automobile, Heavy Engineering
- Tubes & Pipes
- Aerospace & Defense
- Gear Manufacturing

**TUNGSTEN CARBIDE ROTARY BURRS**

SHAPE	MIRANDA CODE	DESCRIPTION HEAD DIA X HEAD LENGTH X OAL LENGTH X SHANK DIA	PRICE RS./ PIECE			
			ORDER CODE	STANDARD PRICE	ORDER CODE	TIN COATED PRICE
			MIETCRBFU		MIRTCRBFU	
 <p>Conical</p>	MAM1	3MM X 11MM X 38MM X 3SHK	MAM1S0311	416	MAM1S0311	458
	MAM2	6MM X 11MM X 38MM X 3SHK	MAM2S0611	545	MAM2S0611	601
	AM1	6MM X 19MM X 60MM X 6SHK	AM10S0619	646	AM10S0619	710
	AM2	10MM X 20MM X 70MM X 6SHK	AM20S1020	646	AM20S1020	710
	AM3	12MM X 25MM X 75MM X 6SHK	AM30S1225	887	AM30S1225	975
	AM4	10MM X 12MM X 60MM X 6SHK	AM40S1012	673	AM40S1012	738
	AM5	16MM X 13MM X 63MM X 6SHK	AM50S1613	969	AM50S1613	1,091
	AM6	16MM X 16MM X 66MM X 6SHK	AM60S1616	969	AM60S1616	1,091
 <p>Cylindrical Radius End</p>	MBM1	3MM X 16MM X 38MM X 3SHK	MBM1S0316	416	MBM1S0316	458
	MBM2	6MM X 13MM X 38MM X 3SHK	MBM2S0613	545	MBM2S0613	601
	BM1	6MM X 20MM X 50MM X 6SHK	BM10S0620	653	BM10S0620	717
	BM2	8MM X 20MM X 70MM X 6SHK	BM20S0820	631	BM20S0820	696
	BM3	10MM X 20MM X 70MM X 6SHK	BM30S1020	789	BM30S1020	867
	BM4	12MM X 20MM X 70MM X 6SHK	BM40S1220	1017	BM40S1220	1,140
	BM5	16MM X 25MM X 75MM X 6SHK	BM50S1625	1555	BM50S1625	1,741
	BM6	12MM X 25MM X 75MM X 6SHK	BM60S1225	1412	BM60S1225	1,584
 <p>Cylindrical</p>	MCM1	3MM X 16MM X 38MM X 3SHK	MCM1S0316	416	MCM1S0316	458
	MCM2	6MM X 6MM X 38MM X 3SHK	MCM2S0606	467	MCM2S0606	516
	MCM3	6MM X 13MM X 38MM X 3SHK	MCM3S0613	545	MCM3S0613	601
	CM1	4MM X 15MM X 50MM X 6SHK	CM10S0415	545	CM10S0415	601
	CM2	6MM X 20MM X 60MM X 6SHK	CM20S0620	625	CM20S0620	689
	CM3	8MM X 20MM X 70MM X 6SHK	CM30S0820	710	CM30S0820	781
	CM4	10MM X 20MM X 70MM X 6SHK	CM40S1020	781	CM40S1020	860
	CM5	12MM X 20MM X 70MM X 6SHK	CM50S1220	982	CM50S1220	1,097
	CM6	16MM X 25MM X 75MM X 6SHK	CM60S1625	1575	CM60S1625	1,762
	CM7	12MM X 16MM X 65MM X 6SHK	CM70S1216	959	CM70S1216	1,074
	CM8	12MM X 25MM X 75MM X 6SHK	CM80S1225	1555	CM80S1225	1,741
	 <p>Flame</p>	FM1	6MM X 15MM X 50MM X 6SHK	FM10S0615	625	FM10S0615
FM2		8MM X 20MM X 70MM X 6SHK	FM20S0820	646	FM20S0820	710
FM3		10MM X 25MM X 65MM X 6SHK	FM30S1025	1275	FM30S1025	1,426
FM4		12MM X 32MM X 82MM X 6SHK	FM40S1232	1531	FM40S1232	1,728
 <p>Cone Radius</p>	MKM1	3MM X 8MM X 38MM X 3SHK	MKM1S0308	416	MKM1S0308	458
	MKM2	6MM X 12MM X 38MM X 3SHK	MKM2S0612	545	MKM2S0612	601
	KM1	10MM X 20MM X 65MM X 6SHK	KM10S1020	611	KM10S1020	673
	KM2	12MM X 20MM X 70MM X 6SHK	KM20S1220	1017	KM20S1220	1,140
	KM3	16MM X 33MM X 75MM X 6SHK	KM30S1633	1405	KM30S1633	1,569

### TUNGSTEN CARBIDE ROTARY BURRS

SHAPE	MIRANDA CODE	DESCRIPTION		PRICE RS./ PIECE		
		HEAD DIA X HEAD LENGTH	ORDER CODE	STANDARD PRICE	ORDER CODE	TIN COATED PRICE
		X OAL LENGTH X SHANK DIA	MIETCRBFU		MIRTCRBFC	
 <p>Oval</p>	MOM1	3MM X 8MM X 38MM X 3SHK	MOM1S0308	416	MOM1S0308	458
	MOM2	6MM X 10MM X 38MM X 3SHK	MOM2S0610	545	MOM2S0610	601
	OM1	8MM X 14MM X 60MM X 6SHK	OM10S0814	696	OM10S0814	767
	OM2	12MM X 20MM X 70MM X 6SHK	OM20S1220	1017	OM20S1220	1,140
	OM3	16MM X 25MM X 75MM X 6SHK	OM30S1625	1569	OM30S1625	1,756
	OM4	6MM X 10MM X 60MM X 6SHK	OM40S0610	696	OM40S0610	767
 <p>Rim</p>	RM1	10MM X 2MM X 50MM X 6SHK	RM10S1002	611	RM10S1002	673
	RM2	20MM X 6MM X 60MM X 6SHK	RM20S2006	1146	RM20S2006	1,262
	RM3	12MM X 10MM X 60MM X 6SHK	RM30S1210	1017	RM30S1210	1,119
 <p>Ball</p>	MSM1	4MM X 3MM X 38MM X 3SHK	MSM1S0403	482	MSM1S0403	530
	MSM2	5MM X 4MM X 38MM X 3SHK	MSM2S0504	503	MSM2S0504	553
	SM1	6MM X 5MM X 50MM X 6SHK	SM10S0605	601	SM10S0605	658
	SM2	8MM X 7MM X 50MM X 6SHK	SM20S0807	631	SM20S0807	696
	SM3	10MM X 9MM X 60MM X 6SHK	SM30S1009	631	SM30S1009	696
	SM4	12MM X 11MM X 60MM X 6SHK	SM40S1211	793	SM40S1211	872
	SM5	16MM X 14MM X 65MM X 6SHK	SM50S1614	1074	SM50S1614	1,205
 <p>Tree Pointed End</p>	MTM1	3MM X 13MM X 38MM X 3SHK	MTM1S0313	416	MTM1S0313	458
	MTM2	3MM X 16MM X 38MM X 3SHK	MTM2S0316	416	MTM2S0316	458
	MTM3	6MM X 13MM X 38MM X 3SHK	MTM3S0613	545	MTM3S0613	601
	TM1	6MM X 20MM X 70MM X 6SHK	TM10S0620	658	TM10S0620	724
	TM2	10MM X 20MM X 70MM X 6SHK	TM20S1020	789	TM20S1020	867
	TM3	12MM X 25MM X 75MM X 6SHK	TM30S1225	945	TM30S1225	1,040
	TM4	16MM X 30MM X 80MM X 8SHK	TM40S1630	1405	TM40S1630	1,569
 <p>Tree Radius End</p>	TBM1	6MM X 20MM X 70MM X 6SHK	TBM1S0620	658	TBM1S0620	724
	TBM2	10MM X 20MM X 70MM X 6SHK	TBM2S1020	789	TBM2S1020	867
	TBM3	12MM X 25MM X 75MM X 6SHK	TBM3S1225	997	TBM3S1225	1,119
<p>Inverted Cone</p>	MIM1	3MM X 8MM X 38MM X 3SHK	MIM1S0308	416	MIM1S0308	458
	MIM2	6MM X 8MM X 38MM X 3SHK	MIM2S0608	467	MIM2S0608	516
Set of 5 Pieces		AM3,BM4,CM5,TM3,SM4	SET0S1200	4541	SET0S1200	5,031



## SOLID CARBIDE TOOLS

MIRANDA  
**Maxx**



**SOILD CARBIDE TOOLS  
END MILLS**



SCEM 4 FLUTE - TiAIN coated				
Dia	SH.DIA	FL	OAL	CPL
1.0	3.0	3	38	868
1.5	3.0	6	38	868
2.0	3.0	9	38	868
2.5	3.0	9	38	868
3.0	3.0	12	38	817
3.5	4.0	14	50	1,073
4.0	4.0	14	50	1,073
4.5	5.0	16	50	1,347
5.0	5.0	20	50	1,347
5.5	6.0	20	50	1,407
6.0	6.0	20	60	1,407
8.0	8.0	20	60	1,557
10.0	10.0	25	75	2,963
12.0	12.0	25	75	3,437
14.0	14.0	25	75	6,035
16.0	16.0	32	89	6,522
20.0	20.0	38	100	13,860

SCBALL NOSE-EM 4 FLUTE - TiAIN coated				
Dia	SH.DIA	FL	OAL	CPL
1.0	3.0	3	38	1,095
1.5	3.0	5	38	1,095
2.0	3.0	7	38	1,095
2.5	3.0	7	38	1,095
3.0	3.0	9	38	987
4.0	4.0	14	50	1,287
5.0	5.0	16	50	1,621
6.0	6.0	20	60	1,691
8.0	8.0	20	60	1,905
10.0	10.0	25	75	3,552
12.0	12.0	25	75	4,130
16.0	16.0	32	89	7,841
20.0	20.0	38	102	16,633



LONG LENGTH 4 FLUTE				CPL
DIA	SH.DIA	FL	OAL	
3	3	20	60	1,560
4	4	20	75	1,759
5	5	25	75	1,960
6	6	30	75	2,045
8	8	40	100	2,276
10	10	40	100	3,590
10	10	75	150	8,195
12	12	50	100	5,146
12	12	75	150	10,053
16	16	75	150	15,081
20	20	75	150	25,086

SCBN- LONG LENGTH 4 FLUTE				CPL
DIA	SH.DIA	FL	OAL	
3	3	20	60	1,869
4	4	20	60	2,113
5	5	25	75	2,350
6	6	30	75	2,457
8	8	40	100	2,703
10	10	40	100	4,310
10	10	75	150	9,836
12	12	50	100	6,167
12	12	75	150	12,065
16	16	75	150	18,100
20	20	75	150	30,104





**SOLID CARBIDE TOOLS  
DRILL**



SOLID CARBIDE JOBBER DRILL -TIALN COATED				
DIA	SH.DIA	FL	OAL	CPL
1.0	1.0	12	32	746
1.5	1.5	18	40	801
2.0	2.0	24	49	916
2.5	2.5	30	57	916
3.0	3.0	33	61	1,025
3.5	3.5	39	70	1,116
4.0	4.0	43	75	1,373
4.5	4.5	47	80	1,470
5.0	5.0	52	86	1,684
5.5	5.5	57	93	1,949
6.0	6.0	57	93	2,028
6.5	6.5	63	101	2,283
7.0	7.0	69	109	2,500
7.5	7.5	69	109	2,729
8.0	8.0	75	117	3,077
8.5	8.5	75	117	3,371
9.0	9.0	81	125	3,825
9.5	9.5	81	125	4,367
10.0	10.0	87	133	5,012
10.5	10.5	87	133	5,602
11.0	11.0	94	142	6,667
12.0	12.0	101	151	7,621
13.0	13.0	101	151	9,524
14.0	14.0	108	160	11,890
16.0	16.0	120	178	17,653

SOLID CARBIDE STUB DRILL -TIALN COATED				
DIA	SH.DIA	FL	OAL	CPL
1.0	1.0	6	26	685
1.5	1.5	9	32	736
2.0	2.0	12	38	842
2.5	2.5	14	43	842
3.0	3.0	16	46	942
3.5	3.5	20	52	971
4.0	4.0	22	55	1,195
4.5	4.5	24	58	1,279
5.0	5.0	26	62	1,466
5.5	5.5	28	66	1,696
6.0	6.0	28	66	1,765
6.5	6.5	31	70	1,895
7.0	7.0	34	74	2,075
7.5	7.5	34	74	2,265
8.0	8.0	37	79	2,554
8.5	8.5	37	79	2,798
9.0	9.0	40	84	2,997
9.5	9.5	40	84	3,422
10.0	10.0	43	89	3,927
10.5	10.5	43	89	4,389
11.0	11.0	47	95	5,764
12.0	12.0	51	102	5,764
13.0	13.0	51	103	8,628
14.0	14.0	54	107	8,628
16.0	16.0	58	115	12,810

\* END MILL FOR 60HRC ON REQUEST

\* END MILL WITH CORNER RADIUS & SPECIAL ON REQUEST

\* PRICE ARE SUBJECT TO REVISION WITHOUT ANY NOTICE

**SUGGESTED SPEED AND DATA FEED FOR SOLID CARBIDE END MILLS**

**APPLICATION: SLOTTING / KEY WAY MACHINING**

MATERIAL HRC DIAMETER	CARBON STEEL, ALLOY STEEL <HRC 28		CARBON STEEL, ALLOY STEEL <HRC 28 - HRC 45		STAINLESS STEEL AND SUPER ALLOYS		CAST IRON	
	RPM	FEED / TEETH	RPM	FEED / TEETH	RPM	FEED / TEETH	RPM	FEED / TEETH
2	6369	0.03	6369	0.024	6369	0.02	6369	0.044
3	4777	0.045	4777	0.036	4777	0.03	4777	0.066
4	3981	0.06	3981	0.048	3981	0.04	3981	0.088
5	3185	0.075	3185	0.06	3185	0.05	3185	0.11
6	2654	0.09	2654	0.072	2654	0.06	2654	0.132
8	1990	0.12	1990	0.096	1990	0.08	1990	0.176
10	1911	0.15	1911	0.12	1911	0.1	1911	0.22
12	1592	0.18	1592	0.144	1592	0.12	1592	0.264
14	1365	0.21	1365	0.168	1365	0.14	1365	0.308
16	1393	0.24	1393	0.192	1393	0.16	1393	0.352
18	1238	0.27	1238	0.216	1238	0.18	1238	0.396
20	1115	0.3	1115	0.24	1115	0.2	1115	0.44

> Reduce feed rate by around 30% in case of long types > Increase speed and feed rate by around 25% in case of coated endmills

**APPLICATION: END MILLING**

MATERIAL HRC DIAMETER	CARBON STEEL, ALLOY STEEL <HRC 28		CARBON STEEL, ALLOY STEEL <HRC 28 - HRC 45		STAINLESS STEEL AND SUPER ALLOYS		GREY CAST IRON	
	RPM	FEED / TEETH	RPM	FEED / TEETH	RPM	FEED / TEETH	RPM	FEED / TEETH
2	6369	0.04	6369	0.03	6369	0.024	6369	0.06
3	4777	0.06	4777	0.045	4777	0.036	4777	0.09
4	3981	0.08	3981	0.06	3981	0.048	3981	0.12
5	3185	0.1	3185	0.075	3185	0.06	3185	0.15
6	2654	0.12	2654	0.09	2654	0.072	2654	0.18
8	1990	0.16	1990	0.12	1990	0.096	1990	0.24
10	1911	0.2	1911	0.15	1911	0.12	1911	0.3
12	1592	0.24	1592	0.18	1592	0.144	1592	0.36
14	1365	0.28	1365	0.21	1365	0.168	1365	0.42
16	1393	0.32	1393	0.24	1393	0.192	1393	0.48
18	1238	0.36	1238	0.27	1238	0.216	1238	0.54
20	1115	0.4	1115	0.3	1115	0.24	1115	0.6

**SUGGESTED SPEED AND FEED DATA FOR SOLID CARBIDE MILLS**

**APPLICATION: DRILLING**

MATERIAL HRC DIAMETER	CARBON STEEL, ALLOY STEEL <28 HRC		CARBON STEEL, ALLOY STEEL <HRC 28 - HRC 45		STAINLESS STEEL AND SUPER ALLOYS		CAST IRON	
	RPM	FEED / TEETH	RPM	FEED / TEETH	RPM	FEED / TEETH	RPM	FEED / TEETH
2	5100	0.04	5100	0.03	4900	0.02	5100	0.06
3	4246	0.045	4246	0.036	4246	0.03	4246	0.066
4	3583	0.06	3583	0.048	3583	0.04	3583	0.088
5	2866	0.075	2866	0.06	2866	0.05	2866	0.11
6	2389	0.09	2389	0.072	2389	0.06	2389	0.0132
8	1990	0.12	1990	0.096	1990	0.08	1990	0.176
10	1592	0.15	1592	0.12	1592	0.1	1592	0.22
12	1327	0.18	1327	0.144	1327	0.12	1327	0.0264
14	1251	0.21	1251	0.168	1251	0.14	1251	0.308
16	1194	0.24	1194	0.192	1194	0.16	1194	0.352
18	1062	0.27	1062	0.216	1062	0.18	1062	0.396
20	1115	0.3	1115	0.24	1115	0.2	1115	0.44

- Increase speed and feed rate by around 25% in case of coated endmills
- Reduce feed rate by around 30% in case of long types.
- Increase speed and feed rate by around 25% in case of coated drills

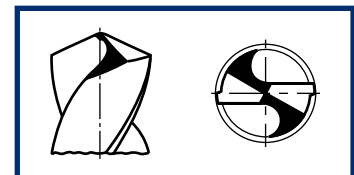
**Technical Formulae**

Cutting speed. =  $\pi \times \text{Dia of Tool} \times \text{RPM} / 1000$

Feed in mm per revolution. = feed in mm per tooth X no. of flutes

Feed in mm per min. = RPM X feed in mm per revolution.

Cutting time. = Cutting length / feed in mm per min



Split Point Geometry



# ASHOK PIRAMAL GROUP

## **CORE VALUES**

We abide by these enduring values that are the foundation of our business and at the heart of all we do each day.

### **CUSTOMER FOCUS**

We listen to our customers.  
We are committed to delivering real value.  
We take ownership of our customer's problem until it is solved.

### **INTEGRITY**

We hold ourselves and others to the highest ethical standards.  
We are honest with each other and constructively give and willingly accept candid feedback.  
We build relationships of trust so we can share and accept the truth,  
even when its hard to say or hear.  
We do the right things even when no one is watching.

### **TEAMWORK**

We respect others and value their ideas and point of view.  
We work together and support each other to achieve our goals.  
We incorporate fun with hard work.  
We have a passion for winning.  
We all play an important role.  
We are one Enterprise. There is no "they" or "I".

### **PASSION FOR EXCELLENCE**

We strive to find better ways to solve customer problems.  
We embrace change and use it to shape our own future.  
we seek innovative solutions to achieve a competitive advantage.  
We recognize outstanding performance.  
We inspire each other to succeed.  
We encourage risk-taking.

### **ACCOUNTABILITY**

We take ownership of results delivered in our area of work.  
We are responsible for and committed to our own personal growth and development.  
We work through challenges and obstacles to achieve a successful outcome.

### **RESPECT**

We show consideration, listen and seek inputs and treat each other fairly.  
We acknowledge work-life balance as a key driver to achieve a competitive edge.  
We value diversity of people and ideas irrespective of the level of experience.



## MIRANDA TOOLS PVT. LTD.

An Ashok Piramal Group Company

WORKS AND HEAD OFFICE : 903 / 904, GIDC Industrial Estate, Ankleshwar - 393 002. Gujarat.

Tele : (02646) 221519, 252368, 239707 Fax : (02646) 251326

CORPORATE OFFICE : 2nd Floor, Peninsula Spenta, Mathuradas Mills Compund,  
Senapati Bapat Marg, Lower Parel, Mumbai - 400 013 Phone: 022-6615 4651

E-mail : [marketing@mirandatools.net](mailto:marketing@mirandatools.net) website : [www.mirandatools.in](http://www.mirandatools.in)

Customer Care No. (02646) - 227162

### BRANCH OFFICES

#### MUMBAI

502, Durga Niwas,  
Near Dahisar Municipal Dispensary,  
L T Road, Dahisar West, Mumbai - 400 068.  
Mobile No. : +91 9323823471. Tel : 022 28900243  
[mumbai@mirandatools.net](mailto:mumbai@mirandatools.net)

#### PUNE

Pimpri, Pune - 411018  
Cell No. : 09371223472/75 Tele/fax : 020-27423411  
[Pune@mirandatools.net](mailto:Pune@mirandatools.net)

#### AHMEDABAD

Relief Road, Ahmedabad - 380 001.  
Cell No. : 9328223476/77 Tele / Fax : 079-25507421  
[ahmedabad@mirandatools.net](mailto:ahmedabad@mirandatools.net)  
Star Mansion, 1st Floor, Opp. Electricity House

#### INDORE

[indore@mirandatools.net](mailto:indore@mirandatools.net)  
Cell : 09328223477

#### NEW DELHI

Cell No. : 9350885015 / 9313023481  
Tele / Fax : 011-23236319  
[delhi@mirandatools.net](mailto:delhi@mirandatools.net)  
1/22-B, Asaf Ali Road, New Delhi - 110 002

#### FARIDABAD

Faridabad - 121 001 Cell : 09313993118 / 9350623483  
Tele / Fax : 0129-2423126, [faridabad@mirandatools.net](mailto:faridabad@mirandatools.net)  
2a/46A, N.I.T. Faridabad, Near Hardware Chowk,

#### LUDHIANA

Cell No. : 09356706157 / 9317823485  
Tele / Fax : 0161-2532028 [ludhiana@mirandatools.net](mailto:ludhiana@mirandatools.net)  
2160/1, GILL ROAD, LUDHIANA - 141 003

#### KOLKATA

Cell No. : 09331701000 / 9339703486  
Tele / Fax : 033 22304115, [kolkata@mirandatools.net](mailto:kolkata@mirandatools.net)  
5-B, Narendrachandra, Dutta Sarani, Kolkata - 700 001.

#### CHENNAI

Cell No. : 09381223492 / 9381223490  
Tele / Fax : 044-25383351 [chennai@mirandatools.net](mailto:chennai@mirandatools.net)  
18, Perianna Maistry Street, 2nd Floor Chennai - 600 001.

#### BANGALORE

Bangalore - 560002 Cell No. : 09343143494 / 9341323491  
Tele / Fax : 080-22234045 [bangalore@mirandatools.net](mailto:bangalore@mirandatools.net)  
No.24 1ind Floor, Kota Complex, J. C. Road,

#### SECUNDERABAD

Cell No. : 09346210922 / 9393023494 Tele : 040-27713910  
[secunderabad@mirandatools.net](mailto:secunderabad@mirandatools.net)  
8-1-11/7, 2nd Floor, Market Street, Secunderabad - 500 003

Authorised Dealer