

V3 TOOLS EDGE

www.v3tools.com



Experience for Excellence

PRICE LIST - 0625

STEEL FILES

HSS TOOL BITS

HSS P.SH. DRILLS

HSS CENTRE DRILLS

MASONRY DRILLS

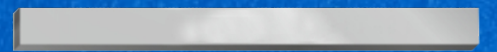
HSS END MILL

HSS TAPS

SOLID CARBIDE END MILLS

SOLID CARBIDE BALL NOSE

SOLID CARBIDE DRILLS



V3 TOOL EDGE PRIVATE LIMITED

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High Performance Tools & Files

**D.K. PANDEY**

C.E.O. V3 Tools

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By Mail :
v3tool20@gmail.com
Customer Care
9312023480

Our Presence

Always at your end
Indian Leading quality Tools Company

Dear V3 Tools Customer,

Since the V3 was founded over years ago.

To us sustainable, responsibility towards our customers and partners means to convey **reliability and competence in all our actions.**

We Committed

By making consequent investment in top quality tools. Cost effective process in **highest ability to supply** on the market and above all **in people.**

So that also in future, you have a skilled and committed partner in us to fulfill your expectations.

You as our customer stand clearly in the centre of company endeavour along with the benefit we bring you. Our focus in your **productivity, value creation and efficiency.** We are committed and challenge our self to improve bit by every day.

Challenge us

We take our responsibility seriously as Indian Leading partners for quality tools. You can rely on us. Today and in future

Terms & Conditions

1. GST Extra @ 18% on Selling Price
2. Delivery F.O.R. Destination Subject to order value
3. Prices & Specification are Subject to Change with out Prior Notice
4. All legal proceeding are subject to Delhi Jurisdiction
5. This Price list is Effective from 05/09/2025 & superceeds our Previous Price list.
6. For Unlisted Intermediate Sizes the prices of next listed size in inch or mm will be apply.
7. Special Products as per drawing also available against requirements.
8. All V3 items required Minimum order value 25,000/- net or MOV for special and non moving SKU each items Rs. 10,000/- or MOQ as mentioned in offer as per size which ever is higher or multiple of standard packing.
9. Dealers are Free to Charges lower than the maximum recommended retail price.
10. If Coating (TIN, TICN, TIALN, ALTIN, ALCRONA & TISINOS, NANO HARD) required while ordering will be charged extra if not included in price list.

Index

1.	Steel Files	V3x	-	5
2.	HSS Tool Bit		-	6
3.	HSS Jobber Drills		-	7-9
4.	HSS EASYCUT & SSPRO		-	10-11
5.	HSS Stub Drills		-	12
6.	HSS Long Series Drills		-	13
7.	HSS Extra Long Drills		-	14
8.	HSS End Mill & Masonry Drills		-	15
9.	HSS Centre Drills		-	16
10.	HSS Taps Coarse Pitch		-	17
11.	HSS Taps Fine Pitch		-	18
12.	HSS Taps BSW, UNC, BSF, UNF, BSP & BA		-	19
13.	Solid Carbide End Mills & Ball Nose		-	20
14.	Solid Carbide Extra Long End Mills		-	21
15.	Solid Carbide Extra Long Ball Nose		-	22
16.	Solid Carbide Jobber Drills		-	23
17.	Solid Carbide Stub Drills		-	24
18.	Solid Carbide Reamers & Centre Drills		-	25
19.	Hardness Comprasion		-	26
20.	Speed & feed Details for Carbide Tools		-	27

Company Profile

Our Company :

V3 Tools Edge is professionally managed Company by Sr. Person, Who is having **more than 32 years** of Marketing & Plant Experience from Premium Cutting & Hand tools Industries. We meet our Customer's requirement by committing to ensure consistent quality, timely delivery & Satisfying Customer needs of the **Times by Learning & Growing**. Our promise you will find a reliable "Partner for Growth" to provide solution of speedy & effortless smooth Innovative Tool Technology to fulfill your expectation.

Range of Products: **V3 Tools Edge** offers wide range of diverse application **Files & Tools**.

Our Operations

To become leading partner for growth in productivity metal working tools for machining.

Our focus in your productivity efficiency and value creation.

Trading Competence

With the **V3 tools Edge** you obtain most comprehensive range throughout market with **highest supply reliability through channel partner at the best value for money**.

Manufacturing Competence.

For more than 32 years of experience we had our finger on the pulse of the markets. Though a continuous dialogue with our customers and leading manufacturer for **premium quality**.

This know how and the unique technical competence of our manufacturer experts can be found combine in our premium brand V3

Service Competence

As a system partner for quality we are **always at your end**. From tool procurement to the optimum application. With comprehensive services for products and processes. From individual via professional advice. Always focused on **your success** due to **simplified processes and sustainable increase in productivity**.

Our Aim : Delighted Customers

Our Passion : Quality Tools

Our Vision : Our Customer's Success

Our Mission :

To become leading partner for growth in productivity metal working tools for machining

Our Values :

Simple

- In Communication
- In Organisation
- In all process

Focused :

- On Solutions / Services
- On core competencies
- On the essentials

Useful :

- For our Customers / Channel partner / suppliers
- For our company development
- For our staff / environment
- For the Next Generation.

Your Advantage

- Competent contact persons
- Highest Commitment
- Global Presence

STEEL FILE

IS-4595-1969, IS-1931:2000

Price RS. / Each

SIZE INCH/ MM	MACHINIST FILES															PACK QTY
	FLAT / HAND 			HALF ROUND 			ROUND 			SQUARE 			THREE SQUARE 			
	Bastard	2nd Cut	Smooth	Bastard	2nd Cut	Smooth	Bastard	2nd Cut	Smooth	Bastard	2nd Cut	Smooth	Bastard	2nd Cut	Smooth	
4"/100	231	287	323	440	476	501	296	341	384	341	366	384	357	384	402	10
6"/150	233	323	366	494	528	566	350	366	393	375	384	402	384	402	449	10
8"/200	242	386	421	620	692	771	395	402	456	384	404	440	509	530	573	10
10"/250	258	422	530	845	980	1041	539	566	611	548	566	611	719	782	816	10
12"/300	383	629	699	1140	1194	1295	672	711	789	674	719	816	908	953	1005	5
14"/350	890	935	1032	1421	1545	1628	944	989	1079	906	962	987	1223	1277	1322	5

SIZE INCH/ MM	MACHINIST FILES									FLAT Alumi- nium	H.RD Alumi- nium	Dread Naught Std. Cut with Tang	MILL FILE Two Sq. Edge	FLAT SUPER LIGHT	FLAT HANDLE	PACK QTY
	PILLAR NARROW			WARDING			KNIFE									
	Bastard	2nd Cut	Smooth	Bastard	2nd Cut	Smooth	Bastard	2nd Cut	Smooth							
4"/100				321	323	341	555	602	690				186			10
6"/150	384	393	404	431	438	474	564	618	708				188			10
8"/200	494	503	521	530	555	599	726	755	852	294	710	995	195			10
10"/250							1016	1041	1097	321	941	1284	206	204	206	10
12"/300							1374	1401	1403	474	1295	1367	285			5
14"/350										995	1520	1655	620			5

SIZE INCH/ MM	S A W F I L E S					R A S P F I L E S									PACK QTY
	HEAVY / REGULAR TAPER ▲	SLIM TAPER ▲	PIT SAW ⬤	CANT SAW ⬤	FEATHER EDGE ⬤	FLAT WOOD RASPS			HALF ROUND WOOD RASP			CABINET RASP		HORSE RASP	
						Bastard	2nd Cut	Smooth	Bastard	2nd Cut	Smooth	Regular	Smooth		
4"/100	71	71	69												10
5"/125	105	87			233*										10
6"/150	132	87		195	269*	386	384	404	458	465	483	474	519		10
8"/200	188	152		258		528	538	564	584	590	611	611	701		10
10"/250						620	665	692	701	735	735	744	816		10
12"/300						807	854	908	854	942	950	908	1061	825	5
14"/350						962	1016	1052	1061	1104	1160	1142	1286	1070	5

SIZE MM	NEEDLE FILES		
	Shape		Set of 12 Nos.
		CUT '0' or '2'	CUT '0' or '2'
140	     	197	2364**
160	     	206	2472**

SIZE MM	DIAMOND COATED NEEDLE FILES		
	Shape		Set of 6 Nos.
		CUT '0' or '2'	CUT '0' or '2'
140	     	753	4517**
160	     	780	4670**

(160 mm Needle Files available with handle in all shape @ 222/- each of 10 Nos. Box Packing)

STANDARD PACKING & NOTE :

All orders will be placed in Standard Packing as mentioned above

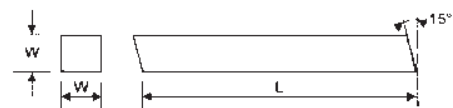
For sizes upto 250 mm : 10 Nos. per packet

For sizes above 250 mm : 5 Nos. per packet.

Feather Edge Files : * Marked 5 Nos per packet.

Diamond & Needle Files : ** Marked Assorted 6 shape are available in Cut '0 & 2' in packet of 12 Nos.

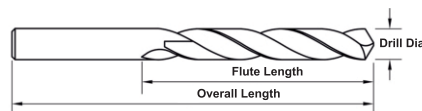
HSS TOOL BITS



NORMAL SIZE		V3x500 (T 42)	V3x700 (T 42 CRYO)	V3x900 (T 42- TINCOATED)	PKT. QTY
MM	INCH	SQ. Price Each Rs.	SQ. Price Each Rs.	SQ. Price Each Rs.	SQ. Price Each Rs.
6X75	1/4"X3"	494	519	645	10
6X100	1/4"X4"	663	690	861	10
6X150	1/4"X6"	1077	1131	1410	10
6X200	1/4"X8"	1826	1916	2373	10
8X75	5/16"X3"	645	674	836	10
8X100	5/16"X4"	872	915	1133	10
8X150	5/16"X6"	1403	1473	0	10
8X200	5/16"X8"	1996	2096	2591	10
10X75	3/8"X3"	755	791	980	10
10X100	3/8"X4"	996	1043	1293	10
10X150	3/8"X6"	1610	1691	2094	10
10X200	3/8"X8"	2294	2409	2985	10
12X75	1/2"X3"	1232	1293	1610	10
12X100	1/2"X4"	1610	1691	2094	10
12X150	1/2"X6"	2535	2663	3293	10
12X200	1/2"X8"	3534	3707	4596	10
16X100	5/8"X4"	2724	2861	3543	1
16X150	5/8"X6"	3977	4175	5172	1
16X200	5/8"X8"	5586	5866	7260	1
19X150	3/4"X6"	5471	5750	7119	1
19X200	3/4"X8"	7503	7874	9753	1
25X150	1"X6"	9186	9645	11940	1
25X200	1"X8"	12246	12858	-	1

As per the customer requirement other grade M35 & M42 will be made available against order.

HSS DRILLS



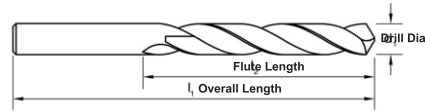
HSS PARALLEL SHANK JOBBER DRILL (GROUND FLUTE)

To IS:5101 / DIN:338 / BS:328

Size - Diameter			Length - mm		Price 10 Nos
MM	INCH	DG/LG	FLUTE	OVERALL	
0.4	1/64	60	5	20	1916
0.5		59	6	22	1520
0.6		58	7	24	1520
0.7		57	9	28	1520
0.8			10	30	1520
0.9		56	11	32	1520
1.00			12	34	539
1.02			12	34	539
1.04			12	34	539
1.07		55	14	36	539
1.09		54	14	36	539
1.10			14	36	539
1.18		53	14	36	539
1.19	3/64		16	38	539
1.20			16	38	539
1.30		52	16	38	539
1.32		51	16	38	539
1.40		50	18	40	539
1.50			18	40	539
1.51		49	20	43	539
1.59	1/16		20	43	539
1.60		48	20	43	539
1.61			20	43	575
1.70		47	20	43	575
1.78			22	46	575
1.80		46	22	46	575
1.85		45	22	46	575
1.90			22	46	575
1.93		44	24	49	575
1.98	5/64		24	49	575
1.99		43	24	49	575
2.00			24	49	575
2.06		42	24	49	575
2.08			24	49	575
2.10			24	49	575
2.18			27	53	575
2.20			27	53	575
2.26			27	53	575
2.30			27	53	575
2.37			30	57	575
2.38	3/32		30	57	575
2.40			30	57	575

Size - Diameter			Length - mm		Price 10 Nos
MM	INCH	DG/LG	FLUTE	OVERALL	
2.44	7/64	41	30	57	575
2.49		40	30	57	575
2.50			30	57	575
2.53		39	30	57	575
2.58		38	30	57	575
2.60			30	57	575
2.64		37	30	57	575
2.70			33	61	575
2.71		36	33	61	575
2.78			33	61	575
2.79	1/8	35	33	61	620
2.80			33	61	620
2.82		34	33	61	620
2.87		33	33	61	620
2.90			33	61	620
2.95		32	33	61	620
3.00			33	61	620
3.05	9/64	31	36	65	726
3.10			36	65	726
3.17			36	65	726
3.20			36	65	744
3.26		30	36	65	744
3.30			36	65	744
3.40			39	70	744
3.45		29	39	70	744
3.50			39	70	744
3.57	5/32	28	39	70	744
3.60			39	70	1106
3.66		27	39	70	1106
3.70			39	70	1106
3.73		26	39	70	1106
3.80		25	43	75	1106
3.86		24	43	75	1106
3.90			43	75	1106
3.91		23	43	75	1106
3.97			43	75	1106
3.99		22	43	75	1106
4.00			43	75	1106
4.04		21	43	75	1331
4.09		20	43	75	1331
4.10			43	75	1331
4.20			43	75	1331

HSS DRILLS



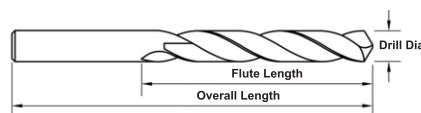
HSS PARALLEL SHANK JOBBER DRILL (GROUND FLUTE)

To IS:5101 / DIN:338 / BS:328

Size - Diameter			Length - mm		Price 10 Nos
MM	INCH	DG/LG	FLUTE	OVERALL	
4.22		19	43	75	1331
4.30		18	47	80	1331
4.37	11/64		47	80	1331
4.39		17	47	80	1331
4.40			47	80	1331
4.50		16	47	80	1752
4.57		15	47	80	1752
4.60			47	80	1752
4.62		14	47	80	1752
4.70		13	47	80	1752
4.76	3/16		52	86	1752
4.80		12	52	86	1752
4.85		11	52	86	1925
4.90			52	86	1925
4.92		10	52	86	1925
4.98		9	52	86	1925
5.00			52	86	1925
5.06		8	52	86	1925
5.10			52	86	1925
5.11		7	52	86	1925
5.16	13/64		52	86	1925
5.18		6	52	86	1925
5.20			52	86	1925
5.22		5	52	86	2085
5.30			52	86	2085
5.31		4	57	93	2085
5.40			57	93	2085
5.41		3	57	93	2085
5.50			57	93	2085
5.56	7/32		57	93	2085
5.60			57	93	2085
5.61		2	57	93	2319
5.70			57	93	2319
5.79		1	57	93	2319
5.80			57	93	2319
5.90			57	93	2319
5.94		A	57	93	2319
5.95	15/64		57	93	2319
6.00			57	93	2319

Size - Diameter			Length - mm		Price 10 Nos
MM	INCH	DG/LG	FLUTE	OVERALL	
6.04		B	63	101	2546
6.10			63	101	2546
6.15		C	63	101	2546
6.20			63	101	2546
6.25		D	63	101	2546
6.30			63	101	2546
6.35	1/4	E	63	101	2546
6.40			63	101	2546
6.50			63	101	3302
6.53		F	63	101	3302
6.60			63	101	3302
6.63		G	63	101	3302
6.70			63	101	3302
6.75	17/64	H	69	109	3302
6.80			69	109	3302
6.90		I	69	109	3615
7.00			69	109	3615
7.03		J	69	109	3615
7.10			69	109	3615
7.14	9/32	K	69	109	3615
7.20			69	109	3615
7.30			69	109	3824
7.37		L	69	109	3824
7.40			69	109	3824
7.49		M	69	109	3824
7.50			69	109	3824
7.54	19/64		75	117	4155
7.60			75	117	4155
7.67		N	75	117	4155
7.70			75	117	4155
7.80			75	117	4155
7.90			75	117	4535
7.94	5/16		75	117	4535
8.00			75	117	4535
8.03		O	75	117	4535
8.10			75	117	4535
8.20		P	75	117	4535
8.30			75	117	5381
8.33	21/64		75	117	5381

HSS DRILLS



HSS PARALLEL SHANK JOBBER DRILL (GROUND FLUTE)

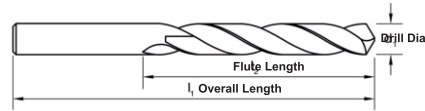
To IS:5101 / DIN:338 / BS:328

Size - Diameter			Length - mm		Price 10 Nos
MM	INCH	DG/LG	FLUTE	OVERALL	
8.40			75	117	5381
8.43		Q	75	117	5381
8.50			75	117	5381
8.60			81	125	5381
8.61		R	81	125	5381
8.70			81	125	5381
8.73	11/32		81	125	5741
8.80			81	125	5741
8.84		S	81	125	5741
8.90			81	125	5741
9.00			81	125	5741
9.09		T	81	125	5927
9.10			81	125	5927
9.13	23/64		81	125	5927
9.20			81	125	5927
9.30			81	125	5927
9.34		U	81	125	5927
9.40			81	125	5927
9.50			81	125	5927
9.52	3/8		87	133	6747
9.58		V	87	133	6747
9.60			87	133	6747
9.70			87	133	6747
9.80		W	87	133	6747
9.90			87	133	7514
9.92	25/64		87	133	7514
10.00			87	133	7514
10.08		X	87	133	7514
10.10			87	133	7514
10.20			87	133	7514
10.26		Y	87	133	8180
10.30			87	133	8180
10.32	13/32		87	133	8180

Size - Diameter			Length - mm		Price 10 Nos
MM	INCH	DG/LG	FLUTE	OVERALL	
10.40			87	133	8180
10.49		Z	87	133	8180
10.50			87	133	8180
10.60			87	133	8180
10.70			94	142	8646
10.72	27/64		94	142	8646
10.80			94	142	8646
10.90			94	142	8646
11.00			94	142	8646
11.10			94	142	9645
11.11	7/16		94	142	9645
11.20			94	142	9645
11.30			94	142	9645
11.40			94	142	9645
11.50			94	142	10160
11.51	29/64		94	142	10160
11.60			94	142	10160
11.70			94	142	10160
11.80			94	142	10160
11.90			101	151	10862
11.91	15/32		101	151	10862
12.00			101	151	10862
12.10			101	151	10862
12.20			101	151	10862
12.30	31/64		101	151	11526
12.40			101	151	11526
12.50			101	151	11526
12.60			101	151	11526
12.70	1/2		101	151	12159
12.80			101	151	12159
12.90			101	151	12159
13.00			101	151	12159

Note:

1. Intermediate, unlisted sizes, prize of the next listed size will be charge.
2. All sizes can be order in multiple of 10 numbers.
3. Minimum order value required for non moving items Rs. 10,000/- Net each size.
4. For M35 Drills 40% will be charged extra.

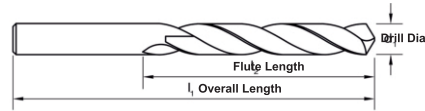


HSSE PARALLEL SHANK EASYCUT & SSPRO (GROUND FLUTE)

To IS:5101 / DIN:338 / BS:328

Size - Diameter			Length - mm		PRICE 10 NOS	
MM	INCH	DG/LG	FLUTE	OVERALL	EASYCUT DRILL	M35 SSPRO DRILL
3.00	1/8		33	61	710	800
3.05		31	36	65	800	980
3.10			36	65	800	980
3.17			36	65	800	980
3.20			36	65	870	980
3.26		30	36	65	870	980
3.30			36	65	870	980
3.40	9/64		39	70	870	980
3.45		29	39	70	870	980
3.50			39	70	870	980
3.57		28	39	70	870	980
3.60			39	70	1250	1520
3.66		27	39	70	1250	1520
3.70			39	70	1250	1520
3.73		26	39	70	1250	1520
3.80		25	43	75	1250	1520
3.86	5/32	24	43	75	1250	1520
3.90			43	75	1250	1520
3.91		23	43	75	1250	1520
3.97			43	75	1250	1520
3.99		22	43	75	1250	1520
4.00			43	75	1250	1520
4.04		21	43	75	1500	1860
4.09		20	43	75	1500	1860
4.10			43	75	1500	1860
4.20	11/64		43	75	1500	1860
4.22		19	43	75	1500	1860
4.30		18	47	80	1500	1860
4.37			47	80	1500	1860
4.39		17	47	80	1500	1860
4.40			47	80	1500	1860
4.50		16	47	80	2040	2420
4.57		15	47	80	2040	2420
4.60	3/16		47	80	2040	2420
4.62		14	47	80	2040	2420
4.70		13	47	80	2040	2420
4.76			52	86	2040	2420
4.80		12	52	86	2040	2420
4.85		11	52	86	2150	2670
4.90			52	86	2150	2670
4.92		10	52	86	2150	2670
4.98		9	52	86	2150	2670

Size - Diameter			Length - mm		PRICE 10 NOS	
MM	INCH	DG/LG	FLUTE	OVERALL	EASYCUT DRILL	M35 SSPRO DRILL
5.00	13/64	8	52	86	2150	2670
5.06			52	86	2150	2670
5.10		7	52	86	2150	2670
5.11			52	86	2150	2670
5.16		6	52	86	2150	2670
5.18			52	86	2150	2670
5.20		5	52	86	2150	2670
5.22			52	86	2330	2670
5.30		4	52	86	2330	2870
5.31	7/32		57	93	2330	2870
5.40		3	57	93	2330	2870
5.41			57	93	2330	2870
5.50			57	93	2330	2870
5.56			57	93	2330	2870
5.60		2	57	93	2330	2870
5.61			57	93	2330	2870
5.70		1	57	93	2330	3210
5.79	15/64		57	93	2330	3210
5.80			57	93	2330	3210
5.90		A	57	93	2330	3210
5.94			57	93	2330	3210
5.95			57	93	2330	3210
6.00		B	57	93	2330	3210
6.04			63	101	2870	3500
6.10		C	63	101	2870	3500
6.15	1/4		63	101	2870	3500
6.20		D	63	101	2870	3500
6.25			63	101	2870	3500
6.30		E	63	101	2870	3500
6.35			63	101	2870	3500
6.40			63	101	2870	3500
6.50		F	63	101	3680	4470
6.53	17/64		63	101	3680	4470
6.60		G	63	101	3680	4470
6.63			63	101	3680	4470
6.70		H	63	101	3680	4470
6.75			69	109	3680	4470
6.80		I	69	109	3680	4470
6.90			69	109	4020	4920
7.00		J	69	109	4020	4920
7.03			69	109	4020	4920
7.10			69	109	4020	4920



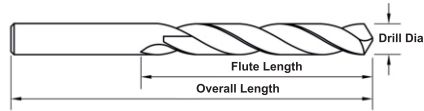
HSSE PARALLEL SHANK EASYCUT & SSPRO (GROUND FLUTE)

To IS:5101 / DIN:338 / BS:328

Size - Diameter			Length - mm		PRICE 10 NOS	
MM	INCH	DG/LG	FLUTE	OVERALL	EASYCUT DRILL	M35 SSPRO DRILL
7.14	9/32	K	69	109	4020	4920
7.20			69	109	4020	4920
7.30			69	109	4220	5190
7.37		L	69	109	4220	5190
7.40			69	109	4220	5190
7.49		M	69	109	4220	5190
7.50			69	109	4220	5190
7.54	19/64		75	117	4650	5190
7.60			75	117	4650	5640
7.67		N	75	117	4650	5640
7.70			75	117	4650	5640
7.80			75	117	4650	5640
7.90			75	117	5030	6110
7.94	5/16		75	117	5030	6110
8.00			75	117	5030	6110
8.03		O	75	117	5030	6110
8.10			75	117	5030	6110
8.20		P	75	117	5030	6110
8.30			75	117	6000	7440
8.33	21/64		75	117	6000	7440
8.40			75	117	6000	7440
8.43		Q	75	117	6000	7440
8.50			75	117	6000	7440
8.60			81	125	6000	7440
8.61		R	81	125	6000	7440
8.70			81	125	6000	7440
8.73	11/32		81	125	6380	7440
8.80			81	125	6380	7910
8.84		S	81	125	6380	7910
8.90			81	125	6380	7910
9.00			81	125	6380	7910
9.09		T	81	125	6570	7910
9.10			81	125	6570	8090
9.13	23/64		81	125	6570	8090
9.20			81	125	6570	8160
9.30			81	125	6570	8160
9.34		U	81	125	6570	8160
9.40			81	125	6570	8160
9.50			81	125	6570	8160
9.52	3/8		87	133	7460	9260
9.58		V	87	133	7460	9260
9.60			87	133	7460	9260

Size - Diameter			Length - mm		PRICE 10 NOS	
MM	INCH	DG/LG	FLUTE	OVERALL	EASYCUT DRILL	M35 SSPRO DRILL
9.70	25/64	W	87	133	7460	9260
9.80			87	133	7460	9260
9.90			87	133	8360	10250
9.92			87	133	8360	10250
10.00		X	87	133	8360	10250
10.08			87	133	8360	10250
10.10			87	133	8360	10250
10.20	13/32	Y	87	133	8360	10250
10.26			87	133	9080	11150
10.30			87	133	9080	11150
10.32			87	133	9080	11150
10.40		Z	87	133	9080	11150
10.49			87	133	9080	11150
10.50	27/64		87	133	9080	11150
10.60			87	133	9080	11150
10.70			94	142	9620	11780
10.72			94	142	9620	11780
10.80			94	142	9620	11780
10.90	7/16		94	142	9620	11780
11.00			94	142	9620	11780
11.10			94	142	10700	13200
11.11			94	142	10700	13200
11.20			94	142	10700	13200
11.30	29/64		94	142	10700	13200
11.40			94	142	10700	13200
11.50			94	142	11310	13920
11.51			94	142	11310	13920
11.60			94	142	11310	13920
11.70	15/32		94	142	11310	13920
11.80			94	142	11310	13920
11.90			101	151	12050	14840
11.91			101	151	12050	14840
12.00	31/64		101	151	12050	14840
12.10			101	151	12050	14840
12.20			101	151	12050	14840
12.30			101	151	12770	15740
12.40	1/2		101	151	12770	15740
12.50			101	151	12770	15740
12.60			101	151	12770	15740
12.70			101	151	13490	16620
12.80			101	151	13490	16620
12.90			101	151	13490	16620
13.00			101	151	13490	16620

HSS DRILLS



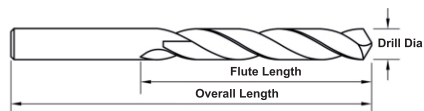
HSS PARALLEL SHANK STUB DRILL (GROUND FLUTE)

To IS:5100 / DIN:1897 / BS:328

Size - Diameter			Length - mm	Price
MM	INCH	FLUTE	OVERALL	10 Nos
1.00	3/64	6	26	555
1.19		8	30	555
1.20		8	30	555
1.50		9	32	555
1.59	1/16	10	34	555
1.80		11	36	555
1.98	5/64	12	38	555
2.00		12	38	555
2.20		13	40	555
2.38	3/32	14	43	555
2.50		14	43	555
2.78	7/64	16	46	555
2.80		16	46	590
3.00		16	46	590
3.17	1/8	18	49	708
3.20		18	49	744
3.50		20	52	744
3.57	9/64	20	52	744
3.80		22	55	1059
3.97	5/32	22	55	1059
4.00		22	55	1059
4.20		22	55	1188
4.37	11/64	24	58	1188
4.50		24	58	1574
4.76	3/16	26	62	1574
4.80		26	62	1574
5.00		26	62	1687
5.16	13/64	26	62	1687
5.20		26	62	1687
5.50		28	66	1826
5.56	7/32	28	66	1826
5.80		28	66	2069
5.95	15/64	28	66	2069
6.00		28	66	2069
6.20		31	70	2310
6.35	1/4	31	70	2310
6.50		31	70	2885
6.75	17/64	34	74	2885
6.80		34	74	2885

Size - Diameter			Length - mm	Price
MM	INCH	FLUTE		10 Nos
7.00		34	74	3167
7.14	9/32	34	74	3167
7.20		34	74	3167
7.50		34	74	3284
7.54	19/64	37	79	3977
7.80		37	79	3977
7.94	5/16	37	79	3977
8.00		37	79	3903
8.20		37	79	3903
8.33	21/64	37	79	4886
8.50		37	79	4886
8.73	11/32	40	84	5109
8.80		40	84	5109
9.00		40	84	5109
9.13	23/64	40	84	5388
9.20		40	84	5388
9.50		40	84	5388
9.52	3/8	43	89	5622
9.80		43	89	5622
9.92	25/64	43	89	6884
10.00		43	89	6884
10.20		43	89	6884
10.32	13/32	43	89	7406
10.50		43	89	7406
10.72	27/64	47	95	8333
10.80		47	95	8333
11.00		47	95	8333
11.11	7/16	47	95	8684
11.20		47	95	8684
11.50		47	95	9836
11.51	29/64	47	95	9836
11.80		47	95	9836
11.91	15/32	51	102	9836
12.00		51	102	9836
12.20		51	102	9836
12.30	31/64	51	102	9836
12.50		51	102	9836
12.70	1/2	51	102	10896
12.80		51	102	10896
13.00		51	102	10896

HSS DRILLS



HSS PARALLEL SHANK LONG SERIES DRILLS

To IS:5102 / DIN:340 / BS:328 / I.S.O.

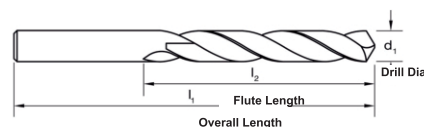
PRICE EACH

Size - Diameter			Length - mm OVERALL	M2	M35
MM	INCH	FLUTE			
1	3/16	33	56	294	323
1.1		37	60	294	323
1.2		41	65	294	323
1.4		45	70	294	323
1.5		45	70	294	323
1.7		50	76	294	323
1.9		53	80	294	323
2		56	85	294	323
2.1		56	85	294	323
2.2		59	90	294	323
2.3	1/4	59	90	375	420
2.4		62	95	375	420
2.5		62	95	375	420
2.6		62	95	375	420
2.7		66	100	375	420
2.8		66	100	375	420
3.00		66	100	377	422
3.10		69	106	377	422
3.20		69	106	377	422
3.30		69	106	377	422
3.40		69	106	377	422
3.50		73	112	377	422
3.70		78	119	404	458
4.00		78	119	404	458
4.20		78	119	404	458
4.30		82	126	404	458
4.50		82	126	404	458
4.76		87	132	404	458
5.00		87	132	474	530
5.10		87	132	474	530
5.30		87	132	555	620
5.50		91	139	555	620
5.60		91	139	600	674
5.80		91	139	600	674
6.00		91	139	600	674
6.10		97	148	672	762
6.30		97	148	672	762
6.35		97	148	672	762

PRICE EACH

Size - Diameter			Length - mm OVERALL	M2	M35
MM	INCH	FLUTE			
6.40	17/64	97	148	872	980
6.50		97	148	872	980
6.60	9/32	97	148	1052	1185
6.70		97	148	1052	1185
6.75	19/64	102	156	1052	1185
7.00		102	156	1052	1185
7.14		102	156	1052	1185
7.50		102	156	1052	1185
7.54		109	165	1052	1185
7.60	5/16	109	165	1052	1185
7.70		109	165	1052	1185
7.80		109	165	1052	1185
7.90		109	165	1086	1221
7.94	11/32	109	165	1086	1221
8.00		109	165	1086	1221
8.50		109	165	1086	1221
8.60		115	175	1203	1295
8.73	3/8	115	175	1203	1295
8.80		115	175	1203	1349
9.00		115	175	1203	1349
9.50		115	175	1203	1536
9.52		121	184	1203	1536
9.80		121	184	1401	1572
10.00		121	184	1411	1700
10.20	7/16	121	184	1583	1781
10.50		121	184	1628	1833
10.80		128	195	1844	2004
11.00	29/64	128	195	2177	2076
11.11		128	195	2105	2076
11.20	15/32	128	195	2105	2076
11.50		128	195	2105	2078
11.51		128	195	2105	2078
11.80	1/2	128	195	2105	2078
11.91		134	205	2105	2078
12.00		134	205	2105	2168
12.50		134	205	2346	2625
12.70		134	205	2600	2915
13.00		134	205	2600	2915

HSS DRILLS



HSS PARALLEL SHANK - EXTRA LONG SERIES DRILLS

Sizes		OAL MM FL MM	Prise Rs./Each				
MM	INCH		150 100	200 150	250 200	300 250	350 300
3	1/8		1052	1457	2049	2456	
3.5			1115	1457	2202	2897	
4	5/32		1052	1454	2202	2897	2993
4.5			1086	1358	2249	3176	4173
5	3/16		1086	1527	2249	3176	4173
5.5	7/32		1142	1610	2472	3267	4866
6	1/4		1142	1644	2472	3267	4866
6.5				1986	3122	3743	5442
7				2088	3122	3743	5442
7.5	9/32			2202	3491	4022	5586
8	5/16			2321	3491	4022	5586
8.5	11/32			2411	3561	4148	5085
9				2418	3561	4148	5085
9.5	3/8			2483	3644	4275	5939
10				2526	3644	4275	5939
10.5	13/32			2744	3815	5190	6720
11	7/16				3815	5190	6720
11.5					4011	5316	7163
12	15/32				4011	5316	7163
12.5	1/2				4254	5631	7593

HSS (M35) PARALLEL SHANK - EXTRA LONG SERIES DRILLS

Sizes		OAL MM FL MM	Prise Rs./Each				
MM	INCH		150 100	200 150	250 200	300 250	350 300
3.00	1/8		1257	1691	2112		
3.50			1275	1709	2112		
4.00	5/32		1275	1709	2580	3390	4380
4.50			1275	1745	2580	3500	4380
5.00	3/16		1275	1781	2600	3723	4596
5.50	7/32		1392	1898	2816	3723	4794
6.00	1/4		1392	1923	2897	3824	4974
6.50				2321	3365	4437	4974
7.00				2573	3705	4380	5586
7.50	9/32			2573	3860	4463	5586
8.00	5/16			2699	4095	4668	5714
8.50	11/32			2825	4166	4866	6110
9.00				2825	4166	4866	6110
9.50	3/8			2913	4182	5550	6290
10.00				2958	4265	5660	6576
10.50	13/32			3212	4436	5955	6900
11.00				3311	4470	6153	7100
11.50				3581	4686	6200	7100
12.00					4893	6200	7325
12.50					4983	6560	7800

HSS END MILLS



HSS PARALLEL SHANK END MILLS
IS 6353 - 1991 & BS - 122 (PART-1) 1953

DIA		SHANK DIA	CEL	OAL	PRICE EACH
MM	INCH				
3	1/8	4	8	40	665
4	5/32	4	11	43	665
5	3/16	5	13	47	665
6	1/4	6	13	57	746
7		8	16	60	845
8	5/16	8	19	63	845
9	3/8	10	19	69	845
10		10	22	72	845
11	7/16	12	22	79	845
12	1/2	12	26	83	872
13		12	26	83	996
14	9/16	12	26	83	1079
15		16	26	83	1320
16	5/8	16	32	92	1329
17		16	32	92	1455
18		16	32	92	1608
19	3/4	16	32	92	1608
20	13/16	20	38	104	1860



HSS PARALLEL SHANK SLOT MILL
IS 6353 - 1991 & BS - 122 (PART-1) 1953

DIA		SHANK DIA	CEL	OAL	PRICE EACH
MM	INCH				
3	1/8	4	7	39	816
4	5/32	4	7	39	816
5	3/16	6	8	49	816
6	1/4	6	8	52	872
7		8	10	54	872
8	5/16	8	11	55	872
9	3/8	8	11	61	872
10		10	13	63	906
11		10	13	70	906
12	1/2	12	16	73	989
14	9/16	12	16	73	1268
15	5/8	12	16	73	1637

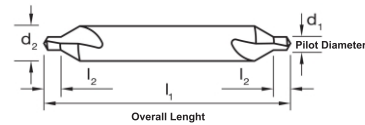
MASONRY DRILLS - CARBIDE TIPPED
(GROUND FLUTED & BRIGHT PLATED)

Sizes			Prise Rs./Each	
MM	INCH	FLUTE	OVERALL	STD. DRILLS
3	1/8	40	76	78
4	5/32	45	85	87
5	3/16	45	90	89
5.5	7/32	45	90	107
6	15/64	60	110	123
6.5	1/4	60	110	105
7	9/32	60	110	206
8	5/16	80	120	186
9	11/32	80	120	231
10	3/8	80	120	213
11	7/16	115	160	296
12	15/32	115	160	260
13	1/2	115	160	260

**Note:**

1. Intermediate, unlisted sizes, prize of the next listed size will be charge.
2. All sizes can be order in multiple of 10 numbers.
3. Minimum order value required for non moving items Rs. 10,000/- Net each size.
4. M35 and M42 End mill available as per Requirement.

HSS CENTRE DRILL

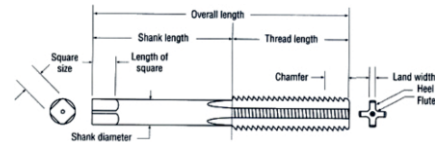


Type A & R IS : 6710-1977						
Pilot Dia	Body Dia	OVER ALL		PILOT length		Price/EACH
		Max.	Min	Max.	Min	
1.00	3.15	33.50	29.50	1.60	1.30	249
1.25	3.15	33.50	29.50	1.90	1.60	249
1.60	4.00	37.50	33.50	2.40	2.00	249
2.00	5.00	42.00	38.00	2.90	2.50	249
2.50	6.30	47.00	43.00	3.60	3.10	285
3.15	8.00	52.00	48.00	4.40	3.90	447
4.00	10.00	59.00	53.00	5.60	5.00	549
5.00	12.50	66.00	60.00	6.90	6.30	935
6.30	16.00	74.00	68.00	8.60	8.00	1104
8.00	20.00	83.00	77.00	11.50	10.10	1707
10.00	25.00	103.00	97.00	14.20	12.80	2195

Type B IS : 6709 - 1977						
Pilot Dia	Body Dia	OVER ALL		PILOT length		Price/EACH
		Max.	Min	Max.	Min	
1.00	4.00	37.50	33.50	1.80	1.40	404
1.25	5.00	42.00	38.00	1.90	1.60	438
1.60	6.30	47.00	43.00	2.40	2.00	512
2.00	8.00	52.00	48.00	3.30	2.50	719
2.50	10.00	59.00	53.00	4.10	3.10	917
3.15	11.20	63.00	57.00	4.90	3.90	1232
4.00	14.00	70.00	64.00	6.20	5.00	1653
5.00	18.00	77.00	73.00	6.90	6.30	2357
6.30	20.00	82.00	78.00	8.60	8.00	2778

B.S. 328 (PART 2) 1950						
Size B.S. NO	Pilot Dia	Body Dia	OVER ALL	PILOT length inch		Price/EACH
				Max.	Min	
BS1	3/64"	1/8"	1.1/2	5/64	1/16	242
BS2	1/16"	3/16"	1.3/4	3/32	5/64	242
BS3	3/32"	1/4"	2	5/32	1/8	276
BS4	1/8"	5/16"	2.1/4	3/16	5/32	431
BS5	3/16"	7/16"	2.1/2	9/32	1/4	573
BS6	1/4"	5/8"	3	11/32	5/16	1070
BS7	5/16"	3/4"	3.1/2	7/16	13/32	1718

HSS TAPS



COARSE PITCH

Price RS. / Each

HSSGROUND THREAD HAND TAPS-COARCE PITCH

IS 6175-PART 1,2 & 3 - 1992

Size	Drill Size	TL	OAL	Str. Flute	SPPT (Spiral Point)	Spiral Flute
M3X0.5	2.5	11	48	431	546	593
M4X0.7	3.3	13	53	431	546	593
M5X0.8	4.2	16	58	474	573	629
M6X1.0	5	19	66	474	573	645
M8X1.25	6.75	22	72	564	663	737
M10X1.5	8.5	24	80	681	828	926
M12X1.75	10.2	29	89	1061	1268	1401
M14X2.0	12	30	95	1545	1860	2123
M16X2.0	14	32	102	1545	1860	2123
M18X2.5	15.5	37	112	2348	2843	3093
M20X2.5	17.5	37	112	3203	3554	4130
M22X2.5	19.5	38	118	3203	3813	4281
M24X3.0	21	45	130	3606	4254	4650
M27X3.0	24	45	135	5397	6657	8468
M30X3.5	26.5	48	138	6117	7379	9557

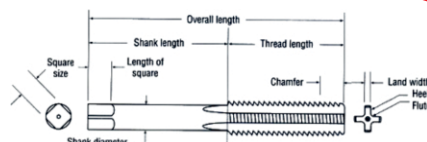
HSSGROUND THREAD LONG SHANK MACHINE TAPS

IS 6175-PART-4 1991

Size	Drill Size	TL	OAL	Str. Flute	Str. Flute
				Type A,C & D	Type B
M3X0.5	2.51	11	66	953	1124
M4X0.7	3.32	13	73	953	1124
M5X0.8	4.22	16	79	683	978
M6X1.0	5.03	19	89	735	1034
M8X1.25	6.78	22	97	798	1034
M10X1.5	8.54	24	108	1023	1221
M12X1.75	10.3	29	119	1446	1716
M14X2.0	12.05	30	127	2103	2492
M16X2.0	14.05	32	137	2103	2492
M18X2.5	15.56	37	149	3039	3635
M20X2.5	17.56	37	149	3804	4472
M22X2.5	19.65	38	158	4254	4553
M24X3.0	21.08	45	172	4607	5435



HSS TAPS



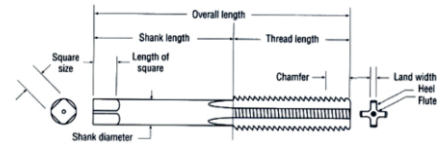
FINE PITCH

Price RS. / Each

HSSGROUND THREAD HAND TAPS-COARCE PITCH					IS 6175-PART 1,2 & 3 - 1992	
Size	Drill SIZE	TL	OAL	Str. Flute	SPPT (Spiral Point)	Spiral Flute
M3X0.35	2.66	11	48	647	771	845
M4X0.5	3.51	13	53	647	771	845
M5X0.5	4.51	17	58	647	782	845
M6X0.75	5.25	19	66	647	798	845
M8X0.75/1.0	7.27/7.03	16/19	66/69	656	906	980
M10X0.75/1.0/1.25	9.27/9.03/8.78	17/20/20	73/76/76	744	1041	1158
M12X1.0/1.25/1.50	11.03/10.78/10.54	20/24/29	80/84/89	1239	1401	1653
M14X1.0/1.25	13.03/12.78	22/25	87/90	1592	1907	2267
M16X1.0	15.03	22	92	1592	1952	2267
M18X1.0/1.5	17.03/16.54	22/29	97/104	2645	3239	3455
M20X2.0	18.05	37	112	3388	4310	3455
M22X2.0	20.05	33	118	3930	4731	5609
M24X1.0/1.5/2	23.03/22.54/22.05	29/35/35	114/120/120	3995	4731	5813
M25X1.5	23.54	35	120	4407	5696	7865
M26X1.5/2.0	24.54	35	120	4886	6155	8225
M27X1.5/2.0	25.54/25.05	37	127	6380	7613	10043
M30X1.0/1.5	29.03/28.54	30/37	120/127	6704	8063	10880

HSSGROUND THREAD LONG SHANK MACHINE TAPS				IS 6175-PART-4 1991	
Size	Drill SIZE	TL	OAL	Type A,C & D	Type B
M3X0.35	2.66	11	66	879	1133
M4X0.5	3.51	13	73	879	1050
M5X0.5	4.51	16	79	836	978
M6X0.75	5.25	19	89	836	978
M8X0.75/1.0	7.27/7.03	16/19	91/97	944	1124
M10X0.75/1.0/1.25	9.27/9.03/8.78	17/20/20	104/108/108	1104	1223
M12X1.0/1.25/1.50	11.03/10.78/10.54	20/24/29	110/119/119	1583	1869
M14X1.0/1.25	13.03/12.78	22/25	124/127	2044	2422
M16X1.0	15.03	22	127	2204	2600
M18X1.0/1.5	17.03/16.54	22/29	135/142	3606	4247
M20X2.0	18.05	37	149	4749	6027
M22X2.0	20.05	38	158	4823	6110
M24X1.0	22.54	35	172	5264	6666
M24X1.5	22.54	35	172	5264	6666
M24X2.0	22.05	35	172	5264	6666

HSS TAPS



BSW/UNC

Size X TPI	DRILL SIZE	TL	OAL	Str. Flute	Spiral Point (SPPT)
NO.5X40	2.65	11	48	503	611
NO.6X32	2.85	13	50	503	611
NO.8X32	3.50	13	53	503	611
NO.10X24	3.90	16	58	503	611
NO.12X24	4.50	17	62	627	744
1/8X40	2.60	11	48	449	546
3/16X24	3.60	16	58	449	566
1/4X20	5.10	19	66	474	566
5/16X18	6.60	22	72	530	665
3/8X16	8	24	80	647	798
7/16X14	9.40	25	85	836	1034
1/2X13	10.80	29	89	1059	1275
9/16X12	12.20	30	95	1545	1860
5/8X11	13.50	32	102	1545	1860
11/16	15.00	37	112	2256	2778
3/4X10	16.50	37	112	2346	2816
7/8X9	19.50	38	118	3239	3878
1X8	22.25	45	130	4058	4875
1.1/8X7	25.00	48	138	5451	6542
1.1/4X7	28.00	51	151	6576	7890
1.3/8X6	30.75	57	162	8475	
1.1/2X6	34.00	60	170	10187	

BSF / UNF

Price RS. / Each

Size X TPI	DRILL SIZE	TL	OAL	Str. Flute	Spiral Point (SPPT)
NO.5	2.70	11	48	503	611
NO.6	2.95	13	50	503	627
NO.8	3.50	13	53	503	656
NO.10	4.10	16	58	503	656
NO.12	4.70	17	62	537	663
3/16X32	4.00	16	58	537	663
1/4X26	5.40	19	66	557	665
5/16X22	6.30	22	72	618	744
3/8X20/24	9.80	24	80	764	942
7/16X18/20	11.20	25	85	978	1176
1/2X16/20	12.70	29	89	1203	1412
9/16X16/18	14.00	30	95	1545	1860
5/8X14	15.75	32	102	1826	2004
11/16X14	17.00	37	112	2256	2778
3/4X12	20.00	37	112	2627	3390
7/8X11	23.00	38	118	3662	4445
1X10	26.00	45	130	5055	5444
1.1/8X9	29.00	48	138	6441	6540
1.1/4X9	32.00	57	151	7993	7883
1.3/8X8	35.00	57	162	9899	
1.1/2X8	38.00	60	170	10187	

B.A TAPS

B.A NO	DRILL SIZE	TL	OAL	STRAIGHT FLUTE	SPIRAL POINT
0	5.10	19	66	573	690
1	4.49	17	62	573	690
2	3.97	16	58	503	618
3	3.44	13	53	503	618
4	3.01	13	50	503	618
5	2.67	11	48	503	618
6	2.32	9.5	44.5	557	618
8	1.81	9.5	44.5	942	906
10	1.39	8	41	1122	1304
11	1.22	8	41	1736	2087
12	1.05	7	40	1736	2087

BSP(P), BSPT & NPT TAPS

Size	DRILL SIZE	TL	OAL	BSP(P)	BSPT	NPT
1/8	8.86	3/4	2.1/8	717	1016	1041
1/4	11.87	1.1/16	2.7/16	1115	1770	1826
3/8	15.38	1.1/16	2.9/16	1680	2283	2321
1/2	19.21	1.3/8	3.1/8	2454	3417	3489
5/8	21.17	1.3/8	3.3/16	2780		
3/4	24.7	1.3/8	3.1/4	3669	5064	3743
7/8	28.46	1.9/16	3.1/2			
1	31.03	1.3/4	3.3/4	5622	7874	8070

SOLID CARBIDE TOOLS

SC END MILL 2/4 FLUTE

Price RS. / Each

DIA	SH.DIA	FL	OAL	V3x ALCRONA 50 HRC	V3x TISINOS 65 HRC	V3x NANOHARD 66 HRC
1.0	4.0	3	50	980	1124	1275
1.5	4.0	4	50	980	1124	1275
2.0	4.0	8	50	980	1124	1275
2.5	4.0	15	50	980	1124	1275
3.0	3.0	12	50	980	1124	1275
4.0	4.0	15	50	1160	1331	1509
5.0	5.0	20	55	1520	1748	1977
6.0	6.0	20	60	1770	2033	2301
7.0	7.0	25	65	2060	2366	2679
8.0	8.0	25	65	2130	2447	2769
9.0	9.0	30	75	3500	4025	4551
10.0	10.0	30	75	3950	4542	5136
11.0	11.0	35	75	4400	5057	5721
12.0	12.0	35	75	4850	5579	6305
14.0	14.0	40	80	7800	8970	10140
16.0	16.0	40	90	10500	12075	13650
18.0	18.0	40	100	14100	16215	18330
20.0	20.0	40	100	17000	19554	22100
22.0	22.0	40	100	20400	23460	26520
24.0	24.0	40	100	23300	26792	30291
25.0	25.0	40	100	25100	28865	32631

END MILLS



SC BALL NOSE END MILL 2/4 FLUTE

BALL NOSE

DIA	SH.DIA	FL	OAL	V3x ALCRONA 50 HRC	V3x TISINOS 65 HRC	V3x NANOHARD 66 HRC
2.0	3.0	10	50	1070	1230	1392
3.0	3.0	10	50	1070	1230	1392
4.0	4.0	14	50	1275	1466	1658
5.0	5.0	20	55	1680	1932	2184
6.0	6.0	20	60	1950	2247	2535
7.0	7.0	25	65	2265	2600	2940
8.0	8.0	25	65	2346	2690	3050
9.0	9.0	30	75	3851	4427	5010
10.0	10.0	30	75	4344	4994	5642
11.0	11.0	35	75	4830	5550	6272
12.0	12.0	35	75	5334	6135	6936
14.0	14.0	40	90	8583	9870	11157
16.0	16.0	40	90	11553	13283	15020
18.0	18.0	40	100	15513	17837	20166
20.0	20.0	40	100	18710	21516	24324
22.0	22.0	40	100	22443	25820	29175
24.0	24.0	40	100	25640	29483	33333
25.0	25.0	40	100	27620	31762	35900



SOLID CARBIDE TOOLS

SC LONG & EXTRA LONG END MILL 4 FLUTE

Price RS. / Each

DIA	SH.DIA	FL	OAL	V3x ALCRONA 50 HRC	V3x TISINOS 65 HRC	V3x NANOHARD 66 HRC
3.0	3.0	20	60	1160	1340	1508
3.0	3.0	25	75	1410	1610	1833
4.0	4.0	20	60	1340	1545	1742
4.0	4.0	25	75	1520	1745	1976
4.0	4.0	40	100	2220	2553	2886
5.0	5.0	20	60	1700	1950	2210
5.0	5.0	25	75	1880	2166	2444
5.0	5.0	40	100	2357	2715	3064
6.0	6.0	35	75	2060	2366	2678
6.0	6.0	40	100	2330	2679	3029
6.0	6.0	50	150	3860	4436	5018
8.0	8.0	35	75	2310	2654	3003
8.0	8.0	40	100	2850	3275	3705
8.0	8.0	75	150	4580	5264	5954
10.0	10.0	40	100	4760	5480	6188
10.0	10.0	75	150	6785	7800	8821
10.0	10.0	75	200	8970	10320	11661
12.0	12.0	50	100	6290	7233	8177
12.0	12.0	75	150	9150	10520	11895
12.0	12.0	75	200	10530	12111	13689
14.0	14.0	75	150	10340	11888	13442
14.0	14.0	75	200	15560	17891	20228
16.0	16.0	75	150	12410	14271	16133
16.0	16.0	75	200	15380	17684	19994
18.0	18.0	75	150	15200	17484	19760
19.0	18.0	75	200	20400	23460	26520
20.0	20.0	75	150	24200	27834	31460
20.0	20.0	75	200	32300	37140	41990
25.0	25.0	75	150	31040	35693	40352
25.0	25.0	75	200	38600	44394	50180



V3x 50 HRC ALCRONA Coated 10% Cobalt (K20UF) Grain Size~0.6-0.8- (µm)

V3x 60 HRC TISINOS Coated 10% Cobalt (K20-30) Grain Size~0.5-0.6- (µm)

V3x Series 66 HRC NANOHARD 12% Cobalt (K44-K44UF) Grain Size 0.4 to 0.5 (µm)

SOLID CARBIDE TOOLS

SC LONG & EXTRA LONG BALL NOSE END MILL 2/4 FLUTE

Price RS. / Each

DIA	SH.DIA	FL	OAL	V3x ALCRONA 50 HRC	V3x TISINOS 65 HRC	V3x NANOHARD 66 HRC
3.0	3.0	20	60	1275	1466	1655
3.0	3.0	25	75	1554	1788	2022
4.0	4.0	20	60	1473	1691	1914
4.0	4.0	25	75	1671	1923	2175
4.0	4.0	40	100	2445	2814	3176
5.0	5.0	20	60	1871	2150	2436
5.0	5.0	25	75	2067	2375	2688
5.0	5.0	40	100	2591	2978	3365
6.0	6.0	35	75	2265	2607	2945
6.0	6.0	40	100	2562	2942	3336
6.0	6.0	50	150	4245	4884	5516
8.0	8.0	35	75	2544	2924	3309
8.0	8.0	40	100	3138	3608	4083
8.0	8.0	75	150	5037	5793	6549
10.0	10.0	40	100	5235	6020	6810
10.0	10.0	75	150	7460	8576	9692
10.0	10.0	75	200	9870	11348	12833
12.0	12.0	50	100	10070	7955	8990
12.0	12.0	75	150	10068	11573	13085
12.0	12.0	75	200	11582	13319	15056
14.0	14.0	75	150	11375	13083	14786
14.0	14.0	75	200	17115	19682	22254
16.0	16.0	75	150	13650	15695	17745
16.0	16.0	75	200	16920	19457	21995
18.0	18.0	75	150	16721	19230	21735
19.0	18.0	75	200	22443	25811	29175
20.0	20.0	75	150	26621	30615	34604
20.0	20.0	75	200	35531	40859	46194
25.0	25.0	75	150	34145	39266	44387
25.0	25.0	75	200	42461	48833	55196



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V3x 50 HRC ALCRONA Coated 10% Cobalt (K20UF) Grain Size~0.6-0.8- (µm)

V3x 60 HRC TISINOS Coated 10% Cobalt (K20-30) Grain Size~0.5-0.6- (µm)

V3x Series 66 HRC NANOHARD 12% Cobalt (K44-K44UF) Grain Size 0.4 to 0.5 (µm)

SOLID CARBIDE TOOLS

SC CARBIDE JOBBER DRILLS

Price RS. / Each

DIA	SH.DIA	FL	OAL	V3x ALCRONA 50 HRC	V3x TISINOS 65 HRC	V3x NANOHARD 66 HRC
0.4	1	4	25	755	870	980
0.4	3	4	40	980	1140	1250
0.5	1	5	25	755	870	980
0.5	3	5	40	980	1140	1250
0.6	1	6	25	755	870	980
0.6	3	6	45	980	1140	1250
0.7	1	10	31	755	870	980
0.7	3	10	40	980	1140	1250
0.8	0.8	10	31	755	870	980
0.8	3	10	31	980	1140	1250
0.9	0.9	10	31	755	870	980
0.9	3	10	31	980	1140	1250
1	1	12	40	755	870	980
1	3	12	50	980	1140	1250
1.5	1.5	18	40	755	870	980
2.0	3	24	50	1050	1280	1340
2.5	3	30	57	1120	1250	1430
3.0	3.0	33	61	1250	1400	1610
3.5	3.0	39	70	1410	1650	1860
4.0	4.0	43	75	1700	1950	2220
4.5	4.5	47	80	1860	2040	2420
5.0	5.0	52	86	2060	2330	2690
5.5	5.5	57	93	2420	2760	3140
6.0	5.0	57	93	2580	2960	3320
6.5	6.5	63	101	3140	3660	4040
7.0	6.0	69	109	3230	3750	4200
7.5	7.5	69	109	3500	4040	4560
8.0	8.0	75	117	4040	4650	5300
8.5	8.5	75	117	4470	5120	5820
9.0	8.0	81	125	4830	5550	6200
9.5	9.5	81	125	5570	6450	7260
10.0	10.0	87	133	6200	7100	8000
10.5	10.5	87	133	7080	8160	9240
11.0	11.0	94	142	7710	8880	9800
12.0	12.0	101	151	9420	10700	12230
13.0	13.0	101	151	11400	13110	14820
14.0	14.0	108	160	14550	16710	18940
15.0	15.0	114	169	17600	20240	22850
16.0	16.0	120	178	21300	24200	27690
18.0	18.0	130	191	26000	30300	33900
20.0	20.0	140	205	37500	43100	48750



SOLID CARBIDE TOOLS

SOLID CARBIDE STUB DRILL

Price RS. / Each

DIA	SH.DIA	FL	OAL	V3x ALCRONA 50 HRC	V3x TISINOS 65 HRC	V3x NANOHARD 66 HRC
3.0	3.0	16	46	1050	1230	1340
3.5	3.5	20	52	1230	1410	1590
4.0	4.0	22	55	1430	1680	1860
4.5	4.5	24	58	1590	1860	2060
5.0	5.0	26	62	1860	2130	2420
5.5	5.5	28	66	1970	2240	2580
6.0	6.0	28	66	2130	2420	2790
6.5	6.5	31	70	2310	2670	3030
7.0	7.0	34	74	2510	2780	3120
7.5	7.5	34	74	2870	3300	3750
8.0	8.0	37	79	3120	3590	4040
8.5	8.5	37	79	3500	4020	4560
9.0	9.0	40	84	3660	4200	4760
9.5	9.5	40	84	4220	4850	5480
10.0	10.0	43	89	5100	5460	6200
10.5	10.5	43	89	5550	6090	6900
11.0	11.0	47	95	6630	7620	8610
11.5	11.5	47	95	6810	7820	8900
12.0	12.0	51	102	6900	7910	8970
12.5	12.5	51	102	9600	11040	12480
13.0	13.0	51	103	9600	11040	12480
14.0	14.0	54	107	9800	11240	12750
14.5	14.5	54	107	11400	13110	14820
15.0	15.0	56	107	11600	13310	15090
16.0	16.0	58	110	13200	15180	17170
18.0	18.0	60	110	17000	19520	22200
20.0	20.0	60	110	19500	22400	25370
22.0	22.0	60	110	23100	26530	30030
24.0	24.0	60	110	26000	29940	33900
25.0	25.0	60	110	26900	30930	34980



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On request availability

- * Step Drill and special Drill as per Drawing
- * Drill for aluminum application

SOLID CARBIDE TOOLS

SOLID CARBIDE REAMER

VX1

Price RS. / Each

DIA	SH.DIA	FL	OAL	V3x ALCRONA 50 HRC
3.0	3.0	16	65	1500
4.0	4.0	19	65	1700
5.0	5.0	25	80	2400
6.0	6.0	25	80	2940
8.0	8.0	40	100	3750
10.0	10.0	40	100	5930
12.0	12.0	40	100	8000
14.0	14.0	50	100	10500
16.0	16.0	50	160	15000



SOLID CARBIDE CENTRE DRILL

PILOT DIA	BODY DIA	OAL	V3x ALCRONA 50 HRC
2.0	5.0	50	1870
2.5	6.3	50	2680
3.15	8.0	65	3450
4.0	10.0	65	4400
5.0	12.5	65	5820
6.3	16.0	75	9800
8.0	20.0	80	18600

VX1


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On request availability

- * Step Drill and special Drill as per Drawing
- * Drill for aluminum application

V3x 50 HRC ALCRONA Coated 10% Cobalt (K20UF) Grain Size~0.6-0.8- (µm)

V3x 60 HRC TISINOS Coated 10% Cobalt (K20-30) Grain Size~0.5-0.6- (µm)

V3x Series 66 HRC NANOHARD 12% Cobalt (K44-K44UF) Grain Size 0.4 to 0.5 (µm)

HARDNESS COMPRASION

BRINELL HARDNESS (HB)	VICKERS HARDNESS (HV)	ROCKWELL HARNESS (HRC)
111	117	-
116	122	-
121	127	-
126	132	-
131	137	-
137	143	-
143	150	-
149	156	-
156	163	-
163	171	-
167	175	-
170	178	-
174	182	-
179	188	-
183	192	-
187	196	-
192	202	-
197	207	-
201	212	-
207	218	-
212	222	-
217	228	-
223	234	-
229	241	20.5
235	247	21.7
241	253	22.8
248	261	24.2

BRINELL HARDNESS (HB)	VICKERS HARDNESS (HV)	ROCKWELL HARNESS (HRC)
255	269	25.4
262	276	26.6
267	284	27.6
277	292	28.8
285	301	29.9
293	309	30.9
302	319	32.1
311	328	33.1
321	339	34.3
331	350	35.5
341	360	36.6
352	372	37.9
363	383	39.1
375	396	40.4
388	410	41.8
401	425	43.1
415	440	44.5
429	455	45.7
444	472	47.1
461	491	48.5
477	508	49.6
495	528	51.0
514	547	52.1
534	569	53.5
565	591	54.7
578	615	56.0

BRINELL HARDNESS (HB)	VICKERS HARDNESS (HV)	ROCKWELL HARNESS (HRC)
601	640	57.3
627	667	58.7
630	670	58.8
638	680	59.2
647	690	59.7
653	697	60.0
656	700	60.1
670	720	61.0
682	737	61.7
684	740	61.8
698	760	62.5
710	780	63.3
712	782	63.5
722	800	64.0
733	800	66.4
745	820	64.7
757	840	65.3
767	860	65.9
-	900	67.0
-	920	67.5
-	940	68.0
-	970	68.6
-	1000	69.1
-	1050	69.8
-	1100	70.4
-	1200	71.5

FILES STEELS - CHEMICAL COMPOSITION

GRADE	Chemical Composition %					
	C	Cr.	Mn.	Si.	S.	P
	Carbon	Chromium	Mangeneses	Silicon	Sulphur	Phosphorous
FILES	1.33	0.53	0.38	0.22	0.029	0.016

HIGH SPEED STEELS - CHEMICAL COMPOSITION

HSS GRADE	Chemical Composition %					
	C	Cr.	Mo.	W	Co.	V
	Carbon	Chromium	Molybdenum	Tungsten	Cobalt	Vanadium
M2	0.9	4.2	5	6.4	-	1.8
M7	1.02	3.8	8.6	1.8	-	1.9
M35	0.93	4.2	5	6.4	4.8	1.8
M42	1.08	3.8	9.4	1.5	8	1.2
T42	1.25	4	3.6	1.5	10	3.2
ASP2017	0.8	4.2	3	3	8	1
ASP2030	1.28	4.2	5	6.4	8.5	3.1
AST2060	2.3	4.2	7	6.5	10.5	6.5

SUGGESTED PARAMETERS - SPEED & FEED DATA

Cutting Speed. (Vc) = $\pi \times D \times S / 1000$
 Spindle Speed (s) = $V_c \times 1000 / \pi D$
 Feed (F) = $S \times f \times N$
 Feed Per Tooth (f) = $F / S \times N$

Vc = Cutting Speed (v)
 π = The Circular Constant (3.14)
 D = Diameter (mm)
 S = Spindle Speed (min-1)
 F = Feed (mm/min)
 F = Feed Per Tooth (mm/Tooth)
 N = Number of Flutes

Application : Side - Milling

Work Material	Carbide Steels < 28HRC		Alloy Steels 28 to 45 HRC		Prehardened Steels HPM, NAK < 45 HRC		Hardened Steels > 52HRC		Copper	
Cutting Speed	50-80m/min		50-70m/min		40-60m/min		20-40m/min		60-68m/min	
Dia	Side Milling		Side Milling		Side Milling		Side Milling		Side Milling	
	Spindle Speed	Feed	Spindle Speed	Feed	Spindle Speed	Feed	Spindle Speed	Feed	Spindle Speed	Feed
	min-1	mm/min	min-1	mm/min	min-1	mm/min	min-1	mm/min	min-1	mm/min
1	20700 - 6400	320 - 100	19100 - 4800	230 - 60	15900 - 4000	200 - 55	9,500	120	22300 - 8000	410 - 150
1.5	13800 - 4200	320 - 100	12700 - 3200	230 - 60	10600 - 2700	200 - 55	6,400	120	14900 - 5300	450 - 150
2	10300 - 3200	320 - 100	9500 - 2400	260 - 70	8000 - 2000	230 - 60	4,800	120	11100 - 4000	500 - 190
2.5	8300 - 2500	380 - 180	7600 - 1900	270 - 70	6400 - 1600	240 - 60	3,800	120	8900 - 3200	540 - 200
3	6900 - 2100	420 - 130	6400 - 1600	290 - 75	5300 - 1300	260 - 70	3,200	120	7400 - 2700	560 - 210
3.5	5900 - 1800	450 - 140	5500 - 1400	290 - 75	4500 - 1100	260 - 70	2,700	130	6400 - 2300	570 - 210
4	5200 - 1600	530 - 160	4800 - 1200	320 - 90	4000 - 1000	290 - 80	2,400	160	5600 - 2000	660 - 240
4.5	4600 - 1400	540 - 140	4200 - 1100	360 - 90	3500 - 900	320 - 85	2,100	160	5000 - 1800	680 - 240
5	4100 - 1300	560 - 170	3800 - 1000	390 - 100	3200 - 800	360 - 90	1,900	160	4500 - 1600	700 - 240
5.5	3800 - 1200	560 - 170	3500 - 1000	410 - 100	2900 - 500	370 - 90	1,700	160	4100 - 1400	700 - 240
6	3400 - 1100	580 - 190	3200 - 800	440 - 110	2700 - 700	410 - 100	1,600	170	3700 - 1300	700 - 240
8	2600 - 800	540 - 160	2400 - 600	410 - 100	2000 - 500	370 - 90	1,200	170	2800 - 1000	610 - 220
10	2100 - 600	510 - 150	1900 - 500	390 - 100	1600 - 400	360 - 85	1,000	170	2200 - 800	560 - 200
12	1700 - 500	460 - 140	1600 - 400	370 - 90	1300 - 300	340 - 80	800	170	1900 - 700	540 - 200
Depth of Cut	Side Milling				Side Milling				Side Milling	
	2D $\phi 1 \sim 2.5 = 0.07D$ $\phi 3 \sim 6 = 0.15D$ $\phi 8 \sim 12 = 0.2D$		5D	$\phi 1 \sim 2.5 = 0.03D$ $\phi 3 \sim 6 = 0.906D$ $\phi 8 \sim 12 = 0.08D$		2D $\sim 5D$ 0.02D 0.06D		2D $\sim 5D$ 0.2D 0.06D	Side Milling	

Use cutting fluid with smoke retardant.

Recommend to use oil mist coolant for machining hardened steels

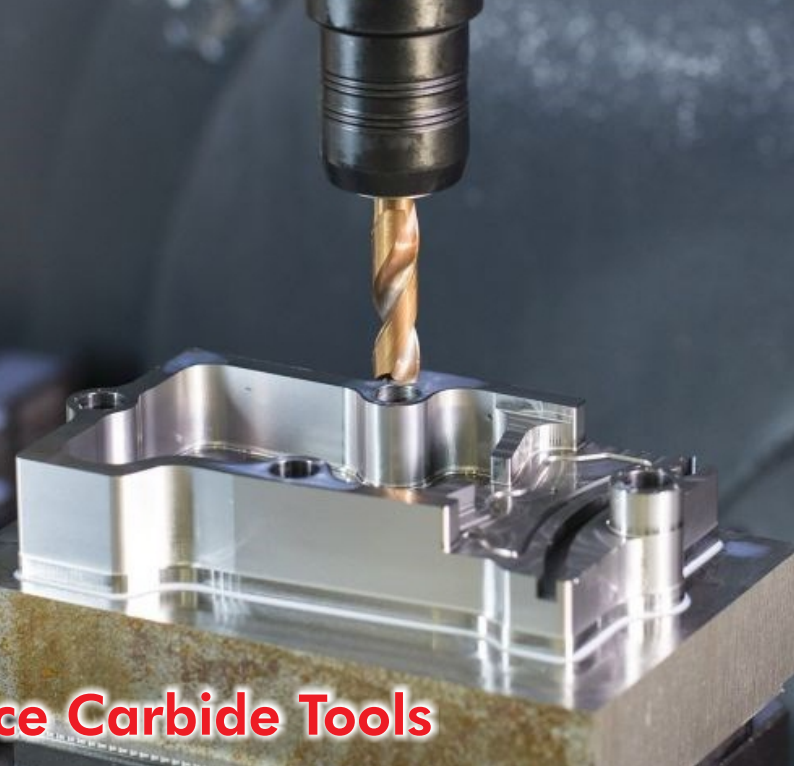
Available only for Side Cutting

Adjust both spindle speed and feed of the same rate.

V3x 50 HRC ALCRONA Coated 10% Cobalt (K20UF) Grain Size~0.6-0.8- (µm)

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V3x Series 66 HRC NANO HARD 12% Cobalt (K44-K44UF) Grain Size 0.4 to 0.5 (µm)



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