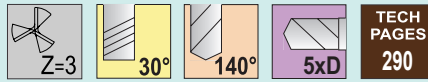


TOLERANCES

<i>d</i>	+0.000" - .0005" (+0.000 - .0127mm)
<i>l₁</i>	+0.125" - .125" (+3.175 - 3.175mm)
<i>l₂</i>	+0.125" - .125" (+3.175 - 3.175mm)

Series 1180

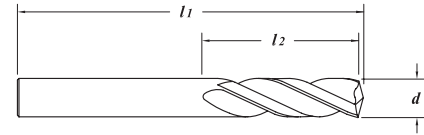
.1575" - .3150"
(4.000mm - 8.000mm)



Recommended for aluminum and other soft materials <40 Rc

Alumastar Coated

- High performance solid submicron grain carbide drill
- No spot drilling required
- Unique point geometry and coating for higher speeds and feeds
- Up to 5x longer tool life than Zrn coated drills
- High performance drill point
- Live tooling recommended on lathe processes



HIGH PERFORMANCE DRILLS

EDP#	<i>d</i> † Diameter		<i>l₁</i> Overall Length	<i>l₂</i> Flute Length	1-11	12-24	25-49	50-100	
	Decimal	Metric							
70166	.1575	4.000	65	24	41.14	39.35	37.56	35.77	
70191	.1772	4.500	65	25	43.46	41.57	39.68	37.79	
70211	.1875	3/16"	4.763	2-3/4"	1-1/4"	44.60	42.66	40.72	38.78
70216	.1890	#12	4.801	2-3/4"	1-1/4"	46.25	44.24	42.23	40.22
70221	.1910	#11	4.851	2-3/4"	1-1/4"	46.54	44.52	42.49	40.47
70226	.1935	#10	4.914	2-3/4"	1-1/4"	46.83	44.79	42.76	40.72
70231	.1969		5.000	75	32	47.41	45.35	43.29	41.23
70236	.1990	#8	5.055	3"	1-5/16"	47.64	45.57	43.50	41.43
70241	.2010	#7	5.105	3"	1-5/16"	47.83	45.75	43.67	41.59
70246	.2031	13/64"	5.159	3"	1-5/16"	48.17	46.08	43.98	41.89
70251	.2040	#6	5.182	3"	1-3/8"	48.50	46.39	44.28	42.17
70256	.2055	#5	5.220	3"	1-3/8"	48.82	46.70	44.57	42.45
70261	.2090	#4	5.309	3"	1-3/8"	49.09	46.96	44.82	42.69
70266	.2130	#3	5.410	3"	1-3/8"	49.42	47.27	45.12	42.97
70271	.2165		5.500	75	35	49.70	47.54	45.38	43.22
70276	.2188	7/32"	5.558	3"	1-3/8"	50.00	47.83	45.65	43.48
70281	.2210	#2	5.613	3"	1-3/8"	51.00	48.79	46.57	44.35
70286	.2280	#1	5.791	3"	1-3/8"	51.24	49.02	46.79	44.56
70296	.2344	15/64"	5.954	3-1/4"	1-1/2"	52.28	50.01	47.73	45.46
70301	.2362		6.000	82	38	52.43	50.15	47.87	45.59
70306	.2380	B	6.045	3-1/4"	1-5/8"	52.57	50.28	48.00	45.71
70311	.2420	C	6.147	3-1/4"	1-5/8"	52.91	50.61	48.31	46.01
70316	.2460	D	6.248	3-1/4"	1-5/8"	53.23	50.92	48.60	46.29
70321	.2500	1/4" / E	6.350	3-1/4"	1-5/8"	53.51	51.18	48.86	46.53
70326	.2559		6.500	82	41	56.76	54.30	51.83	49.36
70331	.2570	F	6.528	3-1/4"	1-11/16"	57.62	55.11	52.61	50.10
70336	.2610	G	6.629	3-1/2"	1-11/16"	58.50	55.96	53.41	50.87
70341	.2656	17/64"	6.746	3-1/2"	1-11/16"	59.36	56.78	54.20	51.62
70346	.2660	H	6.756	3-1/2"	1-11/16"	60.27	57.65	55.03	52.41
70351	.2720	I	6.909	3-1/2"	1-11/16"	61.13	58.48	55.82	53.16
70356	.2756		7.000	88	43	62.00	59.30	56.61	53.91
70361	.2770	J	7.036	3-1/2"	1-11/16"	62.88	60.15	57.41	54.68
70371	.2812	9/32"	7.142	3-1/2"	1-3/4"	64.65	61.84	59.03	56.22
70376	.2900	L	7.366	3-1/2"	1-3/4"	65.46	62.61	59.77	56.92
70381	.2953		7.500	95	44	66.32	63.44	60.55	57.67
70386	.2969	19/64"	7.541	3-3/4"	1-7/8"	66.90	63.99	61.08	58.17
70391	.3020	N	7.671	3-3/4"	1-7/8"	69.33	66.32	63.30	60.29
70396	.3125	5/16"	7.938	3-3/4"	1-7/8"	69.51	66.48	63.46	60.44
70401	.3150		8.000	95	48	73.35	70.16	66.97	63.78

continued →

Series 1180 (continued)

.3160" - .6299"
(8.026mm - 16.000mm)

EDP#	d^{\dagger} Diameter		l_1 Overall Length	l_2 Flute Length	1-11	12-24	25-49	50-100	
	Decimal	Metric							
70406	.3160	O	8.026	3-3/4"	1-7/8"	73.35	70.16	66.97	63.78
70411	.3230	P	8.204	3-3/4"	2-3/32"	73.59	70.39	67.19	63.99
70416	.3281	21/64"	8.334	4"	2-3/32"	74.22	70.99	67.77	64.54
70421	.3320	Q	8.433	4"	2-3/32"	75.58	72.29	69.01	65.72
70426	.3346		8.500	100	53	76.10	72.79	69.48	66.17
70431	.3390	R	8.611	4"	2-3/32"	77.99	74.60	71.21	67.82
70436	.3438	11/32"	8.733	4"	2-3/16"	80.55	77.04	73.54	70.04
70441	.3480	S	8.839	4"	2-3/16"	85.18	81.48	77.77	74.07
70446	.3543		9.000	100	55	85.64	81.92	78.19	74.47
70451	.3580	T	9.093	4-1/4"	2-9/32"	90.24	86.32	82.39	78.47
70456	.3594	23/64"	9.129	4-1/4"	2-9/32"	90.72	86.78	82.83	78.89
70461	.3680	U	9.347	4-1/4"	2-9/32"	94.98	90.85	86.72	82.59
70466	.3740		9.500	108	58	95.82	91.65	87.49	83.32
70471	.3750	3/8"	9.525	4-1/4"	2-3/8"	96.68	92.48	88.27	84.07
70476	.3770	V	9.576	4-1/4"	2-3/8"	99.25	94.93	90.62	86.30
70481	.3860	W	9.804	4-1/2"	2-3/8"	100.83	96.45	92.06	87.68
70486	.3906	25/64"	9.921	4-1/2"	2-3/8"	101.96	97.53	93.09	88.66
70491	.3937		10.000	114	60	104.72	100.17	95.61	91.06
70496	.3970	X	10.084	4-1/2"	2-1/2"	105.79	101.19	96.59	91.99
70501	.4040	Y	10.262	4-1/2"	2-9/16"	108.71	103.98	99.26	94.53
70506	.4062	13/32"	10.317	4-1/2"	2-9/16"	109.56	104.80	100.03	95.27
70511	.4134		10.500	114	67	110.48	105.68	100.87	96.07
70516	.4219	27/64"	10.716	4-1/2"	2-11/16"	111.40	106.56	101.71	96.87
70521	.4331		11.000	114	68	118.85	113.69	108.52	103.35
70526	.4375	7/16"	11.113	4-3/4"	2-13/16"	119.29	114.10	108.92	103.73
70531	.4528		11.500	120	70	126.86	121.34	115.83	110.31
70536	.4531	29/64"	11.509	4-3/4"	2-7/8"	126.86	121.34	115.83	110.31
70541	.4688	15/32"	11.909	4-3/4"	2-7/8"	132.78	127.01	121.23	115.46
70546	.4724		12.000	120	73	133.12	127.34	121.55	115.76
70551	.4844	31/64"	12.304	5-5/16"	3"	135.48	129.59	123.70	117.81
70556	.4921		12.500	135	75	136.99	131.03	125.08	119.12
70561	.5000	1/2"	12.700	5-3/8"	3-1/16"	137.25	131.29	125.32	119.35
70566	.5118		13.000	136	78	151.01	144.44	137.88	131.31
70571	.5156	33/64"	13.096	5-3/8"	3-1/8"	154.24	147.53	140.83	134.12
70576	.5312	17/32"	13.492	5-11/16"	3-5/16"	157.57	150.72	143.87	137.02
70581	.5469	35/64"	13.891	5-13/16"	3-3/8"	163.98	156.85	149.72	142.59
70586	.5512		14.000	148	86	167.23	159.96	152.69	145.42
70591	.5625	9/16"	14.287	5-15/16"	3-1/2"	178.71	170.94	163.17	155.40
70596	.5781	37/64"	14.683	6"	3-1/2"	184.78	176.75	168.71	160.68
70601	.5906		15.000	152	90	188.00	179.83	171.65	163.48
70606	.5938	19/32"	15.082	6"	3-9/16"	188.90	180.69	172.47	164.26
70611	.6094	39/64"	15.478	6-3/16"	3-11/16"	204.78	195.88	186.97	178.07
70616	.6250	5/8"	15.875	6-5/16"	3-3/4"	206.56	197.58	188.60	179.62
70621	.6299		16.000	160	95	210.89	201.72	192.55	183.38

TOLERANCES

d_1	+0.000" - .0004" (+.000 - .010mm)
d_2	h6

Series 1550H, 1250H, 1850H



.0312" - .0354"
(0.792mm - 0.900mm)

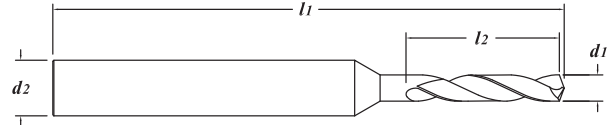
Recommended for high nickel, high temperature alloys, cobalt-based alloys, stainless steels, and tool steels >40 Rc

TiAlN-based Coating

High performance solid submicron grain carbide drill on 3mm or 1/8" diameter shank
30° helix for better chip evacuation
Live tooling recommended on lathe processes



HIGH PERFORMANCE DRILLS



3xD (1550H) EDP#	5xD (1250H) EDP#	12xD (1850H) EDP#	d_1 † Diameter		d_2 Shank Diameter	l_1 Overall Length	l_2 Flute Length	1-11	12-24	25-49	50-100	
			Decimal	Metric								
00100	00304	00510	.0312	1/32"	0.792	1/8"	2"	5/32"	34.95	33.43	31.91	30.39
			.0312	1/32"	0.792	1/8"	2"	15/64"	36.23	34.65	33.08	31.50
00102	00306	00512	.0312	1/32"	0.792	1/8"	2"	7/16"	40.07	38.32	36.58	34.84
			.0315		0.800	3.0	50	4.0	34.37	32.88	31.38	29.89
00104	00308	00514	.0315		0.800	3.0	50	6.0	35.73	34.18	32.62	31.07
			.0315		0.800	3.0	50	12.0	39.50	37.79	36.07	34.35
00106	00310	00516	.0319		0.810	3.0	50	4.0	34.37	32.88	31.38	29.89
			.0319		0.810	3.0	50	6.0	35.73	34.18	32.62	31.07
00108	00312	00518	.0319		0.810	3.0	50	12.0	39.50	37.79	36.07	34.35
			.0320	#67	0.812	1/8"	2"	11/64"	34.95	33.43	31.91	30.39
00110	00314	00520	.0320	#67	0.812	1/8"	2"	15/64"	36.23	34.65	33.08	31.50
			.0320	#67	0.812	1/8"	2"	7/16"	40.07	38.32	36.58	34.84
00112	00316	00522	.0323		0.820	3.0	50	4.5	34.37	32.88	31.38	29.89
			.0323		0.820	3.0	50	6.0	35.73	34.18	32.62	31.07
00114	00318	00524	.0323		0.820	3.0	50	12.0	39.50	37.79	36.07	34.35
			.0327		0.830	3.0	50	4.5	34.37	32.88	31.38	29.89
00116	00320	00526	.0327		0.830	3.0	50	6.0	35.73	34.18	32.62	31.07
			.0327		0.830	3.0	50	12.0	39.50	37.79	36.07	34.35
00118	00322	00528	.0330	#66	0.838	1/8"	2"	11/64"	34.95	33.43	31.91	30.39
			.0330	#66	0.838	1/8"	2"	15/64"	36.23	34.65	33.08	31.50
00120	00324	00530	.0330	#66	0.838	1/8"	2"	7/16"	40.07	38.32	36.58	34.84
			.0331		0.840	3.0	50	4.5	34.37	32.88	31.38	29.89
00122	00326	00532	.0331		0.840	3.0	50	6.0	35.73	34.18	32.62	31.07
			.0331		0.840	3.0	50	12.0	39.50	37.79	36.07	34.35
00124	00328	00534	.0335		0.850	3.0	50	4.5	34.37	32.88	31.38	29.89
			.0335		0.850	3.0	50	6.0	35.73	34.18	32.62	31.07
00126	00330	00536	.0335		0.850	3.0	50	12.0	39.50	37.79	36.07	34.35
			.0339		0.860	3.0	50	4.5	34.37	32.88	31.38	29.89
00128	00332	00538	.0339		0.860	3.0	50	6.5	35.73	34.18	32.62	31.07
			.0339		0.860	3.0	50	13.0	39.50	37.79	36.07	34.35
00130	00334	00540	.0343		0.870	3.0	50	4.5	34.37	32.88	31.38	29.89
			.0343		0.870	3.0	50	6.5	35.73	34.18	32.62	31.07
00132	00336	00542	.0343		0.870	3.0	50	13.0	39.50	37.79	36.07	34.35
			.0346		0.880	3.0	50	4.5	34.37	32.88	31.38	29.89
00134	00338	00544	.0346		0.880	3.0	50	6.5	35.73	34.18	32.62	31.07
			.0346		0.880	3.0	50	13.0	39.50	37.79	36.07	34.35
00136	00340	00546	.0350	#65	0.890	3.0	50	4.5	34.37	32.88	31.38	29.89
			.0350	#65	0.890	3.0	50	6.5	35.73	34.18	32.62	31.07
00138	00342	00548	.0350	#65	0.890	3.0	50	13.0	39.50	37.79	36.07	34.35
			.0354		0.900	3.0	50	4.5	34.37	32.88	31.38	29.89
00140	00344	00550	.0354		0.900	3.0	50	6.5	35.73	34.18	32.62	31.07
			.0354		0.900	3.0	50	13.0	39.50	37.79	36.07	34.35

continued →

Series 1550H,1250H,1850H (continued)

.0358" - .0453"
(0.910mm - 1.150mm)

3xD (1550H) EDP#	5xD (1250H) EDP#	12xD (1850H) EDP#	d_1 † Diameter		d_2 Shank Diameter	l_1 Overall Length	l_2 Flute Length	1-11	12-24	25-49	50-100
			Decimal	Metric							
00128			.0358	0.910	3.0	50	5.0	34.37	32.88	31.38	29.89
	00332		.0358	0.910	3.0	50	6.5	35.73	34.18	32.62	31.07
		00538	.0358	0.910	3.0	50	13.0	39.50	37.79	36.07	34.35
00130			.0360	#64 0.914	1/8"	2"	3/16"	34.95	33.43	31.91	30.39
	00334		.0360	#64 0.914	1/8"	2"	1/4"	36.23	34.65	33.08	31.50
		00540	.0360	#64 0.914	1/8"	2"	1/2"	40.07	38.32	36.58	34.84
00132			.0362	0.920	3.0	50	5.0	34.37	32.88	31.38	29.89
	00336		.0362	0.920	3.0	50	6.5	35.73	34.18	32.62	31.07
		00542	.0362	0.920	3.0	50	13.0	39.50	37.79	36.07	34.35
00134			.0366	0.930	3.0	50	5.0	34.37	32.88	31.38	29.89
	00338		.0366	0.930	3.0	50	6.5	35.73	34.18	32.62	31.07
		00544	.0366	0.930	3.0	50	13.0	39.50	37.79	36.07	34.35
00136			.0370	#63 0.940	3.0	50	5.0	34.37	32.88	31.38	29.89
	00340		.0370	#63 0.940	3.0	50	7.0	35.73	34.18	32.62	31.07
		00546	.0370	#63 0.940	3.0	50	14.0	39.50	37.79	36.07	34.35
00138			.0374	0.950	3.0	50	5.0	34.37	32.88	31.38	29.89
	00342		.0374	0.950	3.0	50	7.0	35.73	34.18	32.62	31.07
		00548	.0374	0.950	3.0	50	14.0	39.50	37.79	36.07	34.35
00140			.0378	0.960	3.0	50	5.0	34.37	32.88	31.38	29.89
	00344		.0378	0.960	3.0	50	7.0	35.73	34.18	32.62	31.07
		00550	.0378	0.960	3.0	50	14.0	39.50	37.79	36.07	34.35
00142			.0380	#62 0.965	1/8"	2"	3/16"	34.95	33.43	31.91	30.39
	00346		.0380	#62 0.965	1/8"	2"	17/64"	36.23	34.65	33.08	31.50
		00552	.0380	#62 0.965	1/8"	2"	9/16"	40.07	38.32	36.58	34.84
00144			.0382	0.970	3.0	50	5.0	34.37	32.88	31.38	29.89
	00348		.0382	0.970	3.0	50	7.0	35.73	34.18	32.62	31.07
		00554	.0382	0.970	3.0	50	14.0	39.50	37.79	36.07	34.35
00146			.0386	0.980	3.0	50	5.0	34.37	32.88	31.38	29.89
	00350		.0386	0.980	3.0	50	7.0	35.73	34.18	32.62	31.07
		00556	.0386	0.980	3.0	50	14.0	39.50	37.79	36.07	34.35
00148			.0390	#61 0.990	3.0	50	5.0	34.37	32.88	31.38	29.89
	00352		.0390	#61 0.990	3.0	50	7.0	35.73	34.18	32.62	31.07
		00558	.0390	#61 0.990	3.0	50	14.0	39.50	37.79	36.07	34.35
00150			.0394	1.000	3.0	50	5.0	34.37	32.88	31.38	29.89
	00354		.0394	1.000	3.0	50	7.0	35.73	34.18	32.62	31.07
		00560	.0394	1.000	3.0	50	14.0	39.50	37.79	36.07	34.35
00152			.0400	#60 1.016	1/8"	2"	13/64"	34.62	33.11	31.61	30.10
	00356		.0400	#60 1.016	1/8"	2"	9/32"	35.90	34.34	32.78	31.22
		00562	.0400	#60 1.016	1/8"	2"	9/16"	39.69	37.96	36.24	34.51
00154			.0410	#59 1.041	1/8"	2"	13/64"	34.62	33.11	31.61	30.10
	00358		.0410	#59 1.041	1/8"	2"	9/32"	35.90	34.34	32.78	31.22
		00564	.0410	#59 1.041	1/8"	2"	9/16"	39.69	37.96	36.24	34.51
00156			.0413	1.050	3.0	50	5.5	34.04	32.56	31.08	29.60
	00360		.0413	1.050	3.0	50	7.5	35.43	33.89	32.35	30.81
		00566	.0413	1.050	3.0	50	15.0	39.18	37.48	35.77	34.07
00158			.0420	#58 1.066	1/8"	2"	7/32"	34.62	33.11	31.61	30.10
	00362		.0420	#58 1.066	1/8"	2"	5/16"	35.90	34.34	32.78	31.22
		00568	.0420	#58 1.066	1/8"	2"	9/16"	39.69	37.96	36.24	34.51
00160			.0430	#57 1.092	1/8"	2"	7/32"	34.62	33.11	31.61	30.10
	00364		.0430	#57 1.092	1/8"	2"	5/16"	35.90	34.34	32.78	31.22
		00570	.0430	#57 1.092	1/8"	2"	9/16"	39.69	37.96	36.24	34.51
00162			.0433	1.100	3.0	50	5.5	34.04	32.56	31.08	29.60
	00366		.0433	1.100	3.0	50	8.0	35.43	33.89	32.35	30.81
		00572	.0433	1.100	3.0	50	16.0	39.18	37.48	35.77	34.07
00164			.0453	1.150	3.0	50	6.0	34.04	32.56	31.08	29.60
	00368		.0453	1.150	3.0	50	8.0	35.43	33.89	32.35	30.81
		00574	.0453	1.150	3.0	50	16.0	39.18	37.48	35.77	34.07

3xD (1550H) EDP#	5xD (1250H) EDP#	12xD (1850H) EDP#	d_1 † Diameter		d_2 Shank Diameter	l_1 Overall Length	l_2 Flute Length	1-11	12-24	25-49	50-100	
			Decimal	Metric								
00166			.0465	#56	1.181	1/8"	2"	15/64"	34.62	33.11	31.61	30.10
	00370		.0465	#56	1.181	1/8"	2"	11/32"	35.90	34.34	32.78	31.22
		00576	.0465	#56	1.181	1/8"	2"	5/8"	39.69	37.96	36.24	34.51
00168			.0469	3/64"	1.191	1/8"	2"	15/64"	34.62	33.11	31.61	30.10
	00372		.0469	3/64"	1.191	1/8"	2"	11/32"	35.90	34.34	32.78	31.22
		00578	.0469	3/64"	1.191	1/8"	2"	5/8"	39.69	37.96	36.24	34.51
00170			.0472		1.200	3.0	50	6.0	34.04	32.56	31.08	29.60
	00374		.0472		1.200	3.0	50	9.0	35.43	33.89	32.35	30.81
		00580	.0472		1.200	3.0	50	18.0	39.18	37.48	35.77	34.07
00172			.0492		1.250	3.0	50	6.5	34.04	32.56	31.08	29.60
	00376		.0492		1.250	3.0	50	9.0	35.43	33.89	32.35	30.81
		00582	.0492		1.250	3.0	50	18.0	39.18	37.48	35.77	34.07
00174			.0512		1.300	3.0	50	6.5	33.71	32.24	30.78	29.31
	00378		.0512		1.300	3.0	50	9.0	35.06	33.54	32.01	30.49
		00584	.0512		1.300	3.0	50	18.0	38.76	37.07	35.39	33.70
00176			.0520	#55	1.320	1/8"	2"	17/64"	34.28	32.79	31.30	29.81
	00380		.0520	#55	1.320	1/8"	2"	3/8"	35.57	34.02	32.48	30.93
		00586	.0520	#55	1.320	1/8"	2"	3/4"	39.32	37.61	35.90	34.19
00178			.0531		1.350	3.0	50	6.5	33.71	32.24	30.78	29.31
	00382		.0531		1.350	3.0	50	9.5	35.06	33.54	32.01	30.49
		00588	.0531		1.350	3.0	50	19.0	38.76	37.07	35.39	33.70
00180			.0550	#54	1.397	1/8"	2"	9/32"	34.28	32.79	31.30	29.81
	00384		.0550	#54	1.397	1/8"	2"	3/8"	35.57	34.02	32.48	30.93
		00590	.0550	#54	1.397	1/8"	2"	3/4"	39.32	37.61	35.90	34.19
00182			.0551		1.400	3.0	50	7.0	33.71	32.24	30.78	29.31
	00386		.0551		1.400	3.0	50	10.0	35.06	33.54	32.01	30.49
		00592	.0551		1.400	3.0	65	20.0	40.54	38.78	37.01	35.25
00184			.0571		1.450	3.0	50	7.0	33.71	32.24	30.78	29.31
	00388		.0571		1.450	3.0	50	10.5	35.06	33.54	32.01	30.49
		00594	.0571		1.450	3.0	65	21.0	40.54	38.78	37.01	35.25
00186			.0591		1.500	3.0	50	7.5	33.71	32.24	30.78	29.31
	00390		.0591		1.500	3.0	50	10.5	35.06	33.54	32.01	30.49
		00596	.0591		1.500	3.0	65	21.0	40.54	38.78	37.01	35.25
00188			.0595	#53	1.511	1/8"	2"	19/64"	34.28	32.79	31.30	29.81
	00392		.0595	#53	1.511	1/8"	2"	7/16"	35.57	34.02	32.48	30.93
		00598	.0595	#53	1.511	1/8"	2-1/2"	13/16"	41.12	39.34	37.55	35.76
00190			.0610		1.550	3.0	50	7.5	33.36	31.91	30.46	29.01
	00394		.0610		1.550	3.0	50	11.0	34.73	33.22	31.71	30.20
		00600	.0610		1.550	3.0	65	22.0	40.19	38.45	36.70	34.95
00192			.0625	1/16"	1.587	1/8"	2"	5/16"	33.96	32.48	31.01	29.53
	00396		.0625	1/16"	1.587	1/8"	2"	7/16"	35.24	33.70	32.17	30.64
		00602	.0625	1/16"	1.587	1/8"	2-1/2"	13/16"	40.76	38.98	37.21	35.44
00194			.0630		1.600	3.0	50	7.5	33.36	31.91	30.46	29.01
	00398		.0630		1.600	3.0	50	11.0	34.73	33.22	31.71	30.20
		00604	.0630		1.600	3.0	65	22.0	40.19	38.45	36.70	34.95
00196			.0635	#52	1.613	1/8"	2"	5/16"	33.96	32.48	31.01	29.53
	00400		.0635	#52	1.613	1/8"	2"	15/32"	35.24	33.70	32.17	30.64
		00606	.0635	#52	1.613	1/8"	2-1/2"	7/8"	40.76	38.98	37.21	35.44
00198			.0650		1.650	3.0	50	8.5	33.36	31.91	30.46	29.01
	00402		.0650		1.650	3.0	50	11.5	34.73	33.22	31.71	30.20
		00608	.0650		1.650	3.0	65	23.0	40.19	38.45	36.70	34.95
00200			.0669		1.700	3.0	50	8.5	33.36	31.91	30.46	29.01
	00404		.0669		1.700	3.0	50	11.5	34.73	33.22	31.71	30.20
		00610	.0669		1.700	3.0	65	23.0	40.19	38.45	36.70	34.95
00202			.0670	#51	1.702	1/8"	2"	11/32"	33.96	32.48	31.01	29.53
	00406		.0670	#51	1.702	1/8"	2"	15/32"	35.24	33.70	32.17	30.64
		00612	.0670	#51	1.702	1/8"	2-1/2"	7/8"	40.76	38.98	37.21	35.44

continued →

Series 1550H,1250H,1850H (continued)

.0689" - .0846"
(1.750mm - 2.150mm)



TOLERANCES	
d1	+0.000" - .0004" (+.000 - .010mm)
d2	h6

Recommended for high nickel, high temperature alloys, cobalt-based alloys, stainless steels, and tool steels >40 Rc

TiAlN-based Coating

High performance solid submicron grain carbide drill on 3mm or 1/8" diameter shank



3xD (1550H) EDP#	5xD (1250H) EDP#	12xD (1850H) EDP#	d1 † Diameter		d2 Shank Diameter	l1 Overall Length	l2 Flute Length	1-11	12-24	25-49	50-100
			Decimal	Metric							
00204			.0689	1.750	3.0	50	9.0	33.36	31.91	30.46	29.01
	00408		.0689	1.750	3.0	50	12.0	34.73	33.22	31.71	30.20
		00614	.0689	1.750	3.0	65	24.0	40.19	38.45	36.70	34.95
00206			.0700	#50 1.778	1/8"	2"	23/64"	33.63	32.16	30.70	29.24
	00410		.0700	#50 1.778	1/8"	2"	1/2"	34.89	33.37	31.86	30.34
		00616	.0700	#50 1.778	1/8"	2-1/2"	1"	40.35	38.60	36.84	35.09
00208			.0709	1.800	3.0	50	9.0	33.04	31.60	30.17	28.73
	00412		.0709	1.800	3.0	50	13.0	34.40	32.90	31.41	29.91
		00618	.0709	1.800	3.0	65	26.0	39.80	38.07	36.34	34.61
00210			.0728	1.850	3.0	50	9.5	33.04	31.60	30.17	28.73
	00414		.0728	1.850	3.0	50	13.0	34.40	32.90	31.41	29.91
		00620	.0728	1.850	3.0	65	26.0	39.80	38.07	36.34	34.61
00212			.0730	#49 1.854	1/8"	2"	3/8"	33.63	32.16	30.70	29.24
	00416		.0730	#49 1.854	1/8"	2"	1/2"	34.89	33.37	31.86	30.34
		00622	.0730	#49 1.854	1/8"	2-1/2"	1"	40.35	38.60	36.84	35.09
00214			.0748	1.900	3.0	50	9.5	33.04	31.60	30.17	28.73
	00418		.0748	1.900	3.0	50	13.5	34.40	32.90	31.41	29.91
		00624	.0748	1.900	3.0	65	27.0	39.80	38.07	36.34	34.61
00216			.0760	#48 1.930	1/8"	2"	3/8"	33.63	32.16	30.70	29.24
	00420		.0760	#48 1.930	1/8"	2"	17/32"	34.89	33.37	31.86	30.34
		00626	.0760	#48 1.930	1/8"	2-1/2"	1-1/8"	42.52	40.67	38.82	36.97
00218			.0768	1.950	3.0	50	10.0	33.04	31.60	30.17	28.73
	00422		.0768	1.950	3.0	50	14.0	34.40	32.90	31.41	29.91
		00628	.0768	1.950	3.0	65	28.0	41.94	40.12	38.29	36.47
00220			.0781	5/64" 1.983	1/8"	2"	13/32"	33.63	32.16	30.70	29.24
	00424		.0781	5/64" 1.983	1/8"	2"	9/16"	34.89	33.37	31.86	30.34
		00630	.0781	5/64" 1.983	1/8"	2-1/2"	1-1/8"	42.52	40.67	38.82	36.97
00222			.0785	#47 1.994	1/8"	2"	13/32"	33.63	32.16	30.70	29.24
	00426		.0785	#47 1.994	1/8"	2"	9/16"	34.89	33.37	31.86	30.34
		00632	.0785	#47 1.994	1/8"	2-1/2"	1-1/8"	42.52	40.67	38.82	36.97
00224			.0787	2.000	3.0	50	10.0	33.04	31.60	30.17	28.73
	00428		.0787	2.000	3.0	50	14.0	34.40	32.90	31.41	29.91
		00634	.0787	2.000	3.0	65	28.0	41.94	40.12	38.29	36.47
00226			.0807	2.050	3.0	50	10.5	32.71	31.28	29.86	28.44
	00430		.0807	2.050	3.0	50	14.0	34.06	32.58	31.10	29.62
		00636	.0807	2.050	3.0	65	28.0	41.55	39.74	37.94	36.13
00228			.0810	#46 2.057	1/8"	2"	27/64"	33.28	31.83	30.39	28.94
	00432		.0810	#46 2.057	1/8"	2"	9/16"	34.58	33.08	31.57	30.07
		00638	.0810	#46 2.057	1/8"	2-1/2"	1-1/8"	42.17	40.34	38.50	36.67
00230			.0820	#45 2.083	1/8"	2"	27/64"	33.28	31.83	30.39	28.94
	00434		.0820	#45 2.083	1/8"	2"	9/16"	34.58	33.08	31.57	30.07
		00640	.0820	#45 2.083	1/8"	2-1/2"	1-1/8"	42.17	40.34	38.50	36.67
00232			.0827	2.100	3.0	50	10.5	32.71	31.28	29.86	28.44
	00436		.0827	2.100	3.0	50	14.5	34.06	32.58	31.10	29.62
		00642	.0827	2.100	3.0	65	29.0	41.55	39.74	37.94	36.13
00234			.0846	2.150	3.0	50	11.0	32.71	31.28	29.86	28.44
	00438		.0846	2.150	3.0	50	14.5	34.06	32.58	31.10	29.62
		00644	.0846	2.150	3.0	65	29.0	41.55	39.74	37.94	36.13

3xD (1550H) EDP#	5xD (1250H) EDP#	12xD (1850H) EDP#	d_1 † Diameter		d_2 Shank Diameter	l_1 Overall Length	l_2 Flute Length	1-11	12-24	25-49	50-100	
			Decimal	Metric								
00236			.0860	#44	2.184	1/8"	2"	7/16"	33.28	31.83	30.39	28.94
	00440		.0860	#44	2.184	1/8"	2"	19/32"	34.58	33.08	31.57	30.07
		00646	.0860	#44	2.184	1/8"	2-1/2"	1-3/16"	42.17	40.34	38.50	36.67
00238			.0866		2.200	3.0	50	11.0	32.71	31.28	29.86	28.44
	00442		.0866		2.200	3.0	50	15.5	34.06	32.58	31.10	29.62
		00648	.0866		2.200	3.0	65	31.0	41.55	39.74	37.94	36.13
00240			.0886		2.250	3.0	50	11.5	32.71	31.28	29.86	28.44
	00444		.0886		2.250	3.0	50	15.5	34.06	32.58	31.10	29.62
		00650	.0886		2.250	3.0	65	31.0	41.55	39.74	37.94	36.13
00242			.0890	#43	2.260	1/8"	2"	29/64"	33.28	31.83	30.39	28.94
	00446		.0890	#43	2.260	1/8"	2"	5/8"	34.58	33.08	31.57	30.07
		00652	.0890	#43	2.260	1/8"	2-1/2"	1-1/4"	42.17	40.34	38.50	36.67
00244			.0906		2.300	3.0	50	11.5	32.37	30.97	29.56	28.15
	00448		.0906		2.300	3.0	50	16.0	33.73	32.26	30.80	29.33
		00654	.0906		2.300	3.0	65	32.0	41.16	39.37	37.58	35.79
00246			.0925		2.350	3.0	50	12.0	32.37	30.97	29.56	28.15
	00450		.0925		2.350	3.0	50	16.0	33.73	32.26	30.80	29.33
		00656	.0925		2.350	3.0	65	32.0	41.16	39.37	37.58	35.79
00248			.0935	#42	2.375	1/8"	2"	31/64"	32.95	31.52	30.08	28.65
	00452		.0935	#42	2.375	1/8"	2"	21/32"	34.22	32.74	31.25	29.76
		00658	.0935	#42	2.375	1/8"	3"	1-5/16"	41.76	39.94	38.13	36.31
00250			.0938	3/32"	2.382	1/8"	2"	31/64"	32.95	31.52	30.08	28.65
	00454		.0938	3/32"	2.382	1/8"	2"	21/32"	34.22	32.74	31.25	29.76
		00660	.0938	3/32"	2.382	1/8"	3"	1-5/16"	41.76	39.94	38.13	36.31
00252			.0945		2.400	3.0	50	12.0	32.37	30.97	29.56	28.15
	00456		.0945		2.400	3.0	50	17.0	33.73	32.26	30.80	29.33
		00662	.0945		2.400	3.0	75	34.0	41.16	39.37	37.58	35.79
00254			.0960	#41	2.438	1/8"	2"	31/64"	32.95	31.52	30.08	28.65
	00458		.0960	#41	2.438	1/8"	2"	43/64"	34.22	32.74	31.25	29.76
		00664	.0960	#41	2.438	1/8"	3"	1-11/32"	41.76	39.94	38.13	36.31
00256			.0965		2.450	3.0	50	12.5	32.37	30.97	29.56	28.15
	00460		.0965		2.450	3.0	50	17.0	33.73	32.26	30.80	29.33
		00666	.0965		2.450	3.0	75	34.0	41.16	39.37	37.58	35.79
00258			.0980	#40	2.489	1/8"	2"	1/2"	32.95	31.52	30.08	28.65
	00462		.0980	#40	2.489	1/8"	2"	11/16"	34.22	32.74	31.25	29.76
		00668	.0980	#40	2.489	1/8"	3"	1-3/8"	41.76	39.94	38.13	36.31
00260			.0984		2.500	3.0	50	12.5	32.37	30.97	29.56	28.15
	00464		.0984		2.500	3.0	50	17.5	33.73	32.26	30.80	29.33
		00670	.0984		2.500	3.0	75	35.0	41.16	39.37	37.58	35.79
00262			.0995	#39	2.527	1/8"	2"	1/2"	32.95	31.52	30.08	28.65
	00466		.0995	#39	2.527	1/8"	2"	11/16"	34.22	32.74	31.25	29.76
		00672	.0995	#39	2.527	1/8"	3"	1-3/8"	41.76	39.94	38.13	36.31
00264			.1004		2.550	3.0	50	13.0	32.07	30.68	29.28	27.89
	00468		.1004		2.550	3.0	50	17.5	33.43	31.98	30.52	29.07
		00674	.1004		2.550	3.0	75	35.0	40.81	39.04	37.26	35.49
00266			.1015	#38	2.578	1/8"	2"	17/32"	32.65	31.23	29.81	28.39
	00470		.1015	#38	2.578	1/8"	2"	45/64"	33.93	32.45	30.98	29.50
		00676	.1015	#38	2.578	1/8"	3"	1-13/32"	41.40	39.60	37.80	36.00
00268			.1024		2.600	3.0	50	13.0	32.07	30.68	29.28	27.89
	00472		.1024		2.600	3.0	50	18.0	33.43	31.98	30.52	29.07
		00678	.1024		2.600	3.0	75	36.0	40.81	39.04	37.26	35.49
00270			.1040	#37	2.641	1/8"	2"	17/32"	32.65	31.23	29.81	28.39
	00474		.1040	#37	2.641	1/8"	2"	23/32"	33.93	32.45	30.98	29.50
		00680	.1040	#37	2.641	1/8"	3"	1-7/16"	41.40	39.60	37.80	36.00
00272			.1043		2.650	3.0	50	13.5	32.07	30.68	29.28	27.89
	00476		.1043		2.650	3.0	50	18.5	33.43	31.98	30.52	29.07
		00682	.1043		2.650	3.0	75	37.0	40.81	39.04	37.26	35.49

continued →

Series 1550H,1250H,1850H (continued)

.1063" - .1250"
(2.700mm - 3.175mm)

3xD (1550H) EDP#	5xD (1250H) EDP#	12xD (1850H) EDP#	d_1 † Diameter		d_2 Shank Diameter	l_1 Overall Length	l_2 Flute Length	1-11	12-24	25-49	50-100
			Decimal	Metric							
00274			.1063	2.700	3.0	50	13.5	32.07	30.68	29.28	27.89
	00478		.1063	2.700	3.0	50	19.0	33.43	31.98	30.52	29.07
		00684	.1063	2.700	3.0	75	38.0	40.81	39.04	37.26	35.49
00276			.1065	#36 2.705	1/8"	2"	17/32"	32.65	31.23	29.81	28.39
	00480		.1065	#36 2.705	1/8"	2"	3/4"	33.93	32.45	30.98	29.50
		00686	.1065	#36 2.705	1/8"	3"	1-1/2"	41.40	39.60	37.80	36.00
00278			.1083	2.750	3.0	50	14.0	32.07	30.68	29.28	27.89
	00482		.1083	2.750	3.0	50	19.5	33.43	31.98	30.52	29.07
		00688	.1083	2.750	3.0	75	39.0	40.81	39.04	37.26	35.49
00280			.1094	7/64" 2.778	1/8"	2"	9/16"	32.65	31.23	29.81	28.39
	00484		.1094	7/64" 2.778	1/8"	2"	49/64"	33.93	32.45	30.98	29.50
		00690	.1094	7/64" 2.778	1/8"	3"	1-9/16"	41.40	39.60	37.80	36.00
00282			.1100	#35 2.794	1/8"	2"	9/16"	32.65	31.23	29.81	28.39
	00486		.1100	#35 2.794	1/8"	2"	49/64"	33.93	32.45	30.98	29.50
		00692	.1100	#35 2.794	1/8"	3"	1-9/16"	41.40	39.60	37.80	36.00
00284			.1102	2.800	3.0	50	14.0	32.07	30.68	29.28	27.89
	00488		.1102	2.800	3.0	50	19.5	33.43	31.98	30.52	29.07
		00694	.1102	2.800	3.0	75	39.0	40.81	39.04	37.26	35.49
00286			.1110	#34 2.819	1/8"	2"	9/16"	32.65	31.23	29.81	28.39
	00490		.1110	#34 2.819	1/8"	2"	25/32"	33.93	32.45	30.98	29.50
		00696	.1110	#34 2.819	1/8"	3"	1-5/8"	41.40	39.60	37.80	36.00
00288			.1122	2.850	3.0	50	14.5	32.07	30.68	29.28	27.89
	00492		.1122	2.850	3.0	50	20.0	33.43	31.98	30.52	29.07
		00698	.1122	2.850	3.0	75	40.0	40.81	39.04	37.26	35.49
00290			.1130	#33 2.870	1/8"	2"	19/32"	32.65	31.23	29.81	28.39
	00494		.1130	#33 2.870	1/8"	2"	51/64"	33.93	32.45	30.98	29.50
		00700	.1130	#33 2.870	1/8"	3"	1-5/8"	41.40	39.60	37.80	36.00
00292			.1142	2.900	3.0	50	14.5	32.07	30.68	29.28	27.89
	00496		.1142	2.900	3.0	50	20.0	33.43	31.98	30.52	29.07
		00702	.1142	2.900	3.0	75	40.0	40.81	39.04	37.26	35.49
00294			.1160	#32 2.946	1/8"	2"	19/32"	32.65	31.23	29.81	28.39
	00498		.1160	#32 2.946	1/8"	2"	13/16"	33.93	32.45	30.98	29.50
		00704	.1160	#32 2.946	1/8"	3"	1-5/8"	41.40	39.60	37.80	36.00
00296			.1161	2.950	3.0	50	15.0	32.07	30.68	29.28	27.89
	00500		.1161	2.950	3.0	50	21.0	33.43	31.98	30.52	29.07
		00706	.1161	2.950	3.0	75	42.0	40.81	39.04	37.26	35.49
00298			.1181	3.000	3.0	50	15.0	30.13	28.82	27.51	26.20
	00502		.1181	3.000	3.0	50	21.0	31.48	30.11	28.74	27.37
		00708	.1181	3.000	3.0	75	42.0	38.50	36.83	35.15	33.48
00300			.1200	#31 3.048	1/8"	2"	5/8"	32.65	31.23	29.81	28.39
	00504		.1200	#31 3.048	1/8"	2"	7/8"	33.93	32.45	30.98	29.50
		00710	.1200	#31 3.048	1/8"	3"	1-3/4"	41.40	39.60	37.80	36.00
00302			.1250	1/8" 3.175	1/8"	2"	5/8"	30.71	29.37	28.04	26.70
	00506		.1250	1/8" 3.175	1/8"	2"	7/8"	31.98	30.59	29.20	27.81
		00712	.1250	1/8" 3.175	1/8"	3"	1-3/4"	39.10	37.40	35.70	34.00

TOLERANCES

d1*	3mm - 6mm	+0.016 +0.004mm (+.00063" +.00015")
	> 6mm - 10mm	+0.021 +0.006mm (+.00082" +.00023")
	> 10mm - 18mm	+0.025 +0.007mm (+.00098" +.00027")
	> 18mm - 20mm	+0.029 +0.008mm (+.00114" +.00031")
d2	6mm	+0.000 -0.008mm (+.00000" - .00030")
	8mm - 10mm	+0.000 -0.009mm (+.00000" - .00035")
	12mm - 18mm	+0.000 -0.011mm (+.00000" - .00040")
	20mm	+0.000 -0.013mm (+.00000" - .00050")



Series 1580HD

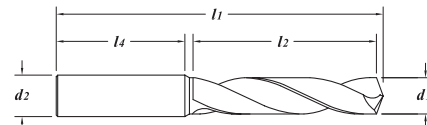
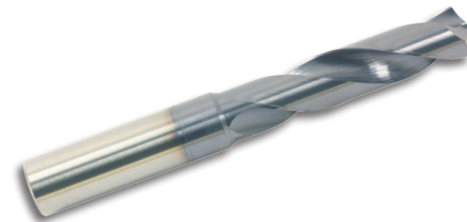
.1181" - .2342"
(3.000mm - 5.950mm)

HIGH PERFORMANCE DRILLS

Recommended for high nickel, high temperature alloys, cobalt-based alloys, stainless steels, and tool steels >40 Rc

TiAlN-based Coating

- High performance solid submicron grain carbide drill with reinforced shank
- Up to 50% faster than standard carbide drills
- 30° helix for better chip evacuation
- Honed cutting edge
- Can be used as a pilot drill
- Live tooling recommended on lathe processes



** Note - These drills are made to a plus/plus tolerance on the drill diameter. If you are in need of a minus tolerance drill, please refer to our other high performance drills.*

EDP#	d1 Diameter		d2 Shank Diameter	l1 Overall Length	l2 Flute Length	l4 Shank Length	1-11	12-24	25-49	50-100
	Decimal	Metric								
20085	.1181	3.000	6.0	62	20	36	43.25	41.37	39.49	37.61
20095	.1220	3.100	6.0	62	20	36	43.25	41.37	39.49	37.61
20105	.1248	3.170	6.0	62	20	36	43.25	41.37	39.49	37.61
20115	.1260	3.200	6.0	62	20	36	43.25	41.37	39.49	37.61
20125	.1280	3.250	6.0	62	20	36	43.25	41.37	39.49	37.61
20135	.1299	3.300	6.0	62	20	36	43.25	41.37	39.49	37.61
20145	.1339	3.400	6.0	62	20	36	43.25	41.37	39.49	37.61
20155	.1378	3.500	6.0	62	20	36	43.25	41.37	39.49	37.61
20165	.1417	3.600	6.0	62	20	36	43.25	41.37	39.49	37.61
20175	.1457	3.700	6.0	62	20	36	43.25	41.37	39.49	37.61
20185	.1476	3.750	6.0	62	20	36	43.25	41.37	39.49	37.61
20195	.1496	3.800	6.0	66	24	36	43.25	41.37	39.49	37.61
20205	.1535	3.900	6.0	66	24	36	43.25	41.37	39.49	37.61
20215	.1575	4.000	6.0	66	24	36	43.25	41.37	39.49	37.61
20225	.1614	4.100	6.0	66	24	36	43.25	41.37	39.49	37.61
20235	.1654	4.200	6.0	66	24	36	43.25	41.37	39.49	37.61
20245	.1673	4.250	6.0	66	24	36	43.25	41.37	39.49	37.61
20255	.1693	4.300	6.0	66	24	36	43.25	41.37	39.49	37.61
20265	.1732	4.400	6.0	66	24	36	43.25	41.37	39.49	37.61
20275	.1772	4.500	6.0	66	24	36	43.25	41.37	39.49	37.61
20285	.1811	4.600	6.0	66	24	36	43.25	41.37	39.49	37.61
20295	.1831	4.650	6.0	66	24	36	43.25	41.37	39.49	37.61
20305	.1850	4.700	6.0	66	24	36	43.25	41.37	39.49	37.61
20315	.1870	4.750	6.0	66	24	36	43.25	41.37	39.49	37.61
20325	.1890	4.800	6.0	66	28	36	43.25	41.37	39.49	37.61
20335	.1929	4.900	6.0	66	28	36	43.25	41.37	39.49	37.61
20345	.1969	5.000	6.0	66	28	36	43.25	41.37	39.49	37.61
20355	.2008	5.100	6.0	66	28	36	43.25	41.37	39.49	37.61
20365	.2027	5.150	6.0	66	28	36	43.25	41.37	39.49	37.61
20375	.2047	5.200	6.0	66	28	36	43.25	41.37	39.49	37.61
20385	.2087	5.300	6.0	66	28	36	43.25	41.37	39.49	37.61
20395	.2165	5.500	6.0	66	28	36	43.25	41.37	39.49	37.61
20405	.2185	5.550	6.0	66	28	36	43.25	41.37	39.49	37.61
20408	.2205	5.600	6.0	66	28	36	43.25	41.37	39.49	37.61
20412	.2244	5.700	6.0	66	28	36	43.25	41.37	39.49	37.61
20415	.2283	5.800	6.0	66	28	36	43.25	41.37	39.49	37.61
20425	.2323	5.900	6.0	66	28	36	43.25	41.37	39.49	37.61
20435	.2342	5.950	6.0	66	28	36	43.25	41.37	39.49	37.61

continued →

Series 1580HD (continued)

.2362" - .4252"
(6.000mm - 10.800mm)

EDP#	d1 Diameter		d2 Shank Diameter	l1 Overall Length	l2 Flute Length	l4 Shank Length	1-11	12-24	25-49	50-100
	Decimal	Metric								
20445	.2362	6.000	6.0	66	28	36	43.25	41.37	39.49	37.61
20448	.2402	6.100	8.0	79	34	36	59.50	56.91	54.33	51.74
20452	.2441	6.200	8.0	79	34	36	59.50	56.91	54.33	51.74
20454	.2480	6.300	8.0	79	34	36	59.50	56.91	54.33	51.74
20455	.2500	6.350	8.0	79	34	36	59.50	56.91	54.33	51.74
20462	.2520	6.400	8.0	79	34	36	59.50	56.91	54.33	51.74
20465	.2559	6.500	8.0	79	34	36	59.50	56.91	54.33	51.74
20468	.2571	6.530	8.0	79	34	36	59.50	56.91	54.33	51.74
20472	.2598	6.600	8.0	79	34	36	59.50	56.91	54.33	51.74
20473	.2638	6.700	8.0	79	34	36	59.50	56.91	54.33	51.74
20475	.2657	6.750	8.0	79	34	36	59.50	56.91	54.33	51.74
20485	.2677	6.800	8.0	79	34	36	59.50	56.91	54.33	51.74
20495	.2717	6.900	8.0	79	34	36	59.50	56.91	54.33	51.74
20505	.2756	7.000	8.0	79	34	36	59.50	56.91	54.33	51.74
20515	.2795	7.100	8.0	79	41	36	59.50	56.91	54.33	51.74
20525	.2815	7.150	8.0	79	41	36	59.50	56.91	54.33	51.74
20535	.2835	7.200	8.0	79	41	36	59.50	56.91	54.33	51.74
20542	.2874	7.300	8.0	79	41	36	59.50	56.91	54.33	51.74
20545	.2913	7.400	8.0	79	41	36	59.50	56.91	54.33	51.74
20555	.2953	7.500	8.0	79	41	36	59.50	56.91	54.33	51.74
20565	.2972	7.550	8.0	79	41	36	59.50	56.91	54.33	51.74
20575	.2992	7.600	8.0	79	41	36	59.50	56.91	54.33	51.74
20585	.3031	7.700	8.0	79	41	36	59.50	56.91	54.33	51.74
20595	.3071	7.800	8.0	79	41	36	59.50	56.91	54.33	51.74
20605	.3130	7.950	8.0	79	41	36	59.50	56.91	54.33	51.74
20615	.3150	8.000	8.0	79	41	36	59.50	56.91	54.33	51.74
20622	.3189	8.100	10.0	89	47	40	82.79	79.19	75.59	71.99
20625	.3228	8.200	10.0	89	47	40	82.79	79.19	75.59	71.99
20635	.3268	8.300	10.0	89	47	40	82.79	79.19	75.59	71.99
20645	.3287	8.350	10.0	89	47	40	82.79	79.19	75.59	71.99
20652	.3307	8.400	10.0	89	47	40	82.79	79.19	75.59	71.99
20655	.3346	8.500	10.0	89	47	40	82.79	79.19	75.59	71.99
20665	.3386	8.600	10.0	89	47	40	82.79	79.19	75.59	71.99
20675	.3425	8.700	10.0	89	47	40	82.79	79.19	75.59	71.99
20685	.3445	8.750	10.0	89	47	40	82.79	79.19	75.59	71.99
20695	.3465	8.800	10.0	89	47	40	82.79	79.19	75.59	71.99
20705	.3504	8.900	10.0	89	47	40	82.79	79.19	75.59	71.99
20715	.3543	9.000	10.0	89	47	40	82.79	79.19	75.59	71.99
20725	.3583	9.100	10.0	89	47	40	82.79	79.19	75.59	71.99
20735	.3602	9.150	10.0	89	47	40	82.79	79.19	75.59	71.99
20745	.3622	9.200	10.0	89	47	40	82.79	79.19	75.59	71.99
20755	.3661	9.300	10.0	89	47	40	82.79	79.19	75.59	71.99
20762	.3701	9.400	10.0	89	47	40	82.79	79.19	75.59	71.99
20765	.3740	9.500	10.0	89	47	40	82.79	79.19	75.59	71.99
20775	.3760	9.550	10.0	89	47	40	82.79	79.19	75.59	71.99
20778	.3780	9.600	10.0	89	47	40	82.79	79.19	75.59	71.99
20782	.3819	9.700	10.0	89	47	40	82.79	79.19	75.59	71.99
20785	.3858	9.800	10.0	89	47	40	82.79	79.19	75.59	71.99
20795	.3898	9.900	10.0	89	47	40	82.79	79.19	75.59	71.99
20805	.3937	10.000	10.0	89	47	40	82.79	79.19	75.59	71.99
20812	.3976	10.100	12.0	102	55	45	107.71	103.03	98.34	93.66
20815	.4016	10.200	12.0	102	55	45	107.71	103.03	98.34	93.66
20825	.4055	10.300	12.0	102	55	45	107.71	103.03	98.34	93.66
20835	.4134	10.500	12.0	102	55	45	107.71	103.03	98.34	93.66
20842	.4173	10.600	12.0	102	55	45	107.71	103.03	98.34	93.66
20845	.4213	10.700	12.0	102	55	45	107.71	103.03	98.34	93.66
20855	.4252	10.800	12.0	102	55	45	107.71	103.03	98.34	93.66

Series 1580HD (continued)

.4331" - .7342"
(11.000mm - 18.650mm)

HIGH PERFORMANCE
DRILLS

EDP#	<i>d1</i> Diameter		<i>d2</i> Shank Diameter	<i>l1</i> Overall Length	<i>l2</i> Flute Length	<i>l4</i> Shank Length	1-11	12-24	25-49	50-100
	Decimal	Metric								
20865	.4331	11.000	12.0	102	55	45	107.71	103.03	98.34	93.66
20875	.4370	11.100	12.0	102	55	45	107.71	103.03	98.34	93.66
20885	.4409	11.200	12.0	102	55	45	107.71	103.03	98.34	93.66
20892	.4488	11.400	12.0	102	55	45	107.71	103.03	98.34	93.66
20895	.4528	11.500	12.0	102	55	45	107.71	103.03	98.34	93.66
20905	.4606	11.700	12.0	102	55	45	107.71	103.03	98.34	93.66
20915	.4685	11.900	12.0	102	55	45	107.71	103.03	98.34	93.66
20925	.4724	12.000	12.0	102	55	45	107.71	103.03	98.34	93.66
20935	.4764	12.100	14.0	107	60	45	135.08	129.21	123.33	117.46
20941	.4803	12.200	14.0	107	60	45	135.08	129.21	123.33	117.46
20945	.4842	12.300	14.0	107	60	45	135.08	129.21	123.33	117.46
20951	.4882	12.400	14.0	107	60	45	135.08	129.21	123.33	117.46
20955	.4921	12.500	14.0	107	60	45	135.08	129.21	123.33	117.46
20961	.4961	12.600	14.0	107	60	45	135.08	129.21	123.33	117.46
20965	.5000	12.700	14.0	107	60	45	135.08	129.21	123.33	117.46
20975	.5039	12.800	14.0	107	60	45	135.08	129.21	123.33	117.46
20978	.5051	12.830	14.0	107	60	45	135.08	129.21	123.33	117.46
20981	.5079	12.900	14.0	107	60	45	135.08	129.21	123.33	117.46
20982	.5098	12.950	14.0	107	60	45	135.08	129.21	123.33	117.46
20985	.5118	13.000	14.0	107	60	45	135.08	129.21	123.33	117.46
20995	.5157	13.100	14.0	107	60	45	135.08	129.21	123.33	117.46
20998	.5236	13.300	14.0	107	60	45	135.08	129.21	123.33	117.46
21005	.5315	13.500	14.0	107	60	45	135.08	129.21	123.33	117.46
21015	.5394	13.700	14.0	107	60	45	135.08	129.21	123.33	117.46
21025	.5433	13.800	14.0	107	60	45	135.08	129.21	123.33	117.46
21035	.5512	14.000	14.0	107	60	45	135.08	129.21	123.33	117.46
21045	.5551	14.100	16.0	115	65	48	160.55	153.57	146.59	139.61
21053	.5591	14.200	16.0	115	65	48	160.55	153.57	146.59	139.61
21055	.5610	14.250	16.0	115	65	48	160.55	153.57	146.59	139.61
21065	.5630	14.300	16.0	115	65	48	160.55	153.57	146.59	139.61
21075	.5709	14.500	16.0	115	65	48	160.55	153.57	146.59	139.61
21085	.5787	14.700	16.0	115	65	48	160.55	153.57	146.59	139.61
21095	.5827	14.800	16.0	115	65	48	160.55	153.57	146.59	139.61
21105	.5906	15.000	16.0	115	65	48	160.55	153.57	146.59	139.61
21115	.5945	15.100	16.0	115	65	48	160.55	153.57	146.59	139.61
21125	.6102	15.500	16.0	115	65	48	160.55	153.57	146.59	139.61
21135	.6181	15.700	16.0	115	65	48	160.55	153.57	146.59	139.61
21145	.6220	15.800	16.0	115	65	48	160.55	153.57	146.59	139.61
21155	.6299	16.000	16.0	115	65	48	160.55	153.57	146.59	139.61
21159	.6331	16.080	18.0	123	73	48	213.10	203.83	194.57	185.30
21161	.6339	16.100	18.0	123	73	48	213.10	203.83	194.57	185.30
21163	.6378	16.200	18.0	123	73	48	213.10	203.83	194.57	185.30
21165	.6398	16.250	18.0	123	73	48	213.10	203.83	194.57	185.30
21175	.6496	16.500	18.0	123	73	48	213.10	203.83	194.57	185.30
21185	.6555	16.650	18.0	123	73	48	213.10	203.83	194.57	185.30
21195	.6693	17.000	18.0	123	73	48	213.10	203.83	194.57	185.30
21205	.6713	17.050	18.0	123	73	48	213.10	203.83	194.57	185.30
21215	.6870	17.450	18.0	123	73	48	213.10	203.83	194.57	185.30
21225	.6890	17.500	18.0	123	73	48	213.10	203.83	194.57	185.30
21235	.7027	17.850	18.0	123	73	48	213.10	203.83	194.57	185.30
21245	.7087	18.000	18.0	123	73	48	213.10	203.83	194.57	185.30
21255	.7185	18.250	20.0	131	79	50	291.82	279.14	266.45	253.76
21265	.7283	18.500	20.0	131	79	50	291.82	279.14	266.45	253.76
21275	.7342	18.650	20.0	131	79	50	291.82	279.14	266.45	253.76

continued →

Series 1580HD (continued)

.7480" - .7874"
(19.000mm - 20.000mm)

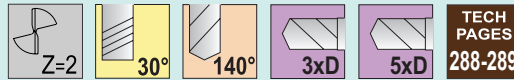
EDP#	<i>d1</i> Diameter		<i>d2</i> Shank Diameter	<i>l1</i> Overall Length	<i>l2</i> Flute Length	<i>l4</i> Shank Length	1-11	12-24	25-49	50-100
	Decimal	Metric								
21285	.7480	19.000	20.0	131	79	50	291.82	279.14	266.45	253.76
21295	.7500	19.050	20.0	131	79	50	291.82	279.14	266.45	253.76
21297	.7520	19.100	20.0	131	79	50	291.82	279.14	266.45	253.76
21298	.7539	19.150	20.0	131	79	50	291.82	279.14	266.45	253.76
21299	.7559	19.200	20.0	131	79	50	291.82	279.14	266.45	253.76
21300	.7579	19.250	20.0	131	79	50	291.82	279.14	266.45	253.76
21303	.7590	19.280	20.0	131	79	50	291.82	279.14	266.45	253.76
21304	.7598	19.300	20.0	131	79	50	291.82	279.14	266.45	253.76
21305	.7638	19.400	20.0	131	79	50	291.82	279.14	266.45	253.76
21315	.7677	19.500	20.0	131	79	50	291.82	279.14	266.45	253.76
21323	.7795	19.800	20.0	131	79	50	291.82	279.14	266.45	253.76
21325	.7815	19.850	20.0	131	79	50	291.82	279.14	266.45	253.76
21335	.7874	20.000	20.0	131	79	50	291.82	279.14	266.45	253.76



Blank Prep

TOLERANCES

d	+.0000" - .0005" (+.0000 - .0127mm)	
l1	≤ 1/8"	+.125" - .062" (+3.175 - 1.588mm)
	> 1/8"	+.125" - .125" (+3.175 - 3.175mm)
l2	≤ 1/8"	+.125" - .062" (+3.175 - 1.588mm)
	> 1/8"	+.125" - .125" (+3.175 - 3.175mm)



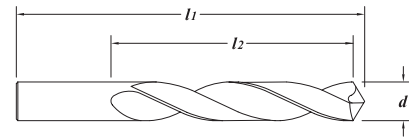
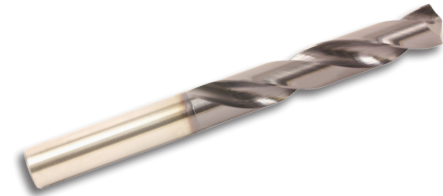
Series 1580H, 1280H

.1181" - .1719"
(3.000mm - 4.366mm)

Recommended for high nickel, high temperature alloys, cobalt-based alloys, stainless steels, and tool steels >40 Rc

TiAlN-based Coating

- High performance - high penetration solid submicron grain carbide drill
- Extended tool life and greater surface finish through faster SFM rates
- Up to 50% faster than standard carbide drills
- 30° helix for better chip evacuation
- Honed cutting edge
- Live tooling recommended on lathe processes



HIGH PERFORMANCE DRILLS

3xD (1580H) EDP#	5xD (1280H) EDP#	d †		l1 Overall Length	l2 Flute Length	1-11	12-24	25-49	50-100
		Decimal	Diameter Metric						
20301		.1181	3.000	46	16	30.13	28.82	27.51	26.20
	21301	.1181	3.000	50	19	31.49	30.12	28.75	27.38
20306		.1200	#31 3.048	1-13/16"	5/8"	30.44	29.12	27.79	26.47
	21306	.1200	#31 3.048	2"	3/4"	31.74	30.36	28.98	27.60
20311		.1250	1/8" 3.175	1-15/16"	11/16"	30.71	29.37	28.04	26.70
	21311	.1250	1/8" 3.175	2"	3/4"	31.99	30.60	29.21	27.82
20316		.1285	#30 3.264	1-15/16"	11/16"	30.98	29.63	28.29	26.94
	21316	.1285	#30 3.264	2-1/4"	3/4"	32.28	30.88	29.47	28.07
20321		.1360	#29 3.454	2-1/16"	3/4"	31.28	29.92	28.56	27.20
	21321	.1360	#29 3.454	2-1/4"	7/8"	32.52	31.11	29.69	28.28
20326		.1378	3.500	52	19	31.59	30.22	28.84	27.47
	21326	.1378	3.500	57	22	32.78	31.35	29.93	28.50
20331		.1405	#28 3.569	2-1/16"	3/4"	31.88	30.49	29.11	27.72
	21331	.1405	#28 3.569	2-1/4"	7/8"	33.04	31.60	30.17	28.73
20336		.1406	9/64" 3.571	2-1/16"	3/4"	32.15	30.76	29.36	27.96
	21336	.1406	9/64" 3.571	2-1/4"	7/8"	33.33	31.88	30.43	28.98
20341		.1440	#27 3.658	2-1/16"	3/4"	32.44	31.03	29.62	28.21
	21341	.1440	#27 3.658	2-1/4"	7/8"	33.55	32.09	30.63	29.17
20346		.1470	#26 3.734	2-3/16"	13/16"	32.69	31.27	29.85	28.43
	21346	.1470	#26 3.734	2-1/4"	7/8"	33.82	32.35	30.88	29.41
20351		.1495	#25 3.797	2-3/16"	13/16"	33.03	31.59	30.16	28.72
	21351	.1495	#25 3.797	2-1/4"	15/16"	34.09	32.60	31.12	29.64
20356		.1520	#24 3.861	2-3/16"	13/16"	33.29	31.85	30.40	28.95
	21356	.1520	#24 3.861	2-1/4"	15/16"	34.33	32.84	31.34	29.85
20361		.1540	#23 3.912	2-3/16"	13/16"	33.59	32.13	30.67	29.21
	21361	.1540	#23 3.912	2-1/4"	15/16"	34.62	33.11	31.61	30.10
20366		.1562	5/32" 3.967	2-3/16"	13/16"	33.86	32.38	30.91	29.44
	21366	.1562	5/32" 3.967	2-1/2"	15/16"	34.86	33.34	31.83	30.31
20371		.1570	#22 3.988	2-3/16"	13/16"	34.17	32.68	31.20	29.71
	21371	.1570	#22 3.988	2-1/2"	15/16"	35.11	33.58	32.06	30.53
20376		.1575	4.000	56	21	34.44	32.95	31.45	29.95
	21376	.1575	4.000	65	24	35.37	33.84	32.30	30.76
20381		.1590	#21 4.039	2-3/16"	13/16"	34.74	33.23	31.72	30.21
	21381	.1590	#21 4.039	2-1/2"	15/16"	35.63	34.08	32.53	30.98
20386		.1610	#20 4.089	2-3/16"	13/16"	35.04	33.52	31.99	30.47
	21386	.1610	#20 4.089	2-1/2"	15/16"	35.91	34.35	32.79	31.23
20391		.1660	#19 4.216	2-9/32"	15/16"	35.34	33.80	32.27	30.73
	21391	.1660	#19 4.216	2-1/2"	1"	36.17	34.60	33.02	31.45
20396		.1695	#18 4.305	2-9/32"	15/16"	35.62	34.07	32.52	30.97
	21396	.1695	#18 4.305	2-1/2"	1"	36.41	34.83	33.24	31.66
20401		.1719	11/64" 4.366	2-9/32"	15/16"	35.91	34.35	32.79	31.23
	21401	.1719	11/64" 4.366	2-1/2"	1"	36.67	35.08	33.48	31.89

continued →

Series 1580H, 1280H (continued)

.1730" - .2380"
(4.394mm - 6.045mm)

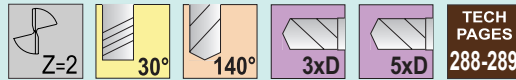
3xD (1580H) EDP#	5xD (1280H) EDP#	d^{\dagger} Diameter		l_1 Overall Length	l_2 Flute Length	1-11	12-24	25-49	50-100	
		Decimal	Metric							
20406		.1730	#17	4.394	2-9/32"	15/16"	36.21	34.64	33.06	31.49
	21406	.1730	#17	4.394	2-1/2"	1"	36.92	35.31	33.71	32.10
20411		.1770	#16	4.496	2-9/32"	15/16"	36.46	34.87	33.29	31.70
	21411	.1770	#16	4.496	2-1/2"	1"	37.20	35.59	33.97	32.35
20416		.1772		4.500	58	24	36.77	35.17	33.57	31.97
	21416	.1772		4.500	65	25	37.47	35.84	34.21	32.58
20421		.1800	#15	4.572	2-9/32"	15/16"	37.02	35.41	33.80	32.19
	21421	.1800	#15	4.572	2-3/4"	1"	37.70	36.06	34.42	32.78
20426		.1820	#14	4.623	2-9/32"	15/16"	37.36	35.74	34.11	32.49
	21426	.1820	#14	4.623	2-3/4"	1"	37.95	36.30	34.65	33.00
20431		.1850	#13	4.700	2-9/32"	15/16"	37.63	35.99	34.36	32.72
	21431	.1850	#13	4.700	2-3/4"	1-1/4"	38.24	36.58	34.91	33.25
20436		.1875	3/16"	4.763	2-13/32"	1"	37.93	36.28	34.63	32.98
	21436	.1875	3/16"	4.763	2-3/4"	1-1/4"	38.51	36.84	35.16	33.49
20441		.1890	#12	4.801	2-13/32"	1"	38.21	36.55	34.89	33.23
	21441	.1890	#12	4.801	2-3/4"	1-1/4"	38.76	37.07	35.39	33.70
20446		.1910	#11	4.851	2-13/32"	1"	38.56	36.88	35.21	33.53
	21446	.1910	#11	4.851	2-3/4"	1-1/4"	39.00	37.30	35.61	33.91
20451		.1935	#10	4.915	2-13/32"	1"	38.79	37.10	35.42	33.73
	21451	.1935	#10	4.915	2-3/4"	1-1/4"	39.27	37.57	35.86	34.15
20456		.1960	#9	4.978	2-13/32"	1"	39.07	37.37	35.67	33.97
	21456	.1960	#9	4.978	3"	1-5/16"	39.51	37.80	36.08	34.36
20461		.1969		5.000	61	25	39.28	37.58	35.87	34.16
	21461	.1969		5.000	75	33	39.79	38.06	36.33	34.60
20466		.1990	#8	5.055	2-13/32"	1"	39.65	37.93	36.20	34.48
	21466	.1990	#8	5.055	3"	1-5/16"	40.00	38.26	36.52	34.78
20471		.2010	#7	5.105	2-13/32"	1"	39.77	38.04	36.31	34.58
	21471	.2010	#7	5.105	3"	1-5/16"	40.17	38.42	36.68	34.93
20476		.2031	13/64"	5.159	2-13/32"	1"	40.03	38.29	36.55	34.81
	21476	.2031	13/64"	5.159	3"	1-5/16"	40.47	38.71	36.95	35.19
20481		.2040	#6	5.182	2-13/32"	1"	40.31	38.56	36.80	35.05
	21481	.2040	#6	5.182	3"	1-3/8"	40.77	39.00	37.22	35.45
20486		.2055	#5	5.220	2-13/32"	1"	40.60	38.83	37.07	35.30
	21486	.2055	#5	5.220	3"	1-3/8"	41.04	39.26	37.47	35.69
20491		.2090	#4	5.309	2-13/32"	1"	40.84	39.06	37.29	35.51
	21491	.2090	#4	5.309	3"	1-3/8"	41.31	39.51	37.72	35.92
20496		.2130	#3	5.410	2-5/8"	1-3/32"	41.11	39.33	37.54	35.75
	21496	.2130	#3	5.410	3"	1-3/8"	41.60	39.79	37.98	36.17
20501		.2165		5.500	67	28	41.38	39.58	37.78	35.98
	21501	.2165		5.500	75	35	41.85	40.03	38.21	36.39
20506		.2188	7/32"	5.558	2-5/8"	1-3/32"	41.72	39.91	38.09	36.28
	21506	.2188	7/32"	5.558	3"	1-3/8"	42.11	40.28	38.45	36.62
20511		.2210	#2	5.613	2-5/8"	1-3/32"	42.02	40.19	38.37	36.54
	21511	.2210	#2	5.613	3"	1-3/8"	43.02	41.15	39.28	37.41
20516		.2280	#1	5.791	2-5/8"	1-3/32"	42.34	40.50	38.66	36.82
	21516	.2280	#1	5.791	3"	1-3/8"	43.24	41.36	39.48	37.60
20521		.2340	A	5.944	2-5/8"	1-3/32"	42.63	40.78	38.92	37.07
	21521	.2340	A	5.944	3-1/4"	1-1/2"	43.88	41.98	40.07	38.16
20526		.2344	15/64"	5.954	2-5/8"	1-3/32"	42.95	41.09	39.22	37.35
	21526	.2344	15/64"	5.954	3-1/4"	1-1/2"	44.00	42.09	40.17	38.26
20531		.2362		6.000	67	28	43.25	41.37	39.49	37.61
	21531	.2362		6.000	80	38	44.14	42.22	40.30	38.38
20536		.2380	B	6.045	2-3/4"	1-7/32"	43.55	41.66	39.76	37.87
	21536	.2380	B	6.045	3-1/4"	1-5/8"	44.26	42.34	40.41	38.49

3xD (1580H) EDP#	5xD (1280H) EDP#	d^{\dagger}		l_1 Overall Length	l_2 Flute Length	1-11	12-24	25-49	50-100	
		Decimal	Diameter							Metric
20541		.2420	C	6.147	2-3/4"	1-7/32"	43.90	41.99	40.08	38.17
	21541	.2420	C	6.147	3-1/4"	1-5/8"	44.56	42.63	40.69	38.75
20546		.2460	D	6.248	2-3/4"	1-7/32"	44.14	42.22	40.30	38.38
	21546	.2460	D	6.248	3-1/4"	1-5/8"	44.85	42.90	40.95	39.00
20551		.2500	1/4" / E	6.350	2-3/4"	1-7/32"	44.52	42.58	40.65	38.71
	21551	.2500	1/4" / E	6.350	3-1/4"	1-5/8"	45.10	43.14	41.18	39.22
20556		.2559		6.500	70	31	45.23	43.26	41.30	39.33
	21556	.2559		6.500	80	41	45.90	43.90	41.91	39.91
20561		.2570	F	6.528	2-3/4"	1-7/32"	45.94	43.95	41.95	39.95
	21561	.2570	F	6.528	3-1/4"	1-11/16"	46.69	44.66	42.63	40.60
20566		.2610	G	6.629	2-3/4"	1-7/32"	46.64	44.62	42.59	40.56
	21566	.2610	G	6.629	3-1/2"	1-11/16"	47.50	45.43	43.37	41.30
20571		.2656	17/64"	6.746	2-15/16"	1-11/32"	47.35	45.29	43.23	41.17
	21571	.2656	17/64"	6.746	3-1/2"	1-11/16"	48.27	46.17	44.07	41.97
20576		.2660	H	6.756	2-15/16"	1-11/32"	48.05	45.96	43.87	41.78
	21576	.2660	H	6.756	3-1/2"	1-11/16"	49.09	46.96	44.82	42.69
20581		.2720	I	6.909	2-15/16"	1-11/32"	48.76	46.64	44.52	42.40
	21581	.2720	I	6.909	3-1/2"	1-11/16"	49.88	47.71	45.54	43.37
20586		.2756		7.000	75	34	49.47	47.32	45.17	43.02
	21586	.2756		7.000	88	43	50.65	48.44	46.24	44.04
20591		.2770	J	7.036	2-15/16"	1-11/32"	50.16	47.98	45.80	43.62
	21591	.2770	J	7.036	3-1/2"	1-11/16"	51.44	49.20	46.97	44.73
20596		.2810	K	7.137	2-15/16"	1-11/32"	50.88	48.66	46.45	44.24
	21596	.2810	K	7.137	3-1/2"	1-3/4"	52.27	50.00	47.72	45.45
20601		.2812	9/32"	7.142	2-15/16"	1-11/32"	51.59	49.35	47.10	44.86
	21601	.2812	9/32"	7.142	3-1/2"	1-3/4"	53.05	50.74	48.44	46.13
20606		.2900	L	7.366	2-15/16"	1-11/32"	52.29	50.02	47.74	45.47
	21606	.2900	L	7.366	3-1/2"	1-3/4"	53.79	51.45	49.11	46.77
20611		.2950	M	7.493	2-15/16"	1-11/32"	53.30	50.99	48.67	46.35
	21611	.2950	M	7.493	3-3/4"	1-3/4"	54.56	52.18	49.81	47.44
20616		.2953		7.500	75	34	53.30	50.99	48.67	46.35
	21616	.2953		7.500	95	44	54.56	52.18	49.81	47.44
20621		.2969	19/64"	7.541	3-3/32"	1-15/32"	53.77	51.44	49.10	46.76
	21621	.2969	19/64"	7.541	3-3/4"	1-7/8"	55.10	52.70	50.31	47.91
20626		.3020	N	7.671	3-3/32"	1-15/32"	56.19	53.75	51.30	48.86
	21626	.3020	N	7.671	3-3/4"	1-7/8"	57.28	54.79	52.30	49.81
20631		.3125	5/16"	7.938	3-3/32"	1-15/32"	56.38	53.93	51.48	49.03
	21631	.3125	5/16"	7.938	3-3/4"	1-7/8"	57.45	54.96	52.46	49.96
20636		.3150		8.000	79	37	59.50	56.91	54.33	51.74
	21636	.3150		8.000	95	48	60.57	57.94	55.30	52.67
20641		.3160	O	8.026	3-3/32"	1-15/32"	59.50	56.91	54.33	51.74
	21641	.3160	O	8.026	3-3/4"	1-7/8"	60.57	57.94	55.30	52.67
20646		.3230	P	8.204	3-3/32"	1-15/32"	59.93	57.32	54.72	52.11
	21646	.3230	P	8.204	3-3/4"	2-3/32"	60.79	58.15	55.50	52.86
20651		.3281	21/64"	8.334	3-3/32"	1-15/32"	61.04	58.39	55.73	53.08
	21651	.3281	21/64"	8.334	4"	2-3/32"	61.35	58.69	56.02	53.35
20656		.3320	Q	8.433	3-3/32"	1-15/32"	62.13	59.43	56.73	54.03
	21656	.3320	Q	8.433	4"	2-3/32"	62.57	59.85	57.13	54.41
20661		.3346		8.500	79	37	62.40	59.69	56.97	54.26
	21661	.3346		8.500	100	53	63.03	60.29	57.55	54.81
20666		.3390	R	8.611	3-5/16"	1-9/16"	64.08	61.29	58.51	55.72
	21666	.3390	R	8.611	4"	2-3/32"	64.76	61.94	59.13	56.31
20671		.3438	11/32"	8.733	3-5/16"	1-9/16"	65.48	62.63	59.79	56.94
	21671	.3438	11/32"	8.733	4"	2-3/16"	67.03	64.12	61.20	58.29

continued →

Series 1580H, 1280H (continued)

.3480" - .4531"
(8.839mm - 11.509mm)



TOLERANCES		
<i>d</i>	+.0000" - .0005" (+.0000 - .0127mm)	
<i>l1</i>	≤ 1/8"	+.125" - .062" (+3.175 - 1.588mm)
	> 1/8"	+.125" - .125" (+3.175 - 3.175mm)
<i>l2</i>	≤ 1/8"	+.125" - .062" (+3.175 - 1.588mm)
	> 1/8"	+.125" - .125" (+3.175 - 3.175mm)

Recommended for high nickel, high temperature alloys, cobalt-based alloys, stainless steels, and tool steels >40 Rc

TiAlN-based Coating

High performance - high penetration solid submicron grain carbide drill

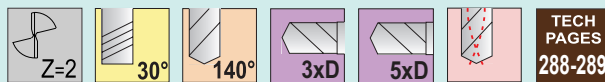


3xD (1580H) EDP#	5xD (1280H) EDP#	<i>d</i> † Diameter		<i>l1</i> Overall Length	<i>l2</i> Flute Length	1-11	12-24	25-49	50-100	
		Decimal	Metric							
20676		.3480	S	8.839	3-5/16"	1-9/16"	67.65	64.71	61.77	58.83
	21676	.3480	S	8.839	4"	2-3/16"	69.66	66.63	63.60	60.57
20681		.3543		9.000	84	40	69.37	66.35	63.34	60.32
	21681	.3543		9.000	100	56	70.06	67.01	63.97	60.92
20686		.3580	T	9.093	3-5/16"	1-9/16"	72.09	68.96	65.82	62.69
	21686	.3580	T	9.093	4-1/4"	2-9/32"	72.83	69.66	66.50	63.33
20691		.3594	23/64"	9.129	3-5/16"	1-9/16"	72.54	69.39	66.23	63.08
	21691	.3594	23/64"	9.129	4-1/4"	2-9/32"	73.27	70.08	66.90	63.71
20696		.3680	U	9.347	3-5/16"	1-9/16"	74.05	70.83	67.61	64.39
	21696	.3680	U	9.347	4-1/4"	2-9/32"	77.44	74.07	70.71	67.34
20701		.3740		9.500	84	40	74.66	71.41	68.17	64.92
	21701	.3740		9.500	105	58	78.20	74.80	71.40	68.00
20706		.3750	3/8"	9.525	3-1/2"	1-11/16"	75.11	71.84	68.58	65.31
	21706	.3750	3/8"	9.525	4-1/4"	2-3/8"	78.99	75.56	72.12	68.69
20711		.3770	V	9.576	3-1/2"	1-11/16"	77.99	74.60	71.21	67.82
	21711	.3770	V	9.576	4-1/4"	2-3/8"	80.91	77.40	73.88	70.36
20716		.3860	W	9.804	3-1/2"	1-11/16"	79.36	75.91	72.46	69.01
	21716	.3860	W	9.804	4-1/2"	2-3/8"	82.35	78.77	75.19	71.61
20721		.3906	25/64"	9.921	3-1/2"	1-11/16"	80.36	76.87	73.37	69.88
	21721	.3906	25/64"	9.921	4-1/2"	2-3/8"	83.35	79.73	76.10	72.48
20726		.3937		10.000	89	43	82.79	79.19	75.59	71.99
	21726	.3937		10.000	115	60	85.86	82.13	78.39	74.66
20731		.3970	X	10.084	3-1/2"	1-11/16"	83.92	80.27	76.62	72.97
	21731	.3970	X	10.084	4-1/2"	2-1/2"	86.91	83.13	79.35	75.57
20736		.4040	Y	10.262	3-1/2"	1-11/16"	84.47	80.80	77.12	73.45
	21736	.4040	Y	10.262	4-1/2"	2-9/16"	89.53	85.64	81.74	77.85
20741		.4062	13/32"	10.317	3-1/2"	1-11/16"	87.07	83.28	79.50	75.71
	21741	.4062	13/32"	10.317	4-1/2"	2-9/16"	90.30	86.37	82.45	78.52
20746		.4130	Z	10.490	3-1/2"	1-11/16"	87.88	84.06	80.24	76.42
	21746	.4130	Z	10.490	4-1/2"	2-5/8"	91.13	87.16	83.20	79.24
20751		.4134		10.500	89	43	87.88	84.06	80.24	76.42
	21751	.4134		10.500	115	67	91.13	87.16	83.20	79.24
20756		.4219	27/64"	10.716	3-3/4"	1-13/16"	88.71	84.85	81.00	77.14
	21756	.4219	27/64"	10.716	4-1/2"	2-11/16"	91.94	87.95	83.95	79.95
20761		.4331		11.000	95	46	95.22	91.08	86.94	82.80
	21761	.4331		11.000	115	68	98.66	94.37	90.08	85.79
20766		.4375	7/16"	11.113	3-3/4"	1-13/16"	95.22	91.08	86.94	82.80
	21766	.4375	7/16"	11.113	4-3/4"	2-13/16"	99.05	94.74	90.44	86.13
20771		.4528		11.500	95	46	102.21	97.77	93.32	88.88
	21771	.4528		11.500	120	71	105.85	101.24	96.64	92.04
20776		.4531	29/64"	11.509	3-3/4"	1-13/16"	102.21	97.77	93.32	88.88
	21776	.4531	29/64"	11.509	4-3/4"	2-7/8"	105.85	101.24	96.64	92.04

3xD (1580H) EDP#	5xD (1280H) EDP#	d † Diameter		l_1 Overall Length	l_2 Flute Length	1-11	12-24	25-49	50-100	
		Decimal	Metric							
20781		.4688	15/32"	11.908	4"	1-15/16"	107.39	102.72	98.05	93.38
	21781	.4688	15/32"	11.908	4-3/4"	2-7/8"	111.17	106.34	101.50	96.67
20786		.4724		12.000	102	49	107.71	103.03	98.34	93.66
	21786	.4724		12.000	120	73	111.50	106.66	101.81	96.96
20791		.4844	31/64"	12.304	4"	1-15/16"	108.45	103.73	99.02	94.30
	21791	.4844	31/64"	12.304	5-5/16"	3"	112.75	107.84	102.94	98.04
20796		.4921		12.500	102	49	109.53	104.76	100.00	95.24
	21796	.4921		12.500	135	76	114.09	109.13	104.17	99.21
20801		.5000	1/2"	12.700	4"	1-15/16"	110.23	105.44	100.64	95.85
	21801	.5000	1/2"	12.700	5-3/8"	3-1/16"	114.32	109.35	104.38	99.41
20806		.5118		13.000	107	53	120.82	115.57	110.31	105.06
	21806	.5118		13.000	135	78	124.32	118.91	113.51	108.10
20811		.5156	33/64"	13.096	4-7/32"	2-3/32"	123.67	118.29	112.92	107.54
	21811	.5156	33/64"	13.096	5-3/8"	3-1/8"	127.22	121.69	116.16	110.63
20816		.5312	17/32"	13.492	4-7/32"	2-3/32"	126.52	121.02	115.52	110.02
	21816	.5312	17/32"	13.492	5-11/16"	3-5/16"	130.21	124.55	118.89	113.23
20821		.5315		13.500	110	56	129.38	123.75	118.13	112.50
	21821	.5315		13.500	145	84	133.09	127.30	121.52	115.73
20826		.5469	35/64"	13.891	4-5/16"	2-7/32"	132.22	126.47	120.72	114.97
	21826	.5469	35/64"	13.891	5-13/16"	3-3/8"	135.99	130.08	124.16	118.25
20831		.5512		14.000	110	56	135.08	129.21	123.33	117.46
	21831	.5512		14.000	145	86	138.93	132.89	126.85	120.81
20836		.5625	9/16"	14.288	4-9/16"	2-15/32"	145.41	139.08	132.76	126.44
	21836	.5625	9/16"	14.288	5-15/16"	3-1/2"	149.30	142.81	136.32	129.83
20841		.5709		14.500	116	63	148.13	141.69	135.25	128.81
	21841	.5709		14.500	150	89	152.05	145.44	138.83	132.22
20846		.5781	37/64"	14.684	4-15/16"	2-9/16"	150.78	144.22	137.67	131.11
	21846	.5781	37/64"	14.684	6"	3-1/2"	154.78	148.05	141.32	134.59
20851		.5906		15.000	125	65	153.56	146.88	140.21	133.53
	21851	.5906		15.000	150	90	157.68	150.82	143.97	137.11
20856		.5938	19/32"	15.083	4-15/16"	2-9/16"	154.40	147.69	140.97	134.26
	21856	.5938	19/32"	15.083	6"	3-9/16"	158.49	151.60	144.71	137.82
20861		.6094	39/64"	15.479	5-1/16"	2-13/16"	155.18	148.43	141.69	134.94
	21861	.6094	39/64"	15.479	6-3/16"	3-11/16"	171.76	164.30	156.83	149.36
20866		.6102		15.500	129	71	155.99	149.20	142.42	135.64
	21866	.6102		15.500	160	94	172.56	165.06	157.55	150.05
20871		.6250	5/8"	15.875	5-1/4"	3-1/8"	156.77	149.95	143.14	136.32
	21871	.6250	5/8"	15.875	6-5/16"	3-3/4"	173.36	165.83	158.29	150.75
20876		.6299		16.000	133	79	160.55	153.57	146.59	139.61
	21876	.6299		16.000	160	95	177.25	169.54	161.84	154.13

Series 1580KD, 1280KD

.1181" - .1654"
(3.000mm - 4.200mm)

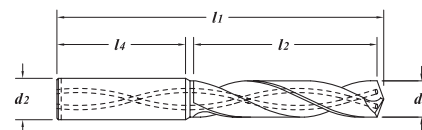


TOLERANCES		
d_1 *	3mm - 6mm	+0.016 +0.004mm (+0.00063" +0.00015")
	> 6mm - 10mm	+0.021 +0.006mm (+0.00082" +0.00023")
	> 10mm - 18mm	+0.025 +0.007mm (+0.00098" +0.00027")
	> 18mm - 20mm	+0.029 +0.008mm (+0.00114" +0.00031")
d_2	6mm	+0.000 -0.008mm (+0.00000" -0.00030")
	8mm - 10mm	+0.000 -0.009mm (+0.00000" -0.00035")
	12mm - 18mm	+0.000 -0.011mm (+0.00000" -0.00040")
	20mm	+0.000 -0.013mm (+0.00000" -0.00050")

Recommended for high nickel, high temperature alloys, cobalt-based alloys, stainless steels, and tool steels >40 Rc

TiAlN-based Coating

- High performance solid submicron grain carbide drill with reinforced shank
- Coolant through capabilities for high pressure coolant systems
- Up to 70% faster than standard carbide drills
- 30° helix for better chip evacuation
- Honed cutting edge
- Can be used as a pilot drill
- Live tooling recommended on lathe processes



* Note - These drills are made to a plus/plus tolerance on the drill diameter.
If you are in need of a minus tolerance drill, please refer to our other high performance drills.

	3xD (1580KD) EDP#	5xD (1280KD) EDP#	d_1 Diameter		d_2 Shank Diameter	l_1 Overall Length	l_2 Flute Length	l_4 Shank Length	1-11	12-24	25-49	50-100
			Decimal	Metric								
NEW	27995		.1181	3.000	6.0	62	20	36	55.46	53.05	50.64	48.23
NEW		25065	.1181	3.000	6.0	66	28	36	65.47	62.62	59.78	56.93
NEW	28005		.1220	3.100	6.0	62	20	36	55.46	53.05	50.64	48.23
NEW		25075	.1220	3.100	6.0	66	28	36	65.47	62.62	59.78	56.93
NEW	28015		.1248	3.170	6.0	62	20	36	55.46	53.05	50.64	48.23
NEW		25085	.1248	3.170	6.0	66	28	36	65.47	62.62	59.78	56.93
NEW	28025		.1260	3.200	6.0	62	20	36	55.46	53.05	50.64	48.23
NEW		25095	.1260	3.200	6.0	66	28	36	65.47	62.62	59.78	56.93
NEW	28035		.1280	3.250	6.0	62	20	36	55.46	53.05	50.64	48.23
NEW		25105	.1280	3.250	6.0	66	28	36	65.47	62.62	59.78	56.93
NEW	28045		.1299	3.300	6.0	62	20	36	55.46	53.05	50.64	48.23
NEW		25115	.1299	3.300	6.0	66	28	36	65.47	62.62	59.78	56.93
NEW	28055		.1339	3.400	6.0	62	20	36	55.46	53.05	50.64	48.23
NEW		25125	.1339	3.400	6.0	66	28	36	65.47	62.62	59.78	56.93
NEW	28065		.1378	3.500	6.0	62	20	36	55.46	53.05	50.64	48.23
NEW		25135	.1378	3.500	6.0	66	28	36	65.47	62.62	59.78	56.93
NEW	28075		.1417	3.600	6.0	62	20	36	55.46	53.05	50.64	48.23
NEW		25145	.1417	3.600	6.0	66	28	36	65.47	62.62	59.78	56.93
NEW	28085		.1457	3.700	6.0	62	20	36	55.46	53.05	50.64	48.23
NEW		25155	.1457	3.700	6.0	66	28	36	65.47	62.62	59.78	56.93
NEW	28095		.1476	3.750	6.0	62	20	36	55.46	53.05	50.64	48.23
NEW		25165	.1476	3.750	6.0	66	28	36	65.47	62.62	59.78	56.93
NEW	28105		.1496	3.800	6.0	66	24	36	55.46	53.05	50.64	48.23
NEW		25175	.1496	3.800	6.0	74	36	36	65.47	62.62	59.78	56.93
NEW	28115		.1535	3.900	6.0	66	24	36	55.46	53.05	50.64	48.23
NEW		25185	.1535	3.900	6.0	74	36	36	65.47	62.62	59.78	56.93
NEW	28125		.1563	3.970	6.0	66	24	36	55.46	53.05	50.64	48.23
NEW		25195	.1563	3.970	6.0	74	36	36	65.47	62.62	59.78	56.93
	28135		.1575	4.000	6.0	66	24	36	55.46	53.05	50.64	48.23
		25205	.1575	4.000	6.0	74	36	36	65.47	62.62	59.78	56.93
	28145		.1614	4.100	6.0	66	24	36	55.46	53.05	50.64	48.23
		25215	.1614	4.100	6.0	74	36	36	65.47	62.62	59.78	56.93
	28155		.1654	4.200	6.0	66	24	36	55.46	53.05	50.64	48.23
		25225	.1654	4.200	6.0	74	36	36	65.47	62.62	59.78	56.93

Series 1580KD, 1280KD (continued)

.1673" - .2500"
(4.250mm - 6.350mm)

HIGH PERFORMANCE
DRILLS

3xD (1580KD) EDP#	5xD (1280KD) EDP#	<i>d1</i> Diameter		<i>d2</i> Shank Diameter	<i>l1</i> Overall Length	<i>l2</i> Flute Length	<i>l4</i> Shank Length	1-11	12-24	25-49	50-100
		Decimal	Metric								
28165		.1673	4.250	6.0	66	24	36	55.46	53.05	50.64	48.23
	25235	.1673	4.250	6.0	74	36	36	65.47	62.62	59.78	56.93
28175		.1693	4.300	6.0	66	24	36	55.46	53.05	50.64	48.23
	25245	.1693	4.300	6.0	74	36	36	65.47	62.62	59.78	56.93
28185		.1732	4.400	6.0	66	24	36	55.46	53.05	50.64	48.23
	25255	.1732	4.400	6.0	74	36	36	65.47	62.62	59.78	56.93
28195		.1772	4.500	6.0	66	24	36	55.46	53.05	50.64	48.23
	25265	.1772	4.500	6.0	74	36	36	65.47	62.62	59.78	56.93
28205		.1811	4.600	6.0	66	24	36	55.46	53.05	50.64	48.23
	25275	.1811	4.600	6.0	74	36	36	65.47	62.62	59.78	56.93
28215		.1831	4.650	6.0	66	24	36	55.46	53.05	50.64	48.23
	25285	.1831	4.650	6.0	74	36	36	65.47	62.62	59.78	56.93
28225		.1850	4.700	6.0	66	24	36	55.46	53.05	50.64	48.23
	25295	.1850	4.700	6.0	74	36	36	65.47	62.62	59.78	56.93
28235		.1870	4.750	6.0	66	24	36	55.46	53.05	50.64	48.23
	25305	.1870	4.750	6.0	74	36	36	65.47	62.62	59.78	56.93
28245		.1890	4.800	6.0	66	28	36	55.46	53.05	50.64	48.23
	25315	.1890	4.800	6.0	82	44	36	65.47	62.62	59.78	56.93
28255		.1929	4.900	6.0	66	28	36	55.46	53.05	50.64	48.23
	25325	.1929	4.900	6.0	82	44	36	65.47	62.62	59.78	56.93
28265		.1969	5.000	6.0	66	28	36	55.46	53.05	50.64	48.23
	25335	.1969	5.000	6.0	82	44	36	65.47	62.62	59.78	56.93
28275		.2008	5.100	6.0	66	28	36	55.46	53.05	50.64	48.23
	25345	.2008	5.100	6.0	82	44	36	65.47	62.62	59.78	56.93
28285		.2027	5.150	6.0	66	28	36	55.46	53.05	50.64	48.23
	25355	.2027	5.150	6.0	82	44	36	65.47	62.62	59.78	56.93
28295		.2047	5.200	6.0	66	28	36	55.46	53.05	50.64	48.23
	25365	.2047	5.200	6.0	82	44	36	65.47	62.62	59.78	56.93
28305		.2087	5.300	6.0	66	28	36	55.46	53.05	50.64	48.23
	25375	.2087	5.300	6.0	82	44	36	65.47	62.62	59.78	56.93
28315		.2165	5.500	6.0	66	28	36	55.46	53.05	50.64	48.23
	25385	.2165	5.500	6.0	82	44	36	65.47	62.62	59.78	56.93
28325		.2185	5.550	6.0	66	28	36	55.46	53.05	50.64	48.23
	25395	.2185	5.550	6.0	82	44	36	65.47	62.62	59.78	56.93
28335		.2205	5.600	6.0	66	28	36	55.46	53.05	50.64	48.23
	25397	.2205	5.600	6.0	82	44	36	65.47	62.62	59.78	56.93
28345		.2244	5.700	6.0	66	28	36	55.46	53.05	50.64	48.23
	25400	.2244	5.700	6.0	82	44	36	65.47	62.62	59.78	56.93
28355		.2283	5.800	6.0	66	28	36	55.46	53.05	50.64	48.23
	25405	.2283	5.800	6.0	82	44	36	65.47	62.62	59.78	56.93
28365		.2323	5.900	6.0	66	28	36	55.46	53.05	50.64	48.23
	25415	.2323	5.900	6.0	82	44	36	65.47	62.62	59.78	56.93
28375		.2342	5.950	6.0	66	28	36	55.46	53.05	50.64	48.23
	25425	.2342	5.950	6.0	82	44	36	65.47	62.62	59.78	56.93
28385		.2362	6.000	6.0	66	28	36	55.46	53.05	50.64	48.23
	25435	.2362	6.000	6.0	82	44	36	65.47	62.62	59.78	56.93
28395		.2402	6.100	8.0	79	34	36	77.28	73.92	70.56	67.20
	25437	.2402	6.100	8.0	91	53	36	92.07	88.07	84.06	80.06
28405		.2441	6.200	8.0	79	34	36	77.28	73.92	70.56	67.20
	25440	.2441	6.200	8.0	91	53	36	92.07	88.07	84.06	80.06
28415		.2480	6.300	8.0	79	34	36	77.28	73.92	70.56	67.20
	25443	.2480	6.300	8.0	91	53	36	92.07	88.07	84.06	80.06
28425		.2500	6.350	8.0	79	34	36	77.28	73.92	70.56	67.20
	25445	.2500	6.350	8.0	91	53	36	92.07	88.07	84.06	80.06

continued →

Series 1580KD, 1280KD (continued)

.2520" - .3346"
(6.400mm - 8.500mm)

3xD (1580KD) EDP#	5xD (1280KD) EDP#	d1 Diameter		d2 Shank Diameter	l1 Overall Length	l2 Flute Length	l4 Shank Length	1-11	12-24	25-49	50-100
		Decimal	Metric								
28435		.2520	6.400	8.0	79	34	36	77.28	73.92	70.56	67.20
	25450	.2520	6.400	8.0	91	53	36	92.07	88.07	84.06	80.06
28445		.2559	6.500	8.0	79	34	36	77.28	73.92	70.56	67.20
	25455	.2559	6.500	8.0	91	53	36	92.07	88.07	84.06	80.06
28446		.2571	6.530	8.0	79	34	36	77.28	73.92	70.56	67.20
	25457	.2571	6.530	8.0	91	53	36	92.07	88.07	84.06	80.06
28455		.2598	6.600	8.0	79	34	36	77.28	73.92	70.56	67.20
	25460	.2598	6.600	8.0	91	53	36	92.07	88.07	84.06	80.06
28461		.2638	6.700	8.0	79	34	36	77.28	73.92	70.56	67.20
	25463	.2638	6.700	8.0	91	53	36	92.07	88.07	84.06	80.06
28465		.2657	6.750	8.0	79	34	36	77.28	73.92	70.56	67.20
	25465	.2657	6.750	8.0	91	53	36	92.07	88.07	84.06	80.06
28475		.2677	6.800	8.0	79	34	36	77.28	73.92	70.56	67.20
	25475	.2677	6.800	8.0	91	53	36	92.07	88.07	84.06	80.06
28485		.2717	6.900	8.0	79	34	36	77.28	73.92	70.56	67.20
	25485	.2717	6.900	8.0	91	53	36	92.07	88.07	84.06	80.06
28495		.2756	7.000	8.0	79	34	36	77.28	73.92	70.56	67.20
	25495	.2756	7.000	8.0	91	53	36	92.07	88.07	84.06	80.06
28505		.2795	7.100	8.0	79	41	36	77.28	73.92	70.56	67.20
	25505	.2795	7.100	8.0	91	53	36	92.07	88.07	84.06	80.06
28515		.2815	7.150	8.0	79	41	36	77.28	73.92	70.56	67.20
	25515	.2815	7.150	8.0	91	53	36	92.07	88.07	84.06	80.06
28525		.2835	7.200	8.0	79	41	36	77.28	73.92	70.56	67.20
	25525	.2835	7.200	8.0	91	53	36	92.07	88.07	84.06	80.06
28535		.2874	7.300	8.0	79	41	36	77.28	73.92	70.56	67.20
	25530	.2874	7.300	8.0	91	53	36	92.07	88.07	84.06	80.06
28545		.2913	7.400	8.0	79	41	36	77.28	73.92	70.56	67.20
	25535	.2913	7.400	8.0	91	53	36	92.07	88.07	84.06	80.06
28555		.2953	7.500	8.0	79	41	36	77.28	73.92	70.56	67.20
	25545	.2953	7.500	8.0	91	53	36	92.07	88.07	84.06	80.06
28565		.2972	7.550	8.0	79	41	36	77.28	73.92	70.56	67.20
	25555	.2972	7.550	8.0	91	53	36	92.07	88.07	84.06	80.06
28575		.2992	7.600	8.0	79	41	36	77.28	73.92	70.56	67.20
	25565	.2992	7.600	8.0	91	53	36	92.07	88.07	84.06	80.06
28585		.3031	7.700	8.0	79	41	36	77.28	73.92	70.56	67.20
	25575	.3031	7.700	8.0	91	53	36	92.07	88.07	84.06	80.06
28595		.3071	7.800	8.0	79	41	36	77.28	73.92	70.56	67.20
	25585	.3071	7.800	8.0	91	53	36	92.07	88.07	84.06	80.06
28605		.3130	7.950	8.0	79	41	36	77.28	73.92	70.56	67.20
	25595	.3130	7.950	8.0	91	53	36	92.07	88.07	84.06	80.06
28615		.3150	8.000	8.0	79	41	36	77.28	73.92	70.56	67.20
	25605	.3150	8.000	8.0	91	53	36	92.07	88.07	84.06	80.06
28625		.3189	8.100	10.0	89	47	40	104.13	99.61	95.08	90.55
	25610	.3189	8.100	10.0	103	61	40	118.61	113.45	108.30	103.14
28635		.3228	8.200	10.0	89	47	40	104.13	99.61	95.08	90.55
	25615	.3228	8.200	10.0	103	61	40	118.61	113.45	108.30	103.14
28645		.3268	8.300	10.0	89	47	40	104.13	99.61	95.08	90.55
	25625	.3268	8.300	10.0	103	61	40	118.61	113.45	108.30	103.14
28655		.3287	8.350	10.0	89	47	40	104.13	99.61	95.08	90.55
	25635	.3287	8.350	10.0	103	61	40	118.61	113.45	108.30	103.14
28665		.3307	8.400	10.0	89	47	40	104.13	99.61	95.08	90.55
	25640	.3307	8.400	10.0	103	61	40	118.61	113.45	108.30	103.14
28675		.3346	8.500	10.0	89	47	40	104.13	99.61	95.08	90.55
	25645	.3346	8.500	10.0	103	61	40	118.61	113.45	108.30	103.14

Series 1580KD, 1280KD (continued)

.3386" - .4370"
(8.600mm - 11.100mm)

HIGH PERFORMANCE
DRILLS

3xD (1580KD) EDP#	5xD (1280KD) EDP#	<i>d1</i> Diameter		<i>d2</i> Shank Diameter	<i>l1</i> Overall Length	<i>l2</i> Flute Length	<i>l4</i> Shank Length	1-11	12-24	25-49	50-100
		Decimal	Metric								
28685		.3386	8.600	10.0	89	47	40	104.13	99.61	95.08	90.55
	25655	.3386	8.600	10.0	103	61	40	118.61	113.45	108.30	103.14
28695		.3425	8.700	10.0	89	47	40	104.13	99.61	95.08	90.55
	25665	.3425	8.700	10.0	103	61	40	118.61	113.45	108.30	103.14
28725		.3445	8.750	10.0	89	47	40	104.13	99.61	95.08	90.55
	25675	.3445	8.750	10.0	103	61	40	118.61	113.45	108.30	103.14
28735		.3465	8.800	10.0	89	47	40	104.13	99.61	95.08	90.55
	25685	.3465	8.800	10.0	103	61	40	118.61	113.45	108.30	103.14
28745		.3504	8.900	10.0	89	47	40	104.13	99.61	95.08	90.55
	25695	.3504	8.900	10.0	103	61	40	118.61	113.45	108.30	103.14
28755		.3543	9.000	10.0	89	47	40	104.13	99.61	95.08	90.55
	25705	.3543	9.000	10.0	103	61	40	118.61	113.45	108.30	103.14
28765		.3583	9.100	10.0	89	47	40	104.13	99.61	95.08	90.55
	25715	.3583	9.100	10.0	103	61	40	118.61	113.45	108.30	103.14
28775		.3602	9.150	10.0	89	47	40	104.13	99.61	95.08	90.55
	25725	.3602	9.150	10.0	103	61	40	118.61	113.45	108.30	103.14
28815		.3622	9.200	10.0	89	47	40	104.13	99.61	95.08	90.55
	25735	.3622	9.200	10.0	103	61	40	118.61	113.45	108.30	103.14
28825		.3661	9.300	10.0	89	47	40	104.13	99.61	95.08	90.55
	25745	.3661	9.300	10.0	103	61	40	118.61	113.45	108.30	103.14
28845		.3701	9.400	10.0	89	47	40	104.13	99.61	95.08	90.55
	25750	.3701	9.400	10.0	103	61	40	118.61	113.45	108.30	103.14
28855		.3740	9.500	10.0	89	47	40	104.13	99.61	95.08	90.55
	25755	.3740	9.500	10.0	103	61	40	118.61	113.45	108.30	103.14
28875		.3760	9.550	10.0	89	47	40	104.13	99.61	95.08	90.55
	25765	.3760	9.550	10.0	103	61	40	118.61	113.45	108.30	103.14
28878		.3780	9.600	10.0	89	47	40	104.13	99.61	95.08	90.55
	25767	.3780	9.600	10.0	103	61	40	118.61	113.45	108.30	103.14
28882		.3819	9.700	10.0	89	47	40	104.13	99.61	95.08	90.55
	25770	.3819	9.700	10.0	103	61	40	118.61	113.45	108.30	103.14
28885		.3858	9.800	10.0	89	47	40	104.13	99.61	95.08	90.55
	25775	.3858	9.800	10.0	103	61	40	118.61	113.45	108.30	103.14
28895		.3898	9.900	10.0	89	47	40	104.13	99.61	95.08	90.55
	25785	.3898	9.900	10.0	103	61	40	118.61	113.45	108.30	103.14
28905		.3937	10.000	10.0	89	47	40	104.13	99.61	95.08	90.55
	25795	.3937	10.000	10.0	103	61	40	118.61	113.45	108.30	103.14
28925		.3976	10.100	12.0	102	55	45	134.84	128.98	123.11	117.25
	25800	.3976	10.100	12.0	118	71	45	152.97	146.32	139.67	133.02
28935		.4016	10.200	12.0	102	55	45	134.84	128.98	123.11	117.25
	25805	.4016	10.200	12.0	118	71	45	152.97	146.32	139.67	133.02
28945		.4055	10.300	12.0	102	55	45	134.84	128.98	123.11	117.25
	25815	.4055	10.300	12.0	118	71	45	152.97	146.32	139.67	133.02
28955		.4134	10.500	12.0	102	55	45	134.84	128.98	123.11	117.25
	25825	.4134	10.500	12.0	118	71	45	152.97	146.32	139.67	133.02
28965		.4173	10.600	12.0	102	55	45	134.84	128.98	123.11	117.25
	25830	.4173	10.600	12.0	118	71	45	152.97	146.32	139.67	133.02
28975		.4213	10.700	12.0	102	55	45	134.84	128.98	123.11	117.25
	25835	.4213	10.700	12.0	118	71	45	152.97	146.32	139.67	133.02
28985		.4252	10.800	12.0	102	55	45	134.84	128.98	123.11	117.25
	25845	.4252	10.800	12.0	118	71	45	152.97	146.32	139.67	133.02
28995		.4331	11.000	12.0	102	55	45	134.84	128.98	123.11	117.25
	25855	.4331	11.000	12.0	118	71	45	152.97	146.32	139.67	133.02
29005		.4370	11.100	12.0	102	55	45	134.84	128.98	123.11	117.25
	25865	.4370	11.100	12.0	118	71	45	152.97	146.32	139.67	133.02

continued →

Series 1580KD, 1280KD (continued)

.4409" - .5433"
(11.200mm - 13.800mm)



TOLERANCES		
d1 *	3mm - 6mm	+0.016 +0.004mm (+0.00063" +0.00015")
	> 6mm - 10mm	+0.021 +0.006mm (+0.00082" +0.00023")
	> 10mm - 18mm	+0.025 +0.007mm (+0.00098" +0.00027")
	> 18mm - 20mm	+0.029 +0.008mm (+0.00114" +0.00031")
d2	6mm	+0.000 -0.008mm (+0.00000" -0.00030")
	8mm - 10mm	+0.000 -0.009mm (+0.00000" -0.00035")
	12mm - 18mm	+0.000 -0.011mm (+0.00000" -0.00040")
	20mm	+0.000 -0.013mm (+0.00000" -0.00050")

Recommended for high nickel, high temperature alloys, cobalt-based alloys, stainless steels, and tool steels >40 Rc

TiAlN-based Coating

High performance solid submicron grain carbide drill with reinforced shank

Can be used as a pilot drill



3xD (1580KD) EDP#	5xD (1280KD) EDP#	d1 Diameter		d2 Shank Diameter	l1 Overall Length	l2 Flute Length	l4 Shank Length	1-11	12-24	25-49	50-100
		Decimal	Metric								
29015		.4409	11.200	12.0	102	55	45	134.84	128.98	123.11	117.25
	25875	.4409	11.200	12.0	118	71	45	152.97	146.32	139.67	133.02
29025		.4488	11.400	12.0	102	55	45	134.84	128.98	123.11	117.25
	25880	.4488	11.400	12.0	118	71	45	152.97	146.32	139.67	133.02
29035		.4528	11.500	12.0	102	55	45	134.84	128.98	123.11	117.25
	25885	.4528	11.500	12.0	118	71	45	152.97	146.32	139.67	133.02
29045		.4606	11.700	12.0	102	55	45	134.84	128.98	123.11	117.25
	25895	.4606	11.700	12.0	118	71	45	152.97	146.32	139.67	133.02
29055		.4685	11.900	12.0	102	55	45	134.84	128.98	123.11	117.25
	25905	.4685	11.900	12.0	118	71	45	152.97	146.32	139.67	133.02
29065		.4724	12.000	12.0	102	55	45	134.84	128.98	123.11	117.25
	25915	.4724	12.000	12.0	118	71	45	152.97	146.32	139.67	133.02
29075		.4764	12.100	14.0	107	60	45	188.34	180.15	171.96	163.77
	25925	.4764	12.100	14.0	124	77	45	225.71	215.90	206.08	196.27
29085		.4803	12.200	14.0	107	60	45	188.34	180.15	171.96	163.77
	25930	.4803	12.200	14.0	124	77	45	225.71	215.90	206.08	196.27
29095		.4842	12.300	14.0	107	60	45	188.34	180.15	171.96	163.77
	25935	.4842	12.300	14.0	124	77	45	225.71	215.90	206.08	196.27
29105		.4882	12.400	14.0	107	60	45	188.34	180.15	171.96	163.77
	25940	.4882	12.400	14.0	124	77	45	225.71	215.90	206.08	196.27
29115		.4921	12.500	14.0	107	60	45	188.34	180.15	171.96	163.77
	25945	.4921	12.500	14.0	124	77	45	225.71	215.90	206.08	196.27
29125		.4961	12.600	14.0	107	60	45	188.34	180.15	171.96	163.77
	25950	.4961	12.600	14.0	124	77	45	225.71	215.90	206.08	196.27
29135		.5000	12.700	14.0	107	60	45	188.34	180.15	171.96	163.77
	25955	.5000	12.700	14.0	124	77	45	225.71	215.90	206.08	196.27
29145		.5039	12.800	14.0	107	60	45	188.34	180.15	171.96	163.77
	25960	.5039	12.800	14.0	124	77	45	225.71	215.90	206.08	196.27
29148		.5051	12.830	14.0	107	60	45	188.34	180.15	171.96	163.77
	25961	.5051	12.830	14.0	124	77	45	225.71	215.90	206.08	196.27
29155		.5079	12.900	14.0	107	60	45	188.34	180.15	171.96	163.77
	25963	.5079	12.900	14.0	124	77	45	225.71	215.90	206.08	196.27
29161		.5098	12.950	14.0	107	60	45	188.34	180.15	171.96	163.77
	25964	.5098	12.950	14.0	124	77	45	225.71	215.90	206.08	196.27
29165		.5118	13.000	14.0	107	60	45	188.34	180.15	171.96	163.77
	25965	.5118	13.000	14.0	124	77	45	225.71	215.90	206.08	196.27
29175		.5157	13.100	14.0	107	60	45	188.34	180.15	171.96	163.77
	25975	.5157	13.100	14.0	124	77	45	225.71	215.90	206.08	196.27
29181		.5236	13.300	14.0	107	60	45	188.34	180.15	171.96	163.77
	25981	.5236	13.300	14.0	124	77	45	225.71	215.90	206.08	196.27
29185		.5315	13.500	14.0	107	60	45	188.34	180.15	171.96	163.77
	25985	.5315	13.500	14.0	124	77	45	225.71	215.90	206.08	196.27
29195		.5394	13.700	14.0	107	60	45	188.34	180.15	171.96	163.77
	25995	.5394	13.700	14.0	124	77	45	225.71	215.90	206.08	196.27
29205		.5433	13.800	14.0	107	60	45	188.34	180.15	171.96	163.77
	26005	.5433	13.800	14.0	124	77	45	225.71	215.90	206.08	196.27

Series 1580KD, 1280KD (continued)

.5512" - .7342"
(14.000mm - 18.650mm)

HIGH PERFORMANCE
DRILLS

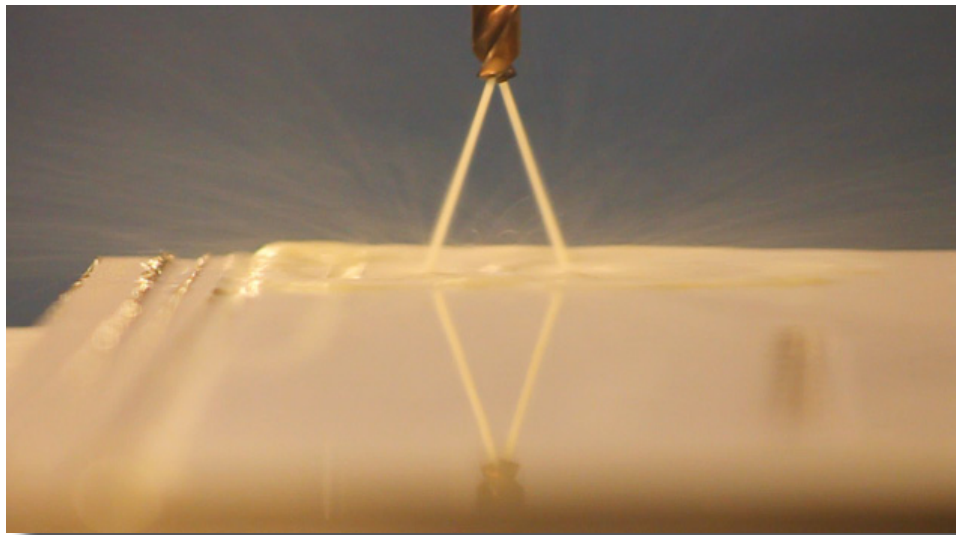
3xD (1580KD) EDP#	5xD (1280KD) EDP#	<i>d1</i> Diameter		<i>d2</i> Shank Diameter	<i>l1</i> Overall Length	<i>l2</i> Flute Length	<i>l4</i> Shank Length	1-11	12-24	25-49	50-100
		Decimal	Metric								
29215		.5512	14.000	14.0	107	60	45	188.34	180.15	171.96	163.77
	26015	.5512	14.000	14.0	124	77	45	225.71	215.90	206.08	196.27
29225		.5551	14.100	16.0	115	65	48	230.21	220.20	210.19	200.18
	26025	.5551	14.100	16.0	133	83	48	300.12	287.07	274.02	260.97
29235		.5591	14.200	16.0	115	65	48	230.21	220.20	210.19	200.18
	26027	.5591	14.200	16.0	133	83	48	300.12	287.07	274.02	260.97
29245		.5610	14.250	16.0	115	65	48	230.21	220.20	210.19	200.18
	26035	.5610	14.250	16.0	133	83	48	300.12	287.07	274.02	260.97
29255		.5630	14.300	16.0	115	65	48	230.21	220.20	210.19	200.18
	26045	.5630	14.300	16.0	133	83	48	300.12	287.07	274.02	260.97
29265		.5709	14.500	16.0	115	65	48	230.21	220.20	210.19	200.18
	26055	.5709	14.500	16.0	133	83	48	300.12	287.07	274.02	260.97
29275		.5787	14.700	16.0	115	65	48	230.21	220.20	210.19	200.18
	26065	.5787	14.700	16.0	133	83	48	300.12	287.07	274.02	260.97
29285		.5827	14.800	16.0	115	65	48	230.21	220.20	210.19	200.18
	26067	.5827	14.800	16.0	133	83	48	300.12	287.07	274.02	260.97
29305		.5906	15.000	16.0	115	65	48	230.21	220.20	210.19	200.18
	26075	.5906	15.000	16.0	133	83	48	300.12	287.07	274.02	260.97
29315		.5945	15.100	16.0	115	65	48	230.21	220.20	210.19	200.18
	26085	.5945	15.100	16.0	133	83	48	300.12	287.07	274.02	260.97
29325		.6102	15.500	16.0	115	65	48	230.21	220.20	210.19	200.18
	26095	.6102	15.500	16.0	133	83	48	300.12	287.07	274.02	260.97
29335		.6181	15.700	16.0	115	65	48	230.21	220.20	210.19	200.18
	26105	.6181	15.700	16.0	133	83	48	300.12	287.07	274.02	260.97
29345		.6220	15.800	16.0	115	65	48	230.21	220.20	210.19	200.18
	26107	.6220	15.800	16.0	133	83	48	300.12	287.07	274.02	260.97
29355		.6299	16.000	16.0	115	65	48	230.21	220.20	210.19	200.18
	26115	.6299	16.000	16.0	133	83	48	300.12	287.07	274.02	260.97
29363		.6331	16.080	18.0	123	73	48	291.07	278.41	265.76	253.10
	26118	.6331	16.080	18.0	143	93	48	356.80	341.29	325.77	310.26
29365		.6339	16.100	18.0	123	73	48	291.07	278.41	265.76	253.10
	26119	.6339	16.100	18.0	143	93	48	356.80	341.29	325.77	310.26
29371		.6378	16.200	18.0	123	73	48	291.07	278.41	265.76	253.10
	26123	.6378	16.200	18.0	143	93	48	356.80	341.29	325.77	310.26
29375		.6398	16.250	18.0	123	73	48	291.07	278.41	265.76	253.10
	26125	.6398	16.250	18.0	143	93	48	356.80	341.29	325.77	310.26
29385		.6496	16.500	18.0	123	73	48	291.07	278.41	265.76	253.10
	26135	.6496	16.500	18.0	143	93	48	356.80	341.29	325.77	310.26
29395		.6555	16.650	18.0	123	73	48	291.07	278.41	265.76	253.10
	26145	.6555	16.650	18.0	143	93	48	356.80	341.29	325.77	310.26
29405		.6693	17.000	18.0	123	73	48	291.07	278.41	265.76	253.10
	26155	.6693	17.000	18.0	143	93	48	356.80	341.29	325.77	310.26
29415		.6713	17.050	18.0	123	73	48	291.07	278.41	265.76	253.10
	26165	.6713	17.050	18.0	143	93	48	356.80	341.29	325.77	310.26
29425		.6870	17.450	18.0	123	73	48	291.07	278.41	265.76	253.10
	26175	.6870	17.450	18.0	143	93	48	356.80	341.29	325.77	310.26
29435		.6890	17.500	18.0	123	73	48	291.07	278.41	265.76	253.10
	26185	.6890	17.500	18.0	143	93	48	356.80	341.29	325.77	310.26
29445		.7027	17.850	18.0	123	73	48	291.07	278.41	265.76	253.10
	26195	.7027	17.850	18.0	143	93	48	356.80	341.29	325.77	310.26
29455		.7087	18.000	18.0	123	73	48	291.07	278.41	265.76	253.10
	26205	.7087	18.000	18.0	143	93	48	356.80	341.29	325.77	310.26
29465		.7185	18.250	20.0	131	79	50	384.54	367.82	351.10	334.38
	26215	.7185	18.250	20.0	153	101	50	433.08	414.25	395.42	376.59
29475		.7283	18.500	20.0	131	79	50	384.54	367.82	351.10	334.38
	26225	.7283	18.500	20.0	153	101	50	433.08	414.25	395.42	376.59
29485		.7342	18.650	20.0	131	79	50	384.54	367.82	351.10	334.38
	26235	.7342	18.650	20.0	153	101	50	433.08	414.25	395.42	376.59

continued →

Series 1580KD, 1280KD (continued)

.7480" - .7874"
(19.000mm - 20.000mm)

3xD (1580KD) EDP#	5xD (1280KD) EDP#	<i>d1</i> Diameter		<i>d2</i> Shank Diameter	<i>l1</i> Overall Length	<i>l2</i> Flute Length	<i>l4</i> Shank Length	1-11	12-24	25-49	50-100
		Decimal	Metric								
29495		.7480	19.000	20.0	131	79	50	384.54	367.82	351.10	334.38
	26245	.7480	19.000	20.0	153	101	50	433.08	414.25	395.42	376.59
29505		.7500	19.050	20.0	131	79	50	384.54	367.82	351.10	334.38
	26255	.7500	19.050	20.0	153	101	50	433.08	414.25	395.42	376.59
29515		.7520	19.100	20.0	131	79	50	384.54	367.82	351.10	334.38
	26256	.7520	19.100	20.0	153	101	50	433.08	414.25	395.42	376.59
29525		.7539	19.150	20.0	131	79	50	384.54	367.82	351.10	334.38
	26257	.7539	19.150	20.0	153	101	50	433.08	414.25	395.42	376.59
29535		.7559	19.200	20.0	131	79	50	384.54	367.82	351.10	334.38
	26258	.7559	19.200	20.0	153	101	50	433.08	414.25	395.42	376.59
29545		.7579	19.250	20.0	131	79	50	384.54	367.82	351.10	334.38
	26259	.7579	19.250	20.0	153	101	50	433.08	414.25	395.42	376.59
29546		.7590	19.280	20.0	131	79	50	384.54	367.82	351.10	334.38
	26260	.7590	19.280	20.0	153	101	50	433.08	414.25	395.42	376.59
29551		.7598	19.300	20.0	131	79	50	384.54	367.82	351.10	334.38
	26261	.7598	19.300	20.0	153	101	50	433.08	414.25	395.42	376.59
29555		.7638	19.400	20.0	131	79	50	384.54	367.82	351.10	334.38
	26265	.7638	19.400	20.0	153	101	50	433.08	414.25	395.42	376.59
29565		.7677	19.500	20.0	131	79	50	384.54	367.82	351.10	334.38
	26275	.7677	19.500	20.0	153	101	50	433.08	414.25	395.42	376.59
29585		.7795	19.800	20.0	131	79	50	384.54	367.82	351.10	334.38
	26281	.7795	19.800	20.0	153	101	50	433.08	414.25	395.42	376.59
29595		.7815	19.850	20.0	131	79	50	384.54	367.82	351.10	334.38
	26285	.7815	19.850	20.0	153	101	50	433.08	414.25	395.42	376.59
29605		.7874	20.000	20.0	131	79	50	384.54	367.82	351.10	334.38
	26295	.7874	20.000	20.0	153	101	50	433.08	414.25	395.42	376.59



TOLERANCES

<i>d</i>	+.0000" - .0005" (+.0000 - .0127mm)	
<i>l1</i>	≤ 1/8"	+.125" - .062" (+3.175 - 1.588mm)
	> 1/8"	+.125" - .125" (+3.175 - 3.175mm)
<i>l2</i>	≤ 1/8"	+.125" - .062" (+3.175 - 1.588mm)
	> 1/8"	+.125" - .125" (+3.175 - 3.175mm)



TECH PAGES
288-289

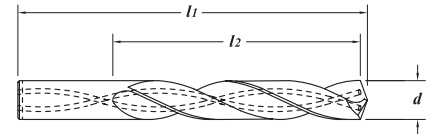
Series 1580KH, 1280KH, 1880KH

.1181" - .1540"
(3.000mm - 3.912mm)

Recommended for high nickel, high temperature alloys, cobalt-based alloys, stainless steels, and tool steels >40 Rc

TiAlN-based Coating

- High performance - high penetration solid submicron grain carbide drill
- Coolant through capabilities for high pressure coolant systems
- Extended tool life and greater surface finish through faster SFM rates
- Up to 70% faster than standard carbide drills
- 30° helix for better chip evacuation
- Honed cutting edge
- Live tooling recommended on lathe processes



HIGH PERFORMANCE DRILLS

	3xD (1580KH) EDP#	5xD (1280KH) EDP#	7xD (1880KH) EDP#	<i>d</i> †		<i>l1</i> Overall Length	<i>l2</i> Flute Length	1-11	12-24	25-49	50-100	
				Decimal	Diameter Metric							
NEW	22010			.1181	3.000	46	16	38.63	36.95	35.27	33.59	
NEW		25366		.1181	3.000	50	19	42.72	40.86	39.01	37.15	
NEW			26366	.1181	3.000	65	28	47.68	45.61	43.53	41.46	
NEW	22015			.1200	#31	3.048	1-13/16"	5/8"	39.03	37.33	35.64	33.94
NEW		25371		.1200	#31	3.048	2"	3/4"	43.07	41.20	39.32	37.45
NEW			26371	.1200	#31	3.048	2-1/2"	1-1/8"	48.07	45.98	43.89	41.80
NEW	22020			.1250	1/8"	3.175	1-15/16"	11/16"	39.36	37.65	35.94	34.23
NEW		25376		.1250	1/8"	3.175	2"	3/4"	43.41	41.52	39.64	37.75
NEW			26376	.1250	1/8"	3.175	2-1/2"	1-1/8"	48.45	46.34	44.24	42.13
NEW	22025			.1285	#30	3.264	1-15/16"	11/16"	39.72	37.99	36.27	34.54
NEW		25381		.1285	#30	3.264	2-1/4"	3/4"	43.80	41.90	39.99	38.09
NEW			26381	.1285	#30	3.264	2-1/2"	1-1/8"	48.89	46.76	44.64	42.51
NEW	22030			.1360	#29	3.454	2-1/16"	3/4"	40.10	38.36	36.61	34.87
NEW		25386		.1360	#29	3.454	2-1/4"	7/8"	44.13	42.21	40.29	38.37
NEW			26386	.1360	#29	3.454	3"	1-1/4"	49.24	47.10	44.96	42.82
NEW	22035			.1378	3.500	52	19	40.50	38.74	36.98	35.22	
NEW		25391		.1378	3.500	57	22	44.47	42.54	40.60	38.67	
NEW			26391	.1378	3.500	75	32	49.63	47.47	45.31	43.16	
NEW	22040			.1405	#28	3.569	2-1/16"	3/4"	40.87	39.09	37.32	35.54
NEW		25396		.1405	#28	3.569	2-1/4"	7/8"	44.83	42.88	40.93	38.98
NEW			26396	.1405	#28	3.569	3"	1-1/4"	50.03	47.85	45.68	43.50
NEW	22045			.1406	9/64"	3.571	2-1/16"	3/4"	41.23	39.44	37.64	35.85
NEW		25401		.1406	9/64"	3.571	2-1/4"	7/8"	45.22	43.25	41.29	39.32
NEW			26401	.1406	9/64"	3.571	3"	1-1/4"	50.46	48.27	46.07	43.88
NEW	22050			.1440	#27	3.658	2-1/16"	3/4"	41.60	39.79	37.98	36.17
NEW		25406		.1440	#27	3.658	2-1/4"	7/8"	45.52	43.54	41.56	39.58
NEW			26406	.1440	#27	3.658	3"	1-3/8"	50.80	48.59	46.38	44.17
NEW	22055			.1470	#26	3.734	2-3/16"	13/16"	41.92	40.10	38.27	36.45
NEW		25411		.1470	#26	3.734	2-1/4"	7/8"	45.90	43.90	41.91	39.91
NEW			26411	.1470	#26	3.734	3"	1-3/8"	51.22	48.99	46.77	44.54
NEW	22060			.1495	#25	3.797	2-3/16"	13/16"	42.34	40.50	38.66	36.82
NEW		25416		.1495	#25	3.797	2-1/4"	15/16"	46.25	44.24	42.23	40.22
NEW			26416	.1495	#25	3.797	3"	1-3/8"	51.62	49.38	47.13	44.89
NEW	22065			.1520	#24	3.861	2-3/16"	13/16"	42.69	40.83	38.98	37.12
NEW		25421		.1520	#24	3.861	2-1/4"	15/16"	46.58	44.55	42.53	40.50
NEW			26421	.1520	#24	3.861	3"	1-1/2"	51.98	49.72	47.46	45.20
NEW	22070			.1540	#23	3.912	2-3/16"	13/16"	43.07	41.20	39.32	37.45
NEW		25426		.1540	#23	3.912	2-1/4"	15/16"	46.97	44.93	42.89	40.84
NEW			26426	.1540	#23	3.912	3"	1-1/2"	52.42	50.14	47.86	45.58

continued →

Series 1580KH, 1280KH, 1880KH (continued)

.1562" - .1935"
(3.967mm - 4.915mm)

	3xD (1580KH)	5xD (1280KH)	7xD (1880KH)	d^{\dagger} Diameter		l_1 Overall Length	l_2 Flute Length	1-11	12-24	25-49	50-100	
	EDP#	EDP#	EDP#	Decimal	Metric							
NEW	22075			.1562	5/32"	3.967	2-3/16"	13/16"	43.40	41.51	39.63	37.74
NEW		25431		.1562	5/32"	3.967	2-1/2"	15/16"	47.30	45.24	43.19	41.13
NEW			26431	.1562	5/32"	3.967	3"	1-1/2"	52.79	50.49	48.20	45.90
NEW	22080			.1570	#22	3.988	2-3/16"	13/16"	43.80	41.90	39.99	38.09
NEW		25436		.1570	#22	3.988	2-1/2"	15/16"	47.63	45.56	43.49	41.42
NEW			26436	.1570	#22	3.988	3"	1-1/2"	53.16	50.85	48.54	46.23
	22085			.1575		4.000	56	21	44.15	42.23	40.31	38.39
		25441		.1575		4.000	65	24	48.01	45.93	43.84	41.75
			26441	.1575		4.000	75	38	53.57	51.24	48.91	46.58
	22090			.1590	#21	4.039	2-3/16"	13/16"	44.55	42.61	40.68	38.74
		25446		.1590	#21	4.039	2-1/2"	15/16"	48.33	46.23	44.13	42.03
			26446	.1590	#21	4.039	3"	1-1/2"	53.92	51.58	49.23	46.89
	22095			.1610	#20	4.089	2-3/16"	13/16"	44.92	42.97	41.01	39.06
		25451		.1610	#20	4.089	2-1/2"	15/16"	48.70	46.59	44.47	42.35
			26451	.1610	#20	4.089	3"	1-1/2"	54.35	51.99	49.62	47.26
	22100			.1660	#19	4.216	2-9/32"	15/16"	45.31	43.34	41.37	39.40
		25456		.1660	#19	4.216	2-1/2"	1"	49.08	46.95	44.81	42.68
			26456	.1660	#19	4.216	3"	1-1/2"	54.76	52.38	50.00	47.62
	22105			.1695	#18	4.305	2-9/32"	15/16"	45.67	43.68	41.70	39.71
		25461		.1695	#18	4.305	2-1/2"	1"	49.43	47.28	45.13	42.98
			26461	.1695	#18	4.305	3-1/2"	1-3/4"	55.13	52.73	50.34	47.94
	22110			.1719	11/64"	4.366	2-9/32"	15/16"	46.05	44.04	42.04	40.04
		25466		.1719	11/64"	4.366	2-1/2"	1"	49.77	47.61	45.44	43.28
			26466	.1719	11/64"	4.366	3-1/2"	1-3/4"	55.52	53.11	50.69	48.28
	22115			.1730	#17	4.394	2-9/32"	15/16"	46.41	44.40	42.38	40.36
		25471		.1730	#17	4.394	2-1/2"	1"	50.09	47.92	45.74	43.56
			26471	.1730	#17	4.394	3-1/2"	1-3/4"	55.89	53.46	51.03	48.60
	22120			.1770	#16	4.496	2-9/32"	15/16"	46.74	44.70	42.67	40.64
		25476		.1770	#16	4.496	2-1/2"	1"	50.47	48.28	46.08	43.89
			26476	.1770	#16	4.496	3-1/2"	1-3/4"	56.33	53.88	51.43	48.98
	22125			.1772		4.500	58	24	47.15	45.10	43.05	41.00
		25481		.1772		4.500	65	25	50.84	48.63	46.42	44.21
			26481	.1772		4.500	88	45	56.73	54.26	51.80	49.33
	22130			.1800	#15	4.572	2-9/32"	15/16"	47.45	45.39	43.32	41.26
		25486		.1800	#15	4.572	2-3/4"	1"	51.18	48.95	46.73	44.50
			26486	.1800	#15	4.572	3-1/2"	1-3/4"	57.10	54.62	52.13	49.65
	22135			.1820	#14	4.623	2-9/32"	15/16"	47.91	45.83	43.74	41.66
		25491		.1820	#14	4.623	2-3/4"	1"	51.51	49.27	47.03	44.79
			26491	.1820	#14	4.623	3-1/2"	1-3/4"	57.47	54.97	52.47	49.97
	22140			.1850	#13	4.699	2-9/32"	15/16"	48.24	46.15	44.05	41.95
		25496		.1850	#13	4.699	2-3/4"	1-1/4"	51.88	49.62	47.37	45.11
			26496	.1850	#13	4.699	3-1/2"	1-3/4"	57.88	55.36	52.85	50.33
	22145			.1875	3/16"	4.763	2-13/32"	1"	48.63	46.52	44.40	42.29
		25501		.1875	3/16"	4.763	2-3/4"	1-1/4"	52.26	49.98	47.71	45.44
			26501	.1875	3/16"	4.763	4"	2"	58.32	55.78	53.25	50.71
	22150			.1890	#12	4.801	2-13/32"	1"	48.98	46.85	44.72	42.59
		25506		.1890	#12	4.801	2-3/4"	1-1/4"	52.58	50.29	48.01	45.72
			26506	.1890	#12	4.801	4"	2"	58.67	56.12	53.57	51.02
	22155			.1910	#11	4.851	2-13/32"	1"	49.43	47.28	45.13	42.98
		25511		.1910	#11	4.851	2-3/4"	1-1/4"	52.92	50.62	48.32	46.02
			26511	.1910	#11	4.851	4"	2"	59.05	56.49	53.92	51.35
	22160			.1935	#10	4.915	2-13/32"	1"	49.71	47.55	45.39	43.23
		25516		.1935	#10	4.915	2-3/4"	1-1/4"	53.31	51.00	48.68	46.36
			26516	.1935	#10	4.915	4"	2"	59.47	56.88	54.30	51.71

Series 1580KH, 1280KH, 1880KH (continued)

.1960" - .2420"
(4.978mm - 6.147mm)

HIGH PERFORMANCE
DRILLS

3xD (1580KH) EDP#	5xD (1280KH) EDP#	7xD (1880KH) EDP#	d^+ Diameter		l_1 Overall Length	l_2 Flute Length	1-11	12-24	25-49	50-100	
			Decimal	Metric							
22165			.1960	#9	4.978	2-13/32"	1"	50.08	47.91	45.73	43.55
	25521		.1960	#9	4.978	3"	1-5/16"	53.62	51.29	48.96	46.63
		26521	.1960	#9	4.978	4"	2"	59.82	57.22	54.62	52.02
22170			.1969		5.000	61	25	50.37	48.18	45.99	43.80
	25526		.1969		5.000	75	33	53.99	51.65	49.30	46.95
		26526	.1969		5.000	100	50	60.24	57.62	55.00	52.38
22175			.1990	#8	5.055	2-13/32"	1"	50.83	48.62	46.41	44.20
	25531		.1990	#8	5.055	3"	1-5/16"	54.27	51.91	49.55	47.19
		26531	.1990	#8	5.055	4"	2"	60.55	57.92	55.28	52.65
22180			.2010	#7	5.105	2-13/32"	1"	50.98	48.76	46.55	44.33
	25536		.2010	#7	5.105	3"	1-5/16"	54.51	52.14	49.77	47.40
		26536	.2010	#7	5.105	4"	2"	60.82	58.18	55.53	52.89
22185			.2031	13/64"	5.159	2-13/32"	1"	51.32	49.09	46.86	44.63
	25541		.2031	13/64"	5.159	3"	1-5/16"	54.90	52.51	50.13	47.74
		26541	.2031	13/64"	5.159	4"	2"	61.27	58.61	55.94	53.28
22190			.2040	#6	5.182	2-13/32"	1"	51.67	49.42	47.18	44.93
	25546		.2040	#6	5.182	3"	1-3/8"	55.32	52.91	50.51	48.10
		26546	.2040	#6	5.182	4"	2"	61.72	59.04	56.35	53.67
22195			.2055	#5	5.220	2-13/32"	1"	52.04	49.78	47.51	45.25
	25551		.2055	#5	5.220	3"	1-3/8"	55.68	53.26	50.84	48.42
		26551	.2055	#5	5.220	4"	2"	62.13	59.43	56.73	54.03
22200			.2090	#4	5.309	2-13/32"	1"	52.37	50.09	47.82	45.54
	25556		.2090	#4	5.309	3"	1-3/8"	56.06	53.63	51.19	48.75
		26556	.2090	#4	5.309	4"	2"	62.55	59.83	57.11	54.39
22205			.2130	#3	5.410	2-5/8"	1-3/32"	52.72	50.42	48.13	45.84
	25561		.2130	#3	5.410	3"	1-3/8"	56.43	53.98	51.52	49.07
		26561	.2130	#3	5.410	4"	2"	62.96	60.23	57.49	54.75
22210			.2165		5.500	67	28	53.05	50.74	48.44	46.13
	25566		.2165		5.500	75	35	56.78	54.31	51.84	49.37
		26566	.2165		5.500	100	50	63.35	60.60	57.84	55.09
22215			.2188	7/32"	5.558	2-5/8"	1-3/32"	53.50	51.17	48.85	46.52
	25571		.2188	7/32"	5.558	3"	1-3/8"	56.90	54.43	51.95	49.48
		26571	.2188	7/32"	5.558	4"	2"	63.72	60.95	58.18	55.41
22220			.2210	#2	5.613	2-5/8"	1-3/32"	53.88	51.54	49.19	46.85
	25576		.2210	#2	5.613	3"	1-3/8"	57.87	55.35	52.84	50.32
		26576	.2210	#2	5.613	4"	2"	64.73	61.92	59.10	56.29
22225			.2280	#1	5.791	2-5/8"	1-3/32"	54.28	51.92	49.56	47.20
	25581		.2280	#1	5.791	3"	1-3/8"	58.08	55.55	53.03	50.50
		26581	.2280	#1	5.791	4-1/8"	2-1/8"	74.16	70.94	67.71	64.49
22230			.2340	A	5.944	2-5/8"	1-3/32"	54.66	52.28	49.91	47.53
	25586		.2340	A	5.944	3-1/4"	1-1/2"	65.18	62.35	59.51	56.68
		26586	.2340	A	5.944	4-1/8"	2-1/8"	78.30	74.90	71.49	68.09
22235			.2344	15/64"	5.954	2-5/8"	1-3/32"	55.07	52.68	50.28	47.89
	25591		.2344	15/64"	5.954	3-1/4"	1-1/2"	65.30	62.46	59.62	56.78
		26591	.2344	15/64"	5.954	4-1/8"	2-1/8"	78.42	75.01	71.60	68.19
22240			.2362		6.000	67	28	55.46	53.05	50.64	48.23
	25596		.2362		6.000	80	38	65.47	62.62	59.78	56.93
		26596	.2362		6.000	105	55	78.59	75.17	71.76	68.34
22245			.2380	B	6.045	2-3/4"	1-7/32"	58.58	56.03	53.49	50.94
	25601		.2380	B	6.045	3-1/4"	1-5/8"	67.54	64.60	61.67	58.73
		26601	.2380	B	6.045	4-1/8"	2-1/8"	81.56	78.01	74.47	70.92
22250			.2420	C	6.147	2-3/4"	1-7/32"	59.06	56.50	53.93	51.36
	25606		.2420	C	6.147	3-1/4"	1-5/8"	67.86	64.91	61.96	59.01
		26606	.2420	C	6.147	4-1/4"	2-1/4"	81.88	78.32	74.76	71.20

continued →

Series 1580KH, 1280KH, 1880KH (continued)

.2460" - .3125"
(6.248mm - 7.938mm)

3xD (1580KH) EDP#	5xD (1280KH) EDP#	7xD (1880KH) EDP#	d^{\dagger} Diameter		l_1 Overall Length	l_2 Flute Length	1-11	12-24	25-49	50-100	
			Decimal	Metric							
22255			.2460	D	6.248	2-3/4"	1-7/32"	59.40	56.82	54.23	51.65
	25611		.2460	D	6.248	3-1/4"	1-5/8"	68.16	65.20	62.23	59.27
		26611	.2460	D	6.248	4-1/4"	2-1/4"	82.19	78.62	75.04	71.47
22260			.2500	1/4" / E	6.350	2-3/4"	1-7/32"	59.89	57.29	54.68	52.08
	25616		.2500	1/4" / E	6.350	3-1/4"	1-5/8"	68.45	65.47	62.50	59.52
		26616	.2500	1/4" / E	6.350	4-1/4"	2-1/4"	82.48	78.89	75.31	71.72
22265			.2559		6.500	70	31	60.87	58.22	55.58	52.93
	25621		.2559		6.500	80	41	69.30	66.29	63.27	60.26
		26621	.2559		6.500	105	58	83.35	79.73	76.10	72.48
22270			.2570	F	6.528	2-3/4"	1-7/32"	61.80	59.11	56.43	53.74
	25626		.2570	F	6.528	3-1/4"	1-11/16"	70.90	67.82	64.73	61.65
		26626	.2570	F	6.528	4-3/8"	2-3/8"	86.55	82.79	79.02	75.26
22275			.2610	G	6.629	2-3/4"	1-7/32"	62.74	60.02	57.29	54.56
	25631		.2610	G	6.629	3-1/2"	1-11/16"	71.77	68.65	65.53	62.41
		26631	.2610	G	6.629	4-3/8"	2-3/8"	87.45	83.64	79.84	76.04
22280			.2656	17/64"	6.746	2-15/16"	1-11/32"	63.71	60.94	58.17	55.40
	25636		.2656	17/64"	6.746	3-1/2"	1-11/16"	72.60	69.44	66.29	63.13
		26636	.2656	17/64"	6.746	4-3/8"	2-3/8"	88.29	84.45	80.61	76.77
22285			.2660	H	6.756	2-15/16"	1-11/32"	64.65	61.84	59.03	56.22
	25641		.2660	H	6.756	3-1/2"	1-11/16"	73.47	70.28	67.08	63.89
		26641	.2660	H	6.756	4-3/8"	2-3/8"	89.21	85.33	81.45	77.57
22290			.2720	I	6.909	2-15/16"	1-11/32"	65.60	62.74	59.89	57.04
	25646		.2720	I	6.909	3-1/2"	1-11/16"	73.55	70.36	67.16	63.96
		26646	.2720	I	6.909	4-3/8"	2-3/8"	89.30	85.42	81.53	77.65
22295			.2756		7.000	75	34	66.55	63.66	60.76	57.87
	25651		.2756		7.000	88	43	74.39	71.16	67.92	64.69
		26651	.2756		7.000	110	61	90.15	86.23	82.31	78.39
22300			.2770	J	7.036	2-15/16"	1-11/32"	67.47	64.54	61.60	58.67
	25656		.2770	J	7.036	3-1/2"	1-11/16"	78.15	74.76	71.36	67.96
		26656	.2770	J	7.036	4-3/8"	2-3/8"	94.70	90.59	86.47	82.35
22305			.2810	K	7.137	2-15/16"	1-11/32"	68.47	65.49	62.52	59.54
	25661		.2810	K	7.137	3-1/2"	1-3/4"	79.02	75.58	72.15	68.71
		26661	.2810	K	7.137	4-7/16"	2-7/16"	95.60	91.44	87.29	83.13
22310			.2812	9/32"	7.142	2-15/16"	1-11/32"	69.41	66.40	63.38	60.36
	25666		.2812	9/32"	7.142	3-1/2"	1-3/4"	79.88	76.41	72.93	69.46
		26666	.2812	9/32"	7.142	4-7/16"	2-7/16"	96.49	92.29	88.10	83.90
22315			.2900	L	7.366	2-15/16"	1-11/32"	70.35	67.29	64.23	61.17
	25671		.2900	L	7.366	3-1/2"	1-3/4"	80.24	76.75	73.26	69.77
		26671	.2900	L	7.366	4-7/16"	2-7/16"	96.85	92.64	88.43	84.22
22320			.2950	M	7.493	2-15/16"	1-11/32"	71.70	68.59	65.47	62.35
	25676		.2950	M	7.493	3-3/4"	1-3/4"	80.71	77.20	73.69	70.18
		26676	.2950	M	7.493	4-7/16"	2-7/16"	97.34	93.10	88.87	84.64
22325			.2953		7.500	75	34	71.70	68.59	65.47	62.35
	25681		.2953		7.500	95	44	80.71	77.20	73.69	70.18
		26681	.2953		7.500	115	66	97.34	93.10	88.87	84.64
22330			.2969	19/64"	7.541	3-3/32"	1-15/32"	72.32	69.18	66.03	62.89
	25686		.2969	19/64"	7.541	3-3/4"	1-7/8"	86.22	82.47	78.72	74.97
		26686	.2969	19/64"	7.541	4-9/16"	2-9/16"	105.08	100.51	95.94	91.37
22335			.3020	N	7.671	3-3/32"	1-15/32"	75.59	72.30	69.02	65.73
	25691		.3020	N	7.671	3-3/4"	1-7/8"	88.16	84.33	80.49	76.66
		26691	.3020	N	7.671	4-9/16"	2-9/16"	107.11	102.45	97.80	93.14
22340			.3125	5/16"	7.938	3-3/32"	1-15/32"	75.85	72.56	69.26	65.96
	25696		.3125	5/16"	7.938	3-3/4"	1-7/8"	88.35	84.51	80.67	76.83
		26696	.3125	5/16"	7.938	4-11/16"	2-9/16"	107.30	102.63	97.97	93.30

TOLERANCES

<i>d</i>	+.0000" - .0005" (+.0000 - .0127mm)	
<i>l1</i>	≤ 1/8"	+.125" - .062" (+3.175 - 1.588mm)
	> 1/8"	+.125" - .125" (+3.175 - 3.175mm)
<i>l2</i>	≤ 1/8"	+.125" - .062" (+3.175 - 1.588mm)
	> 1/8"	+.125" - .125" (+3.175 - 3.175mm)

Series 1580KH, 1280KH, 1880KH (continued)



.3150" - .3750"
(8.000mm - 9.525mm)

Recommended for high nickel, high temperature alloys, cobalt-based alloys, stainless steels, and tool steels >40 Rc

TiAlN-based Coating

High performance - high penetration solid submicron grain carbide drill



HIGH PERFORMANCE DRILLS

3xD (1580KH) EDP#	5xD (1280KH) EDP#	7xD (1880KH) EDP#	<i>d</i> † Diameter		<i>l1</i> Overall Length	<i>l2</i> Flute Length	1-11	12-24	25-49	50-100
			Decimal	Metric						
22345	25701	26701	.3150	8.000	79	37	77.28	73.92	70.56	67.20
			.3150	8.000	95	48	92.08	88.08	84.07	80.07
			.3150	8.000	120	69	111.15	106.32	101.48	96.65
22350	25706	26706	.3160	O 8.026	3-3/32"	1-15/32"	77.28	73.92	70.56	67.20
			.3160	O 8.026	3-3/4"	1-7/8"	92.92	88.88	84.84	80.80
			.3160	O 8.026	4-11/16"	2-11/16"	113.02	108.11	103.19	98.28
22355	25711	26711	.3230	P 8.204	3-3/32"	1-15/32"	77.84	74.46	71.07	67.69
			.3230	P 8.204	3-3/4"	2-3/32"	93.16	89.11	85.06	81.01
			.3230	P 8.204	4-11/16"	2-11/16"	113.26	108.34	103.41	98.49
22360	25716	26716	.3281	21/64" 8.334	3-3/32"	1-15/32"	79.29	75.85	72.40	68.95
			.3281	21/64" 8.334	4"	2-3/32"	93.77	89.69	85.62	81.54
			.3281	21/64" 8.334	4-11/16"	2-11/16"	113.90	108.94	103.99	99.04
22365	25721	26721	.3320	Q 8.433	3-3/32"	1-15/32"	80.71	77.20	73.69	70.18
			.3320	Q 8.433	4"	2-3/32"	94.31	90.21	86.11	82.01
			.3320	Q 8.433	4-15/16"	2-15/16"	114.46	109.48	104.51	99.53
22370	25726	26726	.3346	8.500	79	37	81.04	77.52	73.99	70.47
			.3346	8.500	100	53	94.81	90.68	86.56	82.44
			.3346	8.500	125	75	114.95	109.96	104.96	99.96
22375	25731	26731	.3390	R 8.611	3-5/16"	1-9/16"	83.21	79.60	75.98	72.36
			.3390	R 8.611	4"	2-3/32"	97.90	93.64	89.39	85.13
			.3390	R 8.611	4-15/16"	2-15/16"	120.39	115.16	109.92	104.69
22380	25736	26736	.3438	11/32" 8.733	3-5/16"	1-9/16"	85.04	81.35	77.65	73.95
			.3438	11/32" 8.733	4"	2-3/16"	100.33	95.96	91.60	87.24
			.3438	11/32" 8.733	4-15/16"	2-15/16"	122.95	117.60	112.26	106.91
22385	25741	26741	.3480	S 8.839	3-5/16"	1-9/16"	87.86	84.04	80.22	76.40
			.3480	S 8.839	4"	2-3/16"	102.59	98.13	93.67	89.21
			.3480	S 8.839	5"	3"	125.28	119.83	114.39	108.94
22390	25746	26746	.3543	9.000	84	40	90.10	86.19	82.27	78.35
			.3543	9.000	100	56	103.02	98.54	94.06	89.58
			.3543	9.000	125	77	125.75	120.29	114.82	109.35
22395	25751	26751	.3580	T 9.093	3-5/16"	1-9/16"	93.64	89.57	85.50	81.43
			.3580	T 9.093	4-1/4"	2-9/32"	104.97	100.41	95.84	91.28
			.3580	T 9.093	5"	3"	132.18	126.43	120.69	114.94
22400	25756	26756	.3594	23/64" 9.129	3-5/16"	1-9/16"	94.21	90.11	86.02	81.92
			.3594	23/64" 9.129	4-1/4"	2-9/32"	105.36	100.78	96.20	91.62
			.3594	23/64" 9.129	5"	3"	132.65	126.89	121.12	115.35
22405	25761	26761	.3680	U 9.347	3-5/16"	1-9/16"	95.63	91.48	87.32	83.16
			.3680	U 9.347	4-1/4"	2-9/32"	111.68	106.82	101.97	97.11
			.3680	U 9.347	5"	3"	140.35	134.24	128.14	122.04
22410	25766	26766	.3740	9.500	84	40	96.40	92.21	88.02	83.83
			.3740	9.500	105	58	112.23	107.35	102.47	97.59
			.3740	9.500	130	80	141.22	135.08	128.94	122.80
22415	25771	26771	.3750	3/8" 9.525	3-1/2"	1-11/16"	96.99	92.77	88.56	84.34
			.3750	3/8" 9.525	4-1/4"	2-3/8"	115.01	110.01	105.01	100.01
			.3750	3/8" 9.525	5-1/8"	3-1/8"	144.96	138.66	132.35	126.05

continued →

Series 1580KH, 1280KH, 1880KH (continued)

.3770" - .4921"
(9.576mm - 12.500mm)

3xD (1580KH) EDP#	5xD (1280KH) EDP#	7xD (1880KH) EDP#	d^{\dagger} Diameter		l_1 Overall Length	l_2 Flute Length	1-11	12-24	25-49	50-100	
			Decimal	Metric							
22420			.3770	V	9.576	3-1/2"	1-11/16"	100.72	96.34	91.96	87.58
	25776		.3770	V	9.576	4-1/4"	2-3/8"	115.39	110.37	105.36	100.34
		26776	.3770	V	9.576	5-1/8"	3-1/8"	147.23	140.83	134.43	128.03
22425			.3860	W	9.804	3-1/2"	1-11/16"	102.48	98.02	93.57	89.11
	25781		.3860	W	9.804	4-1/2"	2-3/8"	116.66	111.58	106.51	101.44
		26781	.3860	W	9.804	5-1/8"	3-1/8"	147.74	141.32	134.89	128.47
22430			.3906	25/64"	9.921	3-1/2"	1-11/16"	103.76	99.25	94.74	90.23
	25786		.3906	25/64"	9.921	4-1/2"	2-3/8"	117.53	112.42	107.31	102.20
		26786	.3906	25/64"	9.921	5-1/4"	3-1/4"	148.64	142.18	135.71	129.25
22435			.3937		10.000	89	43	104.13	99.61	95.08	90.55
	25791		.3937		10.000	115	60	118.60	113.44	108.29	103.13
		26791	.3937		10.000	135	83	151.56	144.97	138.38	131.79
22440			.3970	X	10.084	3-1/2"	1-11/16"	105.04	100.47	95.91	91.34
	25796		.3970	X	10.084	4-1/2"	2-1/2"	122.64	117.30	111.97	106.64
		26796	.3970	X	10.084	5-1/4"	3-1/4"	154.94	148.20	141.47	134.73
22445			.4040	Y	10.262	3-1/2"	1-11/16"	105.77	101.17	96.57	91.97
	25801		.4040	Y	10.262	4-1/2"	2-9/16"	123.18	117.82	112.47	107.11
		26801	.4040	Y	10.262	5-3/8"	3-3/8"	158.01	151.14	144.27	137.40
22450			.4062	13/32"	10.317	3-1/2"	1-11/16"	109.01	104.27	99.53	94.79
	25806		.4062	13/32"	10.317	4-1/2"	2-9/16"	125.55	120.09	114.63	109.17
		26806	.4062	13/32"	10.317	5-3/8"	3-3/8"	158.91	152.00	145.09	138.18
22455			.4130	Z	10.490	3-1/2"	1-11/16"	110.02	105.24	100.45	95.67
	25811		.4130	Z	10.490	4-1/2"	2-5/8"	127.52	121.98	116.43	110.89
		26811	.4130	Z	10.490	5-3/8"	3-3/8"	161.54	154.52	147.49	140.47
22460			.4134		10.500	89	43	110.02	105.24	100.45	95.67
	25816		.4134		10.500	115	67	127.52	121.98	116.43	110.89
		26816	.4134		10.500	135	86	161.54	154.52	147.49	140.47
22465			.4219	27/64"	10.716	3-3/4"	1-13/16"	111.04	106.22	101.39	96.56
	25821		.4219	27/64"	10.716	4-1/2"	2-11/16"	129.33	123.71	118.08	112.46
		26821	.4219	27/64"	10.716	5-7/16"	3-7/16"	163.55	156.44	149.33	142.22
22470			.4331		11.000	95	46	119.20	114.02	108.83	103.65
	25826		.4331		11.000	115	68	133.98	128.15	122.33	116.50
		26826	.4331		11.000	135	88	169.88	162.49	155.11	147.72
22475			.4375	7/16"	11.113	3-3/4"	1-13/16"	119.20	114.02	108.83	103.65
	25831		.4375	7/16"	11.113	4-3/4"	2-13/16"	136.69	130.75	124.80	118.86
		26831	.4375	7/16"	11.113	5-7/16"	3-7/16"	173.51	165.97	158.42	150.88
22480			.4528		11.500	95	46	127.96	122.40	116.83	111.27
	25836		.4528		11.500	120	71	141.57	135.41	129.26	123.10
		26836	.4528		11.500	140	91	179.68	171.86	164.05	156.24
22485			.4531	29/64"	11.509	3-3/4"	1-13/16"	127.96	122.40	116.83	111.27
	25841		.4531	29/64"	11.509	4-3/4"	2-7/8"	146.41	140.04	133.68	127.31
		26841	.4531	29/64"	11.509	5-9/16"	3-13/16"	185.29	177.23	169.18	161.12
22490			.4688	15/32"	11.908	4"	1-15/16"	134.44	128.59	122.75	116.90
	25846		.4688	15/32"	11.908	4-3/4"	2-7/8"	149.75	143.24	136.73	130.22
		26846	.4688	15/32"	11.908	5-9/16"	3-13/16"	189.92	181.67	173.41	165.15
22495			.4724		12.000	102	49	134.85	128.99	123.12	117.26
	25851		.4724		12.000	120	73	152.97	146.32	139.67	133.02
		26851	.4724		12.000	140	98	194.81	186.34	177.87	169.40
22500			.4844	31/64"	12.304	4"	1-15/16"	143.08	136.86	130.64	124.42
	25856		.4844	31/64"	12.304	5-5/16"	3"	159.60	152.66	145.72	138.78
		26856	.4844	31/64"	12.304	5-9/16"	3-13/16"	199.87	191.18	182.49	173.80
22505			.4921		12.500	102	49	150.81	144.25	137.70	131.14
	25861		.4921		12.500	135	76	171.30	163.86	156.41	148.96
		26861	.4921		12.500	150	102	200.97	192.24	183.50	174.76

Series 1580KH, 1280KH, 1880KH (continued)

.5000" - .6299"
(12.700mm - 16.000mm)

HIGH PERFORMANCE
DRILLS

3xD (1580KH) EDP#	5xD (1280KH) EDP#	7xD (1880KH) EDP#	d^+ Diameter		l_1 Overall Length	l_2 Flute Length	1-11	12-24	25-49	50-100	
			Decimal	Metric							
22510			.5000	1/2"	12.700	4"	1-15/16"	151.77	145.17	138.57	131.97
	25866		.5000	1/2"	12.700	5-3/8"	3-1/16"	172.93	165.41	157.89	150.37
		26866	.5000	1/2"	12.700	6"	4"	201.70	192.93	184.16	175.39
22515			.5118		13.000	107	53	168.46	161.14	153.81	146.49
	25871		.5118		13.000	135	78	196.11	187.58	179.06	170.53
		26871	.5118		13.000	150	102	211.16	201.98	192.80	183.62
22520			.5156	33/64"	13.096	4-7/32"	2-3/32"	172.44	164.95	157.45	149.95
	25876		.5156	33/64"	13.096	5-3/8"	3-1/8"	204.40	195.51	186.63	177.74
		26876	.5156	33/64"	13.096	6"	4"	220.04	210.47	200.91	191.34
22525			.5312	17/32"	13.492	4-7/32"	2-3/32"	176.40	168.73	161.06	153.39
	25881		.5312	17/32"	13.492	5-11/16"	3-5/16"	207.70	198.67	189.64	180.61
		26881	.5312	17/32"	13.492	6-1/8"	4-1/8"	223.62	213.90	204.17	194.45
22530			.5315		13.500	110	56	180.39	172.55	164.70	156.86
	25886		.5315		13.500	145	84	210.91	201.74	192.57	183.40
		26886	.5315		13.500	155	105	227.08	217.21	207.33	197.46
22535			.5469	35/64"	13.891	4-5/16"	2-7/32"	184.33	176.32	168.30	160.29
	25891		.5469	35/64"	13.891	5-13/16"	3-3/8"	222.47	212.80	203.12	193.45
		26891	.5469	35/64"	13.891	6-1/8"	4-1/8"	234.17	223.99	213.81	203.63
22540			.5512		14.000	110	56	188.32	180.14	171.95	163.76
	25896		.5512		14.000	145	86	225.73	215.92	206.10	196.29
		26896	.5512		14.000	155	105	237.62	227.29	216.96	206.63
22545			.5625	9/16"	14.288	4-9/16"	2-15/32"	208.50	199.43	190.37	181.30
	25901		.5625	9/16"	14.288	5-15/16"	3-1/2"	243.19	232.62	222.04	211.47
		26901	.5625	9/16"	14.288	6-1/4"	4-3/8"	256.55	245.40	234.24	223.09
22550			.5709		14.500	116	63	212.43	203.19	193.96	184.72
	25906		.5709		14.500	150	89	245.11	234.45	223.80	213.14
		26906	.5709		14.500	160	109	258.59	247.35	236.10	224.86
22555			.5781	37/64"	14.684	4-15/16"	2-9/16"	216.22	206.82	197.42	188.02
	25911		.5781	37/64"	14.684	6"	3-1/2"	245.78	235.09	224.41	213.72
		26911	.5781	37/64"	14.684	6-1/4"	4-3/8"	259.28	248.01	236.73	225.46
22560			.5906		15.000	125	65	220.20	210.63	201.05	191.48
	25916		.5906		15.000	150	90	248.98	238.15	227.33	216.50
		26916	.5906		15.000	160	112	262.65	251.23	239.81	228.39
22565			.5938	19/32"	15.083	4-15/16"	2-9/16"	221.40	211.77	202.15	192.52
	25921		.5938	19/32"	15.083	6"	3-9/16"	255.46	244.35	233.25	222.14
		26921	.5938	19/32"	15.083	6-3/8"	4-3/8"	269.47	257.75	246.04	234.32
22570			.6094	39/64"	15.479	5-1/16"	2-13/16"	222.50	212.83	203.15	193.48
	25926		.6094	39/64"	15.479	6-3/16"	3-11/16"	287.50	275.00	262.50	250.00
		26926	.6094	39/64"	15.479	6-7/16"	4-7/16"	303.24	290.06	276.87	263.69
22575			.6102		15.500	129	71	223.66	213.94	204.21	194.49
	25931		.6102		15.500	160	94	288.29	275.76	263.22	250.69
		26931	.6102		15.500	165	113	304.09	290.87	277.65	264.43
22580			.6250	5/8"	15.875	5-1/4"	3-1/8"	224.77	215.00	205.22	195.45
	25936		.6250	5/8"	15.875	6-5/16"	3-3/4"	296.24	283.36	270.48	257.60
		26936	.6250	5/8"	15.875	6-9/16"	4-9/16"	312.51	298.93	285.34	271.75
22585			.6299		16.000	133	79	230.21	220.20	210.19	200.18
	25941		.6299		16.000	160	95	300.13	287.08	274.03	260.98
		26941	.6299		16.000	165	117	316.61	302.84	289.08	275.31