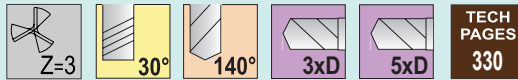


TOLERANCES

<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)

NEW ITEMS

Series 1160, 1180



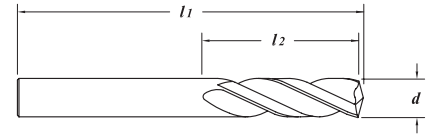
.1562" - .1910"
(3.967mm - 4.851mm)

HIGH PERFORMANCE DRILLS

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
- High performance drill point
- Live tooling recommended on lathe processes



3xD (1160) EDP#	5xD (1180) 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							
70631		.1562	5/32"	3.967	2-1/16"	9/16"	42.99	41.12	39.25	37.38
	70161	.1562	5/32"	3.967	2-1/2"	1"	44.26	42.34	40.41	38.49
70633		.1570	#22	3.988	2-1/8"	5/8"	43.39	41.50	39.62	37.73
	70163	.1570	#22	3.988	2-1/2"	1"	44.59	42.65	40.71	38.77
70635		.1575		4.000	54	16	43.73	41.83	39.93	38.03
	70166	.1575		4.000	65	24	44.92	42.97	41.01	39.06
70637		.1590	#21	4.039	2-1/8"	5/8"	44.11	42.20	40.28	38.36
	70177	.1590	#21	4.039	2-1/2"	1"	45.23	43.26	41.30	39.33
70639		.1610	#20	4.089	2-1/8"	5/8"	44.49	42.56	40.62	38.69
	70179	.1610	#20	4.089	2-1/2"	1"	45.61	43.63	41.64	39.66
70641		.1660	#19	4.216	2-1/8"	5/8"	44.87	42.92	40.97	39.02
	70181	.1660	#19	4.216	2-3/4"	1-1/8"	45.93	43.93	41.94	39.94
70643		.1695	#18	4.305	2-1/8"	5/8"	45.22	43.25	41.29	39.32
	70183	.1695	#18	4.305	2-3/4"	1-1/8"	46.23	44.22	42.21	40.20
70645		.1719	11/64"	4.366	2-1/8"	5/8"	45.61	43.63	41.64	39.66
	70185	.1719	11/64"	4.366	2-3/4"	1-1/8"	46.56	44.54	42.51	40.49
70647		.1730	#17	4.394	2-3/16"	11/16"	45.98	43.98	41.98	39.98
	70187	.1730	#17	4.394	2-3/4"	1-1/8"	46.89	44.85	42.81	40.77
70649		.1770	#16	4.496	2-3/16"	11/16"	46.30	44.29	42.27	40.26
	70189	.1770	#16	4.496	2-3/4"	1-1/8"	47.24	45.19	43.13	41.08
70651		.1772		4.500	55	18	46.69	44.66	42.63	40.60
	70191	.1772		4.500	65	25	47.46	45.40	43.33	41.27
70653		.1800	#15	4.572	2-3/16"	11/16"	47.00	44.96	42.91	40.87
	70196	.1800	#15	4.572	2-3/4"	1-1/4"	47.86	45.78	43.70	41.62
70655		.1820	#14	4.623	2-3/16"	11/16"	47.44	45.38	43.31	41.25
	70201	.1820	#14	4.623	2-3/4"	1-1/4"	48.19	46.09	44.00	41.90
70657		.1850	#13	4.700	2-3/16"	11/16"	47.78	45.71	43.63	41.55
	70206	.1850	#13	4.700	2-3/4"	1-1/4"	48.54	46.43	44.32	42.21
70659		.1875	3/16"	4.763	2-3/16"	11/16"	48.16	46.07	43.97	41.88
	70211	.1875	3/16"	4.763	2-3/4"	1-1/4"	48.70	46.59	44.47	42.35
70661		.1890	#12	4.801	2-1/4"	3/4"	49.74	47.58	45.41	43.25
	70216	.1890	#12	4.801	2-3/4"	1-1/4"	50.51	48.31	46.12	43.92
70663		.1910	#11	4.851	2-1/4"	3/4"	50.20	48.02	45.83	43.65
	70221	.1910	#11	4.851	2-3/4"	1-1/4"	50.82	48.61	46.40	44.19

continued →

Series 1160, 1180 (continued)

.1935" - .2570"
(4.914mm - 6.528mm)

3xD (1160) EDP#	5xD (1180) EDP#	d † Diameter		l_1 Overall Length	l_2 Flute Length	1-11	12-24	25-49	50-100	
		Decimal	Metric							
70665	70226	.1935	#10	4.914	2-1/4"	3/4"	50.50	48.30	46.11	43.91
		.1935	#10	4.914	2-3/4"	1-1/4"	51.14	48.92	46.69	44.47
70667	70229	.1960	#9	4.978	2-1/4"	3/4"	50.85	48.64	46.43	44.22
		.1960	#9	4.978	3"	1-5/16"	51.44	49.20	46.97	44.73
70669	70231	.1969		5.000	57	19	51.13	48.91	46.68	44.46
		.1969		5.000	75	32	51.77	49.52	47.27	45.02
70671	70236	.1990	#8	5.055	2-1/4"	3/4"	51.61	49.37	47.12	44.88
		.1990	#8	5.055	3"	1-5/16"	52.03	49.76	47.50	45.24
70673	70241	.2010	#7	5.105	2-1/4"	3/4"	51.76	49.51	47.26	45.01
		.2010	#7	5.105	3"	1-5/16"	52.23	49.96	47.69	45.42
70675	70246	.2031	13/64"	5.159	2-1/4"	3/4"	52.11	49.84	47.58	45.31
		.2031	13/64"	5.159	3"	1-5/16"	52.60	50.31	48.03	45.74
70677	70251	.2040	#6	5.182	2-3/8"	7/8"	52.46	50.18	47.90	45.62
		.2040	#6	5.182	3"	1-3/8"	52.96	50.66	48.35	46.05
70679	70256	.2055	#5	5.220	2-3/8"	7/8"	52.85	50.56	48.26	45.96
		.2055	#5	5.220	3"	1-3/8"	53.30	50.99	48.67	46.35
70681	70261	.2090	#4	5.309	2-3/8"	7/8"	53.16	50.85	48.54	46.23
		.2090	#4	5.309	3"	1-3/8"	53.60	51.27	48.94	46.61
70683	70266	.2130	#3	5.410	2-3/8"	7/8"	53.52	51.19	48.87	46.54
		.2130	#3	5.410	3"	1-3/8"	53.96	51.61	49.27	46.92
70685	70271	.2165		5.500	60	22	53.85	51.51	49.17	46.83
		.2165		5.500	75	35	54.28	51.92	49.56	47.20
70687	70276	.2188	7/32"	5.558	2-3/8"	7/8"	54.30	51.94	49.58	47.22
		.2188	7/32"	5.558	3"	1-3/8"	54.60	52.23	49.85	47.48
70689	70281	.2210	#2	5.613	2-7/16"	15/16"	54.69	52.32	49.94	47.56
		.2210	#2	5.613	3"	1-3/8"	55.69	53.27	50.85	48.43
70691	70286	.2280	#1	5.791	2-7/16"	15/16"	55.11	52.71	50.32	47.92
		.2280	#1	5.791	3"	1-3/8"	55.96	53.53	51.09	48.66
70693	70294	.2340	A	5.944	2-7/16"	15/16"	55.49	53.08	50.66	48.25
		.2340	A	5.944	3-1/4"	1-1/2"	56.52	54.07	51.61	49.15
70695	70296	.2344	15/64"	5.954	2-7/16"	15/16"	55.91	53.48	51.05	48.62
		.2344	15/64"	5.954	3-1/4"	1-1/2"	57.09	54.60	52.12	49.64
70697	70301	.2362		6.000	64	26	56.29	53.85	51.40	48.95
		.2362		6.000	82	38	57.25	54.76	52.27	49.78
70699	70306	.2380	B	6.045	2-1/2"	1"	56.68	54.22	51.75	49.29
		.2380	B	6.045	3-1/4"	1-5/8"	57.41	54.91	52.42	49.92
70701	70311	.2420	C	6.147	2-1/2"	1"	57.14	54.66	52.17	49.69
		.2420	C	6.147	3-1/4"	1-5/8"	57.78	55.26	52.75	50.24
70703	70316	.2460	D	6.248	2-1/2"	1"	57.45	54.96	52.46	49.96
		.2460	D	6.248	3-1/4"	1-5/8"	58.12	55.59	53.07	50.54
70705	70321	.2500	1/4" / E	6.350	2-1/2"	1"	57.95	55.43	52.91	50.39
		.2500	1/4" / E	6.350	3-1/4"	1-5/8"	58.43	55.89	53.35	50.81
70707	70911	.2510		6.375	2-1/2"	1"	58.70	56.14	53.59	51.04
		.2510		6.375	3-1/4"	1-5/8"	59.33	56.75	54.17	51.59
70709	70326	.2559		6.500	66	28	60.97	58.32	55.67	53.02
		.2559		6.500	82	41	61.99	59.29	56.60	53.90
70711	70331	.2570	F	6.528	2-5/8"	1-1/8"	61.94	59.25	56.55	53.86
		.2570	F	6.528	3-1/4"	1-11/16"	62.92	60.18	57.45	54.71

3xD (1160) EDP#	5xD (1180) EDP#	d † Diameter		l_1 Overall Length	l_2 Flute Length	1-11	12-24	25-49	50-100	
		Decimal	Metric							
70713		.2610	G	6.629	2-5/8"	1-1/8"	62.88	60.15	57.41	54.68
	70336	.2610	G	6.629	3-1/2"	1-11/16"	63.88	61.11	58.33	55.55
70715		.2656	17/64"	6.746	2-5/8"	1-1/8"	63.83	61.05	58.28	55.50
	70341	.2656	17/64"	6.746	3-1/2"	1-11/16"	64.83	62.01	59.19	56.37
70717		.2660	H	6.756	2-11/16"	1-3/16"	64.78	61.96	59.15	56.33
	70346	.2660	H	6.756	3-1/2"	1-11/16"	65.81	62.95	60.09	57.23
70719		.2720	I	6.909	2-11/16"	1-3/16"	64.93	62.11	59.28	56.46
	70351	.2720	I	6.909	3-1/2"	1-11/16"	66.76	63.86	60.95	58.05
70721		.2756		7.000	68	30	65.87	63.01	60.14	57.28
	70356	.2756		7.000	88	43	67.70	64.76	61.81	58.87
70723		.2770	J	7.036	2-11/16"	1-3/16"	66.79	63.89	60.98	58.08
	70361	.2770	J	7.036	3-1/2"	1-11/16"	68.67	65.68	62.70	59.71
70725		.2812	9/32"	7.142	2-11/16"	1-3/16"	68.70	65.71	62.73	59.74
	70371	.2812	9/32"	7.142	3-1/2"	1-3/4"	70.60	67.53	64.46	61.39
70727		.2900	L	7.366	2-3/4"	1-1/4"	69.63	66.61	63.58	60.55
	70376	.2900	L	7.366	3-1/2"	1-3/4"	71.48	68.38	65.27	62.16
70728		.2950	M	7.493	2-3/4"	1-1/4"	70.98	67.89	64.81	61.72
	70378	.2950	M	7.493	3-3/4"	1-7/8"	72.42	69.27	66.12	62.97
NEW	70729	.2953		7.500	70	32	70.98	67.89	64.81	61.72
	70381	.2953		7.500	95	44	72.42	69.27	66.12	62.97
70731		.2969	19/64"	7.541	2-3/4"	1-1/4"	71.62	68.51	65.39	62.28
	70386	.2969	19/64"	7.541	3-3/4"	1-7/8"	73.05	69.87	66.70	63.52
70733		.3020	N	7.671	2-15/16"	1-7/16"	73.91	70.70	67.48	64.27
	70391	.3020	N	7.671	3-3/4"	1-7/8"	75.70	72.41	69.12	65.83
70735		.3125	5/16"	7.938	2-15/16"	1-7/16"	74.18	70.95	67.73	64.50
	70396	.3125	5/16"	7.938	3-3/4"	1-7/8"	75.90	72.60	69.30	66.00
70737		.3150		8.000	76	36	78.29	74.89	71.48	68.08
	70401	.3150		8.000	95	48	80.10	76.62	73.13	69.65
70739		.3160	O	8.026	2-15/16"	1-7/16"	78.29	74.89	71.48	68.08
	70406	.3160	O	8.026	3-3/4"	1-7/8"	80.10	76.62	73.13	69.65
70741		.3230	P	8.204	2-15/16"	1-7/16"	78.86	75.43	72.00	68.57
	70411	.3230	P	8.204	3-3/4"	2-3/32"	80.36	76.87	73.37	69.88
70743		.3281	21/64"	8.334	2-15/16"	1-7/16"	80.30	76.81	73.32	69.83
	70416	.3281	21/64"	8.334	4"	2-3/32"	81.05	77.53	74.00	70.48
70745		.3320	Q	8.433	3"	1-7/16"	81.74	78.19	74.63	71.08
	70421	.3320	Q	8.433	4"	2-3/32"	82.54	78.95	75.36	71.77
70747		.3346		8.500	76	36	82.10	78.53	74.96	71.39
	70426	.3346		8.500	100	53	83.10	79.49	75.87	72.26
70749		.3390	R	8.611	3"	1-7/16"	84.31	80.64	76.98	73.31
	70431	.3390	R	8.611	4"	2-3/32"	85.17	81.47	77.76	74.06
70751		.3438	11/32"	8.733	3"	1-7/16"	86.15	82.40	78.66	74.91
	70436	.3438	11/32"	8.733	4"	2-3/16"	87.95	84.13	80.30	76.48
70753		.3480	S	8.839	3-1/16"	1-1/2"	90.09	86.17	82.26	78.34
	70441	.3480	S	8.839	4"	2-3/16"	93.01	88.97	84.92	80.88
70755		.3543		9.000	78	38	92.38	88.36	84.35	80.33
	70446	.3543		9.000	100	55	93.52	89.45	85.39	81.32
NEW	70757	.3580	T	9.093	3-1/16"	1-1/2"	97.18	92.95	88.73	84.50
	70451	.3580	T	9.093	4-1/4"	2-9/32"	98.54	94.26	89.97	85.69
70759		.3594	23/64"	9.129	3-1/16"	1-1/2"	97.78	93.53	89.28	85.03
	70456	.3594	23/64"	9.129	4-1/4"	2-9/32"	99.06	94.75	90.45	86.14

continued →

Series 1160, 1180 (continued)

.3680" - .5118"
(9.347mm - 13.000mm)

3xD (1160) EDP#	5xD (1180) EDP#	d † Diameter		l_1 Overall Length	l_2 Flute Length	1-11	12-24	25-49	50-100	
		Decimal	Metric							
70761		.3680	U	9.347	3-1/8"	1-9/16"	98.61	94.33	90.04	85.75
	70461	.3680	U	9.347	4-1/4"	2-9/32"	103.72	99.21	94.70	90.19
70763		.3740		9.500	79	39	99.43	95.11	90.78	86.46
	70466	.3740		9.500	108	58	104.64	100.09	95.54	90.99
70765		.3750	3/8"	9.525	3-1/8"	1-9/16"	100.03	95.68	91.33	86.98
	70471	.3750	3/8"	9.525	4-1/4"	2-3/8"	105.57	100.98	96.39	91.80
70767		.3760		9.550	3-1/8"	1-9/16"	101.94	97.50	93.07	88.64
	70913	.3760		9.550	4-1/4"	2-3/8"	106.98	102.33	97.68	93.03
70769		.3770	V	9.576	3-1/4"	1-5/8"	103.86	99.34	94.83	90.31
	70476	.3770	V	9.576	4-1/4"	2-3/8"	108.38	103.66	98.95	94.24
70771		.3860	W	9.804	3-1/4"	1-5/8"	105.67	101.08	96.48	91.89
	70481	.3860	W	9.804	4-1/2"	2-3/8"	110.10	105.31	100.53	95.74
70773		.3906	25/64"	9.921	3-1/4"	1-5/8"	107.01	102.36	97.70	93.05
	70486	.3906	25/64"	9.921	4-1/2"	2-3/8"	111.33	106.49	101.65	96.81
NEW	70775	.3937		10.000	84	43	110.25	105.46	100.66	95.87
	70491	.3937		10.000	114	60	114.34	109.37	104.40	99.43
70777		.3970	X	10.084	3-5/16"	1-11/16"	111.76	106.90	102.04	97.18
	70496	.3970	X	10.084	4-1/2"	2-1/2"	115.52	110.50	105.47	100.45
70779		.4040	Y	10.262	3-5/16"	1-11/16"	112.48	107.59	102.70	97.81
	70501	.4040	Y	10.262	4-1/2"	2-9/16"	118.71	113.55	108.39	103.23
70781		.4062	13/32"	10.317	3-5/16"	1-11/16"	115.95	110.91	105.87	100.83
	70506	.4062	13/32"	10.317	4-1/2"	2-9/16"	119.63	114.43	109.23	104.03
70783		.4134		10.500	85	43	117.02	111.94	106.85	101.76
	70511	.4134		10.500	114	67	120.64	115.39	110.15	104.90
70785		.4219	27/64"	10.716	3-3/8"	1-11/16"	118.14	113.00	107.87	102.73
	70516	.4219	27/64"	10.716	4-1/2"	2-11/16"	121.65	116.36	111.07	105.78
NEW	70787	.4331		11.000	87	45	126.45	120.96	115.46	109.96
	70521	.4331		11.000	114	68	129.79	124.15	118.50	112.86
70789		.4375	7/16"	11.113	3-7/16"	1-3/4"	126.80	121.29	115.77	110.26
	70526	.4375	7/16"	11.113	4-3/4"	2-13/16"	130.27	124.61	118.94	113.28
NEW	70791	.4528		11.500	90	47	134.47	128.62	122.78	116.93
	70531	.4528		11.500	120	70	138.53	132.51	126.48	120.46
70793		.4531	29/64"	11.509	3-9/16"	1-13/16"	134.47	128.62	122.78	116.93
	70536	.4531	29/64"	11.509	4-3/4"	2-7/8"	138.53	132.51	126.48	120.46
70795		.4688	15/32"	11.909	3-11/16"	2-1/16"	141.29	135.15	129.00	122.86
	70541	.4688	15/32"	11.909	4-3/4"	2-7/8"	144.99	138.69	132.38	126.08
70797		.4724		12.000	93	53	141.70	135.54	129.38	123.22
	70546	.4724		12.000	120	73	145.37	139.05	132.73	126.41
70799		.4844	31/64"	12.304	3-11/16"	2-1/16"	142.68	136.48	130.27	124.07
	70551	.4844	31/64"	12.304	5-5/16"	3"	147.95	141.52	135.08	128.65
70801		.4921		12.500	95	53	144.10	137.83	131.57	125.30
	70556	.4921		12.500	135	75	149.59	143.09	136.58	130.08
70803		.5000	1/2"	12.700	3-3/4"	2-1/16"	145.02	138.71	132.41	126.10
	70561	.5000	1/2"	12.700	5-3/8"	3-1/16"	149.88	143.36	136.85	130.33
70805		.5010		12.725	3-3/4"	2-1/16"	146.56	140.18	133.81	127.44
	70915	.5010		12.725	5-3/8"	3-1/16"	151.56	144.97	138.38	131.79
NEW	70807	.5118		13.000	107	55	158.95	152.04	145.13	138.22
	70566	.5118		13.000	136	78	164.91	157.74	150.57	143.40

3xD (1160) EDP#	5xD (1180) EDP#	d † Diameter		l_1 Overall Length	l_2 Flute Length	1-11	12-24	25-49	50-100	
		Decimal	Metric							
70809		.5156	33/64"	13.096	4-1/4"	2-3/16"	162.71	155.64	148.56	141.49
	70571	.5156	33/64"	13.096	5-3/8"	3-1/8"	168.43	161.11	153.78	146.46
70811		.5312	17/32"	13.492	4-1/4"	2-1/4"	166.46	159.23	151.99	144.75
	70576	.5312	17/32"	13.492	5-11/16"	3-5/16"	172.06	164.58	157.10	149.62
NEW 70813		.5469	35/64"	13.891	4-1/4"	2-1/4"	173.95	166.39	158.82	151.26
	70581	.5469	35/64"	13.891	5-13/16"	3-3/8"	179.07	171.28	163.50	155.71
70815		.5512		14.000	107	59	177.71	169.98	162.26	154.53
	70586	.5512		14.000	148	86	182.62	174.68	166.74	158.80
NEW 70817		.5625	9/16"	14.287	4-1/2"	2-3/8"	189.03	180.81	172.59	164.37
	70591	.5625	9/16"	14.287	5-15/16"	3-1/2"	195.16	186.67	178.19	169.70
70819		.5781	37/64"	14.683	4-1/2"	2-1/2"	196.03	187.51	178.98	170.46
	70596	.5781	37/64"	14.683	6"	3-1/2"	201.78	193.01	184.23	175.46
70821		.5906		15.000	115	64	199.64	190.96	182.28	173.60
	70601	.5906		15.000	152	90	205.30	196.37	187.45	178.52
NEW 70823		.5938	19/32"	15.082	4-1/2"	2-1/2"	200.71	191.98	183.26	174.53
	70606	.5938	19/32"	15.082	6"	3-9/16"	206.28	197.31	188.34	179.37
NEW 70825		.6094	39/64"	15.478	4-1/2"	2-9/16"	201.74	192.97	184.20	175.43
	70611	.6094	39/64"	15.478	6-3/16"	3-11/16"	223.62	213.90	204.17	194.45
70827		.6250	5/8"	15.875	4-1/2"	2-5/8"	203.81	194.95	186.09	177.23
	70616	.6250	5/8"	15.875	6-5/16"	3-3/4"	225.56	215.75	205.95	196.14
70829		.6299		16.000	115	66	208.73	199.65	190.58	181.50
	70621	.6299		16.000	160	95	230.29	220.28	210.26	200.25



*1180 Series
High Performance Drill in aluminum*



TOLERANCES

d_1	+0.000" - .0004" (+.000 - .010mm)
d_2	h6
l_1	+0.125" - .125" (+3.175 - 3.175mm)
l_2	+0.125" - .125" (+3.175 - 3.175mm)



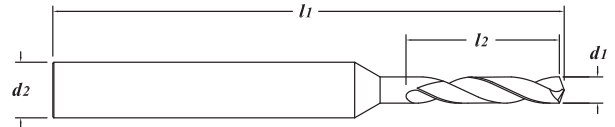
Series 1550H, 1250H, 1850H

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

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

AlTiN-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



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			.0312	1/32"	0.792	1/8"	2"	5/32"	38.17	36.51	34.85	33.19
	00304		.0312	1/32"	0.792	1/8"	2"	15/64"	39.56	37.84	36.12	34.40
		00510	.0312	1/32"	0.792	1/8"	2"	7/16"	43.75	41.84	39.94	38.04
	00306		.0315		0.800	3.0	50	6.0	39.01	37.31	35.62	33.92
		00512	.0315		0.800	3.0	50	12.0	43.14	41.26	39.39	37.51
	00308		.0319		0.810	3.0	50	6.0	39.01	37.31	35.62	33.92
00106			.0320	#67	0.812	1/8"	2"	11/64"	38.17	36.51	34.85	33.19
	00310		.0320	#67	0.812	1/8"	2"	15/64"	39.56	37.84	36.12	34.40
		00516	.0320	#67	0.812	1/8"	2"	7/16"	43.75	41.84	39.94	38.04
		00518	.0323		0.820	3.0	50	12.0	43.14	41.26	39.39	37.51
00112			.0330	#66	0.838	1/8"	2"	11/64"	38.17	36.51	34.85	33.19
	00316		.0330	#66	0.838	1/8"	2"	15/64"	39.56	37.84	36.12	34.40
		00522	.0330	#66	0.838	1/8"	2"	7/16"	43.75	41.84	39.94	38.04
	00318		.0331		0.840	3.0	50	6.0	39.01	37.31	35.62	33.92
		00524	.0331		0.840	3.0	50	12.0	43.14	41.26	39.39	37.51
00116			.0335		0.850	3.0	50	4.5	37.54	35.90	34.27	32.64
		00526	.0335		0.850	3.0	50	12.0	43.14	41.26	39.39	37.51
	00322		.0339		0.860	3.0	50	6.5	39.01	37.31	35.62	33.92
		00528	.0339		0.860	3.0	50	13.0	43.14	41.26	39.39	37.51
00120			.0343		0.870	3.0	50	4.5	37.54	35.90	34.27	32.64
		00530	.0343		0.870	3.0	50	13.0	43.14	41.26	39.39	37.51
00122			.0346		0.880	3.0	50	4.5	37.54	35.90	34.27	32.64
00124			.0350	#65	0.890	3.0	50	4.5	37.54	35.90	34.27	32.64
	00328		.0350	#65	0.890	3.0	50	6.5	39.01	37.31	35.62	33.92
		00534	.0350	#65	0.890	3.0	50	13.0	43.14	41.26	39.39	37.51
	00330		.0354		0.900	3.0	50	6.5	39.01	37.31	35.62	33.92
		00536	.0354		0.900	3.0	50	13.0	43.14	41.26	39.39	37.51

continued →

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

.0358" - .0465"
(0.910mm - 1.181mm)

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								
	00332		.0358		0.910	3.0	50	6.5	39.01	37.31	35.62	33.92
00130			.0360	#64	0.914	1/8"	2"	3/16"	38.17	36.51	34.85	33.19
	00334		.0360	#64	0.914	1/8"	2"	1/4"	39.56	37.84	36.12	34.40
		00540	.0360	#64	0.914	1/8"	2"	1/2"	43.75	41.84	39.94	38.04
00134			.0366		0.930	3.0	50	5.0	37.54	35.90	34.27	32.64
00136			.0370	#63	0.940	3.0	50	5.0	37.54	35.90	34.27	32.64
	00340		.0370	#63	0.940	3.0	50	7.0	39.01	37.31	35.62	33.92
		00546	.0370	#63	0.940	3.0	50	14.0	41.48	39.68	37.87	36.07
00138			.0374		0.950	3.0	50	5.0	37.54	35.90	34.27	32.64
00142			.0380	#62	0.965	1/8"	2"	3/16"	38.17	36.51	34.85	33.19
	00346		.0380	#62	0.965	1/8"	2"	17/64"	39.56	37.84	36.12	34.40
		00552	.0380	#62	0.965	1/8"	2"	9/16"	43.75	41.84	39.94	38.04
		00556	.0386		0.980	3.0	50	14.0	43.14	41.26	39.39	37.51
00148			.0390	#61	0.990	3.0	50	5.0	37.54	35.90	34.27	32.64
	00558		.0390	#61	0.990	3.0	50	14.0	43.14	41.26	39.39	37.51
00150			.0394		1.000	3.0	50	5.0	37.54	35.90	34.27	32.64
	00354		.0394		1.000	3.0	50	7.0	39.01	37.31	35.62	33.92
		00560	.0394		1.000	3.0	50	14.0	43.14	41.26	39.39	37.51
00152			.0400	#60	1.016	1/8"	2"	13/64"	37.80	36.16	34.51	32.87
	00356		.0400	#60	1.016	1/8"	2"	9/32"	39.20	37.50	35.79	34.09
		00562	.0400	#60	1.016	1/8"	2"	9/16"	43.34	41.46	39.57	37.69
00154			.0410	#59	1.041	1/8"	2"	13/64"	37.80	36.16	34.51	32.87
	00358		.0410	#59	1.041	1/8"	2"	9/32"	39.20	37.50	35.79	34.09
		00564	.0410	#59	1.041	1/8"	2"	9/16"	43.34	41.46	39.57	37.69
00156			.0413		1.050	3.0	50	5.5	37.17	35.55	33.94	32.32
	00360		.0413		1.050	3.0	50	7.5	37.20	35.59	33.97	32.35
		00566	.0413		1.050	3.0	50	15.0	42.78	40.92	39.06	37.20
00158			.0420	#58	1.066	1/8"	2"	7/32"	37.80	36.16	34.51	32.87
	00362		.0420	#58	1.066	1/8"	2"	5/16"	39.20	37.50	35.79	34.09
00160			.0430	#57	1.092	1/8"	2"	7/32"	37.80	36.16	34.51	32.87
	00364		.0430	#57	1.092	1/8"	2"	5/16"	39.20	37.50	35.79	34.09
		00570	.0430	#57	1.092	1/8"	2"	9/16"	43.34	41.46	39.57	37.69
00162			.0433		1.100	3.0	50	5.5	37.17	35.55	33.94	32.32
	00366		.0433		1.100	3.0	50	8.0	38.69	37.00	35.32	33.64
		00572	.0433		1.100	3.0	50	16.0	42.78	40.92	39.06	37.20
00164			.0453		1.150	3.0	50	6.0	37.17	35.55	33.94	32.32
	00368		.0453		1.150	3.0	50	8.0	38.69	37.00	35.32	33.64
		00574	.0453		1.150	3.0	50	16.0	42.78	40.92	39.06	37.20
00166			.0465	#56	1.181	1/8"	2"	15/64"	37.80	36.16	34.51	32.87
	00370		.0465	#56	1.181	1/8"	2"	11/32"	39.20	37.50	35.79	34.09
		00576	.0465	#56	1.181	1/8"	2"	5/8"	43.34	41.46	39.57	37.69

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	3/64"	Metric							
00168			.0469	3/64"	1.191	1/8"	2"	15/64"	37.80	36.16	34.51	32.87
	00372		.0469	3/64"	1.191	1/8"	2"	11/32"	39.20	37.50	35.79	34.09
		00578	.0469	3/64"	1.191	1/8"	2"	5/8"	43.34	41.46	39.57	37.69
00170			.0472		1.200	3.0	50	6.0	37.17	35.55	33.94	32.32
	00374		.0472		1.200	3.0	50	9.0	38.69	37.00	35.32	33.64
		00580	.0472		1.200	3.0	50	18.0	42.78	40.92	39.06	37.20
00172			.0492		1.250	3.0	50	6.5	37.17	35.55	33.94	32.32
	00376		.0492		1.250	3.0	50	9.0	38.69	37.00	35.32	33.64
		00582	.0492		1.250	3.0	50	18.0	42.78	40.92	39.06	37.20
00174			.0512		1.300	3.0	50	6.5	36.81	35.21	33.61	32.01
	00378		.0512		1.300	3.0	50	9.0	38.28	36.62	34.95	33.29
		00584	.0512		1.300	3.0	50	18.0	42.33	40.49	38.65	36.81
00176			.0520	#55	1.320	1/8"	2"	17/64"	37.09	35.48	33.86	32.25
	00380		.0520	#55	1.320	1/8"	2"	3/8"	38.85	37.16	35.47	33.78
		00586	.0520	#55	1.320	1/8"	2"	3/4"	42.94	41.07	39.21	37.34
00178			.0531		1.350	3.0	50	6.5	36.81	35.21	33.61	32.01
	00382		.0531		1.350	3.0	50	9.5	38.28	36.62	34.95	33.29
		00588	.0531		1.350	3.0	50	19.0	42.33	40.49	38.65	36.81
00180			.0550	#54	1.397	1/8"	2"	9/32"	37.09	35.48	33.86	32.25
	00384		.0550	#54	1.397	1/8"	2"	3/8"	38.85	37.16	35.47	33.78
		00590	.0550	#54	1.397	1/8"	2"	3/4"	42.94	41.07	39.21	37.34
00182			.0551		1.400	3.0	50	7.0	36.81	35.21	33.61	32.01
	00386		.0551		1.400	3.0	50	10.0	38.28	36.62	34.95	33.29
		00592	.0551		1.400	3.0	65	20.0	44.26	42.34	40.41	38.49
00184			.0571		1.450	3.0	50	7.0	36.81	35.21	33.61	32.01
	00388		.0571		1.450	3.0	50	10.5	38.28	36.62	34.95	33.29
		00594	.0571		1.450	3.0	65	21.0	44.26	42.34	40.41	38.49
00186			.0591		1.500	3.0	50	7.5	36.81	35.21	33.61	32.01
	00390		.0591		1.500	3.0	50	10.5	38.28	36.62	34.95	33.29
		00596	.0591		1.500	3.0	65	21.0	44.26	42.34	40.41	38.49
00188			.0595	#53	1.511	1/8"	2"	19/64"	37.09	35.48	33.86	32.25
	00392		.0595	#53	1.511	1/8"	2"	7/16"	38.85	37.16	35.47	33.78
		00598	.0595	#53	1.511	1/8"	2-1/2"	13/16"	44.91	42.96	41.00	39.05
00190			.0610		1.550	3.0	50	7.5	36.43	34.85	33.26	31.68
	00394		.0610		1.550	3.0	50	11.0	37.93	36.28	34.63	32.98
		00600	.0610		1.550	3.0	65	22.0	43.90	41.99	40.08	38.17
00192			.0625	1/16"	1.587	1/8"	2"	5/16"	37.09	35.48	33.86	32.25
	00396		.0625	1/16"	1.587	1/8"	2"	7/16"	38.48	36.81	35.13	33.46
		00602	.0625	1/16"	1.587	1/8"	2-1/2"	13/16"	44.51	42.57	40.64	38.70
00194			.0630		1.600	3.0	50	7.5	36.43	34.85	33.26	31.68
	00398		.0630		1.600	3.0	50	11.0	37.93	36.28	34.63	32.98
		00604	.0630		1.600	3.0	65	22.0	43.90	41.99	40.08	38.17
00196			.0635	#52	1.613	1/8"	2"	5/16"	37.09	35.48	33.86	32.25
	00400		.0635	#52	1.613	1/8"	2"	15/32"	38.48	36.81	35.13	33.46
		00606	.0635	#52	1.613	1/8"	2-1/2"	7/8"	44.51	42.57	40.64	38.70
00198			.0650		1.650	3.0	50	8.5	36.43	34.85	33.26	31.68
	00402		.0650		1.650	3.0	50	11.5	37.93	36.28	34.63	32.98
		00608	.0650		1.650	3.0	65	23.0	43.90	41.99	40.08	38.17
00200			.0669		1.700	3.0	50	8.5	36.43	34.85	33.26	31.68
	00404		.0669		1.700	3.0	50	11.5	37.93	36.28	34.63	32.98
		00610	.0669		1.700	3.0	65	23.0	43.90	41.99	40.08	38.17
00202			.0670	#51	1.702	1/8"	2"	11/32"	37.09	35.48	33.86	32.25
	00406		.0670	#51	1.702	1/8"	2"	15/32"	38.48	36.81	35.13	33.46
		00612	.0670	#51	1.702	1/8"	2-1/2"	7/8"	44.51	42.57	40.64	38.70
00204			.0689		1.750	3.0	50	9.0	36.43	34.85	33.26	31.68
	00408		.0689		1.750	3.0	50	12.0	37.93	36.28	34.63	32.98
		00614	.0689		1.750	3.0	65	24.0	43.90	41.99	40.08	38.17

continued →

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

.0700" - .0846"
(1.778mm - 2.150mm)



TOLERANCES	
<i>d1</i>	+0.000" - .0004" (+0.00 - .010mm)
<i>d2</i>	h6
<i>l1</i>	+125° - .125° (+3.175 - 3.175mm)
<i>l2</i>	+125° - .125° (+3.175 - 3.175mm)

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

AlTiN-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#	<i>d1</i> † Diameter		<i>d2</i> Shank Diameter	<i>l1</i> Overall Length	<i>l2</i> Flute Length	1-11	12-24	25-49	50-100
			Decimal	Metric							
00206			.0700	#50 1.778	1/8"	2"	23/64"	36.72	35.12	33.53	31.93
	00410		.0700	#50 1.778	1/8"	2"	1/2"	38.10	36.44	34.79	33.13
		00616	.0700	#50 1.778	1/8"	2-1/2"	1"	44.06	42.14	40.23	38.31
00208			.0709	1.800	3.0	50	9.0	36.09	34.52	32.95	31.38
	00412		.0709	1.800	3.0	50	13.0	37.57	35.94	34.30	32.67
		00618	.0709	1.800	3.0	65	26.0	43.46	41.57	39.68	37.79
00210			.0728	1.850	3.0	50	9.5	36.09	34.52	32.95	31.38
		00620	.0728	1.850	3.0	65	26.0	43.46	41.57	39.68	37.79
00212			.0730	#49 1.854	1/8"	2"	3/8"	36.72	35.12	33.53	31.93
	00416		.0730	#49 1.854	1/8"	2"	1/2"	38.10	36.44	34.79	33.13
		00622	.0730	#49 1.854	1/8"	2-1/2"	1"	44.06	42.14	40.23	38.31
00214			.0748	1.900	3.0	50	9.5	36.09	34.52	32.95	31.38
	00418		.0748	1.900	3.0	50	13.5	37.57	35.94	34.30	32.67
		00624	.0748	1.900	3.0	65	27.0	43.46	41.57	39.68	37.79
00216			.0760	#48 1.930	1/8"	2"	3/8"	36.72	35.12	33.53	31.93
	00420		.0760	#48 1.930	1/8"	2"	17/32"	38.10	36.44	34.79	33.13
		00626	.0760	#48 1.930	1/8"	2-1/2"	1-1/8"	46.43	44.41	42.39	40.37
00218			.0768	1.950	3.0	50	10.0	36.09	34.52	32.95	31.38
	00422		.0768	1.950	3.0	50	14.0	37.57	35.94	34.30	32.67
		00628	.0768	1.950	3.0	65	28.0	45.79	43.80	41.81	39.82
00220			.0781	5/64" 1.983	1/8"	2"	13/32"	36.72	35.12	33.53	31.93
	00424		.0781	5/64" 1.983	1/8"	2"	9/16"	38.10	36.44	34.79	33.13
		00630	.0781	5/64" 1.983	1/8"	2-1/2"	1-1/8"	46.43	44.41	42.39	40.37
00222			.0785	#47 1.994	1/8"	2"	13/32"	36.72	35.12	33.53	31.93
	00426		.0785	#47 1.994	1/8"	2"	9/16"	38.10	36.44	34.79	33.13
		00632	.0785	#47 1.994	1/8"	2-1/2"	1-1/8"	46.43	44.41	42.39	40.37
00224			.0787	2.000	3.0	50	10.0	36.09	34.52	32.95	31.38
	00428		.0787	2.000	3.0	50	14.0	37.57	35.94	34.30	32.67
		00634	.0787	2.000	3.0	65	28.0	45.79	43.80	41.81	39.82
00226			.0807	2.050	3.0	50	10.5	35.71	34.16	32.60	31.05
	00430		.0807	2.050	3.0	50	14.0	37.19	35.57	33.96	32.34
		00636	.0807	2.050	3.0	65	28.0	45.38	43.41	41.43	39.46
00228			.0810	#46 2.057	1/8"	2"	27/64"	36.35	34.77	33.19	31.61
	00432		.0810	#46 2.057	1/8"	2"	9/16"	37.75	36.11	34.47	32.83
		00638	.0810	#46 2.057	1/8"	2-1/2"	1-1/8"	46.05	44.04	42.04	40.04
00230			.0820	#45 2.083	1/8"	2"	27/64"	36.35	34.77	33.19	31.61
	00434		.0820	#45 2.083	1/8"	2"	9/16"	37.75	36.11	34.47	32.83
		00640	.0820	#45 2.083	1/8"	2-1/2"	1-1/8"	46.05	44.04	42.04	40.04
00232			.0827	2.100	3.0	50	10.5	35.71	34.16	32.60	31.05
	00436		.0827	2.100	3.0	50	14.5	37.19	35.57	33.96	32.34
		00642	.0827	2.100	3.0	65	29.0	45.38	43.41	41.43	39.46
00234			.0846	2.150	3.0	50	11.0	35.71	34.16	32.60	31.05
	00438		.0846	2.150	3.0	50	14.5	37.19	35.57	33.96	32.34
		00644	.0846	2.150	3.0	65	29.0	45.38	43.41	41.43	39.46

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"	36.35	34.77	33.19	31.61
	00440		.0860	#44	2.184	1/8"	2"	19/32"	37.75	36.11	34.47	32.83
		00646	.0860	#44	2.184	1/8"	2-1/2"	1-3/16"	46.05	44.04	42.04	40.04
00238			.0866		2.200	3.0	50	11.0	35.71	34.16	32.60	31.05
	00442		.0866		2.200	3.0	50	15.5	37.19	35.57	33.96	32.34
		00648	.0866		2.200	3.0	65	31.0	45.38	43.41	41.43	39.46
00240			.0886		2.250	3.0	50	11.5	35.71	34.16	32.60	31.05
00242			.0890	#43	2.260	1/8"	2"	29/64"	36.35	34.77	33.19	31.61
	00446		.0890	#43	2.260	1/8"	2"	5/8"	37.75	36.11	34.47	32.83
		00652	.0890	#43	2.260	1/8"	2-1/2"	1-1/4"	46.05	44.04	42.04	40.04
00244			.0906		2.300	3.0	50	11.5	35.35	33.81	32.28	30.74
	00448		.0906		2.300	3.0	50	16.0	36.83	35.23	33.63	32.03
		00654	.0906		2.300	3.0	65	32.0	44.94	42.99	41.03	39.08
00246			.0925		2.350	3.0	50	12.0	35.35	33.81	32.28	30.74
	00450		.0925		2.350	3.0	50	16.0	35.42	33.88	32.34	30.80
		00656	.0925		2.350	3.0	65	32.0	44.94	42.99	41.03	39.08
00248			.0935	#42	2.375	1/8"	2"	31/64"	35.97	34.41	32.84	31.28
	00452		.0935	#42	2.375	1/8"	2"	21/32"	37.38	35.75	34.13	32.50
		00658	.0935	#42	2.375	1/8"	3"	1-5/16"	45.61	43.63	41.64	39.66
00250			.0938	3/32"	2.382	1/8"	2"	31/64"	35.97	34.41	32.84	31.28
	00454		.0938	3/32"	2.382	1/8"	2"	21/32"	37.38	35.75	34.13	32.50
		00660	.0938	3/32"	2.382	1/8"	3"	1-5/16"	45.61	43.63	41.64	39.66
00252			.0945		2.400	3.0	50	12.0	35.35	33.81	32.28	30.74
	00456		.0945		2.400	3.0	50	17.0	36.83	35.23	33.63	32.03
		00662	.0945		2.400	3.0	75	34.0	44.94	42.99	41.03	39.08
00254			.0960	#41	2.438	1/8"	2"	31/64"	35.97	34.41	32.84	31.28
	00458		.0960	#41	2.438	1/8"	2"	43/64"	37.38	35.75	34.13	32.50
		00664	.0960	#41	2.438	1/8"	3"	1-11/32"	45.61	43.63	41.64	39.66
00256			.0965		2.450	3.0	50	12.5	35.35	33.81	32.28	30.74
		00666	.0965		2.450	3.0	75	34.0	44.94	42.99	41.03	39.08
00258			.0980	#40	2.489	1/8"	2"	1/2"	35.97	34.41	32.84	31.28
	00462		.0980	#40	2.489	1/8"	2"	11/16"	37.38	35.75	34.13	32.50
		00668	.0980	#40	2.489	1/8"	3"	1-3/8"	45.61	43.63	41.64	39.66
00260			.0984		2.500	3.0	50	12.5	35.35	33.81	32.28	30.74
	00464		.0984		2.500	3.0	50	17.5	36.83	35.23	33.63	32.03
		00670	.0984		2.500	3.0	75	35.0	44.94	42.99	41.03	39.08
00262			.0995	#39	2.527	1/8"	2"	1/2"	35.97	34.41	32.84	31.28
	00466		.0995	#39	2.527	1/8"	2"	11/16"	37.38	35.75	34.13	32.50
		00672	.0995	#39	2.527	1/8"	3"	1-3/8"	45.61	43.63	41.64	39.66
00264			.1004		2.550	3.0	50	13.0	35.02	33.50	31.97	30.45
	00468		.1004		2.550	3.0	50	17.5	36.50	34.91	33.33	31.74
		00674	.1004		2.550	3.0	75	35.0	44.56	42.63	40.69	38.75
00266			.1015	#38	2.578	1/8"	2"	17/32"	35.65	34.10	32.55	31.00
	00470		.1015	#38	2.578	1/8"	2"	45/64"	37.05	35.44	33.83	32.22
		00676	.1015	#38	2.578	1/8"	3"	1-13/32"	45.21	43.24	41.28	39.31
00268			.1024		2.600	3.0	50	13.0	35.02	33.50	31.97	30.45
	00472		.1024		2.600	3.0	50	18.0	36.50	34.91	33.33	31.74
		00678	.1024		2.600	3.0	75	36.0	44.56	42.63	40.69	38.75
00270			.1040	#37	2.641	1/8"	2"	17/32"	35.65	34.10	32.55	31.00
	00474		.1040	#37	2.641	1/8"	2"	23/32"	37.05	35.44	33.83	32.22
		00680	.1040	#37	2.641	1/8"	3"	1-7/16"	45.21	43.24	41.28	39.31
00272			.1043		2.650	3.0	50	13.5	35.02	33.50	31.97	30.45
	00476		.1043		2.650	3.0	50	18.5	36.50	34.91	33.33	31.74
		00682	.1043		2.650	3.0	75	37.0	44.56	42.63	40.69	38.75

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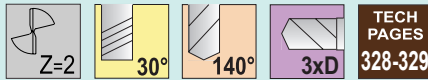
Series 1550H,1250H,1850H (continued)

.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	35.02	33.50	31.97	30.45
	00478		.1063	2.700	3.0	50	19.0	36.50	34.91	33.33	31.74
		00684	.1063	2.700	3.0	75	38.0	44.56	42.63	40.69	38.75
00276			.1065	#36 2.705	1/8"	2"	17/32"	35.65	34.10	32.55	31.00
	00480		.1065	#36 2.705	1/8"	2"	3/4"	37.05	35.44	33.83	32.22
		00686	.1065	#36 2.705	1/8"	3"	1-1/2"	45.21	43.24	41.28	39.31
00278			.1083	2.750	3.0	50	14.0	35.02	33.50	31.97	30.45
	00482		.1083	2.750	3.0	50	19.5	36.50	34.91	33.33	31.74
		00688	.1083	2.750	3.0	75	39.0	44.56	42.63	40.69	38.75
00280			.1094	7/64" 2.778	1/8"	2"	9/16"	35.65	34.10	32.55	31.00
	00484		.1094	7/64" 2.778	1/8"	2"	49/64"	37.05	35.44	33.83	32.22
		00690	.1094	7/64" 2.778	1/8"	3"	1-9/16"	45.21	43.24	41.28	39.31
00282			.1100	#35 2.794	1/8"	2"	9/16"	35.65	34.10	32.55	31.00
	00486		.1100	#35 2.794	1/8"	2"	49/64"	37.05	35.44	33.83	32.22
		00692	.1100	#35 2.794	1/8"	3"	1-9/16"	45.21	43.24	41.28	39.31
00284			.1102	2.800	3.0	50	14.0	35.02	33.50	31.97	30.45
	00488		.1102	2.800	3.0	50	19.5	36.50	34.91	33.33	31.74
		00694	.1102	2.800	3.0	75	39.0	44.56	42.63	40.69	38.75
00286			.1110	#34 2.819	1/8"	2"	9/16"	35.65	34.10	32.55	31.00
	00490		.1110	#34 2.819	1/8"	2"	25/32"	37.05	35.44	33.83	32.22
		00696	.1110	#34 2.819	1/8"	3"	1-5/8"	45.21	43.24	41.28	39.31
00288			.1122	2.850	3.0	50	14.5	35.02	33.50	31.97	30.45
		00698	.1122	2.850	3.0	75	40.0	44.56	42.63	40.69	38.75
00290			.1130	#33 2.870	1/8"	2"	19/32"	35.65	34.10	32.55	31.00
	00494		.1130	#33 2.870	1/8"	2"	51/64"	37.05	35.44	33.83	32.22
		00700	.1130	#33 2.870	1/8"	3"	1-5/8"	45.21	43.24	41.28	39.31
00292			.1142	2.900	3.0	50	14.5	35.02	33.50	31.97	30.45
	00496		.1142	2.900	3.0	50	20.0	36.50	34.91	33.33	31.74
		00702	.1142	2.900	3.0	75	40.0	44.56	42.63	40.69	38.75
00294			.1160	#32 2.946	1/8"	2"	19/32"	35.65	34.10	32.55	31.00
	00498		.1160	#32 2.946	1/8"	2"	13/16"	37.05	35.44	33.83	32.22
		00704	.1160	#32 2.946	1/8"	3"	1-5/8"	45.21	43.24	41.28	39.31
00296			.1161	2.950	3.0	50	15.0	35.02	33.50	31.97	30.45
		00706	.1161	2.950	3.0	75	42.0	44.56	42.63	40.69	38.75
00298			.1181	3.000	3.0	50	15.0	32.90	31.47	30.04	28.61
	00502		.1181	3.000	3.0	50	21.0	34.37	32.88	31.38	29.89
		00708	.1181	3.000	3.0	75	42.0	42.04	40.22	38.39	36.56
00300			.1200	#31 3.048	1/8"	2"	5/8"	35.65	34.10	32.55	31.00
	00504		.1200	#31 3.048	1/8"	2"	7/8"	37.05	35.44	33.83	32.22
		00710	.1200	#31 3.048	1/8"	3"	1-3/4"	45.21	43.24	41.28	39.31
00302			.1250	1/8" 3.175	1/8"	2"	5/8"	33.53	32.08	30.62	29.16
	00506		.1250	1/8" 3.175	1/8"	2"	7/8"	34.93	33.41	31.89	30.37
		00712	.1250	1/8" 3.175	1/8"	3"	1-3/4"	42.70	40.84	38.99	37.13

TOLERANCES

<i>d1</i> *	3mm - 6mm	+016mm +.004mm (+.00063" +.00015")
	> 6mm - 10mm	+021mm +.006mm (+.00082" +.00023")
	> 10mm - 18mm	+025mm +.007mm (+.00098" +.00027")
	> 18mm - 20mm	+029mm +.008mm (+.00114" +.00031")
<i>d2</i>	h6	
<i>l1</i>	+3.175mm -3.175mm (+.125" -.125")	
<i>l2</i>	+3.175mm -3.175mm (+.125" -.125")	
<i>l4</i>	+1.980mm -.000mm (+.078" -.000")	



Series 1580HD

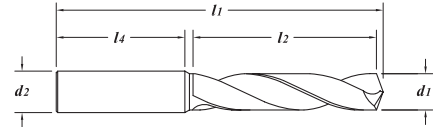
.1181" - .2342"
(3.000mm - 5.950mm)

HIGH PERFORMANCE DRILLS

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

AlTiN-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#	<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								
20085	.1181	3.000	6.0	62	20	36	47.23	45.18	43.12	41.07
20095	.1220	3.100	6.0	62	20	36	47.23	45.18	43.12	41.07
20105	.1248	3.170	6.0	62	20	36	47.23	45.18	43.12	41.07
20115	.1260	3.200	6.0	62	20	36	47.23	45.18	43.12	41.07
20125	.1280	3.250	6.0	62	20	36	47.23	45.18	43.12	41.07
20135	.1299	3.300	6.0	62	20	36	47.23	45.18	43.12	41.07
20145	.1339	3.400	6.0	62	20	36	47.23	45.18	43.12	41.07
20155	.1378	3.500	6.0	62	20	36	47.23	45.18	43.12	41.07
20165	.1417	3.600	6.0	62	20	36	47.23	45.18	43.12	41.07
20175	.1457	3.700	6.0	62	20	36	47.23	45.18	43.12	41.07
20185	.1476	3.750	6.0	62	20	36	47.23	45.18	43.12	41.07
20195	.1496	3.800	6.0	66	24	36	47.23	45.18	43.12	41.07
20205	.1535	3.900	6.0	66	24	36	47.23	45.18	43.12	41.07
20215	.1575	4.000	6.0	66	24	36	47.23	45.18	43.12	41.07
20225	.1614	4.100	6.0	66	24	36	47.23	45.18	43.12	41.07
20235	.1654	4.200	6.0	66	24	36	47.23	45.18	43.12	41.07
20245	.1673	4.250	6.0	66	24	36	47.23	45.18	43.12	41.07
20255	.1693	4.300	6.0	66	24	36	47.23	45.18	43.12	41.07
20265	.1732	4.400	6.0	66	24	36	47.23	45.18	43.12	41.07
20275	.1772	4.500	6.0	66	24	36	47.23	45.18	43.12	41.07
20285	.1811	4.600	6.0	66	24	36	47.23	45.18	43.12	41.07
20295	.1831	4.650	6.0	66	24	36	47.23	45.18	43.12	41.07
20305	.1850	4.700	6.0	66	24	36	47.23	45.18	43.12	41.07
20315	.1870	4.750	6.0	66	24	36	47.23	45.18	43.12	41.07
20325	.1890	4.800	6.0	66	28	36	47.23	45.18	43.12	41.07
20335	.1929	4.900	6.0	66	28	36	47.23	45.18	43.12	41.07
20345	.1969	5.000	6.0	66	28	36	47.23	45.18	43.12	41.07
20355	.2008	5.100	6.0	66	28	36	47.23	45.18	43.12	41.07
20365	.2027	5.150	6.0	66	28	36	47.23	45.18	43.12	41.07
20375	.2047	5.200	6.0	66	28	36	47.23	45.18	43.12	41.07
20385	.2087	5.300	6.0	66	28	36	47.23	45.18	43.12	41.07
20395	.2165	5.500	6.0	66	28	36	47.23	45.18	43.12	41.07
20405	.2185	5.550	6.0	66	28	36	47.23	45.18	43.12	41.07
20408	.2205	5.600	6.0	66	28	36	47.23	45.18	43.12	41.07
20412	.2244	5.700	6.0	66	28	36	47.23	45.18	43.12	41.07
20415	.2283	5.800	6.0	66	28	36	47.23	45.18	43.12	41.07
20425	.2323	5.900	6.0	66	28	36	47.23	45.18	43.12	41.07
20435	.2342	5.950	6.0	66	28	36	47.23	45.18	43.12	41.07

continued →

Series 1580HD (continued)

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

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								
20445	.2362	6.000	6.0	66	28	36	47.23	45.18	43.12	41.07
20448	.2402	6.100	8.0	79	34	36	64.98	62.15	59.33	56.50
20452	.2441	6.200	8.0	79	34	36	64.98	62.15	59.33	56.50
20454	.2480	6.300	8.0	79	34	36	64.98	62.15	59.33	56.50
20455	.2500	6.350	8.0	79	34	36	64.98	62.15	59.33	56.50
20462	.2520	6.400	8.0	79	34	36	64.98	62.15	59.33	56.50
20465	.2559	6.500	8.0	79	34	36	64.98	62.15	59.33	56.50
20468	.2571	6.530	8.0	79	34	36	64.98	62.15	59.33	56.50
20472	.2598	6.600	8.0	79	34	36	64.98	62.15	59.33	56.50
20473	.2638	6.700	8.0	79	34	36	64.98	62.15	59.33	56.50
20475	.2657	6.750	8.0	79	34	36	64.98	62.15	59.33	56.50
20485	.2677	6.800	8.0	79	34	36	64.98	62.15	59.33	56.50
20495	.2717	6.900	8.0	79	34	36	64.98	62.15	59.33	56.50
20505	.2756	7.000	8.0	79	34	36	64.98	62.15	59.33	56.50
20515	.2795	7.100	8.0	79	41	36	64.98	62.15	59.33	56.50
20525	.2815	7.150	8.0	79	41	36	64.98	62.15	59.33	56.50
20535	.2835	7.200	8.0	79	41	36	64.98	62.15	59.33	56.50
20542	.2874	7.300	8.0	79	41	36	64.98	62.15	59.33	56.50
20545	.2913	7.400	8.0	79	41	36	64.98	62.15	59.33	56.50
20555	.2953	7.500	8.0	79	41	36	64.98	62.15	59.33	56.50
20565	.2972	7.550	8.0	79	41	36	64.98	62.15	59.33	56.50
20575	.2992	7.600	8.0	79	41	36	64.98	62.15	59.33	56.50
20585	.3031	7.700	8.0	79	41	36	64.98	62.15	59.33	56.50
20595	.3071	7.800	8.0	79	41	36	64.98	62.15	59.33	56.50
20605	.3130	7.950	8.0	79	41	36	64.98	62.15	59.33	56.50
20615	.3150	8.000	8.0	79	41	36	64.98	62.15	59.33	56.50
20622	.3189	8.100	10.0	89	47	40	90.40	86.47	82.54	78.61
20625	.3228	8.200	10.0	89	47	40	90.40	86.47	82.54	78.61
20635	.3268	8.300	10.0	89	47	40	90.40	86.47	82.54	78.61
20645	.3287	8.350	10.0	89	47	40	90.40	86.47	82.54	78.61
20652	.3307	8.400	10.0	89	47	40	90.40	86.47	82.54	78.61
20655	.3346	8.500	10.0	89	47	40	90.40	86.47	82.54	78.61
20665	.3386	8.600	10.0	89	47	40	90.40	86.47	82.54	78.61
20675	.3425	8.700	10.0	89	47	40	90.40	86.47	82.54	78.61
20685	.3445	8.750	10.0	89	47	40	90.40	86.47	82.54	78.61
20695	.3465	8.800	10.0	89	47	40	90.40	86.47	82.54	78.61
20705	.3504	8.900	10.0	89	47	40	90.40	86.47	82.54	78.61
20715	.3543	9.000	10.0	89	47	40	90.40	86.47	82.54	78.61
20725	.3583	9.100	10.0	89	47	40	90.40	86.47	82.54	78.61
20735	.3602	9.150	10.0	89	47	40	90.40	86.47	82.54	78.61
20745	.3622	9.200	10.0	89	47	40	90.40	86.47	82.54	78.61
20755	.3661	9.300	10.0	89	47	40	90.40	86.47	82.54	78.61
20762	.3701	9.400	10.0	89	47	40	90.40	86.47	82.54	78.61
20765	.3740	9.500	10.0	89	47	40	90.40	86.47	82.54	78.61
20775	.3760	9.550	10.0	89	47	40	90.40	86.47	82.54	78.61
20778	.3780	9.600	10.0	89	47	40	90.40	86.47	82.54	78.61
20782	.3819	9.700	10.0	89	47	40	90.40	86.47	82.54	78.61
20785	.3858	9.800	10.0	89	47	40	90.40	86.47	82.54	78.61
20795	.3898	9.900	10.0	89	47	40	90.40	86.47	82.54	78.61
20805	.3937	10.000	10.0	89	47	40	90.40	86.47	82.54	78.61
20812	.3976	10.100	12.0	102	55	45	117.61	112.50	107.38	102.27
20815	.4016	10.200	12.0	102	55	45	117.61	112.50	107.38	102.27
20825	.4055	10.300	12.0	102	55	45	117.61	112.50	107.38	102.27
20835	.4134	10.500	12.0	102	55	45	117.61	112.50	107.38	102.27
20842	.4173	10.600	12.0	102	55	45	117.61	112.50	107.38	102.27
20845	.4213	10.700	12.0	102	55	45	117.61	112.50	107.38	102.27
20855	.4252	10.800	12.0	102	55	45	117.61	112.50	107.38	102.27

Series 1580HD (continued)

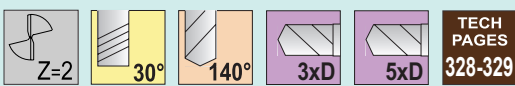
.4331" - .7874"
(11.000mm - 20.000mm)

HIGH PERFORMANCE
DRILLS

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								
20865	.4331	11.000	12.0	102	55	45	117.61	112.50	107.38	102.27
20875	.4370	11.100	12.0	102	55	45	117.61	112.50	107.38	102.27
20885	.4409	11.200	12.0	102	55	45	117.61	112.50	107.38	102.27
20892	.4488	11.400	12.0	102	55	45	117.61	112.50	107.38	102.27
20895	.4528	11.500	12.0	102	55	45	117.61	112.50	107.38	102.27
20905	.4606	11.700	12.0	102	55	45	117.61	112.50	107.38	102.27
20915	.4685	11.900	12.0	102	55	45	117.61	112.50	107.38	102.27
20925	.4724	12.000	12.0	102	55	45	117.61	112.50	107.38	102.27
20935	.4764	12.100	14.0	107	60	45	147.50	141.09	134.67	128.26
20941	.4803	12.200	14.0	107	60	45	147.50	141.09	134.67	128.26
20945	.4842	12.300	14.0	107	60	45	147.50	141.09	134.67	128.26
20955	.4921	12.500	14.0	107	60	45	147.50	141.09	134.67	128.26
20961	.4961	12.600	14.0	107	60	45	147.50	141.09	134.67	128.26
20965	.5000	12.700	14.0	107	60	45	147.50	141.09	134.67	128.26
20975	.5039	12.800	14.0	107	60	45	147.50	141.09	134.67	128.26
20978	.5051	12.830	14.0	107	60	45	147.50	141.09	134.67	128.26
20981	.5079	12.900	14.0	107	60	45	147.50	141.09	134.67	128.26
20982	.5098	12.950	14.0	107	60	45	147.50	141.09	134.67	128.26
20985	.5118	13.000	14.0	107	60	45	147.50	141.09	134.67	128.26
20998	.5236	13.300	14.0	107	60	45	147.50	141.09	134.67	128.26
21005	.5315	13.500	14.0	107	60	45	147.50	141.09	134.67	128.26
21015	.5394	13.700	14.0	107	60	45	147.50	141.09	134.67	128.26
21025	.5433	13.800	14.0	107	60	45	147.50	141.09	134.67	128.26
21035	.5512	14.000	14.0	107	60	45	147.50	141.09	134.67	128.26
21045	.5551	14.100	16.0	115	65	48	175.32	167.70	160.07	152.45
21053	.5591	14.200	16.0	115	65	48	175.32	167.70	160.07	152.45
21055	.5610	14.250	16.0	115	65	48	175.32	167.70	160.07	152.45
21065	.5630	14.300	16.0	115	65	48	175.32	167.70	160.07	152.45
21075	.5709	14.500	16.0	115	65	48	175.32	167.70	160.07	152.45
21085	.5787	14.700	16.0	115	65	48	175.32	167.70	160.07	152.45
21105	.5906	15.000	16.0	115	65	48	175.32	167.70	160.07	152.45
21115	.5945	15.100	16.0	115	65	48	175.32	167.70	160.07	152.45
21125	.6102	15.500	16.0	115	65	48	175.32	167.70	160.07	152.45
21135	.6181	15.700	16.0	115	65	48	175.32	167.70	160.07	152.45
21145	.6220	15.800	16.0	115	65	48	175.32	167.70	160.07	152.45
21155	.6299	16.000	16.0	115	65	48	175.32	167.70	160.07	152.45
21159	.6331	16.080	18.0	123	73	48	232.70	222.59	212.47	202.35
21175	.6496	16.500	18.0	123	73	48	232.70	222.59	212.47	202.35
21185	.6555	16.650	18.0	123	73	48	232.70	222.59	212.47	202.35
21195	.6693	17.000	18.0	123	73	48	232.70	222.59	212.47	202.35
21215	.6870	17.450	18.0	123	73	48	232.70	222.59	212.47	202.35
21225	.6890	17.500	18.0	123	73	48	232.70	222.59	212.47	202.35
21235	.7027	17.850	18.0	123	73	48	232.70	222.59	212.47	202.35
21245	.7087	18.000	18.0	123	73	48	232.70	222.59	212.47	202.35
21255	.7185	18.250	20.0	131	79	50	318.68	304.82	290.97	277.11
21265	.7283	18.500	20.0	131	79	50	318.68	304.82	290.97	277.11
21275	.7342	18.650	20.0	131	79	50	318.68	304.82	290.97	277.11
21295	.7500	19.050	20.0	131	79	50	318.68	304.82	290.97	277.11
21304	.7598	19.300	20.0	131	79	50	318.68	304.82	290.97	277.11
21315	.7677	19.500	20.0	131	79	50	318.68	304.82	290.97	277.11
21325	.7815	19.850	20.0	131	79	50	318.68	304.82	290.97	277.11
21335	.7874	20.000	20.0	131	79	50	318.68	304.82	290.97	277.11

Series 1580H, 1280H

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

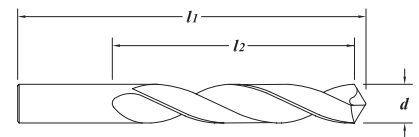


TOLERANCES		
<i>d</i>	+.0000" - .0005" (+.0000 - .0127mm)	
<i>l1</i>	≤ 1/8"	+ .125" - .062" (+3.175 - 1.588mm)
	> 1/8"	+ .125" - .125" (+3.175 - 3.175mm)
<i>l2</i>	≤ 1/8"	+ .125" - .062" (+3.175 - 1.588mm)
	> 1/8"	+ .125" - .125" (+3.175 - 3.175mm)

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

AlTiN-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



3xD (1580H) EDP#	5xD (1280H) 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						
20301		.1181	3.000	46	16	32.90	31.47	30.04	28.61
	21301	.1181	3.000	50	19	34.39	32.89	31.40	29.90
20306		.1200	#31 3.048	1-13/16"	5/8"	33.24	31.79	30.35	28.90
	21306	.1200	#31 3.048	2"	3/4"	34.66	33.15	31.65	30.14
20311		.1250	1/8" 3.175	1-15/16"	11/16"	33.53	32.08	30.62	29.16
	21311	.1250	1/8" 3.175	2"	3/4"	34.94	33.42	31.90	30.38
20316		.1285	#30 3.264	1-15/16"	11/16"	33.83	32.36	30.89	29.42
	21316	.1285	#30 3.264	2-1/4"	3/4"	35.25	33.72	32.18	30.65
20321		.1360	#29 3.454	2-1/16"	3/4"	34.16	32.67	31.19	29.70
	21321	.1360	#29 3.454	2-1/4"	7/8"	35.51	33.97	32.42	30.88
20326		.1378	3.500	52	19	34.49	32.99	31.49	29.99
	21326	.1378	3.500	57	22	35.80	34.24	32.69	31.13
20331		.1405	#28 3.569	2-1/16"	3/4"	34.81	33.30	31.78	30.27
	21331	.1405	#28 3.569	2-1/4"	7/8"	36.09	34.52	32.95	31.38
20336		.1406	9/64" 3.571	2-1/16"	3/4"	35.11	33.58	32.06	30.53
	21336	.1406	9/64" 3.571	2-1/4"	7/8"	36.40	34.82	33.23	31.65
20341		.1440	#27 3.658	2-1/16"	3/4"	35.42	33.88	32.34	30.80
	21341	.1440	#27 3.658	2-1/4"	7/8"	36.64	35.05	33.45	31.86
20346		.1470	#26 3.734	2-3/16"	13/16"	35.70	34.14	32.59	31.04
	21346	.1470	#26 3.734	2-1/4"	7/8"	36.94	35.33	33.73	32.12
20351		.1495	#25 3.797	2-3/16"	13/16"	36.08	34.51	32.94	31.37
	21351	.1495	#25 3.797	2-1/4"	15/16"	37.21	35.60	33.98	32.36
20356		.1520	#24 3.861	2-3/16"	13/16"	36.36	34.78	33.20	31.62
	21356	.1520	#24 3.861	2-1/4"	15/16"	37.48	35.85	34.22	32.59
20361		.1540	#23 3.912	2-3/16"	13/16"	36.69	35.09	33.50	31.90
	21361	.1540	#23 3.912	2-1/4"	15/16"	37.80	36.16	34.51	32.87
20366		.1562	5/32" 3.967	2-3/16"	13/16"	36.97	35.37	33.76	32.15
	21366	.1562	5/32" 3.967	2-1/2"	15/16"	38.07	36.41	34.76	33.10
20371		.1570	#22 3.988	2-3/16"	13/16"	37.32	35.70	34.07	32.45
	21371	.1570	#22 3.988	2-1/2"	15/16"	38.34	36.67	35.01	33.34
20376		.1575	4.000	56	21	37.62	35.98	34.35	32.71
	21376	.1575	4.000	65	24	38.63	36.95	35.27	33.59
20381		.1590	#21 4.039	2-3/16"	13/16"	37.94	36.29	34.64	32.99
	21381	.1590	#21 4.039	2-1/2"	15/16"	38.90	37.21	35.52	33.83
20386		.1610	#20 4.089	2-3/16"	13/16"	38.26	36.60	34.93	33.27
	21386	.1610	#20 4.089	2-1/2"	15/16"	39.22	37.51	35.81	34.10
20391		.1660	#19 4.216	2-9/32"	15/16"	38.59	36.92	35.24	33.56
	21391	.1660	#19 4.216	2-1/2"	1"	39.49	37.77	36.06	34.34
20396		.1695	#18 4.305	2-9/32"	15/16"	38.89	37.20	35.51	33.82
	21396	.1695	#18 4.305	2-1/2"	1"	39.76	38.03	36.30	34.57
20401		.1719	11/64" 4.366	2-9/32"	15/16"	39.22	37.51	35.81	34.10
	21401	.1719	11/64" 4.366	2-1/2"	1"	40.04	38.30	36.56	34.82

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"	39.54	37.82	36.10	34.38
	21406	.1730	#17	4.394	2-1/2"	1"	40.32	38.57	36.81	35.06
20411		.1770	#16	4.496	2-9/32"	15/16"	39.81	38.08	36.35	34.62
	21411	.1770	#16	4.496	2-1/2"	1"	40.63	38.86	37.10	35.33
20416		.1772		4.500	58	24	40.15	38.40	36.66	34.91
	21416	.1772		4.500	65	25	40.92	39.14	37.36	35.58
20421		.1800	#15	4.572	2-9/32"	15/16"	40.42	38.67	36.91	35.15
	21421	.1800	#15	4.572	2-3/4"	1"	41.17	39.38	37.59	35.80
20426		.1820	#14	4.623	2-9/32"	15/16"	40.79	39.02	37.24	35.47
	21426	.1820	#14	4.623	2-3/4"	1"	41.45	39.64	37.84	36.04
20431		.1850	#13	4.700	2-9/32"	15/16"	41.09	39.30	37.52	35.73
	21431	.1850	#13	4.700	2-3/4"	1-1/4"	41.76	39.94	38.13	36.31
20436		.1875	3/16"	4.763	2-13/32"	1"	41.42	39.62	37.82	36.02
	21436	.1875	3/16"	4.763	2-3/4"	1-1/4"	42.06	40.23	38.40	36.57
20441		.1890	#12	4.801	2-13/32"	1"	41.73	39.92	38.10	36.29
	21441	.1890	#12	4.801	2-3/4"	1-1/4"	42.33	40.49	38.65	36.81
20446		.1910	#11	4.851	2-13/32"	1"	42.11	40.28	38.45	36.62
	21446	.1910	#11	4.851	2-3/4"	1-1/4"	42.58	40.73	38.88	37.03
20451		.1935	#10	4.915	2-13/32"	1"	42.37	40.52	38.68	36.84
	21451	.1935	#10	4.915	2-3/4"	1-1/4"	42.88	41.02	39.15	37.29
20456		.1960	#9	4.978	2-13/32"	1"	42.67	40.81	38.96	37.10
	21456	.1960	#9	4.978	3"	1-5/16"	43.15	41.27	39.40	37.52
20461		.1969		5.000	61	25	42.90	41.03	39.17	37.30
	21461	.1969		5.000	75	33	43.45	41.56	39.67	37.78
20466		.1990	#8	5.055	2-13/32"	1"	43.30	41.42	39.53	37.65
	21466	.1990	#8	5.055	3"	1-5/16"	43.68	41.78	39.88	37.98
20471		.2010	#7	5.105	2-13/32"	1"	43.42	41.54	39.65	37.76
	21471	.2010	#7	5.105	3"	1-5/16"	43.87	41.97	40.06	38.15
20476		.2031	13/64"	5.159	2-13/32"	1"	43.71	41.81	39.91	38.01
	21476	.2031	13/64"	5.159	3"	1-5/16"	44.19	42.27	40.35	38.43
20481		.2040	#6	5.182	2-13/32"	1"	44.01	42.10	40.18	38.27
	21481	.2040	#6	5.182	3"	1-3/8"	44.52	42.58	40.65	38.71
20486		.2055	#5	5.220	2-13/32"	1"	44.33	42.41	40.48	38.55
	21486	.2055	#5	5.220	3"	1-3/8"	44.82	42.87	40.92	38.97
20491		.2090	#4	5.309	2-13/32"	1"	44.60	42.66	40.72	38.78
	21491	.2090	#4	5.309	3"	1-3/8"	45.11	43.15	41.19	39.23
20496		.2130	#3	5.410	2-5/8"	1-3/32"	44.90	42.94	40.99	39.04
	21496	.2130	#3	5.410	3"	1-3/8"	45.43	43.45	41.48	39.50
20501		.2165		5.500	67	28	45.18	43.22	41.25	39.29
	21501	.2165		5.500	75	35	45.70	43.71	41.73	39.74
20506		.2188	7/32"	5.558	2-5/8"	1-3/32"	45.55	43.57	41.59	39.61
	21506	.2188	7/32"	5.558	3"	1-3/8"	45.99	43.99	41.99	39.99
20511		.2210	#2	5.613	2-5/8"	1-3/32"	45.89	43.89	41.90	39.90
	21511	.2210	#2	5.613	3"	1-3/8"	46.98	44.94	42.89	40.85
20516		.2280	#1	5.791	2-5/8"	1-3/32"	46.24	44.23	42.22	40.21
	21516	.2280	#1	5.791	3"	1-3/8"	47.22	45.17	43.11	41.06
20521		.2340	A	5.944	2-5/8"	1-3/32"	46.55	44.53	42.50	40.48
	21521	.2340	A	5.944	3-1/4"	1-1/2"	47.92	45.84	43.75	41.67
20526		.2344	15/64"	5.954	2-5/8"	1-3/32"	46.91	44.87	42.83	40.79
	21526	.2344	15/64"	5.954	3-1/4"	1-1/2"	48.05	45.96	43.87	41.78
20531		.2362		6.000	67	28	47.23	45.18	43.12	41.07
	21531	.2362		6.000	80	38	48.20	46.10	44.01	41.91
20536		.2380	B	6.045	2-3/4"	1-7/32"	47.55	45.49	43.42	41.35
	21536	.2380	B	6.045	3-1/4"	1-5/8"	48.33	46.23	44.13	42.03

continued →

Series 1580H, 1280H (continued)

.2420" - .3438"
(6.147mm - 8.733mm)

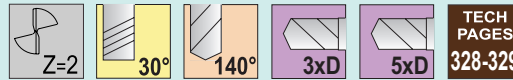
3xD (1580H) EDP#	5xD (1280H) EDP#	d^{\dagger}		l_1 Overall Length	l_2 Flute Length	1-11	12-24	25-49	50-100	
		Decimal	Diameter							Metric
20541		.2420	C	6.147	2-3/4"	1-7/32"	47.93	45.85	43.76	41.68
	21541	.2420	C	6.147	3-1/4"	1-5/8"	48.67	46.55	44.44	42.32
20546		.2460	D	6.248	2-3/4"	1-7/32"	48.20	46.10	44.01	41.91
	21546	.2460	D	6.248	3-1/4"	1-5/8"	48.98	46.85	44.72	42.59
20551		.2500	1/4" / E	6.350	2-3/4"	1-7/32"	48.62	46.51	44.39	42.28
	21551	.2500	1/4" / E	6.350	3-1/4"	1-5/8"	49.25	47.11	44.97	42.83
20556		.2559		6.500	70	31	49.39	47.25	45.10	42.95
	21556	.2559		6.500	80	41	50.13	47.95	45.77	43.59
20561		.2570	F	6.528	2-3/4"	1-7/32"	50.17	47.99	45.81	43.63
	21561	.2570	F	6.528	3-1/4"	1-11/16"	50.99	48.77	46.56	44.34
20566		.2610	G	6.629	2-3/4"	1-7/32"	50.93	48.72	46.50	44.29
	21566	.2610	G	6.629	3-1/2"	1-11/16"	51.87	49.61	47.36	45.10
20571		.2656	17/64"	6.746	2-15/16"	1-11/32"	51.70	49.46	47.21	44.96
	21571	.2656	17/64"	6.746	3-1/2"	1-11/16"	52.70	50.41	48.12	45.83
20576		.2660	H	6.756	2-15/16"	1-11/32"	52.46	50.18	47.90	45.62
	21576	.2660	H	6.756	3-1/2"	1-11/16"	53.60	51.27	48.94	46.61
20581		.2720	I	6.909	2-15/16"	1-11/32"	53.25	50.93	48.62	46.30
	21581	.2720	I	6.909	3-1/2"	1-11/16"	54.46	52.10	49.73	47.36
20586		.2756		7.000	75	34	54.03	51.68	49.33	46.98
	21586	.2756		7.000	88	43	55.30	52.90	50.49	48.09
20591		.2770	J	7.036	2-15/16"	1-11/32"	54.77	52.39	50.01	47.63
	21591	.2770	J	7.036	3-1/2"	1-11/16"	56.18	53.74	51.29	48.85
20596		.2810	K	7.137	2-15/16"	1-11/32"	55.56	53.14	50.73	48.31
	21596	.2810	K	7.137	3-1/2"	1-3/4"	57.07	54.59	52.11	49.63
20601		.2812	9/32"	7.142	2-15/16"	1-11/32"	56.33	53.88	51.43	48.98
	21601	.2812	9/32"	7.142	3-1/2"	1-3/4"	57.94	55.42	52.90	50.38
20606		.2900	L	7.366	2-15/16"	1-11/32"	57.10	54.62	52.13	49.65
	21606	.2900	L	7.366	3-1/2"	1-3/4"	58.73	56.18	53.62	51.07
20611		.2950	M	7.493	2-15/16"	1-11/32"	58.21	55.68	53.15	50.62
	21611	.2950	M	7.493	3-3/4"	1-3/4"	59.57	56.98	54.39	51.80
20616		.2953		7.500	75	34	58.21	55.68	53.15	50.62
	21616	.2953		7.500	95	44	59.57	56.98	54.39	51.80
20621		.2969	19/64"	7.541	3-3/32"	1-15/32"	58.72	56.17	53.61	51.06
	21621	.2969	19/64"	7.541	3-3/4"	1-7/8"	60.17	57.55	54.94	52.32
20626		.3020	N	7.671	3-3/32"	1-15/32"	61.35	58.69	56.02	53.35
	21626	.3020	N	7.671	3-3/4"	1-7/8"	62.55	59.83	57.11	54.39
20631		.3125	5/16"	7.938	3-3/32"	1-15/32"	61.57	58.89	56.22	53.54
	21631	.3125	5/16"	7.938	3-3/4"	1-7/8"	62.74	60.02	57.29	54.56
20636		.3150		8.000	79	37	64.98	62.15	59.33	56.50
	21636	.3150		8.000	95	48	66.14	63.26	60.39	57.51
20641		.3160	O	8.026	3-3/32"	1-15/32"	64.98	62.15	59.33	56.50
	21641	.3160	O	8.026	3-3/4"	1-7/8"	66.14	63.26	60.39	57.51
20646		.3230	P	8.204	3-3/32"	1-15/32"	65.45	62.60	59.76	56.91
	21646	.3230	P	8.204	3-3/4"	2-3/32"	66.38	63.49	60.61	57.72
20651		.3281	21/64"	8.334	3-3/32"	1-15/32"	66.65	63.76	60.86	57.96
	21651	.3281	21/64"	8.334	4"	2-3/32"	67.00	64.09	61.17	58.26
20656		.3320	Q	8.433	3-3/32"	1-15/32"	67.85	64.90	61.95	59.00
	21656	.3320	Q	8.433	4"	2-3/32"	68.33	65.36	62.39	59.42
20661		.3346		8.500	79	37	68.14	65.18	62.21	59.25
	21661	.3346		8.500	100	53	68.83	65.84	62.84	59.85
20666		.3390	R	8.611	3-5/16"	1-9/16"	69.98	66.94	63.89	60.85
	21666	.3390	R	8.611	4"	2-3/32"	70.73	67.65	64.58	61.50
20671		.3438	11/32"	8.733	3-5/16"	1-9/16"	71.51	68.40	65.29	62.18
	21671	.3438	11/32"	8.733	4"	2-3/16"	73.20	70.02	66.83	63.65

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 1580H, 1280H (continued)

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



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

AlTiN-based Coating

High performance - high penetration solid submicron grain carbide drill



HIGH PERFORMANCE DRILLS

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"	73.88	70.66	67.45	64.24
	21676	.3480	S	8.839	4"	2-3/16"	76.06	72.75	69.45	66.14
20681		.3543		9.000	84	40	75.75	72.46	69.16	65.87
	21681	.3543		9.000	100	56	76.51	73.18	69.86	66.53
20686		.3580	T	9.093	3-5/16"	1-9/16"	78.72	75.30	71.87	68.45
	21686	.3580	T	9.093	4-1/4"	2-9/32"	79.53	76.08	72.62	69.16
20691		.3594	23/64"	9.129	3-5/16"	1-9/16"	79.21	75.77	72.32	68.88
	21691	.3594	23/64"	9.129	4-1/4"	2-9/32"	80.02	76.54	73.06	69.58
20696		.3680	U	9.347	3-5/16"	1-9/16"	80.86	77.34	73.83	70.31
	21696	.3680	U	9.347	4-1/4"	2-9/32"	84.57	80.89	77.22	73.54
20701		.3740		9.500	84	40	81.54	77.99	74.45	70.90
	21701	.3740		9.500	105	58	85.40	81.69	77.97	74.26
20706		.3750	3/8"	9.525	3-1/2"	1-11/16"	82.02	78.45	74.89	71.32
	21706	.3750	3/8"	9.525	4-1/4"	2-3/8"	86.25	82.50	78.75	75.00
20711		.3770	V	9.576	3-1/2"	1-11/16"	85.17	81.47	77.76	74.06
	21711	.3770	V	9.576	4-1/4"	2-3/8"	88.37	84.52	80.68	76.84
20716		.3860	W	9.804	3-1/2"	1-11/16"	86.66	82.90	79.13	75.36
	21716	.3860	W	9.804	4-1/2"	2-3/8"	89.93	86.02	82.11	78.20
20721		.3906	25/64"	9.921	3-1/2"	1-11/16"	87.75	83.93	80.12	76.30
	21721	.3906	25/64"	9.921	4-1/2"	2-3/8"	91.01	87.05	83.10	79.14
20726		.3937		10.000	89	43	90.40	86.47	82.54	78.61
	21726	.3937		10.000	115	60	93.76	89.68	85.61	81.53
20731		.3970	X	10.084	3-1/2"	1-11/16"	91.63	87.65	83.66	79.68
	21731	.3970	X	10.084	4-1/2"	2-1/2"	94.90	90.77	86.65	82.52
20736		.4040	Y	10.262	3-1/2"	1-11/16"	92.23	88.22	84.21	80.20
	21736	.4040	Y	10.262	4-1/2"	2-9/16"	97.76	93.51	89.26	85.01
20741		.4062	13/32"	10.317	3-1/2"	1-11/16"	95.08	90.95	86.81	82.68
	21741	.4062	13/32"	10.317	4-1/2"	2-9/16"	98.61	94.33	90.04	85.75
20746		.4130	Z	10.490	3-1/2"	1-11/16"	95.97	91.80	87.62	83.45
	21746	.4130	Z	10.490	4-1/2"	2-5/8"	99.51	95.18	90.86	86.53
20751		.4134		10.500	89	43	95.97	91.80	87.62	83.45
	21751	.4134		10.500	115	67	99.51	95.18	90.86	86.53
20756		.4219	27/64"	10.716	3-3/4"	1-13/16"	96.88	92.66	88.45	84.24
	21756	.4219	27/64"	10.716	4-1/2"	2-11/16"	100.41	96.04	91.68	87.31
20761		.4331		11.000	95	46	103.98	99.46	94.94	90.42
	21761	.4331		11.000	115	68	107.73	103.05	98.36	93.68
20766		.4375	7/16"	11.113	3-3/4"	1-13/16"	103.98	99.46	94.94	90.42
	21766	.4375	7/16"	11.113	4-3/4"	2-13/16"	108.17	103.47	98.76	94.06
20771		.4528		11.500	95	46	111.61	106.76	101.90	97.05
	21771	.4528		11.500	120	71	115.59	110.56	105.54	100.51
20776		.4531	29/64"	11.509	3-3/4"	1-13/16"	111.61	106.76	101.90	97.05
	21776	.4531	29/64"	11.509	4-3/4"	2-7/8"	115.59	110.56	105.54	100.51

continued →

Series 1580H, 1280H (continued)

.4688" - .6299"
(11.908mm - 16.000mm)

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							
20781		.4688	15/32"	11.908	4"	1-15/16"	117.27	112.17	107.07	101.97
	21781	.4688	15/32"	11.908	4-3/4"	2-7/8"	121.39	116.12	110.84	105.56
20786		.4724		12.000	102	49	117.61	112.50	107.38	102.27
	21786	.4724		12.000	120	73	121.76	116.47	111.17	105.88
20791		.4844	31/64"	12.304	4"	1-15/16"	118.43	113.28	108.13	102.98
	21791	.4844	31/64"	12.304	5-5/16"	3"	123.12	117.77	112.41	107.06
20796		.4921		12.500	102	49	119.60	114.40	109.20	104.00
	21796	.4921		12.500	135	76	124.59	119.17	113.76	108.34
20801		.5000	1/2"	12.700	4"	1-15/16"	120.37	115.14	109.90	104.67
	21801	.5000	1/2"	12.700	5-3/8"	3-1/16"	124.84	119.42	113.99	108.56
20806		.5118		13.000	107	53	131.93	126.19	120.46	114.72
	21806	.5118		13.000	135	78	135.76	129.86	123.95	118.05
20811		.5156	33/64"	13.096	4-7/32"	2-3/32"	135.06	129.18	123.31	117.44
	21811	.5156	33/64"	13.096	5-3/8"	3-1/8"	138.93	132.89	126.85	120.81
20816		.5312	17/32"	13.492	4-7/32"	2-3/32"	138.16	132.15	126.15	120.14
	21816	.5312	17/32"	13.492	5-11/16"	3-5/16"	142.20	136.02	129.83	123.65
20821		.5315		13.500	110	56	141.29	135.15	129.00	122.86
	21821	.5315		13.500	145	84	145.34	139.02	132.70	126.38
20826		.5469	35/64"	13.891	4-5/16"	2-7/32"	144.38	138.11	131.83	125.55
	21826	.5469	35/64"	13.891	5-13/16"	3-3/8"	148.50	142.04	135.59	129.13
20831		.5512		14.000	110	56	147.50	141.09	134.67	128.26
	21831	.5512		14.000	145	86	151.71	145.11	138.52	131.92
20836		.5625	9/16"	14.288	4-9/16"	2-15/32"	158.78	151.88	144.97	138.07
	21836	.5625	9/16"	14.288	5-15/16"	3-1/2"	163.04	155.95	148.86	141.77
20841		.5709		14.500	116	63	161.76	154.73	147.69	140.66
	21841	.5709		14.500	150	89	166.04	158.82	151.60	144.38
20846		.5781	37/64"	14.684	4-15/16"	2-9/16"	164.66	157.50	150.34	143.18
	21846	.5781	37/64"	14.684	6"	3-1/2"	169.02	161.67	154.32	146.97
20851		.5906		15.000	125	65	167.69	160.40	153.11	145.82
	21851	.5906		15.000	150	90	172.19	164.70	157.22	149.73
20856		.5938	19/32"	15.083	4-15/16"	2-9/16"	168.60	161.27	153.94	146.61
	21856	.5938	19/32"	15.083	6"	3-9/16"	173.08	165.55	158.03	150.50
20861		.6094	39/64"	15.479	5-1/16"	2-13/16"	169.46	162.10	154.73	147.36
	21861	.6094	39/64"	15.479	6-3/16"	3-11/16"	187.57	179.41	171.26	163.10
20866		.6102		15.500	129	71	170.34	162.93	155.53	148.12
	21866	.6102		15.500	160	94	188.43	180.24	172.04	163.85
20871		.6250	5/8"	15.875	5-1/4"	3-1/8"	171.20	163.76	156.31	148.87
	21871	.6250	5/8"	15.875	6-5/16"	3-3/4"	189.31	181.08	172.85	164.62
20876		.6299		16.000	133	79	175.32	167.70	160.07	152.45
	21876	.6299		16.000	160	95	193.56	185.14	176.73	168.31

TOLERANCES		
d_1 *	3mm - 6mm	+0.16mm +0.04mm (+0.0063" +0.0015")
	> 6mm - 10mm	+0.21mm +0.06mm (+0.0082" +0.0023")
	> 10mm - 18mm	+0.25mm +0.07mm (+0.0098" +0.0027")
	> 18mm - 20mm	+0.29mm +0.08mm (+0.0114" +0.0031")
d_2	h6	
l_1	+3.175mm -3.175mm (+.125" -.125")	
l_2	+3.175mm -3.175mm (+.125" -.125")	
l_4	+1.980mm -.000mm (+.078" -.000")	

**NEW
ITEMS**

Series 1580KD, 1280KD, 1880KD



**TECH
PAGES
328-329**

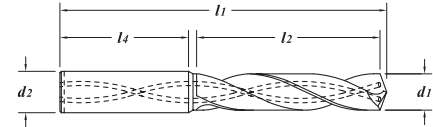
.1181" - .1470"
(3.000mm - 3.734mm)

**HIGH PERFORMANCE
DRILLS**

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

AlTiN-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#	7xD (1880KD) 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									
	27995			.1181	3.000	6.0	62	20	36	60.57	57.94	55.30	52.67	
		25065		.1181	3.000	6.0	66	28	36	71.50	68.39	65.28	62.17	
NEW			26942	.1181	3.000	6.0	70	30	36	85.82	82.09	78.36	74.63	
	28005			.1220	3.100	6.0	62	20	36	60.57	57.94	55.30	52.67	
		25075		.1220	3.100	6.0	66	28	36	71.50	68.39	65.28	62.17	
	28015			.1248	3.170	6.0	62	20	36	60.57	57.94	55.30	52.67	
		25085		.1248	3.170	6.0	66	28	36	71.50	68.39	65.28	62.17	
NEW			26946	.1248	3.170	6.0	70	30	36	85.82	82.09	78.36	74.63	
NEW	28018			.1250	1/8"	3.175	6.0	62	20	36	60.57	57.94	55.30	52.67
NEW		25088		.1250	1/8"	3.175	6.0	66	28	36	71.50	68.39	65.28	62.17
NEW			26948	.1250	1/8"	3.175	6.0	70	30	36	85.82	82.09	78.36	74.63
	28025			.1260	3.200	6.0	62	20	36	60.57	57.94	55.30	52.67	
		25095		.1260	3.200	6.0	66	28	36	71.50	68.39	65.28	62.17	
NEW			26950	.1260	3.200	6.0	70	30	36	85.82	82.09	78.36	74.63	
	28035			.1280	3.250	6.0	62	20	36	60.57	57.94	55.30	52.67	
		25105		.1280	3.250	6.0	66	28	36	71.50	68.39	65.28	62.17	
NEW			26952	.1280	3.250	6.0	70	30	36	85.82	82.09	78.36	74.63	
NEW	28038			.1285	#30	3.264	6.0	62	20	36	60.57	57.94	55.30	52.67
NEW		25108		.1285	#30	3.264	6.0	66	28	36	71.50	68.39	65.28	62.17
NEW			26954	.1285	#30	3.264	6.0	70	30	36	85.82	82.09	78.36	74.63
	28045			.1299	3.300	6.0	62	20	36	60.57	57.94	55.30	52.67	
		25115		.1299	3.300	6.0	66	28	36	71.50	68.39	65.28	62.17	
NEW			26956	.1299	3.300	6.0	70	30	36	85.82	82.09	78.36	74.63	
	28055			.1339	3.400	6.0	62	20	36	60.57	57.94	55.30	52.67	
		25125		.1339	3.400	6.0	66	28	36	71.50	68.39	65.28	62.17	
NEW	28058			.1360	#29	3.454	6.0	62	20	36	60.57	57.94	55.30	52.67
NEW		25128		.1360	#29	3.454	6.0	66	28	36	71.50	68.39	65.28	62.17
NEW			26960	.1360	#29	3.454	6.0	70	30	36	85.82	82.09	78.36	74.63
	28065			.1378	3.500	6.0	62	20	36	60.57	57.94	55.30	52.67	
		25135		.1378	3.500	6.0	66	28	36	71.50	68.39	65.28	62.17	
NEW			26962	.1378	3.500	6.0	75	37	36	85.82	82.09	78.36	74.63	
	28075			.1417	3.600	6.0	62	20	36	60.57	57.94	55.30	52.67	
		25145		.1417	3.600	6.0	66	28	36	71.50	68.39	65.28	62.17	
	28085			.1457	3.700	6.0	62	20	36	60.57	57.94	55.30	52.67	
		25155		.1457	3.700	6.0	66	28	36	71.50	68.39	65.28	62.17	
NEW	28088			.1470	#26	3.734	6.0	62	20	36	60.57	57.94	55.30	52.67
NEW		25158		.1470	#26	3.734	6.0	66	28	36	71.50	68.39	65.28	62.17
NEW			26968	.1470	#26	3.734	6.0	75	37	36	85.82	82.09	78.36	74.63

continued →

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

.1476" - .1811"
(3.750mm - 4.600mm)

	3xD (1580KD) EDP#	5xD (1280KD) EDP#	7xD (1880KD) 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								
	28095			.1476	3.750	6.0	62	20	36	60.57	57.94	55.30	52.67
		25165		.1476	3.750	6.0	66	28	36	71.50	68.39	65.28	62.17
NEW			26972	.1476	3.750	6.0	75	37	36	85.82	82.09	78.36	74.63
NEW	28098			.1495	#25 3.797	6.0	62	20	36	60.57	57.94	55.30	52.67
NEW		25172		.1495	#25 3.797	6.0	66	28	36	71.50	68.39	65.28	62.17
NEW			26978	.1495	#25 3.797	6.0	75	37	36	85.82	82.09	78.36	74.63
	28105			.1496	3.800	6.0	66	24	36	60.57	57.94	55.30	52.67
		25175		.1496	3.800	6.0	74	36	36	71.50	68.39	65.28	62.17
	28115			.1535	3.900	6.0	66	24	36	60.57	57.94	55.30	52.67
		25185		.1535	3.900	6.0	74	36	36	71.50	68.39	65.28	62.17
NEW			26982	.1535	3.900	6.0	75	37	36	85.82	82.09	78.36	74.63
NEW	28118			.1562	5/32" 3.967	6.0	66	24	36	60.57	57.94	55.30	52.67
NEW		25192		.1562	5/32" 3.967	6.0	74	36	36	71.50	68.39	65.28	62.17
NEW			26984	.1562	5/32" 3.967	6.0	75	37	36	85.82	82.09	78.36	74.63
	28125			.1563	3.970	6.0	66	24	36	60.57	57.94	55.30	52.67
		25195		.1563	3.970	6.0	74	36	36	71.50	68.39	65.28	62.17
	28135			.1575	4.000	6.0	66	24	36	60.57	57.94	55.30	52.67
		25205		.1575	4.000	6.0	74	36	36	71.50	68.39	65.28	62.17
NEW			26986	.1575	4.000	6.0	75	37	36	85.82	82.09	78.36	74.63
NEW	28138			.1590	#21 4.038	6.0	66	24	36	60.57	57.94	55.30	52.67
NEW		25208		.1590	#21 4.038	6.0	74	36	36	71.50	68.39	65.28	62.17
NEW			26988	.1590	#21 4.038	6.0	75	37	36	85.82	82.09	78.36	74.63
NEW	28140			.1610	#20 4.089	6.0	66	24	36	60.57	57.94	55.30	52.67
NEW		25212		.1610	#20 4.089	6.0	74	36	36	71.50	68.39	65.28	62.17
NEW			26990	.1610	#20 4.089	6.0	75	37	36	85.82	82.09	78.36	74.63
	28145			.1614	4.100	6.0	66	24	36	60.57	57.94	55.30	52.67
		25215		.1614	4.100	6.0	74	36	36	71.50	68.39	65.28	62.17
NEW			26992	.1614	4.100	6.0	75	37	36	85.82	82.09	78.36	74.63
	28155			.1654	4.200	6.0	66	24	36	60.57	57.94	55.30	52.67
		25225		.1654	4.200	6.0	74	36	36	71.50	68.39	65.28	62.17
NEW			26994	.1654	4.200	6.0	75	37	36	85.82	82.09	78.36	74.63
NEW	28158			.1660	#19 4.216	6.0	66	24	36	60.57	57.94	55.30	52.67
NEW		25228		.1660	#19 4.216	6.0	74	36	36	71.50	68.39	65.28	62.17
NEW			26996	.1660	#19 4.216	6.0	85	45	36	85.82	82.09	78.36	74.63
	28165			.1673	4.250	6.0	66	24	36	60.57	57.94	55.30	52.67
		25235		.1673	4.250	6.0	74	36	36	71.50	68.39	65.28	62.17
NEW			26998	.1673	4.250	6.0	85	45	36	85.82	82.09	78.36	74.63
	28175			.1693	4.300	6.0	66	24	36	60.57	57.94	55.30	52.67
		25245		.1693	4.300	6.0	74	36	36	71.50	68.39	65.28	62.17
NEW	28178			.1719	11/64" 4.366	6.0	66	24	36	60.57	57.94	55.30	52.67
NEW		25248		.1719	11/64" 4.366	6.0	74	36	36	71.50	68.39	65.28	62.17
NEW			27002	.1719	11/64" 4.366	6.0	85	45	36	85.82	82.09	78.36	74.63
	28185			.1732	4.400	6.0	66	24	36	60.57	57.94	55.30	52.67
		25255		.1732	4.400	6.0	74	36	36	71.50	68.39	65.28	62.17
NEW			27004	.1732	4.400	6.0	85	45	36	85.82	82.09	78.36	74.63
NEW	28188			.1770	#16 4.496	6.0	66	24	36	60.57	57.94	55.30	52.67
NEW		25262		.1770	#16 4.496	6.0	74	36	36	71.50	68.39	65.28	62.17
NEW			27006	.1770	#16 4.496	6.0	85	45	36	85.82	82.09	78.36	74.63
	28195			.1772	4.500	6.0	66	24	36	60.57	57.94	55.30	52.67
		25265		.1772	4.500	6.0	74	36	36	71.50	68.39	65.28	62.17
NEW			27008	.1772	4.500	6.0	85	45	36	85.82	82.09	78.36	74.63
	28205			.1811	4.600	6.0	66	24	36	60.57	57.94	55.30	52.67
		25275		.1811	4.600	6.0	74	36	36	71.50	68.39	65.28	62.17
NEW			27011	.1811	4.600	6.0	85	45	36	85.82	82.09	78.36	74.63
NEW	28208			.1820	#14 4.622	6.0	66	24	36	60.57	57.94	55.30	52.67
NEW		25280		.1820	#14 4.622	6.0	74	36	36	71.50	68.39	65.28	62.17
NEW			27012	.1820	#14 4.622	6.0	90	50	36	85.82	82.09	78.36	74.63

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

.1820" - .2283"
(4.622mm - 5.800mm)

HIGH PERFORMANCE
DRILLS

	3xD (1580KD) EDP#	5xD (1280KD) EDP#	7xD (1880KD) EDP#	<i>d</i> ₁ Diameter		<i>d</i> ₂ Shank Diameter	<i>l</i> ₁ Overall Length	<i>l</i> ₂ Flute Length	<i>l</i> ₄ Shank Length	1-11	12-24	25-49	50-100	
				Decimal	Metric									
		25285		.1831	4.650	6.0	74	36	36	71.50	68.39	65.28	62.17	
NEW			27014	.1831	4.650	6.0	90	50	36	85.82	82.09	78.36	74.63	
	28225			.1850	4.700	6.0	66	24	36	60.57	57.94	55.30	52.67	
		25295		.1850	4.700	6.0	74	36	36	71.50	68.39	65.28	62.17	
	28235			.1870	4.750	6.0	66	24	36	60.57	57.94	55.30	52.67	
		25305		.1870	4.750	6.0	74	36	36	71.50	68.39	65.28	62.17	
NEW			27016	.1870	4.750	6.0	90	50	36	85.82	82.09	78.36	74.63	
NEW	28238			.1875	3/16"	4.762	6.0	66	28	36	60.57	57.94	55.30	52.67
NEW		25310		.1875	3/16"	4.762	6.0	74	36	68.75	65.76	62.77	59.78	
NEW			27018	.1875	3/16"	4.762	6.0	90	50	85.82	82.09	78.36	74.63	
	28245			.1890	#12	4.800	6.0	66	28	36	60.57	57.94	55.30	52.67
		25315		.1890	#12	4.800	6.0	82	44	36	71.50	68.39	65.28	62.17
NEW			27021	.1890	#12	4.800	6.0	90	50	85.82	82.09	78.36	74.63	
	28255			.1929	4.900	6.0	66	28	36	60.57	57.94	55.30	52.67	
		25325		.1929	4.900	6.0	82	44	36	71.50	68.39	65.28	62.17	
NEW			27022	.1929	4.900	6.0	90	50	36	85.82	82.09	78.36	74.63	
NEW	28258			.1960	#9	4.978	6.0	66	28	36	60.57	57.94	55.30	52.67
NEW		25330		.1960	#9	4.978	6.0	82	44	36	71.50	68.39	65.28	62.17
NEW			27024	.1960	#9	4.978	6.0	90	50	85.82	82.09	78.36	74.63	
	28265			.1969	5.000	6.0	66	28	36	60.57	57.94	55.30	52.67	
		25335		.1969	5.000	6.0	82	44	36	71.50	68.39	65.28	62.17	
NEW			27026	.1969	5.000	6.0	90	50	36	85.82	82.09	78.36	74.63	
	28275			.2008	5.100	6.0	66	28	36	60.57	57.94	55.30	52.67	
		25345		.2008	5.100	6.0	82	44	36	71.50	68.39	65.28	62.17	
NEW	28278			.2010	#7	5.105	6.0	66	28	36	60.57	57.94	55.30	52.67
NEW		25348		.2010	#7	5.105	6.0	82	44	36	71.50	68.39	65.28	62.17
NEW			27031	.2010	#7	5.105	6.0	97	57	85.82	82.09	78.36	74.63	
	28285			.2027	5.150	6.0	66	28	36	60.57	57.94	55.30	52.67	
		25355		.2027	5.150	6.0	82	44	36	71.50	68.39	65.28	62.17	
	28295			.2047	5.200	6.0	66	28	36	60.57	57.94	55.30	52.67	
		25365		.2047	5.200	6.0	82	44	36	71.50	68.39	65.28	62.17	
	28305			.2087	5.300	6.0	66	28	36	60.57	57.94	55.30	52.67	
		25375		.2087	5.300	6.0	82	44	36	71.50	68.39	65.28	62.17	
NEW	28308			.2130	#3	5.410	6.0	66	28	36	60.57	57.94	55.30	52.67
NEW		25380		.2130	#3	5.410	6.0	82	44	36	71.50	68.39	65.28	62.17
NEW			27036	.2130	#3	5.410	6.0	97	57	85.82	82.09	78.36	74.63	
	28315			.2165	5.500	6.0	66	28	36	60.57	57.94	55.30	52.67	
		25385		.2165	5.500	6.0	82	44	36	71.50	68.39	65.28	62.17	
NEW			27038	.2165	5.500	6.0	97	57	36	85.82	82.09	78.36	74.63	
	28325			.2185	5.550	6.0	66	28	36	60.57	57.94	55.30	52.67	
		25395		.2185	5.550	6.0	82	44	36	71.50	68.39	65.28	62.17	
NEW	28328			.2188	7/32"	5.557	6.0	66	28	36	60.57	57.94	55.30	52.67
NEW		25398		.2188	7/32"	5.557	6.0	82	44	36	71.50	68.39	65.28	62.17
NEW			27041	.2188	7/32"	5.557	6.0	97	57	85.82	82.09	78.36	74.63	
	28335			.2205	5.600	6.0	66	28	36	60.57	57.94	55.30	52.67	
		25397		.2205	5.600	6.0	82	44	36	71.50	68.39	65.28	62.17	
NEW			27042	.2205	5.600	6.0	97	57	36	85.82	82.09	78.36	74.63	
	28345			.2244	5.700	6.0	66	28	36	60.57	57.94	55.30	52.67	
		25400		.2244	5.700	6.0	82	44	36	71.50	68.39	65.28	62.17	
NEW			27044	.2244	5.700	6.0	97	57	36	85.82	82.09	78.36	74.63	
NEW	28348			.2280	#1	5.791	6.0	66	28	36	60.57	57.94	55.30	52.67
NEW		25403		.2280	#1	5.791	6.0	82	44	36	71.50	68.39	65.28	62.17
NEW			27046	.2280	#1	5.791	6.0	97	57	85.82	82.09	78.36	74.63	
	28355			.2283	5.800	6.0	66	28	36	60.57	57.94	55.30	52.67	
		25405		.2283	5.800	6.0	82	44	36	71.50	68.39	65.28	62.17	
			27048	.2283	5.800	6.0	97	57	36	85.82	82.09	78.36	74.63	

continued →

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

.2323" - .2812"
(5.900mm - 7.142mm)

	3xD (1580KD) EDP#	5xD (1280KD) EDP#	7xD (1880KD) 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								
	28365			.2323	5.900	6.0	66	28	36	60.57	57.94	55.30	52.67
		25415		.2323	5.900	6.0	82	44	36	71.50	68.39	65.28	62.17
NEW			27051	.2323	5.900	6.0	97	57	36	85.82	82.09	78.36	74.63
	28375			.2342	5.950	6.0	66	28	36	60.57	57.94	55.30	52.67
		25425		.2342	5.950	6.0	82	44	36	71.50	68.39	65.28	62.17
NEW			27052	.2342	5.950	6.0	97	57	36	85.82	82.09	78.36	74.63
	28385			.2362	6.000	6.0	66	28	36	60.57	57.94	55.30	52.67
		25435		.2362	6.000	6.0	82	44	36	71.50	68.39	65.28	62.17
NEW			27054	.2362	6.000	6.0	97	57	36	85.82	82.09	78.36	74.63
	28395			.2402	6.100	8.0	79	34	36	84.39	80.72	77.05	73.38
		25437		.2402	6.100	8.0	91	53	36	100.53	96.16	91.79	87.42
	28405			.2441	6.200	8.0	79	34	36	84.39	80.72	77.05	73.38
		25440		.2441	6.200	8.0	91	53	36	100.53	96.16	91.79	87.42
	28415			.2480	6.300	8.0	79	34	36	84.39	80.72	77.05	73.38
		25443		.2480	6.300	8.0	91	53	36	100.53	96.16	91.79	87.42
	28425			.2500	1/4"	6.350	8.0	34	36	84.39	80.72	77.05	73.38
		25445		.2500	1/4"	6.350	91	53	36	100.53	96.16	91.79	87.42
NEW			27056	.2500	1/4"	6.350	106	66	36	121.37	116.09	110.82	105.54
	28435			.2520	6.400	8.0	79	34	36	84.39	80.72	77.05	73.38
		25450		.2520	6.400	8.0	91	53	36	100.53	96.16	91.79	87.42
NEW			27058	.2520	6.400	8.0	106	66	36	121.37	116.09	110.82	105.54
	28445			.2559	6.500	8.0	79	34	36	84.39	80.72	77.05	73.38
		25455		.2559	6.500	8.0	91	53	36	100.53	96.16	91.79	87.42
NEW			27061	.2559	6.500	8.0	106	66	36	121.37	116.09	110.82	105.54
	28446			.2571	6.530	8.0	79	34	36	84.39	80.72	77.05	73.38
		25457		.2571	6.530	8.0	91	53	36	100.53	96.16	91.79	87.42
NEW			27062	.2571	6.530	8.0	106	66	36	121.37	116.09	110.82	105.54
	28455			.2598	6.600	8.0	79	34	36	84.39	80.72	77.05	73.38
		25460		.2598	6.600	8.0	91	53	36	100.53	96.16	91.79	87.42
NEW			27064	.2598	6.600	8.0	106	66	36	121.37	116.09	110.82	105.54
		25463		.2638	6.700	8.0	91	53	36	100.53	96.16	91.79	87.42
NEW			27066	.2638	6.700	8.0	106	66	36	121.37	116.09	110.82	105.54
NEW	28463			.2656	17/64"	6.746	8.0	34	36	84.39	80.72	77.05	73.38
NEW		25464		.2656	17/64"	6.746	91	53	36	100.53	96.16	91.79	87.42
NEW			27068	.2656	17/64"	6.746	106	66	36	121.37	116.09	110.82	105.54
	28465			.2657	6.750	8.0	79	34	36	84.39	80.72	77.05	73.38
		25465		.2657	6.750	8.0	91	53	36	100.53	96.16	91.79	87.42
	28475			.2677	6.800	8.0	79	34	36	84.39	80.72	77.05	73.38
		25475		.2677	6.800	8.0	91	53	36	100.53	96.16	91.79	87.42
NEW			27071	.2677	6.800	8.0	106	66	36	121.37	116.09	110.82	105.54
	28485			.2717	6.900	8.0	79	34	36	84.39	80.72	77.05	73.38
		25485		.2717	6.900	8.0	91	53	36	100.53	96.16	91.79	87.42
NEW			27072	.2717	6.900	8.0	116	76	36	121.37	116.09	110.82	105.54
	28495			.2756	7.000	8.0	79	34	36	84.39	80.72	77.05	73.38
		25495		.2756	7.000	8.0	91	53	36	100.53	96.16	91.79	87.42
NEW			27074	.2756	7.000	8.0	116	76	36	121.37	116.09	110.82	105.54
NEW	28498			.2770	J	7.035	8.0	41	36	84.39	80.72	77.05	73.38
NEW		25498		.2770	J	7.035	91	53	36	100.53	96.16	91.79	87.42
NEW			27076	.2770	J	7.035	116	76	36	121.37	116.09	110.82	105.54
	28505			.2795	7.100	8.0	79	41	36	84.39	80.72	77.05	73.38
		25505		.2795	7.100	8.0	91	53	36	100.53	96.16	91.79	87.42
NEW	28508			.2812	9/32"	7.142	8.0	41	36	84.39	80.72	77.05	73.38
NEW		25512		.2812	9/32"	7.142	91	53	36	100.53	96.16	91.79	87.42
NEW			27079	.2812	9/32"	7.142	116	76	36	121.37	116.09	110.82	105.54

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

.2815" - .3386"
(7.150mm - 8.600mm)

HIGH PERFORMANCE
DRILLS

	3xD (1580KD) EDP#	5xD (1280KD) EDP#	7xD (1880KD) 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								
	28515			.2815	7.150	8.0	79	41	36	84.39	80.72	77.05	73.38
		25515		.2815	7.150	8.0	91	53	36	100.53	96.16	91.79	87.42
NEW			27082	.2815	7.150	8.0	116	76	36	121.37	116.09	110.82	105.54
	28525			.2835	7.200	8.0	79	41	36	84.39	80.72	77.05	73.38
		25525		.2835	7.200	8.0	91	53	36	100.53	96.16	91.79	87.42
	28535			.2874	7.300	8.0	79	41	36	84.39	80.72	77.05	73.38
		25530		.2874	7.300	8.0	91	53	36	100.53	96.16	91.79	87.42
	28545			.2913	7.400	8.0	79	41	36	84.39	80.72	77.05	73.38
		25535		.2913	7.400	8.0	91	53	36	100.53	96.16	91.79	87.42
	28555			.2953	7.500	8.0	79	41	36	84.39	80.72	77.05	73.38
		25545		.2953	7.500	8.0	91	53	36	100.53	96.16	91.79	87.42
NEW			27086	.2953	7.500	8.0	116	76	36	121.37	116.09	110.82	105.54
	28565			.2972	7.550	8.0	79	41	36	84.39	80.72	77.05	73.38
		25555		.2972	7.550	8.0	91	53	36	100.53	96.16	91.79	87.42
NEW			27088	.2972	7.550	8.0	116	76	36	121.37	116.09	110.82	105.54
	28575			.2992	7.600	8.0	79	41	36	84.39	80.72	77.05	73.38
		25565		.2992	7.600	8.0	91	53	36	100.53	96.16	91.79	87.42
NEW	28578			.3020	N 7.670	8.0	79	41	36	84.39	80.72	77.05	73.38
NEW		25570		.3020	N 7.670	8.0	91	53	36	100.53	96.16	91.79	87.42
NEW			27092	.3020	N 7.670	8.0	116	76	36	121.37	116.09	110.82	105.54
	28585			.3031	7.700	8.0	79	41	36	84.39	80.72	77.05	73.38
		25575		.3031	7.700	8.0	91	53	36	100.53	96.16	91.79	87.42
	28595			.3071	7.800	8.0	79	41	36	84.39	80.72	77.05	73.38
		25585		.3071	7.800	8.0	91	53	36	100.53	96.16	91.79	87.42
NEW			27096	.3071	7.800	8.0	116	76	36	121.37	116.09	110.82	105.54
NEW	28602			.3125	5/16" 7.937	8.0	79	41	36	84.39	80.72	77.05	73.38
NEW		25593		.3125	5/16" 7.937	8.0	91	53	36	100.53	96.16	91.79	87.42
NEW			27101	.3125	5/16" 7.937	8.0	116	76	36	121.37	116.09	110.82	105.54
	28605			.3130	7.950	8.0	79	41	36	84.39	80.72	77.05	73.38
		25595		.3130	7.950	8.0	91	53	36	100.53	96.16	91.79	87.42
NEW			27102	.3130	7.950	8.0	116	76	36	121.37	116.09	110.82	105.54
	28615			.3150	8.000	8.0	79	41	36	84.39	80.72	77.05	73.38
		25605		.3150	8.000	8.0	91	53	36	100.53	96.16	91.79	87.42
NEW			27104	.3150	8.000	8.0	116	76	36	121.37	116.09	110.82	105.54
	28625			.3189	8.100	10.0	89	47	40	113.71	108.77	103.82	98.88
		25610		.3189	8.100	10.0	103	61	40	129.52	123.89	118.26	112.63
	28635			.3228	8.200	10.0	89	47	40	113.71	108.77	103.82	98.88
		25615		.3228	8.200	10.0	103	61	40	129.52	123.89	118.26	112.63
NEW	28638			.3230	P 8.204	10.0	89	47	40	113.71	108.77	103.82	98.88
NEW		25618		.3230	P 8.204	10.0	103	61	40	129.52	123.89	118.26	112.63
NEW			27108	.3230	P 8.204	10.0	131	87	40	165.51	158.31	151.12	143.92
	28645			.3268	8.300	10.0	89	47	40	113.71	108.77	103.82	98.88
		25625		.3268	8.300	10.0	103	61	40	129.52	123.89	118.26	112.63
NEW	28648			.3281	21/64" 8.333	10.0	89	47	40	113.71	108.77	103.82	98.88
NEW		25628		.3281	21/64" 8.333	10.0	103	61	40	129.52	123.89	118.26	112.63
NEW			27112	.3281	21/64" 8.333	10.0	131	87	40	165.51	158.31	151.12	143.92
	28655			.3287	8.350	10.0	89	47	40	113.71	108.77	103.82	98.88
		25635		.3287	8.350	10.0	103	61	40	129.52	123.89	118.26	112.63
NEW			27114	.3287	8.350	10.0	131	87	40	165.51	158.31	151.12	143.92
	28665			.3307	8.400	10.0	89	47	40	113.71	108.77	103.82	98.88
		25640		.3307	8.400	10.0	103	61	40	129.52	123.89	118.26	112.63
	28675			.3346	8.500	10.0	89	47	40	113.71	108.77	103.82	98.88
		25645		.3346	8.500	10.0	103	61	40	129.52	123.89	118.26	112.63
NEW			27118	.3346	8.500	10.0	131	87	40	165.51	158.31	151.12	143.92
	28685			.3386	8.600	10.0	89	47	40	113.71	108.77	103.82	98.88
		25655		.3386	8.600	10.0	103	61	40	129.52	123.89	118.26	112.63
NEW			27121	.3386	8.600	10.0	131	87	40	165.51	158.31	151.12	143.92

continued →

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

.3390" - .3906"
(8.610mm - 9.920mm)

	3xD (1580KD) EDP#	5xD (1280KD) EDP#	7xD (1880KD) 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								
NEW	28688			.3390	R 8.610	10.0	89	47	40	113.71	108.77	103.82	98.88
NEW		25658		.3390	R 8.610	10.0	103	61	40	129.52	123.89	118.26	112.63
NEW			27122	.3390	R 8.610	10.0	131	87	40	165.51	158.31	151.12	143.92
	28695			.3425	8.700	10.0	89	47	40	113.71	108.77	103.82	98.88
		25665		.3425	8.700	10.0	103	61	40	129.52	123.89	118.26	112.63
NEW			27124	.3425	8.700	10.0	131	87	40	165.51	158.31	151.12	143.92
NEW	28698			.3438	11/32" 8.732	10.0	89	47	40	113.71	108.77	103.82	98.88
NEW		25670		.3438	11/32" 8.732	10.0	103	61	40	129.52	123.89	118.26	112.63
NEW			27126	.3438	11/32" 8.732	10.0	131	87	40	165.51	158.31	151.12	143.92
	28725			.3445	8.750	10.0	89	47	40	113.71	108.77	103.82	98.88
		25675		.3445	8.750	10.0	103	61	40	129.52	123.89	118.26	112.63
NEW			27128	.3445	8.750	10.0	131	87	40	165.51	158.31	151.12	143.92
	28735			.3465	8.800	10.0	89	47	40	113.71	108.77	103.82	98.88
		25685		.3465	8.800	10.0	103	61	40	129.52	123.89	118.26	112.63
NEW			27130	.3465	8.800	10.0	131	87	40	165.51	158.31	151.12	143.92
	28745			.3504	8.900	10.0	89	47	40	113.71	108.77	103.82	98.88
		25695		.3504	8.900	10.0	103	61	40	129.52	123.89	118.26	112.63
	28755			.3543	9.000	10.0	89	47	40	113.71	108.77	103.82	98.88
		25705		.3543	9.000	10.0	103	61	40	129.52	123.89	118.26	112.63
NEW			27134	.3543	9.000	10.0	131	87	40	165.51	158.31	151.12	143.92
	28765			.3583	9.100	10.0	89	47	40	113.71	108.77	103.82	98.88
		25715		.3583	9.100	10.0	103	61	40	129.52	123.89	118.26	112.63
NEW	28768			.3594	23/64" 9.128	10.0	89	47	40	113.71	108.77	103.82	98.88
NEW		25720		.3594	23/64" 9.128	10.0	103	61	40	129.52	123.89	118.26	112.63
NEW			27138	.3594	23/64" 9.128	10.0	139	95	40	165.51	158.31	151.12	143.92
		25725		.3602	9.150	10.0	103	61	40	129.52	123.89	118.26	112.63
NEW			27140	.3602	9.150	10.0	139	95	40	165.51	158.31	151.12	143.92
	28815			.3622	9.200	10.0	89	47	40	113.71	108.77	103.82	98.88
		25735		.3622	9.200	10.0	103	61	40	129.52	123.89	118.26	112.63
	28825			.3661	9.300	10.0	89	47	40	113.71	108.77	103.82	98.88
		25745		.3661	9.300	10.0	103	61	40	129.52	123.89	118.26	112.63
	28845			.3701	9.400	10.0	89	47	40	113.71	108.77	103.82	98.88
		25750		.3701	9.400	10.0	103	61	40	129.52	123.89	118.26	112.63
	28855			.3740	9.500	10.0	89	47	40	113.71	108.77	103.82	98.88
		25755		.3740	9.500	10.0	103	61	40	129.52	123.89	118.26	112.63
NEW			27146	.3740	9.500	10.0	139	95	40	165.51	158.31	151.12	143.92
NEW	28858			.3750	3/8" 9.525	10.0	89	47	40	113.71	108.77	103.82	98.88
NEW		25760		.3750	3/8" 9.525	10.0	103	61	40	129.52	123.89	118.26	112.63
NEW			27148	.3750	3/8" 9.525	10.0	139	95	40	165.51	158.31	151.12	143.92
	28875			.3760	9.550	10.0	89	47	40	113.71	108.77	103.82	98.88
		25765		.3760	9.550	10.0	103	61	40	129.52	123.89	118.26	112.63
NEW			27150	.3760	9.550	10.0	139	95	40	165.51	158.31	151.12	143.92
	28878			.3780	9.600	10.0	89	47	40	113.71	108.77	103.82	98.88
		25767		.3780	9.600	10.0	103	61	40	129.52	123.89	118.26	112.63
NEW			27152	.3780	9.600	10.0	139	95	40	165.51	158.31	151.12	143.92
	28882			.3819	9.700	10.0	89	47	40	113.71	108.77	103.82	98.88
		25770		.3819	9.700	10.0	103	61	40	129.52	123.89	118.26	112.63
	28885			.3858	9.800	10.0	89	47	40	113.71	108.77	103.82	98.88
		25775		.3858	9.800	10.0	103	61	40	129.52	123.89	118.26	112.63
	28895			.3898	9.900	10.0	89	47	40	113.71	108.77	103.82	98.88
		25785		.3898	9.900	10.0	103	61	40	129.52	123.89	118.26	112.63
NEW			27160	.3898	9.900	10.0	139	95	40	165.51	158.31	151.12	143.92
NEW	28898			.3906	25/64" 9.920	10.0	89	47	40	113.71	108.77	103.82	98.88
NEW		25787		.3906	25/64" 9.920	10.0	103	61	40	129.52	123.89	118.26	112.63
NEW			27162	.3906	25/64" 9.920	10.0	139	95	40	165.51	158.31	151.12	143.92

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

.3937" - .4688"
(10.000mm - 11.907mm)

HIGH PERFORMANCE
DRILLS

	3xD (1580KD) EDP#	5xD (1280KD) EDP#	7xD (1880KD) 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								
	28905			.3937	10.000	10.0	89	47	40	113.71	108.77	103.82	98.88
		25795		.3937	10.000	10.0	103	61	40	129.52	123.89	118.26	112.63
NEW			27164	.3937	10.000	10.0	139	95	40	165.51	158.31	151.12	143.92
	28925			.3976	10.100	12.0	102	55	45	147.23	140.83	134.43	128.03
		25800		.3976	10.100	12.0	118	71	45	167.05	159.79	152.52	145.26
	28935			.4016	10.200	12.0	102	55	45	147.23	140.83	134.43	128.03
		25805		.4016	10.200	12.0	118	71	45	167.05	159.79	152.52	145.26
	28945			.4055	10.300	12.0	102	55	45	147.23	140.83	134.43	128.03
		25815		.4055	10.300	12.0	118	71	45	167.05	159.79	152.52	145.26
NEW			27170	.4055	10.300	12.0	155	106	45	215.11	205.76	196.40	187.05
NEW	28948			.4062	13/32"	10.317	12.0	102	55	147.23	140.83	134.43	128.03
NEW		25817		.4062	13/32"	10.317	12.0	118	71	167.05	159.79	152.52	145.26
NEW			27172	.4062	13/32"	10.317	12.0	155	106	215.11	205.76	196.40	187.05
NEW	28953			.4130	Z	10.490	12.0	102	55	147.23	140.83	134.43	128.03
NEW		25823		.4130	Z	10.490	12.0	118	71	167.05	159.79	152.52	145.26
NEW			27178	.4130	Z	10.490	12.0	155	106	215.11	205.76	196.40	187.05
	28955			.4134	10.500	12.0	102	55	45	147.23	140.83	134.43	128.03
		25825		.4134	10.500	12.0	118	71	45	167.05	159.79	152.52	145.26
NEW			27180	.4134	10.500	12.0	155	106	45	215.11	205.76	196.40	187.05
	28965			.4173	10.600	12.0	102	55	45	147.23	140.83	134.43	128.03
		25830		.4173	10.600	12.0	118	71	45	167.05	159.79	152.52	145.26
NEW			27182	.4173	10.600	12.0	155	106	45	215.11	205.76	196.40	187.05
	28975			.4213	10.700	12.0	102	55	45	147.23	140.83	134.43	128.03
		25835		.4213	10.700	12.0	118	71	45	167.05	159.79	152.52	145.26
NEW			27184	.4213	10.700	12.0	155	106	45	215.11	205.76	196.40	187.05
NEW	28978			.4219	27/64"	10.716	12.0	102	55	147.23	140.83	134.43	128.03
NEW		25838		.4219	27/64"	10.716	12.0	118	71	167.05	159.79	152.52	145.26
NEW			27186	.4219	27/64"	10.716	12.0	155	106	215.11	205.76	196.40	187.05
	28985			.4252	10.800	12.0	102	55	45	147.23	140.83	134.43	128.03
		25845		.4252	10.800	12.0	118	71	45	167.05	159.79	152.52	145.26
	28995			.4331	11.000	12.0	102	55	45	147.23	140.83	134.43	128.03
		25855		.4331	11.000	12.0	118	71	45	167.05	159.79	152.52	145.26
NEW			27190	.4331	11.000	12.0	163	114	45	215.11	205.76	196.40	187.05
	29005			.4370	11.100	12.0	102	55	45	147.23	140.83	134.43	128.03
		25865		.4370	11.100	12.0	118	71	45	167.05	159.79	152.52	145.26
NEW	29008			.4375	7/16"	11.112	12.0	102	55	147.23	140.83	134.43	128.03
NEW		25868		.4375	7/16"	11.112	12.0	118	71	167.05	159.79	152.52	145.26
NEW			27194	.4375	7/16"	11.112	12.0	163	114	215.11	205.76	196.40	187.05
	29015			.4409	11.200	12.0	102	55	45	147.23	140.83	134.43	128.03
		25875		.4409	11.200	12.0	118	71	45	167.05	159.79	152.52	145.26
	29025			.4488	11.400	12.0	102	55	45	147.23	140.83	134.43	128.03
		25880		.4488	11.400	12.0	118	71	45	167.05	159.79	152.52	145.26
	29035			.4528	11.500	12.0	102	55	45	147.23	140.83	134.43	128.03
		25885		.4528	11.500	12.0	118	71	45	167.05	159.79	152.52	145.26
NEW	29038			.4531	29/64"	11.508	12.0	102	55	147.23	140.83	134.43	128.03
NEW		25888		.4531	29/64"	11.508	12.0	118	71	167.05	159.79	152.52	145.26
NEW			27200	.4531	29/64"	11.508	12.0	163	114	215.11	205.76	196.40	187.05
	29045			.4606	11.700	12.0	102	55	45	147.23	140.83	134.43	128.03
		25895		.4606	11.700	12.0	118	71	45	167.05	159.79	152.52	145.26
	29055			.4685	11.900	12.0	102	55	45	147.23	140.83	134.43	128.03
NEW	29058			.4688	15/32"	11.907	12.0	102	55	147.23	140.83	134.43	128.03
NEW		25910		.4688	15/32"	11.907	12.0	118	71	167.05	159.79	152.52	145.26
NEW			27208	.4688	15/32"	11.907	12.0	163	114	215.11	205.76	196.40	187.05

continued →

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

.4724" - .5610"
(12.000mm - 14.250mm)

	3xD (1580KD) EDP#	5xD (1280KD) EDP#	7xD (1880KD) 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								
	29065			.4724	12.000	12.0	102	55	45	147.23	140.83	134.43	128.03
		25915		.4724	12.000	12.0	118	71	45	167.05	159.79	152.52	145.26
NEW			27210	.4724	12.000	12.0	163	114	45	215.11	205.76	196.40	187.05
	29075			.4764	12.100	14.0	107	60	45	205.67	196.72	187.78	178.84
		25925		.4764	12.100	14.0	124	77	45	246.47	235.75	225.04	214.32
	29085			.4803	12.200	14.0	107	60	45	205.67	196.72	187.78	178.84
		25930		.4803	12.200	14.0	124	77	45	246.47	235.75	225.04	214.32
	29095			.4842	12.300	14.0	107	60	45	205.67	196.72	187.78	178.84
		25935		.4842	12.300	14.0	124	77	45	246.47	235.75	225.04	214.32
NEW	29098			.4844	31/64"	12.303	14.0	107	60	205.67	196.72	187.78	178.84
NEW		25937		.4844	31/64"	12.303	14.0	124	77	246.47	235.75	225.04	214.32
NEW			27214	.4844	31/64"	12.303	14.0	182	133	287.20	274.71	262.23	249.74
	29115			.4921	12.500	14.0	107	60	45	205.67	196.72	187.78	178.84
		25945		.4921	12.500	14.0	124	77	45	246.47	235.75	225.04	214.32
NEW			27218	.4921	12.500	14.0	182	133	45	287.20	274.71	262.23	249.74
	29125			.4961	12.600	14.0	107	60	45	205.67	196.72	187.78	178.84
		25950		.4961	12.600	14.0	124	77	45	246.47	235.75	225.04	214.32
	29135			.5000	1/2"	12.700	14.0	107	60	205.67	196.72	187.78	178.84
		25955		.5000	1/2"	12.700	14.0	124	77	246.47	235.75	225.04	214.32
NEW			27220	.5000	1/2"	12.700	14.0	182	133	287.20	274.71	262.23	249.74
	29145			.5039	12.800	14.0	107	60	45	205.67	196.72	187.78	178.84
		25960		.5039	12.800	14.0	124	77	45	246.47	235.75	225.04	214.32
	29148			.5051	12.830	14.0	107	60	45	205.67	196.72	187.78	178.84
		25961		.5051	12.830	14.0	124	77	45	246.47	235.75	225.04	214.32
NEW			27224	.5051	12.830	14.0	182	133	45	287.20	274.71	262.23	249.74
	29155			.5079	12.900	14.0	107	60	45	205.67	196.72	187.78	178.84
NEW			27226	.5079	12.900	14.0	182	133	45	287.20	274.71	262.23	249.74
	29161			.5098	12.950	14.0	107	60	45	197.75	189.16	180.56	171.96
NEW			27228	.5098	12.950	14.0	182	133	45	287.20	274.71	262.23	249.74
	29165			.5118	13.000	14.0	107	60	45	205.67	196.72	187.78	178.84
		25965		.5118	13.000	14.0	124	77	45	246.47	235.75	225.04	214.32
NEW			27230	.5118	13.000	14.0	182	133	45	287.20	274.71	262.23	249.74
	29175			.5157	13.100	14.0	107	60	45	205.67	196.72	187.78	178.84
		25975		.5157	13.100	14.0	124	77	45	246.47	235.75	225.04	214.32
	29181			.5236	13.300	14.0	107	60	45	205.67	196.72	187.78	178.84
NEW	29184			.5312	17/32"	13.492	14.0	107	60	205.67	196.72	187.78	178.84
NEW		25983		.5312	17/32"	13.492	14.0	124	77	246.47	235.75	225.04	214.32
NEW			27238	.5312	17/32"	13.492	14.0	182	133	287.20	274.71	262.23	249.74
	29185			.5315	13.500	14.0	107	60	45	205.67	196.72	187.78	178.84
		25985		.5315	13.500	14.0	124	77	45	246.47	235.75	225.04	214.32
NEW			27240	.5315	13.500	14.0	182	133	45	287.20	274.71	262.23	249.74
	29195			.5394	13.700	14.0	107	60	45	205.67	196.72	187.78	178.84
		25995		.5394	13.700	14.0	124	77	45	246.47	235.75	225.04	214.32
	29205			.5433	13.800	14.0	107	60	45	205.67	196.72	187.78	178.84
		26005		.5433	13.800	14.0	124	77	45	246.47	235.75	225.04	214.32
	29215			.5512	14.000	14.0	107	60	45	205.67	196.72	187.78	178.84
		26015		.5512	14.000	14.0	124	77	45	246.47	235.75	225.04	214.32
NEW			27250	.5512	14.000	14.0	182	133	45	287.20	274.71	262.23	249.74
	29225			.5551	14.100	16.0	115	65	48	251.39	240.46	229.53	218.60
		26025		.5551	14.100	16.0	133	83	48	327.73	313.48	299.23	284.98
	29235			.5591	14.200	16.0	115	65	48	251.39	240.46	229.53	218.60
		26027		.5591	14.200	16.0	133	83	48	327.73	313.48	299.23	284.98
	29245			.5610	14.250	16.0	115	65	48	251.39	240.46	229.53	218.60

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

.5625" - .7283"
(14.287mm - 18.500mm)

HIGH PERFORMANCE
DRILLS

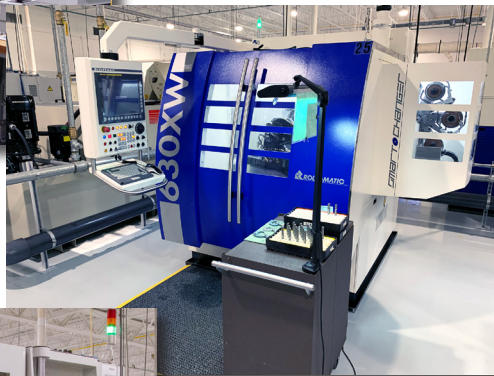
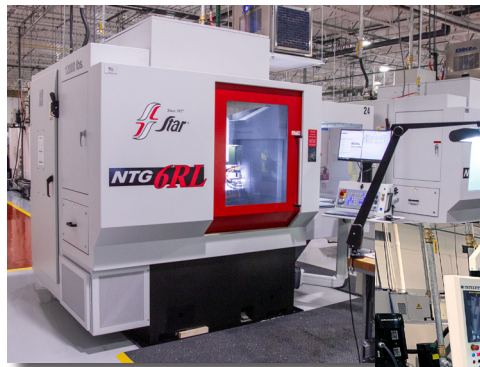
	3xD (1580KD) EDP#	5xD (1280KD) EDP#	7xD (1880KD) EDP#	<i>d1</i> Diameter		<i>d2</i> Shank Diameter	<i>l1</i> Overall Length	<i>l2</i> Flute Length	<i>l4</i> Shank Length	1-11	12-24	25-49	50-100	
				Decimal	Metric									
NEW	29250			.5625	9/16"	14.287	16.0	115	65	48	251.39	240.46	229.53	218.60
NEW		26042		.5625	9/16"	14.287	16.0	133	83	48	327.73	313.48	299.23	284.98
NEW			27254	.5625	9/16"	14.287	16.0	204	152	48	379.91	363.40	346.88	330.36
	29255			.5630		14.300	16.0	115	65	48	251.39	240.46	229.53	218.60
		26045		.5630		14.300	16.0	133	83	48	327.73	313.48	299.23	284.98
	29265			.5709		14.500	16.0	115	65	48	251.39	240.46	229.53	218.60
		26055		.5709		14.500	16.0	133	83	48	327.73	313.48	299.23	284.98
NEW			27258	.5709		14.500	16.0	204	152	48	379.91	363.40	346.88	330.36
	29275			.5787		14.700	16.0	115	65	48	251.39	240.46	229.53	218.60
		26065		.5787		14.700	16.0	133	83	48	327.73	313.48	299.23	284.98
	29285			.5827		14.800	16.0	115	65	48	251.39	240.46	229.53	218.60
		26067		.5827		14.800	16.0	133	83	48	327.73	313.48	299.23	284.98
	29305			.5906		15.000	16.0	115	65	48	251.39	240.46	229.53	218.60
		26075		.5906		15.000	16.0	133	83	48	327.73	313.48	299.23	284.98
NEW			27264	.5906		15.000	16.0	204	152	48	379.91	363.40	346.88	330.36
NEW	29308			.5938	19/32"	15.082	16.0	115	65	48	251.39	240.46	229.53	218.60
NEW		26083		.5938	19/32"	15.082	16.0	133	83	48	327.73	313.48	299.23	284.98
NEW			27266	.5938	19/32"	15.082	16.0	204	152	48	379.91	363.40	346.88	330.36
	29315			.5945		15.100	16.0	115	65	48	251.39	240.46	229.53	218.60
		26085		.5945		15.100	16.0	133	83	48	327.73	313.48	299.23	284.98
NEW			27268	.5945		15.100	16.0	204	152	48	379.91	363.40	346.88	330.36
	29325			.6102		15.500	16.0	115	65	48	251.39	240.46	229.53	218.60
		26095		.6102		15.500	16.0	133	83	48	327.73	313.48	299.23	284.98
		26105		.6181		15.700	16.0	133	83	48	327.73	313.48	299.23	284.98
	29345			.6220		15.800	16.0	115	65	48	251.39	240.46	229.53	218.60
		26107		.6220		15.800	16.0	133	83	48	327.73	313.48	299.23	284.98
NEW			27276	.6220		15.800	16.0	204	152	48	379.91	363.40	346.88	330.36
NEW	29348			.6250	5/8"	15.875	16.0	115	65	48	251.39	240.46	229.53	218.60
NEW		26108		.6250	5/8"	15.875	16.0	133	83	48	327.73	313.48	299.23	284.98
NEW			27278	.6250	5/8"	15.875	16.0	204	152	48	379.91	363.40	346.88	330.36
		26115		.6299		16.000	16.0	133	83	48	327.73	313.48	299.23	284.98
NEW			27282	.6299		16.000	16.0	204	152	48	379.91	363.40	346.88	330.36
	29363			.6331		16.080	18.0	123	73	48	317.85	304.03	290.21	276.39
		26118		.6331		16.080	18.0	143	93	48	389.62	372.68	355.74	338.80
	29365			.6339		16.100	18.0	123	73	48	317.85	304.03	290.21	276.39
		26119		.6339		16.100	18.0	143	93	48	389.62	372.68	355.74	338.80
		26123		.6378		16.200	18.0	143	93	48	389.62	372.68	355.74	338.80
	29375			.6398		16.250	18.0	123	73	48	317.85	304.03	290.21	276.39
		26125		.6398		16.250	18.0	143	93	48	389.62	372.68	355.74	338.80
	29385			.6496		16.500	18.0	123	73	48	317.85	304.03	290.21	276.39
		26135		.6496		16.500	18.0	143	93	48	389.62	372.68	355.74	338.80
	29395			.6555		16.650	18.0	123	73	48	317.85	304.03	290.21	276.39
		26145		.6555		16.650	18.0	143	93	48	389.62	372.68	355.74	338.80
	29405			.6693		17.000	18.0	123	73	48	317.85	304.03	290.21	276.39
		26155		.6693		17.000	18.0	143	93	48	389.62	372.68	355.74	338.80
	29415			.6713		17.050	18.0	123	73	48	317.85	304.03	290.21	276.39
		26165		.6713		17.050	18.0	143	93	48	389.62	372.68	355.74	338.80
	29425			.6870		17.450	18.0	123	73	48	317.85	304.03	290.21	276.39
		26175		.6870		17.450	18.0	143	93	48	389.62	372.68	355.74	338.80
	29435			.6890		17.500	18.0	123	73	48	317.85	304.03	290.21	276.39
		26185		.6890		17.500	18.0	143	93	48	389.62	372.68	355.74	338.80
	29445			.7027		17.850	18.0	123	73	48	317.85	304.03	290.21	276.39
		26195		.7027		17.850	18.0	143	93	48	389.62	372.68	355.74	338.80
	29455			.7087		18.000	18.0	123	73	48	317.85	304.03	290.21	276.39
		26205		.7087		18.000	18.0	143	93	48	389.62	372.68	355.74	338.80
		26215		.7185		18.250	20.0	153	101	50	472.93	452.36	431.80	411.24
		26225		.7283		18.500	20.0	153	101	50	472.93	452.36	431.80	411.24

continued →

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

.7342" - .7874"
(18.650mm - 20.000mm)

3xD (1580KD) EDP#	5xD (1280KD) EDP#	7xD (1880KD) 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								
	26235		.7342	18.650	20.0	153	101	50	472.93	452.36	431.80	411.24
	26245		.7480	19.000	20.0	153	101	50	472.93	452.36	431.80	411.24
29505			.7500	3/4"	19.050	20.0	131	79	419.91	401.65	383.40	365.14
	26255		.7500	3/4"	19.050	20.0	153	101	472.93	452.36	431.80	411.24
29545			.7579	19.250	20.0	131	79	50	419.91	401.65	383.40	365.14
29546			.7590	19.280	20.0	131	79	50	419.91	401.65	383.40	365.14
	26260		.7590	19.280	20.0	153	101	50	472.93	452.36	431.80	411.24
29551			.7598	19.300	20.0	131	79	50	419.91	401.65	383.40	365.14
	26261		.7598	19.300	20.0	153	101	50	472.93	452.36	431.80	411.24
29565			.7677	19.500	20.0	131	79	50	419.91	401.65	383.40	365.14
	26281		.7795	19.800	20.0	153	101	50	472.93	452.36	431.80	411.24
29595			.7815	19.850	20.0	131	79	50	419.91	401.65	383.40	365.14
29605			.7874	20.000	20.0	131	79	50	419.91	401.65	383.40	365.14



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)



TECH PAGES
328-329

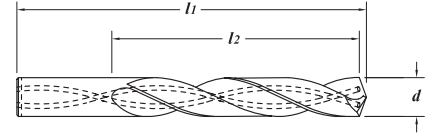
Series 1580KH, 1280KH, 1880KH

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

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

AlTiN-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



3xD (1580KH) EDP#	5xD (1280KH) EDP#	7xD (1880KH) EDP#	d †		l1 Overall Length	l2 Flute Length	1-11	12-24	25-49	50-100
			Decimal	Diameter Metric						
22010			.1181	3.000	46	16	42.18	40.35	38.51	36.68
	25366		.1181	3.000	50	19	46.66	44.63	42.60	40.57
22015		26366	.1181	3.000	65	28	52.06	49.80	47.53	45.27
	25371		.1200	#31 3.048	1-13/16"	5/8"	42.63	40.78	38.92	37.07
		26371	.1200	#31 3.048	2"	3/4"	47.02	44.98	42.93	40.89
22020			.1200	#31 3.048	2-1/2"	1-1/8"	52.50	50.22	47.93	45.65
	25376		.1250	1/8" 3.175	1-15/16"	11/16"	42.99	41.12	39.25	37.38
		26376	.1250	1/8" 3.175	2"	3/4"	47.41	45.35	43.29	41.23
22025			.1250	1/8" 3.175	2-1/2"	1-1/8"	52.91	50.61	48.31	46.01
	25381		.1285	#30 3.264	1-15/16"	11/16"	43.38	41.49	39.61	37.72
		26381	.1285	#30 3.264	2-1/4"	3/4"	47.83	45.75	43.67	41.59
22030			.1285	#30 3.264	2-1/2"	1-1/8"	53.39	51.07	48.75	46.43
	25386		.1360	#29 3.454	2-1/16"	3/4"	43.78	41.88	39.97	38.07
		26386	.1360	#29 3.454	2-1/4"	7/8"	48.19	46.09	44.00	41.90
22035			.1360	#29 3.454	3"	1-1/4"	53.77	51.44	49.10	46.76
	25391		.1378	3.500	52	19	44.23	42.31	40.38	38.46
		26391	.1378	3.500	57	22	48.55	46.44	44.33	42.22
22040			.1378	3.500	75	32	54.20	51.84	49.49	47.13
	25396		.1405	#28 3.569	2-1/16"	3/4"	44.63	42.69	40.75	38.81
		26396	.1405	#28 3.569	2-1/4"	7/8"	48.96	46.83	44.70	42.57
22045			.1405	#28 3.569	3"	1-1/4"	54.64	52.26	49.89	47.51
	25401		.1406	9/64" 3.571	2-1/16"	3/4"	45.02	43.07	41.11	39.15
		26401	.1406	9/64" 3.571	2-1/4"	7/8"	49.38	47.23	45.09	42.94
22050			.1406	9/64" 3.571	3"	1-1/4"	55.10	52.70	50.31	47.91
	25406		.1440	#27 3.658	2-1/16"	3/4"	45.43	43.45	41.48	39.50
		26406	.1440	#27 3.658	2-1/4"	7/8"	49.70	47.54	45.38	43.22
22055			.1440	#27 3.658	3"	1-3/8"	55.48	53.06	50.65	48.24
	25411		.1470	#26 3.734	2-3/16"	13/16"	45.77	43.78	41.79	39.80
		26411	.1470	#26 3.734	2-1/4"	7/8"	50.13	47.95	45.77	43.59
22060			.1470	#26 3.734	3"	1-3/8"	55.94	53.50	51.07	48.64
	25416		.1495	#25 3.797	2-3/16"	13/16"	46.24	44.23	42.22	40.21
		26416	.1495	#25 3.797	2-1/4"	15/16"	50.51	48.31	46.12	43.92
22065			.1495	#25 3.797	3"	1-3/8"	56.37	53.92	51.47	49.02
	25421		.1520	#24 3.861	2-3/16"	13/16"	46.62	44.59	42.57	40.54
		26421	.1520	#24 3.861	2-1/4"	15/16"	50.86	48.65	46.44	44.23
22070			.1520	#24 3.861	3"	1-1/2"	56.76	54.30	51.83	49.36
	25426		.1540	#23 3.912	2-3/16"	13/16"	47.02	44.98	42.93	40.89
		26426	.1540	#23 3.912	2-1/4"	15/16"	51.29	49.06	46.83	44.60
			.1540	#23 3.912	3"	1-1/2"	57.24	54.75	52.26	49.77

continued →

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

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

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							
22075			.1562	5/32"	3.967	2-3/16"	13/16"	47.40	45.34	43.28	41.22
	25431		.1562	5/32"	3.967	2-1/2"	15/16"	51.66	49.41	47.17	44.92
		26431	.1562	5/32"	3.967	3"	1-1/2"	57.65	55.14	52.64	50.13
22080			.1570	#22	3.988	2-3/16"	13/16"	47.83	45.75	43.67	41.59
	25436		.1570	#22	3.988	2-1/2"	15/16"	52.01	49.75	47.49	45.23
		26436	.1570	#22	3.988	3"	1-1/2"	58.05	55.53	53.00	50.48
22085			.1575		4.000	56	21	48.21	46.11	44.02	41.92
	25441		.1575		4.000	65	24	52.43	50.15	47.87	45.59
		26441	.1575		4.000	75	38	58.50	55.96	53.41	50.87
22090			.1590	#21	4.039	2-3/16"	13/16"	48.66	46.54	44.43	42.31
	25446		.1590	#21	4.039	2-1/2"	15/16"	52.79	50.49	48.20	45.90
		26446	.1590	#21	4.039	3"	1-1/2"	58.88	56.32	53.76	51.20
22095			.1610	#20	4.089	2-3/16"	13/16"	49.05	46.92	44.78	42.65
	25451		.1610	#20	4.089	2-1/2"	15/16"	53.19	50.88	48.56	46.25
		26451	.1610	#20	4.089	3"	1-1/2"	59.34	56.76	54.18	51.60
22100			.1660	#19	4.216	2-9/32"	15/16"	49.47	47.32	45.17	43.02
	25456		.1660	#19	4.216	2-1/2"	1"	53.59	51.26	48.93	46.60
		26456	.1660	#19	4.216	3"	1-1/2"	59.80	57.20	54.60	52.00
22105			.1695	#18	4.305	2-9/32"	15/16"	49.88	47.71	45.54	43.37
	25461		.1695	#18	4.305	2-1/2"	1"	53.98	51.63	49.29	46.94
		26461	.1695	#18	4.305	3-1/2"	1-3/4"	60.20	57.59	54.97	52.35
22110			.1719	11/64"	4.366	2-9/32"	15/16"	50.28	48.09	45.91	43.72
	25466		.1719	11/64"	4.366	2-1/2"	1"	54.35	51.99	49.62	47.26
		26466	.1719	11/64"	4.366	3-1/2"	1-3/4"	60.63	57.99	55.36	52.72
22115			.1730	#17	4.394	2-9/32"	15/16"	50.69	48.49	46.28	44.08
	25471		.1730	#17	4.394	2-1/2"	1"	54.71	52.33	49.95	47.57
		26471	.1730	#17	4.394	3-1/2"	1-3/4"	61.03	58.38	55.72	53.07
22120			.1770	#16	4.496	2-9/32"	15/16"	51.04	48.82	46.60	44.38
	25476		.1770	#16	4.496	2-1/2"	1"	55.11	52.71	50.32	47.92
		26476	.1770	#16	4.496	3-1/2"	1-3/4"	61.51	58.84	56.16	53.49
22125			.1772		4.500	58	24	51.49	49.25	47.01	44.77
	25481		.1772		4.500	65	25	55.52	53.11	50.69	48.28
		26481	.1772		4.500	88	45	61.95	59.26	56.56	53.87
22130			.1800	#15	4.572	2-9/32"	15/16"	51.81	49.56	47.30	45.05
	25486		.1800	#15	4.572	2-3/4"	1"	55.89	53.46	51.03	48.60
		26486	.1800	#15	4.572	3-1/2"	1-3/4"	62.35	59.64	56.93	54.22
22135			.1820	#14	4.623	2-9/32"	15/16"	52.31	50.04	47.76	45.49
	25491		.1820	#14	4.623	2-3/4"	1"	56.25	53.80	51.36	48.91
		26491	.1820	#14	4.623	3-1/2"	1-3/4"	62.76	60.03	57.30	54.57
22140			.1850	#13	4.699	2-9/32"	15/16"	52.68	50.39	48.10	45.81
	25496		.1850	#13	4.699	2-3/4"	1-1/4"	56.65	54.19	51.72	49.26
		26496	.1850	#13	4.699	3-1/2"	1-3/4"	63.20	60.46	57.71	54.96
22145			.1875	3/16"	4.763	2-13/32"	1"	53.11	50.80	48.49	46.18
	25501		.1875	3/16"	4.763	2-3/4"	1-1/4"	57.06	54.58	52.10	49.62
		26501	.1875	3/16"	4.763	4"	2"	63.69	60.92	58.15	55.38
22150			.1890	#12	4.801	2-13/32"	1"	53.49	51.16	48.84	46.51
	25506		.1890	#12	4.801	2-3/4"	1-1/4"	57.42	54.92	52.43	49.93
		26506	.1890	#12	4.801	4"	2"	64.07	61.28	58.50	55.71
22155			.1910	#11	4.851	2-13/32"	1"	53.98	51.63	49.29	46.94
	25511		.1910	#11	4.851	2-3/4"	1-1/4"	57.79	55.28	52.76	50.25
		26511	.1910	#11	4.851	4"	2"	64.49	61.69	58.88	56.08
22160			.1935	#10	4.915	2-13/32"	1"	54.29	51.93	49.57	47.21
	25516		.1935	#10	4.915	2-3/4"	1-1/4"	58.22	55.69	53.16	50.63
		26516	.1935	#10	4.915	4"	2"	64.94	62.12	59.29	56.47

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"	54.69	52.32	49.94	47.56
	25521		.1960	#9	4.978	3"	1-5/16"	58.56	56.01	53.47	50.92
		26521	.1960	#9	4.978	4"	2"	65.32	62.48	59.64	56.80
22170			.1969		5.000	61	25	55.00	52.61	50.22	47.83
	25526		.1969		5.000	75	33	58.96	56.40	53.83	51.27
		26526	.1969		5.000	100	50	65.78	62.92	60.06	57.20
22175			.1990	#8	5.055	2-13/32"	1"	55.51	53.10	50.68	48.27
	25531		.1990	#8	5.055	3"	1-5/16"	59.26	56.68	54.11	51.53
		26531	.1990	#8	5.055	4"	2"	66.11	63.24	60.36	57.49
22180			.2010	#7	5.105	2-13/32"	1"	55.67	53.25	50.83	48.41
	25536		.2010	#7	5.105	3"	1-5/16"	59.52	56.94	54.35	51.76
		26536	.2010	#7	5.105	4"	2"	66.41	63.53	60.64	57.75
22185			.2031	13/64"	5.159	2-13/32"	1"	56.04	53.60	51.17	48.73
	25541		.2031	13/64"	5.159	3"	1-5/16"	59.96	57.35	54.75	52.14
		26541	.2031	13/64"	5.159	4"	2"	66.91	64.00	61.09	58.18
22190			.2040	#6	5.182	2-13/32"	1"	56.43	53.98	51.52	49.07
	25546		.2040	#6	5.182	3"	1-3/8"	60.41	57.78	55.16	52.53
		26546	.2040	#6	5.182	4"	2"	67.39	64.46	61.53	58.60
22195			.2055	#5	5.220	2-13/32"	1"	56.82	54.35	51.88	49.41
	25551		.2055	#5	5.220	3"	1-3/8"	60.80	58.16	55.51	52.87
		26551	.2055	#5	5.220	4"	2"	67.85	64.90	61.95	59.00
22200			.2090	#4	5.309	2-13/32"	1"	57.19	54.70	52.22	49.73
	25556		.2090	#4	5.309	3"	1-3/8"	61.23	58.56	55.90	53.24
		26556	.2090	#4	5.309	4"	2"	68.30	65.33	62.36	59.39
22205			.2130	#3	5.410	2-5/8"	1-3/32"	57.57	55.07	52.56	50.06
	25561		.2130	#3	5.410	3"	1-3/8"	61.62	58.94	56.26	53.58
		26561	.2130	#3	5.410	4"	2"	68.76	65.77	62.78	59.79
22210			.2165		5.500	67	28	57.94	55.42	52.90	50.38
	25566		.2165		5.500	75	35	62.00	59.30	56.61	53.91
		26566	.2165		5.500	100	50	69.17	66.17	63.16	60.15
22215			.2188	7/32"	5.558	2-5/8"	1-3/32"	58.42	55.88	53.34	50.80
	25571		.2188	7/32"	5.558	3"	1-3/8"	62.13	59.43	56.73	54.03
		26571	.2188	7/32"	5.558	4"	2"	69.59	66.56	63.54	60.51
22220			.2210	#2	5.613	2-5/8"	1-3/32"	58.83	56.28	53.72	51.16
	25576		.2210	#2	5.613	3"	1-3/8"	63.19	60.45	57.70	54.95
		26576	.2210	#2	5.613	4"	2"	70.68	67.61	64.53	61.46
22225			.2280	#1	5.791	2-5/8"	1-3/32"	59.27	56.69	54.12	51.54
	25581		.2280	#1	5.791	3"	1-3/8"	63.42	60.67	57.91	55.15
		26581	.2280	#1	5.791	4-1/8"	2-1/8"	80.98	77.46	73.94	70.42
22230			.2340	A	5.944	2-5/8"	1-3/32"	59.70	57.10	54.51	51.91
	25586		.2340	A	5.944	3-1/4"	1-1/2"	71.17	68.08	64.98	61.89
		26586	.2340	A	5.944	4-1/8"	2-1/8"	85.50	81.79	78.07	74.35
22235			.2344	15/64"	5.954	2-5/8"	1-3/32"	60.13	57.52	54.90	52.29
	25591		.2344	15/64"	5.954	3-1/4"	1-1/2"	71.30	68.20	65.10	62.00
		26591	.2344	15/64"	5.954	4-1/8"	2-1/8"	85.63	81.91	78.18	74.46
22240			.2362		6.000	67	28	60.57	57.94	55.30	52.67
	25596		.2362		6.000	80	38	71.50	68.39	65.28	62.17
		26596	.2362		6.000	105	55	85.82	82.09	78.36	74.63
22245			.2380	B	6.045	2-3/4"	1-7/32"	63.97	61.19	58.41	55.63
	25601		.2380	B	6.045	3-1/4"	1-5/8"	73.76	70.55	67.35	64.14
		26601	.2380	B	6.045	4-1/8"	2-1/8"	89.07	85.20	81.32	77.45
22250			.2420	C	6.147	2-3/4"	1-7/32"	64.50	61.70	58.89	56.09
	25606		.2420	C	6.147	3-1/4"	1-5/8"	74.11	70.88	67.66	64.44
		26606	.2420	C	6.147	4-1/4"	2-1/4"	89.41	85.53	81.64	77.75

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"	64.86	62.04	59.22	56.40
	25611		.2460	D	6.248	3-1/4"	1-5/8"	74.43	71.19	67.96	64.72
		26611	.2460	D	6.248	4-1/4"	2-1/4"	89.75	85.84	81.94	78.04
22260			.2500	1/4" / E	6.350	2-3/4"	1-7/32"	65.40	62.56	59.71	56.87
	25616		.2500	1/4" / E	6.350	3-1/4"	1-5/8"	74.75	71.50	68.25	65.00
		26616	.2500	1/4" / E	6.350	4-1/4"	2-1/4"	90.07	86.15	82.24	78.32
22265			.2559		6.500	70	31	66.47	63.58	60.69	57.80
	25621		.2559		6.500	80	41	75.67	72.38	69.09	65.80
		26621	.2559		6.500	105	58	91.01	87.05	83.10	79.14
22270			.2570	F	6.528	2-3/4"	1-7/32"	67.49	64.56	61.62	58.69
	25626		.2570	F	6.528	3-1/4"	1-11/16"	77.42	74.05	70.69	67.32
		26626	.2570	F	6.528	4-3/8"	2-3/8"	94.51	90.40	86.29	82.18
22275			.2610	G	6.629	2-3/4"	1-7/32"	68.52	65.54	62.56	59.58
	25631		.2610	G	6.629	3-1/2"	1-11/16"	78.37	74.97	71.56	68.15
		26631	.2610	G	6.629	4-3/8"	2-3/8"	95.48	91.33	87.18	83.03
22280			.2656	17/64"	6.746	2-15/16"	1-11/32"	69.58	66.55	63.53	60.50
	25636		.2656	17/64"	6.746	3-1/2"	1-11/16"	79.28	75.83	72.39	68.94
		26636	.2656	17/64"	6.746	4-3/8"	2-3/8"	96.40	92.21	88.02	83.83
22285			.2660	H	6.756	2-15/16"	1-11/32"	70.60	67.53	64.46	61.39
	25641		.2660	H	6.756	3-1/2"	1-11/16"	80.22	76.74	73.25	69.76
		26641	.2660	H	6.756	4-3/8"	2-3/8"	97.42	93.18	88.95	84.71
22290			.2720	I	6.909	2-15/16"	1-11/32"	71.63	68.52	65.40	62.29
	25646		.2720	I	6.909	3-1/2"	1-11/16"	80.33	76.84	73.34	69.85
		26646	.2720	I	6.909	4-3/8"	2-3/8"	97.51	93.27	89.03	84.79
22295			.2756		7.000	75	34	72.67	69.51	66.35	63.19
	25651		.2756		7.000	88	43	81.24	77.70	74.17	70.64
		26651	.2756		7.000	110	61	98.44	94.16	89.88	85.60
22300			.2770	J	7.036	2-15/16"	1-11/32"	73.67	70.47	67.26	64.06
	25656		.2770	J	7.036	3-1/2"	1-11/16"	85.34	81.63	77.92	74.21
		26656	.2770	J	7.036	4-3/8"	2-3/8"	103.42	98.92	94.43	89.93
22305			.2810	K	7.137	2-15/16"	1-11/32"	74.77	71.52	68.27	65.02
	25661		.2810	K	7.137	3-1/2"	1-3/4"	86.30	82.54	78.79	75.04
		26661	.2810	K	7.137	4-7/16"	2-7/16"	104.40	99.86	95.32	90.78
22310			.2812	9/32"	7.142	2-15/16"	1-11/32"	75.81	72.51	69.22	65.92
	25666		.2812	9/32"	7.142	3-1/2"	1-3/4"	87.23	83.44	79.64	75.85
		26666	.2812	9/32"	7.142	4-7/16"	2-7/16"	105.36	100.78	96.20	91.62
22315			.2900	L	7.366	2-15/16"	1-11/32"	76.82	73.48	70.14	66.80
	25671		.2900	L	7.366	3-1/2"	1-3/4"	87.62	83.81	80.00	76.19
		26671	.2900	L	7.366	4-7/16"	2-7/16"	105.77	101.17	96.57	91.97
22320			.2950	M	7.493	2-15/16"	1-11/32"	78.30	74.90	71.49	68.09
	25676		.2950	M	7.493	3-3/4"	1-3/4"	88.14	84.30	80.47	76.64
		26676	.2950	M	7.493	4-7/16"	2-7/16"	106.28	101.66	97.04	92.42
22325			.2953		7.500	75	34	78.30	74.90	71.49	68.09
	25681		.2953		7.500	95	44	88.14	84.30	80.47	76.64
		26681	.2953		7.500	115	66	106.28	101.66	97.04	92.42
22330			.2969	19/64"	7.541	3-3/32"	1-15/32"	78.97	75.54	72.10	68.67
	25686		.2969	19/64"	7.541	3-3/4"	1-7/8"	94.15	90.06	85.96	81.87
		26686	.2969	19/64"	7.541	4-9/16"	2-9/16"	114.75	109.76	104.77	99.78
22335			.3020	N	7.671	3-3/32"	1-15/32"	82.55	78.96	75.37	71.78
	25691		.3020	N	7.671	3-3/4"	1-7/8"	96.27	92.08	87.90	83.71
		26691	.3020	N	7.671	4-9/16"	2-9/16"	116.97	111.88	106.80	101.71
22340			.3125	5/16"	7.938	3-3/32"	1-15/32"	82.83	79.23	75.63	72.03
	25696		.3125	5/16"	7.938	3-3/4"	1-7/8"	96.49	92.29	88.10	83.90
		26696	.3125	5/16"	7.938	4-11/16"	2-9/16"	117.17	112.08	106.98	101.89

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

AlTiN-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	84.39	80.72	77.05	73.38	
			.3150	8.000	95	48	100.54	96.17	91.80	87.43	
				.3150	8.000	120	69	121.37	116.09	110.82	105.54
22350	25706	26706	.3160	O 8.026	3-3/32"	1-15/32"	84.39	80.72	77.05	73.38	
			.3160	O 8.026	3-3/4"	1-7/8"	101.46	97.05	92.64	88.23	
				.3160	O 8.026	4-11/16"	2-11/16"	123.42	118.05	112.69	107.32
22355	25711	26711	.3230	P 8.204	3-3/32"	1-15/32"	85.00	81.30	77.61	73.91	
			.3230	P 8.204	3-3/4"	2-3/32"	101.73	97.31	92.88	88.46	
				.3230	P 8.204	4-11/16"	2-11/16"	123.68	118.31	112.93	107.55
22360	25716	26716	.3281	21/64"	8.334	3-3/32"	1-15/32"	86.60	82.83	79.07	75.30
			.3281	21/64"	8.334	4"	2-3/32"	102.40	97.94	93.49	89.04
				.3281	21/64"	8.334	4-11/16"	2-11/16"	124.37	118.97	113.56
22365	25721	26721	.3320	Q 8.433	3-3/32"	1-15/32"	88.14	84.30	80.47	76.64	
			.3320	Q 8.433	4"	2-3/32"	102.98	98.51	94.03	89.55	
				.3320	Q 8.433	4-15/16"	2-15/16"	124.99	119.56	114.12	108.69
22370	25726	26726	.3346	8.500	79	37	88.49	84.65	80.80	76.95	
			.3346	8.500	100	53	103.52	99.02	94.52	90.02	
				.3346	8.500	125	75	125.53	120.08	114.62	109.16
22375	25731	26731	.3390	R 8.611	3-5/16"	1-9/16"	90.87	86.92	82.97	79.02	
			.3390	R 8.611	4"	2-3/32"	106.92	102.27	97.62	92.97	
				.3390	R 8.611	4-15/16"	2-15/16"	131.47	125.75	120.04	114.32
22380	25736	26736	.3438	11/32"	8.733	3-5/16"	1-9/16"	92.87	88.84	84.80	80.76
			.3438	11/32"	8.733	4"	2-3/16"	109.55	104.79	100.02	95.26
				.3438	11/32"	8.733	4-15/16"	2-15/16"	134.26	128.43	122.59
22385	25741	26741	.3480	S 8.839	3-5/16"	1-9/16"	95.94	91.77	87.60	83.43	
			.3480	S 8.839	4"	2-3/16"	112.03	107.16	102.29	97.42	
				.3480	S 8.839	5"	3"	136.82	130.87	124.92	118.97
22390	25746	26746	.3543	9.000	84	40	98.39	94.12	89.84	85.56	
			.3543	9.000	100	56	112.49	107.60	102.71	97.82	
				.3543	9.000	125	77	137.32	131.35	125.38	119.41
22395	25751	26751	.3580	T 9.093	3-5/16"	1-9/16"	102.26	97.81	93.37	88.92	
			.3580	T 9.093	4-1/4"	2-9/32"	114.62	109.64	104.65	99.67	
				.3580	T 9.093	5"	3"	144.35	138.07	131.80	125.52
22400	25756	26756	.3594	23/64"	9.129	3-5/16"	1-9/16"	102.88	98.41	93.93	89.46
			.3594	23/64"	9.129	4-1/4"	2-9/32"	115.06	110.06	105.05	100.05
				.3594	23/64"	9.129	5"	3"	144.85	138.56	132.26
22405	25761	26761	.3680	U 9.347	3-5/16"	1-9/16"	104.43	99.89	95.35	90.81	
			.3680	U 9.347	4-1/4"	2-9/32"	121.96	116.66	111.35	106.05	
				.3680	U 9.347	5"	3"	153.26	146.60	139.93	133.27
22410	25766	26766	.3740	9.500	84	40	105.27	100.69	96.12	91.54	
			.3740	9.500	105	58	122.56	117.23	111.90	106.57	
				.3740	9.500	130	80	154.22	147.51	140.81	134.10
22415	25771	26771	.3750	3/8"	9.525	3-1/2"	1-11/16"	105.92	101.31	96.71	92.10
			.3750	3/8"	9.525	4-1/4"	2-3/8"	125.59	120.13	114.67	109.21
				.3750	3/8"	9.525	5-1/8"	3-1/8"	158.29	151.40	144.52

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"	109.99	105.20	100.42	95.64
	25776		.3770	V	9.576	4-1/4"	2-3/8"	126.01	120.53	115.05	109.57
		26776	.3770	V	9.576	5-1/8"	3-1/8"	160.78	153.79	146.80	139.81
22425			.3860	W	9.804	3-1/2"	1-11/16"	111.91	107.04	102.18	97.31
	25781		.3860	W	9.804	4-1/2"	2-3/8"	127.39	121.85	116.31	110.77
		26781	.3860	W	9.804	5-1/8"	3-1/8"	161.33	154.32	147.30	140.29
22430			.3906	25/64"	9.921	3-1/2"	1-11/16"	113.31	108.38	103.46	98.53
	25786		.3906	25/64"	9.921	4-1/2"	2-3/8"	128.34	122.76	117.18	111.60
		26786	.3906	25/64"	9.921	5-1/4"	3-1/4"	162.31	155.25	148.20	141.14
22435			.3937		10.000	89	43	113.71	108.77	103.82	98.88
	25791		.3937		10.000	115	60	129.51	123.88	118.25	112.62
		26791	.3937		10.000	135	83	165.51	158.31	151.12	143.92
22440			.3970	X	10.084	3-1/2"	1-11/16"	114.71	109.73	104.74	99.75
	25796		.3970	X	10.084	4-1/2"	2-1/2"	133.92	128.10	122.27	116.45
		26796	.3970	X	10.084	5-1/4"	3-1/4"	169.20	161.84	154.49	147.13
22445			.4040	Y	10.262	3-1/2"	1-11/16"	115.49	110.47	105.45	100.43
	25801		.4040	Y	10.262	4-1/2"	2-9/16"	134.52	128.67	122.82	116.97
		26801	.4040	Y	10.262	5-3/8"	3-3/8"	172.55	165.04	157.54	150.04
22450			.4062	13/32"	10.317	3-1/2"	1-11/16"	119.04	113.86	108.69	103.51
	25806		.4062	13/32"	10.317	4-1/2"	2-9/16"	137.10	131.14	125.18	119.22
		26806	.4062	13/32"	10.317	5-3/8"	3-3/8"	173.52	165.98	158.43	150.89
22455			.4130	Z	10.490	3-1/2"	1-11/16"	120.14	114.92	109.69	104.47
	25811		.4130	Z	10.490	4-1/2"	2-5/8"	139.25	133.20	127.14	121.09
		26811	.4130	Z	10.490	5-3/8"	3-3/8"	176.40	168.73	161.06	153.39
22460			.4134		10.500	89	43	120.14	114.92	109.69	104.47
	25816		.4134		10.500	115	67	139.25	133.20	127.14	121.09
		26816	.4134		10.500	135	86	176.40	168.73	161.06	153.39
22465			.4219	27/64"	10.716	3-3/4"	1-13/16"	121.27	116.00	110.72	105.45
	25821		.4219	27/64"	10.716	4-1/2"	2-11/16"	141.22	135.08	128.94	122.80
		26821	.4219	27/64"	10.716	5-7/16"	3-7/16"	178.60	170.83	163.07	155.30
22470			.4331		11.000	95	46	130.16	124.50	118.84	113.18
	25826		.4331		11.000	115	68	146.30	139.94	133.58	127.22
		26826	.4331		11.000	135	88	185.51	177.44	169.38	161.31
22475			.4375	7/16"	11.113	3-3/4"	1-13/16"	130.16	124.50	118.84	113.18
	25831		.4375	7/16"	11.113	4-3/4"	2-13/16"	149.26	142.77	136.28	129.79
		26831	.4375	7/16"	11.113	5-7/16"	3-7/16"	189.47	181.24	173.00	164.76
22480			.4528		11.500	95	46	139.73	133.65	127.58	121.50
	25836		.4528		11.500	120	71	154.59	147.87	141.15	134.43
		26836	.4528		11.500	140	91	196.20	187.67	179.14	170.61
22485			.4531	29/64"	11.509	3-3/4"	1-13/16"	139.73	133.65	127.58	121.50
	25841		.4531	29/64"	11.509	4-3/4"	2-7/8"	159.88	152.93	145.98	139.03
		26841	.4531	29/64"	11.509	5-9/16"	3-13/16"	202.34	193.55	184.75	175.95
22490			.4688	15/32"	11.908	4"	1-15/16"	146.81	140.43	134.04	127.66
	25846		.4688	15/32"	11.908	4-3/4"	2-7/8"	163.53	156.42	149.31	142.20
		26846	.4688	15/32"	11.908	5-9/16"	3-13/16"	207.40	198.39	189.37	180.35
22495			.4724		12.000	102	49	147.25	140.84	134.44	128.04
	25851		.4724		12.000	120	73	167.05	159.79	152.52	145.26
		26851	.4724		12.000	140	98	212.73	203.48	194.23	184.98
22500			.4844	31/64"	12.304	4"	1-15/16"	156.25	149.46	142.66	135.87
	25856		.4844	31/64"	12.304	5-5/16"	3"	174.28	166.71	159.13	151.55
		26856	.4844	31/64"	12.304	5-9/16"	3-13/16"	218.26	208.77	199.28	189.79
22505			.4921		12.500	102	49	164.69	157.53	150.37	143.21
	25861		.4921		12.500	135	76	187.07	178.94	170.80	162.67
		26861	.4921		12.500	150	102	219.47	209.92	200.38	190.84

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"	165.73	158.52	151.32	144.11
	25866		.5000	1/2"	12.700	5-3/8"	3-1/16"	188.84	180.63	172.42	164.21
		26866	.5000	1/2"	12.700	6"	4"	220.26	210.68	201.11	191.53
22515			.5118		13.000	107	53	183.95	175.96	167.96	159.96
	25871		.5118		13.000	135	78	214.15	204.84	195.53	186.22
		26871	.5118		13.000	150	102	230.59	220.56	210.54	200.51
22520			.5156	33/64"	13.096	4-7/32"	2-3/32"	188.31	180.13	171.94	163.75
	25876		.5156	33/64"	13.096	5-3/8"	3-1/8"	223.22	213.51	203.81	194.10
		26876	.5156	33/64"	13.096	6"	4"	240.29	229.85	219.40	208.95
22525			.5312	17/32"	13.492	4-7/32"	2-3/32"	192.63	184.25	175.88	167.50
	25881		.5312	17/32"	13.492	5-11/16"	3-5/16"	226.81	216.95	207.09	197.23
		26881	.5312	17/32"	13.492	6-1/8"	4-1/8"	244.19	233.57	222.96	212.34
22530			.5315		13.500	110	56	196.98	188.42	179.85	171.29
	25886		.5315		13.500	145	84	230.31	220.30	210.28	200.27
		26886	.5315		13.500	155	105	247.96	237.18	226.40	215.62
22535			.5469	35/64"	13.891	4-5/16"	2-7/32"	201.28	192.53	183.78	175.03
	25891		.5469	35/64"	13.891	5-13/16"	3-3/8"	242.93	232.36	221.80	211.24
		26891	.5469	35/64"	13.891	6-1/8"	4-1/8"	255.71	244.60	233.48	222.36
22540			.5512		14.000	110	56	205.65	196.71	187.77	178.83
	25896		.5512		14.000	145	86	246.49	235.77	225.06	214.34
		26896	.5512		14.000	155	105	259.49	248.20	236.92	225.64
22545			.5625	9/16"	14.288	4-9/16"	2-15/32"	227.68	217.78	207.88	197.98
	25901		.5625	9/16"	14.288	5-15/16"	3-1/2"	265.56	254.01	242.47	230.92
		26901	.5625	9/16"	14.288	6-1/4"	4-3/8"	280.15	267.97	255.79	243.61
22550			.5709		14.500	116	63	231.98	221.89	211.81	201.72
	25906		.5709		14.500	150	89	267.66	256.03	244.39	232.75
		26906	.5709		14.500	160	109	282.37	270.09	257.82	245.54
22555			.5781	37/64"	14.684	4-15/16"	2-9/16"	236.12	225.85	215.59	205.32
	25911		.5781	37/64"	14.684	6"	3-1/2"	268.40	256.73	245.06	233.39
		26911	.5781	37/64"	14.684	6-1/4"	4-3/8"	283.13	270.82	258.51	246.20
22560			.5906		15.000	125	65	240.45	230.00	219.54	209.09
	25916		.5906		15.000	150	90	271.88	260.06	248.24	236.42
		26916	.5906		15.000	160	112	286.81	274.34	261.87	249.40
22565			.5938	19/32"	15.083	4-15/16"	2-9/16"	241.78	231.26	220.75	210.24
	25921		.5938	19/32"	15.083	6"	3-9/16"	278.97	266.84	254.71	242.58
		26921	.5938	19/32"	15.083	6-3/8"	4-3/8"	294.26	281.47	268.67	255.88
22570			.6094	39/64"	15.479	5-1/16"	2-13/16"	242.97	232.41	221.84	211.28
	25926		.6094	39/64"	15.479	6-3/16"	3-11/16"	313.95	300.30	286.65	273.00
		26926	.6094	39/64"	15.479	6-7/16"	4-7/16"	331.13	316.73	302.34	287.94
22575			.6102		15.500	129	71	244.24	233.62	223.00	212.38
	25931		.6102		15.500	160	94	314.81	301.13	287.44	273.75
		26931	.6102		15.500	165	113	332.07	317.64	303.20	288.76
22580			.6250	5/8"	15.875	5-1/4"	3-1/8"	245.44	234.77	224.10	213.43
	25936		.6250	5/8"	15.875	6-5/16"	3-3/4"	323.50	309.43	295.37	281.30
		26936	.6250	5/8"	15.875	6-9/16"	4-9/16"	341.26	326.43	311.59	296.75
22585			.6299		16.000	133	79	251.39	240.46	229.53	218.60
	25941		.6299		16.000	160	95	327.74	313.49	299.24	284.99
		26941	.6299		16.000	165	117	345.74	330.70	315.67	300.64