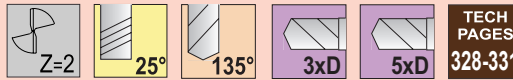


TOLERANCES

<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)

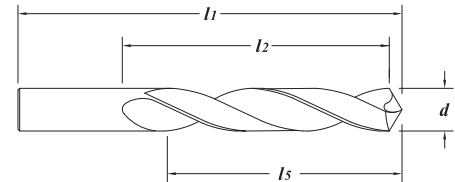
Series 1520, 1205

.0625" - .1015"
(1.588mm - 2.578mm)



General purpose for all material groups

- Solid submicron grain carbide drill
- No spotting required in most applications
- 4-facet self-centering point
- Live tooling recommended on lathe processes
- Durana Coating - page 77



GENERAL PURPOSE DRILLS

3xD (1520) EDP#	5xD (1205) EDP#	<i>d</i> †		<i>l₁</i> Overall Length	<i>l₂</i> Flute Length	<i>l₅</i> Max Drill Depth	LIST PRICE	
		Decimal	Diameter Metric					
77165		.0625	1/16"	1.588	1-3/4"	5/8"	.200"	7.03
	89165	.0625	1/16"	1.588	1-3/4"	3/4"	.325"	7.03
77170		.0635	#52	1.613	1-3/4"	11/16"	.204"	7.13
	89170	.0635	#52	1.613	1-3/4"	3/4"	.331"	7.13
77175		.0670	#51	1.702	1-3/4"	11/16"	.215"	7.24
	89175	.0670	#51	1.702	1-3/4"	3/4"	.349"	7.24
77180		.0700	#50	1.778	1-3/4"	11/16"	.224"	7.41
	89180	.0700	#50	1.778	1-3/4"	7/8"	.364"	7.41
77185		.0730	#49	1.854	1-3/4"	11/16"	.234"	7.61
	89185	.0730	#49	1.854	1-3/4"	7/8"	.380"	7.61
77190		.0760	#48	1.930	1-3/4"	11/16"	.244"	7.86
	89190	.0760	#48	1.930	1-3/4"	7/8"	.396"	7.86
77195		.0781	5/64"	1.984	1-3/4"	11/16"	.250"	8.15
	89195	.0781	5/64"	1.984	1-3/4"	7/8"	.407"	8.15
77200		.0785	#47	1.994	1-3/4"	3/4"	.252"	8.43
	89200	.0785	#47	1.994	1-3/4"	7/8"	.409"	8.43
77205		.0787		2.000	44	19	6	8.56
	89205	.0787		2.000	44	22	10	8.56
77210		.0810	#46	2.057	1-3/4"	3/4"	.260"	8.70
	89210	.0810	#46	2.057	1-3/4"	7/8"	.422"	8.70
77215		.0820	#45	2.083	1-3/4"	3/4"	.263"	8.96
	89215	.0820	#45	2.083	1-3/4"	7/8"	.427"	8.96
77220		.0860	#44	2.184	1-3/4"	3/4"	.276"	9.25
	89220	.0860	#44	2.184	2"	1"	.448"	9.25
77225		.0890	#43	2.261	1-3/4"	3/4"	.285"	9.52
	89225	.0890	#43	2.261	2"	1"	.463"	9.52
77230		.0935	#42	2.375	1-3/4"	3/4"	.300"	9.65
	89230	.0935	#42	2.375	2"	1"	.487"	9.65
77235		.0938	3/32"	2.383	1-3/4"	3/4"	.301"	9.86
	89235	.0938	3/32"	2.383	2"	1"	.488"	9.86
77240		.0960	#41	2.438	1-13/16"	13/16"	.308"	9.95
	89240	.0960	#41	2.438	2"	1"	.500"	9.95
77245		.0980	#40	2.489	1-13/16"	13/16"	.314"	10.10
	89245	.0980	#40	2.489	2"	1"	.510"	10.10
77250		.0984		2.500	46	21	8	10.16
	89250	.0984		2.500	57	32	13	10.16
77255		.0995	#39	2.527	1-13/16"	13/16"	.319"	10.20
	89255	.0995	#39	2.527	2-1/4"	1-1/4"	.518"	10.20
77260		.1015	#38	2.578	1-13/16"	13/16"	.326"	10.29
	89260	.1015	#38	2.578	2-1/4"	1-1/4"	.529"	10.32

continued →

Series 1520, 1205 (continued)

.1040" - .1719"
(2.642mm - 4.366mm)

3xD (1520) EDP#	5xD (1205) EDP#	d^{\dagger} Diameter		l_1 Overall Length	l_2 Flute Length	l_5 Max Drill Depth	LIST PRICE	
		Decimal	Metric					
77265		.1040	#37	2.642	1-13/16"	13/16"	.334"	10.38
	89265	.1040	#37	2.642	2-1/4"	1-1/4"	.542"	10.46
77270		.1065	#36	2.705	1-13/16"	13/16"	.342"	10.44
	89270	.1065	#36	2.705	2-1/4"	1-1/4"	.555"	10.59
77275		.1094	7/64"	2.779	1-13/16"	13/16"	.351"	10.51
	89275	.1094	7/64"	2.779	2-1/4"	1-1/4"	.570"	10.77
77280		.1100	#35	2.794	1-7/8"	7/8"	.353"	10.57
	89280	.1100	#35	2.794	2-1/4"	1-1/4"	.573"	10.89
77285		.1110	#34	2.819	1-7/8"	7/8"	.356"	10.70
	89285	.1110	#34	2.819	2-1/4"	1-1/4"	.578"	11.02
77290		.1130	#33	2.870	1-7/8"	7/8"	.362"	10.77
	89290	.1130	#33	2.870	2-1/4"	1-1/4"	.588"	11.23
77295		.1160	#32	2.946	1-7/8"	7/8"	.372"	10.85
	89295	.1160	#32	2.946	2-1/4"	1-1/4"	.604"	11.35
77300		.1181		3.000	48	22	10	10.98
	89300	.1181		3.000	57	32	16	11.46
77305		.1200	#31	3.048	1-7/8"	7/8"	.385"	11.04
	89305	.1200	#31	3.048	2-1/4"	1-1/4"	.625"	11.53
77310		.1250	1/8"	3.175	1-7/8"	7/8"	.401"	11.16
	89310	.1250	1/8"	3.175	2-1/4"	1-1/4"	.651"	11.67
77315		.1285	#30	3.264	1-15/16"	15/16"	.412"	11.47
	89315	.1285	#30	3.264	2-1/4"	1-1/4"	.669"	11.97
77320		.1360	#29	3.454	1-15/16"	15/16"	.436"	11.77
	89320	.1360	#29	3.454	2-1/2"	1-3/8"	.708"	12.35
77325		.1378		3.500	49	24	11	12.15
	89325	.1378		3.500	63	35	18	12.75
77330		.1405	#28	3.569	1-15/16"	15/16"	.451"	12.32
	89330	.1405	#28	3.569	2-1/2"	1-3/8"	.732"	12.87
77335		.1406	9/64"	3.571	1-15/16"	15/16"	.451"	12.44
	89335	.1406	9/64"	3.571	2-1/2"	1-3/8"	.732"	13.03
77340		.1440	#27	3.658	2-1/16"	1"	.462"	13.54
	89340	.1440	#27	3.658	2-1/2"	1-3/8"	.750"	13.54
77345		.1470	#26	3.734	2-1/16"	1"	.471"	13.67
	89345	.1470	#26	3.734	2-1/2"	1-3/8"	.765"	13.67
77350		.1495	#25	3.797	2-1/16"	1"	.479"	13.85
	89350	.1495	#25	3.797	2-1/2"	1-3/8"	.778"	13.85
77355		.1520	#24	3.861	2-1/16"	1"	.487"	13.88
	89355	.1520	#24	3.861	2-1/2"	1-3/8"	.791"	13.88
77360		.1540	#23	3.912	2-1/16"	1"	.494"	13.97
	89360	.1540	#23	3.912	2-1/2"	1-3/8"	.802"	13.97
77365		.1562	5/32"	3.967	2-1/16"	1"	.501"	14.07
	89365	.1562	5/32"	3.967	2-1/2"	1-3/8"	.813"	14.07
77370		.1570	#22	3.988	2-1/8"	1-1/16"	.504"	14.95
	89370	.1570	#22	3.988	2-1/2"	1-3/8"	.818"	14.95
77375		.1575		4.000	54	27	13	15.14
	89375	.1575		4.000	63	35	21	15.14
77380		.1590	#21	4.039	2-1/8"	1-1/16"	.510"	15.31
	89380	.1590	#21	4.039	2-1/2"	1-3/8"	.828"	15.31
77385		.1610	#20	4.089	2-1/8"	1-1/16"	.516"	15.42
	89385	.1610	#20	4.089	2-1/2"	1-3/8"	.838"	15.42
77390		.1660	#19	4.216	2-1/8"	1-1/16"	.532"	16.06
	89390	.1660	#19	4.216	2-3/4"	1-5/8"	.864"	16.06
77395		.1695	#18	4.305	2-1/8"	1-1/16"	.544"	16.25
	89395	.1695	#18	4.305	2-3/4"	1-5/8"	.883"	16.25
77400		.1719	11/64"	4.366	2-1/8"	1-1/16"	.551"	16.60
	89400	.1719	11/64"	4.366	2-3/4"	1-5/8"	.895"	16.60

3xD (1520) EDP#	5xD (1205) EDP#	$d \dagger$ Diameter		l_1 Overall Length	l_2 Flute Length	l_5 Max Drill Depth	LIST PRICE	
		Decimal	Metric					
77405		.1730	#17	4.394	2-3/16"	1-1/8"	.555"	16.82
	89405	.1730	#17	4.394	2-3/4"	1-5/8"	.901"	16.82
77410		.1770	#16	4.496	2-3/16"	1-1/8"	.568"	17.00
	89410	.1770	#16	4.496	2-3/4"	1-5/8"	.922"	17.00
77415		.1772		4.500	56	29	14	17.09
	89415	.1772		4.500	70	41	23	17.09
77420		.1800	#15	4.572	2-3/16"	1-1/8"	.577"	17.17
	89420	.1800	#15	4.572	2-3/4"	1-5/8"	.937"	17.17
77425		.1820	#14	4.623	2-3/16"	1-1/8"	.584"	17.56
	89425	.1820	#14	4.623	2-3/4"	1-5/8"	.948"	17.56
77430		.1850	#13	4.700	2-3/16"	1-1/8"	.593"	17.69
	89430	.1850	#13	4.700	2-3/4"	1-5/8"	.963"	17.69
77435		.1875	3/16"	4.763	2-3/16"	1-1/8"	.601"	17.78
	89435	.1875	3/16"	4.763	2-3/4"	1-5/8"	.976"	17.78
77440		.1890	#12	4.801	2-1/4"	1-3/16"	.606"	18.36
	89440	.1890	#12	4.801	2-3/4"	1-5/8"	.984"	18.36
77445		.1910	#11	4.851	2-1/4"	1-3/16"	.613"	18.55
	89445	.1910	#11	4.851	2-3/4"	1-5/8"	.995"	18.55
77450		.1935	#10	4.915	2-1/4"	1-3/16"	.621"	19.45
	89450	.1935	#10	4.915	2-3/4"	1-5/8"	1.008"	19.45
77455		.1960	#9	4.978	2-1/4"	1-3/16"	.629"	19.93
	89455	.1960	#9	4.978	3"	1-3/4"	1.021"	19.93
77460		.1969		5.000	57	30	16	20.05
	89460	.1969		5.000	76	44	26	20.05
77465		.1990	#8	5.055	2-1/4"	1-3/16"	.638"	20.18
	89465	.1990	#8	5.055	3"	1-3/4"	1.036"	20.18
77470		.2010	#7	5.105	2-1/4"	1-3/16"	.645"	20.76
	89470	.2010	#7	5.105	3"	1-3/4"	1.047"	20.76
77475		.2031	13/64"	5.159	2-1/4"	1-3/16"	.651"	20.93
	89475	.2031	13/64"	5.159	3"	1-3/4"	1.058"	20.93
77480		.2040	#6	5.182	2-3/8"	1-1/4"	.654"	21.35
	89480	.2040	#6	5.182	3"	1-3/4"	1.062"	21.35
77485		.2055	#5	5.220	2-3/8"	1-1/4"	.659"	21.80
	89485	.2055	#5	5.220	3"	1-3/4"	1.070"	21.80
77490		.2090	#4	5.309	2-3/8"	1-1/4"	.670"	22.17
	89490	.2090	#4	5.309	3"	1-3/4"	1.088"	22.17
77495		.2130	#3	5.410	2-3/8"	1-1/4"	.683"	22.56
	89495	.2130	#3	5.410	3"	1-3/4"	1.109"	22.56
77500		.2165		5.500	60	32	18	22.74
	89500	.2165		5.500	76	44	29	22.74
77505		.2188	7/32"	5.558	2-3/8"	1-1/4"	.702"	22.90
	89505	.2188	7/32"	5.558	3"	1-3/4"	1.139"	22.90
77510		.2210	#2	5.613	2-7/16"	1-5/16"	.709"	23.47
	89510	.2210	#2	5.613	3"	1-3/4"	1.151"	23.47
77515		.2280	#1	5.791	2-7/16"	1-5/16"	.731"	23.60
	89515	.2280	#1	5.791	3"	1-3/4"	1.187"	23.60
77520		.2340	A	5.944	2-7/16"	1-5/16"	.750"	23.64
	89520	.2340	A	5.944	3-1/4"	2"	1.218"	23.87
77525		.2344	15/64"	5.954	2-7/16"	1-5/16"	.752"	23.72
	89525	.2344	15/64"	5.954	3-1/4"	2"	1.221"	23.94
77530		.2362		6.000	64	35	19	23.79
	89530	.2362		6.000	82	50	31	24.03
77535		.2380	B	6.045	2-1/2"	1-3/8"	.763"	23.87
	89535	.2380	B	6.045	3-1/4"	2"	1.239"	24.11
77540		.2420	C	6.147	2-1/2"	1-3/8"	.776"	24.06
	89540	.2420	C	6.147	3-1/4"	2"	1.260"	24.30

continued →

Series 1520, 1205 (continued)

.2460" - .3543"
(6.248mm - 9.000mm)

3xD (1520) EDP#	5xD (1205) EDP#	$d \dagger$ Diameter		l_1 Overall Length	l_2 Flute Length	l_5 Max Drill Depth	LIST PRICE
		Decimal	Metric				
77545		.2460	D	6.248	2-1/2"	1-3/8"	24.24
	89545	.2460	D	6.248	3-1/4"	2"	24.47
77550		.2500	1/4" / E	6.350	2-1/2"	1-3/8"	24.41
	89550	.2500	1/4" / E	6.350	3-1/4"	2"	24.64
77555		.2559		6.500	67	37	24.98
	89555	.2559		6.500	82	50	25.24
77560		.2570	F	6.528	2-5/8"	1-7/16"	25.52
	89560	.2570	F	6.528	3-1/4"	2"	25.76
77565		.2610	G	6.629	2-5/8"	1-7/16"	26.01
	89565	.2610	G	6.629	3-1/2"	2-1/8"	26.29
77570		.2656	17/64"	6.746	2-5/8"	1-7/16"	26.56
	89570	.2656	17/64"	6.746	3-1/2"	2-1/8"	26.82
77575		.2660	H	6.756	2-11/16"	1-1/2"	27.30
	89575	.2660	H	6.756	3-1/2"	2-1/8"	27.59
77580		.2720	I	6.909	2-11/16"	1-1/2"	27.62
	89580	.2720	I	6.909	3-1/2"	2-1/8"	27.89
77585		.2756		7.000	68	38	27.84
	89585	.2756		7.000	88	54	28.12
77590		.2770	J	7.036	2-11/16"	1-1/2"	28.11
	89590	.2770	J	7.036	3-1/2"	2-1/8"	28.37
77595		.2810	K	7.137	2-11/16"	1-1/2"	28.36
	89595	.2810	K	7.137	3-1/2"	2-1/8"	28.62
77600		.2812	9/32"	7.142	2-11/16"	1-1/2"	28.50
	89600	.2812	9/32"	7.142	3-1/2"	2-1/8"	28.81
77605		.2900	L	7.366	2-3/4"	1-9/16"	29.55
	89605	.2900	L	7.366	3-1/2"	2-1/8"	29.83
77610		.2950	M	7.493	2-3/4"	1-9/16"	31.63
	89610	.2950	M	7.493	3-3/4"	2-3/8"	31.94
77615		.2953		7.500	70	40	31.63
	89615	.2953		7.500	95	60	31.94
77620		.2969	19/64"	7.541	2-3/4"	1-9/16"	31.78
	89620	.2969	19/64"	7.541	3-3/4"	2-3/8"	31.94
77625		.3020	N	7.671	2-15/16"	1-5/8"	33.50
	89625	.3020	N	7.671	3-3/4"	2-3/8"	33.83
77630		.3125	5/16"	7.938	2-15/16"	1-5/8"	33.62
	89630	.3125	5/16"	7.938	3-3/4"	2-3/8"	33.96
77635		.3150		8.000	75	43	36.05
	89635	.3150		8.000	95	60	36.44
77640		.3160	O	8.026	2-15/16"	1-11/16"	36.05
	89640	.3160	O	8.026	3-3/4"	2-3/8"	36.44
77645		.3230	P	8.204	2-15/16"	1-11/16"	36.37
	89645	.3230	P	8.204	3-3/4"	2-3/8"	36.44
77650		.3281	21/64"	8.334	2-15/16"	1-11/16"	36.60
	89650	.3281	21/64"	8.334	4"	2-1/2"	36.97
77655		.3320	Q	8.433	3"	1-11/16"	37.44
	89655	.3320	Q	8.433	4"	2-1/2"	37.84
77660		.3346		8.500	76	43	37.79
	89660	.3346		8.500	101	63	38.17
77665		.3390	R	8.611	3"	1-11/16"	39.00
	89665	.3390	R	8.611	4"	2-1/2"	39.40
77670		.3438	11/32"	8.733	3"	1-11/16"	40.59
	89670	.3438	11/32"	8.733	4"	2-1/2"	40.99
77675		.3480	S	8.839	3-1/16"	1-3/4"	41.14
	89675	.3480	S	8.839	4"	2-1/2"	41.14
77680		.3543		9.000	78	44	41.38
	89680	.3543		9.000	101	63	41.38

3xD (1520) EDP#	5xD (1205) EDP#	$d \dagger$ Diameter		l_1 Overall Length	l_2 Flute Length	l_5 Max Drill Depth	LIST PRICE
		Decimal	Metric				
77685		.3580	T	9.093	3-1/16"	1-3/4"	41.55
	89685	.3580	T	9.093	4-1/4"	2-3/4"	41.75
77690		.3594	23/64"	9.129	3-1/16"	1-3/4"	41.83
	89690	.3594	23/64"	9.129	4-1/4"	2-3/4"	42.04
77695		.3680	U	9.347	3-1/8"	1-13/16"	45.81
	89695	.3680	U	9.347	4-1/4"	2-3/4"	47.71
77700		.3740		9.500	79	46	46.24
	89700	.3740		9.500	107	70	48.16
77705		.3750	3/8"	9.525	3-1/8"	1-13/16"	46.60
	89705	.3750	3/8"	9.525	4-1/4"	2-3/4"	48.54
77710		.3770	V	9.576	3-1/4"	1-7/8"	47.48
	89710	.3770	V	9.576	4-1/4"	2-3/4"	49.46
77715		.3860	W	9.804	3-1/4"	1-7/8"	48.48
	89715	.3860	W	9.804	4-1/2"	2-7/8"	50.51
77720		.3906	25/64"	9.921	3-1/4"	1-7/8"	49.21
	89720	.3906	25/64"	9.921	4-1/2"	2-7/8"	51.26
77725		.3937		10.000	84	49	50.98
	89725	.3937		10.000	114	73	53.10
77730		.3970	X	10.084	3-5/16"	1-15/16"	52.46
	89730	.3970	X	10.084	4-1/2"	2-7/8"	54.67
	89735	.4040	Y	10.262	4-1/2"	2-7/8"	55.11
77740		.4062	13/32"	10.317	3-5/16"	1-15/16"	54.81
	89740	.4062	13/32"	10.317	4-1/2"	2-7/8"	57.09
77745		.4130	Z	10.490	3-3/8"	2"	55.42
	89745	.4130	Z	10.490	4-1/2"	2-7/8"	57.70
77750		.4134		10.500	86	51	55.42
	89750	.4134		10.500	114	73	57.70
77755		.4219	27/64"	10.716	3-3/8"	2"	56.00
	89755	.4219	27/64"	10.716	4-1/2"	2-7/8"	58.35
77760		.4331		11.000	87	52	60.81
	89760	.4331		11.000	114	73	63.36
77765		.4375	7/16"	11.113	3-7/16"	2-1/16"	60.81
	89765	.4375	7/16"	11.113	4-1/2"	2-7/8"	63.36
77770		.4528		11.500	91	54	65.98
	89770	.4528		11.500	120	76	68.74
77775		.4531	29/64"	11.509	3-9/16"	2-1/8"	65.98
	89775	.4531	29/64"	11.509	4-3/4"	3"	68.74
77780		.4688	15/32"	11.908	3-5/8"	2-1/8"	69.78
	89780	.4688	15/32"	11.908	4-3/4"	3"	72.70
77785		.4724		12.000	94	56	70.04
	89785	.4724		12.000	120	76	72.93
77790		.4844	31/64"	12.304	3-11/16"	2-3/16"	70.57
	89790	.4844	31/64"	12.304	4-3/4"	3"	72.93
77795		.4921		12.500	95	56	71.38
	89795	.4921		12.500	120	76	74.88
77800		.5000	1/2"	12.700	3-3/4"	2-1/4"	71.90
	89800	.5000	1/2"	12.700	4-3/4"	3"	74.88
77805		.5118		13.000	107	60	90.32
	89805	.5118		13.000	127	83	94.08
77810		.5156	33/64"	13.096	4-1/4"	2-3/8"	92.74
	89810	.5156	33/64"	13.096	5"	3-1/4"	96.61
77815		.5312	17/32"	13.492	4-1/4"	2-3/8"	95.16
	89815	.5312	17/32"	13.492	5"	3-1/4"	99.12
77820		.5315		13.500	107	60	97.58
	89820	.5315		13.500	127	83	101.65

continued →

Series 1520, 1205 (continued)

.5469" - .6299"
(13.891mm - 16.000mm)

3xD (1520) EDP#	5xD (1205) EDP#	d † Diameter		l_1 Overall Length	l_2 Flute Length	l_5 Max Drill Depth	LIST PRICE
		Decimal	Metric				
77825		.5469	35/64"	13.891	4-1/4"	2-3/8"	100.01
	89825	.5469	35/64"	13.891	5"	3-1/4"	104.18
77830		.5512		14.000	107	60	102.43
	89830	.5512		14.000	127	83	106.71
77835		.5625	9/16"	14.287	4-1/2"	2-1/2"	111.70
	89835	.5625	9/16"	14.287	5"	3-1/4"	116.37
77840		.5709		14.500	115	65	114.04
	89840	.5709		14.500	127	83	118.79
	89845	.5781	37/64"	14.683	5-1/4"	3-1/2"	121.22
77850		.5906		15.000	115	65	118.74
	89850	.5906		15.000	133	89	123.68
77855		.5938	19/32"	15.082	4-1/2"	2-1/2"	119.42
	89855	.5938	19/32"	15.082	5-1/4"	3-1/2"	124.40
77860		.6094	39/64"	15.478	4-1/2"	2-1/2"	120.09
	89860	.6094	39/64"	15.478	5-1/4"	3-1/2"	125.08
	89865	.6102		15.500	133	89	125.80
77870		.6250	5/8"	15.875	4-1/2"	2-1/2"	121.43
	89870	.6250	5/8"	15.875	5-1/4"	3-1/2"	126.48
	89875	.6299		16.000	133	89	129.87