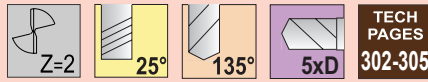


TOLERANCES

<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)

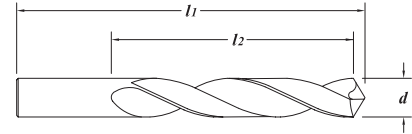


Series 1205

.0625" - .1575"
(1.588mm - 4.000mm)

General purpose for all material groups

- Solid submicron grain carbide drill
- No spotting required in most applications
- 4-facet self-centering point
- Adaptability when converting from high-speed steel
- Live tooling recommended on lathe processes
- Hardlube Coating - page 76



DRILLS

EDP#	<i>d</i> [†] Diameter		<i>l1</i> Overall Length	<i>l2</i> Flute Length	1-11	12-24	25-49	50-100	
	Decimal	Metric							
89165	.0625	1/16"	1.588	1-3/4"	3/4"	7.13	6.82	6.51	6.20
89170	.0635	#52	1.613	1-3/4"	3/4"	7.23	6.92	6.60	6.29
89175	.0670	#51	1.702	1-3/4"	3/4"	7.34	7.02	6.70	6.38
89180	.0700	#50	1.778	1-3/4"	7/8"	7.52	7.19	6.87	6.54
89185	.0730	#49	1.854	1-3/4"	7/8"	7.72	7.38	7.05	6.71
89190	.0760	#48	1.930	1-3/4"	7/8"	7.97	7.62	7.28	6.93
89195	.0781	5/64"	1.984	1-3/4"	7/8"	8.27	7.91	7.55	7.19
89200	.0785	#47	1.994	1-3/4"	7/8"	8.54	8.17	7.80	7.43
89205	.0787		2.000	44	22	8.68	8.31	7.93	7.55
89210	.0810	#46	2.057	1-3/4"	7/8"	8.82	8.44	8.05	7.67
89215	.0820	#45	2.083	1-3/4"	7/8"	9.09	8.69	8.30	7.90
89220	.0860	#44	2.184	2"	1"	9.38	8.98	8.57	8.16
89225	.0890	#43	2.261	2"	1"	9.65	9.23	8.81	8.39
89230	.0935	#42	2.375	2"	1"	9.79	9.36	8.94	8.51
89235	.0938	3/32"	2.383	2"	1"	10.01	9.57	9.14	8.70
89240	.0960	#41	2.438	2"	1"	10.10	9.66	9.22	8.78
89245	.0980	#40	2.489	2"	1"	10.25	9.80	9.36	8.91
89250	.0984		2.500	57	32	10.30	9.86	9.41	8.96
89255	.0995	#39	2.527	2-1/4"	1-1/4"	10.35	9.90	9.45	9.00
89260	.1015	#38	2.578	2-1/4"	1-1/4"	10.48	10.02	9.57	9.11
89265	.1040	#37	2.642	2-1/4"	1-1/4"	10.61	10.15	9.69	9.23
89270	.1065	#36	2.705	2-1/4"	1-1/4"	10.75	10.29	9.82	9.35
89275	.1094	7/64"	2.779	2-1/4"	1-1/4"	10.93	10.45	9.98	9.50
89280	.1100	#35	2.794	2-1/4"	1-1/4"	11.05	10.57	10.09	9.61
89285	.1110	#34	2.819	2-1/4"	1-1/4"	11.18	10.69	10.21	9.72
89290	.1130	#33	2.870	2-1/4"	1-1/4"	11.39	10.89	10.40	9.90
89295	.1160	#32	2.946	2-1/4"	1-1/4"	11.51	11.01	10.51	10.01
89300	.1181		3.000	57	32	11.63	11.12	10.62	10.11
89305	.1200	#31	3.048	2-1/4"	1-1/4"	11.70	11.19	10.68	10.17
89310	.1250	1/8"	3.175	2-1/4"	1-1/4"	11.85	11.33	10.82	10.30
89315	.1285	#30	3.264	2-1/4"	1-1/4"	12.14	11.62	11.09	10.56
89320	.1360	#29	3.454	2-1/2"	1-3/8"	12.52	11.98	11.43	10.89
89325	.1378		3.500	63	35	12.94	12.38	11.81	11.25
89330	.1405	#28	3.569	2-1/2"	1-3/8"	13.06	12.50	11.93	11.36
89335	.1406	9/64"	3.571	2-1/2"	1-3/8"	13.21	12.64	12.06	11.49
89340	.1440	#27	3.658	2-1/2"	1-3/8"	13.73	13.13	12.54	11.94
89345	.1470	#26	3.734	2-1/2"	1-3/8"	13.87	13.27	12.66	12.06
89350	.1495	#25	3.797	2-1/2"	1-3/8"	14.05	13.44	12.83	12.22
89355	.1520	#24	3.861	2-1/2"	1-3/8"	14.08	13.46	12.85	12.24
89360	.1540	#23	3.912	2-1/2"	1-3/8"	14.18	13.56	12.95	12.33
89365	.1562	5/32"	3.967	2-1/2"	1-3/8"	14.27	13.65	13.03	12.41
89370	.1570	#22	3.988	2-1/2"	1-3/8"	15.17	14.51	13.85	13.19
89375	.1575		4.000	63	35	15.36	14.70	14.03	13.36

continued →

Series 1205 (continued)

.1590" - .3346"
(4.039mm - 8.500mm)

DRILLS

EDP#	d^{\dagger} Diameter		l_1 Overall Length	l_2 Flute Length	1-11	12-24	25-49	50-100	
	Decimal	Metric							
89380	.1590	#21	4.039	2-1/2"	1-3/8"	15.54	14.86	14.19	13.51
89385	.1610	#20	4.089	2-1/2"	1-3/8"	15.65	14.97	14.29	13.61
89390	.1660	#19	4.216	2-3/4"	1-5/8"	16.28	15.58	14.87	14.16
89395	.1695	#18	4.305	2-3/4"	1-5/8"	16.49	15.77	15.06	14.34
89400	.1719	11/64"	4.366	2-3/4"	1-5/8"	16.84	16.10	15.37	14.64
89405	.1730	#17	4.394	2-3/4"	1-5/8"	17.07	16.32	15.58	14.84
89410	.1770	#16	4.496	2-3/4"	1-5/8"	17.25	16.50	15.75	15.00
89415	.1772		4.500	70	41	17.34	16.59	15.83	15.08
89420	.1800	#15	4.572	2-3/4"	1-5/8"	17.41	16.65	15.90	15.14
89425	.1820	#14	4.623	2-3/4"	1-5/8"	17.81	17.04	16.26	15.49
89430	.1850	#13	4.700	2-3/4"	1-5/8"	17.95	17.17	16.39	15.61
89435	.1875	3/16"	4.763	2-3/4"	1-5/8"	18.03	17.25	16.46	15.68
89440	.1890	#12	4.801	2-3/4"	1-5/8"	18.62	17.81	17.00	16.19
89445	.1910	#11	4.851	2-3/4"	1-5/8"	18.83	18.01	17.19	16.37
89450	.1935	#10	4.915	2-3/4"	1-5/8"	19.72	18.87	18.01	17.15
89455	.1960	#9	4.978	3"	1-3/4"	20.22	19.34	18.46	17.58
89460	.1969		5.000	76	44	20.33	19.45	18.56	17.68
89465	.1990	#8	5.055	3"	1-3/4"	20.47	19.58	18.69	17.80
89470	.2010	#7	5.105	3"	1-3/4"	21.07	20.15	19.24	18.32
89475	.2031	13/64"	5.159	3"	1-3/4"	21.23	20.31	19.38	18.46
89480	.2040	#6	5.182	3"	1-3/4"	21.67	20.72	19.78	18.84
89485	.2055	#5	5.220	3"	1-3/4"	22.11	21.15	20.19	19.23
89490	.2090	#4	5.309	3"	1-3/4"	22.49	21.52	20.54	19.56
89495	.2130	#3	5.410	3"	1-3/4"	22.89	21.89	20.90	19.90
89500	.2165		5.500	76	44	23.07	22.07	21.06	20.06
89505	.2188	7/32"	5.558	3"	1-3/4"	23.23	22.22	21.21	20.20
89510	.2210	#2	5.613	3"	1-3/4"	23.81	22.77	21.74	20.70
89515	.2280	#1	5.791	3"	1-3/4"	23.94	22.90	21.86	20.82
89520	.2340	A	5.944	3-1/4"	2"	24.22	23.17	22.11	21.06
89525	.2344	15/64"	5.954	3-1/4"	2"	24.29	23.23	22.18	21.12
89530	.2362		6.000	82	50	24.38	23.32	22.26	21.20
89535	.2380	B	6.045	3-1/4"	2"	24.46	23.40	22.33	21.27
89540	.2420	C	6.147	3-1/4"	2"	24.64	23.57	22.50	21.43
89545	.2460	D	6.248	3-1/4"	2"	24.83	23.75	22.67	21.59
89550	.2500	1/4" / E	6.350	3-1/4"	2"	25.00	23.91	22.83	21.74
89555	.2559		6.500	82	50	25.61	24.50	23.38	22.27
89560	.2570	F	6.528	3-1/4"	2"	26.13	24.99	23.86	22.72
89565	.2610	G	6.629	3-1/2"	2-1/8"	26.67	25.51	24.35	23.19
89570	.2656	17/64"	6.746	3-1/2"	2-1/8"	27.21	26.03	24.84	23.66
89575	.2660	H	6.756	3-1/2"	2-1/8"	27.99	26.77	25.56	24.34
89580	.2720	I	6.909	3-1/2"	2-1/8"	28.30	27.07	25.84	24.61
89585	.2756		7.000	88	54	28.53	27.29	26.05	24.81
89590	.2770	J	7.036	3-1/2"	2-1/8"	28.78	27.53	26.28	25.03
89595	.2810	K	7.137	3-1/2"	2-1/8"	29.04	27.78	26.51	25.25
89600	.2812	9/32"	7.142	3-1/2"	2-1/8"	29.22	27.95	26.68	25.41
89605	.2900	L	7.366	3-1/2"	2-1/8"	30.27	28.95	27.64	26.32
89610	.2950	M	7.493	3-3/4"	2-3/8"	32.40	30.99	29.58	28.17
89615	.2953		7.500	95	60	32.40	30.99	29.58	28.17
89620	.2969	19/64"	7.541	3-3/4"	2-3/8"	32.40	30.99	29.58	28.17
89625	.3020	N	7.671	3-3/4"	2-3/8"	34.33	32.84	31.34	29.85
89630	.3125	5/16"	7.938	3-3/4"	2-3/8"	34.45	32.96	31.46	29.96
89635	.3150		8.000	95	60	36.96	35.35	33.75	32.14
89640	.3160	O	8.026	3-3/4"	2-3/8"	36.96	35.35	33.75	32.14
89645	.3230	P	8.204	3-3/4"	2-3/8"	36.96	35.35	33.75	32.14
89650	.3281	21/64"	8.334	4"	2-1/2"	37.51	35.88	34.25	32.62
89655	.3320	Q	8.433	4"	2-1/2"	38.39	36.72	35.05	33.38
89660	.3346		8.500	101	63	38.72	37.04	35.35	33.67

EDP#	d^{\dagger} Diameter		l_1 Overall Length	l_2 Flute Length	1-11	12-24	25-49	50-100	
	Decimal	Metric							
89665	.3390	R	8.611	4"	2-1/2"	39.97	38.24	36.50	34.76
89670	.3438	11/32"	8.733	4"	2-1/2"	41.58	39.78	37.97	36.16
89675	.3480	S	8.839	4"	2-1/2"	41.73	39.92	38.10	36.29
89680	.3543		9.000	101	63	41.98	40.15	38.33	36.50
89685	.3580	T	9.093	4-1/4"	2-3/4"	42.35	40.51	38.67	36.83
89690	.3594	23/64"	9.129	4-1/4"	2-3/4"	42.65	40.80	38.94	37.09
89695	.3680	U	9.347	4-1/4"	2-3/4"	48.40	46.30	44.19	42.09
89700	.3740		9.500	107	70	48.85	46.73	44.60	42.48
89705	.3750	3/8"	9.525	4-1/4"	2-3/4"	49.24	47.10	44.96	42.82
89710	.3770	V	9.576	4-1/4"	2-3/4"	50.17	47.99	45.81	43.63
89715	.3860	W	9.804	4-1/2"	2-7/8"	51.24	49.02	46.79	44.56
89720	.3906	25/64"	9.921	4-1/2"	2-7/8"	52.00	49.74	47.48	45.22
89725	.3937		10.000	114	73	53.88	51.54	49.19	46.85
89730	.3970	X	10.084	4-1/2"	2-7/8"	55.46	53.05	50.64	48.23
89735	.4040	Y	10.262	4-1/2"	2-7/8"	55.91	53.48	51.05	48.62
89740	.4062	13/32"	10.317	4-1/2"	2-7/8"	57.93	55.41	52.89	50.37
89745	.4130	Z	10.490	4-1/2"	2-7/8"	58.54	55.99	53.45	50.90
89750	.4134		10.500	114	73	58.54	55.99	53.45	50.90
89755	.4219	27/64"	10.716	4-1/2"	2-7/8"	59.19	56.62	54.04	51.47
89760	.4331		11.000	114	73	64.27	61.48	58.68	55.89
89765	.4375	7/16"	11.113	4-1/2"	2-7/8"	64.27	61.48	58.68	55.89
89770	.4528		11.500	120	76	69.72	66.69	63.66	60.63
89775	.4531	29/64"	11.509	4-3/4"	3"	69.72	66.69	63.66	60.63
89780	.4688	15/32"	11.908	4-3/4"	3"	73.75	70.54	67.34	64.13
89785	.4724		12.000	120	76	73.99	70.77	67.56	64.34
89790	.4844	31/64"	12.304	4-3/4"	3"	73.99	70.77	67.56	64.34
89795	.4921		12.500	120	76	75.97	72.67	69.36	66.06
89800	.5000	1/2"	12.700	4-3/4"	3"	75.97	72.67	69.36	66.06
89805	.5118		13.000	127	83	95.44	91.29	87.14	82.99
89810	.5156	33/64"	13.096	5"	3-1/4"	98.00	93.74	89.48	85.22
89815	.5312	17/32"	13.492	5"	3-1/4"	100.56	96.18	91.81	87.44
89820	.5315		13.500	127	83	103.12	98.64	94.15	89.67
89825	.5469	35/64"	13.891	5"	3-1/4"	105.69	101.09	96.50	91.90
89830	.5512		14.000	127	83	108.25	103.54	98.84	94.13
89835	.5625	9/16"	14.287	5"	3-1/4"	118.05	112.92	107.78	102.65
89840	.5709		14.500	127	83	120.51	115.27	110.03	104.79
89845	.5781	37/64"	14.683	5-1/4"	3-1/2"	122.97	117.62	112.28	106.93
89850	.5906		15.000	133	89	125.48	120.02	114.57	109.11
89855	.5938	19/32"	15.082	5-1/4"	3-1/2"	126.20	120.71	115.23	109.74
89860	.6094	39/64"	15.478	5-1/4"	3-1/2"	126.89	121.37	115.86	110.34
89865	.6102		15.500	133	89	127.62	122.07	116.52	110.97
89870	.6250	5/8"	15.875	5-1/4"	3-1/2"	128.32	122.74	117.16	111.58
89875	.6299		16.000	133	89	131.76	126.03	120.30	114.57