

Series 4100

.0590" - .0820"
(1.499mm - 2.083mm)



TECH
PAGES
312-313

TOLERANCES

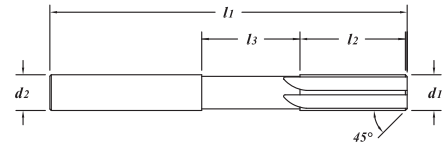
d_1	.0590" - .2509" (1.498 - 6.372mm)	+ .0002" - .0000" (+.0050 - .0000mm)
	.2510" - .5020" (6.375 - 12.750mm)	+ .0003" - .0000" (+.0075 - .0000mm)
d_2	.0590" - .2509" (1.498 - 6.372mm)	+ .0002" - .0000" (+.0050 - .0000mm)
	.2510" - .5020" (6.375 - 12.750mm)	+ .0003" - .0000" (+.0075 - .0000mm)

Solid Carbide Submicron Grain

Straight - RHC Flutes

Standard 45° Lead Chamfer

Neck diameter is .010" ±.002" less than (d_1) fluted diameter



EDP#	d_1 † Diameter		d_2 Shank Diameter	l_1 Overall Length	l_2 Flute Length	l_3 Neck Length	Number Flutes	1-11	12-24	25-49	50-100	
	Decimal	Metric										
95066	.0590		1.499	.0590"	1-1/2"	3/8"	.250"	4	14.81	14.17	13.52	12.88
95069	.0591		1.500	.0591"	1-1/2"	3/8"	.250"	4	14.81	14.17	13.52	12.88
95072	.0595	#53	1.511	.0595"	1-1/2"	3/8"	.250"	4	14.81	14.17	13.52	12.88
95075	.0600		1.524	.0600"	1-1/2"	3/8"	.250"	4	14.81	14.17	13.52	12.88
95078	.0605		1.537	.0605"	1-1/2"	3/8"	.250"	4	14.81	14.17	13.52	12.88
95081	.0610		1.549	.0610"	1-1/2"	3/8"	.250"	4	14.81	14.17	13.52	12.88
95084	.0615		1.562	.0615"	1-1/2"	3/8"	.250"	4	14.81	14.17	13.52	12.88
95087	.0620		1.575	.0620"	1-1/2"	3/8"	.250"	4	14.81	14.17	13.52	12.88
95090	.0625	1/16"	1.588	.0625"	1-1/2"	3/8"	.250"	4	14.81	14.17	13.52	12.88
95093	.0630		1.600	.0630"	1-1/2"	3/8"	.250"	4	14.81	14.17	13.52	12.88
95096	.0635	#52	1.613	.0635"	1-1/2"	3/8"	.250"	4	14.81	14.17	13.52	12.88
95099	.0640		1.626	.0640"	1-1/2"	3/8"	.250"	4	14.81	14.17	13.52	12.88
95102	.0645		1.638	.0645"	1-1/2"	3/8"	.250"	4	14.81	14.17	13.52	12.88
95105	.0650		1.651	.0650"	1-1/2"	3/8"	.250"	4	14.81	14.17	13.52	12.88
95108	.0660		1.676	.0660"	1-3/4"	1/2"	.250"	4	14.81	14.17	13.52	12.88
95111	.0670	#51	1.702	.0670"	1-3/4"	1/2"	.250"	4	14.81	14.17	13.52	12.88
95114	.0680		1.727	.0680"	1-3/4"	1/2"	.375"	4	14.81	14.17	13.52	12.88
95117	.0690		1.753	.0690"	1-3/4"	1/2"	.375"	4	14.81	14.17	13.52	12.88
95120	.0700	#50	1.778	.0700"	1-3/4"	1/2"	.375"	4	14.81	14.17	13.52	12.88
95123	.0710		1.803	.0710"	1-3/4"	1/2"	.375"	4	14.81	14.17	13.52	12.88
95126	.0720		1.829	.0720"	1-3/4"	1/2"	.375"	4	14.81	14.17	13.52	12.88
95129	.0730	#49	1.854	.0730"	1-3/4"	1/2"	.375"	4	14.81	14.17	13.52	12.88
95132	.0740		1.880	.0740"	1-3/4"	1/2"	.375"	4	14.81	14.17	13.52	12.88
95135	.0750		1.905	.0750"	1-3/4"	1/2"	.375"	4	14.81	14.17	13.52	12.88
95138	.0760	#48	1.930	.0760"	1-3/4"	1/2"	.375"	4	14.81	14.17	13.52	12.88
95141	.0770		1.956	.0770"	1-3/4"	1/2"	.375"	4	14.81	14.17	13.52	12.88
95144	.0780		1.981	.0780"	1-3/4"	1/2"	.375"	4	14.81	14.17	13.52	12.88
95147	.0781	5/64"	1.984	.0781"	1-3/4"	1/2"	.375"	4	14.81	14.17	13.52	12.88
95150	.0785	#47	1.994	.0785"	1-3/4"	1/2"	.375"	4	14.81	14.17	13.52	12.88
95153	.0787		2.000	.0787"	1-3/4"	1/2"	.375"	4	14.81	14.17	13.52	12.88
95156	.0790		2.007	.0790"	1-3/4"	1/2"	.375"	4	14.81	14.17	13.52	12.88
95159	.0800		2.032	.0800"	1-3/4"	1/2"	.375"	4	14.81	14.17	13.52	12.88
95162	.0810	#46	2.057	.0810"	2"	1/2"	.375"	4	14.81	14.17	13.52	12.88
95165	.0820	#45	2.083	.0820"	2"	1/2"	.375"	4	14.81	14.17	13.52	12.88

EDP#	d_1 † Diameter		d_2 Shank Diameter	l_1 Overall Length	l_2 Flute Length	l_3 Neck Length	Number Flutes	1-11	12-24	25-49	50-100
	Decimal	Metric									
95168	.0830	2.108	.0830"	2"	1/2"	.375"	4	14.81	14.17	13.52	12.88
95171	.0840	2.134	.0840"	2"	1/2"	.375"	4	14.81	14.17	13.52	12.88
95174	.0850	2.159	.0850"	2"	1/2"	.375"	4	14.81	14.17	13.52	12.88
95177	.0860 #44	2.184	.0860"	2"	1/2"	.375"	4	14.81	14.17	13.52	12.88
95180	.0870	2.210	.0870"	2"	1/2"	.375"	4	14.81	14.17	13.52	12.88
95183	.0880	2.235	.0880"	2"	1/2"	.375"	4	14.81	14.17	13.52	12.88
95186	.0890 #43	2.261	.0890"	2"	1/2"	.375"	4	14.81	14.17	13.52	12.88
95189	.0900	2.286	.0900"	2"	1/2"	.375"	4	14.81	14.17	13.52	12.88
95192	.0910	2.311	.0910"	2"	1/2"	.375"	4	14.81	14.17	13.52	12.88
95195	.0915	2.324	.0915"	2"	1/2"	.375"	4	14.81	14.17	13.52	12.88
95198	.0920	2.337	.0920"	2"	1/2"	.375"	4	14.81	14.17	13.52	12.88
95201	.0925	2.350	.0925"	2"	1/2"	.375"	4	14.81	14.17	13.52	12.88
95204	.0930	2.362	.0930"	2"	1/2"	.375"	4	14.81	14.17	13.52	12.88
95207	.0935 #42	2.375	.0935"	2"	1/2"	.375"	4	14.81	14.17	13.52	12.88
95210	.0938 3/32"	2.383	.0938"	2"	1/2"	.375"	4	14.81	14.17	13.52	12.88
95213	.0940	2.388	.0940"	2"	1/2"	.375"	4	14.81	14.17	13.52	12.88
95216	.0945	2.400	.0945"	2"	1/2"	.375"	4	14.81	14.17	13.52	12.88
95219	.0950	2.413	.0950"	2"	1/2"	.375"	4	14.81	14.17	13.52	12.88
95222	.0960 #41	2.438	.0960"	2-1/4"	5/8"	.375"	4	16.65	15.93	15.20	14.48
95225	.0970	2.464	.0970"	2-1/4"	5/8"	.375"	4	16.65	15.93	15.20	14.48
95228	.0980 #40	2.489	.0980"	2-1/4"	5/8"	.375"	4	16.65	15.93	15.20	14.48
95231	.0984	2.500	.0984"	2-1/4"	5/8"	.375"	4	16.65	15.93	15.20	14.48
95234	.0990	2.515	.0990"	2-1/4"	5/8"	.500"	4	16.65	15.93	15.20	14.48
95237	.0995 #39	2.527	.0995"	2-1/4"	5/8"	.500"	4	16.65	15.93	15.20	14.48
95240	.1000	2.540	.1000"	2-1/4"	5/8"	.500"	4	16.65	15.93	15.20	14.48
95243	.1010	2.565	.1010"	2-1/4"	5/8"	.500"	4	16.65	15.93	15.20	14.48
95246	.1015 #38	2.578	.1015"	2-1/4"	5/8"	.500"	4	16.65	15.93	15.20	14.48
95249	.1020	2.591	.1020"	2-1/4"	5/8"	.500"	4	16.65	15.93	15.20	14.48
95252	.1030	2.616	.1030"	2-1/4"	5/8"	.500"	4	16.65	15.93	15.20	14.48
95255	.1040 #37	2.642	.1040"	2-1/4"	5/8"	.500"	4	16.65	15.93	15.20	14.48
95258	.1050	2.667	.1050"	2-1/4"	5/8"	.500"	4	16.65	15.93	15.20	14.48
95261	.1060	2.692	.1060"	2-1/4"	5/8"	.500"	4	16.65	15.93	15.20	14.48
95264	.1065 #36	2.705	.1065"	2-1/4"	5/8"	.500"	4	16.65	15.93	15.20	14.48
95267	.1070	2.718	.1070"	2-1/4"	5/8"	.500"	4	16.65	15.93	15.20	14.48
95270	.1080	2.743	.1080"	2-1/4"	5/8"	.500"	4	16.65	15.93	15.20	14.48
95273	.1090	2.769	.1090"	2-1/4"	5/8"	.500"	4	16.65	15.93	15.20	14.48
95276	.1094 7/64"	2.779	.1094"	2-1/4"	5/8"	.500"	4	16.65	15.93	15.20	14.48
95279	.1100 #35	2.794	.1100"	2-1/4"	5/8"	.500"	4	16.78	16.05	15.32	14.59
95282	.1110 #34	2.819	.1110"	2-1/4"	5/8"	.500"	4	16.78	16.05	15.32	14.59
95285	.1120	2.845	.1120"	2-1/4"	5/8"	.500"	4	16.78	16.05	15.32	14.59
95288	.1130 #33	2.870	.1130"	2-1/4"	5/8"	.500"	4	16.78	16.05	15.32	14.59
95291	.1140	2.896	.1140"	2-1/4"	5/8"	.500"	4	16.78	16.05	15.32	14.59
95294	.1150	2.921	.1150"	2-1/4"	5/8"	.500"	4	16.78	16.05	15.32	14.59
95297	.1160 #32	2.946	.1160"	2-1/4"	5/8"	.500"	4	16.78	16.05	15.32	14.59
95300	.1170	2.972	.1170"	2-1/4"	5/8"	.500"	4	16.78	16.05	15.32	14.59
95303	.1180	2.997	.1180"	2-1/4"	5/8"	.500"	4	16.78	16.05	15.32	14.59
95306	.1181	3.000	.1181"	2-1/4"	5/8"	.500"	4	16.78	16.05	15.32	14.59
95309	.1190	3.023	.1190"	2-1/4"	5/8"	.500"	4	16.78	16.05	15.32	14.59

continued →

Series 4100 (continued)

.1200" - .1550"
(3.048mm - 3.937mm)

EDP#	$d1$ † Diameter			$d2$ Shank Diameter	$l1$ Overall Length	$l2$ Flute Length	$l3$ Neck Length	Number Flutes	1-11	12-24	25-49	50-100
	Decimal		Metric									
95312	.1200	#31	3.048	.1200"	2-1/4"	5/8"	.500"	4	16.78	16.05	15.32	14.59
95315	.1210		3.073	.1210"	2-1/4"	5/8"	.500"	4	16.78	16.05	15.32	14.59
95318	.1220		3.099	.1220"	2-1/4"	5/8"	.500"	4	16.78	16.05	15.32	14.59
95321	.1230		3.124	.1230"	2-1/4"	5/8"	.500"	4	16.78	16.05	15.32	14.59
95324	.1235		3.137	.1235"	2-1/4"	5/8"	.500"	4	16.78	16.05	15.32	14.59
95327	.1240		3.150	.1240"	2-1/4"	5/8"	.500"	4	16.78	16.05	15.32	14.59
95330	.1245		3.162	.1245"	2-1/4"	5/8"	.500"	4	16.78	16.05	15.32	14.59
95333	.1248		3.170	.1248"	2-1/4"	5/8"	.500"	4	16.78	16.05	15.32	14.59
95336	.1250	1/8"	3.175	.1250"	2-1/4"	5/8"	.500"	4	16.78	16.05	15.32	14.59
95339	.1255		3.188	.1255"	2-1/4"	5/8"	.500"	4	17.46	16.70	15.94	15.18
95342	.1260		3.200	.1260"	2-1/4"	5/8"	.500"	4	17.46	16.70	15.94	15.18
95345	.1265		3.213	.1265"	2-1/4"	5/8"	.500"	4	17.46	16.70	15.94	15.18
95348	.1270		3.226	.1270"	2-1/4"	5/8"	.500"	4	17.46	16.70	15.94	15.18
95351	.1275		3.239	.1275"	2-1/4"	5/8"	.500"	4	17.46	16.70	15.94	15.18
95354	.1280		3.251	.1280"	2-1/4"	5/8"	.500"	4	17.46	16.70	15.94	15.18
95357	.1285	#30	3.264	.1285"	2-1/4"	5/8"	.500"	4	17.46	16.70	15.94	15.18
95360	.1290		3.277	.1290"	2-1/4"	5/8"	.500"	4	17.46	16.70	15.94	15.18
95363	.1300		3.302	.1300"	2-1/4"	5/8"	.500"	4	17.46	16.70	15.94	15.18
95366	.1310		3.327	.1310"	2-1/2"	3/4"	.500"	4	19.38	18.54	17.69	16.85
95369	.1320		3.353	.1320"	2-1/2"	3/4"	.500"	4	19.38	18.54	17.69	16.85
95372	.1330		3.378	.1330"	2-1/2"	3/4"	.500"	4	19.38	18.54	17.69	16.85
95375	.1340		3.404	.1340"	2-1/2"	3/4"	.500"	4	19.38	18.54	17.69	16.85
95378	.1350		3.429	.1350"	2-1/2"	3/4"	.500"	4	19.38	18.54	17.69	16.85
95381	.1360	#29	3.454	.1360"	2-1/2"	3/4"	.500"	4	19.38	18.54	17.69	16.85
95384	.1370		3.480	.1370"	2-1/2"	3/4"	.500"	4	19.38	18.54	17.69	16.85
95387	.1378		3.500	.1378"	2-1/2"	3/4"	.500"	4	19.38	18.54	17.69	16.85
95390	.1380		3.505	.1380"	2-1/2"	3/4"	.500"	4	19.38	18.54	17.69	16.85
95393	.1390		3.531	.1390"	2-1/2"	3/4"	.500"	4	19.38	18.54	17.69	16.85
95396	.1400		3.556	.1400"	2-1/2"	3/4"	.500"	4	19.38	18.54	17.69	16.85
95399	.1405	#28	3.569	.1405"	2-1/2"	3/4"	.500"	4	19.38	18.54	17.69	16.85
95402	.1406	9/64"	3.571	.1406"	2-1/2"	3/4"	.500"	4	19.38	18.54	17.69	16.85
95405	.1410		3.581	.1410"	2-1/2"	3/4"	.500"	4	20.98	20.06	19.15	18.24
95408	.1420		3.607	.1420"	2-1/2"	3/4"	.500"	4	20.98	20.06	19.15	18.24
95411	.1430		3.632	.1430"	2-1/2"	3/4"	.500"	4	20.98	20.06	19.15	18.24
95414	.1440	#27	3.658	.1440"	2-1/2"	3/4"	.500"	4	20.98	20.06	19.15	18.24
95417	.1450		3.683	.1450"	2-1/2"	3/4"	.500"	4	20.98	20.06	19.15	18.24
95420	.1460		3.708	.1460"	2-1/2"	3/4"	.500"	4	20.98	20.06	19.15	18.24
95423	.1470	#26	3.734	.1470"	2-1/2"	3/4"	.500"	4	20.98	20.06	19.15	18.24
95426	.1480		3.759	.1480"	2-1/2"	3/4"	.500"	4	20.98	20.06	19.15	18.24
95429	.1490		3.785	.1490"	2-1/2"	3/4"	.500"	4	20.98	20.06	19.15	18.24
95432	.1495	#25	3.797	.1495"	2-1/2"	3/4"	.500"	4	20.98	20.06	19.15	18.24
95435	.1500		3.810	.1500"	2-1/2"	3/4"	.500"	4	20.98	20.06	19.15	18.24
95438	.1510		3.835	.1510"	2-1/2"	3/4"	.500"	4	20.98	20.06	19.15	18.24
95441	.1520	#24	3.861	.1520"	2-1/2"	3/4"	.500"	4	20.98	20.06	19.15	18.24
95444	.1530		3.886	.1530"	2-1/2"	3/4"	.500"	4	20.98	20.06	19.15	18.24
95447	.1540	#23	3.912	.1540"	2-1/2"	3/4"	.500"	4	20.98	20.06	19.15	18.24
95450	.1545		3.924	.1545"	2-1/2"	3/4"	.500"	4	20.98	20.06	19.15	18.24
95453	.1550		3.937	.1550"	2-1/2"	3/4"	.500"	4	20.98	20.06	19.15	18.24

EDP#	d_1 † Diameter		d_2 Shank Diameter	l_1 Overall Length	l_2 Flute Length	l_3 Neck Length	Number Flutes	1-11	12-24	25-49	50-100
	Decimal	Metric									
95456	.1555	3.950	.1555"	2-1/2"	3/4"	.500"	4	20.98	20.06	19.15	18.24
95459	.1560	3.962	.1560"	2-1/2"	3/4"	.500"	4	20.98	20.06	19.15	18.24
95462	.1562 5/32"	3.967	.1562"	2-1/2"	3/4"	.500"	4	20.98	20.06	19.15	18.24
95465	.1565	3.975	.1565"	2-1/2"	3/4"	.500"	4	20.98	20.06	19.15	18.24
95468	.1570 #22	3.988	.1570"	2-1/2"	3/4"	.500"	4	23.32	22.31	21.29	20.28
95471	.1575	4.000	.1575"	2-1/2"	3/4"	.500"	4	23.32	22.31	21.29	20.28
95474	.1580	4.013	.1580"	2-1/2"	3/4"	.500"	4	23.32	22.31	21.29	20.28
95477	.1590 #21	4.039	.1590"	2-1/2"	3/4"	.500"	4	23.32	22.31	21.29	20.28
95480	.1600	4.064	.1600"	2-3/4"	7/8"	.625"	4	23.32	22.31	21.29	20.28
95483	.1610 #20	4.089	.1610"	2-3/4"	7/8"	.625"	4	23.32	22.31	21.29	20.28
95486	.1620	4.115	.1620"	2-3/4"	7/8"	.625"	4	23.32	22.31	21.29	20.28
95489	.1630	4.140	.1630"	2-3/4"	7/8"	.625"	4	23.32	22.31	21.29	20.28
95492	.1640	4.166	.1640"	2-3/4"	7/8"	.625"	4	23.32	22.31	21.29	20.28
95495	.1650	4.191	.1650"	2-3/4"	7/8"	.625"	4	23.32	22.31	21.29	20.28
95498	.1660 #19	4.216	.1660"	2-3/4"	7/8"	.625"	4	23.32	22.31	21.29	20.28
95501	.1670	4.242	.1670"	2-3/4"	7/8"	.625"	4	23.32	22.31	21.29	20.28
95504	.1680	4.267	.1680"	2-3/4"	7/8"	.625"	4	23.32	22.31	21.29	20.28
95507	.1690	4.293	.1690"	2-3/4"	7/8"	.625"	4	23.32	22.31	21.29	20.28
95510	.1695 #18	4.305	.1695"	2-3/4"	7/8"	.625"	4	23.32	22.31	21.29	20.28
95513	.1700	4.318	.1700"	2-3/4"	7/8"	.625"	4	23.32	22.31	21.29	20.28
95516	.1710	4.343	.1710"	2-3/4"	7/8"	.625"	4	23.32	22.31	21.29	20.28
95519	.1719 11/64"	4.366	.1719"	2-3/4"	7/8"	.625"	4	23.32	22.31	21.29	20.28
95522	.1720	4.369	.1720"	2-3/4"	7/8"	.625"	4	23.32	22.31	21.29	20.28
95525	.1730 #17	4.394	.1730"	2-3/4"	7/8"	.625"	4	24.27	23.21	22.16	21.10
95528	.1740	4.420	.1740"	2-3/4"	7/8"	.625"	4	24.27	23.21	22.16	21.10
95531	.1750	4.445	.1750"	2-3/4"	7/8"	.625"	4	24.27	23.21	22.16	21.10
95534	.1760	4.470	.1760"	2-3/4"	7/8"	.625"	4	24.27	23.21	22.16	21.10
95537	.1770 #16	4.496	.1770"	2-3/4"	7/8"	.625"	4	24.27	23.21	22.16	21.10
95540	.1772	4.500	.1772"	2-3/4"	7/8"	.625"	4	24.27	23.21	22.16	21.10
95543	.1780	4.521	.1780"	2-3/4"	7/8"	.625"	4	24.27	23.21	22.16	21.10
95546	.1790	4.547	.1790"	2-3/4"	7/8"	.625"	4	24.27	23.21	22.16	21.10
95549	.1800 #15	4.572	.1800"	2-3/4"	7/8"	.625"	4	24.27	23.21	22.16	21.10
95552	.1810	4.597	.1810"	2-3/4"	7/8"	.625"	4	24.27	23.21	22.16	21.10
95555	.1820 #14	4.623	.1820"	2-3/4"	7/8"	.625"	4	24.27	23.21	22.16	21.10
95558	.1830	4.648	.1830"	2-3/4"	7/8"	.625"	4	24.27	23.21	22.16	21.10
95561	.1840	4.674	.1840"	2-3/4"	7/8"	.625"	4	24.27	23.21	22.16	21.10
95564	.1850 #13	4.699	.1850"	2-3/4"	7/8"	.625"	4	24.27	23.21	22.16	21.10
95567	.1855	4.712	.1855"	2-3/4"	7/8"	.625"	4	24.27	23.21	22.16	21.10
95570	.1860	4.724	.1860"	2-3/4"	7/8"	.625"	4	24.27	23.21	22.16	21.10
95573	.1865	4.737	.1865"	2-3/4"	7/8"	.625"	4	24.27	23.21	22.16	21.10
95576	.1870	4.750	.1870"	2-3/4"	7/8"	.625"	4	24.27	23.21	22.16	21.10
95577	.1873	4.757	.1873"	2-3/4"	7/8"	.625"	4	24.27	23.21	22.16	21.10
95579	.1875 3/16"	4.763	.1875"	2-3/4"	7/8"	.625"	4	24.27	23.21	22.16	21.10
95582	.1880	4.775	.1880"	2-3/4"	7/8"	.625"	4	24.78	23.71	22.63	21.55
95585	.1885	4.788	.1885"	2-3/4"	7/8"	.625"	4	24.78	23.71	22.63	21.55
95588	.1890 #12	4.801	.1890"	2-3/4"	7/8"	.625"	4	24.78	23.71	22.63	21.55
95591	.1900	4.826	.1900"	2-3/4"	7/8"	.625"	4	24.78	23.71	22.63	21.55
95594	.1910 #11	4.851	.1910"	2-3/4"	7/8"	.625"	4	24.78	23.71	22.63	21.55

continued →

Series 4100 (continued)

.1920" - .2250"
(4.877mm - 5.715mm)



TECH
PAGES
312-313

TOLERANCES

d_1	.0590" - .2509" (1.498 - 6.372mm)	+ .0002" - .0000" (+.0050 - .0000mm)
	.2510" - .5020" (6.375 - 12.750mm)	+ .0003" - .0000" (+.0075 - .0000mm)
d_2	.0590" - .2509" (1.498 - 6.372mm)	+ .0002" - .0000" (+.0050 - .0000mm)
	.2510" - .5020" (6.375 - 12.750mm)	+ .0003" - .0000" (+.0075 - .0000mm)



Solid Carbide Submicron Grain

Neck diameter is .010" $\pm$.002" less than (d_1) fluted diameter

EDP#	d_1 † Diameter		d_2 Shank Diameter	l_1 Overall Length	l_2 Flute Length	l_3 Neck Length	Number Flutes	1-11	12-24	25-49	50-100
	Decimal	Metric									
95597	.1920	4.877	.1920"	2-3/4"	7/8"	.625"	4	24.78	23.71	22.63	21.55
95600	.1930	4.902	.1930"	2-3/4"	7/8"	.625"	4	24.78	23.71	22.63	21.55
95603	.1935	#10 4.915	.1935"	2-3/4"	7/8"	.625"	4	24.78	23.71	22.63	21.55
95606	.1940	4.928	.1940"	2-3/4"	7/8"	.625"	4	24.78	23.71	22.63	21.55
95609	.1950	4.953	.1950"	2-3/4"	7/8"	.625"	4	24.78	23.71	22.63	21.55
95612	.1960	#9 4.978	.1960"	3"	1"	.625"	4	28.03	26.81	25.59	24.37
95615	.1969	5.000	.1969"	3"	1"	.625"	4	28.03	26.81	25.59	24.37
95618	.1970	5.004	.1970"	3"	1"	.625"	4	28.03	26.81	25.59	24.37
95621	.1980	5.029	.1980"	3"	1"	.625"	4	28.03	26.81	25.59	24.37
95624	.1990	#8 5.055	.1990"	3"	1"	.625"	4	28.03	26.81	25.59	24.37
95627	.2000	5.080	.2000"	3"	1"	.625"	4	28.03	26.81	25.59	24.37
95630	.2010	#7 5.105	.2010"	3"	1"	.625"	4	28.03	26.81	25.59	24.37
95633	.2020	5.131	.2020"	3"	1"	.625"	4	28.03	26.81	25.59	24.37
95636	.2030	5.156	.2030"	3"	1"	.625"	4	28.03	26.81	25.59	24.37
95639	.2031	13/64" 5.159	.2031"	3"	1"	.625"	4	28.03	26.81	25.59	24.37
95642	.2040	#6 5.182	.2040"	3"	1"	.625"	4	28.03	26.81	25.59	24.37
95645	.2050	5.207	.2050"	3"	1"	.625"	4	28.03	26.81	25.59	24.37
95648	.2055	#5 5.220	.2055"	3"	1"	.625"	4	28.03	26.81	25.59	24.37
95651	.2060	5.232	.2060"	3"	1"	.625"	4	28.03	26.81	25.59	24.37
95654	.2070	5.258	.2070"	3"	1"	.625"	4	28.03	26.81	25.59	24.37
95657	.2080	5.283	.2080"	3"	1"	.625"	4	28.03	26.81	25.59	24.37
95660	.2090	#4 5.309	.2090"	3"	1"	.625"	4	28.03	26.81	25.59	24.37
95663	.2100	5.334	.2100"	3"	1"	.625"	4	28.03	26.81	25.59	24.37
95666	.2110	5.359	.2110"	3"	1"	.625"	4	28.03	26.81	25.59	24.37
95669	.2120	5.385	.2120"	3"	1"	.625"	4	28.03	26.81	25.59	24.37
95672	.2130	#3 5.410	.2130"	3"	1"	.625"	4	28.03	26.81	25.59	24.37
95675	.2140	5.436	.2140"	3"	1"	.625"	4	28.03	26.81	25.59	24.37
95678	.2150	5.461	.2150"	3"	1"	.625"	4	28.03	26.81	25.59	24.37
95681	.2160	5.486	.2160"	3"	1"	.625"	4	28.03	26.81	25.59	24.37
95684	.2165	5.500	.2165"	3"	1"	.625"	4	28.03	26.81	25.59	24.37
95687	.2170	5.512	.2170"	3"	1"	.625"	4	28.03	26.81	25.59	24.37
95690	.2180	5.537	.2180"	3"	1"	.625"	4	28.03	26.81	25.59	24.37
95693	.2188	7/32" 5.558	.2188"	3"	1"	.625"	4	28.03	26.81	25.59	24.37
95696	.2190	5.563	.2190"	3"	1"	.625"	4	28.03	26.81	25.59	24.37
95699	.2200	5.588	.2200"	3"	1"	.625"	4	32.69	31.27	29.85	28.43
95702	.2210	#2 5.613	.2210"	3"	1"	.625"	4	32.69	31.27	29.85	28.43
95705	.2220	5.639	.2220"	3"	1"	.625"	4	32.69	31.27	29.85	28.43
95708	.2230	5.664	.2230"	3"	1"	.625"	4	32.69	31.27	29.85	28.43
95711	.2240	5.690	.2240"	3"	1"	.625"	4	32.69	31.27	29.85	28.43
95714	.2250	5.715	.2250"	3"	1"	.625"	4	32.69	31.27	29.85	28.43

EDP#	d_1 † Diameter		d_2 Shank Diameter	l_1 Overall Length	l_2 Flute Length	l_3 Neck Length	Number Flutes	1-11	12-24	25-49	50-100
	Decimal	Metric									
95717	.2260	5.740	.2260"	3"	1"	.625"	4	32.69	31.27	29.85	28.43
95720	.2270	5.766	.2270"	3"	1"	.625"	4	32.69	31.27	29.85	28.43
95723	.2280	#1 5.791	.2280"	3"	1"	.625"	4	32.69	31.27	29.85	28.43
95726	.2290	5.817	.2290"	3"	1"	.625"	4	32.69	31.27	29.85	28.43
95729	.2300	5.842	.2300"	3"	1"	.625"	4	32.69	31.27	29.85	28.43
95732	.2310	5.867	.2310"	3"	1"	.625"	4	32.69	31.27	29.85	28.43
95735	.2320	5.893	.2320"	3"	1"	.625"	4	32.69	31.27	29.85	28.43
95738	.2330	5.918	.2330"	3"	1"	.625"	4	32.69	31.27	29.85	28.43
95741	.2340	A 5.944	.2340"	3"	1"	.625"	4	32.69	31.27	29.85	28.43
95744	.2344	15/64" 5.954	.2344"	3"	1"	.625"	4	32.69	31.27	29.85	28.43
95747	.2350	5.969	.2350"	3"	1"	.625"	4	33.91	32.44	30.96	29.49
95750	.2360	5.994	.2360"	3"	1"	.625"	4	33.91	32.44	30.96	29.49
95753	.2362	6.000	.2362"	3"	1"	.625"	4	33.91	32.44	30.96	29.49
95756	.2370	6.020	.2370"	3"	1"	.625"	4	33.91	32.44	30.96	29.49
95759	.2380	B 6.045	.2380"	3"	1"	.625"	4	33.91	32.44	30.96	29.49
95762	.2390	6.071	.2390"	3"	1"	.625"	4	33.91	32.44	30.96	29.49
95765	.2400	6.096	.2400"	3"	1"	.625"	4	33.91	32.44	30.96	29.49
95768	.2410	6.121	.2410"	3"	1"	.625"	4	33.91	32.44	30.96	29.49
95771	.2420	C 6.147	.2420"	3"	1"	.625"	4	33.91	32.44	30.96	29.49
95774	.2430	6.172	.2430"	3"	1"	.625"	4	33.91	32.44	30.96	29.49
95777	.2440	6.198	.2440"	3"	1"	.625"	4	33.91	32.44	30.96	29.49
95780	.2450	6.223	.2450"	3"	1"	.625"	4	33.91	32.44	30.96	29.49
95783	.2460	D 6.248	.2460"	3"	1"	.625"	4	33.91	32.44	30.96	29.49
95786	.2470	6.274	.2470"	3"	1"	.625"	4	33.91	32.44	30.96	29.49
95789	.2480	6.299	.2480"	3"	1"	.625"	4	33.91	32.44	30.96	29.49
95792	.2485	6.312	.2485"	3"	1"	.625"	4	33.91	32.44	30.96	29.49
95795	.2490	6.325	.2490"	3"	1"	.625"	4	33.91	32.44	30.96	29.49
95798	.2495	6.337	.2495"	3"	1"	.625"	4	33.91	32.44	30.96	29.49
95799	.2498	6.345	.2498"	3"	1"	.625"	4	33.91	32.44	30.96	29.49
95801	.2500	1/4" / E 6.350	.2500"	3"	1"	.625"	4	33.91	32.44	30.96	29.49
95802	.2502	6.355	.2502"	3"	1"	.625"	4	33.91	32.44	30.96	29.49
95804	.2505	6.363	.2505"	3"	1"	.625"	4	33.91	32.44	30.96	29.49
95807	.2510	6.375	.2510"	3"	1"	.625"	4	33.91	32.44	30.96	29.49
95810	.2515	6.388	.2515"	3"	1"	.625"	4	33.91	32.44	30.96	29.49
95813	.2520	6.401	.2520"	3"	1"	.625"	4	33.91	32.44	30.96	29.49
95816	.2530	6.426	.2530"	3"	1"	.625"	4	33.91	32.44	30.96	29.49
95819	.2540	6.452	.2540"	3"	1"	.625"	4	33.91	32.44	30.96	29.49
95822	.2550	6.477	.2550"	3-1/4"	1-1/8"	.625"	6	39.10	37.40	35.70	34.00
95825	.2559	6.500	.2559"	3-1/4"	1-1/8"	.625"	6	39.10	37.40	35.70	34.00
95828	.2560	6.502	.2560"	3-1/4"	1-1/8"	.625"	6	39.10	37.40	35.70	34.00
95831	.2570	F 6.528	.2570"	3-1/4"	1-1/8"	.625"	6	39.10	37.40	35.70	34.00
95834	.2580	6.553	.2580"	3-1/4"	1-1/8"	.625"	6	39.10	37.40	35.70	34.00
95837	.2590	6.579	.2590"	3-1/4"	1-1/8"	.625"	6	39.10	37.40	35.70	34.00
95840	.2600	6.604	.2600"	3-1/4"	1-1/8"	.625"	6	39.10	37.40	35.70	34.00
95843	.2610	G 6.629	.2610"	3-1/4"	1-1/8"	.625"	6	39.10	37.40	35.70	34.00
95846	.2620	6.655	.2620"	3-1/4"	1-1/8"	.625"	6	39.10	37.40	35.70	34.00
95849	.2630	6.680	.2630"	3-1/4"	1-1/8"	.625"	6	39.10	37.40	35.70	34.00
95852	.2640	6.706	.2640"	3-1/4"	1-1/8"	.625"	6	39.10	37.40	35.70	34.00

continued →

Series 4100 (continued)

.2650" - .3070"
(6.731mm - 7.798mm)

EDP#	d_1 † Diameter		d_2 Shank Diameter	l_1 Overall Length	l_2 Flute Length	l_3 Neck Length	Number Flutes	1-11	12-24	25-49	50-100	
	Decimal	Metric										
95855	.2650		6.731	.2650"	3-1/4"	1-1/8"	.625"	6	39.10	37.40	35.70	34.00
95858	.2656	17/64"	6.746	.2656"	3-1/4"	1-1/8"	.625"	6	39.10	37.40	35.70	34.00
95861	.2660	H	6.756	.2660"	3-1/4"	1-1/8"	.625"	6	39.10	37.40	35.70	34.00
95864	.2670		6.782	.2670"	3-1/4"	1-1/8"	.625"	6	39.10	37.40	35.70	34.00
95867	.2680		6.807	.2680"	3-1/4"	1-1/8"	.625"	6	39.10	37.40	35.70	34.00
95870	.2690		6.833	.2690"	3-1/4"	1-1/8"	.625"	6	39.10	37.40	35.70	34.00
95873	.2700		6.858	.2700"	3-1/4"	1-1/8"	.625"	6	39.10	37.40	35.70	34.00
95876	.2710		6.883	.2710"	3-1/4"	1-1/8"	.625"	6	39.10	37.40	35.70	34.00
95879	.2720	I	6.909	.2720"	3-1/4"	1-1/8"	.750"	6	39.48	37.76	36.05	34.33
95882	.2730		6.934	.2730"	3-1/4"	1-1/8"	.750"	6	39.48	37.76	36.05	34.33
95885	.2740		6.960	.2740"	3-1/4"	1-1/8"	.750"	6	39.48	37.76	36.05	34.33
95888	.2750		6.985	.2750"	3-1/4"	1-1/8"	.750"	6	39.48	37.76	36.05	34.33
95891	.2756		7.000	.2756"	3-1/4"	1-1/8"	.750"	6	39.48	37.76	36.05	34.33
95894	.2760		7.010	.2760"	3-1/4"	1-1/8"	.750"	6	39.48	37.76	36.05	34.33
95897	.2770	J	7.036	.2770"	3-1/4"	1-1/8"	.750"	6	39.48	37.76	36.05	34.33
95900	.2780		7.061	.2780"	3-1/4"	1-1/8"	.750"	6	39.48	37.76	36.05	34.33
95903	.2790		7.087	.2790"	3-1/4"	1-1/8"	.750"	6	39.48	37.76	36.05	34.33
95906	.2800		7.112	.2800"	3-1/4"	1-1/8"	.750"	6	39.48	37.76	36.05	34.33
95909	.2810	K	7.137	.2810"	3-1/4"	1-1/8"	.750"	6	39.48	37.76	36.05	34.33
95912	.2812	9/32"	7.142	.2812"	3-1/4"	1-1/8"	.750"	6	39.48	37.76	36.05	34.33
95915	.2820		7.163	.2820"	3-1/4"	1-1/8"	.750"	6	42.73	40.88	39.02	37.16
95918	.2830		7.188	.2830"	3-1/4"	1-1/8"	.750"	6	42.73	40.88	39.02	37.16
95921	.2840		7.214	.2840"	3-1/4"	1-1/8"	.750"	6	42.73	40.88	39.02	37.16
95924	.2850		7.239	.2850"	3-1/4"	1-1/8"	.750"	6	42.73	40.88	39.02	37.16
95927	.2860		7.264	.2860"	3-1/4"	1-1/8"	.750"	6	42.73	40.88	39.02	37.16
95930	.2870		7.290	.2870"	3-1/4"	1-1/8"	.750"	6	42.73	40.88	39.02	37.16
95933	.2880		7.315	.2880"	3-1/4"	1-1/8"	.750"	6	42.73	40.88	39.02	37.16
95936	.2890		7.341	.2890"	3-1/4"	1-1/8"	.750"	6	43.06	41.18	39.31	37.44
95939	.2900	L	7.366	.2900"	3-1/4"	1-1/8"	.750"	6	43.06	41.18	39.31	37.44
95942	.2910		7.391	.2910"	3-1/4"	1-1/8"	.750"	6	43.06	41.18	39.31	37.44
95945	.2920		7.417	.2920"	3-1/4"	1-1/8"	.750"	6	43.06	41.18	39.31	37.44
95948	.2930		7.442	.2930"	3-1/4"	1-1/8"	.750"	6	43.06	41.18	39.31	37.44
95951	.2940		7.468	.2940"	3-1/4"	1-1/8"	.750"	6	43.06	41.18	39.31	37.44
95954	.2950	M	7.493	.2950"	3-1/4"	1-1/8"	.750"	6	43.06	41.18	39.31	37.44
95957	.2953		7.500	.2953"	3-1/4"	1-1/8"	.750"	6	43.06	41.18	39.31	37.44
95960	.2960		7.518	.2960"	3-1/4"	1-1/8"	.750"	6	43.06	41.18	39.31	37.44
95963	.2969	19/64"	7.541	.2969"	3-1/4"	1-1/8"	.750"	6	43.06	41.18	39.31	37.44
95966	.2970		7.544	.2970"	3-1/4"	1-1/8"	.750"	6	43.06	41.18	39.31	37.44
95969	.2980		7.569	.2980"	3-1/4"	1-1/8"	.750"	6	43.06	41.18	39.31	37.44
95972	.2990		7.595	.2990"	3-1/4"	1-1/8"	.750"	6	43.06	41.18	39.31	37.44
95975	.3000		7.620	.3000"	3-1/4"	1-1/8"	.750"	6	43.06	41.18	39.31	37.44
95978	.3010		7.645	.3010"	3-1/4"	1-1/8"	.750"	6	43.06	41.18	39.31	37.44
95981	.3020	N	7.671	.3020"	3-1/4"	1-1/8"	.750"	6	43.06	41.18	39.31	37.44
95984	.3030		7.696	.3030"	3-1/4"	1-1/8"	.750"	6	43.06	41.18	39.31	37.44
95987	.3040		7.722	.3040"	3-1/4"	1-1/8"	.750"	6	43.06	41.18	39.31	37.44
95990	.3050		7.747	.3050"	3-1/4"	1-1/8"	.750"	6	43.06	41.18	39.31	37.44
95993	.3060		7.772	.3060"	3-1/4"	1-1/8"	.750"	6	43.06	41.18	39.31	37.44
95996	.3070		7.798	.3070"	3-1/4"	1-1/8"	.750"	6	43.06	41.18	39.31	37.44

EDP#	$d1$ † Diameter		$d2$ Shank Diameter	$l1$ Overall Length	$l2$ Flute Length	$l3$ Neck Length	Number Flutes	1-11	12-24	25-49	50-100	
	Decimal	Metric										
95999	.3080		7.823	.3080"	3-1/4"	1-1/8"	.750"	6	43.06	41.18	39.31	37.44
96002	.3090		7.849	.3090"	3-1/4"	1-1/8"	.750"	6	43.06	41.18	39.31	37.44
96005	.3100		7.874	.3100"	3-1/4"	1-1/8"	.750"	6	43.06	41.18	39.31	37.44
96006	.3105		7.887	.3105"	3-1/4"	1-1/8"	.750"	6	43.06	41.18	39.31	37.44
96008	.3110		7.899	.3110"	3-1/4"	1-1/8"	.750"	6	43.06	41.18	39.31	37.44
96011	.3115		7.912	.3115"	3-1/4"	1-1/8"	.750"	6	43.06	41.18	39.31	37.44
96014	.3120		7.925	.3120"	3-1/4"	1-1/8"	.750"	6	43.06	41.18	39.31	37.44
96015	.3123		7.932	.3123"	3-1/4"	1-1/8"	.750"	6	43.06	41.18	39.31	37.44
96017	.3125	5/16"	7.938	.3125"	3-1/4"	1-1/8"	.750"	6	43.06	41.18	39.31	37.44
96021	.3130		7.950	.3130"	3-1/4"	1-1/8"	.750"	6	43.06	41.18	39.31	37.44
96023	.3135		7.963	.3135"	3-1/4"	1-1/8"	.750"	6	43.06	41.18	39.31	37.44
96026	.3140		7.976	.3140"	3-1/4"	1-1/8"	.750"	6	43.06	41.18	39.31	37.44
96029	.3150		8.000	.3150"	3-1/4"	1-1/8"	.750"	6	43.06	41.18	39.31	37.44
96032	.3160	O	8.026	.3160"	3-1/4"	1-1/8"	.750"	6	43.06	41.18	39.31	37.44
96035	.3170		8.052	.3170"	3-1/4"	1-1/8"	.750"	6	43.06	41.18	39.31	37.44
96038	.3180		8.077	.3180"	3-1/4"	1-1/8"	.750"	6	43.06	41.18	39.31	37.44
96041	.3190		8.103	.3190"	3-1/2"	1-1/4"	.750"	6	53.05	50.74	48.44	46.13
96044	.3200		8.128	.3200"	3-1/2"	1-1/4"	.750"	6	53.05	50.74	48.44	46.13
96047	.3210		8.153	.3210"	3-1/2"	1-1/4"	.750"	6	53.05	50.74	48.44	46.13
96050	.3220		8.179	.3220"	3-1/2"	1-1/4"	.750"	6	53.05	50.74	48.44	46.13
96053	.3230	P	8.204	.3230"	3-1/2"	1-1/4"	.750"	6	53.05	50.74	48.44	46.13
96056	.3240		8.230	.3240"	3-1/2"	1-1/4"	.750"	6	53.05	50.74	48.44	46.13
96059	.3250		8.255	.3250"	3-1/2"	1-1/4"	.750"	6	53.05	50.74	48.44	46.13
96062	.3260		8.280	.3260"	3-1/2"	1-1/4"	.750"	6	53.05	50.74	48.44	46.13
96065	.3270		8.306	.3270"	3-1/2"	1-1/4"	.750"	6	53.05	50.74	48.44	46.13
96068	.3280		8.331	.3280"	3-1/2"	1-1/4"	.750"	6	53.05	50.74	48.44	46.13
96071	.3281	21/64"	8.334	.3281"	3-1/2"	1-1/4"	.750"	6	53.05	50.74	48.44	46.13
96074	.3290		8.357	.3290"	3-1/2"	1-1/4"	.750"	6	53.05	50.74	48.44	46.13
96077	.3300		8.382	.3300"	3-1/2"	1-1/4"	.750"	6	53.05	50.74	48.44	46.13
96079	.3310		8.407	.3310"	3-1/2"	1-1/4"	.750"	6	53.05	50.74	48.44	46.13
96083	.3320	Q	8.433	.3320"	3-1/2"	1-1/4"	.750"	6	53.05	50.74	48.44	46.13
96086	.3330		8.458	.3330"	3-1/2"	1-1/4"	.750"	6	53.05	50.74	48.44	46.13
96089	.3340		8.484	.3340"	3-1/2"	1-1/4"	.750"	6	53.05	50.74	48.44	46.13
96092	.3346		8.500	.3346"	3-1/2"	1-1/4"	.750"	6	53.05	50.74	48.44	46.13
96095	.3350		8.509	.3350"	3-1/2"	1-1/4"	.750"	6	53.05	50.74	48.44	46.13
96098	.3360		8.534	.3360"	3-1/2"	1-1/4"	.750"	6	53.05	50.74	48.44	46.13
96101	.3370		8.560	.3370"	3-1/2"	1-1/4"	.750"	6	53.05	50.74	48.44	46.13
96104	.3380		8.585	.3380"	3-1/2"	1-1/4"	.750"	6	53.05	50.74	48.44	46.13
96107	.3390	R	8.611	.3390"	3-1/2"	1-1/4"	.750"	6	53.05	50.74	48.44	46.13
96110	.3400		8.636	.3400"	3-1/2"	1-1/4"	.750"	6	53.05	50.74	48.44	46.13
96113	.3410		8.661	.3410"	3-1/2"	1-1/4"	.750"	6	53.05	50.74	48.44	46.13
96116	.3420		8.687	.3420"	3-1/2"	1-1/4"	.750"	6	56.17	53.72	51.28	48.84
96119	.3430		8.712	.3430"	3-1/2"	1-1/4"	.750"	6	56.17	53.72	51.28	48.84
96122	.3438	11/32"	8.733	.3438"	3-1/2"	1-1/4"	.750"	6	56.17	53.72	51.28	48.84
96125	.3440		8.738	.3440"	3-1/2"	1-1/4"	.750"	6	56.17	53.72	51.28	48.84
96128	.3450		8.763	.3450"	3-1/2"	1-1/4"	.750"	6	56.17	53.72	51.28	48.84
96131	.3460		8.788	.3460"	3-1/2"	1-1/4"	.750"	6	56.17	53.72	51.28	48.84
96134	.3470		8.814	.3470"	3-1/2"	1-1/4"	.750"	6	56.17	53.72	51.28	48.84

continued →

Series 4100 (continued)

.3480" - .3810"
(8.839mm - 9.677mm)



TECH
PAGES
312-313

TOLERANCES

d_1	.0590" - .2509" (1.498 - 6.372mm)	+ .0002" - .0000" (+.0050 - .0000mm)
	.2510" - .5020" (6.375 - 12.750mm)	+ .0003" - .0000" (+.0075 - .0000mm)
d_2	.0590" - .2509" (1.498 - 6.372mm)	+ .0002" - .0000" (+.0050 - .0000mm)
	.2510" - .5020" (6.375 - 12.750mm)	+ .0003" - .0000" (+.0075 - .0000mm)



Solid Carbide Submicron Grain

Neck diameter is .010" $\pm$.002" less than (d_1) fluted diameter

EDP#	d_1 † Diameter		Metric	d_2 Shank Diameter	l_1 Overall Length	l_2 Flute Length	l_3 Neck Length	Number Flutes	1-11	12-24	25-49	50-100
	Decimal											
96137	.3480	S	8.839	.3480"	3-1/2"	1-1/4"	.750"	6	56.17	53.72	51.28	48.84
96141	.3490		8.865	.3490"	3-1/2"	1-1/4"	.750"	6	56.17	53.72	51.28	48.84
96143	.3500		8.890	.3500"	3-1/2"	1-1/4"	.750"	6	56.17	53.72	51.28	48.84
96146	.3510		8.915	.3510"	3-1/2"	1-1/4"	.750"	6	56.17	53.72	51.28	48.84
96149	.3520		8.941	.3520"	3-1/2"	1-1/4"	.750"	6	56.17	53.72	51.28	48.84
96152	.3530		8.966	.3530"	3-1/2"	1-1/4"	.750"	6	56.17	53.72	51.28	48.84
96155	.3540		8.992	.3540"	3-1/2"	1-1/4"	.750"	6	56.17	53.72	51.28	48.84
96158	.3543		9.000	.3543"	3-1/2"	1-1/4"	.750"	6	56.17	53.72	51.28	48.84
96161	.3550		9.017	.3550"	3-1/2"	1-1/4"	.750"	6	56.17	53.72	51.28	48.84
96164	.3560		9.042	.3560"	3-1/2"	1-1/4"	.750"	6	56.17	53.72	51.28	48.84
96167	.3570		9.068	.3570"	3-1/2"	1-1/4"	.750"	6	56.17	53.72	51.28	48.84
96170	.3580	T	9.093	.3580"	3-1/2"	1-1/4"	.750"	6	56.17	53.72	51.28	48.84
96173	.3590		9.119	.3590"	3-1/2"	1-1/4"	.750"	6	56.17	53.72	51.28	48.84
96176	.3594	23/64"	9.129	.3594"	3-1/2"	1-1/4"	.750"	6	56.17	53.72	51.28	48.84
96179	.3600		9.144	.3600"	3-1/2"	1-1/4"	.750"	6	56.17	53.72	51.28	48.84
96182	.3610		9.169	.3610"	3-1/2"	1-1/4"	.750"	6	56.17	53.72	51.28	48.84
96185	.3620		9.195	.3620"	3-1/2"	1-1/4"	.750"	6	56.17	53.72	51.28	48.84
96191	.3640		9.246	.3640"	3-1/2"	1-1/4"	.750"	6	57.87	55.35	52.84	50.32
96194	.3650		9.271	.3650"	3-1/2"	1-1/4"	.750"	6	57.87	55.35	52.84	50.32
96197	.3660		9.296	.3660"	3-1/2"	1-1/4"	.750"	6	57.87	55.35	52.84	50.32
96199	.3670		9.322	.3670"	3-1/2"	1-1/4"	.750"	6	57.87	55.35	52.84	50.32
96203	.3680	U	9.347	.3680"	3-1/2"	1-1/4"	.750"	6	57.87	55.35	52.84	50.32
96206	.3690		9.373	.3690"	3-1/2"	1-1/4"	.750"	6	57.87	55.35	52.84	50.32
96209	.3700		9.398	.3700"	3-1/2"	1-1/4"	.750"	6	57.87	55.35	52.84	50.32
96212	.3710		9.423	.3710"	3-1/2"	1-1/4"	.750"	6	57.87	55.35	52.84	50.32
96215	.3720		9.449	.3720"	3-1/2"	1-1/4"	.750"	6	57.87	55.35	52.84	50.32
96218	.3730		9.474	.3730"	3-1/2"	1-1/4"	.750"	6	57.87	55.35	52.84	50.32
96221	.3740		9.500	.3740"	3-1/2"	1-1/4"	.750"	6	57.87	55.35	52.84	50.32
96224	.3745		9.512	.3745"	3-1/2"	1-1/4"	.750"	6	57.87	55.35	52.84	50.32
96225	.3748		9.520	.3748"	3-1/2"	1-1/4"	.750"	6	57.87	55.35	52.84	50.32
96227	.3750	3/8"	9.525	.3750"	3-1/2"	1-1/4"	.750"	6	57.87	55.35	52.84	50.32
96230	.3755		9.538	.3755"	3-1/2"	1-1/4"	.750"	6	57.87	55.35	52.84	50.32
96233	.3760		9.550	.3760"	3-1/2"	1-1/4"	.750"	6	57.87	55.35	52.84	50.32
96236	.3765		9.563	.3765"	3-1/2"	1-1/4"	.750"	6	57.87	55.35	52.84	50.32
96239	.3770	V	9.576	.3770"	3-1/2"	1-1/4"	.750"	6	57.87	55.35	52.84	50.32
96242	.3780		9.601	.3780"	3-1/2"	1-1/4"	.750"	6	67.86	64.91	61.96	59.01
96245	.3790		9.627	.3790"	3-1/2"	1-1/4"	.750"	6	67.86	64.91	61.96	59.01
96248	.3800		9.652	.3800"	3-1/2"	1-1/4"	.750"	6	67.86	64.91	61.96	59.01
96251	.3810		9.677	.3810"	3-1/2"	1-1/4"	.750"	6	67.86	64.91	61.96	59.01

EDP#	d_1 † Diameter		d_2 Shank Diameter	l_1 Overall Length	l_2 Flute Length	l_3 Neck Length	Number Flutes	1-11	12-24	25-49	50-100
	Decimal	Metric									
96254	.3820	9.703	.3820"	3-1/2"	1-1/4"	.750"	6	67.86	64.91	61.96	59.01
96257	.3830	9.728	.3830"	3-1/2"	1-1/4"	.750"	6	67.86	64.91	61.96	59.01
96260	.3840	9.754	.3840"	3-1/2"	1-1/4"	.750"	6	67.86	64.91	61.96	59.01
96263	.3850	9.779	.3850"	3-1/2"	1-1/4"	.750"	6	67.86	64.91	61.96	59.01
96266	.3860	W 9.804	.3860"	3-1/2"	1-1/4"	.750"	6	67.86	64.91	61.96	59.01
96269	.3870	9.830	.3870"	3-1/2"	1-1/4"	.750"	6	67.86	64.91	61.96	59.01
96272	.3880	9.855	.3880"	3-1/2"	1-1/4"	.750"	6	67.86	64.91	61.96	59.01
96275	.3890	9.881	.3890"	3-1/2"	1-1/4"	.750"	6	67.86	64.91	61.96	59.01
96278	.3900	9.906	.3900"	3-1/2"	1-1/4"	.750"	6	67.86	64.91	61.96	59.01
96281	.3906	25/64" 9.921	.3906"	3-1/2"	1-1/4"	.750"	6	67.86	64.91	61.96	59.01
96284	.3910	9.931	.3910"	3-1/2"	1-1/4"	.750"	6	67.86	64.91	61.96	59.01
96287	.3920	9.957	.3920"	3-1/2"	1-1/4"	.750"	6	67.86	64.91	61.96	59.01
96290	.3930	9.982	.3930"	3-1/2"	1-1/4"	.750"	6	67.86	64.91	61.96	59.01
96293	.3937	10.000	.3937"	3-1/2"	1-1/4"	.750"	6	70.27	67.21	64.16	61.10
96296	.3940	10.008	.3940"	3-1/2"	1-1/4"	.750"	6	70.27	67.21	64.16	61.10
96299	.3950	10.033	.3950"	3-1/2"	1-1/4"	.750"	6	70.27	67.21	64.16	61.10
96302	.3960	10.058	.3960"	3-1/2"	1-1/4"	.750"	6	70.27	67.21	64.16	61.10
96305	.3970	X 10.084	.3970"	3-1/2"	1-1/4"	.750"	6	70.27	67.21	64.16	61.10
96308	.3980	10.109	.3980"	3-1/2"	1-1/4"	.750"	6	70.27	67.21	64.16	61.10
96311	.3990	10.135	.3990"	3-1/2"	1-1/4"	.750"	6	70.27	67.21	64.16	61.10
96314	.4000	10.160	.4000"	3-1/2"	1-1/4"	.750"	6	70.27	67.21	64.16	61.10
96317	.4010	10.185	.4010"	3-1/2"	1-1/4"	.750"	6	70.27	67.21	64.16	61.10
96319	.4020	10.211	.4020"	3-1/2"	1-1/4"	.750"	6	70.27	67.21	64.16	61.10
96323	.4030	10.236	.4030"	3-1/2"	1-1/4"	.750"	6	70.27	67.21	64.16	61.10
96326	.4040	Y 10.262	.4040"	3-1/2"	1-1/4"	.750"	6	70.27	67.21	64.16	61.10
96329	.4050	10.287	.4050"	3-1/2"	1-1/4"	.750"	6	70.27	67.21	64.16	61.10
96332	.4060	10.312	.4060"	3-1/2"	1-1/4"	.750"	6	70.27	67.21	64.16	61.10
96335	.4062	13/32" 10.317	.4062"	3-1/2"	1-1/4"	.750"	6	70.27	67.21	64.16	61.10
96338	.4070	10.338	.4070"	3-1/2"	1-1/4"	.750"	6	70.27	67.21	64.16	61.10
96341	.4080	10.363	.4080"	3-1/2"	1-1/4"	.750"	6	70.27	67.21	64.16	61.10
96344	.4090	10.389	.4090"	3-1/2"	1-1/4"	.750"	6	70.27	67.21	64.16	61.10
96347	.4100	10.414	.4100"	3-1/2"	1-1/4"	.750"	6	70.27	67.21	64.16	61.10
96350	.4110	10.439	.4110"	3-1/2"	1-1/4"	.750"	6	72.73	69.56	66.40	63.24
96353	.4120	10.465	.4120"	3-1/2"	1-1/4"	.750"	6	72.73	69.56	66.40	63.24
96356	.4130	Z 10.490	.4130"	3-1/2"	1-1/4"	.750"	6	72.73	69.56	66.40	63.24
96359	.4134	10.500	.4134"	3-1/2"	1-1/4"	.750"	6	72.73	69.56	66.40	63.24
96362	.4140	10.516	.4140"	3-1/2"	1-1/4"	.750"	6	72.73	69.56	66.40	63.24
96365	.4150	10.541	.4150"	3-1/2"	1-1/4"	.750"	6	72.73	69.56	66.40	63.24
96366	.4160	10.566	.4160"	4"	1-3/8"	.750"	6	72.73	69.56	66.40	63.24
96367	.4170	10.592	.4170"	4"	1-3/8"	.750"	6	72.73	69.56	66.40	63.24
96369	.4190	10.643	.4190"	4"	1-3/8"	.750"	6	72.73	69.56	66.40	63.24
96374	.4210	10.693	.4210"	4"	1-3/8"	.750"	6	72.73	69.56	66.40	63.24
96377	.4219	27/64" 10.716	.4219"	4"	1-3/8"	.750"	6	72.73	69.56	66.40	63.24
96380	.4220	10.719	.4220"	4"	1-3/8"	.750"	6	72.73	69.56	66.40	63.24
96383	.4230	10.744	.4230"	4"	1-3/8"	.750"	6	72.73	69.56	66.40	63.24
96386	.4240	10.770	.4240"	4"	1-3/8"	.750"	6	72.73	69.56	66.40	63.24

continued →

Series 4100 (continued)

.4250" - .4724"
(10.795mm - 12.000mm)

EDP#	d_1 † Diameter		d_2 Shank Diameter	l_1 Overall Length	l_2 Flute Length	l_3 Neck Length	Number Flutes	1-11	12-24	25-49	50-100
	Decimal	Metric									
96389	.4250	10.795	.4250"	4"	1-3/8"	.750"	6	72.73	69.56	66.40	63.24
96392	.4260	10.820	.4260"	4"	1-3/8"	.750"	6	72.73	69.56	66.40	63.24
96395	.4270	10.846	.4270"	4"	1-3/8"	.750"	6	72.73	69.56	66.40	63.24
96398	.4280	10.871	.4280"	4"	1-3/8"	.750"	6	72.73	69.56	66.40	63.24
96404	.4300	10.922	.4300"	4"	1-3/8"	.750"	6	72.73	69.56	66.40	63.24
96407	.4310	10.947	.4310"	4"	1-3/8"	.750"	6	72.73	69.56	66.40	63.24
96410	.4320	10.973	.4320"	4"	1-3/8"	.750"	6	72.73	69.56	66.40	63.24
96413	.4330	10.998	.4330"	4"	1-3/8"	.750"	6	72.73	69.56	66.40	63.24
96416	.4331	11.000	.4331"	4"	1-3/8"	.750"	6	72.73	69.56	66.40	63.24
96419	.4340	11.024	.4340"	4"	1-3/8"	.750"	6	72.73	69.56	66.40	63.24
96422	.4350	11.049	.4350"	4"	1-3/8"	.750"	6	72.73	69.56	66.40	63.24
96425	.4360	11.074	.4360"	4"	1-3/8"	.750"	6	72.73	69.56	66.40	63.24
96428	.4365	11.087	.4365"	4"	1-3/8"	.750"	6	72.73	69.56	66.40	63.24
96431	.4370	11.100	.4370"	4"	1-3/8"	.750"	6	72.73	69.56	66.40	63.24
96432	.4373	11.107	.4373"	4"	1-3/8"	.750"	6	72.73	69.56	66.40	63.24
96434	.4375	7/16"	.4375"	4"	1-3/8"	.750"	6	72.73	69.56	66.40	63.24
96437	.4380	11.125	.4380"	4"	1-3/8"	.750"	6	77.96	74.57	71.18	67.79
96440	.4385	11.138	.4385"	4"	1-3/8"	.750"	6	77.96	74.57	71.18	67.79
96443	.4390	11.151	.4390"	4"	1-3/8"	.750"	6	77.96	74.57	71.18	67.79
96446	.4400	11.176	.4400"	4"	1-3/8"	.750"	6	77.96	74.57	71.18	67.79
96449	.4410	11.201	.4410"	4"	1-3/8"	.750"	6	77.96	74.57	71.18	67.79
96455	.4430	11.252	.4430"	4"	1-3/8"	.750"	6	77.96	74.57	71.18	67.79
96458	.4440	11.278	.4440"	4"	1-3/8"	.750"	6	77.96	74.57	71.18	67.79
96461	.4450	11.303	.4450"	4"	1-3/8"	.750"	6	77.96	74.57	71.18	67.79
96467	.4470	11.354	.4470"	4"	1-3/8"	.750"	6	77.96	74.57	71.18	67.79
96470	.4480	11.379	.4480"	4"	1-3/8"	.750"	6	77.96	74.57	71.18	67.79
96473	.4490	11.405	.4490"	4"	1-3/8"	.750"	6	77.96	74.57	71.18	67.79
96476	.4500	11.430	.4500"	4"	1-3/8"	.750"	6	77.96	74.57	71.18	67.79
96479	.4510	11.455	.4510"	4"	1-3/8"	.750"	6	77.96	74.57	71.18	67.79
96485	.4528	11.500	.4528"	4"	1-3/8"	.750"	6	77.96	74.57	71.18	67.79
96488	.4530	11.506	.4530"	4"	1-3/8"	.750"	6	77.96	74.57	71.18	67.79
96491	.4531	29/64"	.4531"	4"	1-3/8"	.750"	6	77.96	74.57	71.18	67.79
96494	.4540	11.532	.4540"	4"	1-3/8"	.750"	6	77.96	74.57	71.18	67.79
96497	.4550	11.557	.4550"	4"	1-3/8"	.750"	6	77.96	74.57	71.18	67.79
96500	.4560	11.582	.4560"	4"	1-3/8"	.750"	6	77.96	74.57	71.18	67.79
96503	.4570	11.608	.4570"	4"	1-3/8"	.750"	6	77.96	74.57	71.18	67.79
96506	.4580	11.633	.4580"	4"	1-3/8"	.750"	6	77.96	74.57	71.18	67.79
96512	.4600	11.684	.4600"	4"	1-3/8"	.750"	6	77.96	74.57	71.18	67.79
96515	.4610	11.709	.4610"	4"	1-3/8"	.750"	6	80.30	76.81	73.32	69.83
96527	.4650	11.811	.4650"	4"	1-3/8"	.750"	6	80.30	76.81	73.32	69.83
96530	.4660	11.836	.4660"	4"	1-3/8"	.750"	6	80.30	76.81	73.32	69.83
96533	.4670	11.862	.4670"	4"	1-3/8"	.750"	6	80.30	76.81	73.32	69.83
96539	.4688	15/32"	.4688"	4"	1-3/8"	.750"	6	80.30	76.81	73.32	69.83
96542	.4690	11.913	.4690"	4"	1-3/8"	.750"	6	80.30	76.81	73.32	69.83
96545	.4700	11.938	.4700"	4"	1-1/2"	.750"	6	80.30	76.81	73.32	69.83
96548	.4710	11.963	.4710"	4"	1-1/2"	.750"	6	80.30	76.81	73.32	69.83
96551	.4720	11.989	.4720"	4"	1-1/2"	.750"	6	80.30	76.81	73.32	69.83
96554	.4724	12.000	.4724"	4"	1-1/2"	.750"	6	80.30	76.81	73.32	69.83

EDP#	d_1 † Diameter		d_2 Shank Diameter	l_1 Overall Length	l_2 Flute Length	l_3 Neck Length	Number Flutes	1-11	12-24	25-49	50-100
	Decimal	Metric									
96557	.4730	12.014	.4730"	4"	1-1/2"	.750"	6	80.30	76.81	73.32	69.83
96561	.4740	12.040	.4740"	4"	1-1/2"	.750"	6	80.30	76.81	73.32	69.83
96563	.4750	12.065	.4750"	4"	1-1/2"	.750"	6	80.30	76.81	73.32	69.83
96566	.4760	12.090	.4760"	4"	1-1/2"	.750"	6	80.30	76.81	73.32	69.83
96569	.4770	12.116	.4770"	4"	1-1/2"	.750"	6	80.30	76.81	73.32	69.83
96572	.4780	12.141	.4780"	4"	1-1/2"	.750"	6	80.30	76.81	73.32	69.83
96578	.4800	12.192	.4800"	4"	1-1/2"	.750"	6	82.05	78.49	74.92	71.35
96581	.4810	12.217	.4810"	4"	1-1/2"	.750"	6	82.05	78.49	74.92	71.35
96584	.4820	12.243	.4820"	4"	1-1/2"	.750"	6	82.05	78.49	74.92	71.35
96590	.4840	12.294	.4840"	4"	1-1/2"	.750"	6	82.05	78.49	74.92	71.35
96593	.4844 31/64"	12.304	.4844"	4"	1-1/2"	.750"	6	82.05	78.49	74.92	71.35
96596	.4850	12.319	.4850"	4"	1-1/2"	.750"	6	82.05	78.49	74.92	71.35
96602	.4870	12.370	.4870"	4"	1-1/2"	.750"	6	82.05	78.49	74.92	71.35
96608	.4890	12.421	.4890"	4"	1-1/2"	.750"	6	82.05	78.49	74.92	71.35
96617	.4920	12.497	.4920"	4"	1-1/2"	.750"	6	82.05	78.49	74.92	71.35
96620	.4921	12.500	.4921"	4"	1-1/2"	.750"	6	82.05	78.49	74.92	71.35
96623	.4930	12.522	.4930"	4"	1-1/2"	.750"	6	82.05	78.49	74.92	71.35
96629	.4950	12.573	.4950"	4"	1-1/2"	.750"	6	82.05	78.49	74.92	71.35
96632	.4960	12.598	.4960"	4"	1-1/2"	.750"	6	82.05	78.49	74.92	71.35
96635	.4970	12.624	.4970"	4"	1-1/2"	.750"	6	82.05	78.49	74.92	71.35
96638	.4980	12.649	.4980"	4"	1-1/2"	.750"	6	82.05	78.49	74.92	71.35
96641	.4990	12.675	.4990"	4"	1-1/2"	.750"	6	82.05	78.49	74.92	71.35
96644	.4995	12.687	.4995"	4"	1-1/2"	.750"	6	82.05	78.49	74.92	71.35
96645	.4998	12.695	.4998"	4"	1-1/2"	.750"	6	82.05	78.49	74.92	71.35
96647	.5000 1/2"	12.700	.5000"	4"	1-1/2"	.750"	6	82.05	78.49	74.92	71.35
96650	.5005	12.713	.5005"	4"	1-1/2"	.750"	6	82.05	78.49	74.92	71.35
96653	.5010	12.725	.5010"	4"	1-1/2"	.750"	6	82.05	78.49	74.92	71.35
96656	.5020	12.751	.5020"	4"	1-1/2"	.750"	6	82.05	78.49	74.92	71.35

Series 4100 (Metric)

1.990mm - 10.040mm
(.07835" - .39528")



TECH
PAGES
313

TOLERANCES

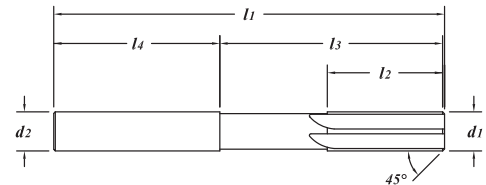
d_1	1.500 - 6.372mm	+0.005mm - .000
	6.375 - 12.750mm	+0.0075mm - .0000
d_2	1.500 - 6.372mm	+0.005mm - .000
	6.375 - 12.750mm	+0.0075mm - .0000

Solid Carbide Submicron Grain

Straight - RHC Flutes

Standard 45° Lead Chamfer

Neck diameter is 0.25mm $\pm$ 0.05 less than (d_1) fluted diameter



EDP#	d_1		d_2 Shank Diameter	l_1 Overall Length	l_2 Flute Length	l_3 Reach Length	l_4 Shank Length	Number Flutes	1-11	12-24	25-49	50-100
	Decimal	Metric										
96659	.07835	1.990	1.990	50	12	32	18	4	15.27	14.61	13.94	13.28
96662	.07874	2.000	2.000	50	12	32	18	4	15.27	14.61	13.94	13.28
96665	.07913	2.010	2.010	50	12	32	18	4	15.27	14.61	13.94	13.28
96668	.07953	2.020	2.020	50	12	32	18	4	15.27	14.61	13.94	13.28
96671	.11772	2.990	2.990	65	16	36	29	4	18.76	17.94	17.13	16.31
96674	.11811	3.000	3.000	65	16	36	29	4	18.76	17.94	17.13	16.31
96677	.11850	3.010	3.010	65	16	36	29	4	18.76	17.94	17.13	16.31
96680	.11890	3.020	3.020	65	16	36	29	4	18.76	17.94	17.13	16.31
96683	.15709	3.990	3.990	75	20	45	30	4	25.35	24.24	23.14	22.04
96686	.15748	4.000	4.000	75	20	45	30	4	25.35	24.24	23.14	22.04
96689	.15787	4.010	4.010	75	20	45	30	4	25.35	24.24	23.14	22.04
96692	.15827	4.020	4.020	75	20	45	30	4	25.35	24.24	23.14	22.04
96695	.15866	4.030	4.030	75	20	45	30	4	25.35	24.24	23.14	22.04
96698	.19646	4.990	4.990	100	25	60	40	4	32.45	31.04	29.63	28.22
96701	.19685	5.000	5.000	100	25	60	40	4	32.45	31.04	29.63	28.22
96704	.19724	5.010	5.010	100	25	60	40	4	32.45	31.04	29.63	28.22
96707	.19764	5.020	5.020	100	25	60	40	4	32.45	31.04	29.63	28.22
96710	.19803	5.030	5.030	100	25	60	40	4	32.45	31.04	29.63	28.22
96713	.23583	5.990	5.990	100	25	60	40	4	39.41	37.70	35.98	34.27
96716	.23622	6.000	6.000	100	25	60	40	4	39.41	37.70	35.98	34.27
96719	.23661	6.010	6.010	100	25	60	40	4	39.41	37.70	35.98	34.27
96722	.23701	6.020	6.020	100	25	60	40	4	39.41	37.70	35.98	34.27
96725	.27559	7.000	7.000	100	25	60	40	6	45.47	43.49	41.52	39.54
96728	.31457	7.990	7.990	120	32	75	45	6	54.68	52.31	49.93	47.55
96731	.31496	8.000	8.000	120	32	75	45	6	54.68	52.31	49.93	47.55
96734	.31535	8.010	8.010	120	32	75	45	6	54.68	52.31	49.93	47.55
96737	.31575	8.020	8.020	120	32	75	45	6	54.68	52.31	49.93	47.55
96740	.31614	8.030	8.030	120	32	75	45	6	54.68	52.31	49.93	47.55
96743	.35433	9.000	9.000	120	32	75	45	6	68.84	65.85	62.85	59.86
96746	.39291	9.980	9.980	130	32	75	55	6	80.83	77.32	73.80	70.29
96749	.39331	9.990	9.990	130	32	75	55	6	80.83	77.32	73.80	70.29
96752	.39370	10.000	10.000	130	32	75	55	6	85.05	81.36	77.66	73.96
96755	.39409	10.010	10.010	130	32	75	55	6	85.05	81.36	77.66	73.96
96758	.39449	10.020	10.020	130	32	75	55	6	85.05	81.36	77.66	73.96
96761	.39488	10.030	10.030	130	32	75	55	6	85.05	81.36	77.66	73.96
96764	.39528	10.040	10.040	130	32	75	55	6	85.05	81.36	77.66	73.96

EDP#	d_1		d_2	l_1	l_2	l_3	l_4	Number Flutes	1-11	12-24	25-49	50-100
	Decimal	Metric	Shank Diameter	Overall Length	Flute Length	Reach Length	Shank Length					
96767	.47165	11.980	11.980	150	40	100	50	6	97.38	93.15	88.91	84.68
96770	.47205	11.990	11.990	150	40	100	50	6	97.38	93.15	88.91	84.68
96773	.47244	12.000	12.000	150	40	100	50	6	97.38	93.15	88.91	84.68
96776	.47283	12.010	12.010	150	40	100	50	6	97.38	93.15	88.91	84.68
96779	.47323	12.020	12.020	150	40	100	50	6	97.38	93.15	88.91	84.68
96782	.47362	12.030	12.030	150	40	100	50	6	97.38	93.15	88.91	84.68



Reamer Manufacturing



LHS / RHC

STR / RHC

RHS / RHC

Special Reamers - Solid Carbide - 2 Week Delivery

Solid Carbide Submicron Grain

All reamers furnished with a standard 45° Lead Chamfer

All reamers furnished with a standard neck for reach

Neck diameter is .010" ±.002" less than fluted diameter

Diameter		Overall Length	Flute Length	No. of Flutes
Decimal	Metric			
.0590" - .0650"	1.499 - 1.651	1-1/2"	3/8"	4
.0660" - .0800"	1.676 - 2.032	1-3/4"	1/2"	4
.0810" - .0950"	2.057 - 2.413	2"	1/2"	4
.0960" - .1300"	2.438 - 3.302	2-1/4"	5/8"	4
.1310" - .1590"	3.327 - 4.039	2-1/2"	3/4"	4
.1600" - .1950"	4.064 - 4.953	2-3/4"	7/8"	4
.1960" - .2540"	4.978 - 6.452	3"	1"	4
.2550" - .3180"	6.477 - 8.077	3-1/4"	1-1/8"	6
.3190" - .4150"	8.103 - 10.541	3-1/2"	1-1/4"	6
.4160" - .4690"	10.566 - 11.913	4"	1-3/8"	6
.4700" - .5020"	11.938 - 12.751	4"	1-1/2"	6
.5030" - .5700"	12.776 - 14.478	4"	1-5/8"	6
.5710" - .7500"	14.503 - 19.050	4"	1-3/4"	6