



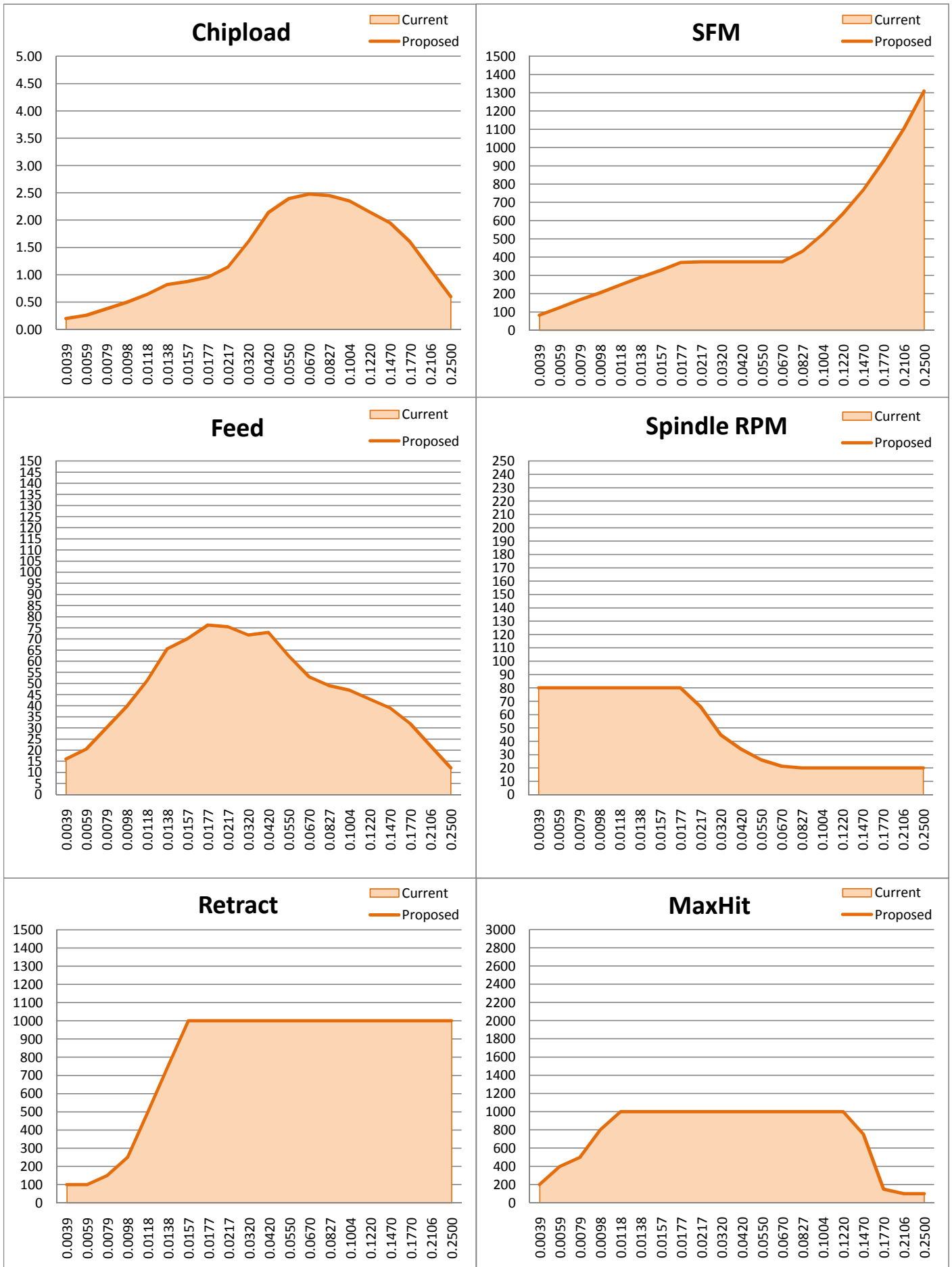
Application:	
Material Type:	High Speed Low Loss
Drill Designs:	MDBT, UCMT/UCCP, WTCB

Process Parameters:	
Cutting Speed (SFM)	375
Maximum Chipload (0.001"/Revolution)	2.48
Maximum Hit Count	1000
Maximum Spindle RPM	80
Minimum Spindle RPM	20
Z-Offset (1-Point Clearance + Additional Depth; 2-Diameter)	1
Additional Depth (inch)	0.010
Maximum Drill Depth (Inch)	0.040

	Diameter		Chipload	SFM	Retract	MaxHit
1	0.0039	0.10MM	0.20		100	200
2	0.0059	#97 - 0.15MM	0.26		100	400
3	0.0079	#92 - 0.20MM	0.38		150	500
4	0.0098	0.25MM	0.50		250	800
5	0.0118	0.30MM	0.64		500	1000
6	0.0138	0.35MM	0.82		750	1000
7	0.0157	0.40MM	0.88		1000	1000
8	0.0177	0.45MM	0.95		1000	1000
9	0.0217	0.55MM	1.14		1000	1000
10	0.0320	#67	1.60		1000	1000
11	0.0420	#58	2.14		1000	1000
12	0.0550	#54	2.39		1000	1000
13	0.0670	#51	2.48		1000	1000
14	0.0827	2.10MM	2.45		1000	1000
15	0.1004	2.55MM	2.35		1000	1000
16	0.1220	3.10MM	2.15		1000	1000
17	0.1470	#26	1.95		1000	750
18	0.1770	#16	1.60		1000	150
19	0.2106	5.35MM	1.10		1000	100
20	0.2500	1/4 - 6.35MM	0.60		1000	100

# High Speed Low Loss

## MDBT, UCMT/UCCP, WTCB





## High Speed Low Loss MDBT, UCMT/UCCP, WTCB

Series	Diameter (in.)		Feed (IPM)	Speed (K-RPM)	Retract (IPM)	MaxHit	Z-offset (in.)	SFM	Chipload (0.001"/Rev.)
MDBT	0.0039	0.10MM	16	80	100	200	-0.011	82	0.20
	0.0051	0.13MM	19	80	100	325	-0.011	107	0.23
	0.0059	#97 - 0.15MM	20	80	100	400	-0.011	124	0.26
	0.0063	#96	22	80	110	425	-0.011	132	0.28
	0.0067	#95	24	80	120	450	-0.012	140	0.30
	0.0071	#94	26	80	130	475	-0.012	149	0.33
	0.0075	#93	28	80	140	500	-0.012	157	0.35
UCMT / UCCP	0.0079	#92 - 0.20MM	30	80	150	500	-0.012	165	0.38
	0.0083	#91	32	80	171	575	-0.012	174	0.40
	0.0087	#90	34	80	192	650	-0.012	182	0.43
	0.0091	#89	36	80	213	700	-0.012	191	0.45
	0.0095	#88	38	80	234	775	-0.012	199	0.48
	0.0098	0.25MM	40	80	250	800	-0.012	205	0.50
	0.0100	#87	41	80	275	825	-0.012	209	0.51
	0.0105	#86	44	80	338	875	-0.012	220	0.55
	0.0110	#85	47	80	400	925	-0.013	230	0.58
	0.0115	#84	49	80	463	975	-0.013	241	0.62
	0.0118	0.30MM	51	80	500	1000	-0.013	247	0.64
	0.0120	#83	53	80	525	1000	-0.013	251	0.66
	0.0125	#82	56	80	588	1000	-0.013	262	0.70
	0.0130	#81	60	80	650	1000	-0.013	272	0.75
	0.0135	#80	63	80	713	1000	-0.013	283	0.79
	0.0138	0.35MM	66	80	750	1000	-0.013	289	0.82
	0.0145	#79	67	80	842	1000	-0.013	304	0.84
	0.0156	1/64	70	80	987	1000	-0.014	327	0.87
	0.0157	0.40MM	70	80	1000	1000	-0.014	329	0.88
	0.0160	#78	71	80	1000	1000	-0.014	335	0.89
	0.0177	0.45MM	76	80	1000	1000	-0.014	371	0.95
	0.0180	#77	76	79	1000	1000	-0.014	371	0.97
	0.0197	0.50MM	76	72	1000	1000	-0.015	373	1.05
0.0200	#76	76	71	1000	1000	-0.015	373	1.06	
MDBT	0.0210	#75	76	68	1000	1000	-0.015	374	1.11
	0.0217	0.55MM	75	66	1000	1000	-0.015	375	1.14
	0.0225	#74	75	64	1000	1000	-0.015	375	1.18
	0.0236	0.60MM	75	61	1000	1000	-0.016	375	1.23



## High Speed Low Loss MDBT, UCMT/UCCP, WTCB

Series	Diameter (in.)		Feed (IPM)	Speed (K-RPM)	Retract (IPM)	MaxHit	Z-offset (in.)	SFM	Chipload (0.001"/Rev.)
MDBT	0.0240	#73	74	60	1000	1000	-0.016	375	1.25
	0.0250	#72	74	57	1000	1000	-0.016	375	1.29
	0.0256	0.65MM	74	56	1000	1000	-0.016	375	1.32
	0.0260	#71	74	55	1000	1000	-0.016	375	1.34
	0.0276	0.70MM	73	52	1000	1000	-0.016	375	1.41
	0.0280	#70	73	51	1000	1000	-0.017	375	1.43
	0.0292	#69	73	49	1000	1000	-0.017	375	1.48
	0.0295	0.75MM	72	49	1000	1000	-0.017	375	1.49
	0.0310	#68	72	46	1000	1000	-0.017	375	1.56
	0.0312	1/32	72	46	1000	1000	-0.017	375	1.57
	0.0315	0.80MM	72	45	1000	1000	-0.017	375	1.58
	0.0320	#67	72	45	1000	1000	-0.017	375	1.60
	0.0330	#66	72	43	1000	1000	-0.018	375	1.66
	0.0335	0.85MM	72	43	1000	1000	-0.018	375	1.68
	0.0350	#65	72	41	1000	1000	-0.018	375	1.76
	0.0354	0.90MM	72	40	1000	1000	-0.018	375	1.79
	0.0360	#64	72	40	1000	1000	-0.018	375	1.82
	0.0370	#63	72	39	1000	1000	-0.019	375	1.87
	0.0374	0.95MM	72	38	1000	1000	-0.019	375	1.89
	0.0380	#62	73	38	1000	1000	-0.019	375	1.93
	0.0390	#61	73	37	1000	1000	-0.019	375	1.98
	0.0394	1.00MM	73	36	1000	1000	-0.019	375	2.00
	0.0400	#60	73	36	1000	1000	-0.019	375	2.03
	0.0410	#59	73	35	1000	1000	-0.020	375	2.09
	0.0413	1.05MM	73	35	1000	1000	-0.020	375	2.10
	0.0420	#58	73	34	1000	1000	-0.020	375	2.14
	0.0430	#57	72	33	1000	1000	-0.020	375	2.16
	0.0433	1.10MM	72	33	1000	1000	-0.020	375	2.16
	0.0441	1.12MM	71	32	1000	1000	-0.020	375	2.18
	0.0453	1.15MM	70	32	1000	1000	-0.021	375	2.20
	0.0465	#56	69	31	1000	1000	-0.021	375	2.23
	0.0469	3/64	68	31	1000	1000	-0.021	375	2.23
0.0472	1.20MM	68	30	1000	1000	-0.021	375	2.24	
0.0492	1.25MM	66	29	1000	1000	-0.021	375	2.28	
0.0512	1.30MM	65	28	1000	1000	-0.022	375	2.32	



## High Speed Low Loss MDBT, UCMT/UCCP, WTCB

Series	Diameter (in.)		Feed (IPM)	Speed (K-RPM)	Retract (IPM)	MaxHit	Z-offset (in.)	SFM	Chipload (0.001"/Rev.)
MDBT	0.0520	#55	64	28	1000	1000	-0.022	375	2.33
	0.0531	1.35MM	64	27	1000	1000	-0.022	375	2.36
	0.0550	#54	62	26	1000	1000	-0.023	375	2.39
	0.0551	1.40MM	62	26	1000	1000	-0.023	375	2.39
	0.0571	1.45MM	60	25	1000	1000	-0.023	375	2.41
	0.0591	1.50MM	59	24	1000	1000	-0.024	375	2.42
	0.0595	#53	58	24	1000	1000	-0.024	375	2.42
	0.0610	1.55MM	57	23	1000	1000	-0.024	375	2.44
	0.0625	1/16	56	23	1000	1000	-0.025	375	2.45
	0.0630	1.60MM	56	23	1000	1000	-0.025	375	2.45
	0.0635	#52	55	23	1000	1000	-0.025	375	2.45
	0.0650	1.65MM	54	22	1000	1000	-0.025	375	2.46
	0.0669	1.70MM	53	21	1000	1000	-0.026	375	2.48
	0.0670	#51	53	21	1000	1000	-0.026	375	2.48
	0.0689	1.75MM	52	21	1000	1000	-0.026	382	2.47
	0.0700	#50	52	21	1000	1000	-0.026	386	2.47
	0.0709	1.80MM	52	21	1000	1000	-0.027	389	2.47
	0.0728	1.85MM	51	21	1000	1000	-0.027	396	2.47
	0.0730	#49	51	21	1000	1000	-0.027	397	2.47
	0.0748	1.90MM	51	21	1000	1000	-0.027	404	2.46
	0.0760	#48	51	21	1000	1000	-0.028	408	2.46
	0.0768	1.95MM	50	20	1000	1000	-0.028	411	2.46
	0.0781	5/64	50	20	1000	1000	-0.028	416	2.46
	0.0785	#47	50	20	1000	1000	-0.028	417	2.46
	0.0787	2.00MM	50	20	1000	1000	-0.028	418	2.46
	0.0807	2.05MM	49	20	1000	1000	-0.029	426	2.45
	0.0810	#46	49	20	1000	1000	-0.029	427	2.45
	0.0820	#45	49	20	1000	1000	-0.029	430	2.45
	0.0827	2.10MM	49	20	1000	1000	-0.029	433	2.45
	0.0846	2.15MM	49	20	1000	1000	-0.030	443	2.44
	0.0860	#44	49	20	1000	1000	-0.030	450	2.43
	0.0866	2.20MM	49	20	1000	1000	-0.030	453	2.43
	0.0886	2.25MM	48	20	1000	1000	-0.031	464	2.42
0.0890	#43	48	20	1000	1000	-0.031	466	2.41	
0.0906	2.30MM	48	20	1000	1000	-0.031	474	2.41	



## High Speed Low Loss MDBT, UCMT/UCCP, WTCB

Series	Diameter (in.)		Feed (IPM)	Speed (K-RPM)	Retract (IPM)	MaxHit	Z-offset (in.)	SFM	Chipload (0.001"/Rev.)
MDBT	0.0925	2.35MM	48	20	1000	1000	-0.032	484	2.39
	0.0935	#42	48	20	1000	1000	-0.032	490	2.39
	0.0938	3/32	48	20	1000	1000	-0.032	491	2.39
	0.0945	2.40MM	48	20	1000	1000	-0.032	495	2.38
	0.0960	#41	47	20	1000	1000	-0.032	503	2.37
	0.0965	2.45MM	47	20	1000	1000	-0.032	505	2.37
	0.0980	#40	47	20	1000	1000	-0.033	513	2.36
	0.0984	2.50MM	47	20	1000	1000	-0.033	515	2.36
	0.0995	#39	47	20	1000	1000	-0.033	521	2.36
	0.1004	2.55MM	47	20	1000	1000	-0.033	526	2.35
	0.1015	#38	47	20	1000	1000	-0.034	531	2.34
	0.1024	2.60MM	47	20	1000	1000	-0.034	536	2.33
	0.1040	#37	46	20	1000	1000	-0.034	545	2.32
	0.1043	2.65MM	46	20	1000	1000	-0.034	546	2.31
	0.1063	2.70MM	46	20	1000	1000	-0.035	557	2.30
	0.1065	#36	46	20	1000	1000	-0.035	558	2.29
	0.1083	2.75MM	46	20	1000	1000	-0.035	567	2.28
	0.1094	7/64	45	20	1000	1000	-0.036	573	2.27
	0.1100	#35	45	20	1000	1000	-0.036	576	2.26
	0.1102	2.80MM	45	20	1000	1000	-0.036	577	2.26
	0.1110	#34	45	20	1000	1000	-0.036	581	2.25
	0.1122	2.85MM	45	20	1000	1000	-0.036	587	2.24
	0.1130	#33	45	20	1000	1000	-0.036	592	2.23
	0.1142	2.90MM	44	20	1000	1000	-0.037	598	2.22
	0.1160	#32	44	20	1000	1000	-0.037	607	2.21
	0.1161	2.95MM	44	20	1000	1000	-0.037	608	2.20
	0.1181	3.00MM	44	20	1000	1000	-0.038	618	2.19
	0.1200	#31	43	20	1000	1000	-0.038	628	2.17
	0.1201	3.05MM	43	20	1000	1000	-0.038	629	2.17
	0.1220	3.10MM	43	20	1000	1000	-0.038	639	2.15
0.1240	3.15MM	43	20	1000	1000	-0.039	649	2.13	
0.1250	1/8	43	20	1000	975	-0.039	654	2.13	
WTCB	0.1260	3.20MM	42	20	1000	975	-0.018	660	2.12
	0.1280	3.25MM	42	20	1000	950	-0.018	670	2.10
	0.1285	#30	42	20	1000	950	-0.018	673	2.10



## High Speed Low Loss MDBT, UCMT/UCCP, WTCB

Series	Diameter		Feed	Speed	Retract	MaxHit	Z-offset	SFM	Chipload
	(in.)		(IPM)	(K-RPM)	(IPM)		(in.)		(0.001"/Rev.)
WTCB	0.1299	3.30MM	42	20	1000	925	-0.019	680	2.09
	0.1319	3.35MM	41	20	1000	925	-0.019	691	2.07
	0.1339	3.40MM	41	20	1000	900	-0.019	701	2.05
	0.1358	3.45MM	41	20	1000	875	-0.019	711	2.04
	0.1360	#29	41	20	1000	875	-0.019	712	2.04
	0.1378	3.50MM	40	20	1000	850	-0.019	722	2.02
	0.1398	3.55MM	40	20	1000	825	-0.019	732	2.01
	0.1405	#28	40	20	1000	825	-0.019	736	2.00
	0.1406	9/64	40	20	1000	825	-0.019	736	2.00
	0.1417	3.60MM	40	20	1000	825	-0.019	742	1.99
	0.1437	3.65MM	40	20	1000	800	-0.019	752	1.98
	0.1440	#27	39	20	1000	800	-0.019	754	1.97
	0.1457	3.70MM	39	20	1000	775	-0.020	763	1.96
	0.1470	#26	39	20	1000	750	-0.020	770	1.95
	0.1476	3.75MM	39	20	1000	750	-0.020	773	1.94
	0.1495	#25	38	20	1000	700	-0.020	783	1.92
	0.1496	3.80MM	38	20	1000	700	-0.020	783	1.92
	0.1516	3.85MM	38	20	1000	675	-0.020	794	1.90
	0.1520	#24	38	20	1000	650	-0.020	796	1.89
	0.1535	3.90MM	37	20	1000	625	-0.020	804	1.87
	0.1540	#23	37	20	1000	625	-0.020	806	1.87
	0.1555	3.95MM	37	20	1000	600	-0.020	814	1.85
	0.1562	5/32	37	20	1000	575	-0.020	818	1.84
	0.1570	#22	37	20	1000	550	-0.020	822	1.83
	0.1575	4.00MM	37	20	1000	550	-0.020	825	1.83
	0.1590	#21	36	20	1000	525	-0.020	833	1.81
	0.1594	4.05MM	36	20	1000	525	-0.020	835	1.81
	0.1610	#20	36	20	1000	475	-0.021	843	1.79
	0.1614	4.10MM	36	20	1000	475	-0.021	845	1.78
	0.1634	4.15MM	35	20	1000	425	-0.021	856	1.76
	0.1654	4.20MM	35	20	1000	400	-0.021	866	1.74
	0.1660	#19	35	20	1000	375	-0.021	869	1.73
0.1673	4.25MM	34	20	1000	350	-0.021	876	1.71	
0.1693	4.30MM	34	20	1000	325	-0.021	886	1.69	
0.1695	#18	34	20	1000	300	-0.021	887	1.69	



## High Speed Low Loss MDBT, UCMT/UCCP, WTCB

Series	Diameter (in.)		Feed (IPM)	Speed (K-RPM)	Retract (IPM)	MaxHit	Z-offset (in.)	SFM	Chipload (0.001"/Rev.)
WTCB	0.1713	4.35MM	33	20	1000	275	-0.021	897	1.67
	0.1719	11/64	33	20	1000	275	-0.021	900	1.66
	0.1730	#17	33	20	1000	250	-0.021	906	1.65
	0.1732	4.40MM	33	20	1000	250	-0.021	907	1.64
	0.1752	4.45MM	32	20	1000	200	-0.022	917	1.62
	0.1770	#16	32	20	1000	150	-0.022	927	1.60
	0.1772	4.50MM	32	20	1000	150	-0.022	928	1.60
	0.1791	4.55MM	31	20	1000	150	-0.022	938	1.57
	0.1800	#15	31	20	1000	150	-0.022	942	1.56
	0.1811	4.60MM	31	20	1000	150	-0.022	948	1.54
	0.1820	#14	31	20	1000	150	-0.022	953	1.53
	0.1831	4.65MM	30	20	1000	150	-0.022	959	1.51
	0.1850	4.70MM	30	20	1000	150	-0.022	969	1.48
	0.1870	4.75MM	29	20	1000	150	-0.022	979	1.45
	0.1875	3/16	29	20	1000	150	-0.022	982	1.44
	0.1890	#12 - 4.80MM	28	20	1000	150	-0.022	990	1.42
	0.1909	4.85MM	28	20	1000	150	-0.023	1000	1.39
	0.1910	#11	28	20	1000	150	-0.023	1000	1.39
	0.1929	4.90MM	27	20	1000	150	-0.023	1010	1.36
	0.1935	#10	27	20	1000	150	-0.023	1013	1.35
	0.1949	4.95MM	27	20	1000	125	-0.023	1020	1.33
	0.1960	#9	26	20	1000	125	-0.023	1026	1.32
	0.1969	5.00MM	26	20	1000	125	-0.023	1031	1.30
	0.1988	5.05MM	26	20	1000	125	-0.023	1041	1.28
	0.1990	#8	25	20	1000	125	-0.023	1042	1.27
	0.2008	5.10MM	25	20	1000	125	-0.023	1051	1.25
	0.2010	#7	25	20	1000	125	-0.023	1052	1.24
	0.2028	5.15MM	24	20	1000	125	-0.023	1062	1.22
	0.2031	13/64	24	20	1000	125	-0.023	1063	1.21
	0.2040	#6	24	20	1000	125	-0.023	1068	1.20
	0.2047	5.20MM	24	20	1000	125	-0.023	1072	1.19
	0.2055	#5	24	20	1000	125	-0.024	1076	1.18
	0.2067	5.25MM	23	20	1000	125	-0.024	1082	1.16
0.2087	5.30MM	23	20	1000	125	-0.024	1093	1.13	
0.2090	#4	22	20	1000	125	-0.024	1094	1.12	





## High Speed Low Loss MDBT, UCMT/UCCP, WTCB

Series	Diameter (in.)		Feed (IPM)	Speed (K-RPM)	Retract (IPM)	MaxHit	Z-offset (in.)	SFM	Chipload (0.001"/Rev.)
WTCB	0.2106	5.35MM	22	20	1000	100	-0.024	1103	1.10
	0.2126	5.40MM	21	20	1000	100	-0.024	1113	1.07
	0.2130	#3	21	20	1000	100	-0.024	1115	1.07
	0.2146	5.45MM	21	20	1000	100	-0.024	1124	1.05
	0.2165	5.50MM	21	20	1000	100	-0.024	1134	1.03
	0.2185	5.55MM	20	20	1000	100	-0.024	1144	1.00
	0.2188	7/32	20	20	1000	100	-0.024	1146	1.00
	0.2205	5.60MM	19	20	1000	100	-0.025	1155	0.97
	0.2210	#2	19	20	1000	100	-0.025	1157	0.97
	0.2224	5.65MM	19	20	1000	100	-0.025	1164	0.95
	0.2244	5.70MM	18	20	1000	100	-0.025	1175	0.92
	0.2264	5.75MM	18	20	1000	100	-0.025	1185	0.90
	0.2280	#1	18	20	1000	100	-0.025	1194	0.88
	0.2283	5.80MM	18	20	1000	100	-0.025	1195	0.88
	0.2303	5.85MM	17	20	1000	100	-0.025	1206	0.85
	0.2323	5.90MM	16	20	1000	100	-0.025	1216	0.82
	0.2340	#A	16	20	1000	100	-0.025	1225	0.80
	0.2343	5.95MM	16	20	1000	100	-0.025	1227	0.80
	0.2344	15/64	16	20	1000	100	-0.025	1227	0.80
	0.2362	6.00MM	16	20	1000	100	-0.026	1237	0.78
	0.2380	#B	15	20	1000	100	-0.026	1246	0.75
	0.2382	6.05MM	15	20	1000	100	-0.026	1247	0.75
	0.2402	6.10MM	14	20	1000	100	-0.026	1258	0.72
	0.2420	#C	14	20	1000	100	-0.026	1267	0.70
	0.2421	6.15MM	14	20	1000	100	-0.026	1268	0.70
	0.2441	6.20MM	13	20	1000	100	-0.026	1278	0.67
	0.2460	#D	13	20	1000	100	-0.026	1288	0.65
	0.2461	6.25MM	13	20	1000	100	-0.026	1289	0.65
	0.2480	6.30MM	13	20	1000	100	-0.026	1299	0.63
	0.2500	1/4 - 6.35MM	12	20	1000	100	-0.026	1309	0.60