



Niagara Cutter

S203 - 2 Flutes 30° Helix HSS Single-End Mill
for General Purpose
Center-Cutting

Designed for all Materials
Profile / Slotting / Pocket
Weldon Flat

Flute Diameter Tolerances : **+0.000"/-0.0015"**
Shank Diameter Tolerances : **-0.0001"/-0.0005"**
Overall Length Tolerances : **+0.062"/-0.000"**
Length of Cut Tolerances
[1/16",5/16"] **+0.031"/-0.000"**
[21/64",1"] **+0.031"/-0.000"**
Helix Angle : **30°**

Flute Diam.	Shank Diam.	Length Of Cut	Overall Length	#F	Uncoat	Suggested		
						TiN	TiCN	TiAlN
1/8	3/8	3/8	2-5/16	2	20041	20040	69000	67069
5/32	3/8	7/16	2-5/16	2	20051	20050	79400	67070
11/64	3/8	7/16	2-5/16	2	20059	20058	69001	67071
3/16	3/8	3/16	2-1/16	2	21061	21060	87921	17576
3/16	3/8	7/16	2-5/16	2	20061	20060	69002	67072
3/16	3/8	5/8	2-7/16	2	22061	22060	87941	14654
3/16	3/8	3/4	2-5/8	2	23061	23060	87985	52258
13/64	3/8	7/16	2-5/16	2	20069	20068	69003	67073
7/32	3/8	1/4	2-1/16	2	21071	21070	87922	17577
7/32	3/8	1/2	2-5/16	2	20071	20070	69004	67074
7/32	3/8	3/4	2-9/16	2	22071	22070	87942	14655
7/32	3/8	7/8	2-11/16	2	23071	23070	87986	52259
15/64	3/8	1/2	2-5/16	2	20079	20078	69005	67075
1/4	3/8	1/4	2-1/16	2	21081	21080	87923	17578
1/4	3/8	1/2	2-5/16	2	20081	20080	20084	67076
1/4	3/8	3/4	2-5/8	2	22081	22080	87943	14656
1/4	3/8	1	2-7/8	2	23081	23080	87987	52260
17/64	3/8	9/16	2-5/16	2	20089	20088	69006	67077
9/32	3/8	5/16	2-1/16	2	21091	21090	87924	17579
9/32	3/8	9/16	2-5/16	2	20091	20090	69007	67078
9/32	3/8	1	2-3/4	2	22091	22090	87944	14657
9/32	3/8	1-3/8	3-1/8	2	23091	23090	87988	52261
19/64	3/8	9/16	2-5/16	2	20099	20098	69008	67079
5/16	3/8	5/16	2-1/16	2	21101	21100	87925	17580
5/16	3/8	9/16	2-5/16	2	20101	20100	20104	67080
5/16	3/8	1	2-3/4	2	22101	22100	87945	14658



Niagara Cutter

S203 - 2 Flutes 30° Helix HSS Single-End Mill
for General Purpose
Center-Cutting

Flute Diam.	Shank Diam.	Overall Length	Length Of Cut	#F	Uncoat	Suggested		
						TiN	TiCN	TiAlN
5/16	3/8	1-3/8	3-1/8	2	23101	23100	87989	52262
21/64	3/8	9/16	2-5/16	2	20109	20108	69009	67081
11/32	3/8	3/8	2-1/8	2	21111	21110	87926	17581
11/32	3/8	9/16	2-5/16	2	20111	20110	69010	67082
11/32	3/8	1-1/8	2-7/8	2	22111	22110	87946	14659
11/32	3/8	1-1/2	3-1/4	2	23111	23110	87990	52263
23/64	3/8	9/16	2-5/16	2	20119	20118	69011	67083
3/8	3/8	3/8	2-1/8	2	21121	21120	87927	17582
3/8	3/8	9/16	2-5/16	2	20121	20120	20124	67084
3/8	3/8	1-1/8	2-7/8	2	22121	22120	87947	14660
3/8	3/8	1-1/2	3-1/4	2	23121	23120	87991	52264
25/64	3/8	13/16	2-1/2	2	20129	20128	69012	67085
13/32	3/8	7/16	2-1/8	2	21131	21130	87928	17583
13/32	3/8	13/16	2-1/2	2	20131	20130	69013	67086
13/32	3/8	1-3/8	3-1/16	2	22131	22130	87948	14661
13/32	3/8	2	3-11/16	2	23131	23130	87992	52265
27/64	3/8	13/16	2-1/2	2	20139	20138	69014	67087
7/16	3/8	7/16	2-1/8	2	21141	21140	87929	17584
7/16	3/8	13/16	2-1/2	2	20141	20140	69015	67088
7/16	3/8	1-3/8	3-1/16	2	22141	22140	87949	14662
7/16	3/8	2	3-11/16	2	23141	23140	87993	52266
29/64	3/8	13/16	2-1/2	2	20149	20148	69016	67089
15/32	3/8	1/2	2-3/16	2	21151	21150	87930	17585
15/32	3/8	13/16	2-1/2	2	20151	20150	69017	67090
15/32	3/8	1-1/2	3-3/16	2	22151	22150	87950	14663
15/32	3/8	2	3-11/16	2	23151	23150	87994	52267
31/64	3/8	13/16	2-1/2	2	20159	20158	69018	67091
1/2	3/8	13/16	2-1/2	2	20161	20167	69019	67092
1/2	1/2	1/2	2-1/2	2	21162	21160	87931	17586
1/2	1/2	1	3	2	20162	20160	20164	67093
1/2	1/2	1-1/2	3-1/2	2	22162	22160	87951	14664
1/2	1/2	2	4	2	23162	23160	87995	52268
33/64	1/2	1	3	2	20169	20168	69020	67094
17/32	1/2	5/8	2-5/8	2	21172	21170	87932	17587



Niagara Cutter

S203 - 2 Flutes 30° Helix HSS Single-End Mill
for General Purpose
Center-Cutting

Flute Diam.	Shank Diam.	Overall Length	Length Of Cut	#F	Uncoat	Suggested		
						TiN	TiCN	TiAlN
17/32	1/2	1-1/8	3-1/8	2	20172	20170	69021	67095
17/32	1/2	1-7/8	3-7/8	2	22172	22170	87952	14665
17/32	1/2	2-1/2	4-1/2	2	23172	23170	87996	52269
35/64	1/2	1-1/8	3-1/8	2	20179	20178	69022	67096
9/16	1/2	5/8	2-5/8	2	21182	21180	87933	17588
9/16	1/2	1-1/8	3-1/8	2	20182	20180	69023	67097
9/16	1/2	1-7/8	3-7/8	2	22182	22180	87953	14666
9/16	1/2	2-1/2	4-1/2	2	23182	23180	87997	52270
37/64	1/2	1-1/8	3-1/8	2	20189	20188	69024	67098
19/32	1/2	1-1/8	3-1/8	2	20192	20190	69025	67099
39/64	5/8	1-5/16	3-7/16	2	20199	20198	69026	67100
5/8	1/2	1-1/8	3-1/8	2	20202	20207	69027	67101
5/8	5/8	5/8	2-3/4	2	21203	21200	87934	17589
5/8	5/8	1-5/16	3-7/16	2	20203	20200	20204	67102
5/8	5/8	1-5/8	3-3/4	2	22204	22201	87955	14667
5/8	5/8	1-7/8	4	2	22203	22200	87954	14668
5/8	5/8	2	4-1/8	2	23204	23201	87998	52271
5/8	5/8	2-1/2	4-5/8	2	23203	23200	87999	52272
41/64	5/8	1-5/16	3-7/16	2	20209	20208	69028	67103
21/32	5/8	1-5/16	3-7/16	2	20213	20210	69029	67104
43/64	5/8	1-5/16	3-7/16	2	20219	20218	69030	67105
11/16	1/2	1-5/16	3-5/16	2	20222	20227	69031	67106
11/16	1/2	1-5/8	3-5/8	2	22222	22221	87956	14670
11/16	5/8	3/4	2-7/8	2	21223	21220	87935	17590
11/16	5/8	1-5/16	3-7/16	2	20223	20220	69032	67107
11/16	5/8	2-1/4	4-3/8	2	22223	22220	87957	14669
11/16	5/8	3	5-1/8	2	23223	23220	88000	52273
45/64	3/4	1-5/16	3-9/16	2	20229	20228	69033	67108
23/32	3/4	1-5/16	3-9/16	2	20234	20230	69034	67109
47/64	3/4	1-5/16	3-9/16	2	20239	20238	69035	67110
3/4	1/2	1-5/16	3-5/16	2	20242	20241	69036	67111
3/4	5/8	1-5/16	3-7/16	2	20243	20247	69037	67112
3/4	3/4	3/4	3	2	21244	21240	87936	17591
3/4	3/4	1-5/16	3-9/16	2	20244	20240	20245	67113



Niagara Cutter

S203 - 2 Flutes 30° Helix HSS Single-End Mill
for General Purpose
Center-Cutting

Flute Diam.	Shank Diam.	Overall Length	Length Of Cut	#F	Uncoat	Suggested		
						TiN	TiCN	TiAlN
3/4	3/4	1-3/4	4	2	22245	22241	87959	14671
3/4	3/4	2-1/4	4-1/2	2	22244	22240	87958	14672
3/4	3/4	3	5-1/4	2	23244	23240	88001	52274
49/64	3/4	1-1/2	3-3/4	2	20249	20248	69038	67114
25/32	3/4	1-1/2	3-3/4	2	20254	20250	69039	67115
51/64	3/4	1-1/2	3-3/4	2	20259	20258	69040	67116
13/16	5/8	1-1/2	3-5/8	2	20263	20267	69041	67117
13/16	3/4	7/8	3-1/8	2	21264	21260	87937	17592
13/16	3/4	1-1/2	3-3/4	2	20264	20260	69042	67118
13/16	3/4	2-5/8	4-7/8	2	22264	22260	87960	14673
13/16	3/4	3-1/2	5-3/4	2	23264	23260	88002	52275
53/64	7/8	1-1/2	3-3/4	2	20269	20268	69043	67119
27/32	7/8	1-1/2	3-3/4	2	20275	20270	69044	67120
55/64	7/8	1-1/2	3-3/4	2	20279	20278	69045	67121
7/8	5/8	1-1/2	3-5/8	2	20283	20281	69046	67122
7/8	3/4	1-1/2	3-3/4	2	20284	20287	69047	67123
7/8	7/8	7/8	3-1/8	2	21285	21280	87938	17593
7/8	7/8	1-1/2	3-3/4	2	20285	20280	69048	67124
7/8	7/8	2	4-1/4	2	22286	22281	87962	14674
7/8	7/8	2-1/2	4-3/4	2	22289	22288	87963	14675
7/8	7/8	2-5/8	4-7/8	2	22285	22280	87961	14676
7/8	7/8	3-1/2	5-3/4	2	23285	23280	88003	52276
57/64	7/8	1-5/8	3-7/8	2	20289	20288	69049	67125
29/32	7/8	1-5/8	3-7/8	2	20295	20290	69050	67126
59/64	7/8	1-5/8	3-7/8	2	20299	20298	69051	67127
15/16	3/4	1-1/2	3-3/4	2	20304	20303	69052	67128
15/16	7/8	1	3-1/4	2	21305	21300	87939	17594
15/16	7/8	1-5/8	3-7/8	2	20305	20300	69053	67129
15/16	7/8	3	5-1/4	2	22305	22300	87964	14677
15/16	7/8	4	6-1/4	2	23305	23300	88004	52277
61/64	1	1-5/8	4-1/8	2	20309	20308	69054	67130
31/32	1	1-5/8	4-1/8	2	20316	20310	69055	67131
63/64	1	1-5/8	4-1/8	2	20319	20318	69056	67132
1	5/8	1-1/2	3-5/8	2	20323	20322	69057	67133



Niagara Cutter

S203 - 2 Flutes 30° Helix HSS Single-End Mill
for General Purpose
Center-Cutting

Flute Diam.	Shank Diam.	Overall Length	Length Of Cut	#F	Uncoat	Suggested		
						TiN	TiCN	TiAlN
1	3/4	1-1/2	3-3/4	2	20324	20321	69058	67134
1	7/8	1-1/2	3-3/4	2	20325	20328	69059	67135
1	1	1	3-1/2	2	21326	21320	87940	17595
1	1	1-5/8	4-1/8	2	20326	20320	20329	67136
1	1	2-1/4	4-3/4	2	22327	22321	87966	14678
1	1	3	5-1/2	2	22326	22320	87965	14679
1	1	4	6-1/2	2	23326	23320	88005	52278
1-1/16	3/4	1-1/2	3-3/4	2	20344	20348	69060	67137
1-1/16	1	1-5/8	4-1/8	2	20346	20340	69061	67138
1-1/8	3/4	1-5/8	3-7/8	2	20364	20361	69062	67139
1-1/8	7/8	1-5/8	3-7/8	2	20365	20362	69063	67140
1-1/8	1	1-5/8	4-1/8	2	20366	20360	69064	67141
1-1/8	1	2-1/4	4-3/4	2	22366	22361	87967	14680
1-1/8	1	3	5-1/2	2	22369	22368	87968	14681
1-3/16	3/4	1-5/8	3-7/8	2	20384	20381	69065	67142
1-3/16	1	1-5/8	4-1/8	2	20386	20380	69066	67143
1-1/4	3/4	1-5/8	3-7/8	2	20404	20402	69067	67144
1-1/4	7/8	1-5/8	3-7/8	2	20405	20403	69068	67145
1-1/4	1	1-5/8	4-1/8	2	20406	20401	69069	67146
1-1/4	1	2-1/4	4-3/4	2	22408	22401	87971	14682
1-1/4	1	3	5-1/2	2	22409	22403	87972	14684
1-1/4	1-1/4	1-5/8	4-1/8	2	20407	20400	69070	67147
1-1/4	1-1/4	2-1/4	4-3/4	2	22406	22402	87969	14683
1-1/4	1-1/4	3	5-1/2	2	22407	22400	87970	14685
1-5/16	1	1-5/8	4-1/8	2	20426	20420	69071	67148
1-3/8	3/4	1-5/8	3-7/8	2	20444	20448	69072	67149
1-3/8	1	1-5/8	4-1/8	2	20446	20440	69073	67150
1-3/8	1	2-1/4	4-3/4	2	22446	22442	87973	14686
1-3/8	1	3	5-1/2	2	22449	22448	87974	14687
1-7/16	1	1-5/8	4-1/8	2	20466	20460	69074	67151
1-1/2	3/4	1-5/8	3-7/8	2	20484	20482	69075	67152
1-1/2	1	1-5/8	4-1/8	2	20486	20481	69076	67153
1-1/2	1-1/4	1-5/8	4-1/8	2	20487	20480	69077	67154
1-1/2	1-1/4	2-1/4	4-3/4	2	22488	22481	87976	14688



Niagara Cutter

S203 - 2 Flutes 30° Helix HSS Single-End Mill
for General Purpose
Center-Cutting

Flute Diam.	Shank Diam.	Overall Length	Length Of Cut	#F	Uncoat	Suggested		
						TiN	TiCN	TiAlN
1-1/2	1-1/4	3	5-1/2	2	22487	22480	87975	14689
1-9/16	1-1/4	1-5/8	4-1/8	2	20507	20500	69078	67155
1-5/8	1-1/4	1-5/8	4-1/8	2	20527	20520	69079	67156
1-5/8	1-1/4	2-1/4	4-3/4	2	22527	22521	87977	14690
1-5/8	1-1/4	3	5-1/2	2	22529	22528	87978	14691
1-11/16	1-1/4	1-5/8	4-1/8	2	20547	20540	69080	67157
1-3/4	3/4	1-5/8	3-7/8	2	20564	20563	69081	67158
1-3/4	1-1/4	1-5/8	4-1/8	2	20567	20560	69082	67159
1-3/4	1-1/4	2-1/4	4-3/4	2	22567	22561	87979	14692
1-3/4	1-1/4	3	5-1/2	2	22569	22568	87980	14693
1-13/16	1-1/4	1-5/8	4-1/8	2	20587	20580	69083	67160
1-7/8	1-1/4	1-5/8	4-1/8	2	20607	20600	69084	67161
1-7/8	1-1/4	2-1/4	4-3/4	2	22607	22601	87981	14694
1-7/8	1-1/4	3	5-1/2	2	22609	22608	87982	14695
1-15/16	1-1/4	1-5/8	4-1/8	2	20627	20620	69085	67162
2	3/4	1-5/8	3-7/8	2	20644	20643	69086	67163
2	1-1/4	1-5/8	4-1/8	2	20647	20640	69087	67164
2	1-1/4	2-1/4	4-3/4	2	22646	22642	87983	14696
2	1-1/4	3	5-1/2	2	22647	22640	87984	14697