

STABILIZER™

PATENT #6,991,409

- Chatter Reduction
- Increased Productivity
 - Greater depths-of-cut
 - Faster speeds
 - Heavier feeds
 - Better surface finish



Niagara Cutter

STB-4
7/06

Stabilizer-HT (STR440 / STB440 / STRN440 / STBN440)

Designed For:

- Stainless Steels
- High Temperature Alloys
- Nickel Based Alloys
- Titanium and Titanium Alloys

- Extra Fine Carbide
 - Eccentric Primary Relief
 - TiAlN Coating Standard
 - Weldon Flat on Shank
- Sizes 3/8" and larger



Inch Series					Stabilizer-HT			Stabilizer-HT		
Price Code E					STR440 with Radius			STB440 Ball-End		
Dia	Dia	LOC	OAL	# F	TiAlN EDP	List	Radius	EDP	List	
1/8	1/8	1/8	1 1/2	4	57453	\$13.10	.008-.010	57489	\$13.55	
1/8	1/8	3/8	1 1/2	4	57454	\$14.67	.008-.010	57490	\$15.12	
5/32	3/16	3/16	2	4	57455	\$18.48	.008-.010	57491	\$18.92	
5/32	3/16	7/16	2	4	57456	\$21.72	.008-.010	57492	\$22.40	
3/16	3/16	3/16	2	4	57457	\$17.70	.008-.010	57493	\$18.14	
3/16	3/16	7/16	2	4	57458	\$20.38	.008-.010	57494	\$20.94	
7/32	1/4	1/4	2	4	57459	\$22.52	.015-.020	57495	\$23.18	
7/32	1/4	7/16	2 1/2	4	57460	\$27.22	.015-.020	57496	\$28.00	
1/4	1/4	1/4	2	4	57461	\$23.30	.015-.020	57497	\$24.30	
1/4	1/4	1/2	2 1/2	4	57462	\$25.98	.015-.020	57498	\$27.10	
9/32	5/16	5/8	2 1/2	4	57463	\$35.96	.015-.020	57499	\$37.52	
5/16	5/16	5/16	2	4	57464	\$29.34	.015-.020	57500	\$30.68	
5/16	5/16	13/16	2 1/2	4	57465	\$32.60	.015-.020	57501	\$34.04	
11/32	3/8	13/16	2 1/2	4	57466	\$44.46	.015-.020	57502	\$46.36	
3/8	3/8	3/8	2	4	57467	\$36.29	.015-.020	57503	\$37.86	
3/8	3/8	7/8	2 1/2	4	57468	\$40.43	.015-.020	57504	\$42.22	
13/32	7/16	15/16	2 3/4	4	57469	\$43.00	.015-.020	57505	\$44.92	
7/16	7/16	7/16	2 1/2	4	57470	\$45.58	.015-.020	57506	\$47.60	
7/16	7/16	1	2 3/4	4	57471	\$50.62	.015-.020	57507	\$52.86	
15/32	1/2	1	3	4	57472	\$53.32	.030-.035	57508	\$55.66	
1/2	1/2	1/2	2 1/2	4	57473	\$56.00	.030-.035	57509	\$58.46	
1/2	1/2	1	3	4	57474	\$62.16	.030-.035	57510	\$64.96	
1/2	1/2	1 1/4	3	4	57475	\$67.76	.030-.035	57511	\$70.60	
9/16	9/16	1 1/8	3 1/2	4	57476	\$100.02	.030-.035	57512	\$104.38	
5/8	5/8	5/8	3	4	57477	\$117.82	.030-.035	57513	\$122.98	
5/8	5/8	1 1/4	3 1/2	4	57478	\$131.04	.030-.035	57514	\$136.64	
11/16	3/4	1 3/8	4	4	57479	\$160.29	.030-.035	57515	\$167.22	
3/4	3/4	3/4	3	4	57480	\$152.66	.030-.035	57516	\$159.26	
3/4	3/4	1 1/2	4	4	57481	\$169.68	.030-.035	57517	\$176.96	
13/16	7/8	1 5/8	4	4	57482	\$200.11	.030-.035	57518	\$208.75	
7/8	7/8	1 3/4	4	4	57483	\$206.30	.030-.035	57519	\$215.21	
15/16	1	1 7/8	4	4	57484	\$255.07	.030-.035	57520	\$266.13	
1	1	1	4	4	57485	\$242.93	.030-.035	57521	\$253.46	
1	1	1 1/2	4	4	57486	\$269.92	.030-.035	57522	\$281.68	
1	1	2	5	4	57487	\$445.07	.030-.035	57523	\$464.21	
1 1/4	1 1/4	2 1/4	5	4	57488	\$609.06	.030-.035	57524	\$635.24	

Inch Series					Stabilizer-HT			Stabilizer-HT			
Price Code E					STRN440 With Radius			STBN440 Ball-End			
Flute Dia.	Shank Dia	LOC	Reach	Dia	OAL	# F	EDP	List	Radius	EDP	List
1/4	1/4	3/8	2 1/8	0.240	4	4	57525	\$47.48	.015-.020	57542	\$49.84
5/16	5/16	7/16	2 1/8	0.300	4	4	57526	\$76.94	.015-.020	57543	\$80.75
3/8	3/8	1/2	2 1/8	0.360	4	4	57527	\$68.76	.015-.020	57544	\$72.24
3/8	3/8	1/2	4 1/8	0.360	6	4	57528	\$103.16	.015-.020	57545	\$108.30
7/16	7/16	9/16	2 1/8	0.420	4	4	57529	\$92.84	.015-.020	57546	\$97.44
7/16	7/16	9/16	4 1/8	0.420	6	4	57530	\$125.44	.015-.020	57547	\$131.71
1/2	1/2	5/8	2 1/8	0.480	4	4	57531	\$97.66	.030-.035	57548	\$102.59
1/2	1/2	5/8	3 1/8	0.480	5	4	57532	\$125.44	.030-.035	57549	\$131.71
1/2	1/2	5/8	4 1/8	0.480	6	4	57533	\$153.32	.030-.035	57550	\$160.94
5/8	5/8	3/4	2 1/8	0.600	4	4	57534	\$150.20	.030-.035	57551	\$157.70
5/8	5/8	3/4	3 1/8	0.600	5	4	57535	\$194.10	.030-.035	57552	\$203.84
5/8	5/8	3/4	4	0.600	6	4	57536	\$239.24	.030-.035	57553	\$251.22
3/4	3/4	1	2	0.720	4	4	57537	\$176.74	.030-.035	57554	\$185.58
3/4	3/4	1	3	0.720	5	4	57538	\$213.14	.030-.035	57555	\$223.78
3/4	3/4	1	4	0.720	6	4	57539	\$241.58	.030-.035	57556	\$253.68
1	1	1 1/4	3	0.960	5	4	57540	\$261.30	.030-.035	57557	\$274.40
1	1	1 1/4	4	0.960	6	4	57541	\$348.32	.030-.035	57558	\$365.79

Stabilizer-HT (STRM440 / STBM440)

Metric Series

Price Code E

					Stabilizer-HT			Stabilizer-HT	
					STRM440			STBM440	
					With Radius			Ball End	
Flute Dia	Shank Dia	LOC	OAL	# F	TiAlN EDP	List	Corner Radius	TiAlN EDP	List
3mm	6mm	3mm	58mm	4	57559	\$28.24	0.2-0.25	57593	\$29.51
3mm	6mm	6mm	58mm	4	57560	\$31.51	0.2-0.25	57594	\$32.93
4mm	6mm	4mm	58mm	4	57561	\$25.67	0.2-0.25	57595	\$26.83
4mm	6mm	8mm	58mm	4	57562	\$28.64	0.2-0.25	57596	\$29.93
5mm	6mm	5mm	58mm	4	57563	\$22.52	0.2-0.25	57597	\$23.18
5mm	6mm	10mm	58mm	4	57564	\$27.22	0.2-0.25	57598	\$28.00
6mm	6mm	6mm	58mm	4	57565	\$23.30	0.38-0.50	57599	\$24.30
6mm	6mm	12mm	58mm	4	57566	\$25.98	0.38-0.50	57600	\$27.10
7mm	8mm	7mm	64mm	4	57567	\$30.96	0.38-0.50	57601	\$32.35
7mm	8mm	14mm	64mm	4	57568	\$35.96	0.38-0.50	57602	\$37.52
8mm	8mm	8mm	64mm	4	57569	\$29.34	0.38-0.50	57603	\$30.68
8mm	8mm	16mm	64mm	4	57570	\$32.60	0.38-0.50	57604	\$34.04
9mm	10mm	9mm	63mm	4	57571	\$34.53	0.38-0.50	57605	\$36.08
9mm	10mm	18mm	73mm	4	57572	\$38.36	0.38-0.50	57606	\$40.08
10mm	10mm	10mm	63mm	4	57573	\$36.34	0.38-0.50	57607	\$37.97
10mm	10mm	20mm	73mm	4	57574	\$40.44	0.38-0.50	57608	\$42.22
11mm	12mm	11mm	74mm	4	57575	\$46.88	0.38-0.50	57609	\$48.99
11mm	12mm	22mm	84mm	4	57576	\$53.32	0.38-0.50	57610	\$55.66
12mm	12mm	12mm	74mm	4	57577	\$57.77	0.76-0.89	57611	\$60.37
12mm	12mm	24mm	84mm	4	57578	\$62.16	0.76-0.89	57612	\$64.96
13mm	14mm	13mm	76mm	4	57579	\$85.46	0.76-0.89	57613	\$89.31
13mm	14mm	26mm	84mm	4	57580	\$94.95	0.76-0.89	57614	\$99.22
14mm	14mm	14mm	76mm	4	57581	\$89.96	0.76-0.89	57615	\$94.00
14mm	14mm	28mm	84mm	4	57582	\$100.02	0.76-0.89	57616	\$104.38
15mm	16mm	15mm	83mm	4	57583	\$111.96	0.76-0.89	57617	\$117.00
15mm	16mm	30mm	93mm	4	57584	\$124.42	0.76-0.89	57618	\$130.01
16mm	16mm	16mm	83mm	4	57585	\$117.82	0.76-0.89	57619	\$122.98
16mm	16mm	32mm	93mm	4	57586	\$131.04	0.76-0.89	57620	\$136.64
18mm	18mm	18mm	85mm	4	57587	\$138.18	0.76-0.89	57621	\$144.40
18mm	18mm	36mm	93mm	4	57588	\$145.41	0.76-0.89	57622	\$151.95
20mm	20mm	20mm	93mm	4	57589	\$152.63	0.76-0.89	57623	\$159.49
20mm	20mm	40mm	105mm	4	57590	\$169.68	0.76-0.89	57624	\$176.96
25mm	25mm	25mm	115mm	4	57591	\$242.92	0.76-0.89	57625	\$253.46
25mm	25mm	50mm	115mm	4	57592	\$269.92	0.76-0.89	57626	\$281.68

Stabilizer - HT Recommended Starting Point Speed and Feeds (Slotting)

Material	SFFPM	Diameter = 1/4			Diameter = 3/8			Diameter = 1/2			Diameter = 3/4			Diameter = 1			
		RPM	CPT	IPM	RPM	CPT	IPM	RPM	CPT	IPM	RPM	CPT	IPM	RPM	CPT	IPM	
Inconel	625	135	2063	0.0006	5.0	1375	0.0009	5.0	1031	0.0012	5.0	688	0.0015	4.1	516	0.0018	3.7
	718	90	1375	0.0005	2.8	917	0.0008	2.8	688	0.0010	2.8	458	0.0013	2.3	344	0.0015	2.1
Other Nickel Based																	
Waspalloy	90	1375	0.0005	2.8	917	0.0008	2.8	688	0.0010	2.8	458	0.0013	2.3	344	0.0015	2.1	
Hastelloy	90	1375	0.0005	2.8	917	0.0008	2.8	688	0.0010	2.8	458	0.0013	2.3	344	0.0015	2.1	
A-286	110	1681	0.0005	3.4	1121	0.0008	3.4	840	0.0010	3.4	560	0.0013	2.8	420	0.0015	2.5	
Titanium																	
6AL-4V / Comm. Pure	275	4202	0.0008	12.6	2801	0.0011	12.6	2101	0.0015	12.6	1401	0.0019	10.5	1051	0.0023	9.5	
Stainless Steel																	
303	400	6112	0.0009	20.8	4075	0.0013	20.8	3056	0.0017	20.8	2037	0.0021	17.3	1528	0.0026	15.6	
304	400	6112	0.0009	20.8	4075	0.0013	20.8	3056	0.0017	20.8	2037	0.0021	17.3	1528	0.0026	15.6	
316	400	6112	0.0009	20.8	4075	0.0013	20.8	3056	0.0017	20.8	2037	0.0021	17.3	1528	0.0026	15.6	
15/5	350	5348	0.0009	18.2	3565	0.0013	18.2	2674	0.0017	18.2	1783	0.0021	15.2	1337	0.0026	13.6	
17/4	350	5348	0.0009	18.2	3565	0.0013	18.2	2674	0.0017	18.2	1783	0.0021	15.2	1337	0.0026	13.6	
416	350	5348	0.0009	18.2	3565	0.0013	18.2	2674	0.0017	18.2	1783	0.0021	15.2	1337	0.0026	13.6	
Kovar / Invar	225	3438	0.0009	11.7	2292	0.0013	11.7	1719	0.0017	11.7	1146	0.0021	9.7	860	0.0026	8.8	

Speeds and Feeds are based upon: ADOC = 1 x Diameter, RDOC = 1 x Diameter

Stabilizer - HT Recommended Starting Point Speed and Feeds (Profiling)

Material	SFFPM	Diameter = 1/4			Diameter = 3/8			Diameter = 1/2			Diameter = 3/4			Diameter = 1			
		RPM	CPT	IPM	RPM	CPT	IPM	RPM	CPT	IPM	RPM	CPT	IPM	RPM	CPT	IPM	
Inconel	625	155	2372	0.0008	7.1	1581	0.0011	7.1	1186	0.0015	7.1	791	0.0019	5.9	593	0.0023	5.3
	718	104	1581	0.0006	4.0	1054	0.0009	4.0	791	0.0013	4.0	527	0.0016	3.3	395	0.0019	3.0
Other Nickel Based																	
Waspalloy	104	1581	0.0006	4.0	1054	0.0009	4.0	791	0.0013	4.0	527	0.0016	3.3	395	0.0019	3.0	
Hastelloy	104	1581	0.0006	4.0	1054	0.0009	4.0	791	0.0013	4.0	527	0.0016	3.3	395	0.0019	3.0	
A-286	127	1933	0.0006	4.8	1289	0.0009	4.8	966	0.0013	4.8	644	0.0016	4.0	483	0.0019	3.6	
Titanium																	
6AL-4V / Comm. Pure	316	4832	0.0009	18.1	3222	0.0014	18.1	2416	0.0019	18.1	1611	0.0023	15.1	1208	0.0028	13.6	
Stainless Steel																	
303	460	7029	0.0011	29.9	4686	0.0016	29.9	3514	0.0021	29.9	2343	0.0027	24.9	1757	0.0032	22.4	
304	460	7029	0.0011	29.9	4686	0.0016	29.9	3514	0.0021	29.9	2343	0.0027	24.9	1757	0.0032	22.4	
316	460	7029	0.0011	29.9	4686	0.0016	29.9	3514	0.0021	29.9	2343	0.0027	24.9	1757	0.0032	22.4	
15/5	403	6150	0.0011	26.1	4100	0.0016	26.1	3075	0.0021	26.1	2050	0.0027	21.8	1538	0.0032	19.6	
17/4	403	6150	0.0011	26.1	4100	0.0016	26.1	3075	0.0021	26.1	2050	0.0027	21.8	1538	0.0032	19.6	
416	403	6150	0.0011	26.1	4100	0.0016	26.1	3075	0.0021	26.1	2050	0.0027	21.8	1538	0.0032	19.6	
Kovar / Invar	259	3954	0.0011	16.8	2636	0.0016	16.8	1977	0.0021	16.8	1318	0.0027	14.0	988	0.0032	12.6	

Speeds and Feeds are based upon: ADOC = 1 x Diameter, RDOC = 0.25 x Diameter

Stabilizer-GP (STS430 / STR430 / STB430 / STRN430 / STBN430)

Designed For:

- Carbon Steels
 - Tool Steels
 - Alloy Steels
 - Cast Irons
 - Extra Fine Carbide
 - Eccentric Primary Relief
 - TiAlN Coating Standard
 - Weldon Flat on Shank
- Sizes 3/8" and larger



Inch Series

Price Code E

						Stabilizer-GP		Stabilizer-GP			Stabilizer-GP	
						STS430		STR430			STB430	
						Square Corner		With Radius			Ball-End	
Dia	Shank Dia	LOC	OAL	# F	EDP	List	EDP	List	Corner Radius	EDP	List	
1/8	1/8	1/8	1 1/2	4	60650	\$12.77	60679	\$13.10	.008-.010	60708	\$13.55	
1/8	1/8	3/8	1 1/2	4	60651	\$14.34	60680	\$14.67	.008-.010	60709	\$15.12	
5/32	3/16	3/16	2	4	60652	\$17.92	60681	\$18.48	.008-.010	60710	\$18.93	
5/32	3/16	7/16	2	4	60653	\$21.17	60682	\$21.73	.008-.010	60711	\$22.40	
3/16	3/16	3/16	2	4	60654	\$17.14	60683	\$17.70	.008-.010	60712	\$18.14	
3/16	3/16	7/16	2	4	60655	\$19.82	60684	\$20.38	.008-.010	60713	\$20.94	
7/32	1/4	1/4	2	4	60656	\$21.95	60685	\$22.51	.015-.020	60714	\$23.18	
7/32	1/4	7/16	2 1/2	4	60657	\$26.43	60686	\$27.22	.015-.020	60715	\$28.00	
1/4	1/4	1/4	2	4	60658	\$22.29	60687	\$23.30	.015-.020	60716	\$24.30	
1/4	1/4	1/2	2 1/2	4	60659	\$24.86	60688	\$25.98	.015-.020	60717	\$27.10	
9/32	5/16	5/8	2 1/2	4	60660	\$34.38	60689	\$35.95	.015-.020	60718	\$37.52	
5/16	5/16	5/16	2	4	60661	\$28.11	60690	\$29.34	.015-.020	60719	\$30.69	
5/16	5/16	13/16	2 1/2	4	60662	\$31.14	60691	\$32.59	.015-.020	60720	\$34.05	
11/32	3/8	13/16	2 1/2	4	60663	\$42.56	60692	\$44.46	.015-.020	60721	\$46.37	
3/8	3/8	3/8	2	4	60664	\$34.72	60693	\$36.29	.015-.020	60722	\$37.86	
3/8	3/8	7/8	2 1/2	4	60665	\$38.64	60694	\$40.43	.015-.020	60723	\$42.22	
13/32	7/16	15/16	2 3/4	4	60666	\$41.10	60695	\$43.01	.015-.020	60724	\$44.91	
7/16	7/16	7/16	2 1/2	4	60667	\$43.57	60696	\$45.58	.015-.020	60725	\$47.60	
7/16	7/16	1	2 3/4	4	60668	\$48.38	60697	\$50.62	.015-.020	60726	\$52.86	
15/32	1/2	1	3	4	60669	\$51.07	60698	\$53.31	.030-.035	60727	\$55.66	
1/2	1/2	1/2	2 1/2	4	60670	\$53.65	60699	\$56.00	.030-.035	60728	\$58.46	
1/2	1/2	1	3	4	60671	\$59.47	60700	\$62.16	.030-.035	60729	\$64.96	
1/2	1/2	1 1/4	3	4	57330	\$65.07	57337	\$67.76	.030-.035	57344	\$70.60	
9/16	9/16	1 1/8	3 1/2	4	60672	\$95.65	60701	\$100.02	.030-.035	60730	\$104.38	
5/8	5/8	5/8	3	4	60673	\$112.78	60702	\$117.82	.030-.035	60731	\$122.98	
5/8	5/8	1 1/4	3 1/2	4	60674	\$125.33	60703	\$131.04	.030-.035	60732	\$136.64	
11/16	3/4	1 3/8	4	4	57331	\$153.35	57338	\$160.29	.030-.035	57345	\$167.23	
3/4	3/4	3/4	3	4	60675	\$146.05	60704	\$152.66	.030-.035	60733	\$159.26	
3/4	3/4	1 1/2	4	4	60676	\$162.29	60705	\$169.68	.030-.035	60734	\$176.96	
13/16	7/8	1 5/8	4	4	57332	\$191.42	57339	\$200.11	.030-.035	57346	\$208.75	
7/8	7/8	1 3/4	4	4	57333	\$197.34	57340	\$206.30	.030-.035	57347	\$215.21	
15/16	1	1 7/8	4	4	57334	\$244.02	57341	\$255.07	.030-.035	57348	\$266.13	
1	1	1	4	4	60677	\$232.40	60706	\$242.93	.030-.035	60735	\$253.46	
1	1	1 1/2	4	4	60678	\$258.27	60707	\$269.92	.030-.035	60736	\$281.68	
1	1	2	5	4	57335	\$426.72	57342	\$445.07	.030-.035	57349	\$464.21	
1 1/4	1 1/4	2 1/4	5	4	57336	\$582.86	57343	\$609.06	.030-.035	57350	\$635.24	

Inch Series

Price Code E

							Stabilizer-GP			Stabilizer-GP	
							STRN430			STBN430	
							With Radius			Ball-End	
Flute Dia.	Shank Dia	LOC	Reach	Dia	OAL	# F	EDP	List	Radius	EDP	List
1/4	1/4	3/8	2 1/8	0.240	4	4	60737	\$47.49	.015-.020	60754	\$49.84
5/16	5/16	7/16	2 1/8	0.300	4	4	60738	\$76.94	.015-.020	60755	\$80.75
3/8	3/8	1/2	2 1/8	0.360	4	4	60739	\$68.77	.015-.020	60756	\$72.24
3/8	3/8	1/2	4 1/8	0.360	6	4	60740	\$103.15	.015-.020	60757	\$108.30
7/16	7/16	9/16	2 1/8	0.420	4	4	60741	\$92.85	.015-.020	60758	\$97.44
7/16	7/16	9/16	4 1/8	0.420	6	4	60742	\$125.44	.015-.020	60759	\$131.71
1/2	1/2	5/8	2 1/8	0.480	4	4	60743	\$97.66	.030-.035	60760	\$102.59
1/2	1/2	5/8	3 1/8	0.480	5	4	60744	\$125.44	.030-.035	60761	\$131.71
1/2	1/2	5/8	4 1/8	0.480	6	4	60745	\$153.33	.030-.035	60762	\$160.94
5/8	5/8	3/4	2 1/8	0.600	4	4	60746	\$150.19	.030-.035	60763	\$157.70
5/8	5/8	3/4	3 1/8	0.600	5	4	60747	\$194.10	.030-.035	60764	\$203.84
5/8	5/8	3/4	4	0.600	6	4	60748	\$239.23	.030-.035	60765	\$251.22
3/4	3/4	1	2	0.720	4	4	60749	\$176.74	.030-.035	60766	\$185.58
3/4	3/4	1	3	0.720	5	4	60750	\$213.14	.030-.035	60767	\$223.78
3/4	3/4	1	4	0.720	6	4	60751	\$241.58	.030-.035	60768	\$253.68
1	1	1 1/4	3	0.960	5	4	60752	\$261.30	.030-.035	60769	\$274.40
1	1	1 1/4	4	0.960	6	4	60753	\$348.32	.030-.035	60770	\$365.79

Stabilizer-GP (STSM430 / STRM430 / STBM430)

Metric Series

Price Code E

					Stabilizer-GP		Stabilizer-GP			Stabilizer-GP	
					STSM430		STRM430			STBM430	
					Square Corner		With Radius			Ball-End	
Flute Dia	Shank Dia	LOC	OAL	# F	TiAIN EDP	List	TiAIN EDP	List	Corner Radius	TiAIN EDP	List
3mm	6mm	3mm	58mm	4	57351	\$27.02	57385	\$28.24	0.2-0.25	57419	\$29.51
3mm	6mm	6mm	58mm	4	57352	\$30.15	57386	\$31.51	0.2-0.25	57420	\$32.93
4mm	6mm	4mm	58mm	4	57353	\$24.57	57387	\$25.67	0.2-0.25	57421	\$26.83
4mm	6mm	8mm	58mm	4	57354	\$27.41	57388	\$28.64	0.2-0.25	57422	\$29.93
5mm	6mm	5mm	58mm	4	57355	\$23.40	57389	\$22.52	0.2-0.25	57423	\$23.18
5mm	6mm	10mm	58mm	4	57356	\$26.10	57390	\$27.22	0.2-0.25	57424	\$28.00
6mm	6mm	6mm	58mm	4	57357	\$22.28	57391	\$23.30	0.38-0.50	57425	\$24.30
6mm	6mm	12mm	58mm	4	57358	\$24.86	57392	\$25.98	0.38-0.50	57426	\$27.10
7mm	8mm	7mm	64mm	4	57359	\$29.63	57393	\$30.96	0.38-0.50	57427	\$32.35
7mm	8mm	14mm	64mm	4	57360	\$34.38	57394	\$35.96	0.38-0.50	57428	\$37.52
8mm	8mm	8mm	64mm	4	57361	\$28.12	57395	\$29.34	0.38-0.50	57429	\$30.68
8mm	8mm	16mm	64mm	4	57362	\$31.14	57396	\$32.60	0.38-0.50	57430	\$34.04
9mm	10mm	9mm	63mm	4	57363	\$33.04	57397	\$34.53	0.38-0.50	57431	\$36.08
9mm	10mm	18mm	73mm	4	57364	\$36.71	57398	\$38.36	0.38-0.50	57432	\$40.08
10mm	10mm	10mm	63mm	4	57365	\$34.77	57399	\$36.34	0.38-0.50	57433	\$37.97
10mm	10mm	20mm	73mm	4	57366	\$38.64	57400	\$40.44	0.38-0.50	57434	\$42.22
11mm	12mm	11mm	74mm	4	57367	\$44.86	57401	\$46.88	0.38-0.50	57435	\$48.99
11mm	12mm	22mm	84mm	4	57368	\$51.08	57402	\$53.32	0.38-0.50	57436	\$55.66
12mm	12mm	12mm	74mm	4	57369	\$55.28	57403	\$57.77	0.76-0.89	57437	\$60.37
12mm	12mm	24mm	84mm	4	57370	\$59.48	57404	\$62.16	0.76-0.89	57438	\$64.96
13mm	14mm	13mm	76mm	4	57371	\$81.78	57405	\$85.46	0.76-0.89	57439	\$89.31
13mm	14mm	26mm	84mm	4	57372	\$90.86	57406	\$94.95	0.76-0.89	57440	\$99.22
14mm	14mm	14mm	76mm	4	57373	\$86.08	57407	\$89.96	0.76-0.89	57441	\$94.00
14mm	14mm	28mm	84mm	4	57374	\$95.64	57408	\$100.02	0.76-0.89	57442	\$104.38
15mm	16mm	15mm	83mm	4	57375	\$107.14	57409	\$111.96	0.76-0.89	57443	\$117.00
15mm	16mm	30mm	93mm	4	57376	\$119.06	57410	\$124.42	0.76-0.89	57444	\$130.01
16mm	16mm	16mm	83mm	4	57377	\$112.78	57411	\$117.82	0.76-0.89	57445	\$122.98
16mm	16mm	32mm	93mm	4	57378	\$125.32	57412	\$131.04	0.76-0.89	57446	\$136.64
18mm	18mm	18mm	85mm	4	57379	\$132.23	57413	\$138.18	0.76-0.89	57447	\$144.40
18mm	18mm	36mm	93mm	4	57380	\$139.14	57414	\$145.41	0.76-0.89	57448	\$151.95
20mm	20mm	20mm	93mm	4	57381	\$146.05	57415	\$152.63	0.76-0.89	57449	\$159.49
20mm	20mm	40mm	105mm	4	57382	\$162.28	57416	\$169.68	0.76-0.89	57450	\$176.96
25mm	25mm	25mm	115mm	4	57383	\$232.40	57417	\$242.92	0.76-0.89	57451	\$253.46
25mm	25mm	50mm	115mm	4	57384	\$258.28	57418	\$269.92	0.76-0.89	57452	\$281.68

Stabilizer - GP Recommended Starting Point Speed and Feeds (Slotting)

Material	SFPM	Diameter = 1/4			Diameter = 3/8			Diameter = 1/2			Diameter = 3/4			Diameter = 1		
		RPM	CPT	IPM	RPM	CPT	IPM	RPM	CPT	IPM	RPM	CPT	IPM	RPM	CPT	IPM
Steels																
1018/1020	600	9168	0.0013	45.8	6112	0.0019	45.8	4584	0.0025	45.8	3056	0.0031	38.2	2292	0.0038	34.4
1045	550	8404	0.0010	33.6	5603	0.0015	33.6	4202	0.0020	33.6	2801	0.0025	28.0	2101	0.0030	25.2
4140	500	7640	0.0010	30.6	5093	0.0015	30.6	3820	0.0020	30.6	2547	0.0025	25.5	1910	0.0030	22.9
4340	475	7258	0.0010	29.0	4839	0.0015	29.0	3629	0.0020	29.0	2419	0.0025	24.2	1815	0.0030	21.8
Cast Iron																
Ductile	425	6494	0.0013	32.5	4329	0.0019	32.5	3247	0.0025	32.5	2165	0.0031	27.1	1624	0.0038	24.4
Gray	550	8404	0.0013	42.0	5603	0.0019	42.0	4202	0.0025	42.0	2801	0.0031	35.0	2101	0.0038	31.5
Tool Steel																
A2	425	6494	0.0010	26.0	4329	0.0015	26.0	3247	0.0020	26.0	2165	0.0025	21.6	1624	0.0030	19.5
D2	350	5348	0.0010	21.4	3565	0.0015	21.4	2674	0.0020	21.4	1783	0.0025	17.8	1337	0.0030	16.0
H13	425	6494	0.0010	26.0	4329	0.0015	26.0	3247	0.0020	26.0	2165	0.0025	21.6	1624	0.0030	19.5
P20	375	5730	0.0013	28.7	3820	0.0019	28.7	2865	0.0025	28.7	1910	0.0031	23.9	1433	0.0038	21.5
S7	400	6112	0.0010	24.4	4075	0.0015	24.4	3056	0.0020	24.4	2037	0.0025	20.4	1528	0.0030	18.3

Speeds and Feeds are based upon: ADOC = 1 x Diameter, RDOC = 1 x Diameter

Stabilizer - GP Recommended Starting Point Speed and Feeds (Profiling)

Material	SFPM	Diameter = 1/4			Diameter = 3/8			Diameter = 1/2			Diameter = 3/4			Diameter = 1		
		RPM	CPT	IPM	RPM	CPT	IPM	RPM	CPT	IPM	RPM	CPT	IPM	RPM	CPT	IPM
Steels																
1018/1020	750	11460	0.0016	71.6	7640	0.0023	71.6	5730	0.0031	71.6	3820	0.0039	59.7	2865	0.0047	53.7
1045	688	10505	0.0013	52.5	7003	0.0019	52.5	5253	0.0025	52.5	3502	0.0031	43.8	2626	0.0038	39.4
4140	625	9550	0.0013	47.8	6367	0.0019	47.8	4775	0.0025	47.8	3183	0.0031	39.8	2388	0.0038	35.8
4340	594	9073	0.0013	45.4	6048	0.0019	45.4	4536	0.0025	45.4	3024	0.0031	37.8	2268	0.0038	34.0
Cast Iron																
Ductile	489	7468	0.0014	42.9	4979	0.0022	42.9	3734	0.0029	42.9	2489	0.0036	35.8	1867	0.0043	32.2
Gray	633	9665	0.0014	55.6	6443	0.0022	55.6	4832	0.0029	55.6	3222	0.0036	46.3	2416	0.0043	41.7
Tool Steel																
A2	531	8118	0.0013	40.6	5412	0.0019	40.6	4059	0.0025	40.6	2706	0.0031	33.8	2029	0.0038	30.4
D2	438	6685	0.0013	33.4	4457	0.0019	33.4	3343	0.0025	33.4	2228	0.0031	27.9	1671	0.0038	25.1
H13	531	8118	0.0013	40.6	5412	0.0019	40.6	4059	0.0025	40.6	2706	0.0031	33.8	2029	0.0038	30.4
P20	469	7163	0.0016	44.8	4775	0.0023	44.8	3581	0.0031	44.8	2388	0.0039	37.3	1791	0.0047	33.6
S7	500	7640	0.0013	38.2	5093	0.0019	38.2	3820	0.0025	38.2	2547	0.0031	31.8	1910	0.0038	28.7

Speeds and Feeds are based upon: ADOC = 1 x Diameter, RDOC = 0.25 x Diameter

STABILIZER™

ASYMMETRICAL CUTTING EDGES DESIGNED TO **ELIMINATE HARMONICS**

EVEN IN DEEP SLOTTING CUTS AT **HIGH FEED RATES**. AVAILABLE IN

TWO STYLES: **GP-SERIES** FOR CARBON AND ALLOY STEELS

HT-SERIES FOR STAINLESS, TITANIUM

AND HIGH TEMP ALLOYS

■ STANDARD SQUARE-END, CORNER RADIUS
AND BALL-END STYLES

■ EXTRA-FINE GRAIN CARBIDE

■ HIGH PERFORMANCE TITANIUM COATING

■ PATENT #6,991,409

CHIPS PRODUCED AFTER 1 MINUTE

GENERAL PURPOSE

4 flute carbide end mill

0.57 (cu in/min)



HIGH PERFORMANCE

3 flute carbide end mill

1.72 (cu in/min)



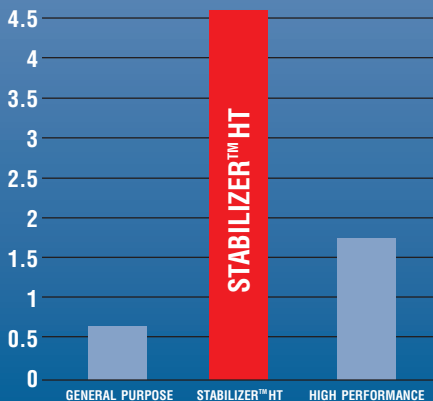
STABILIZER™ HT

4 flute carbide end mill

4.58 (cu in/min)



METAL REMOVAL RATE (CUBIC INCHES/MIN)



CUTTING PERFORMANCE IN 304 STAINLESS 185 Bhn

	GENERAL PURPOSE 4 FLUTE CARBIDE	STABILIZER™ HT 4 FLUTE CARBIDE	HIGH PERFORMANCE 3 FLUTE CARBIDE
CUTTING DIAMETER (IN.)	0.5	0.5	0.5
AXIAL DOC (IN.)	0.5	0.5	0.5
RADIAL DOC (IN.)	0.5	0.5	0.5
SFM	150	400	300
RPM	1146	3056	2292
CPT (IN.)	0.0005	0.0015	0.001
IPM	2.3	18.3	6.9
MRR	0.57	4.58	1.72

Increased metal removal rates with STABILIZER™ HT require adequate fixturing, clamping and coolant.



Niagara Cutter