

SQUARE

2 FLUTE END MILL



CUTTING DIA.	SHANK DIA.	CUTTING LENGTH	OVERALL LENGTH	UNCOATED		TIN	
				EDP NO.	PRICE	EDP NO.	PRICE
1/64"	1/8"	1/8"	1-1/2"	50095	\$11.92	80095	\$13.41
1/32"	1/8"	3/32"	1-1/2"	50100	\$8.32	80100	\$9.81
3/64"	1/8"	1/8"	1-1/2"	50105	\$8.32	80105	\$9.81
1/16"	1/8"	3/16"	1-1/2"	50110	\$8.32	80110	\$9.81
5/64"	1/8"	3/16"	1-1/2"	50115	\$8.32	80115	\$9.81
3/32"	1/8"	3/16"	1-1/2"	50120	\$8.32	80120	\$9.81
7/64"	1/8"	3/16"	1-1/2"	50125	\$8.32	80125	\$9.81
1/8"	1/8"	1/2"	1-1/2"	50130	\$7.38	80130	\$8.86
9/64"	3/16"	5/8"	2"	50135	\$11.92	80135	\$13.77
5/32"	3/16"	5/8"	2"	50140	\$11.92	80140	\$13.77
11/64"	3/16"	5/8"	2"	50145	\$11.92	80145	\$13.77
3/16"	3/16"	5/8"	2"	50150	\$10.62	80150	\$12.46
13/64"	1/4"	5/8"	2-1/2"	50155	\$15.07	80155	\$18.92
7/32"	1/4"	3/4"	2-1/2"	50160	\$15.07	80160	\$18.92
15/64"	1/4"	3/4"	2-1/2"	50165	\$15.07	80165	\$18.92
1/4"	1/4"	3/4"	2-1/2"	50170	\$12.51	80170	\$16.33
17/64"	5/16"	3/4"	2-1/2"	50175	\$19.84	80175	\$25.52
9/32"	5/16"	3/4"	2-1/2"	50180	\$19.84	80180	\$25.52
19/64"	5/16"	13/16"	2-1/2"	50185	\$19.84	80185	\$25.52
5/16"	5/16"	13/16"	2-1/2"	50190	\$17.28	80190	\$22.95
21/64"	3/8"	7/8"	2-1/2"	50195	\$23.17	80195	\$28.85
11/32"	3/8"	7/8"	2-1/2"	50200	\$23.17	80200	\$28.85
23/64"	3/8"	7/8"	2-1/2"	50205	\$23.17	80205	\$28.85
3/8"	3/8"	7/8"	2-1/2"	50210	\$20.34	80210	\$26.05
25/64"	7/16"	1"	3"	50215	\$30.06	80215	\$37.08
13/32"	7/16"	1"	3"	50220	\$30.06	80220	\$37.08
27/64"	7/16"	1"	3"	50225	\$30.06	80225	\$37.08
7/16"	7/16"	1"	3"	50230	\$27.54	80230	\$34.56
29/64"	1/2"	1"	3"	50235	\$36.22	80235	\$43.24
15/32"	1/2"	1"	3"	50240	\$36.22	80240	\$43.24
31/64"	1/2"	1"	3"	50245	\$36.22	80245	\$43.24
1/2"	1/2"	1"	3"	50250	\$31.72	80250	\$38.74
9/16"	9/16"	1-1/4"	3-1/2"	50255	\$58.05	80255	\$68.22
5/8"	5/8"	1-1/4"	3-1/2"	50260	\$59.17	80260	\$69.34
11/16"	3/4"	1-1/2"	4"	50265	\$94.05	80265	\$106.06
3/4"	3/4"	1-1/2"	4"	50270	\$87.75	80270	\$99.76
7/8"	7/8"	1-1/2"	4"	50275	\$134.55	80275	\$149.44
1"	1"	1-1/2"	4"	50280	\$136.80	80280	\$154.53
1-1/4"	1-1/4"	2"	4-1/2"	50285	\$381.37	80285	\$415.55

TOLERANCES-CUTTING DIAMETER ALL SIZES +.000-.002 SHANK DIAMETER ALL SIZES -.0001-.0004

MICROGRAIN SOLID CARBIDE

TO ORDER SPECIFY EDP No. OR FILL OUT SPECIAL TOOL FORM ON PAGE 27



CUTTING DIA.	SHANK DIA.	CUTTING OVERALL		UNCOATED		TIALN	
		LENGTH	LENGTH	EDP NO.	PRICE	EDP NO.	PRICE
1/8"	1/8"	3/4"	3"	52095	\$15.58	82095	\$17.33
1/8"	1/8"	1"	3"	52100	\$15.58	82100	\$17.33
3/16"	3/16"	1-1/4"	3"	52105	\$16.57	82105	\$19.44
3/16"	3/16"	1"	4"	52110	\$18.15	82110	\$21.50
1/4"	1/4"	1-1/8"	3"	52115	\$19.61	82115	\$23.43
1/4"	1/4"	1"	4"	52120	\$21.68	82120	\$26.16
1/4"	1/4"	1-1/2"	4"	52125	\$22.75	82125	\$27.23
1/4"	1/4"	1-1/2"	6"	52130	\$31.15	82130	\$37.40
5/16"	5/16"	1-1/8"	3"	52135	\$23.52	82135	\$29.16
5/16"	5/16"	1"	4"	52140	\$26.33	82140	\$33.60
5/16"	5/16"	1-5/8"	4"	52145	\$28.00	82145	\$35.25
5/16"	5/16"	1-1/2"	6"	52150	\$40.63	82150	\$50.52
3/8"	3/8"	1-1/8"	3"	52155	\$27.10	82155	\$32.74
3/8"	3/8"	1"	4"	52160	\$30.01	82160	\$37.27
3/8"	3/8"	1-1/2"	4"	52165	\$31.62	82165	\$38.88
3/8"	3/8"	2"	4"	52170	\$32.92	82170	\$40.18
3/8"	3/8"	1-1/2"	6"	52175	\$42.65	82175	\$54.16
3/8"	3/8"	3"	6"	52180	\$46.36	82180	\$56.26
7/16"	7/16"	1"	4"	52185	\$41.84	82185	\$50.92
7/16"	7/16"	2"	4"	52190	\$45.56	82190	\$54.64
7/16"	7/16"	1-1/2"	6"	52195	\$58.81	82195	\$71.58
7/16"	7/16"	3"	6"	52200	\$65.53	82200	\$78.29
1/2"	1/2"	1-1/4"	3"	52205	\$35.39	82205	\$42.37
1/2"	1/2"	1"	4"	52210	\$42.96	82210	\$52.05
1/2"	1/2"	1-1/2"	4"	52215	\$43.72	82215	\$52.84
1/2"	1/2"	2"	4"	52220	\$47.44	82220	\$56.53
1/2"	1/2"	1-1/2"	6"	52225	\$64.28	82225	\$73.04
1/2"	1/2"	3"	6"	52230	\$67.64	82230	\$80.41
5/8"	5/8"	2-1/2"	5"	52235	\$90.62	82235	\$103.30
5/8"	5/8"	1-1/2"	6"	52240	\$97.35	82240	\$112.34
5/8"	5/8"	3"	6"	52245	\$101.28	82245	\$116.28
3/4"	3/4"	2-1/2"	5"	52250	\$132.01	82250	\$146.71
3/4"	3/4"	1-1/2"	6"	52255	\$149.97	82255	\$167.36
3/4"	3/4"	3"	6"	52260	\$158.08	82260	\$175.46
3/4"	3/4"	4"	7"	52265	\$210.27	82265	\$230.02
1"	1"	2"	5"	52270	\$226.84	82270	\$247.09
1"	1"	2-1/2"	5"	52275	\$233.38	82275	\$253.64
1"	1"	3"	6"	52280	\$243.68	82280	\$266.31
1"	1"	4"	7"	52285	\$327.10	82285	\$352.27
1-1/4"	1-1/4"	3"	6"	52290	\$557.74	82290	\$582.74

TOLERANCES-CUTTING DIAMETER-ALL SIZES +.000-.002 SHANK DIAMETER ALL SIZES -.0001-.0004

MICROGRAIN SOLID CARBIDE

TO ORDER SPECIFY EDP No. OR FILL OUT SPECIAL TOOL FORM ON PAGE 27



CUTTING DIA.	SHANK DIA.	CUTTING OVERALL		UNCOATED		TIALN	
		LENGTH	LENGTH	EDP NO.	PRICE	EDP NO.	PRICE
1/64"	1/8"	3/64"	1-1/2"	50295	\$11.92	80295	\$13.41
1/32"	1/8"	3/32"	1-1/2"	50300	\$8.32	80300	\$9.81
3/64"	1/8"	1/8"	1-1/2"	50305	\$8.32	80305	\$9.81
1/16"	1/8"	3/16"	1-1/2"	50310	\$8.32	80310	\$9.81
5/64"	1/8"	3/16"	1-1/2"	50315	\$8.32	80315	\$9.81
3/32"	1/8"	3/16"	1-1/2"	50320	\$8.32	80320	\$9.81
7/64"	1/8"	3/16"	1-1/2"	50325	\$8.32	80325	\$9.81
1/8"	1/8"	1/2"	1-1/2"	50330	\$7.38	80330	\$8.86
9/64"	3/16"	5/8"	2"	50335	\$11.92	80335	\$13.77
5/32"	3/16"	5/8"	2"	50340	\$11.92	80340	\$13.77
11/64"	3/16"	5/8"	2"	50345	\$11.92	80345	\$13.77
3/16"	3/16"	5/8"	2"	50350	\$10.62	80350	\$12.46
13/64"	1/4"	5/8"	2-1/2"	50355	\$15.07	80355	\$18.90
7/32"	1/4"	3/4"	2-1/2"	50360	\$15.07	80360	\$18.90
15/64"	1/4"	3/4"	2-1/2"	50365	\$15.07	80365	\$18.90
1/4"	1/4"	3/4"	2-1/2"	50370	\$12.51	80370	\$16.33
17/64"	5/16"	3/4"	2-1/2"	50375	\$19.84	80375	\$25.52
9/32"	5/16"	3/4"	2-1/2"	50380	\$19.84	80380	\$25.52
19/64"	5/16"	13/16"	2-1/2"	50385	\$19.84	80385	\$25.52
5/16"	5/16"	13/16"	2-1/2"	50390	\$17.28	80390	\$22.95
21/64"	3/8"	7/8"	2-1/2"	50395	\$23.17	80395	\$28.85
11/32"	3/8"	7/8"	2-1/2"	50400	\$23.17	80400	\$28.85
23/64"	3/8"	7/8"	2-1/2"	50405	\$23.17	80405	\$28.85
3/8"	3/8"	7/8"	2-1/2"	50410	\$20.34	80410	\$26.05
25/64"	7/16"	1"	3"	50415	\$30.06	80415	\$37.08
13/32"	7/16"	1"	3"	50420	\$30.06	80420	\$37.08
27/64"	7/16"	1"	3"	50425	\$30.06	80425	\$37.08
7/16"	7/16"	1"	3"	50430	\$27.54	80430	\$34.56
29/64"	1/2"	1"	3"	50435	\$36.22	80435	\$43.24
15/32"	1/2"	1"	3"	50440	\$36.22	80440	\$43.24
31/64"	1/2"	1"	3"	50445	\$36.22	80445	\$43.24
1/2"	1/2"	1"	3"	50450	\$31.72	80450	\$38.74
9/16"	9/16"	1-1/4"	3-1/2"	50455	\$58.05	80455	\$68.22
5/8"	5/8"	1-1/4"	3-1/2"	50460	\$59.17	80460	\$69.34
11/16"	3/4"	1-1/2"	4"	50465	\$94.05	80465	\$106.06
3/4"	3/4"	1-1/2"	4"	50470	\$87.75	80470	\$99.76
7/8"	7/8"	1-1/2"	4"	50475	\$134.55	80475	\$149.44
1"	1"	1-1/2"	4"	50480	\$136.80	80480	\$154.53
1-1/4"	1-1/4"	2"	4-1/2"	50485	\$381.37	80485	\$415.55

TOLERANCES-CUTTING DIAMETER-ALL SIZES +.000-.002 SHANK DIAMETER ALL SIZES -.0001-.0004

MICROGRAIN SOLID CARBIDE

TO ORDER SPECIFY EDP No. OR FILL OUT SPECIAL TOOL FORM ON PAGE 27

SQUARE

3 FLUTE LONG & EXTRA LONG END MILL



CUTTING DIA.	SHANK DIA.	CUTTING LENGTH	OVERALL LENGTH	UNCOATED		TIALN	
				EDP NO.	PRICE	EDP NO.	PRICE
1/8"	1/8"	3/4"	3"	53295	\$15.58	83295	\$17.33
1/8"	1/8"	1"	3"	53300	\$15.58	83300	\$17.33
3/16"	3/16"	1-1/4"	3"	53305	\$16.57	83305	\$19.44
3/16"	3/16"	1"	4"	53310	\$18.15	83310	\$21.50
1/4"	1/4"	1-1/8"	3"	53315	\$19.61	83315	\$23.43
1/4"	1/4"	1"	4"	53320	\$21.68	83320	\$26.16
1/4"	1/4"	1-1/2"	4"	53325	\$22.75	83325	\$27.23
1/4"	1/4"	1-1/2"	6"	53330	\$31.15	83330	\$37.40
5/16"	5/16"	1-1/8"	3"	53335	\$23.52	83335	\$29.16
5/16"	5/16"	1"	4"	53340	\$26.33	83340	\$33.60
5/16"	5/16"	1-5/8"	4"	53345	\$28.00	83345	\$35.25
5/16"	5/16"	1-1/2"	6"	53350	\$40.63	83350	\$50.52
3/8"	3/8"	1-1/8"	3"	53355	\$27.10	83355	\$32.74
3/8"	3/8"	1"	4"	53360	\$30.01	83360	\$37.27
3/8"	3/8"	1-1/2"	4"	53365	\$31.62	83365	\$38.88
3/8"	3/8"	2"	4"	53370	\$32.92	83370	\$40.18
3/8"	3/8"	1-1/2"	6"	53375	\$42.65	83375	\$54.16
3/8"	3/8"	3"	6"	53380	\$46.36	83380	\$56.26
7/16"	7/16"	1"	4"	53385	\$41.84	83385	\$50.92
7/16"	7/16"	2"	4"	53390	\$45.56	83390	\$54.64
7/16"	7/16"	1-1/2"	6"	53395	\$58.81	83395	\$71.58
7/16"	7/16"	3"	6"	53400	\$65.53	83400	\$78.29
1/2"	1/2"	1-1/4"	3"	53405	\$35.39	83405	\$42.37
1/2"	1/2"	1"	4"	53410	\$42.96	83410	\$52.05
1/2"	1/2"	1-1/2"	4"	53415	\$43.72	83415	\$52.84
1/2"	1/2"	2"	4"	53420	\$47.44	83420	\$56.53
1/2"	1/2"	1-1/2"	6"	53425	\$64.28	83425	\$73.04
1/2"	1/2"	3"	6"	53430	\$67.64	83430	\$80.41
5/8"	5/8"	2-1/2"	5"	53435	\$90.62	83435	\$103.30
5/8"	5/8"	1-1/2"	6"	53440	\$97.35	83440	\$112.34
5/8"	5/8"	3"	6"	53445	\$101.28	83445	\$116.28
3/4"	3/4"	2-1/2"	5"	53450	\$132.01	83450	\$146.71
3/4"	3/4"	1-1/2"	6"	53455	\$149.97	83455	\$167.36
3/4"	3/4"	3"	6"	53460	\$158.08	83460	\$175.46
3/4"	3/4"	4"	7"	53465	\$210.27	83465	\$230.02
1"	1"	2"	5"	53470	\$226.84	83470	\$247.09
1"	1"	2-1/2"	5"	53475	\$233.38	83475	\$253.64
1"	1"	3"	6"	53480	\$243.68	83480	\$266.31
1"	1"	4"	7"	53485	\$327.10	83485	\$352.27
1-1/4"	1-1/4"	3"	6"	53490	\$557.74	83490	\$582.74

TOLERANCES-CUTTING DIAMETER-ALL SIZES +.000-.002 SHANK DIAMETER ALL SIZES -.0001-.0004

MICROGRAIN SOLID CARBIDE

TO ORDER SPECIFY EDP No. OR FILL OUT SPECIAL TOOL FORM ON PAGE 27



CUTTING DIA.	SHANK DIA.	CUTTING LENGTH	OVERALL LENGTH	UNCOATED		TIALN	
				EDP NO.	PRICE	EDP NO.	PRICE
1/64"	1/8"	3/64"	1-1/2"	50495	\$11.92	80495	\$13.41
1/32"	1/8"	3/32"	1-1/2"	50500	\$8.32	80500	\$9.81
3/64"	1/8"	1/8"	1-1/2"	50505	\$8.32	80505	\$9.81
1/16"	1/8"	3/16"	1-1/2"	50510	\$8.32	80510	\$9.81
5/64"	1/8"	3/16"	1-1/2"	50515	\$8.32	80515	\$9.81
3/32"	1/8"	3/16"	1-1/2"	50520	\$8.32	80520	\$9.81
7/64"	1/8"	3/16"	1-1/2"	50525	\$8.32	80525	\$9.81
1/8"	1/8"	1/2"	1-1/2"	50530	\$7.38	80530	\$8.86
9/64"	3/16"	5/8"	2"	50535	\$11.92	80535	\$13.77
5/32"	3/16"	5/8"	2"	50540	\$11.92	80540	\$13.77
11/64"	3/16"	5/8"	2"	50545	\$11.92	80545	\$13.77
3/16"	3/16"	5/8"	2"	50550	\$10.62	80550	\$12.46
13/64"	1/4"	5/8"	2-1/2"	50555	\$15.07	80555	\$18.90
7/32"	1/4"	3/4"	2-1/2"	50560	\$15.07	80560	\$18.90
15/64"	1/4"	3/4"	2-1/2"	50565	\$15.07	80565	\$18.90
1/4"	1/4"	3/4"	2-1/2"	50570	\$12.51	80570	\$16.33
17/64"	5/16"	3/4"	2-1/2"	50575	\$19.84	80575	\$25.52
9/32"	5/16"	3/4"	2-1/2"	50580	\$19.84	80580	\$25.52
19/64"	5/16"	13/16"	2-1/2"	50585	\$19.84	80585	\$25.52
5/16"	5/16"	13/16"	2-1/2"	50590	\$17.28	80590	\$22.95
21/64"	3/8"	7/8"	2-1/2"	50595	\$23.17	80595	\$28.85
11/32"	3/8"	7/8"	2-1/2"	50600	\$23.17	80600	\$28.85
23/64"	3/8"	7/8"	2-1/2"	50605	\$23.17	80605	\$28.85
3/8"	3/8"	7/8"	2-1/2"	50610	\$20.34	80610	\$26.05
25/64"	7/16"	1"	3"	50615	\$30.06	80615	\$37.08
13/32"	7/16"	1"	3"	50620	\$30.06	80620	\$37.08
27/64"	7/16"	1"	3"	50625	\$30.06	80625	\$37.08
7/16"	7/16"	1"	3"	50630	\$27.54	80630	\$34.56
29/64"	1/2"	1"	3"	50635	\$36.22	80635	\$43.24
15/32"	1/2"	1"	3"	50640	\$36.22	80640	\$43.24
31/64"	1/2"	1"	3"	50645	\$36.22	80645	\$43.24
1/2"	1/2"	1"	3"	50650	\$31.72	80650	\$38.74
9/16"	9/16"	1-1/4"	3-1/2"	50655	\$58.05	80655	\$68.22
5/8"	5/8"	1-1/4"	3-1/2"	50660	\$59.17	80660	\$69.34
11/16"	3/4"	1-1/2"	4"	50665	\$94.05	80665	\$106.06
3/4"	3/4"	1-1/2"	4"	50670	\$87.75	80670	\$99.76
7/8"	7/8"	1-1/2"	4"	50675	\$134.55	80675	\$149.44
1"	1"	1-1/2"	4"	50680	\$136.80	80680	\$154.53
1-1/4"	1-1/4"	2"	4-1/2"	50685	\$381.37	80685	\$415.55

TOLERANCES-CUTTING DIAMETER-ALL SIZES +.000-.002 SHANK DIAMETER ALL SIZES -.0001-.0004

MICROGRAIN SOLID CARBIDE

TO ORDER SPECIFY EDP No. OR FILL OUT SPECIAL TOOL FORM ON PAGE 27



CUTTING DIA.	SHANK DIA.	CUTTING LENGTH	OVERALL LENGTH	UNCOATED		TIALN	
				EDP NO.	PRICE	EDP NO.	PRICE
1/8"	1/8"	3/4"	3"	54495	\$15.58	84495	\$17.33
1/8"	1/8"	1"	3"	54500	\$15.58	84500	\$17.33
3/16"	3/16"	1-1/4"	3"	54505	\$16.57	84505	\$19.44
3/16"	3/16"	1"	4"	54510	\$18.15	84510	\$21.50
1/4"	1/4"	1-1/8"	3"	54515	\$19.61	84515	\$23.43
1/4"	1/4"	1"	4"	54520	\$21.68	84520	\$26.16
1/4"	1/4"	1-1/2"	4"	54525	\$22.75	84525	\$27.23
1/4"	1/4"	1-1/2"	6"	54530	\$31.15	84530	\$37.40
5/16"	5/16"	1-1/8"	3"	54535	\$23.52	84535	\$29.16
5/16"	5/16"	1"	4"	54540	\$26.33	84540	\$33.60
5/16"	5/16"	1-5/8"	4"	54545	\$28.00	84545	\$35.25
5/16"	5/16"	1-1/2"	6"	54550	\$40.63	84550	\$50.52
3/8"	3/8"	1-1/8"	3"	54555	\$27.10	84555	\$32.74
3/8"	3/8"	1"	4"	54560	\$30.01	84560	\$37.27
3/8"	3/8"	1-1/2"	4"	54565	\$31.62	84565	\$38.88
3/8"	3/8"	2"	4"	54570	\$32.92	84570	\$40.18
3/8"	3/8"	1-1/2"	6"	54575	\$42.65	84575	\$54.16
3/8"	3/8"	3"	6"	54580	\$46.36	84580	\$56.26
7/16"	7/16"	1"	4"	54585	\$41.84	84585	\$50.92
7/16"	7/16"	2"	4"	54590	\$45.56	84590	\$54.64
7/16"	7/16"	1-1/2"	6"	54595	\$58.81	84595	\$71.58
7/16"	7/16"	3"	6"	54600	\$65.53	84600	\$78.29
1/2"	1/2"	1-1/4"	3"	54605	\$35.39	84605	\$42.37
1/2"	1/2"	1"	4"	54610	\$42.96	84610	\$52.05
1/2"	1/2"	1-1/2"	4"	54615	\$43.72	84615	\$52.84
1/2"	1/2"	2"	4"	54620	\$47.44	84620	\$56.53
1/2"	1/2"	1-1/2"	6"	54625	\$64.28	84625	\$73.04
1/2"	1/2"	3"	6"	54630	\$67.64	84630	\$80.41
5/8"	5/8"	2-1/2"	5"	54635	\$90.62	84635	\$103.30
5/8"	5/8"	1-1/2"	6"	54640	\$97.35	84640	\$112.34
5/8"	5/8"	3"	6"	54645	\$101.28	84645	\$116.28
3/4"	3/4"	2-1/2"	5"	54650	\$132.01	84650	\$146.71
3/4"	3/4"	1-1/2"	6"	54655	\$149.97	84655	\$167.36
3/4"	3/4"	3"	6"	54660	\$158.08	84660	\$175.46
3/4"	3/4"	4"	7"	54665	\$210.27	84665	\$230.02
1"	1"	2"	5"	54670	\$226.84	84670	\$247.09
1"	1"	2-1/2"	5"	54675	\$233.38	84675	\$253.64
1"	1"	3"	6"	54680	\$243.68	84680	\$266.31
1"	1"	4"	7"	54685	\$327.10	84685	\$352.27
1-1/4"	1-1/4"	3"	6"	54690	\$557.74	84690	\$582.74

TOLERANCES-CUTTING DIAMETER-ALL SIZES +.000-.002 SHANK DIAMETER ALL SIZES -.0001-.0004

MICROGRAIN SOLID CARBIDE

TO ORDER SPECIFY EDP No. OR FILL OUT SPECIAL TOOL FORM ON PAGE 27

SQUARE

5 FLUTE END MILL



CUTTING DIA.	SHANK DIA.	CUTTING LENGTH	OVERALL LENGTH	UNCOATED		TIALN	
				EDP NO.	PRICE	EDP NO.	PRICE
1/4"	1/4"	3/4"	2-1/2"	55695	\$17.11	85695	\$20.92
5/16"	5/16"	13/16"	2-1/2"	55700	\$26.55	85700	\$32.22
3/8"	3/8"	7/8"	2-1/2"	55705	\$28.88	85705	\$34.47
7/16"	7/16"	1"	2-1/2"	55710	\$36.63	85710	\$43.65
1/2"	1/2"	1"	3"	55715	\$39.37	85715	\$46.39
9/16"	9/16"	1-1/4"	3-1/2"	55720	\$83.55	85720	\$97.25
5/8"	5/8"	1-1/4"	3-1/2"	55725	\$75.82	85725	\$85.95
3/4"	3/4"	1-1/2"	4"	55730	\$107.55	85730	\$119.56
7/8"	7/8"	1-1/2"	4"	55735	\$115.32	85735	\$127.88
1"	1"	1-1/2"	4"	55740	\$166.72	85740	\$184.45
1-1/4"	1-1/4"	2"	4-1/2"	55745	\$455.65	85745	\$488.33

6 FLUTE END MILL



CUTTING DIA.	SHANK DIA.	CUTTING LENGTH	OVERALL LENGTH	UNCOATED		TIALN	
				EDP NO.	PRICE	EDP NO.	PRICE
1/4"	1/4"	3/4"	2-1/2"	56695	\$20.53	86695	\$25.15
5/16"	5/16"	13/16"	2-1/2"	56700	\$31.86	86700	\$38.66
3/8"	3/8"	7/8"	2-1/2"	56705	\$34.65	86705	\$41.36
1/2"	1/2"	1"	3"	56710	\$47.24	86710	\$55.67
5/8"	5/8"	1-1/4"	3-1/2"	56715	\$90.98	86715	\$103.14
3/4"	3/4"	1-1/2"	4"	56720	\$129.06	86720	\$143.47
7/8"	7/8"	1-1/2"	4"	56725	\$138.38	86725	\$153.46
1"	1"	1-1/2"	4"	56730	\$200.06	86730	\$221.34
1-1/4"	1-1/4"	2"	4-1/2"	56735	\$455.65	86735	\$488.33

4 FLUTE ROUGHER END MILL



CUTTING DIA.	SHANK DIA.	CUTTING LENGTH	OVERALL LENGTH	UNCOATED		TIALN	
				EDP NO.	PRICE	EDP NO.	PRICE
1/4"	1/4"	3/4"	2-1/2"	50695	\$21.84	80695	\$25.55
5/16"	5/16"	13/16"	2-1/2"	50700	\$29.36	80700	\$34.85
3/8"	3/8"	7/8"	2-1/2"	50705	\$34.22	80705	\$39.66
1/2"	1/2"	1"	3"	50710	\$52.88	80710	\$60.15
5/8"	5/8"	1-1/4"	3-1/2"	50715	\$94.06	80715	\$104.52
3/4"	3/4"	1-1/2"	4"	50720	\$135.23	80720	\$152.26
1"	1"	1-1/2"	4"	50725	\$210.35	80725	\$226.35

TOLERANCES-CUTTING DIAMETER-ALL SIZES +.000-.002 SHANK DIAMETER ALL SIZES -.0001-.0004

MICROGRAIN SOLID CARBIDE

TO ORDER SPECIFY EDP No. OR FILL OUT SPECIAL TOOL FORM ON PAGE 27

SQUARE

2 FLUTE DOUBLE END MILL



CUTTING DIA.	SHANK DIA.	CUTTING LENGTH	OVERALL LENGTH	UNCOATED		TIALN	
				EDP NO.	PRICE	EDP NO.	PRICE
1/16"	1/8"	1/8"	1-1/2"	51095	\$15.12	81095	\$17.05
1/8"	1/8"	1/4"	1-1/2"	51100	\$10.71	81100	\$12.65
3/16"	3/16"	3/8"	2"	51105	\$16.11	81105	\$18.54
1/4"	1/4"	1/2"	2-1/2"	51110	\$19.48	81110	\$24.43
5/16"	5/16"	1/2"	2-1/2"	51115	\$25.06	81115	\$32.44
3/8"	3/8"	1/2"	2-1/2"	51120	\$26.55	81120	\$33.88
7/16"	7/16"	5/8"	3"	51125	\$40.32	81125	\$49.45
1/2"	1/2"	5/8"	3"	51130	\$45.36	81130	\$54.49
5/8"	5/8"	3/4"	3-1/2"	51135	\$75.35	81135	\$88.65
3/4"	3/4"	3/4"	4"	51140	\$95.35	81140	\$112.55

4 FLUTE DOUBLE END MILL



CUTTING DIA.	SHANK DIA.	CUTTING LENGTH	OVERALL LENGTH	UNCOATED		TIALN	
				EDP NO.	PRICE	EDP NO.	PRICE
1/16"	1/8"	1/8"	1-1/2"	51495	\$15.12	81495	\$17.05
1/8"	1/8"	1/4"	1-1/2"	51500	\$10.71	81500	\$12.65
3/16"	3/16"	3/8"	2"	51505	\$16.11	81505	\$18.54
1/4"	1/4"	1/2"	2-1/2"	51510	\$19.48	81510	\$24.43
5/16"	5/16"	1/2"	2-1/2"	51515	\$25.06	81515	\$32.44
3/8"	3/8"	1/2"	2-1/2"	51520	\$26.55	81520	\$33.88
7/16"	7/16"	5/8"	3"	51525	\$40.32	81525	\$49.45
1/2"	1/2"	5/8"	3"	51530	\$45.36	81530	\$54.49
5/8"	5/8"	3/4"	3-1/2"	51535	\$75.35	81535	\$88.65
3/4"	3/4"	3/4"	4"	51540	\$95.35	81540	\$112.55

5 FLUTE DOUBLE END MILL



CUTTING DIA.	SHANK DIA.	CUTTING LENGTH	OVERALL LENGTH	UNCOATED		TIALN	
				EDP NO.	PRICE	EDP NO.	PRICE
1/4"	1/4"	1/2"	2-1/2"	55750	\$22.11	85750	\$28.35
5/16"	5/16"	1/2"	2-1/2"	55755	\$38.82	85755	\$50.34
3/8"	3/8"	1/2"	2-1/2"	55760	\$43.32	85760	\$54.84
1/2"	1/2"	5/8"	3"	55765	\$59.05	85765	\$71.42
5/8"	5/8"	3/4"	3-1/2"	55770	\$113.73	85770	\$133.53
3/4"	3/4"	1"	4"	55775	\$161.32	85775	\$184.60
7/8"	7/8"	1"	4"	55780	\$172.98	85780	\$207.42
1"	1"	1"	4"	55785	\$250.08	85785	\$284.52

TOLERANCES-CUTTING DIAMETER-ALL SIZES +.000-.002 SHANK DIAMETER ALL SIZES -.0001-.0004

MICROGRAIN SOLID CARBIDE

TO ORDER SPECIFY EDP No. OR FILL OUT SPECIAL TOOL FORM ON PAGE 27

RADIUS

.030"/.060"/.090"/.120"



2 FLUTE END MILL

CUTTING DIA.	SHANK DIA.	CUTTING LENGTH	OVERALL LENGTH	UNCOATED		TIALN	
				EDP NO.	PRICE	EDP NO.	PRICE
1/4"	1/4"	3/4"	2-1/2"	40095	\$20.34	70095	\$24.14
5/16"	5/16"	13/16"	2-1/2"	40100	\$21.28	70100	\$26.92
3/8"	3/8"	7/8"	2-1/2"	40105	\$27.33	70105	\$32.97
7/16"	7/16"	1"	2-1/2"	40110	\$28.45	70110	\$35.43
1/2"	1/2"	1"	3"	40115	\$38.08	70115	\$45.06
9/16"	9/16"	1-1/4"	3-1/2"	40120	\$66.15	70120	\$76.22
5/8"	5/8"	1-1/4"	3-1/2"	40125	\$66.56	70125	\$77.09
3/4"	3/4"	1-1/2"	4"	40130	\$92.10	70130	\$104.06
7/8"	7/8"	1-1/2"	4"	40135	\$142.50	70135	\$157.54
1"	1"	1-1/2"	4"	40140	\$159.02	70140	\$176.67
1-1/4"	1-1/4"	2"	4-1/2"	40145	\$393.37	70145	\$427.55

4 FLUTE END MILL



CUTTING DIA.	SHANK DIA.	CUTTING LENGTH	OVERALL LENGTH	UNCOATED		TIALN	
				EDP NO.	PRICE	EDP NO.	PRICE
1/4"	1/4"	3/4"	2-1/2"	40150	\$20.34	70150	\$24.14
5/16"	5/16"	13/16"	2-1/2"	40155	\$21.28	70155	\$26.92
3/8"	3/8"	7/8"	2-1/2"	40160	\$27.33	70160	\$32.97
7/16"	7/16"	1"	2-1/2"	40165	\$28.45	70165	\$35.43
1/2"	1/2"	1"	3"	40170	\$38.08	70170	\$45.06
9/16"	9/16"	1-1/4"	3-1/2"	40175	\$66.15	70175	\$76.22
5/8"	5/8"	1-1/4"	3-1/2"	40180	\$66.56	70180	\$77.09
3/4"	3/4"	1-1/2"	4"	40185	\$92.10	70185	\$104.06
7/8"	7/8"	1-1/2"	4"	40190	\$142.55	70190	\$157.44
1"	1"	1-1/2"	4"	40195	\$159.02	70195	\$176.67
1-1/4"	1-1/4"	2"	4-1/2"	40200	\$393.37	70200	\$427.55

4 FLUTE VARIABLE END MILL



CUTTING DIA.	SHANK DIA.	CUTTING LENGTH	OVERALL LENGTH	CORNER RADIUS	TIALN	
					EDP NO.	PRICE
1/4"	1/4"	3/4"	2-1/2"	.015-.020	84695	\$19.25
5/16"	5/15"	13/16"	2-1/2"	.015-.020	84700	\$28.75
3/8"	3/8"	1"	2-1/2"	.015-.020	84705	\$34.65
1/2"	1/2"	1"	3"	.025-.030	84710	\$42.55
5/8"	5/8"	1-1/4"	3-1/2"	.030-.035	84715	\$74.25
3/4"	3/4"	1-1/2"	4"	.030-.035	84720	\$95.75
1"	1"	1-1/2"	4"	.030-.035	84725	\$165.55

TOLERANCES-CUTTING DIAMETER-ALL SIZES +.000-.002 SHANK DIAMETER ALL SIZES -.0001-.0004

MICROGRAIN SOLID CARBIDE

TO ORDER SPECIFY EDP No. OR FILL OUT SPECIAL TOOL FORM ON PAGE 27

RADIUS

.030"-.060"-.090"-.120"



5 FLUTE END MILL

CUTTING DIA.	SHANK DIA.	CUTTING LENGTH	OVERALL LENGTH	UNCOATED		TIALN	
				EDP NO.	PRICE	EDP NO.	PRICE
1/4"	1/4"	3/4"	2-1/2"	40245	\$25.11	70245	\$28.92
5/16"	5/16"	13/16"	2-1/2"	40250	\$34.55	70250	\$40.22
3/8"	3/8"	7/8"	2-1/2"	40255	\$36.88	70255	\$42.47
7/16"	7/16"	1"	2-1/2"	40260	\$44.63	70260	\$51.65
1/2"	1/2"	1"	3"	40265	\$47.37	70265	\$54.39
9/16"	9/16"	1-1/4"	3-1/2"	40270	\$91.55	70270	\$105.25
5/8"	5/8"	1-1/4"	3-1/2"	40275	\$83.82	70275	\$103.00
3/4"	3/4"	1-1/2"	4"	40280	\$115.55	70280	\$127.56
7/8"	7/8"	1-1/2"	4"	40285	\$123.32	70285	\$135.88
1"	1"	1-1/2"	4"	40290	\$174.72	70290	\$192.45
1-1/4"	1-1/4"	2"	4-1/2"	40295	\$463.65	70295	\$496.33

4 FLUTE DOUBLE END MILL



CUTTING DIA.	SHANK DIA.	CUTTING LENGTH	OVERALL LENGTH	UNCOATED		TIALN	
				EDP NO.	PRICE	EDP NO.	PRICE
1/4"	1/4"	1/2"	2-1/2"	40205	\$28.48	70205	\$33.80
5/16"	5/16"	1/2"	2-1/2"	40210	\$29.79	70210	\$37.69
3/8"	3/8"	1/2"	2-1/2"	40215	\$38.26	70215	\$46.16
1/2"	1/2"	5/8"	3"	40220	\$53.31	70220	\$63.08
5/8"	5/8"	3/4"	3-1/2"	40225	\$93.18	70225	\$107.93
3/4"	3/4"	1"	4"	40230	\$128.94	70230	\$145.68
7/8"	7/8"	1"	4"	40235	\$176.34	70235	\$188.34
1"	1"	1"	4"	40240	\$222.63	70240	\$247.34

5 FLUTE DOUBLE END MILL



CUTTING DIA.	SHANK DIA.	CUTTING LENGTH	OVERALL LENGTH	UNCOATED		TIALN	
				EDP NO.	PRICE	EDP NO.	PRICE
1/4"	1/4"	1/2"	2-1/2"	40300	\$30.11	70300	\$36.35
5/16"	5/16"	1/2"	2-1/2"	40305	\$46.82	70305	\$58.34
3/8"	3/8"	1/2"	2-1/2"	40310	\$51.32	70310	\$62.84
1/2"	1/2"	5/8"	3"	40315	\$67.05	70315	\$79.42
5/8"	5/8"	3/4"	3-1/2"	40320	\$121.73	70320	\$141.53
3/4"	3/4"	1"	4"	40325	\$169.32	70325	\$192.60
7/8"	7/8"	1"	4"	40330	\$181.28	70330	\$215.42
1"	1"	1"	4"	40335	\$258.08	70335	\$292.52

TOLERANCES-CUTTING DIAMETER-ALL SIZES +.000-.002 SHANK DIAMETER ALL SIZES -.0001-.0004

MICROGRAIN SOLID CARBIDE

TO ORDER SPECIFY EDP No. OR FILL OUT SPECIAL TOOL FORM ON PAGE 27



CUTTING DIA.	SHANK DIA.	CUTTING OVERALL		UNCOATED		TIALN	
		LENGTH	LENGTH	EDP NO.	PRICE	EDP NO.	PRICE
1/64"	3/64"	1/8"	1-1/2"	40340	\$14.24	70340	\$15.72
1/32"	1/8"	3/32"	1-1/2"	40345	\$9.95	70345	\$11.42
3/64"	1/8"	1/8"	1-1/2"	40350	\$9.95	70350	\$11.42
1/16"	1/8"	3/16"	1-1/2"	40355	\$9.95	70355	\$11.42
5/64"	1/8"	3/16"	1-1/2"	40360	\$9.95	70360	\$11.42
3/32"	1/8"	3/16"	1-1/2"	40365	\$9.95	70365	\$11.42
7/64"	1/8"	3/16"	1-1/2"	40370	\$9.95	70370	\$11.42
1/8"	1/8"	1/2"	1-1/2"	40375	\$8.74	70375	\$10.32
9/64"	3/16"	5/8"	2"	40380	\$14.24	70380	\$16.08
5/32"	3/16"	5/8"	2"	40385	\$14.24	70385	\$16.08
11/64"	3/16"	5/8"	2"	40390	\$14.24	70390	\$16.08
3/16"	3/16"	5/8"	2"	40395	\$12.68	70395	\$14.52
13/64"	1/4"	5/8"	2-1/2"	40400	\$18.32	70400	\$21.95
7/32"	1/4"	3/4"	2-1/2"	40405	\$18.32	70405	\$21.95
15/64"	1/4"	3/4"	2-1/2"	40410	\$18.32	70410	\$21.95
1/4"	1/4"	3/4"	2-1/2"	40415	\$14.96	70415	\$18.76
17/64"	5/16"	3/4"	2-1/2"	40420	\$24.68	70420	\$30.32
9/32"	5/16"	3/4"	2-1/2"	40425	\$24.68	70425	\$30.32
19/64"	5/16"	13/16"	2-1/2"	40430	\$24.68	70430	\$30.32
5/16"	5/16"	13/16"	2-1/2"	40435	\$21.52	70435	\$27.14
21/64"	3/8"	7/8"	2-1/2"	40440	\$28.84	70440	\$34.49
11/32"	3/8"	7/8"	2-1/2"	40445	\$28.84	70445	\$34.49
23/64"	3/8"	7/8"	2-1/2"	40450	\$28.84	70450	\$34.49
3/8"	3/8"	7/8"	2-1/2"	40455	\$25.31	70455	\$30.95
25/64"	7/16"	1"	3"	40460	\$37.42	70460	\$44.39
13/32"	7/16"	1"	3"	40465	\$37.42	70465	\$44.39
27/64"	7/16"	1"	3"	40470	\$37.42	70470	\$44.39
7/16"	7/16"	1"	3"	40475	\$34.27	70475	\$41.25
29/64"	1/2"	1"	3"	40480	\$45.06	70480	\$52.05
15/32"	1/2"	1"	3"	40485	\$45.06	70485	\$52.05
31/64"	1/2"	1"	3"	40490	\$45.06	70490	\$52.05
1/2"	1/2"	1"	3"	40495	\$39.46	70495	\$46.45
9/16"	9/16"	1-1/4"	3-1/2"	40500	\$72.21	70500	\$82.32
5/8"	5/8"	1-1/4"	3-1/2"	40505	\$73.64	70505	\$83.76
11/16"	3/4"	1-1/2"	4"	40510	\$117.08	70510	\$128.96
3/4"	3/4"	1-1/2"	4"	40515	\$109.16	70515	\$121.12
7/8"	7/8"	1-1/2"	4"	40520	\$167.42	70520	\$182.22
1"	1"	1-1/2"	4"	40525	\$170.22	70525	\$187.87

TOLERANCES-CUTTING DIAMETER-ALL SIZES +.000-.002 SHANK DIAMETER ALL SIZES -.0001-.0004

MICROGRAIN SOLID CARBIDE

TO ORDER SPECIFY EDP No. OR FILL OUT SPECIAL TOOL FORM ON PAGE 27



CUTTING DIA.	SHANK DIA.	CUTTING LENGTH	OVERALL LENGTH	UNCOATED		TIALN	
				EDP NO.	PRICE	EDP NO.	PRICE
1/8"	1/8"	3/4"	3"	42095	\$17.24	72095	\$19.08
1/8"	1/8"	1"	3"	42100	\$17.24	72100	\$19.08
3/16"	3/16"	1-1/4"	3"	42105	\$19.08	72105	\$21.95
3/16"	3/16"	1"	4"	42110	\$22.12	72110	\$25.48
1/4"	1/4"	1-1/8"	3"	42115	\$22.58	72115	\$26.38
1/4"	1/4"	1"	4"	42120	\$24.64	72120	\$29.12
1/4"	1/4"	1-1/2"	4"	42125	\$25.71	72125	\$30.19
1/4"	1/4"	1-1/2"	6"	42130	\$34.08	72130	\$40.36
5/16"	5/16"	1-1/8"	3"	42135	\$27.59	72135	\$33.24
5/16"	5/16"	1"	4"	42140	\$30.41	72140	\$37.67
5/16"	5/16"	1-5/8"	4"	42145	\$32.07	72145	\$39.32
5/16"	5/16"	1-1/2"	6"	42150	\$44.70	72150	\$54.60
3/8"	3/8"	1-1/8"	3"	42155	\$32.12	72155	\$37.76
3/8"	3/8"	1"	4"	42160	\$35.03	72160	\$42.28
3/8"	3/8"	1-1/2"	4"	42165	\$36.64	72165	\$43.89
3/8"	3/8"	2"	4"	42170	\$37.94	72170	\$45.20
3/8"	3/8"	1-1/2"	6"	42175	\$49.27	72175	\$59.17
3/8"	3/8"	3"	6"	42180	\$51.37	72180	\$61.28
7/16"	7/16"	1"	4"	42185	\$48.37	72185	\$57.47
7/16"	7/16"	2"	4"	42190	\$52.09	72190	\$61.19
7/16"	7/16"	1-1/2"	6"	42195	\$65.36	72195	\$78.12
7/16"	7/16"	3"	6"	42200	\$72.08	72200	\$84.84
1/2"	1/2"	1-1/4"	3"	42205	\$43.09	72205	\$50.08
1/2"	1/2"	1"	4"	42210	\$50.66	72210	\$59.75
1/2"	1/2"	1-1/2"	4"	42215	\$51.42	72215	\$60.52
1/2"	1/2"	2"	4"	42220	\$55.14	72220	\$64.23
1/2"	1/2"	1-1/2"	6"	42225	\$71.98	72225	\$84.76
1/2"	1/2"	3"	6"	42230	\$75.35	72230	\$88.11
5/8"	5/8"	2-1/2"	5"	42235	\$105.09	72235	\$117.76
5/8"	5/8"	1-1/2"	6"	42240	\$111.80	72240	\$126.81
5/8"	5/8"	3"	6"	42245	\$115.75	72245	\$130.76
3/4"	3/4"	2-1/2"	5"	42250	\$152.48	72250	\$167.18
3/4"	3/4"	1-1/2"	6"	42255	\$170.44	72255	\$187.83
3/4"	3/4"	3"	6"	42260	\$178.56	72260	\$195.93
3/4"	3/4"	4"	7"	42265	\$232.52	72265	\$252.47
1"	1"	2"	4-1/2"	42270	\$261.12	72270	\$281.36
1"	1"	2-1/2"	5"	42275	\$267.65	72275	\$287.90
1"	1"	3"	6"	42280	\$277.95	72280	\$300.57
1"	1"	4"	7"	42285	\$361.36	72285	\$386.54

TOLERANCES-CUTTING DIAMETER-ALL SIZES +.000-.002 SHANK DIAMETER ALL SIZES -.0001-.0004

MICROGRAIN SOLID CARBIDE

TO ORDER SPECIFY EDP No. OR FILL OUT SPECIAL TOOL FORM ON PAGE 27



CUTTING DIA.	SHANK DIA.	CUTTING LENGTH	OVERALL LENGTH	UNCOATED		TIALN	
				EDP NO.	PRICE	EDP NO.	PRICE
1/64"	3/64"	1/8"	1-1/2"	40530	\$14.24	70530	\$15.72
1/32"	1/8"	3/32"	1-1/2"	40535	\$9.95	70535	\$11.42
3/64"	1/8"	1/8"	1-1/2"	40540	\$9.95	70540	\$11.42
1/16"	1/8"	3/16"	1-1/2"	40545	\$9.95	70545	\$11.42
5/64"	1/8"	3/16"	1-1/2"	40550	\$9.95	70550	\$11.42
3/32"	1/8"	3/16"	1-1/2"	40555	\$9.95	70555	\$11.42
7/64"	1/8"	3/16"	1-1/2"	40560	\$9.95	70560	\$11.42
1/8"	1/8"	1/2"	1-1/2"	40565	\$8.74	70565	\$10.32
9/64"	3/16"	5/8"	2"	40570	\$14.24	70570	\$16.08
5/32"	3/16"	5/8"	2"	40575	\$14.24	70575	\$16.08
11/64"	3/16"	5/8"	2"	40580	\$14.24	70580	\$16.08
3/16"	3/16"	5/8"	2"	40585	\$12.68	70585	\$14.52
13/64"	1/4"	5/8"	2-1/2"	40590	\$18.32	70590	\$21.95
7/32"	1/4"	3/4"	2-1/2"	40595	\$18.32	70595	\$21.95
15/64"	1/4"	3/4"	2-1/2"	40600	\$18.32	70600	\$21.95
1/4"	1/4"	3/4"	2-1/2"	40605	\$14.96	70605	\$18.76
17/64"	5/16"	3/4"	2-1/2"	40610	\$24.68	70610	\$30.32
9/32"	5/16"	3/4"	2-1/2"	40615	\$24.68	70615	\$30.32
19/64"	5/16"	13/16"	2-1/2"	40620	\$24.68	70620	\$30.32
5/16"	5/16"	13/16"	2-1/2"	40625	\$21.52	70625	\$27.14
21/64"	3/8"	7/8"	2-1/2"	40630	\$28.84	70630	\$34.49
11/32"	3/8"	7/8"	2-1/2"	40635	\$28.84	70635	\$34.49
23/64"	3/8"	7/8"	2-1/2"	40640	\$28.84	70640	\$34.49
3/8"	3/8"	7/8"	2-1/2"	40645	\$25.31	70645	\$30.95
25/64"	7/16"	1"	3"	40650	\$37.42	70650	\$44.39
13/32"	7/16"	1"	3"	40655	\$37.42	70655	\$44.39
27/64"	7/16"	1"	3"	40660	\$37.42	70660	\$44.39
7/16"	7/16"	1"	3"	40665	\$34.27	70665	\$41.25
29/64"	1/2"	1"	3"	40670	\$45.06	70670	\$52.05
15/32"	1/2"	1"	3"	40675	\$45.06	70675	\$52.05
31/64"	1/2"	1"	3"	40680	\$45.06	70680	\$52.05
1/2"	1/2"	1"	3"	40685	\$39.46	70685	\$46.45
9/16"	9/16"	1-1/4"	3-1/2"	40690	\$72.21	70690	\$82.32
5/8"	5/8"	1-1/4"	3-1/2"	40695	\$73.64	70695	\$83.76
11/16"	3/4"	1-1/2"	4"	40700	\$117.08	70700	\$128.96
3/4"	3/4"	1-1/2"	4"	40705	\$109.16	70705	\$121.12
7/8"	7/8"	1-1/2"	4"	40710	\$167.42	70710	\$182.22
1"	1"	1-1/2"	4"	40715	\$170.22	70715	\$187.87
1-1/4"	1-1/4"	2"	4-1/2"	40720	\$415.24	70720	\$448.55

TOLERANCES-CUTTING DIAMETER-ALL SIZES +.000-.002 SHANK DIAMETER ALL SIZES -.0001-.0004

MICROGRAIN SOLID CARBIDE

TO ORDER SPECIFY EDP No. OR FILL OUT SPECIAL TOOL FORM ON PAGE 27



CUTTING DIA.	SHANK DIA.	CUTTING LENGTH	OVERALL LENGTH	UNCOATED		TIALN	
				EDP NO.	PRICE	EDP NO.	PRICE
1/8"	1/8"	3/4"	3"	44095	\$17.24	74095	\$19.08
1/8"	1/8"	1"	3"	44100	\$17.24	74100	\$19.08
3/16"	3/16"	1-1/4"	3"	44105	\$19.08	74105	\$21.95
3/16"	3/16"	1"	4"	44110	\$22.12	74110	\$25.48
1/4"	1/4"	1-1/8"	3"	44115	\$22.58	74115	\$26.38
1/4"	1/4"	1"	4"	44120	\$24.64	74120	\$29.12
1/4"	1/4"	1-1/2"	4"	44125	\$25.71	74125	\$30.19
1/4"	1/4"	1-1/2"	6"	44130	\$34.08	74130	\$40.36
5/16"	5/16"	1-1/8"	3"	44135	\$27.59	74135	\$33.24
5/16"	5/16"	1"	4"	44140	\$30.41	74140	\$37.67
5/16"	5/16"	1-5/8"	4"	44145	\$32.07	74145	\$39.32
5/16"	5/16"	1-1/2"	6"	44150	\$44.70	74150	\$54.60
3/8"	3/8"	1-1/8"	3"	44155	\$32.12	74155	\$37.76
3/8"	3/8"	1"	4"	44160	\$35.03	74160	\$42.28
3/8"	3/8"	1-1/2"	4"	44165	\$36.64	74165	\$43.89
3/8"	3/8"	2"	4"	44170	\$37.94	74170	\$45.20
3/8"	3/8"	1-1/2"	6"	44175	\$49.27	74175	\$59.17
3/8"	3/8"	3"	6"	44180	\$51.37	74180	\$61.28
7/16"	7/16"	1"	4"	44185	\$48.37	74185	\$57.47
7/16"	7/16"	2"	4"	44190	\$52.09	74190	\$61.19
7/16"	7/16"	1-1/2"	6"	44195	\$65.36	74195	\$78.12
7/16"	7/16"	3"	6"	44200	\$72.08	74200	\$84.84
1/2"	1/2"	1-1/4"	3"	44205	\$43.09	74205	\$50.08
1/2"	1/2"	1"	4"	44210	\$50.66	74210	\$59.75
1/2"	1/2"	1-1/2"	4"	44215	\$51.42	74215	\$60.52
1/2"	1/2"	2"	4"	44220	\$55.14	74220	\$64.23
1/2"	1/2"	1-1/2"	6"	44225	\$71.98	74225	\$84.76
1/2"	1/2"	3"	6"	44230	\$75.35	74230	\$88.11
5/8"	5/8"	2-1/2"	5"	44235	\$105.09	74235	\$117.76
5/8"	5/8"	1-1/2"	6"	44240	\$111.80	74240	\$126.81
5/8"	5/8"	3"	6"	44245	\$115.75	74245	\$130.76
3/4"	3/4"	2-1/2"	5"	44250	\$152.48	74250	\$167.18
3/4"	3/4"	1-1/2"	6"	44255	\$170.44	74255	\$187.83
3/4"	3/4"	3"	6"	44260	\$178.56	74260	\$195.93
3/4"	3/4"	4"	7"	44265	\$232.52	74265	\$252.47
1"	1"	2"	4-1/2"	44270	\$261.12	74270	\$281.36
1"	1"	2-1/2"	5"	44275	\$267.65	74275	\$287.90
1"	1"	3"	6"	44280	\$277.95	74280	\$300.57
1"	1"	4"	7"	44285	\$361.36	74285	\$386.54
1-1/4"	1-1/4"	3"	6"	44290	\$667.87	74290	\$727.87

TOLERANCES-CUTTING DIAMETER-ALL SIZES +.000-.002 SHANK DIAMETER ALL SIZES -.0001-.0004

MICROGRAIN SOLID CARBIDE

TO ORDER SPECIFY EDP No. OR FILL OUT SPECIAL TOOL FORM ON PAGE 27

BALL

2 FLUTE DOUBLE END MILL



CUTTING DIA.	SHANK DIA.	CUTTING LENGTH	OVERALL LENGTH	UNCOATED		TIALN	
				EDP NO.	PRICE	EDP NO.	PRICE
1/16"	1/8"	1/8"	1-1/2"	41095	\$17.73	71095	\$19.62
3/32"	1/8"	3/16"	1-1/2"	41100	\$17.73	71100	\$19.62
1/8"	1/8"	1/4"	1-1/2"	41105	\$13.32	71105	\$15.21
5/32"	3/16"	5/16"	2"	41110	\$22.27	71110	\$24.75
3/16"	3/16"	3/8"	2"	41115	\$20.16	71115	\$22.59
1/4"	1/4"	1/2"	2-1/2"	41120	\$24.34	71120	\$29.29
5/16"	5/16"	1/2"	2-1/2"	41125	\$31.32	71125	\$38.75
3/8"	3/8"	1/2"	2-1/2"	41130	\$32.89	71130	\$40.27
7/16"	7/16"	9/16"	2-3/4"	41135	\$50.44	71135	\$29.58
1/2"	1/2"	5/8"	3"	41140	\$56.74	71140	\$65.88
5/8"	5/8"	3/4"	4"	41145	\$85.62	71145	\$102.12
3/4"	3/4"	1"	4"	41150	\$115.65	71150	\$127.85

4 FLUTE DOUBLE END MILL



CUTTING DIA.	SHANK DIA.	CUTTING LENGTH	OVERALL LENGTH	UNCOATED		TIALN	
				EDP NO.	PRICE	EDP NO.	PRICE
1/16"	1/8"	1/8"	1-1/2"	41155	\$17.73	71155	\$19.62
3/32"	1/8"	3/16"	1-1/2"	41160	\$17.73	71160	\$19.62
1/8"	1/8"	1/4"	1-1/2"	41165	\$13.32	71165	\$15.21
5/32"	3/16"	5/16"	2"	41170	\$22.27	71170	\$24.75
3/16"	3/16"	3/8"	2"	41175	\$20.16	71175	\$22.59
1/4"	1/4"	1/2"	2-1/2"	41180	\$24.34	71180	\$29.29
5/16"	5/16"	1/2"	2-1/2"	41185	\$31.32	71185	\$38.75
3/8"	3/8"	1/2"	2-1/2"	41190	\$32.89	71190	\$40.27
7/16"	7/16"	9/16"	2-3/4"	41195	\$50.44	71195	\$29.58
1/2"	1/2"	5/8"	3"	41200	\$56.74	71200	\$65.88
5/8"	5/8"	3/4"	4"	41205	\$85.62	71205	\$102.12
3/4"	3/4"	1"	4"	41210	\$115.65	71210	\$127.85

TOLERANCES-CUTTING DIAMETER-ALL SIZES +.000-.002 SHANK DIAMETER ALL SIZES -.0001-.0004

MICROGRAIN SOLID CARBIDE

TO ORDER SPECIFY EDP No. OR FILL OUT SPECIAL TOOL FORM ON PAGE 27

CHAMFER

2 FLUTE 60 Deg INCLUDED ANGLE END MILL



CUTTING DIA.	CUTTING LENGTH	SHANK DIA.	OVERAL LENHTH	UNCOATED		TIALN	
				EDP NO.	PRICE	EDP NO.	PRICE
1/8"	.110"	1/8"	1-1/2"	40725	\$7.85	70725	\$9.95
3/16"	.165"	3/16"	2"	40730	\$11.35	70730	\$13.65
1/4"	.225"	1/4"	2-1/2"	40735	\$12.95	70735	\$16.85
3/8"	.325"	3/8"	2-1/2"	40740	\$20.85	70740	\$26.45
1/2"	.435"	1/2"	3"	40745	\$30.95	70745	\$37.65
3/4"	.650"	3/4"	4"	40750	\$70.85	70750	\$85.75

4 FLUTE 60 Deg INCLUDED ANGLE END MILL



CUTTING DIA.	CUTTING LENGTH	SHANK DIA.	OVERAL LENHTH	UNCOATED		TIALN	
				EDP NO.	PRICE	EDP NO.	PRICE
1/8"	.110"	1/8"	1-1/2"	40755	7.85	70755	9.95
3/16"	.165"	3/16"	2"	40760	11.35	70760	13.65
1/4"	.225"	1/4"	2-1/2"	40765	12.95	70765	16.85
3/8"	.325"	3/8"	2-1/2"	40770	20.85	70770	26.45
1/2"	.435"	1/2"	3"	40775	30.95	70775	37.65
3/4"	.650"	3/4"	4"	40780	70.85	70780	85.75

TOLERANCES-CUTTING DIAMETER-ALL SIZES +.000-.002 SHANK DIAMETER ALL SIZES -.0001-.0004

MICROGRAIN SOLID CARBIDE

TO ORDER SPECIFY EDP No. OR FILL OUT SPECIAL TOOL FORM ON PAGE 27

CHAMFER

2 FLUTE 90 Deg INCLUDED ANGLE END MILL



CUTTING DIA.	CUTTING LENGTH	SHANK DIA.	OVERAL LENHTH	UNCOATED		TIALN	
				EDP NO.	PRICE	EDP NO.	PRICE
1/8"	.110"	1/8"	1-1/2"	40785	\$7.85	70785	\$9.95
3/16"	.165"	3/16"	2"	40790	\$11.35	70790	\$13.65
1/4"	.225"	1/4"	2-1/2"	40795	\$12.95	70795	\$16.85
3/8"	.325"	3/8"	2-1/2"	40800	\$20.85	70800	\$26.45
1/2"	.435"	1/2"	3"	40805	\$30.95	70805	\$37.65
3/4"	.650"	3/4"	4"	40810	\$70.85	70810	\$85.75

4 FLUTE 90 Deg INCLUDED ANGLE END MILL



CUTTING DIA.	CUTTING LENGTH	SHANK DIA.	OVERAL LENHTH	UNCOATED		TIALN	
				EDP NO.	PRICE	EDP NO.	PRICE
1/8"	.110"	1/8"	1-1/2"	40815	7.85	70815	9.95
3/16"	.165"	3/16"	2"	40820	11.35	70820	13.65
1/4"	.225"	1/4"	2-1/2"	40825	12.95	70825	16.85
3/8"	.325"	3/8"	2-1/2"	40830	20.85	70830	26.45
1/2"	.435"	1/2"	3"	40835	30.95	70835	37.65
3/4"	.650"	3/4"	4"	40840	70.85	70840	85.75

TOLERANCES-CUTTING DIAMETER-ALL SIZES +.000-.002 SHANK DIAMETER ALL SIZES -.0001-.0004

MICROGRAIN SOLID CARBIDE

TO ORDER SPECIFY EDP No. OR FILL OUT SPECIAL TOOL FORM ON PAGE 27

DRILLS

2 FLUTE 90 & 120 Deg INCLUDED ANGLE SPOTTING DRILL



CUTTING DIA.	CUTTING LENGTH	SHANK DIA.	OVERAL LENHTH	90 DEG		120 DEG.	
				EDP NO.	PRICE	EDP NO.	PRICE
1/8"	1/2"	1/8"	1-1/2"	22200	\$9.65	24200	\$9.65
3/16"	5/8"	3/16"	2"	22210	\$13.25	24210	\$13.25
1/4"	3/4"	1/4"	2-1/2"	22220	\$16.55	24220	\$16.55
3/8"	1"	3/8"	2-1/2"	22230	\$24.25	24230	\$24.25
1/2"	1"	1/2"	3"	22240	\$35.75	24240	\$35.75
3/4"	1-1/4"	3/4"	4"	22250	\$95.55	24250	\$95.55

COOLANT FEED DRILL

2 FLUTE 140 POINT ANGLE WITH 2 INTERNALLY TWISTED COOLANT HOLES



DIA. MM	DIA. INCH	DEC. EQUIV.	SHANK DIA.	L1 OAL.	L2 F/LENGTH	EDP NO.	PRICE
2.5		0.099	6	64	22	20099	\$54.00
3.00		0.118	6	64	22	20118	\$54.00
3.18	1/8"	0.125	6	64	22	20125	\$54.00
3.25		0.128	6	64	22	20128	\$54.00
3.30		0.130	6	64	22	20129	\$54.00
3.40		0.134	6	64	22	20133	\$54.00
3.50		0.138	6	64	22	20137	\$54.00
3.57	9/64"	0.141	6	64	22	20140	\$54.00
3.70		0.146	6	64	22	20145	\$54.00
3.80		0.150	6	64	22	20149	\$54.00
3.97	5/32"	0.156	6	68	30	20156	\$58.50
4.00		0.158	6	68	30	20157	\$58.50
4.20		0.165	6	68	30	20165	\$58.50
4.30		0.169	6	68	30	20169	\$58.50
4.37	11/64"	0.172	6	68	30	20171	\$58.50
4.50		0.177	6	68	30	20177	\$58.50
4.65		0.183	6	68	30	20183	\$58.50
4.76	3/16"	0.188	6	68	30	20187	\$58.50
4.80		0.189	6	68	30	20189	\$58.50
5.00		0.197	6	68	30	20196	\$58.50
5.10		0.201	6	68	30	20200	\$58.50
5.16	13/64"	0.203	6	68	30	20203	\$63.90
5.20		0.205	6	68	30	20204	\$63.90
5.30		0.209	6	68	30	20208	\$63.90
5.40		0.213	6	68	30	20212	\$63.90

TOLERANCES-CUTTING DIAMETER-ALL SIZES +.000-.002 SHANK DIAMETER ALL SIZES -.0001-.0004

MICROGRAIN SOLID CARBIDE

TO ORDER SPECIFY EDP No. OR FILL OUT SPECIAL TOOL FORM ON PAGE 27

DRILLS

COOLANT FEED DRILL

2 FLUTE 140 POINT ANGLE WITH 2 INTERNALLY TWISTED COOLANT HOLES



DIA. MM	DIA. INCH	DEC. EQUIV.	SHANK DIA.	L1 OAL.	L2 F/LENGTH	EDP NO.	PRICE
5.50		0.217	6	68	30	20216	\$63.90
5.55		0.219	6	68	30	20218	\$63.90
5.56	7/32"	0.219	6	68	30	20219	\$66.75
5.60		0.221	6	68	30	20220	\$66.75
5.70		0.224	6	68	30	20224	\$66.75
5.80		0.228	6	68	30	20228	\$66.75
5.95	15/64"	0.234	6	68	30	20234	\$66.75
6.00		0.236	6	68	30	20236	\$66.75
6.10		0.240	8	68	30	20240	\$66.75
6.20		0.244	8	68	30	20244	\$66.75
6.30		0.248	8	68	30	20248	\$66.75
6.35	1/4"	0.250	8	80	34	20250	\$74.70
6.40		0.252	8	80	34	20252	\$74.70
6.50		0.256	8	80	34	20255	\$74.70
6.60		0.260	8	80	34	20259	\$74.70
6.75	17/64"	0.266	8	80	34	20265	\$74.70
6.80		0.268	8	80	34	20267	\$74.70
6.90		0.272	8	80	34	20271	\$74.70
7.00		0.276	8	80	34	20275	\$74.70
7.10		0.280	8	80	42	20279	\$74.70
7.14	9/32"	0.281	8	80	42	20281	\$74.70
7.20		0.284	8	80	42	20283	\$74.70
7.30		0.287	8	80	42	20287	\$74.70
7.40		0.291	8	80	42	20291	\$74.70
7.50		0.295	8	80	42	20295	\$74.70
7.54	19/64"	0.297	8	80	42	20296	\$74.70
7.60		0.299	8	80	42	20299	\$74.70
7.80		0.307	8	80	42	20307	\$74.70
7.90		0.311	8	80	42	20311	\$74.70
7.94	5/16"	0.313	8	92	48	20312	\$74.70
8.00		0.315	8	92	48	20315	\$74.70
8.10		0.319	10	92	48	20318	\$74.70
8.20		0.323	10	92	48	20322	\$74.70
8.30		0.327	10	92	48	20326	\$74.70
8.33	21/64"	0.328	10	92	48	20328	\$89.35
8.40		0.331	10	92	48	20330	\$89.35
8.50		0.335	10	92	48	20334	\$89.35
8.60		0.339	10	92	48	20338	\$89.35
8.70		0.343	10	92	48	20342	\$89.35
8.73	11/32"	0.344	10	92	48	20343	\$89.35

TOLERANCES-CUTTING DIAMETER-ALL SIZES +.000-.002 SHANK DIAMETER ALL SIZES -.0001-.0004

MICROGRAIN SOLID CARBIDE

TO ORDER SPECIFY EDP No. OR FILL OUT SPECIAL TOOL FORM ON PAGE 27

DRILLS

COOLANT FEED DRILL

2 FLUTE 140 POINT ANGLE WITH 2 INTERNALLY TWISTED COOLANT HOLES



DIA. MM	DIA. INCH	DEC. EQUIV.	SHANK DIA.	L1 OAL.	L2 F/LENGTH	EDP NO.	PRICE
9.50		0.374	10	92	48	20374	\$92.75
9.53	3/8"	0.375	10	92	48	20375	\$92.75
9.60		0.378	10	92	48	20378	\$92.75
9.70		0.382	10	92	48	20381	\$92.75
9.80		0.386	10	92	48	20385	\$92.75
9.90		0.390	10	92	48	20389	\$92.75
9.92	25/64	0.391	10	104	58	20390	\$115.25
10.00		0.394	10	104	58	20393	\$115.25
10.10		0.398	12	104	58	20397	\$115.25
10.20		0.402	12	104	58	20401	\$115.25
10.30		0.406	12	104	58	20405	\$115.25
10.32	13/32"	0.406	12	104	58	20406	\$122.45
10.40		0.409	12	104	58	20409	\$122.45
10.50		0.413	12	104	58	20413	\$122.45
10.60		0.417	12	104	58	20417	\$122.45
10.70		0.421	12	104	58	20421	\$122.45
10.72	27/64"	0.422	12	104	58	20421	\$122.45
10.80		0.425	12	104	58	20425	\$122.45
11.00		0.433	12	104	58	20433	\$122.45
11.10		0.437	12	104	58	20437	\$122.45
11.11	7/16"	0.438	12	104	58	20438	\$126.95
11.20		0.441	12	104	58	20440	\$126.95
11.30		0.445	12	104	58	20444	\$126.95
11.50		0.453	12	104	58	20452	\$126.95
11.51	29/64"	0.453	12	104	58	20453	\$126.95
11.70		0.461	12	104	58	20460	\$126.95
11.80		0.465	12	104	58	20464	\$126.95
11.91	15/32"	0.469	12	104	58	20468	\$126.95
12.00		0.472	12	104	58	20472	\$126.95
12.10		0.476	14	104	58	20476	\$126.95
12.20		0.480	14	104	58	20480	\$126.95
12.25		0.482	14	104	58	20482	\$126.95
12.30		0.484	14	104	58	20484	\$126.95
12.30	31/64"	0.484	14	124	78	20485	\$126.95
12.50		0.492	14	124	78	20492	\$126.95
12.60		0.496	14	124	78	20496	\$126.95
12.70	1/2"	0.500	14	124	78	20500	\$126.95
12.75		0.502	14	124	78	20502	\$172.85
12.80		0.504	14	124	78	20503	\$172.85
12.90		0.508	14	124	78	20507	\$172.85
13.00		0.512	14	124	78	20511	\$172.85

TOLERANCES-CUTTING DIAMETER-ALL SIZES +.000-.002 SHANK DIAMETER ALL SIZES -.0001-.0004

MICROGRAIN SOLID CARBIDE

TO ORDER SPECIFY EDP No. OR FILL OUT SPECIAL TOOL FORM ON PAGE 27

COOLANT FEED DRILL

2 FLUTE 140 POINT ANGLE WITH 2 INTERNALLY TWISTED COOLANT HOLES



DIA. MM	DIA. INCH	DEC. EQUIV.	SHANK DIA.	L1 OAL.	L2 F/LENGTH	EDP NO.	PRICE
13.80		0.543	14	124	78	20543	\$172.85
14.00		0.551	14	124	78	20551	\$172.85
14.10		0.555	14	124	78	20555	\$172.85
14.20		0.559	14	124	78	20559	\$172.85
14.29	9/16"	0.563	16	130	84	20562	\$234.55
14.50		0.571	16	130	84	20570	\$234.55
14.75		0.581	16	130	84	20580	\$234.55
15.00		0.591	16	130	84	20590	\$234.55
15.10		0.595	16	130	84	20594	\$234.55
15.20		0.598	16	130	84	20598	\$234.55
15.30		0.602	16	130	84	20602	\$234.55
15.50		0.610	16	130	84	20610	\$234.55
15.80		0.622	16	130	84	20622	\$234.55
15.88	5/8"	0.625	16	130	84	20625	\$234.55
16.00		0.630	16	130	84	20629	\$234.55
16.50		0.650	18	145	90	20649	\$255.25
16.75		0.659	18	145	90	20659	\$311.62
17.00		0.669	18	145	90	20669	\$311.62
17.50		0.689	18	145	90	20689	\$311.62
17.60		0.693	18	145	90	20692	\$311.62
18.00		0.709	18	145	90	20708	\$311.62
18.50		0.728	20	155	103	20728	\$361.85
19.00		0.748	20	155	103	20748	\$361.85
19.05	3/4"	0.750	20	155	103	20750	\$361.85
19.50		0.768	20	155	10	20767	\$361.85
20.00		0.787	20	155	103	20787	\$361.85

TOLERANCES-CUTTING DIAMETER-ALL SIZES +.000-.002 SHANK DIAMETER ALL SIZES -.0001-.0004

MICROGRAIN SOLID CARBIDE

TO ORDER SPECIFY EDP No. OR FILL OUT SPECIAL TOOL FORM ON PAGE 27