

NEW

**SERIES 255RA & SERIES 855RA
HIGH PERFORMANCE
FINISHING END MILLS**

Pricing current as of January 1, 2006

**No. 0601F
SUPPLEMENT TO
CATALOG 2003-04**

GARR TOOL[®]



Series 255RA - fractional Series 855RA - metric Corner Radius - TiAlN Coated

TOLERANCES

Flute Diameter: +.000 -.002" (+0.000 -0.050mm)
Shank Diameter: -.0001 -.0004" (-0.0025 -0.0100mm)
Corner Radius: +.001 -.001" (+0.025 -0.025mm)

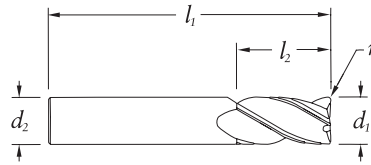
High performance solid carbide finisher for titanium, stainless steels and exotic materials

An ideal tool for finishing applications after using the VRX end mill

See page 57 of the 2003-04 catalog for square end sizes

Can be modified with a neck or flat with a 48-hour turnaround

5 rhs/rhc flutes - 45° helix



EDP#	Decimal Equiv.	d_1 Flute Diameter †		d_2 Shank Diameter	l_1 Overall Length	l_2 Flute Length	r Corner Radius	1-11	12-25	26-49	50-100
83527	.1181	3mm		3mm	38mm	8mm	.20mm	12.39	11.85	11.31	10.77
83537	.1181	3mm		3mm	38mm	8mm	.50mm	12.39	11.85	11.31	10.77
83547	.1181	3mm		3mm	50mm	12mm	.20mm	14.84	14.19	13.55	12.90
83557	.1181	3mm		3mm	50mm	12mm	.50mm	14.84	14.19	13.55	12.90
83567	.1250	1/8	(3.17mm)	1/8	1-1/2	1/4	.010	11.76	11.25	10.74	10.23
83577	.1250	1/8	(3.17mm)	1/8	1-1/2	1/4	.020	11.76	11.25	10.74	10.23
83587	.1250	1/8	(3.17mm)	1/8	2	1/2	.010	14.47	13.84	13.21	12.58
83597	.1250	1/8	(3.17mm)	1/8	2	1/2	.020	14.47	13.84	13.21	12.58
83607	.1575	4mm		6mm	50mm	8mm	.30mm	19.96	19.09	18.22	17.36
83617	.1575	4mm		6mm	50mm	8mm	.50mm	19.96	19.09	18.22	17.36
83627	.1575	4mm		6mm	50mm	12mm	.30mm	19.96	19.09	18.22	17.36
83637	.1575	4mm		6mm	50mm	12mm	.50mm	19.96	19.09	18.22	17.36
83647	.1875	3/16	(4.76mm)	3/16	2	5/16	.010	14.79	14.15	13.50	12.86
83657	.1875	3/16	(4.76mm)	3/16	2	5/16	.020	14.79	14.15	13.50	12.86
83667	.1875	3/16	(4.76mm)	3/16	2	9/16	.010	14.79	14.15	13.50	12.86
83677	.1875	3/16	(4.76mm)	3/16	2	9/16	.020	14.79	14.15	13.50	12.86
83707	.1969	5mm		6mm	65mm	15mm	.30mm	21.77	20.82	19.88	18.93
83717	.1969	5mm		6mm	65mm	15mm	.50mm	21.77	20.82	19.88	18.93
83767	.2362	6mm		6mm	50mm	12mm	.30mm	18.78	17.96	17.15	16.33
83777	.2362	6mm		6mm	50mm	12mm	.50mm	18.78	17.96	17.15	16.33
83787	.2362	6mm		6mm	65mm	19mm	.30mm	21.09	20.17	19.26	18.34
83797	.2362	6mm		6mm	65mm	19mm	.50mm	21.09	20.17	19.26	18.34
83827	.2500	1/4	(6.35mm)	1/4	2	3/8	.015	18.08	17.29	16.51	15.72
83837	.2500	1/4	(6.35mm)	1/4	2	3/8	.030	18.08	17.29	16.51	15.72
83847	.2500	1/4	(6.35mm)	1/4	2-1/2	3/4	.015	20.31	19.43	18.54	17.66
83857	.2500	1/4	(6.35mm)	1/4	2-1/2	3/4	.030	20.31	19.43	18.54	17.66
83927	.3125	5/16	(7.94mm)	5/16	2	7/16	.020	24.68	23.61	22.53	21.46
83937	.3125	5/16	(7.94mm)	5/16	2	7/16	.030	24.68	23.61	22.53	21.46
83947	.3125	5/16	(7.94mm)	5/16	2-1/2	13/16	.020	27.51	26.31	25.12	23.92
83957	.3125	5/16	(7.94mm)	5/16	2-1/2	13/16	.030	27.51	26.31	25.12	23.92

fractional - Series 255RA
metric - Series 855RA
Corner Radius - TIALN Coated

EDP#	Decimal Equiv.	<i>d1</i> Flute Diameter †	<i>d2</i> Shank Diameter	<i>l1</i> Overall Length	<i>l2</i> Flute Length	<i>r</i> Corner Radius	1-11	12-25	26-49	50-100
83987	.3150	8mm	8mm	50mm	12mm	.50mm	25.59	24.48	23.36	22.25
83997	.3150	8mm	8mm	50mm	12mm	1.0mm	25.59	24.48	23.36	22.25
84007	.3150	8mm	8mm	65mm	22mm	.50mm	28.54	27.30	26.06	24.82
84017	.3150	8mm	8mm	65mm	22mm	1.0mm	28.54	27.30	26.06	24.82
84087	.3750	3/8 (9.52mm)	3/8	2	1/2	.020	29.10	27.83	26.57	25.30
84097	.3750	3/8 (9.52mm)	3/8	2	1/2	.030	29.10	27.83	26.57	25.30
84107	.3750	3/8 (9.52mm)	3/8	2-1/2	7/8	.020	32.00	30.61	29.22	27.83
84117	.3750	3/8 (9.52mm)	3/8	2-1/2	7/8	.030	32.00	30.61	29.22	27.83
84167	.3937	10mm	10mm	70mm	22mm	.50mm	38.67	36.99	35.31	33.63
84177	.3937	10mm	10mm	70mm	22mm	1.0mm	38.67	36.99	35.31	33.63
84267	.4724	12mm	12mm	75mm	32mm	.50mm	56.57	54.11	51.65	49.19
84277	.4724	12mm	12mm	75mm	32mm	1.0mm	56.57	54.11	51.65	49.19
84317	.5000	1/2 (12.70mm)	1/2	3	1-1/4	.020	54.28	51.92	49.56	47.20
84327	.5000	1/2 (12.70mm)	1/2	3	1-1/4	.030	54.28	51.92	49.56	47.20
84337	.5000	1/2 (12.70mm)	1/2	3	1-1/4	.060	54.28	51.92	49.56	47.20
84367	.5000	1/2 (12.70mm)	1/2	4	2	.030	64.30	61.50	58.71	55.91
84377	.5000	1/2 (12.70mm)	1/2	4	2	.060	64.30	61.50	58.71	55.91
84487	.6250	5/8 (15.87mm)	5/8	3-1/2	1-1/4	.030	86.32	82.57	78.81	75.06
84497	.6250	5/8 (15.87mm)	5/8	3-1/2	1-1/4	.060	86.32	82.57	78.81	75.06
84567	.6299	16mm	16mm	88mm	32mm	1.0mm	90.01	86.10	82.18	78.27
84577	.6299	16mm	16mm	88mm	32mm	2.0mm	90.01	86.10	82.18	78.27
84587	.6299	16mm	16mm	150mm	65mm	1.0mm	134.41	128.57	122.72	116.88
84597	.6299	16mm	16mm	150mm	65mm	2.0mm	134.41	128.57	122.72	116.88
84687	.7500	3/4 (19.05mm)	3/4	4	1-1/2	.030	123.52	118.15	112.78	107.41
84697	.7500	3/4 (19.05mm)	3/4	4	1-1/2	.060	123.52	118.15	112.78	107.41
84707	.7500	3/4 (19.05mm)	3/4	5	2	.030	171.04	163.60	156.17	148.73
84717	.7500	3/4 (19.05mm)	3/4	5	2	.060	171.04	163.60	156.17	148.73
84767	.7874	20mm	20mm	100mm	38mm	1.0mm	174.81	167.21	159.61	152.01
84777	.7874	20mm	20mm	100mm	38mm	3.0mm	174.81	167.21	159.61	152.01
84887	.9843	25mm	25mm	100mm	38mm	1.0mm	200.04	191.34	182.64	173.95
84897	.9843	25mm	25mm	100mm	38mm	3.0mm	200.04	191.34	182.64	173.95
84967	1.000	1 (25.40mm)	1	4	1-1/2	.030	210.43	201.28	192.13	182.98
84977	1.000	1 (25.40mm)	1	4	1-1/2	.120	210.43	201.28	192.13	182.98
84987	1.000	1 (25.40mm)	1	5	2	.030	258.78	247.53	236.28	225.03
84997	1.000	1 (25.40mm)	1	5	2	.120	258.78	247.53	236.28	225.03

GARR TOOL 255RA/855RA Series Milling Guide

Material	SFM (Vc)	CPT (CHIPLOAD PER TOOTH) Recommendations - (Fz)									*Profiling	Slotting
		1/8	3/16	1/4	5/16	3/8	1/2	5/8	3/4	1	Radial	Axial
Aluminum	600+	.0005-.0010	.0010-.0020	.0020-.0030	.0030-.0040	.0030-.0040	.0040-.0060	.0040-.0060	.0040-.0080	.0040-.0080	0.3 x D	0.5 x D
Stainless Steel	300-400	.0004-.0010	.0006-.0010	.0008-.0015	.0010-.0020	.0012-.0020	.0015-.0020	.0020-.0025	.0025-.0030	.0025-.0035	0.3 x D	0.5 x D
Inconel	175-225	.0004-.0010	.0007-.0010	.0010-.0015	.0010-.0015	.0010-.0015	.0010-.0015	.0012-.0020	.0015-.0025	.0015-.0025	0.2 x D	0.2 x D
Titanium	400-500	.0005-.0010	.0008-.0010	.0010-.0020	.0010-.0020	.0015-.0020	.0025-.0030	.0025-.0030	.0030-.0035	.0030-.0040	0.3 x D	0.5 x D

Material	SMM (Vc)	CPT (CHIPLOAD PER TOOTH) Metric Recommendations - (Fz)									*Profiling	Slotting
		3mm	5mm	6mm	8mm	10mm	12mm	16mm	20mm	25mm	Radial	Axial
Aluminum	180+	0.010-0.030	0.025-0.050	0.050-0.075	0.075-0.100	0.075-0.100	0.100-0.150	0.100-0.150	0.100-0.200	0.100-0.200	0.3 x D	0.5 x D
Stainless Steel	90-120	0.009-0.020	0.015-0.025	0.020-0.040	0.030-0.050	0.030-0.050	0.040-0.050	0.050-0.065	0.065-0.075	0.065-0.100	0.3 x D	0.5 x D
Inconel	60-75	0.008-0.020	0.020-0.025	0.020-0.025	0.025-0.040	0.025-0.040	0.025-0.040	0.030-0.050	0.040-0.065	0.040-0.065	0.2 x D	0.2 x D
Titanium	120-150	0.010-0.020	0.020-0.025	0.025-0.040	0.025-0.050	0.040-0.050	0.050-0.075	0.065-0.075	0.075-0.100	0.075-0.100	0.3 x D	0.5 x D

* For profiling, axial = 2xD

NOTE - ABOVE ARE STARTING PARAMETERS ONLY. HIGHER RESULTS MAY BE ACHIEVED WITH OPTIMUM CONDITIONS.

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