3125 V-MAC

V-MAC



The V-Mac is a premiere edition of full radial engagement HEM style end mill. The V-Mac has unsurpassed performance in high cutting force milling in high temp alloys, stainless steel, and Inconel. Please select L.O.C. appropriately to ensure maximum performance. Not Recommended for High Si Aluminum (>10%), Low Si Aluminum (<10%), Composites, Plastics, Brass & Copper, or Graphite.

FULLERTON®

SPEEDS / FEEDS

Examples: Inconel 625

	Nickel Alloy						
IMPERIAL IPT	Rough Profile	HEM	Finish	METRIC MMPT	Rough Profile	HEM	Finish
SFM (ft/min)	150	220	160	SMPM (m/min)	46	91	49
Axial Depth	full	full	full	Axial Depth	full	full	full
Radial Width	10%	4%-8%	>6%	Radial Width	10%	4%-8%	>6%
1/8"	.0006	.0007	.0007	3	.0152	.0178	.0178
1/4"	.0015	.0015	.0015	6	.0381	.0381	.0381
3/8"	.0020	.0020	.0022	10	.0508	.0508	.0559
1/2"	.0025	.0027	.0030	12	.0635	.0686	.0762
3/4"	.0035	.0038	.0040	20	.0889	.0965	.1016
1"	.0040	.0035	.0046	25	.1016	.0889	.1168

Examples: Inconel 718

	Nickel Alloy						
IMPERIAL IPT	Rough Profile	HEM	Finish	METRIC MMPT	Rough Profile	HEM	Finish
SFM (ft/min)	170	250	180	SMPM (m/min)	52	101	55
Axial Depth	full	full	full	Axial Depth	full	full	full
Radial Width	10%	4%-8%	>6%	Radial Width	10%	4%-8%	>6%
1/8"	.0007	.0008	.0008	3	.0178	.0203	.0203
1/4"	.0016	.0017	.0018	6	.0406	.0432	.0457
3/8"	.0024	.0025	.0025	10	.0610	.0635	.0635
1/2"	.0027	.0030	.0032	12	.0686	.0762	.0813
3/4"	.0038	.0040	.0042	20	.0965	.1016	.1067
1"	.0042	.0045	.0048	25	.1067	.1143	.1219

Examples: 301,303,304,304L,316,316L,321

	Stainless Steel - Austenitic						
IMPERIAL IPT	Rough Profile	HEM	Finish	METRIC MMPT	Rough Profile	HEM	Finish
SFM (ft/min)	375	575	400	SMPM (m/min)	114	175	122
Axial Depth	full	full	full	Axial Depth	full	full	full
Radial Width	10%	4%-8%	>6%	Radial Width	10%	4%-8%	>6%
1/8"	.0008	.0010	.0010	3	.0203	.0254	.0254
1/4"	.0016	.0018	.0018	6	.0406	.0457	.0457
3/8"	.0024	.0027	.0028	10	.0610	.0686	.0711
1/2"	.0037	.0045	.0045	12	.0940	.1143	.1143
3/4"	.0045	.0052	.0056	20	.1143	.1321	.1422
1"	.0058	.0066	.0068	25	.1473	.1676	.1727

Examples: 403, 410, 416, 420, 440, 430, 446

	Stainless Steel - Martensitic Ferritic						
IMPERIAL IPT	Rough Profile	HEM	Finish	METRIC MMPT	Rough Profile	HEM	Finish
SFM (ft/min)	425	625	475	SMPM (m/min)	130	191	145
Axial Depth	full	full	full	Axial Depth	full	full	full
Radial Width	10%	4%-8%	>6%	Radial Width	10%	4%-8%	>6%
1/8"	.0008	.0010	.0010	3	.0203	.0254	.0254
1/4"	.0016	.0018	.0018	6	.0406	.0457	.0457
3/8"	.0024	.0027	.0028	10	.0610	.0686	.0711
1/2"	.0037	.0045	.0045	12	.0940	.1143	.1143
3/4"	.0045	.0052	.0056	20	.1143	.1321	.1422
1"	.0058	.0066	.0068	25	.1473	.1676	.1727

Examples: 13XX, 41XX, 43XX, 51XX, 86XX, 93XX

	Steels						
IMPERIAL IPT	Rough Profile	HEM	Finish	METRIC MMPT	Rough Profile	HEM	Finish
SFM (ft/min)	550	950	700	SMPM (m/min)	168	290	213
Axial Depth	full	full	full	Axial Depth	full	full	full
Radial Width	10%	4%-8%	>10%	Radial Width	10%	4%-8%	>6%
1/8"	.0008	.0010	.0010	3	.0203	.0254	.0254
1/4"	.0016	.0018	.0018	6	.0406	.0457	.0457
3/8"	.0024	.0027	.0028	10	.0610	.0686	.0711
1/2"	.0037	.0045	.0045	12	.0940	.1143	.1143
3/4"	.0045	.0052	.0056	20	.1143	.1321	.1422
1"	.0058	.0066	.0068	25	.1473	.1676	.1727

Examples: A2, H13, P20, S7 (36-50 Rc)

	Hardened Steels						
IMPERIAL IPT	Rough Profile	HEM	Finish	METRIC MMPT	Rough Profile	HEM	Finish
SFM (ft/min)	200	375	230	SMPM (m/min)	61	114	70
Axial Depth	full	full	full	Axial Depth	full	full	full
Radial Width	10%	4%-8%	>6%	Radial Width	10%	4%-8%	>6%
1/8"	.0007	.0008	.0008	3	.0178	.0203	.0203
1/4"	.0016	.0017	.0018	6	.0406	.0432	.0457
3/8"	.0024	.0025	.0025	10	.0610	.0635	.0635
1/2"	.0027	.0030	.0032	12	.0686	.0762	.0813
3/4"	.0038	.0040	.0042	20	.0965	.1016	.1067
1"	.0042	.0045	.0048	25	.1067	.1143	.1219