SPEEDS & FEEDS

6 Flute - Variable Pitch

HVNI-6

HVNI-6

Material Guide		Hardness	SFM	Inches per Tooth (IPT)														
				1/4			3/8			1/2			3/4			1		
				Slot	Rgh	Fin	Slot	Rgh	Fin	Slot	Rgh	Fin	Slot	Rgh	Fin	Slot	Rgh	Fin
Pure Nickel	Nickel 200, Nickel 201	< 75 HRB	285	.0060	.0028	.0018	.0088	.0041	.0021	.0116	.0054	.0025	.0165	.0077	.0029	.0212	.0099	.0036
		75 - 98 HRB	250	.0049	.0023	.0017	.0073	.0034	.0019	.0096	.0045	.0023	.0137	.0064	.0027	.0178	.0083	.0033
Nickel Alloy	Hastelloy C-22, Inconel 625, Waspaloy, René 41, Inconel 718, Incoloy 20	75 - 98 HRB	80	.0030	.0014	.0013	.0045	.0021	.0015	.0058	.0027	.0018	.0084	.0039	.0021	.0107	.0050	.0025
		21 - 36 HRC	75	.0030	.0014	.0013	.0043	.0020	.0015	.0056	.0026	.0017	.0081	.0038	.0020	.0105	.0049	.0025
		36 - 50 HRC	70	.0026	.0012	.0012	.0036	.0017	.0014	.0047	.0022	.0016	.0069	.0032	.0019	.0088	.0041	.0023
Pure Titanium	Ti Grade 1, Ti Grade 2, Ti Grade 3, Ti Grade 4, Ti Grade 7, Ti Grade 12	< 75 HRB	300	.0047	.0038	.0021	.0071	.0057	.0024	.0099	.0074	.0029	.0148	.0106	.0034	.0198	.0137	.0041
		75 - 98 HRB	275	.0040	.0032	.0019	.0059	.0048	.0023	.0082	.0062	.0026	.0123	.0089	.0031	.0165	.0115	.0038
		21 - 36 HRC	250	.0030	.0024	.0017	.0045	.0036	.0019	.0062	.0047	.0023	.0092	.0067	.0027	.0123	.0086	.0032
Titanium Alloy	Ti 3Al-2.5V, Ti 6Al-4V, Ti 10V-2Fe-3Al	21 - 36 HRC	180	.0024	.0019	.0014	.0037	.0028	.0017	.0049	.0037	.0020	.0073	.0053	.0023	.0097	.0068	.0029
		36 - 50 HRC	160	.0022	.0017	.0014	.0032	.0026	.0016	.0044	.0034	.0019	.0067	.0048	.0023	.0089	.0062	.0027
Cobalt Alloy	ASTM F562, ASTM F90, ASTM F75, ASTM F799	75 - 98 HRB	210	.0034	.0016	.0014	.0051	.0024	.0016	.0066	.0031	.0019	.0096	.0045	.0022	.0122	.0057	.0027
		21 - 36 HRC	170	.0034	.0016	.0014	.0049	.0023	.0016	.0064	.0030	.0018	.0092	.0043	.0022	.0120	.0056	.0027
		36 - 50 HRC	65	.0021	.0010	.0011	.0034	.0016	.0013	.0043	.0020	.0015	.0062	.0029	.0018	.0081	.0038	.0022

Milling Process	ADOC	RDOC
HEM (High Efficiency Milling)	Up to Max LOC	Up to 10% Diameter
Rgh (Roughing)	Up to Max LOC	10%-20% Diameter
Fin (Finishing)	Up to Max LOC	4%-6% Diameter

Note: IPT values shown are for 2.5xD length of cut tools, and should be adjusted for longer or shorter lengths of cut. For more accurate running parameters, please refer to Machining Advisor Pro.