

446 AND 436 SERIES V² CHIP LOADS

MATERIALS	Carbon Steels	Alloy Steels	Stainless Steels 300 Series	Stainless Steels 400 Series	Cast Irons	High Temp Alloys	Titanium Alloys
Description	10XX, 11XX, 13XX, 15XX	40XX, 41XX, 42XX, 43XX, 46XX, 86XX Series	304, 304L, 316, 316L, 312, Invar Kovar	420, 430F, 416, 420F, 440L		Inconel 625/718, A286, Haynes	Wrought 6AL-4V, ASTM 1,2,3 6A1-25N-4ZR- 2MO-51
SFM > 32 RC	360 – 420	180 – 260	250 – 300	360 – 420	140 -300	100 – 160	200 – 250
SFM < 32 RC	220 – 280	140 – 220	200 – 260	220 – 280	80 – 140	60 – 120	160 – 200
1/4 Slotting	.0011	.0011	.0011	.0011	.0011	.0009	.0011
Heavy Radial	.0011	.0014	.0011	.0014	.0011	.0009	.0013
Finishing Light Radial	.0014	.0014	.0014	.0014	.0014	.0014	.0014
5/16 S	.0015	.0015	.0015	.0015	.0013	.0011	.0013
H R	.0018	.0016	.0015	.0015	.0013	.0011	.0015
FL R	.0018	.0017	.0018	.0017	.0017	.0013	.0016
3/8 S	.0018	.0018	.0018	.0018	.0018	.0014	.0018
H R	.0018	.0021	.0018	.0021	.0018	.0014	.0020
FL R	.1121	.0021	.0021	.0021	.0021	.0021	.0021
1/2 S	.0025	.0025	.0025	.0025	.0028	.0020	.0025
H R	.0025	.0030	.0025	.0030	.0025	.0020	.0028
FL R	.0030	.0030	.0030	.0030	.0028	.0030	.0030
5/8 S	.0031	.0031	.0031	.0031	.0031	.0025	.0031
H R	.0031	.0037	.0031	.0037	.0031	.0025	.0034
FL R	.0037	.0037	.0037	.0037	.0037	.0037	.0037
3/4 S	.0037	.0037	.0037	.0037	.0037	.0030	.0037
H R	.0037	.0045	.0037	.0045	.0037	.0030	.0042
FL R	.0045	.0045	.0045	.0045	.0045	.0045	.0045
1" S	.0050	.0050	.0050	.0050	.0050	.0040	.0050
H R	.0050	.0060	.0050	.0060	.0050	.0040	.0056
FL R	.0060	.0060	.0060	.0060	.0060	.0060	.0060

Deep Slotting = $3/4 - 1 \times \text{DIA}$
 Heavy Radial = $1.0 \times \text{DIA Depth}$
 $50 \% \times \text{DIA Radial}$
 Finishing Light = $<10\% \text{ of DIA Radial}$