



INCH

METRIC

# Multi Extreme

## Recommended Cutting Data for Face Milling with -HF Style

Material	Grade	SFM	IPT	DOC	WOC
Gray Cast Iron	JC8118	600	.060"	.060" - .080"	70%
Nodular Cast Iron	JC8118	550	.060"	.040" - .060"	70%
Carbon Steel	JC8050	500	.060"	.040" - .060"	70%
Low Alloy Steel	JC8050	450	.060"	.040" - .060"	70%
Mold Steel	JC8118	400	.060"	.040" - .060"	60%
Tool & Die Steel (40-50 HRC)	JC8118	300	.040"	.020" - .040"	60%
Stainless (Austenitic) (300 Series)	JC8050	300	.050"	.030" - .050"	40-60%
Stainless (Martensitic) (400 Series)	JC8118	400	.050"	.020" - .040"	40-60%

## Recommended Cutting Data for -SM style, Side & Face Milling

Material	Grade	Side Milling				Face Milling			
		SFM	IPT	DOC	WOC	SFM	IPT	DOC	WOC
Gray Cast Iron	JC8118	700	.012"	.120"	12%	600	.012"	.060"	80%
Nodular Cast Iron	JC8118	650	.012"	.120"	10%	550	.012"	.060"	80%
Carbon Steel	JC8050	600	.012"	.120"	10%	500	.012"	.060"	80%
Low Alloy Steel	JC8050	550	.012"	.120"	10%	450	.012"	.060"	80%
Mold Steel	JC8118	500	.010"	.120"	8%	400	.010"	.060"	80%
Tool & Die Steel (40-50 HRC)	JC8118	400	.006"	.120"	6%	300	.006"	.040"	60%
Stainless (Austenitic) (300 Series)	JC8050	450	.010"	.120"	10%	300	.010"	.050"	60%
Stainless (Martensitic) (400 Series)	JC8118	500	.012"	.120"	10%	400	.012"	.060"	60%

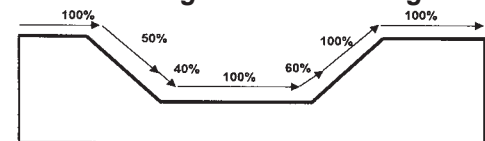
- NOTE:** 1. These parameters are for stable machining with steel bodies at lengths 4XD. See table below for longer applications.  
 2. If chatter occurs, recommend to reduce DOC or spindle speed and maintain IPT.  
 3. If machine does not have enough power, recommend reducing DOC or spindle speed and feed.  
 4. RPM = 3.82 x SFM / Dia.  
 5. IPM = RPM x IPT x # of flutes (or teeth)

## Additional Cutting Data For Longer Tools

Reach/Dia.	~4.0	4.0~4.5	4.5~5.3	5.3~5.7	5.7~6.2	6.3~
rpm %	100	90	80	80	75	70
Feed %	100	90	90	80	75	70

**NOTE:** The above percentages should be applied, according to tool ratio.

## Reduced Cutting Data For Cutting Pattern



**NOTE:** Feed should be reduced when cutting the above pattern