



# Extreme SAP Cutters

**INCH**

**METRIC**

## Recommended Cutting Data for Extreme SAP Cutters

Material	Grade	SFM	Parameters	Face Milling		Side Milling	
				Low HP	High HP	Low HP	High HP
Gray Cast Iron	JC8118 JC8050	700	IPT	.012"	.012"	.010"	.014"
			DOC	.150"	.200"	.400"	.600"
			WOC	70%	70%	20%	20%
Nodular Cast Iron	JC8118 JC8050	650	IPT	.012"	.012"	.010"	.012"
			DOC	.150"	.200"	.400"	.600"
			WOC	70%	70%	20%	20%
Carbon Steel	JC8118 JC8050	600	IPT	.012"	.012"	.010"	.012"
			DOC	.120"	.150"	.400"	.600"
			WOC	70%	70%	20%	20%
Low Alloy Steel	JC8118 JC8050	550	IPT	.012"	.012"	.010"	.012"
			DOC	.120"	.150"	.400"	.600"
			WOC	60%	60%	20%	20%
Mold Steel	JC8050 JC8118	500	IPT	.010"	.010"	.010"	.012"
			DOC	.120"	.150"	.400"	.600"
			WOC	60%	60%	20%	20%
Tool & Die Steel (40-50 HRC)	JC8118 JC8050	400	IPT	.010"	.010"	.008"	.010"
			DOC	.100"	.120"	.300"	.500"
			WOC	60%	60%	10%	10%
Hardened Tool Steel (50-60 HRC)	JC8118 JC8050	250	IPT	.005"	.005"	.006"	.006"
			DOC	.040"	.060"	.200"	.300"
			WOC	20%	20%	10%	10%
Stainless Steel	JC8050 JC8118	300	IPT	.008"	.008"	.008"	.008"
			DOC	.120"	.150"	.400"	.600"
			WOC	60%	60%	15%	15%
Titanium	JC8050 JC8118	200	IPT	.005"	.005"	.005"	.005"
			DOC	.100"	.150"	.300"	.500"
			WOC	60%	60%	15%	15%

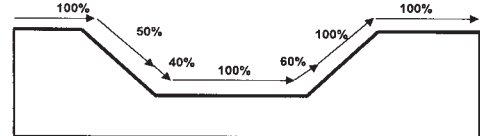
**NOTE:** 1. These parameters are for stable machining with steel bodies at lengths 4XD. See table below for longer applications.  
 2.  $RPM = 3.82 \times SFM / Dia$ .  
 3.  $IPM = RPM \times IPT \times \# \text{ of flutes (or teeth)}$

### 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