

# Speeds and Feeds



Material		Recommended Cutting Values - Side Cutting											
Group		Material Description	Width of Cut, ae	Depth of Cut, ap	Parameter	Cutting Diameter (in)							
ISO	VDI 3323					1/8	3/16	1/4	5/16	3/8	1/2	5/8	3/4
N	21	Aluminum-Wrought Alloy	$\text{Ø}1/8 \sim \text{Ø}3/8 = 0.25D$ $\text{Ø}1/2 \sim \text{Ø}3/4 = 0.5D$	1.0D	Vc, SFM	330	495	660	650	780	1040	975	780
					Fz, IPT	.0018	.0025	.0030	.0044	.0052	.0064	.0079	.0094
					n, RPM	10089	10089	10089	7949	7949	7949	5962	3975
					Vf, IPM	36.32	50.45	60.54	69.95	82.67	101.75	94.20	74.72
	22		$\text{Ø}1/8 \sim \text{Ø}3/8 = 0.25D$ $\text{Ø}1/2 \sim \text{Ø}3/4 = 0.5D$	1.0D	Vc, SFM	330	495	660	650	780	1040	975	780
					Fz, IPT	.0018	.0025	.0030	.0044	.0052	.0064	.0079	.0094
					n, RPM	10089	10089	10089	7949	7949	7949	5962	3975
					Vf, IPM	36.32	50.45	60.54	69.95	82.67	101.75	94.20	74.72
23	Aluminum-Cast Alloy	$\text{Ø}1/8 \sim \text{Ø}3/8 = 0.25D$ $\text{Ø}1/2 \sim \text{Ø}3/4 = 0.5D$	1.0D	Vc, SFM	215	320	430	425	510	680	635	510	
				Fz, IPT	.0018	.0025	.0030	.0045	.0052	.0064	.0079	.0094	
				n, RPM	6573	6522	6573	5197	5197	5197	3883	2599	
				Vf, IPM	23.66	32.61	39.44	46.78	54.05	66.53	61.35	48.86	
24		$\text{Ø}1/8 \sim \text{Ø}3/8 = 0.25D$ $\text{Ø}1/2 \sim \text{Ø}3/4 = 0.5D$	1.0D	Vc, SFM	215	320	430	425	510	680	635	510	
				Fz, IPT	.0018	.0025	.0030	.0045	.0052	.0064	.0079	.0094	
				n, RPM	6573	6522	6573	5197	5197	5197	3883	2599	
				Vf, IPM	23.66	32.61	39.44	46.78	54.05	66.53	61.35	48.86	

# Speeds and Feeds



Material		Recommended Cutting Values - <u>Slotting</u>											
Group		Material Description	Width of Cut, ae	Depth of Cut, ap	Parameter	Cutting Diameter (in)							
ISO	VDI 3323					1/8	3/16	1/4	5/16	3/8	1/2	5/8	3/4
N	21	Aluminum-Wrought Alloy	1.0D	0.5D	Vc, SFM	330	495	660	650	780	1040	975	780
					Fz, IPT	.0014	.0019	.0024	.0035	.0042	.0052	.0062	.0079
					n, RPM	10089	10089	10089	7949	7949	7949	5962	3975
					Vf, IPM	28.25	38.34	48.43	55.64	66.77	82.67	73.93	62.80
	22		1.0D	0.5D	Vc, SFM	330	495	660	650	780	1040	975	780
					Fz, IPT	.0014	.0019	.0024	.0035	.0042	.0052	.0062	.0079
					n, RPM	10089	10089	10089	7949	7949	7949	5962	3975
					Vf, IPM	28.25	38.34	48.43	55.64	66.77	82.67	73.93	62.80
23	1.0D	0.5D	Vc, SFM	215	320	430	425	510	680	635	510		
			Fz, IPT	.0014	.0019	.0024	.0035	.0042	.0052	.0062	.0079		
			n, RPM	6573	6522	6573	5197	5197	5197	3883	2599		
			Vf, IPM	18.41	24.78	31.55	36.38	43.66	54.05	48.15	41.06		
24	1.0D	0.5D	Vc, SFM	215	320	430	425	510	680	635	510		
			Fz, IPT	.0014	.0019	.0024	.0035	.0042	.0052	.0062	.0079		
			n, RPM	6573	6522	6573	5197	5197	5197	3883	2599		
			Vf, IPM	18.41	24.78	31.55	36.38	43.66	54.05	48.15	41.06		