



Speed & Feed Recommendations

ZH1MCR, ZH1MCRS Metric	HARDNESS		CUT	SPEED		FEED (mm/flute)			
	BRINELL	Type		m/min	6	10	12	20	25
HIGH TEMPERATURE ALLOY A-286, Hastelloy, Haynes, Incoloy, Inconel, Rene, Udimet, Waspalloy	≤ 300	Slot	21	0.017	0.032	0.041	0.053	0.058	
		Profile	27	0.017	0.032	0.041	0.053	0.058	
		Light	45	0.036	0.075	0.091	0.120	0.133	
	> 300	Slot	16	0.012	0.024	0.029	0.037	0.040	
		Profile	21	0.012	0.024	0.029	0.037	0.040	
		Light	34	0.026	0.053	0.062	0.085	0.093	

CUT TYPE			rpm = $(1000 \times m/min) / (3.14 \times D_1)$ mm/min = (mm/flute) x rpm
SLOT	PROFILE	LIGHT*	
$a_p = D_1$ $a_e = D_1$	$a_p = 1.5 \times D_1$ $a_e = 0.5 \times D_1$	$a_p = 1.5 \times D_1$ $a_e = 0.05 \times D_1$	<ul style="list-style-type: none"> maximum recommended depths shown reduce speed and feed for materials harder than listed * finish cuts typically require reduced feed and cutting depths of $0.02 \times D_1$ maximum refer to the SGS Tool Wizard for more complete technical information (available at) Max. ramp angle = 6° / Max. ramp depth = $1 \times D$ (reduce feed accordingly)