

# CUTTING CONDITIONS

Milling | Endmills | Cutting conditions

## AM-CRE

Radius type

Vc	Prehardened Steel • Hardened Steel ~45HRC		Hardened Steel ~65HRC		Stainless Steel ≤200HB		Cobalt Chromium Based Alloy (Stellite)		Titanium Alloy		Ni based Alloy (Inconel 718)					
	S (min <sup>-1</sup> )	F (mm/min)	S (min <sup>-1</sup> )	F (mm/min)	S (min <sup>-1</sup> )	F (mm/min)	S (min <sup>-1</sup> )	F (mm/min)	S (min <sup>-1</sup> )	F (mm/min)	S (min <sup>-1</sup> )	F (mm/min)				
50~70m/min	40~60m/min		60~80m/min		50~70m/min		40~60m/min		20~40m/min							
6xR1,5	3.200	960	2.700	800	3.700	1.120	3.200	960	2.700	800	1.600	480				
8xR2	2.400	720	2.000	600	2.800	840	2.400	720	2.000	600	1.200	360				
10xR2	1.900	920	1.600	760	2.200	1.070	1.900	920	1.600	760	960	460				
12xR2	1.600	1.270	1.300	1.060	1.900	1.490	1.600	1.270	1.300	1.060	800	640				
16xR3	1.200	1.430	1.000	1.190	1.400	1.670	1.200	1.430	1.000	1.190	600	720				
20xR3	1.000	1.530	800	1.270	1.100	1.780	1.000	1.530	800	1.270	480	760				
Depth of cut	<table border="1"> <tr> <td>ae</td> <td>ap</td> </tr> <tr> <td>Max:0,5mm</td> <td>Max:0,5mm</td> </tr> </table>												ae	ap	Max:0,5mm	Max:0,5mm
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1. This tool is recommended for the roughing of additive manufacturing and mold overlay surfaces.
2. Please use machines and holders that are rigid and highly accurate.
3. The values listed above are for reference. Please set the cutting condition in accordance with the actual machining environment.
4. Please reduce the feed rate when the depth of cut is greater than specified.
5. Please adjust the speed, feed and depth of cut accordingly when the overhang length is longer than specified.
6. Please use a suitable fluid with high smoke retardant properties.
7. During dry (no fluid) milling, please use air blow to remove disposable chips from the milling area and to eliminate chip packing.
8. Please use water-soluble coolant when machining stainless steel, cobalt-chromium based alloy, titanium alloy, and Ni-based alloy.
9. Tool runout should be kept to a minimum for maximum accuracy.
10. When the cutting load fluctuates in areas such as the corners, please reduce the rotational speed.