Identification(Shoulder Milling)

Reduce the cutting parameters by the coefficient values shown according to the length of overhang. For long edge and oversize types heads refer to their specific recommended conditions.

(inch)

Workpiece Material	Copper Copper	Alloy Steels, Mild Alloys	Steels,	Pre-hardened S Alloy Steels, Allo	teels, Carbon Ste by Tool Steels	els,	Austenitic Stainless Steels, Ferritic and Martensitic Stainless Steels, Titanium Alloys		
L/D	Revolution n (min-1)	Feed per Tooth fz (IPT)	Width of Cut ae	Revolution n (min-1)	Feed per Tooth fz (IPT)	Width of Cut ae	Revolution n (min-1)	Feed per Tooth fz (IPT)	Width of Cut ae
2	100%	100%	100%	100%	100%	100%	100%	100%	100%
3	100%	100%	100%	100%	100%	100%	100%	100%	100%
4	80%	90%	70%	80%	90%	70%	80%	90%	70%
5	60%	80%	40%	60%	80%	40%	60%	80%	40%
6	50%	70%	30%	50%	70%	30%	50%	70%	30%
7	40%	70%	20%	40%	70%	20%	30%	60%	20%
8	40%	60%	10%	40%	60%	10%	30%	50%	10%
9	30%	60%	10%	30%	60%	10%	20%	50%	10%

Workpiece Material	Precipitation Ha	rdening Stainless m Alloys	Steels,	Heat Resistant Alloys			
				Inconel718			
L/D	Revolution Feed per Tooth fz (IPT)		Width of Cut ae	Revolution n (min-1)	Feed per Tooth fz (IPT)	Width of Cut ae	
2	100%	100%	100%	100%	100%	100%	
3	100%	100%	100%	100%	100%	100%	
4	80%	90%	70%	80%	90%	70%	
5	60%	80%	40%	60%	80%	40%	
6	50%	70%	30%	50%	70%	30%	
7	30%	60%	20%	30%	60%	20%	
8	30%	50%	10%	30%	50%	10%	
9	20%	50%	10%	20%	50%	10%	



Recommended Cutting Conditions

iMX-B2S

Shoulder Milling (inch) Hardened Steels (55-65HRC) Workpiece Material Inclination Angle α ≤15° α>15° Depth of Cut Width of Cut DC Revolution Feed Rate Revolution Feed Rate **n** (min-1) vf (IPM) **n** (min-1) vf (IPM) (mm) (inch) (mm) (inch) 16 .630 8 .315 6000 66.9 3000 18.9 .012 .063 .787 10 .394 4800 51.2 2400 15.0 .012 .079 ae Depth of Cut

Note 1) If the depth of cut is smaller, the revolution and the feed rate can be increased. Note 2) α is the inclination angle of the machined surface.

iMX-B4S

Shoulder Milling

(inch)

Workpiece Material				Hardened Steels (55–65HRC)						
In	Inclination Angle			α≤15°			15°	Depth of Cut	Width of Cut	
	(inch)		(inch)	Revolution n (min ⁻¹)	Feed Rate vf (IPM)	Revolution n (min-1)	Feed Rate vf (IPM)	ар	ae	
16	.630	8	.315	6000	66.9	3000	28.3	.012	.063	
20	.787	10	.394	4800	51.2	2400	22.8	.012	.079	
	Depth of Cut			ae ap						

Note 1) If the depth of cut is smaller, the revolution and the feed rate can be increased. Note 2) α is the inclination angle of the machined surface.

