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	Carbon Steels, Alloy Steels, Mild Steels, Copper, Copper Alloys			Pre-hardened Steels, Carbon Steels, Alloy Steels, Alloy Tool Steels			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%

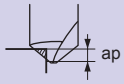
Workpiece Material	Precipitation Hardening Stainless Steels, Cobalt Chromium Alloys			Heat Resistant Alloys Inconel718		
L/D	Revolution **n** (min^{-1})	Feed per Tooth **fz** (IPT)	Width of Cut **ae**	Revolution **n** (min^{-1})	Feed per Tooth **fz** (IPT)	Width of Cut **ae**
2	100%	100%	100%	100%	100%	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%

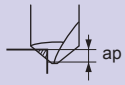
iMX-CH6V
Chamfer head, 6 flute

Recommended Cutting Conditions

Chamfer Milling (Shape Circumference)

(inch)

Workpiece Material		Carbon Steels, Alloy Steels, Gray Cast Irons			Alloy Tool Steels, Carbon Steels, Alloy Steels, Pre-hardened Steels			Austenitic Stainless Steels, Titanium Alloys		
DC (mm)	DC (inch)	Revolution **n** (min-1)	Feed Rate **vf** (IPM)	Depth of Cut **ap**	Revolution **n** (min-1)	Feed Rate **vf** (IPM)	Depth of Cut **ap**	Revolution **n** (min-1)	Feed Rate **vf** (IPM)	Depth of Cut **ap**
12	**.4724**	2700	32.4	.094	1900	20.5	.094	1600	15.4	.094
	.5000	2500	30.0	.094	1800	19.4	.094	1500	14.4	.094
	.6250	2000	24.0	.107	1400	15.1	.107	1200	11.5	.107
16	**.6299**	2000	24.0	.107	1400	15.1	.107	1200	11.5	.107
	.7500	1700	20.4	.126	1200	13.0	.126	990	9.5	.126
20	**.7874**	1600	19.2	.126	1100	11.9	.126	950	9.1	.126
Depth of Cut										

Workpiece Material		Hardenned Steels (40-55HRC)			Heat Resistant Alloys Inconel718		
DC (mm)	DC (inch)	Revolution **n** (min-1)	Feed Rate **vf** (IPM)	Depth of Cut **ap**	Revolution **n** (min-1)	Feed Rate **vf** (IPM)	Depth of Cut **ap**
12	**.4724**	1300	9.4	.094	810	7.8	.094
	.5000	1300	9.4	.094	760	7.3	.094
	.6250	1000	7.2	.107	610	5.9	.107
16	**.6299**	1000	7.2	.107	610	5.9	.107
	.7500	840	6.0	.126	510	4.9	.126
20	**.7874**	800	5.8	.126	490	4.7	.126
Depth of Cut							

Note 1) Vibration may occur if the rigidity of machine or workpiece material is low.
In this case, please reduce the revolution and the feed rate proportionately.
Note 2) For stainless steels, titanium alloys and heat resistant alloys, the use of water-soluble coolant is effective.