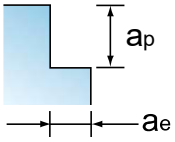
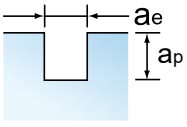
CUTTING CONDITION – IAUE/IAE5 for Aluminum Application

Side Milling 	ALUMINUM ALLOYS 2017,2024,356,6061,7075				COPPER ALLOYS Alum Bronze,C110,Muntz Brass			
Hardness BRINELL	≦ 150				≦ 140			
HRC	≦ 80 HRB				≦ 76.4 HRB			
Vc (sfm)	968 (810~1214)				533 (446~669)			
MILL DIA. (inch)	RPM	Fz	Feed (IPM) IAUE-3Flutes	Feed (IPM) IAE5-2Flutes	RPM	Fz	Feed (IPM) IAUE-3Flutes	Feed (IPM) IAE5-2Flutes
1/8	29,380	0.00060	52.9	35.3	16,193	0.00030	14.6	9.7
3/16	19,587	0.00110	64.6	43.1	10,795	0.00055	17.8	11.9
1/4	14,690	0.00160	70.5	47.0	8,096	0.00080	19.4	13.3
5/16	11,752	0.00230	81.1	54.1	6,477	0.00115	22.3	14.9
3/8	9,793	0.00300	88.1	58.8	5,398	0.00150	24.3	16.2
1/2	7,345	0.00400	88.1	58.8	4,048	0.00200	24.3	16.2
5/8	5,876	0.00440	77.6	51.7	3,239	0.00220	21.4	14.3
3/4	4,897	0.00480	70.5	47.0	2,699	0.00240	19.4	13
1	3,673	0.00560	61.7	41.1	2,024	0.00280	17.0	11.3
Depth of cut								

rpm=sfm×3.82/D1
Feed(IPM)=RPM x Fz x T(Flute)

FRACTIONAL

Slot Milling 	ALUMINUM ALLOYS 2017,2024,356,6061,7075				COPPER ALLOYS Alum Bronze,C110,Muntz Brass			
Hardness BRINELL	≦ 150				≦ 140			
HRC	≦ 80 HRB				≦ 76.4 HRB			
Vc (sfm)	810 (648~972)				446 (357~535)			
MILL DIA. (inch)	RPM	Fz	Feed (IPM) IAUE-3Flutes	Feed (IPM) IAE5-2Flutes	RPM	Fz	Feed (IPM) IAUE-3Flutes	Feed (IPM) IAE5-2Flutes
1/8	23,504	0.00060	42.3	28.2	12,954	0.00030	11.7	7.8
3/16	15,670	0.00110	51.7	34.5	8,636	0.00055	14.2	9.5
1/4	11,752	0.00160	56.4	37.6	6,477	0.00080	15.5	10.4
5/16	9,402	0.00230	64.9	43.2	5,182	0.00115	17.9	11.9
3/8	7,835	0.00300	70.5	47.0	4,318	0.00150	19.4	13.0
1/2	5,876	0.00400	70.5	47.0	3,239	0.00200	19.4	13.0
5/8	4,701	0.00440	62.1	41.4	2,591	0.00220	17.1	11.4
3/4	3,917	0.00480	56.4	37.6	2,159	0.00240	15.5	10.4
1	2,938	0.00560	49.4	32.9	1,619	0.00280	13.6	9.1
Depth of cut								

rpm=sfm×3.82/D1
Feed(IPM)=RPM x Fz x T(Flute)

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