RELIABIDE
CARBIDE TOOLING

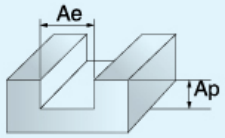
SUPERMAX

SUPERMAX ALU

TECHNICAL DATA

Cutting Data Parameters

Slotting Standard 2/4Flutes

Shape of cut	 Ae=D(D≤Φ3) Ae≤0.1D(D>Φ2) Ap≤0.2D(D>Φ2)					Ae=D AP≤0.05D(Φ0.5≤D≤Φ2) AP≤0.10D(D>Φ2)		
Work material	Carbon steel、Castiron AISI 1049，SCM,FC250 (~30HRC)			Alloy steel,Die steel,Pre–hardened steel AISI H13, NAK (<45HRC)			Hardened steel AISI H13 (<52HRC)		
ΦD(mm)	Rev(min⁻¹)	Cutting speed (mm/min)		Rev(min⁻¹)	Cutting speed (mm/min)		Rev(min⁻¹)	Cutting speed (mm/min)	
		2Flutes	4Flutes		2Flutes	4Flutes		2Flutes	4Flutes
1	24000	384	576	16000	256	384	12000	77	116
2	12000	384	576	8000	256	384	6400	77	116
3	8000	384	576	5600	256	384	4000	77	116
4	6000	384	576	4160	256	384	3200	77	116
5	4800	384	576	3360	256	384	2560	77	116
6	4000	384	576	2800	256	384	2160	77	116
8	3200	333	500	2240	224	333	1600	71	103
10	2560	288	436	1760	192	288	1280	64	90
12	2160	363	397	1520	173	263	1040	64	77
16	1600	231	352	1120	148	224	800	84	109
20	1280	205	314	880	141	218	640	71	90

Matters need attention in usage

1. Use rigid and precise machine and tool holder.
2. If chattering and noise occur due to the rigidity of machine or the work material installation is very low, please reduce the revolution and the feed rate proportionately.
3. In drilling, please set the feed rate at 1/3 or below.
4. When cutting stainless steel, please use fluid; when cutting Austenitic stainless steel, non-water-soluble cutting fluid is very effective.

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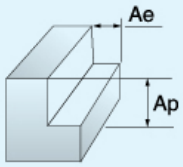
TECHNICAL DATA

Cutting Data Parameters

Side Milling Standard 2/4Flutes

Shape of cut



Ae≤0.1D(D≤Φ3)
Ae≤0.2D(D＞Φ3)
Ap≤1.5D

Work material	Aluminum Alloy, cuprum			Carbon steel、Castiron AISI 1049，SCM,FC250 (~30HRC)			Alloy steel,Die steel (＜35HRC)			Stainless steel AISI 1304，AISI1316		
ΦD(mm)	Rev(min⁻¹)	Cutting speed (mm/min) 2Flutes	4Flutes	Rev(min⁻¹)	Cutting speed (mm/min) 2Flutes	4Flutes	Rev(min⁻¹)	Cutting speed (mm/min) 2Flutes	4Flutes	Rev(min⁻¹)	Cutting speed (mm/min) 2Flutes	4Flutes
1	30400	240	480	16000	96	192	9600	56	112	8000	48	96
2	17600	352	640	8800	144	216	5760	88	136	4800	75	112
3	13600	384	696	6800	160	240	4240	104	160	3520	88	136
4	11200	584	880	5760	288	432	3520	176	264	2960	144	216
5	9600	688	1040	4800	304	456	2880	184	280	2400	152	232
6	8800	792	1200	4240	336	504	2560	192	288	2160	168	256
8	6400	800	1200	3200	360	544	1920	192	288	1600	176	264
10	5120	720	1080	2560	312	472	1520	152	232	1280	152	232
12	4240	592	880	2160	264	400	1280	128	192	1040	120	184
16	3200	448	672	1600	192	288	960	96	144	800	96	144
20	2560	360	544	1280	160	240	800	80	120	640	76	112

Matters need attention in usage

1. Use rigid and precise machine and tool holder.
2. If chattering and noise occur due to the rigidity of machine or the work material installation is very low, please reduce the revolution and the feed rate proportionately.
3. In drilling, please set the feed rate at 1/3 or below.
4. When cutting stainless steel, please use fluid; when cutting Austenitic stainless steel, non-water-soluble cutting fluid is very effective.

RELIABIDE
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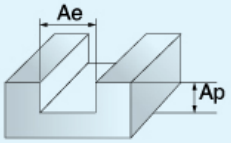
TECHNICAL DATA

Cutting Data Parameters

Slotting Standard 2/4Flutes

Shape of cut



2 Ae=D
Ap≤0.1D(D < Φ2)
Ap≤0.3D(Φ2≤D≤Φ3)
Ap≤0.5D(D > Φ3)

4 Ae=D
Ap≤0.3D(D≤Φ3)
Ap≤0.5D(D > Φ3)

Work material	Aluminum Alloy, cuprum			Carbon steel、Castiron AISI 1049，SCM,FC250 (~30HRC)			Alloy steel,Die steel (< 35HRC)			Stainless steel AISI 1304， AISI1316		
		Cutting speed (mm/min)			Cutting speed (mm/min)			Cutting speed (mm/min)			Cutting speed (mm/min)	
ΦD(mm)	Rev(min⁻¹)	2Flutes	4Flutes	Rev(min⁻¹)	2Flutes	4Flutes	Rev(min⁻¹)	2Flutes	4Flutes	Rev(min⁻¹)	2Flutes	4Flutes
1	30400	240	384	16000	96	154	9600	56	90	8000	48	77
2	17600	352	512	8800	144	173	5760	88	109	4800	72	90
3	13600	384	560	6800	160	192	4240	104	128	3520	88	109
4	11200	464	704	5760	232	346	3520	144	212	2400	88	173
5	9600	552	832	4800	240	365	2880	144	224	1920	88	186
6	8800	632	960	4240	272	404	2560	152	231	1760	104	205
8	6400	640	960	3200	288	436	1920	152	231	1280	104	212
10	5120	576	864	2560	248	378	1520	120	186	1040	88	186
12	3200	472	704	2160	208	320	1280	104	154	800	72	148
16	2560	360	538	1600	152	231	960	80	116	640	56	116
20	2000	288	736	1280	128	192	800	64	96	512	48	90

Matters need attention in usage

1. Use rigid and precise machine and tool holder.
2. If chattering and noise occur due to the rigidity of machine or the work material installation is very low, please reduce the revolution and the feed rate proportionately.
3. In drilling, please set the feed rate at 1/3 or below.
4. When cutting stainless steel, please use fluid; when cutting Austenitic stainless steel, non-water-soluble cutting fluid is very effective.