

A100 Series

Mirror-like flute surface for Aluminum

- *ENSSF for medium to high speed finishing cutting*
- *ENSSP for high speed medium to finishing cutting*
- *Special geometry design, reduce cutting force and better surfaces*



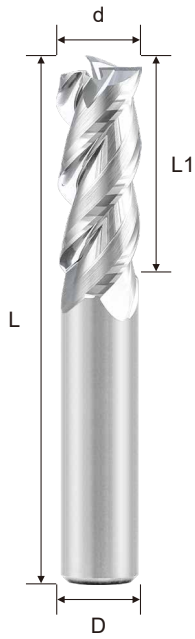
A100 Carbide Endmills - HF Finishing Square Type - 3F

- High quality finishing.
- Mirror-like flute surface design.
- For finishing cutting of aluminum alloys.
- Medium to high speed cutting.

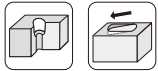
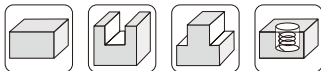
ENSSF3

Work Material		
Aluminum Alloy	Copper	Non-ferrous Material
☉	☉	☉

- P
- M
- K
- N
- S
- H



Order No.	Dia. (d)	CL (L1)	OAL (L)	Shank (D)	Flutes (F)
ENSSF301000	1	3	50	6	3
ENSSF302000	2	6	50	6	3
ENSSF303000	3	11	60	6	3
ENSSF304000	4	13	60	6	3
ENSSF305000	5	17	60	6	3
ENSSF306000	6	17	60	6	3
ENSSF308000	8	22	75	8	3
ENSSF310000	10	27	75	10	3
ENSSF312000	12	32	75	12	3



$\varnothing d$	Tolerance
$\varnothing d < 3$	0 ~ -0.02
$3 \leq \varnothing d \leq 10$	0 ~ -0.03
$\varnothing d > 10$	0 ~ -0.04

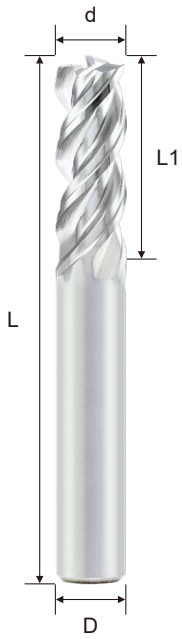
A100 Carbide Endmills - HP Finishing Square Type - 3F

- High performance finishing.
- U-flute and Mirror-like flute surface design.
- For medium to finishing cutting of aluminum alloys.
- High speed cutting.
- Is better for Aluminum alloy with Si ≥ 8%.

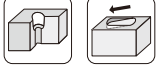
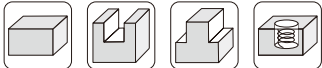
ENSSP3

Work Material		
Aluminum Alloy	Copper	Non-ferrous Material
◎	◎	◎

P M K N S H



Order No.	Dia. (d)	CL (L1)	OAL (L)	Shank (D)	Flutes (F)
ENSSP306000	6	15	50	6	3
ENSSP308000	8	20	60	8	3
ENSSP310000	10	30	75	10	3
ENSSP312000	12	30	75	12	3
ENSSP316000	16	40	100	16	3

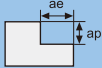
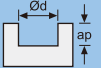


Ød	Tolerance
Ød < 3	0 ~ -0.02
3 ≤ Ød ≤ 10	0 ~ -0.03
Ød > 10	0 ~ -0.04

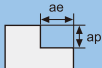
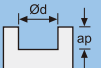
A100 Carbide Endmills - ENSSF, ENSSP Cutting Conditions

Recommended Cutting Conditions

ENSSF

Material	Aluminum Alloy						
Application	Shoulder Milling 				Slot Milling 		
VC	55 ~ 225 (m/min)				55 ~ 225 (m/min)		
Dia (mm)	RPM	Feed (mm/min)	ap (mm)	ae (mm)	RPM	Feed (mm/min)	ap (mm)
1	17800	590	1 ~ 2×d	0.05 ~ 0.15×d	17800	470	0.2×d
2	17800	620	1 ~ 2×d	0.05 ~ 0.15×d	17800	500	0.2×d
3	15000	650	1 ~ 2×d	0.05 ~ 0.15×d	15000	520	0.2×d
4	13000	685	1 ~ 2×d	0.05 ~ 0.15×d	13000	550	0.2×d
5	12000	720	1 ~ 2×d	0.05 ~ 0.15×d	12000	580	0.2×d
6	10000	760	1 ~ 2×d	0.05 ~ 0.15×d	10000	610	0.2×d
8	8500	840	1 ~ 2×d	0.05 ~ 0.15×d	8500	670	0.2×d
10	7000	920	1 ~ 2×d	0.05 ~ 0.15×d	7000	740	0.2×d
12	6000	1010	1 ~ 2×d	0.05 ~ 0.15×d	6000	810	0.2×d

ENSSP

Material	Aluminum Alloy						
Application	Shoulder Milling 				Slot Milling 		
VC	150 ~ 350 (m/min)				120 ~ 300 (m/min)		
Dia (mm)	RPM	Feed (mm/min)	ap (mm)	ae (mm)	RPM	Feed (mm/min)	ap (mm)
6	16000	1280	1 ~ 2×d	0.05 ~ 0.15×d	13000	880	0.2×d
8	12000	1520	1 ~ 2×d	0.05 ~ 0.15×d	9500	960	0.2×d
10	9500	1520	1 ~ 2×d	0.05 ~ 0.15×d	7600	960	0.2×d
12	8000	1520	1 ~ 2×d	0.05 ~ 0.15×d	6400	960	0.2×d
16	6000	1520	1 ~ 2×d	0.05 ~ 0.15×d	4800	960	0.2×d

※When machining Aluminum alloy with Si ≥ 8% , reduce RPM 20% and Feed 30%.

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