



ULTRASTAR 無敵銑刀系列

ULTRASTAR-Super fine for steel alloy End mill series

ULTRASTAR

特點

SPECIAL FEATURES

採用特殊刀刃設計，
剛性表現優於一般銑刀!!

With special blade design,the rigidity performance is better than the normal type !!

獨有Tix-H鍍層，提升刀具壽命。

Unique Tix-H coating leads the longer cutting life time.

專為HRC50以下工件加工所設計，保證效率加倍。

Design for milling work piece (lower than HRC 50), and help users to save over 50% labor time.

實績測試

Benchmark test:

UL10-SEM4100

機台Machine: CAMPRO- No Air blow

工件Work Piece: P1 (HRC 28)

轉速Spindle Speed: 3600 RPM

進給Feed rate: 1400 mm/min

單刃切削量Feed Rate per Tooth: 0.1mm

深度Depth: 1D

寬度Width: 10mm

切削方式Milling Method: 溝銑Slot milling

P1-HRC 28 Test-Life time

一般鋼材銑刀測試

ULTRASTAR OTHER BRANDS



加工真實參數:

S: 3600 / F: 1400-10mm深度一無Air氣冷

N120	G00	250.000	Z		
N130	X-25.000	Y-98.000	I		
	絕對座標	线性動量	G01	G04	G08
X	0.000	0.000	G17	G21	G08
Y	36.300	53.870	G08	G40	G68
Z	-18.000	0.000	G23	G43	G07
A	0.000	0.000	DRN F		370
			I	10M	3
ID: F	1400	S	3600		
ACT. F	1400MM/MIN	SACT	3598 / 分		
			S	3598.49%	
RMT	STRT	MTN	***	15:35:50	

Ultrastar endmills give no Burr on the component



ULTRASTAR 無敵銑刀

ULTRASTAR -Super fine for steel alloy End mill series- (Super High feed rate performance)



規格表

編號 (Number)	外徑 (D)	刃長 (H)	刃數 (T)	柄徑 (d)	全長 (L)
UL04-SEM 4030	3	8	4	4	50
UL04-SEM 4040	4	10	4	4	50
UL06-SEM 4020	2	5	4	6	50
UL06-SEM 4040	4	10	4	6	50
UL06-SEM 4050	5	13	4	6	50
UL06-SEM 4060	6	15	4	6	50
UL08-SEM 4070	7	18	4	8	60
UL08-SEM 4080	8	20	4	8	60
UL10-SEM 4100	10	30	4	10	75
UL12-SEM 4120	12	32	4	12	75
UL16-SEM 4160	16	50	4	16	100
UL20-SEM 4200	20	50	4	20	100

切削條件表

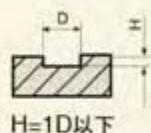
Recommended Milling Conditions

Cutting Conditions 切削條件	ULTRA micro grain carbide used for ULTRASTAR End mills 粉末微粒碳化鎢 ULTRASTAR 鋼件刀	Cutting Materials 被切削材	合金鋼, 工具鋼 模具鋼, 熱處理鋼 SCr, SCM, SNC, SNCM SKD, NAK101	The hardness of the material cut 被切削材 硬度	HRC30-45
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立銑刀刃徑 mm	轉速-spindle speed RPM	進給-feed rate mm/min	立銑刀刃徑 mm	轉速-spindle speed RPM	進給-feed rate mm/min
D3.0	10600	2100	D3.0	10600	2100
D4.0	8000	1600	D4.0	8000	1600
D5.0	6300	1200	D5.0	6300	1200
D6.0	5300	1000	D6.0	5300	1000
D8.0	4400	1400	D8.0	4400	1400
D10.0	3800	1200	D10.0	3800	1200
D12.0	3200	1000	D12.0	3200	1000
D16.0	2400	700	D16.0	2400	700
D20.0	1900	600	D20.0	1900	600

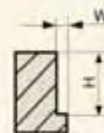
最大切削量 / Max Cutting Range.

Slot Milling- below 1D depth.



H=1D以下

最大切削量 / Max Cutting Range.



Depth= H is within 2D
W= 0.2D