

切削條件表

Xs-UB

MILLING CONDITIONS

被切削材 Work Material		調質鋼/預硬鋼 Prehardened Steels : NAK80 : 1.2083 : AISI420 : M310 (HRC36~45)					
冷卻方式 Coolant Type		溼式切削 Wet coolant					
型號 Type No.	刀具伸長量 Extension Length (mm)	切削速度 Cutting Speed (m/min)	迴轉速度 Speed (min ⁻¹)	進給速度 Feed (mm/min)	加工深度 (A _p) Depth of Cut	加工寬度 (A _p) Width of Cut	加工方式 Milling Type
Xs-UB0802	25	280	10000~11000	2000~2400	0.18~0.23	0.36~0.46	3D銑 3D MILLING
Xs-UB0802	25	330	12000~13000	3800~4200	0.08~0.13	0.16~0.26	3D銑 3D MILLING
Xs-UB0802	45	185	6700~7300	1200~1600	0.15~0.2	0.3~0.4	3D銑 3D MILLING
Xs-UB0802	45	225	8300~8800	1800~2200	0.08~0.1	0.16~0.2	3D銑 3D MILLING
Xs-UB0802	65	175	6000~7000	1200~1600	0.08~0.1	0.16~0.2	3D銑 3D MILLING
Xs-UB1002	40	290	8700~9200	2600~3000	0.23~0.28	0.46~0.56	3D銑 3D MILLING
Xs-UB1002	40	290	8700~9200	3600~4000	0.1~0.15	0.2~0.3	3D銑 3D MILLING
Xs-UB1002	60	290	8700~9200	1800~2200	0.1~0.15	0.2~0.3	3D銑 3D MILLING
Xs-UB1002	60	290	8700~9200	2200~2600	0.06~0.1	0.12~0.2	3D銑 3D MILLING
Xs-UB1002	100	195	5700~6200	1100~1300	0.1~0.14	0.2~0.28	3D銑 3D MILLING
Xs-UB1002	100	260	7700~8200	1400~1700	0.06~0.1	0.12~0.2	3D銑 3D MILLING
Xs-UB1202	40	325	8200~8600	2200~2600	0.28~0.3	0.56~0.6	3D銑 3D MILLING
Xs-UB1202	40	325	8200~8600	3000~3400	0.1~0.15	0.2~0.3	3D銑 3D MILLING
Xs-UB1202	60	325	8200~8600	1600~2000	0.2~0.25	0.4~0.5	3D銑 3D MILLING
Xs-UB1202	60	325	8200~8600	2200~2600	0.1~0.15	0.2~0.3	3D銑 3D MILLING
Xs-UB1202	100	220	5300~5800	800~1200	0.1~0.15	0.2~0.3	3D銑 3D MILLING
Xs-UB1602	60	230	4000~4500	1400~1800	0.23~0.28	0.46~0.56	3D銑 3D MILLING
Xs-UB1602	60	305	5500~6000	2800~3200	0.12~0.17	0.24~0.34	3D銑 3D MILLING
Xs-UB1602	100	175	3000~3500	1200~1600	0.23~0.28	0.46~0.56	3D銑 3D MILLING
Xs-UB1602	100	230	4000~4500	2200~2600	0.12~0.17	0.24~0.34	3D銑 3D MILLING
Xs-UB1602	140	140	2300~2800	1300~1600	0.1~0.15	0.2~0.3	3D銑 3D MILLING
Xs-UB2002	80	360	5200~5700	1400~1800	0.23~0.28	0.46~0.56	3D銑 3D MILLING
Xs-UB2002	80	380	5500~6000	2400~2800	0.12~0.17	0.24~0.34	3D銑 3D MILLING
Xs-UB2002	130	190	2500~3000	900~1200	0.2~0.25	0.4~0.5	3D銑 3D MILLING
Xs-UB2002	130	220	3000~3500	1600~2000	0.12~0.17	0.24~0.34	3D銑 3D MILLING
Xs-UB2002	180	140	1700~2200	1000~1300	0.1~0.15	0.2~0.3	3D銑 3D MILLING
Xs-UB2502	80	330	3500~4000	1300~1700	0.23~0.28	0.46~0.56	3D銑 3D MILLING
Xs-UB2502	80	350	4000~4500	1800~2200	0.12~0.17	0.24~0.34	3D銑 3D MILLING
Xs-UB2502	130	220	2400~2800	1000~1400	0.2~0.25	0.4~0.5	3D銑 3D MILLING
Xs-UB2502	130	300	3400~3800	1300~1700	0.12~0.17	0.24~0.34	3D銑 3D MILLING
Xs-UB2502	180	240	2500~3000	1100~1400	0.1~0.15	0.2~0.3	3D銑 3D MILLING

附註
Note

- 由於機器剛性及主軸扭力不同，加工時若有尖銳聲音，請調降轉速(S)及進給(F)。
- 使用BT50 (SK50/HSK100A) 刀把夾持之機器，可視情況調高轉速(S)及進給(F)。

- Due to spindle torque and the rigidity of machine differs, please lower the Speed(S) and Feed(F) if hearing sharp voices while milling.
- For the machine use with holder of BT50(SK50/HSK100A), please higher Speed(S) and Feed(F) according to the cutting condition.

切削條件表

Xs-UB

MILLING CONDITIONS

被切削材 Work Material		熱處理鋼 Hardened Steels SKD61/ STAVAX / 17-4PH : 1.2083 / 1.2344 / 1.4542 : H13 / 420 (HRc48~54)					
冷卻方式 Coolant Type		乾式切削 Dry coolant					
型號 Type No.	刀具伸長量 Extension Length (mm)	切削速度 Cutting Speed (m/min)	迴轉速度 Speed (min ⁻¹)	進給速度 Feed (mm/min)	加工深度 (A _a) Depth of Cut	加工寬度 (A _p) Width of Cut	加工方式 Milling Type
Xs-UB0802	25	280	10000~11000	2600~3000	0.06~0.09	0.12~0.18	3D銑 3D MILLING
Xs-UB0802	45	145	5400~5800	1600~2000	0.06~0.08	0.12~0.16	3D銑 3D MILLING
Xs-UB0802	65	130	4700~5200	1200~1600	0.06~0.08	0.12~0.16	3D銑 3D MILLING
Xs-UB1002	40	260	7700~8200	2600~3000	0.08~0.13	0.16~0.26	3D銑 3D MILLING
Xs-UB1002	60	230	6700~7200	1400~1800	0.08~0.13	0.16~0.26	3D銑 3D MILLING
Xs-UB1002	80	185	5300~5800	1000~1200	0.07~0.1	0.16~0.2	3D銑 3D MILLING
Xs-UB1202	40	305	7500~8000	1800~2200	0.08~0.13	0.16~0.26	3D銑 3D MILLING
Xs-UB1202	60	290	7200~7700	1200~1600	0.08~0.13	0.16~0.26	3D銑 3D MILLING
Xs-UB1202	100	220	5300~5800	800~1100	0.08~0.13	0.16~0.26	3D銑 3D MILLING
Xs-UB1602	60	215	3800~4200	2000~2400	0.1~0.15	0.2~0.3	3D銑 3D MILLING
Xs-UB1602	100	160	2800~3200	1600~2000	0.1~0.15	0.2~0.3	3D銑 3D MILLING
Xs-UB1602	130	115	2000~2300	800~1200	0.1~0.12	0.2~0.24	3D銑 3D MILLING
Xs-UB2002	80	315	4500~5000	1200~1600	0.1~0.15	0.2~0.3	3D銑 3D MILLING
Xs-UB2002	130	190	2500~3000	800~1200	0.1~0.15	0.2~0.3	3D銑 3D MILLING
Xs-UB2002	180	140	1700~2200	800~1000	0.08~0.1	0.16~0.2	3D銑 3D MILLING
Xs-UB2502	80	315	3500~4000	1300~1700	0.1~0.15	0.2~0.3	3D銑 3D MILLING
Xs-UB2502	130	240	2500~3000	1000~1400	0.1~0.15	0.2~0.3	3D銑 3D MILLING
Xs-UB2502	180	200	2000~2500	800~1200	0.1~0.15	0.2~0.3	3D銑 3D MILLING

附註 Note

1. 由於機器剛性及主軸扭力不同，加工時若有尖銳聲音，請調降轉速(S)及進給(F)。
2. 使用BT50 (SK50/HSK100A) 刀把夾持之機器，可視情況調高轉速(S)及進給(F)。
3. Xs-UB1002在HRc52伸長量100mm時，條件非常差。

1. Due to spindle torque and the rigidity of machine differs, please lower the Speed(S) and Feed(F) if hearing sharp voices while milling.
2. For the machine use with holder of BT50(SK50/HSK100A), please higher Speed(S) and Feed(F) according to the cutting condition.
3. When Xs-UB1002 of extension is 100mm in HRc52, the cutting data is not good.