

切削條件表

X-UEx

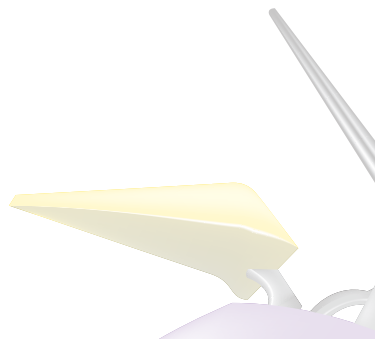
MILLING CONDITIONS

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		乾式/油霧切削 Dry/MQL 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
X-UEx0804	24	95	3600~4000	1000~1400	0.1~0.2	6~8	溝銑 SLOTTING
X-UEx0804	24	95	3600~4000	800~1000	0.05~0.1	6~8	溝銑 SLOTTING
X-UEx0804	24	80	3000~3400	900~1300	8	0.2~0.4	側銑 SIDE MILLING
X-UEx0804	24	80	3000~3400	500~700	8	0.05~0.15	側銑 SIDE MILLING
X-UEx0804	40	80	3000~3400	800~1200	0~0.1	6~8	溝銑 SLOTTING
X-UEx0804	40	80	3000~3400	400~600	0.05~0.1	6~8	溝銑 SLOTTING
X-UEx0804	40	75	2800~3200	400~600	8	0.1~0.2	側銑 SIDE MILLING
X-UEx0804	40	75	2800~3200	400~600	8	0.05~0.1	側銑 SIDE MILLING
X-UEx0804	55	60	2200~2600	300~400	0.05~0.1	6~8	溝銑 SLOTTING
X-UEx0804	55	60	2200~2600	300~400	8	0.05~0.1	側銑 SIDE MILLING
X-UEx1004	30	95	2800~3200	900~1200	0.1~0.2	8~10	溝銑 SLOTTING
X-UEx1004	30	95	2800~3200	800~1000	0.05~0.1	8~10	溝銑 SLOTTING
X-UEx1004	30	65	1900~2200	900~1300	10	0.3~0.5	側銑 SIDE MILLING
X-UEx1004	30	80	2500~2800	450~600	10	0.05~0.15	側銑 SIDE MILLING
X-UEx1004	40	70	2000~2400	800~1000	0~0.1	8~10	溝銑 SLOTTING
X-UEx1004	40	75	2200~2600	500~700	0.05~0.1	8~10	溝銑 SLOTTING
X-UEx1004	40	70	2000~2400	400~600	10	0.2~0.3	側銑 SIDE MILLING
X-UEx1004	40	75	2200~2600	400~600	10	0.05~0.1	側銑 SIDE MILLING
X-UEx1004	60	60	1800~2200	300~500	0.05~0.1	8~10	溝銑 SLOTTING
X-UEx1004	60	60	1800~2200	300~500	10	0.05~0.1	側銑 SIDE MILLING
X-UEx1204	35	105	2600~3000	800~1000	0.1~0.2	10~12	溝銑 SLOTTING
X-UEx1204	35	100	2400~2800	500~700	0.05~0.15	10~12	溝銑 SLOTTING
X-UEx1204	35	75	1800~2200	600~800	12	0.3~0.5	側銑 SIDE MILLING
X-UEx1204	35	100	2400~2800	500~700	12	0.05~0.15	側銑 SIDE MILLING
X-UEx1204	60	80	2000~2400	600~800	0.1~0.15	10~12	溝銑 SLOTTING
X-UEx1204	60	80	2000~2400	300~500	0.05~0.15	10~12	溝銑 SLOTTING
X-UEx1204	60	75	1800~2200	400~600	12	0.2~0.3	側銑 SIDE MILLING
X-UEx1204	60	80	2000~2400	300~500	12	0.05~0.15	側銑 SIDE MILLING
X-UEx1204	80	75	1800~2200	300~500	0.05~0.1	10~12	溝銑 SLOTTING
X-UEx1204	80	70	1600~2000	300~400	12	0.05~0.1	側銑 SIDE MILLING
X-UEx1604	45	90	1700~2000	500~700	0.1~0.2	14~16	溝銑 SLOTTING
X-UEx1604	45	100	1800~2200	400~600	0.05~0.15	14~16	溝銑 SLOTTING
X-UEx1604	45	80	1400~1800	600~800	16	0.4~0.6	側銑 SIDE MILLING
X-UEx1604	45	90	1600~2000	400~600	16	0.05~0.15	側銑 SIDE MILLING
X-UEx1604	70	70	1200~1600	400~600	0.1~0.15	14~16	溝銑 SLOTTING
X-UEx1604	70	70	1200~1600	300~500	0.05~0.15	14~16	溝銑 SLOTTING
X-UEx1604	70	50	900~1200	300~500	16	0.2~0.35	側銑 SIDE MILLING
X-UEx1604	70	80	1400~1800	300~400	16	0.05~0.15	側銑 SIDE MILLING
X-UEx1604	100	60	1000~1300	300~400	0.05~0.1	14~16	溝銑 SLOTTING
X-UEx1604	100	60	1000~1300	250~350	16	0.05~0.1	側銑 SIDE MILLING

EXCHANGEABLE HEAD ENDMILL II



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		乾式/油霧切削 Dry/MQL 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 (Aa) Depth of Cut	加工寬度 (Ap) Width of Cut	加工方式 Milling Type
X-UEx2004	50	95	1400~1600	500~700	0.15~0.25	18~20	溝銑 SLOTTING
X-UEx2004	50	95	1400~1600	400~600	0.05~0.15	18~20	溝銑 SLOTTING
X-UEx2004	50	75	1100~1300	500~700	20	0.4~0.7	側銑 SIDE MILLING
X-UEx2004	50	80	1200~1400	300~500	20	0.05~0.2	側銑 SIDE MILLING
X-UEx2004	80	70	1000~1300	350~550	0.15~0.25	18~20	溝銑 SLOTTING
X-UEx2004	80	70	1000~1300	300~400	0.05~0.15	18~20	溝銑 SLOTTING
X-UEx2004	80	55	700~1000	300~450	20	0.2~0.4	側銑 SIDE MILLING
X-UEx2004	80	80	1200~1400	300~400	20	0.05~0.2	側銑 SIDE MILLING
X-UEx2004	110	60	800~1100	300~400	0.05~0.15	18~20	溝銑 SLOTTING
X-UEx2004	110	60	800~1100	200~350	20	0.05~0.2	側銑 SIDE MILLING
X-UEx2504	60	95	1100~1400	400~650	0.15~0.25	20~25	溝銑 SLOTTING
X-UEx2504	60	95	1100~1400	300~500	0.05~0.15	20~25	溝銑 SLOTTING
X-UEx2504	60	75	800~1100	400~600	25	0.4~0.7	側銑 SIDE MILLING
X-UEx2504	60	80	900~1200	250~350	25	0.05~0.2	側銑 SIDE MILLING
X-UEx2504	100	70	800~1000	350~550	0.15~0.25	20~25	溝銑 SLOTTING
X-UEx2504	100	70	800~1000	300~400	0.05~0.15	20~25	溝銑 SLOTTING
X-UEx2504	100	60	600~900	300~450	25	0.2~0.4	側銑 SIDE MILLING
X-UEx2504	100	70	800~1000	250~350	25	0.05~0.2	側銑 SIDE MILLING
X-UEx2504	130	60	600~900	250~350	0.05~0.15	20~25	溝銑 SLOTTING
X-UEx2504	130	60	600~900	200~350	25	0.05~0.2	側銑 SIDE MILLING
X-UEx3204	70	95	800~1100	300~500	0.15~0.25	25~32	溝銑 SLOTTING
X-UEx3204	70	95	800~1100	250~400	0.05~0.15	25~32	溝銑 SLOTTING
X-UEx3204	70	75	600~900	300~500	32	0.4~0.7	側銑 SIDE MILLING
X-UEx3204	70	80	700~1000	250~400	32	0.05~0.2	側銑 SIDE MILLING
X-UEx3204	110	70	600~800	250~450	0.15~0.25	25~32	溝銑 SLOTTING
X-UEx3204	110	70	600~800	200~300	0.05~0.15	25~32	溝銑 SLOTTING
X-UEx3204	110	60	500~700	250~400	32	0.2~0.4	側銑 SIDE MILLING
X-UEx3204	110	70	600~800	200~350	32	0.05~0.2	側銑 SIDE MILLING
X-UEx3204	150	60	500~700	150~250	0.05~0.15	25~32	溝銑 SLOTTING
X-UEx3204	150	60	500~700	150~250	32	0.05~0.2	側銑 SIDE MILLING



切削條件表

X-UEx

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/油霧切削 Dry/MQL 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
X-UEx0804	24	95	3600~4000	1000~1400	0.1~0.2	6~8	溝銑 SLOTTING
X-UEx0804	24	95	3600~4000	800~1000	0.05~0.1	6~8	溝銑 SLOTTING
X-UEx0804	24	80	3000~3400	900~1300	8	0.2~0.4	側銑 SIDE MILLING
X-UEx0804	24	80	3000~3400	500~700	8	0.05~0.15	側銑 SIDE MILLING
X-UEx0804	40	80	3000~3400	800~1200	0~0.1	6~8	溝銑 SLOTTING
X-UEx0804	40	80	3000~3400	400~600	0.05~0.1	6~8	溝銑 SLOTTING
X-UEx0804	40	75	2800~3200	400~600	8	0.1~0.2	側銑 SIDE MILLING
X-UEx0804	40	75	2800~3200	400~600	8	0.05~0.1	側銑 SIDE MILLING
X-UEx0804	55	60	2200~2600	300~400	0.05~0.1	6~8	溝銑 SLOTTING
X-UEx0804	55	60	2200~2600	300~400	8	0.05~0.1	側銑 SIDE MILLING
X-UEx1004	30	95	2800~3200	900~1200	0.1~0.2	8~10	溝銑 SLOTTING
X-UEx1004	30	95	2800~3200	800~1000	0.05~0.1	8~10	溝銑 SLOTTING
X-UEx1004	30	65	1900~2200	900~1300	10	0.3~0.5	側銑 SIDE MILLING
X-UEx1004	30	80	2500~2800	450~600	10	0.05~0.15	側銑 SIDE MILLING
X-UEx1004	40	70	2000~2400	800~1000	0~0.1	8~10	溝銑 SLOTTING
X-UEx1004	40	75	2200~2600	500~700	0.05~0.1	8~10	溝銑 SLOTTING
X-UEx1004	40	70	2000~2400	400~600	10	0.2~0.3	側銑 SIDE MILLING
X-UEx1004	40	75	2200~2600	400~600	10	0.05~0.1	側銑 SIDE MILLING
X-UEx1004	60	60	1800~2200	300~500	0.05~0.1	8~10	溝銑 SLOTTING
X-UEx1004	60	60	1800~2200	300~500	10	0.05~0.1	側銑 SIDE MILLING
X-UEx1204	35	105	2600~3000	800~1000	0.1~0.2	10~12	溝銑 SLOTTING
X-UEx1204	35	100	2400~2800	500~700	0.05~0.15	10~12	溝銑 SLOTTING
X-UEx1204	35	75	1800~2200	600~800	12	0.3~0.5	側銑 SIDE MILLING
X-UEx1204	35	100	2400~2800	500~700	12	0.05~0.15	側銑 SIDE MILLING
X-UEx1204	60	80	2000~2400	600~800	0.1~0.15	10~12	溝銑 SLOTTING
X-UEx1204	60	80	2000~2400	300~500	0.05~0.15	10~12	溝銑 SLOTTING
X-UEx1204	60	75	1800~2200	400~600	12	0.2~0.3	側銑 SIDE MILLING
X-UEx1204	60	80	2000~2400	300~500	12	0.05~0.15	側銑 SIDE MILLING
X-UEx1204	80	75	1800~2200	300~500	0.05~0.1	10~12	溝銑 SLOTTING
X-UEx1204	80	70	1600~2000	300~400	12	0.05~0.1	側銑 SIDE MILLING
X-UEx1604	45	90	1700~2000	500~700	0.1~0.2	14~16	溝銑 SLOTTING
X-UEx1604	45	100	1800~2200	400~600	0.05~0.15	14~16	溝銑 SLOTTING
X-UEx1604	45	80	1400~1800	600~800	16	0.4~0.6	側銑 SIDE MILLING
X-UEx1604	45	90	1600~2000	400~600	16	0.05~0.15	側銑 SIDE MILLING
X-UEx1604	70	70	1200~1600	400~600	0.1~0.15	14~16	溝銑 SLOTTING
X-UEx1604	70	70	1200~1600	300~500	0.05~0.15	14~16	溝銑 SLOTTING
X-UEx1604	70	50	900~1200	300~500	16	0.2~0.35	側銑 SIDE MILLING
X-UEx1604	70	80	1400~1800	300~400	16	0.05~0.15	側銑 SIDE MILLING
X-UEx1604	100	60	1000~1300	300~400	0.05~0.1	14~16	溝銑 SLOTTING
X-UEx1604	100	60	1000~1300	250~350	16	0.05~0.1	側銑 SIDE MILLING

EXCHANGEABLE HEAD ENDMILL II



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/油霧切削 Dry/MQL 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 (Aa) Depth of Cut	加工寬度 (Ap) Width of Cut	加工方式 Milling Type
X-UEx2004	50	95	1400~1600	500~700	0.15~0.25	18~20	溝銑 SLOTTING
X-UEx2004	50	95	1400~1600	400~600	0.05~0.15	18~20	溝銑 SLOTTING
X-UEx2004	50	75	1100~1300	500~700	20	0.4~0.7	側銑 SIDE MILLING
X-UEx2004	50	80	1200~1400	300~500	20	0.05~0.2	側銑 SIDE MILLING
X-UEx2004	80	70	1000~1300	350~550	0.15~0.25	18~20	溝銑 SLOTTING
X-UEx2004	80	70	1000~1300	300~400	0.05~0.15	18~20	溝銑 SLOTTING
X-UEx2004	80	55	700~1000	300~450	20	0.2~0.4	側銑 SIDE MILLING
X-UEx2004	80	80	1200~1400	300~400	20	0.05~0.2	側銑 SIDE MILLING
X-UEx2004	110	60	800~1100	300~400	0.05~0.15	18~20	溝銑 SLOTTING
X-UEx2004	110	60	800~1100	200~350	20	0.05~0.2	側銑 SIDE MILLING
X-UEx2504	60	95	1100~1400	400~650	0.15~0.25	20~25	溝銑 SLOTTING
X-UEx2504	60	95	1100~1400	300~500	0.05~0.15	20~25	溝銑 SLOTTING
X-UEx2504	60	75	800~1100	400~600	25	0.4~0.7	側銑 SIDE MILLING
X-UEx2504	60	80	900~1200	250~350	25	0.05~0.2	側銑 SIDE MILLING
X-UEx2504	100	70	800~1000	350~550	0.15~0.25	20~25	溝銑 SLOTTING
X-UEx2504	100	70	800~1000	300~400	0.05~0.15	20~25	溝銑 SLOTTING
X-UEx2504	100	60	600~900	300~450	25	0.2~0.4	側銑 SIDE MILLING
X-UEx2504	100	70	800~1000	250~350	25	0.05~0.2	側銑 SIDE MILLING
X-UEx2504	130	60	600~900	250~350	0.05~0.15	20~25	溝銑 SLOTTING
X-UEx2504	130	60	600~900	200~350	25	0.05~0.2	側銑 SIDE MILLING
X-UEx3204	70	95	800~1100	300~500	0.15~0.25	25~32	溝銑 SLOTTING
X-UEx3204	70	95	800~1100	250~400	0.05~0.15	25~32	溝銑 SLOTTING
X-UEx3204	70	75	600~900	300~500	32	0.4~0.7	側銑 SIDE MILLING
X-UEx3204	70	80	700~1000	250~400	32	0.05~0.2	側銑 SIDE MILLING
X-UEx3204	110	70	600~800	250~450	0.15~0.25	25~32	溝銑 SLOTTING
X-UEx3204	110	70	600~800	200~300	0.05~0.15	25~32	溝銑 SLOTTING
X-UEx3204	110	60	500~700	250~400	32	0.2~0.4	側銑 SIDE MILLING
X-UEx3204	110	70	600~800	200~350	32	0.05~0.2	側銑 SIDE MILLING
X-UEx3204	150	60	500~700	150~250	0.05~0.15	25~32	溝銑 SLOTTING
X-UEx3204	150	60	500~700	150~250	32	0.05~0.2	側銑 SIDE MILLING

