



被切削材 Work Material		調質鋼 / 預硬鋼 : Prehardened Steels (HRC36~45)							被切削材 Work Material		熱處理鋼 : Hardened Steels (HRC48~54)							被切削材 Work Material		熱處理鋼 : Hardened Steels (HRC55~62)						
NAK80 : 1.2083 / AISI420 : M310									SKD61/ STAVAX / 17-4PH : 1.2083 / 1.2344 / 1.4542 : H13 / 420									SKD11 / SKH9 : 1.2379 / 1.3342 : D2 / M2								
型號 Type NO.	刀具伸長量 Extension Length	切削速度 Cutting Speed (m/ min)	迴轉速度 Speed (min <sup>-1</sup> )	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	型號 Type NO.	刀具伸長量 Extension Length	切削速度 Cutting Speed (m/ min)	迴轉速度 Speed (min <sup>-1</sup> )	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	型號 Type NO.	刀具伸長量 Extension Length	切削速度 Cutting Speed (m/ min)	迴轉速度 Speed (min <sup>-1</sup> )	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-UBY0804	25	270	10500~11500	2200~2600	0.15~0.25	0.3~0.5	3D銑(3D milling)	X-UBY0804	25	220	8500~9000	2000~2400	0.1~0.2	0.3~0.4	3D銑(3D milling)	X-UBY0804	25mm	190	7200~7700	1400~1800	0.05~0.1	0.1~0.2	3D銑(3D milling)			
X-UBY0804	25	315	12000~13000	2200~2600	0.05~0.1	0.05~0.2	3D銑(3D milling)	X-UBY0804	25	240	9000~10000	1800~2200	0.05~0.1	0.05~0.2	3D銑(3D milling)	X-UBY0804	40mm	140	5400~5800	1000~1400	0.05~0.1	0.1~0.2	3D銑(3D milling)			
X-UBY0804	40	195	7500~8000	1600~2000	0.15~0.25	0.3~0.5	3D銑(3D milling)	X-UBY0804	40	180	7000~7500	1400~1800	0.1~0.2	0.3~0.4	3D銑(3D milling)	X-UBY0804	60mm	90	3400~3800	600~900	0.05~0.1	0.05~0.15	3D銑(3D milling)			
X-UBY0804	40	240	9000~10000	1600~2000	0.05~0.1	0.05~0.2	3D銑(3D milling)	X-UBY0804	40	195	7500~8000	1400~1800	0.05~0.1	0.05~0.2	3D銑(3D milling)	X-UBY1004	30mm	175	6700~7200	1800~2200	0.05~0.15	0.1~0.25	3D銑(3D milling)			
X-UBY0804	60	105	4000~4500	1400~1800	0.1~0.2	0.3~0.4	3D銑(3D milling)	X-UBY0804	60	100	3800~4300	1000~1400	0.1~0.15	0.2~0.3	3D銑(3D milling)	X-UBY1004	50mm	140	4200~4700	1200~1600	0.05~0.15	0.1~0.25	3D銑(3D milling)			
X-UBY0804	60	115	4300~4800	800~1100	0.05~0.1	0.05~0.15	3D銑(3D milling)	X-UBY0804	60	110	4200~4700	700~1000	0.05~0.1	0.05~0.15	3D銑(3D milling)	X-UBY1004	70mm	100	3000~3400	700~1100	0.05~0.1	0.1~0.2	3D銑(3D milling)			
X-UBY1004	30	280	8700~9200	2000~2400	0.15~0.25	0.4~0.6	3D銑(3D milling)	X-UBY1004	30	240	7500~8000	1800~2200	0.15~0.25	0.35~0.45	3D銑(3D milling)	X-UBY1204	35mm	230	5800~6300	1600~2000	0.05~0.15	0.1~0.25	3D銑(3D milling)			
X-UBY1004	30	300	9000~10000	2800~3200	0.05~0.15	0.1~0.25	3D銑(3D milling)	X-UBY1004	30	280	8700~9200	2200~2600	0.05~0.15	0.1~0.25	3D銑(3D milling)	X-UBY1204	55mm	150	3700~4200	1000~1400	0.05~0.15	0.1~0.25	3D銑(3D milling)			
X-UBY1004	50	230	7000~7500	1400~1800	0.15~0.25	0.4~0.6	3D銑(3D milling)	X-UBY1004	50	220	6700~7200	1300~1700	0.15~0.25	0.35~0.45	3D銑(3D milling)	X-UBY1204	80mm	100	2400~2800	600~800	0.05~0.1	0.1~0.2	3D銑(3D milling)			
X-UBY1004	50	245	7600~8000	2200~2600	0.05~0.15	0.1~0.25	3D銑(3D milling)	X-UBY1004	50	220	6700~7200	1600~2000	0.05~0.15	0.1~0.25	3D銑(3D milling)	X-UBY1604	50mm	190	3600~4000	1200~1600	0.05~0.2	0.15~0.3	3D銑(3D milling)			
X-UBY1004	70	125	3800~4200	1000~1400	0.15~0.25	0.4~0.5	3D銑(3D milling)	X-UBY1004	70	120	3600~4000	800~1200	0.1~0.2	0.3~0.4	3D銑(3D milling)	X-UBY1604	90mm	150	2700~3200	700~1000	0.05~0.2	0.15~0.3	3D銑(3D milling)			
X-UBY1004	70	190	5800~6300	1000~1400	0.05~0.15	0.1~0.2	3D銑(3D milling)	X-UBY1004	70	155	4700~5200	800~1200	0.05~0.15	0.1~0.2	3D銑(3D milling)	X-UBY1604	130mm	105	1900~2300	600~800	0.05~0.15	0.15~0.25	3D銑(3D milling)			
X-UBY1204	35	280	7200~7700	2200~2600	0.2~0.3	0.4~0.6	3D銑(3D milling)	X-UBY1204	35	255	6500~7000	2200~2600	0.15~0.25	0.4~0.5	3D銑(3D milling)	X-UBY2004	60mm	190	2800~3200	1000~1400	0.05~0.2	0.2~0.3	3D銑(3D milling)			
X-UBY1204	35	280	7200~7700	2400~2800	0.05~0.15	0.2~0.3	3D銑(3D milling)	X-UBY1204	35	260	6700~7200	2000~2400	0.05~0.15	0.1~0.25	3D銑(3D milling)	X-UBY2004	100mm	145	2100~2500	700~1000	0.05~0.2	0.2~0.3	3D銑(3D milling)			
X-UBY1204	55	260	6700~7200	1800~2200	0.2~0.3	0.4~0.6	3D銑(3D milling)	X-UBY1204	55	225	5700~6200	1400~1800	0.15~0.25	0.4~0.5	3D銑(3D milling)	X-UBY2004	150mm	105	1500~1900	600~800	0.05~0.15	0.15~0.25	3D銑(3D milling)			
X-UBY1204	55	280	7200~7700	1800~2200	0.05~0.15	0.2~0.3	3D銑(3D milling)	X-UBY1204	55	260	6700~7200	1600~2000	0.05~0.15	0.1~0.25	3D銑(3D milling)	X-UBY2504	70mm	190	2200~2600	900~1200	0.05~0.2	0.2~0.3	3D銑(3D milling)			
X-UBY1204	80	230	5800~6300	1200~1600	0.2~0.3	0.4~0.6	3D銑(3D milling)	X-UBY1204	80	170	4300~4800	1200~1600	0.1~0.2	0.3~0.4	3D銑(3D milling)	X-UBY2504	110mm	145	1600~2000	600~900	0.05~0.2	0.2~0.3	3D銑(3D milling)			
X-UBY1204	80	255	6500~7000	1400~1800	0.05~0.15	0.15~0.25	3D銑(3D milling)	X-UBY1204	80	140	3600~4000	800~1200	0.05~0.15	0.1~0.2	3D銑(3D milling)	X-UBY2504	160mm	105	1100~1500	500~700	0.05~0.15	0.15~0.25	3D銑(3D milling)			
X-UBY1604	50	230	4300~4800	1800~2200	0.2~0.35	0.6~0.8	3D銑(3D milling)	X-UBY1604	50	200	3800~4200	1400~1800	0.2~0.35	0.5~0.7	3D銑(3D milling)	X-UBY3004	80mm	190	1800~2200	800~1100	0.05~0.2	0.2~0.3	3D銑(3D milling)			
X-UBY1604	50	280	5300~5800	2200~2600	0.05~0.2	0.2~0.35	3D銑(3D milling)	X-UBY1604	50	270	5200~5700	1800~2200	0.05~0.2	0.15~0.3	3D銑(3D milling)	X-UBY3004	120mm	145	1300~1700	500~800	0.05~0.2	0.2~0.3	3D銑(3D milling)			
X-UBY1604	90	200	3700~4200	1200~1600	0.2~0.35	0.6~0.8	3D銑(3D milling)	X-UBY1604	90	180	3400~3800	1000~1400	0.2~0.35	0.5~0.7	3D銑(3D milling)	X-UBY3004	170mm	105	900~1300	400~600	0.05~0.15	0.15~0.25	3D銑(3D milling)			
X-UBY1604	90	240	4500~5000	1600~2000	0.05~0.2	0.2~0.35	3D銑(3D milling)	X-UBY1604	90	210	4000~4500	1400~1800	0.05~0.2	0.15~0.3	3D銑(3D milling)	X-UBY3204	80mm	190	1700~2100	800~1100	0.05~0.2	0.2~0.3	3D銑(3D milling)			
X-UBY1604	130	120	2200~2600	700~1100	0.2~0.35	0.6~0.7	3D銑(3D milling)	X-UBY1604	130	100	1800~2200	700~1000	0.2~0.3	0.4~0.6	3D銑(3D milling)	X-UBY3204	120mm	145	1200~1600	500~800	0.05~0.2	0.2~0.3	3D銑(3D milling)			
X-UBY1604	130	140	2600~3000	800~1200	0.05~0.2	0.2~0.3	3D銑(3D milling)	X-UBY1604	130	130	2400~2800	800~1100	0.05~0.15	0.15~0.25	3D銑(3D milling)	X-UBY3204	170mm	105	800~1200	400~600	0.05~0.15	0.15~0.25	3D銑(3D milling)			
X-UBY2004	60	225	3400~3800	1600~2000	0.3~0.4	0.8~1	3D銑(3D milling)	X-UBY2004	60	200	3000~3400	1400~1800	0.3~0.4	0.6~0.8	3D銑(3D milling)	附註 / Note:										
X-UBY2004	60	275	4200~4600	2000~2400	0.05~0.2	0.2~0.35	3D銑(3D milling)	X-UBY2004	60	270	4100~4500	1600~2000	0.05~0.2	0.2~0.3	3D銑(3D milling)	建議冷卻方式為乾式 / 油霧。										
X-UBY2004	100	200	3000~3400	1200~1600	0.3~0.4	0.8~1	3D銑(3D milling)	X-UBY2004	100	180	2700~3100	1000~1400	0.3~0.4	0.6~0.8	3D銑(3D milling)	Suggest to use Dry/MQL coolant										
X-UBY2004	100	240	3600~4000	1600~2000	0.05~0.2	0.2~0.35	3D銑(3D milling)	X-UBY2004	100	210	3200~3600	1400~1800	0.05~0.2	0.2~0.3	3D銑(3D milling)											
X-UBY2004	150	120	1700~2100	700~1100	0.3~0.4	0.7~0.9	3D銑(3D milling)	X-UBY2004	150	100	1400~1800	700~1000	0.3~0.4	0.5~0.7	3D銑(3D milling)											
X-UBY2004	150	140	2000~2400	800~1200	0.05~0.2	0.2~0.3	3D銑(3D milling)	X-UBY2004	150	130	1900~2300	800~1100	0.05~0.15	0.15~0.25	3D銑(3D milling)											
X-UBY2504	70	225	2600~3000	1600~2000	0.3~0.4	0.8~1	3D銑(3D milling)	X-UBY2504	70	200	2200~2700	1200~1600	0.3~0.4	0.6~0.8	3D銑(3D milling)											
X-UBY2504	70	275	3300~3700	1800~2200	0.05~0.2	0.2~0.35	3D銑(3D milling)	X-UBY2504	70	270	3200~3600	1400~1800	0.05~0.2	0.2~0.3	3D銑(3D milling)											
X-UBY2504	110	200	2200~2700	1100~1400	0.3~0.4	0.8~1	3D銑(3D milling)	X-UBY2504	110	180	2100~2500	900~1200	0.3~0.4	0.6~0.8	3D銑(3D milling)											
X-UBY2504	110	240	2800~3200	1400~1800	0.05~0.2	0.2~0.35	3D銑(3D milling)	X-UBY2504	110	210	2400~2800	1200~1600	0.05~0.2	0.2~0.3	3D銑(3D milling)											
X-UBY2504	160	120	1300~1700	700~1000	0.3~0.4	0.7~0.9	3D銑(3D milling)	X-UBY2504	160	100	1000~1400	600~900	0.3~0.4	0.5~0.7	3D銑(3D milling)											
X-UBY2504	160	140	1600~2000	800~1100	0.05~0.2	0.2~0.3	3D銑(3D milling)	X-UBY2504	160	130	1400~1800	700~1000	0.05~0.15	0.15~0.25	3D銑(3D milling)											
X-UBY3004	80	225	2200~2600	1400~1800	0.3~0.4	0.8~1	3D銑(3D milling)	X-UBY3004	80	200	1900~2300	1000~1400	0.3~0.4	0.6~0.8	3D銑(3D milling)											
X-UBY3004	80	275	2700~3100	1600~2000	0.05~0.2	0.2~0.35	3D銑(3D milling)	X-UBY3004	80	270	2600~3000	1200~1600	0.05~0.2	0.2~0.3	3D銑(3D milling)											
X-UBY3004	120	200	1800~2200	900~1200	0.3~0.4	0.8~1	3D銑(3D milling)	X-UBY3004	120	180	1700~2100	700~1000	0.3~0.4	0.6~0.8	3D銑(3D milling)											
X-UBY3004	120	220	2000~2400	1200~1500	0.05~0.2	0.2~0.35	3D銑(3D milling)	X-UBY3004	120	210	2000~2400	1000~1400	0.05~0.2	0.2~0.3	3D銑(3D milling)											
X-UBY3004	170	120	1100~1500	600~900	0.3~0.4	0.7~0.9	3D銑(3D milling)	X-UBY3004	170	100	800~1200	500~800	0.3~0.4	0.5~0.7	3D銑(3D milling)											
X-UBY3004	170	140	1200~1600	700~1000	0.05~0.2	0.2~0.3	3D銑(3D milling)	X-UBY3004	170	130	1200~1600	600~900	0.05~0.15	0.15~0.25	3D銑(3D milling)											
X-UBY3204	80	225	2000~2400	1200~1600	0.3~0.4	0.8~1	3D銑(3D milling)	X-UBY3204	80	200	1800~2200	1000~1300	0.3~0.4	0.6~0.8	3D銑(3D milling)											
X-UBY3204	80	275	2500~2900	1400~1800	0.05~0.2	0.2~0.35	3D銑(3D milling)	X-UBY3204	80	270	2400~2800	1200~1500	0.05~0.2	0.2~0.3	3D銑(3D milling)											
X-UBY3204	120	200	1800~2200	800~1100	0.3~0.																					