

被切削材 Work Material	合金工具鋼 / 碳工具鋼 : Alloy Tool Steels / Carbon Tool Steels P20 / P5 / SK3 / SKD61 / SKD11 : 1.2311 / 1.1545 / 1.2379 / 1.2344 : H13 / D2 (HRc23~32)						
	型號 Type NO.	刀具伸長量 Extension Length	切削速度 Cutting Speed (m/min)	迴轉速度 Speed (mim <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
USB0203	45mm	85	13000~14000	1700~2100	0.05~0.1	0.05~0.1	3D銑(3D milling)
USB0203	45mm	85	13000~14000	1100~1500	0.05~0.1	0.05~0.1	3D銑(3D milling)
USB0205	45mm	85	13000~14000	1900~2300	0.05~0.1	0.05~0.1	3D銑(3D milling)
USB0205	45mm	85	13000~14000	1100~1500	0.05~0.1	0.05~0.1	3D銑(3D milling)
USB0315	55mm	55	5500~6000	1300~1700	0.05~0.1	0.05~0.1	3D銑(3D milling)
USB0315	55mm	60	6000~6500	1000~1400	0.05~0.1	0.05~0.1	3D銑(3D milling)
USB0303	40mm	110	11000~12000	2100~2500	0.05~0.1	0.05~0.1	3D銑(3D milling)
USB0303	40mm	120	12000~13000	1300~1700	0.05~0.1	0.05~0.1	3D銑(3D milling)
USB0305	40mm	110	11000~12000	2300~2700	0.05~0.1	0.05~0.1	3D銑(3D milling)
USB0305	40mm	120	12000~13000	1300~1700	0.05~0.1	0.05~0.1	3D銑(3D milling)
USB0415	55mm	50	3800~4300	1200~1600	0.05~0.15	0.2~0.3	3D銑(3D milling)
USB0415	55mm	55	4200~4700	1100~1500	0.05~0.15	0.05~0.15	3D銑(3D milling)
USB0405	35mm	100	8000~8500	2200~2600	0.05~0.15	0.2~0.3	3D銑(3D milling)
USB0405	35mm	130	10000~11000	1400~1800	0.05~0.15	0.05~0.15	3D銑(3D milling)
USB0615	50mm	180	9500~10000	1500~1900	0.05~0.15	0.2~0.3	3D銑(3D milling)
USB0615	50mm	200	10000~11000	1300~1700	0.05~0.15	0.05~0.15	3D銑(3D milling)
USB0603	40mm	200	10000~11000	2300~2700	0.05~0.15	0.2~0.3	3D銑(3D milling)
USB0603	40mm	215	11000~12000	2100~2500	0.05~0.15	0.05~0.15	3D銑(3D milling)
USB0605	50mm	180	9500~10000	2100~2500	0.05~0.15	0.2~0.3	3D銑(3D milling)
USB0605	50mm	200	10000~11000	1700~2100	0.05~0.15	0.05~0.15	3D銑(3D milling)
USB0603B	50mm	200	10000~11000	2300~2700	0.05~0.15	0.2~0.3	3D銑(3D milling)
USB0603B	50mm	215	11000~12000	2100~2500	0.05~0.15	0.05~0.15	3D銑(3D milling)
USB0605B	50mm	200	10000~11000	2500~2900	0.05~0.15	0.2~0.3	3D銑(3D milling)
USB0605B	50mm	215	11000~12000	2100~2500	0.05~0.15	0.05~0.15	3D銑(3D milling)

附註 / Note :

建議冷卻方式為乾式 / 油霧。

Suggest to use Dry/MQL coolant.

被切削材 Work Material	調質鋼 / 預硬鋼 : Prehardened Steels NAK80 : 1.2083 : AISI420 : M310 (HRC36~45)						
	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
USB0203	45mm	85	13000~14000	1600~2000	0.05~0.1	0.05~0.1	3D銑(3D milling)
USB0203	45mm	85	13000~14000	1000~1400	0.05~0.1	0.05~0.1	3D銑(3D milling)
USB0205	45mm	85	13000~14000	1800~2200	0.05~0.1	0.05~0.1	3D銑(3D milling)
USB0205	45mm	85	13000~14000	1000~1400	0.05~0.1	0.05~0.1	3D銑(3D milling)
USB0315	55mm	55	5500~6000	1200~1600	0.05~0.1	0.05~0.1	3D銑(3D milling)
USB0315	55mm	60	6000~6500	900~1300	0.05~0.1	0.05~0.1	3D銑(3D milling)
USB0303	40mm	110	11000~12000	2000~2400	0.05~0.1	0.05~0.1	3D銑(3D milling)
USB0303	40mm	120	12000~13000	1200~1600	0.05~0.1	0.05~0.1	3D銑(3D milling)
USB0305	40mm	110	11000~12000	2200~2600	0.05~0.1	0.05~0.1	3D銑(3D milling)
USB0305	40mm	120	12000~13000	1200~1600	0.05~0.1	0.05~0.1	3D銑(3D milling)
USB0415	55mm	50	3800~4300	1100~1500	0.05~0.15	0.2~0.3	3D銑(3D milling)
USB0415	55mm	55	4200~4700	1000~1400	0.05~0.15	0.05~0.15	3D銑(3D milling)
USB0405	35mm	100	8000~8500	2000~2400	0.05~0.15	0.2~0.3	3D銑(3D milling)
USB0405	35mm	130	10000~11000	1200~1600	0.05~0.15	0.05~0.15	3D銑(3D milling)
USB0615	55mm	180	9500~10000	1200~1600	0.05~0.15	0.2~0.3	3D銑(3D milling)
USB0615	55mm	200	10000~11000	1000~1400	0.05~0.15	0.05~0.15	3D銑(3D milling)
USB0603	40mm	200	10000~11000	2000~2400	0.05~0.15	0.2~0.3	3D銑(3D milling)
USB0603	40mm	215	11000~12000	1800~2200	0.05~0.15	0.05~0.15	3D銑(3D milling)
USB0605	55mm	180	9500~10000	1800~2200	0.05~0.15	0.2~0.3	3D銑(3D milling)
USB0605	55mm	200	10000~11000	1400~1800	0.05~0.15	0.05~0.15	3D銑(3D milling)
USB0603B	55mm	200	10000~11000	2000~2400	0.05~0.15	0.2~0.3	3D銑(3D milling)
USB0603B	55mm	215	11000~12000	1800~2200	0.05~0.15	0.05~0.15	3D銑(3D milling)
USB0605B	55mm	200	10000~11000	2200~2600	0.05~0.15	0.2~0.3	3D銑(3D milling)
USB0605B	55mm	215	11000~12000	1800~2200	0.05~0.15	0.05~0.15	3D銑(3D milling)

附註 / Note :

建議冷卻方式為乾式 / 油霧。

Suggest to use Dry/MQL coolant.

被切削材 Work Material	熱處理鋼 : Hardened Steels SKD61/ STAVAX / 17-4PH : 1.2083 / 1.2344 / 1.4542 : H13 / 420 (HRC 48~54)							
	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
	USB0203	40mm	45	6700~7300	600~1000	0.05~0.1	0.05~0.1	3D銑(3D milling)
	USB0205	40mm	45	6700~7300	700~1100	0.05~0.1	0.05~0.1	3D銑(3D milling)
	USB0315	55mm	50	4800~5300	500~700	0.05~0.1	0.05~0.1	3D銑(3D milling)
	USB0303	40mm	80	8000~8500	800~1200	0.05~0.1	0.05~0.1	3D銑(3D milling)
	USB0305	40mm	80	8000~8500	900~1300	0.05~0.1	0.05~0.1	3D銑(3D milling)
	USB0415	55mm	45	3300~3800	500~700	0.05~0.1	0.05~0.1	3D銑(3D milling)
	USB0405	35mm	90	7000~7500	1000~1400	0.05~0.1	0.05~0.1	3D銑(3D milling)
	USB0615	55mm	120	6200~6700	600~1000	0.05~0.1	0.05~0.1	3D銑(3D milling)
	USB0603	40mm	140	7200~7700	1400~1800	0.05~0.1	0.05~0.1	3D銑(3D milling)
	USB0605	55mm	120	6200~6700	1000~1400	0.05~0.1	0.05~0.1	3D銑(3D milling)
	USB0603B	55mm	140	7200~7700	1300~1700	0.05~0.1	0.05~0.1	3D銑(3D milling)
	USB0605B	55mm	140	7200~7700	1400~1800	0.05~0.1	0.05~0.1	3D銑(3D milling)

附註 / Note :

建議冷卻方式為乾式 / 油霧。

Suggest to use Dry/MQL coolant.