DHF

被切削材 Work Material	熱處理鋼 Hardened Steels: SKD61,STAVAX,1.2083 ,17-4PH (HRc52)						
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^-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
UMB0022	10mm	15	18000~20000	250~400	0.008~0.012	0,2	溝銑(Slotting)
UMB0022	10mm	15	18000~20000	400~500	0.005~0.008	0,2	溝銑(Slotting)
UMB0022	10mm	15	18000~20000	500~700	0.008~0.015	0.016~0.03	3D銑(3D milling)
UMB0022	10mm	15	18000~20000	700~900	0.005~0.008	0.01~0.016	3D銑(3D milling)
UMB0032	10mm	20	18000~20000	300~500	0.01~0.015	0,3	溝銑(Slotting)
UMB0032	10mm	20	18000~20000	500~600	0.005~0.01	0,3	溝銑(Slotting)
UMB0032	10mm	20	18000~20000	600~800	0.015~0.025	0.03~0.05	3D銑(3D milling)
UMB0032	10mm	20	18000~20000	800~1000	0.005~0.015	0.01~0.03	3D銑(3D milling)
UNB0042	10mm	25	18000~20000	400~600	0.015~0.02	0,4	溝銑(Slotting)
UNB0042	10mm	25	18000~20000	600~700	0.005~0.01	0,4	溝銑(Slotting)
UNB0042	10mm	25	18000~20000	700~900	0.015~0.025	0.03~0.05	3D銑(3D milling)
UNB0042	10mm	25	18000~20000	900~1100	0.005~0.015	0.01~0.03	3D銑(3D milling)
UMB0052	12mm	30	18000~20000	600~800	0.015~0.02	0,5	溝銑(Slotting)
UMB0052	12mm	30	18000~20000	800~900	0.005~0.01	0,5	溝銑(Slotting)
UMB0052	12mm	30	18000~20000	800~900	0.02~0.03	0.04~0.06	3D銑(3D milling)
UMB0052	12mm	30	18000~20000	1000~1200	0.005~0.015	0.01~0.03	3D銑(3D milling)
UMB0062	12mm	35	18000~20000	600~800	0.02~0.025	0,6	溝銑(Slotting)
UMB0062	12mm	35	18000~20000	800~1000	0.005~0.01	0,6	溝銑(Slotting)
UMB0062	12mm	35	18000~20000	800~1000	0.03~0.045	0.06~0.09	3D銑(3D milling)
UMB0062	12mm	35	18000~20000	1200~1600	0.005~0.02	0.01~0.04	3D銑(3D milling)
UMB0072	12mm	40	16000~18000	600~800	0.02~0.03	0,7	溝銑(Slotting)
UMB0072	12mm	40	16000~18000	800~1000	0.005~0.015	0,7	溝銑(Slotting)
UMB0072	12mm	40	16000~18000	800~1000	0.035~0.05	0.07~0.1	3D銑(3D milling)
UMB0072	12mm	40	16000~18000	1200~1600	0.005~0.025	0.01~0.05	3D銑(3D milling)
UNB0082	12mm	45	16000~18000	600~800	0.02~0.04	0,8	溝銑(Slotting)
UNB0082	12mm	45	16000~18000	800~1000	0.005~0.015	0,8	溝銑(Slotting)
UNB0082	12mm	45	16000~18000	800~1000	0.04~0.06	0.08~0.12	3D銑(3D milling)
UNB0082	12mm	45	16000~18000	1400~1800	0.005~0.025	0.01~0.05	3D銑(3D milling)
UMB0102S	12mm	50	14000~16000	600~800	0.04~0.06	1	溝銑(Slotting)
UMB0102S	12mm	50	14000~16000	1000~1200	0.015~0.03	1	溝銑(Slotting)
UMB0102S	12mm	50	14000~16000	1000~1200	0.06~0.08	0.12~0.16	3D銑(3D milling)
UMB0102S	12mm	50	14000~16000	1600~2000	0.01~0.03	0.02~0.06	3D銑(3D milling)
UMB0102	12mm	50	14000~16000	600~800	0.04~0.06	1	溝銑(Slotting)
UMB0102	12mm	50	14000~16000	1000~1200	0.015~0.03	1	溝銑(Slotting)
UMB0102	12mm	50	14000~16000	1000~1200	0.06~0.08	0.12~0.16	3D銑(3D milling)
UMB0102	12mm	50	14000~16000	1600~2000	0.01~0.03	0.02~0.06	3D銑(3D milling)
UMB0152S	12mm	75	14000~16000	600~800	0.06~0.08	1,5	溝銑(Slotting)
UMB0152S	12mm	75	14000~16000	1000~1200	0.015~0.04	1,5	溝銑(Slotting)
UMB0152S	12mm	75	14000~16000	1000~1200	0.08~0.1	0.16~0.2	3D銑(3D milling)
UMB0152S	12mm	75	14000~16000	1800~2200	0.02~0.05	0.04~0.1	3D銑(3D milling)
UMB0152	12mm	75	14000~16000	600~800	0.06~0.08	1,5	溝銑(Slotting)
UMB0152	12mm	75	14000~16000	1000~1200	0.015~0.04	1,5	溝銑(Slotting)
UMB0152	12mm	75	14000~16000	1000~1200	0.08~0.1	0.16~0.2	3D銑(3D milling)
UMB0152	12mm	75	14000~16000	1800~2200	0.02~0.05	0.04~0.1	3D銑(3D milling)
UMB0202S	12mm	90	13000~14000	800~1000	0.1~0.12	2	溝銑(Slotting)
UMB0202S	12mm	90	13000~14000	1200~1400	0.02~0.06	2	溝銑(Slotting)
UMB0202S	12mm	90	13000~14000	1600~1800	0.12~0.14	0.24~0.28	3D銑(3D milling)
UMB0202S	12mm	90	13000~14000	2200~2600	0.025~0.06	0.05~0.12	3D銑(3D milling)
UMB0202	12mm	90	13000~14000	800~1000	0.1~0.12	2	溝銑(Slotting)
UMB0202	12mm	90	13000~14000	1200~1400	0.02~0.06	2	溝銑(Slotting)
UMB0202	12mm	90	13000~14000	1600~1800	0.12~0.14	0.24~0.28	3D銑(3D milling)
UMB0202	12mm	90	13000~14000	2200~2600	0.025~0.06	0.05~0.12	3D銑(3D milling)
UMB0302S	12mm	125	12000~13000	1000~1200	0.14~0.16	3	溝銑(Slotting)
UMB0302S	12mm	125	12000~13000	1400~1800	0.03~0.08	3	溝銑(Slotting)
UMB0302S	12mm	125	12000~13000	2200~2400	0.16~0.18	0.32~0.36	3D銑(3D milling)
UMB0302S	12mm	125	12000~13000	2800~3200	0.03~0.08	0.06~0.16	3D銑(3D milling)
UMB0302	12mm	125	12000~13000	1000~1200	0.14~0.16	3	溝銑(Slotting)
UMB0302	12mm	125	12000~13000	1400~1800	0.03~0.08	3	溝銑(Slotting)
UMB0302	12mm	125	12000~13000	2200~2400	0.16~0.18	0.32~0.36	3D銑(3D milling)
UMB0302	12mm	125	12000~13000	2800~3200	0.03~0.08	0.06~0.16	3D銑(3D milling)
UMB0402	12mm	150	11000~12000	1200~1400	0.16~0.18	4	溝銑(Slotting)
UMB0402	12mm	150	11000~12000	1800~2200	0.04~0.09	4	溝銑(Slotting)
UMB0402	12mm	150	11000~12000	2600~2800	0.2~0.22	0.4~0.44	3D銑(3D milling)
UMB0402	12mm	150	11000~12000	3200~3600	0.035~0.1	0.07~0.2	3D銑(3D milling)

附註 / Note：
以上冷卻方式皆為油霧。
Suggest to use MQL coolant.

DHF

被切削材 Work Material	熱處理鋼 Hardened Steels: SKD11 (HRc62)						
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^-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
UMB0022	10mm	15	16000~18000	100~200	0.005~0.008	0,2	溝銑(Slotting)
UMB0022	10mm	15	16000~18000	100~200	0.005~0.008	0,2	溝銑(Slotting)
UMB0022	10mm	15	16000~18000	200~300	0.008~0.01	0.016~0.02	3D銑(3D milling)
UMB0022	10mm	15	16000~18000	300~400	0.005~0.008	0.01~0.016	3D銑(3D milling)
UMB0032	10mm	15	15000~16000	100~200	0.005~0.008	0,3	溝銑(Slotting)
UMB0032	10mm	15	15000~16000	100~200	0.005~0.008	0,3	溝銑(Slotting)
UMB0032	10mm	15	15000~16000	200~300	0.008~0.01	0.016~0.02	3D銑(3D milling)
UMB0032	10mm	15	15000~16000	300~400	0.005~0.008	0.01~0.016	3D銑(3D milling)
UNB0042	10mm	20	15000~16000	150~250	0.005~0.01	0,4	溝銑(Slotting)
UNB0042	10mm	20	15000~16000	150~250	0.005~0.01	0,4	溝銑(Slotting)
UNB0042	10mm	20	15000~16000	200~300	0.008~0.015	0.016~0.03	3D銑(3D milling)
UNB0042	10mm	20	15000~16000	300~400	0.005~0.008	0.01~0.016	3D銑(3D milling)
UMB0052	12mm	25	14000~15000	200~300	0.005~0.015	0,5	溝銑(Slotting)
UMB0052	12mm	25	14000~15000	200~300	0.005~0.015	0,5	溝銑(Slotting)
UMB0052	12mm	25	14000~15000	300~500	0.015~0.025	0.03~0.05	3D銑(3D milling)
UMB0052	12mm	25	14000~15000	500~700	0.005~0.015	0.01~0.03	3D銑(3D milling)
UMB0062	12mm	30	14000~15000	200~400	0.015~0.025	0,6	溝銑(Slotting)
UMB0062	12mm	30	14000~15000	400~500	0.005~0.015	0,6	溝銑(Slotting)
UMB0062	12mm	30	14000~15000	300~500	0.015~0.025	0.03~0.05	3D銑(3D milling)
UMB0062	12mm	30	14000~15000	500~700	0.005~0.015	0.01~0.03	3D銑(3D milling)
UMB0072	12mm	30	13000~14000	300~500	0.02~0.03	0,7	溝銑(Slotting)
UMB0072	12mm	30	13000~14000	500~700	0.005~0.015	0,7	溝銑(Slotting)
UMB0072	12mm	30	13000~14000	400~600	0.025~0.035	0.05~0.07	3D銑(3D milling)
UMB0072	12mm	30	13000~14000	800~1000	0.005~0.015	0.01~0.03	3D銑(3D milling)
UNB0082	12mm	35	13000~14000	300~500	0.02~0.03	0,8	溝銑(Slotting)
UNB0082	12mm	35	13000~14000	500~700	0.005~0.015	0,8	溝銑(Slotting)
UNB0082	12mm	35	13000~14000	400~600	0.03~0.04	0.06~0.08	3D銑(3D milling)
UNB0082	12mm	35	13000~14000	800~1000	0.005~0.02	0.01~0.04	3D銑(3D milling)
UMB0102S	12mm	40	12000~13000	400~600	0.03~0.04	1	溝銑(Slotting)
UMB0102S	12mm	40	12000~13000	600~800	0.015~0.025	1	溝銑(Slotting)
UMB0102S	12mm	40	12000~13000	400~600	0.06~0.08	0.12~0.16	3D銑(3D milling)
UMB0102S	12mm	40	12000~13000	800~1000	0.01~0.03	0.02~0.06	3D銑(3D milling)
UMB0102	12mm	40	12000~13000	400~600	0.03~0.04	1	溝銑(Slotting)
UMB0102	12mm	40	12000~13000	600~800	0.015~0.025	1	溝銑(Slotting)
UMB0102	12mm	40	12000~13000	400~600	0.06~0.08	0.12~0.16	3D銑(3D milling)
UMB0102	12mm	40	12000~13000	800~1000	0.01~0.03	0.02~0.06	3D銑(3D milling)
UMB0152S	12mm	60	11000~12000	400~600	0.04~0.06	1,5	溝銑(Slotting)
UMB0152S	12mm	60	11000~12000	800~1000	0.015~0.03	1,5	溝銑(Slotting)
UMB0152S	12mm	60	11000~12000	400~600	0.08~0.1	0.16~0.2	3D銑(3D milling)
UMB0152S	12mm	60	11000~12000	1000~1400	0.02~0.05	0.04~0.1	3D銑(3D milling)
UMB0152	12mm	60	11000~12000	400~600	0.04~0.06	1,5	溝銑(Slotting)
UMB0152	12mm	60	11000~12000	800~1000	0.015~0.03	1,5	溝銑(Slotting)
UMB0152	12mm	60	11000~12000	400~600	0.08~0.1	0.16~0.2	3D銑(3D milling)
UMB0152	12mm	60	11000~12000	1000~1400	0.02~0.05	0.04~0.1	3D銑(3D milling)
UMB0202S	12mm	70	10000~11000	600~800	0.06~0.08	2	溝銑(Slotting)
UMB0202S	12mm	70	10000~11000	1000~1200	0.02~0.04	2	溝銑(Slotting)
UMB0202S	12mm	70	10000~11000	800~1000	0.09~0.11	0.18~0.22	3D銑(3D milling)
UMB0202S	12mm	70	10000~11000	1400~1800	0.02~0.06	0.04~0.12	3D銑(3D milling)
UMB0202	12mm	70	10000~11000	600~800	0.06~0.08	2	溝銑(Slotting)
UMB0202	12mm	70	10000~11000	1000~1200	0.02~0.04	2	溝銑(Slotting)
UMB0202	12mm	70	10000~11000	800~1000	0.09~0.11	0.18~0.22	3D銑(3D milling)
UMB0202	12mm	70	10000~11000	1400~1800	0.02~0.06	0.04~0.12	3D銑(3D milling)
UMB0302S	12mm	95	9000~10000	600~800	0.1~0.12	3	溝銑(Slotting)
UMB0302S	12mm	95	9000~10000	1200~1400	0.02~0.06	3	溝銑(Slotting)
UMB0302S	12mm	95	9000~10000	800~1000	0.12~0.14	0.24~0.28	3D銑(3D milling)
UMB0302S	12mm	95	9000~10000	1400~1800	0.025~0.06	0.05~0.12	3D銑(3D milling)
UMB0302	12mm	95	9000~10000	600~800	0.1~0.12	3	溝銑(Slotting)
UMB0302	12mm	95	9000~10000	1200~1400	0.02~0.06	3	溝銑(Slotting)
UMB0302	12mm	95	9000~10000	800~1000	0.12~0.14	0.24~0.28	3D銑(3D milling)
UMB0302	12mm	95	9000~10000	1400~1800	0.025~0.06	0.05~0.12	3D銑(3D milling)
UMB0402	12mm	115	8000~9000	800~1000	0.14~0.16	4	溝銑(Slotting)
UMB0402	12mm	115	8000~9000	1200~1400	0.03~0.08	4	溝銑(Slotting)
UMB0402	12mm	115	8000~9000	1000~1200	0.16~0.18	0.32~0.36	3D銑(3D milling)
UMB0402	12mm	115	8000~9000	1600~2000	0.03~0.08	0.06~0.16	3D銑(3D milling)

附註 / Note：
以上冷卻方式皆為油霧。
Suggest to use MQL coolant.

被切削材 Work Material	耐蝕不銹鋼 Stainless Steel: SUS316/1.4401 , SUS304/1.4301 (HRc30)						
型號 Type NO.	刀具伸長量 Extension Length	迴轉速度 Speed (mim^-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

附註 / Note：
以上冷卻方式皆為濕式。
Suggest to use Wet coolant.

被切削材 Work Material	耐蝕不銹鋼 Stainless Steel: SUS316/1.4401 , SUS304/1.4301 (HRc30)						
型號 Type NO.	刀具伸長量 Extension Length	迴轉速度 Speed (mim^-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

附註 / Note：
以上冷卻方式皆為濕式。
Suggest to use Wet coolant.