

RTD

切削條件表

Milling Conditions

被切削材 Work Material

碳素鋼 / 鑄鐵 : Carbon Steels / Cast Iron

S50C / Fc250 / SS400 : 1.1210 / 0.6025 / 1.0036 : 1050 / NO.35 / A570 Gr.45 (~HRc22)

冷卻方式 Coolant Type

濕式切削 Wet coolant

型號 Type NO.	刀具伸長量 Extension Length(mm)	切削速度 (m/min) Cutting Speed	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
RTD0202	12	60	9000~10000	900~1100	0.1~0.12	1~2	溝銑 (SLOTTING)
RTD0202	12	60	9000~10000	800~1000	0.04~0.06	1~2	溝銑 (SLOTTING)
RTD0202	12	100	16000~17000	1100~1300	0.1~0.12	1~2	溝銑 (SLOTTING)
RTD0202	12	100	16000~17000	1000~1200	0.04~0.06	1~2	溝銑 (SLOTTING)
RTD0202	12	60	9000~10000	1100~1300	2~4	0.1~0.12	側銑 (SIDE MILLING)
RTD0202	12	60	9000~10000	800~1000	2~4	0.04~0.06	側銑 (SIDE MILLING)
RTD0202	12	85	13500~15000	1200~1400	2~4	0.1~0.12	側銑 (SIDE MILLING)
RTD0202	12	85	13500~15000	900~1100	2~4	0.04~0.06	側銑 (SIDE MILLING)
RTD0202	12	60	9000~10000	1100~1400	0.1~0.12	0.1~0.12	3D銑 (3D MILLING)
RTD0202	12	60	9000~10000	1100~1400	0.04~0.06	0.04~0.06	3D銑 (3D MILLING)
RTD0202	12	145	23000~24000	1400~1800	0.1~0.12	0.1~0.12	3D銑 (3D MILLING)
RTD0202	12	145	23000~24000	1400~1800	0.04~0.06	0.04~0.06	3D銑 (3D MILLING)
RTD0205	12	60	9000~10000	900~1100	0.1~0.12	0.5~2	溝銑 (SLOTTING)
RTD0205	12	60	9000~10000	800~1000	0.04~0.06	0.5~2	溝銑 (SLOTTING)
RTD0205	12	100	16000~17000	1100~1300	0.1~0.12	0.5~2	溝銑 (SLOTTING)
RTD0205	12	100	16000~17000	1000~1200	0.04~0.06	0.5~2	溝銑 (SLOTTING)
RTD0205	12	60	9000~10000	1100~1300	2~4	0.1~0.12	側銑 (SIDE MILLING)
RTD0205	12	60	9000~10000	800~1000	2~4	0.04~0.06	側銑 (SIDE MILLING)
RTD0205	12	85	13500~15000	1200~1400	2~4	0.1~0.12	側銑 (SIDE MILLING)
RTD0205	12	85	13500~15000	900~1100	2~4	0.04~0.06	側銑 (SIDE MILLING)
RTD0205	12	60	9000~10000	1100~1400	0.1~0.12	0.1~0.12	3D銑 (3D MILLING)
RTD0205	12	60	9000~10000	1100~1400	0.04~0.06	0.04~0.06	3D銑 (3D MILLING)
RTD0205	12	145	23000~24000	1400~1800	0.1~0.12	0.1~0.12	3D銑 (3D MILLING)
RTD0205	12	145	23000~24000	1400~1800	0.04~0.06	0.04~0.06	3D銑 (3D MILLING)
RTD0305	12	85	9000~10000	900~1100	0.12~0.15	1~3	溝銑 (SLOTTING)
RTD0305	12	85	9000~10000	800~1000	0.06~0.08	1~3	溝銑 (SLOTTING)
RTD0305	12	100	10500~11000	1100~1300	0.12~0.15	1~3	溝銑 (SLOTTING)
RTD0305	12	100	10500~11000	1000~1200	0.06~0.08	1~3	溝銑 (SLOTTING)
RTD0305	12	80	8500~9000	1100~1300	3~6	0.12~0.15	側銑 (SIDE MILLING)
RTD0305	12	80	8500~9000	800~1000	3~6	0.06~0.08	側銑 (SIDE MILLING)
RTD0305	12	85	9000~10000	1200~1400	3~6	0.12~0.15	側銑 (SIDE MILLING)
RTD0305	12	85	9000~10000	900~1100	3~6	0.06~0.08	側銑 (SIDE MILLING)
RTD0305	12	85	9000~10000	1100~1400	0.12~0.15	0.12~0.15	3D銑 (3D MILLING)
RTD0305	12	85	9000~10000	1100~1400	0.06~0.08	0.06~0.08	3D銑 (3D MILLING)
RTD0305	12	145	15000~16000	1400~1800	0.12~0.15	0.12~0.15	3D銑 (3D MILLING)
RTD0305	12	150	16000~17000	1400~1800	0.06~0.08	0.06~0.08	3D銑 (3D MILLING)

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型號 Type NO.	刀具伸長量 Extension Length(mm)	切削速度 (m/min) Cutting Speed	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
RTD0405	14	100	8000~8400	1000~1200	0.15~0.18	2~4	溝銑 (SLOTTING)
RTD0405	14	100	8000~8400	1000~1200	0.07~0.1	2~4	溝銑 (SLOTTING)
RTD0405	14	85	6800~7200	1000~1200	4~8	0.15~0.18	側銑 (SIDE MILLING)
RTD0405	14	85	6500~7500	800~1000	4~8	0.07~0.1	側銑 (SIDE MILLING)
RTD0405	14	110	8700~9200	1000~1200	0.15~0.18	0.15~0.18	3D銑 (3D MILLING)
RTD0405	14	110	8700~9200	1200~1600	0.07~0.1	0.07~0.1	3D銑 (3D MILLING)
RTD0405	14	150	12000~13000	1600~2000	0.15~0.18	0.15~0.18	3D銑 (3D MILLING)
RTD0405	14	165	13000~14000	1600~2000	0.07~0.1	0.07~0.1	3D銑 (3D MILLING)
RTD0505	17	90	5800~6400	1200~1400	0.15~0.18	3~5	溝銑 (SLOTTING)
RTD0505	17	130	8000~8500	1000~1400	0.07~0.1	3~5	溝銑 (SLOTTING)
RTD0505	17	95	6000~7000	1000~1200	5~10	0.15~0.18	側銑 (SIDE MILLING)
RTD0505	17	95	6000~7000	800~1000	5~10	0.07~0.1	側銑 (SIDE MILLING)
RTD0505	17	135	8500~9000	1400~1800	0.15~0.18	0.15~0.18	3D銑 (3D MILLING)
RTD0505	17	135	8500~9000	1300~1600	0.07~0.1	0.07~0.1	3D銑 (3D MILLING)
RTD0505	17	160	10000~11000	1600~2000	0.15~0.18	0.15~0.18	3D銑 (3D MILLING)
RTD0505	17	160	10000~11000	1400~1800	0.07~0.1	0.07~0.1	3D銑 (3D MILLING)
RTD0510	17	90	5800~6400	1200~1400	0.15~0.18	2~5	溝銑 (SLOTTING)
RTD0510	17	130	8000~8500	1000~1400	0.07~0.1	2~5	溝銑 (SLOTTING)
RTD0510	17	95	6000~7000	1000~1200	5~10	0.15~0.18	側銑 (SIDE MILLING)
RTD0510	17	95	6000~7000	800~1000	5~10	0.07~0.1	側銑 (SIDE MILLING)
RTD0510	17	135	8500~9000	1400~1800	0.15~0.18	0.15~0.18	3D銑 (3D MILLING)
RTD0510	17	135	8500~9000	1300~1600	0.07~0.1	0.07~0.1	3D銑 (3D MILLING)
RTD0510	17	160	10000~11000	1600~2000	0.15~0.18	0.15~0.18	3D銑 (3D MILLING)
RTD0510	17	160	10000~11000	1400~1800	0.07~0.1	0.07~0.1	3D銑 (3D MILLING)
RTD0605	20	90	4800~5400	1400~1600	0.15~0.2	4~6	溝銑 (SLOTTING)
RTD0605	20	130	6800~7200	1400~1600	0.07~0.1	4~6	溝銑 (SLOTTING)
RTD0605	20	95	5000~6000	1000~1200	6~12	0.15~0.2	側銑 (SIDE MILLING)
RTD0605	20	95	5000~6000	800~1000	6~12	0.07~0.1	側銑 (SIDE MILLING)
RTD0605	20	160	8500~9000	1800~2200	0.15~0.2	0.15~0.2	3D銑 (3D MILLING)
RTD0605	20	160	8500~9000	1600~2000	0.07~0.1	0.07~0.1	3D銑 (3D MILLING)
RTD0610	20	90	4800~5400	1400~1600	0.15~0.2	3~6	溝銑 (SLOTTING)
RTD0610	20	130	6800~7200	1400~1600	0.07~0.1	3~6	溝銑 (SLOTTING)
RTD0610	20	95	5000~6000	1000~1200	6~12	0.15~0.2	側銑 (SIDE MILLING)
RTD0610	20	95	5000~6000	800~1000	6~12	0.07~0.1	側銑 (SIDE MILLING)
RTD0610	20	160	8500~9000	1800~2200	0.15~0.2	0.15~0.2	3D銑 (3D MILLING)
RTD0610	20	160	8500~9000	1600~2000	0.07~0.1	0.07~0.1	3D銑 (3D MILLING)

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RTD0805	30	135	5200~5800	1000~1400	0.2~0.25	6~8	溝銑 (SLOTTING)
RTD0805	30	145	5800~6200	1000~1200	0.07~0.11	6~8	溝銑 (SLOTTING)
RTD0805	30	90	3500~4000	1000~1200	8~16	0.2~0.25	側銑 (SIDE MILLING)
RTD0805	30	90	3500~4000	700~1000	8~16	0.07~0.11	側銑 (SIDE MILLING)
RTD0805	30	190	7500~8500	2000~2400	0.2~0.25	0.2~0.25	3D銑 (3D MILLING)
RTD0805	30	190	7500~8500	1400~1800	0.07~0.11	0.07~0.11	3D銑 (3D MILLING)
RTD0810	30	135	5200~5800	1000~1400	0.2~0.25	5~8	溝銑 (SLOTTING)
RTD0810	30	145	5800~6200	1000~1200	0.07~0.11	5~8	溝銑 (SLOTTING)
RTD0810	30	90	3500~4000	1000~1200	8~16	0.2~0.25	側銑 (SIDE MILLING)
RTD0810	30	90	3500~4000	700~1000	8~16	0.07~0.11	側銑 (SIDE MILLING)
RTD0810	30	190	7500~8500	2000~2400	0.2~0.25	0.2~0.25	3D銑 (3D MILLING)
RTD0810	30	190	7500~8500	1400~1800	0.07~0.11	0.07~0.11	3D銑 (3D MILLING)
RTD1005Z	30	135	4200~4700	1200~1600	0.25~0.3	8~10	溝銑 (SLOTTING)
RTD1005Z	30	145	4500~5000	800~1000	0.08~0.13	8~10	溝銑 (SLOTTING)
RTD1005Z	30	90	2800~3200	800~1200	10~20	0.25~0.3	側銑 (SIDE MILLING)
RTD1005Z	30	90	2800~3200	700~900	10~20	0.1~0.15	側銑 (SIDE MILLING)
RTD1005Z	30	190	6000~7000	2400~2800	0.25~0.3	0.25~0.3	3D銑 (3D MILLING)
RTD1005Z	30	190	6000~7000	1400~1800	0.08~0.13	0.08~0.13	3D銑 (3D MILLING)
RTD1005	35	135	4200~4700	1200~1600	0.25~0.3	8~10	溝銑 (SLOTTING)
RTD1005	35	145	4500~5000	800~1000	0.08~0.13	8~10	溝銑 (SLOTTING)
RTD1005	35	90	2800~3200	800~1200	10~20	0.25~0.3	側銑 (SIDE MILLING)
RTD1005	35	90	2800~3200	700~900	10~20	0.08~0.13	側銑 (SIDE MILLING)
RTD1005	35	190	6000~7000	2100~2500	0.25~0.3	0.25~0.3	3D銑 (3D MILLING)
RTD1005	35	190	6000~7000	1400~1800	0.08~0.13	0.08~0.13	3D銑 (3D MILLING)
RTD1010Z	30	135	4200~4700	1200~1600	0.25~0.3	7~10	溝銑 (SLOTTING)
RTD1010Z	30	145	4500~5000	800~1000	0.08~0.13	7~10	溝銑 (SLOTTING)
RTD1010Z	30	90	2800~3200	800~1200	10~20	0.25~0.3	側銑 (SIDE MILLING)
RTD1010Z	30	90	2800~3200	700~900	10~20	0.1~0.15	側銑 (SIDE MILLING)
RTD1010Z	30	190	6000~7000	2400~2800	0.25~0.3	0.25~0.3	3D銑 (3D MILLING)
RTD1010Z	30	190	6000~7000	1400~1800	0.08~0.13	0.08~0.13	3D銑 (3D MILLING)
RTD1010	35	135	4200~4700	1200~1600	0.25~0.3	7~10	溝銑 (SLOTTING)
RTD1010	35	145	4500~5000	800~1000	0.08~0.13	7~10	溝銑 (SLOTTING)
RTD1010	35	90	2800~3200	800~1200	10~20	0.25~0.3	側銑 (SIDE MILLING)
RTD1010	35	90	2800~3200	700~900	10~20	0.1~0.15	側銑 (SIDE MILLING)
RTD1010	35	190	6000~7000	2100~2500	0.25~0.3	0.25~0.3	3D銑 (3D MILLING)
RTD1010	35	190	6000~7000	1400~1800	0.08~0.13	0.08~0.13	3D銑 (3D MILLING)

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型號 Type NO.	刀具伸長量 Extension Length(mm)	切削速度 (m/min) Cutting Speed	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
RTD1020Z	30	135	4200~4700	1200~1600	0.25~0.3	5~10	溝銑 (SLOTTING)
RTD1020Z	30	145	4500~5000	800~1000	0.08~0.13	5~10	溝銑 (SLOTTING)
RTD1020Z	30	90	2800~3200	800~1200	10~20	0.25~0.3	側銑 (SIDE MILLING)
RTD1020Z	30	90	2800~3200	700~900	10~20	0.1~0.15	側銑 (SIDE MILLING)
RTD1020Z	30	190	6000~7000	2400~2800	0.25~0.3	0.25~0.3	3D銑 (3D MILLING)
RTD1020Z	30	190	6000~7000	1400~1800	0.08~0.13	0.08~0.13	3D銑 (3D MILLING)
RTD1020	35	135	4200~4700	1200~1600	0.25~0.3	5~10	溝銑 (SLOTTING)
RTD1020	35	145	4500~5000	800~1000	0.08~0.13	5~10	溝銑 (SLOTTING)
RTD1020	35	90	2800~3200	800~1200	10~20	0.25~0.3	側銑 (SIDE MILLING)
RTD1020	35	90	2800~3200	700~900	10~20	0.1~0.15	側銑 (SIDE MILLING)
RTD1020	35	190	6000~7000	2100~2500	0.25~0.3	0.25~0.3	3D銑 (3D MILLING)
RTD1020	35	190	6000~7000	1400~1800	0.08~0.13	0.08~0.13	3D銑 (3D MILLING)
RTD1030Z	30	135	4200~4700	1200~1600	0.25~0.3	3~10	溝銑 (SLOTTING)
RTD1030Z	30	145	4500~5000	800~1000	0.08~0.13	3~10	溝銑 (SLOTTING)
RTD1030Z	30	90	2800~3200	800~1200	10~20	0.25~0.3	側銑 (SIDE MILLING)
RTD1030Z	30	90	2800~3200	700~900	10~20	0.1~0.15	側銑 (SIDE MILLING)
RTD1030Z	30	190	6000~7000	2400~2800	0.25~0.3	0.25~0.3	3D銑 (3D MILLING)
RTD1030Z	30	190	6000~7000	1400~1800	0.08~0.13	0.08~0.13	3D銑 (3D MILLING)
RTD1030	35	135	4200~4700	1200~1600	0.25~0.3	3~10	溝銑 (SLOTTING)
RTD1030	35	145	4500~5000	800~1000	0.08~0.13	3~10	溝銑 (SLOTTING)
RTD1030	35	90	2800~3200	800~1200	10~20	0.25~0.3	側銑 (SIDE MILLING)
RTD1030	35	90	2800~3200	700~900	10~20	0.1~0.15	側銑 (SIDE MILLING)
RTD1030	35	190	6000~7000	2100~2500	0.25~0.3	0.25~0.3	3D銑 (3D MILLING)
RTD1030	35	190	6000~7000	1400~1800	0.08~0.13	0.08~0.13	3D銑 (3D MILLING)
RTD1210	40	145	3800~4200	1200~1600	0.25~0.3	9~12	溝銑 (SLOTTING)
RTD1210	40	150	4000~4500	1400~1600	0.1~0.15	9~12	溝銑 (SLOTTING)
RTD1210	40	105	2800~3200	1000~1200	12~24	0.25~0.3	側銑 (SIDE MILLING)
RTD1210	40	105	2800~3200	600~800	12~24	0.1~0.15	側銑 (SIDE MILLING)
RTD1210	40	170	4500~5000	1600~2000	0.25~0.3	0.25~0.3	3D銑 (3D MILLING)
RTD1210	40	190	5000~5500	1600~2000	0.1~0.15	0.1~0.15	3D銑 (3D MILLING)
RTD1220	40	145	3800~4200	1200~1600	0.25~0.3	7~12	溝銑 (SLOTTING)
RTD1220	40	150	4000~4500	1400~1600	0.1~0.15	7~12	溝銑 (SLOTTING)
RTD1220	40	105	2800~3200	1000~1200	12~24	0.25~0.3	側銑 (SIDE MILLING)
RTD1220	40	105	2800~3200	600~800	12~24	0.1~0.15	側銑 (SIDE MILLING)
RTD1220	40	170	4500~5000	1600~2000	0.25~0.3	0.25~0.3	3D銑 (3D MILLING)
RTD1220	40	190	5000~5500	1600~2000	0.1~0.15	0.1~0.15	3D銑 (3D MILLING)

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RTD1230	40	145	3800~4200	1200~1600	0.25~0.3	5~12	溝銼 (SLOTTING)
RTD1230	40	150	4000~4500	1400~1600	0.1~0.15	5~12	溝銼 (SLOTTING)
RTD1230	40	105	2800~3200	1000~1200	12~24	0.25~0.3	側銼 (SIDE MILLING)
RTD1230	40	105	2800~3200	600~800	12~24	0.1~0.15	側銼 (SIDE MILLING)
RTD1230	40	170	4500~5000	1600~2000	0.25~0.3	0.25~0.3	3D銼 (3D MILLING)
RTD1230	40	190	5000~5500	1600~2000	0.1~0.15	0.1~0.15	3D銼 (3D MILLING)

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)

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濕式切削 Wet coolant

型號 Type NO.	刀具伸長量 Extension Length(mm)	切削速度 (m/min) Cutting Speed	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
RTD0202	12	60	9000~10000	800~1000	0.1~0.12	1~2	溝銼 (SLOTTING)
RTD0202	12	60	9000~10000	800~1000	0.04~0.06	1~2	溝銼 (SLOTTING)
RTD0202	12	100	16000~17000	1000~1200	0.1~0.12	1~2	溝銼 (SLOTTING)
RTD0202	12	100	16000~17000	1000~1200	0.04~0.06	1~2	溝銼 (SLOTTING)
RTD0202	12	60	9000~10000	1000~1200	2~4	0.1~0.12	側銼 (SIDE MILLING)
RTD0202	12	60	9000~10000	700~900	2~4	0.04~0.06	側銼 (SIDE MILLING)
RTD0202	12	60	9000~10000	1000~1200	0.1~0.12	0.1~0.12	3D銼 (3D MILLING)
RTD0202	12	60	9000~10000	1000~1200	0.04~0.06	0.04~0.06	3D銼 (3D MILLING)
RTD0202	12	140	22000~23000	1200~1600	0.1~0.12	0.1~0.12	3D銼 (3D MILLING)
RTD0202	12	145	23000~24000	1200~1600	0.04~0.06	0.04~0.06	3D銼 (3D MILLING)
RTD0205	12	60	9000~10000	800~1000	0.1~0.12	0.5~2	溝銼 (SLOTTING)
RTD0205	12	60	9000~10000	800~1000	0.04~0.06	0.5~2	溝銼 (SLOTTING)
RTD0205	12	100	16000~17000	1000~1200	0.1~0.12	0.5~2	溝銼 (SLOTTING)
RTD0205	12	100	16000~17000	1000~1200	0.04~0.06	0.5~2	溝銼 (SLOTTING)
RTD0205	12	60	9000~10000	1000~1200	2~4	0.1~0.12	側銼 (SIDE MILLING)
RTD0205	12	60	9000~10000	700~900	2~4	0.04~0.06	側銼 (SIDE MILLING)
RTD0205	12	60	9000~10000	1000~1200	0.1~0.12	0.1~0.12	3D銼 (3D MILLING)
RTD0205	12	60	9000~10000	1000~1200	0.04~0.06	0.04~0.06	3D銼 (3D MILLING)
RTD0205	12	140	22000~23000	1200~1600	0.1~0.12	0.1~0.12	3D銼 (3D MILLING)
RTD0205	12	145	23000~24000	1200~1600	0.04~0.06	0.04~0.06	3D銼 (3D MILLING)

RTD

切削條件表

Milling Conditions

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)

冷卻方式 Coolant Type

濕式切削 Wet coolant

型號 Type NO.	刀具伸長量 Extension Length(mm)	切削速度 (m/min) Cutting Speed	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
RTD0305	12	85	9000~10000	800~1000	0.12~0.15	1~3	溝銼 (SLOTTING)
RTD0305	12	85	9000~10000	800~1000	0.06~0.08	1~3	溝銼 (SLOTTING)
RTD0305	12	100	10500~11000	1100~1300	0.12~0.15	1~3	溝銼 (SLOTTING)
RTD0305	12	100	10500~11000	1000~1200	0.06~0.08	1~3	溝銼 (SLOTTING)
RTD0305	12	80	8500~9000	1000~1200	3~6	0.12~0.15	側銼 (SIDE MILLING)
RTD0305	12	80	8500~9000	700~900	3~6	0.06~0.08	側銼 (SIDE MILLING)
RTD0305	12	85	9000~10000	1000~1200	0.12~0.15	0.12~0.15	3D銼 (3D MILLING)
RTD0305	12	85	9000~10000	1000~1200	0.06~0.08	0.06~0.08	3D銼 (3D MILLING)
RTD0305	12	140	14000~15000	1400~1800	0.12~0.15	0.12~0.15	3D銼 (3D MILLING)
RTD0305	12	150	16000~17000	1400~1800	0.06~0.08	0.06~0.08	3D銼 (3D MILLING)
RTD0405	14	100	8000~8400	800~1000	0.15~0.18	2~4	溝銼 (SLOTTING)
RTD0405	14	100	8000~8400	800~1000	0.07~0.1	2~4	溝銼 (SLOTTING)
RTD0405	14	85	6800~7200	800~1000	4~8	0.15~0.18	側銼 (SIDE MILLING)
RTD0405	14	85	6500~7000	500~700	4~8	0.07~0.1	側銼 (SIDE MILLING)
RTD0405	14	110	8700~9200	800~1000	0.15~0.18	0.15~0.18	3D銼 (3D MILLING)
RTD0405	14	110	8700~9200	1000~1200	0.07~0.1	0.07~0.1	3D銼 (3D MILLING)
RTD0405	14	140	11000~12000	1400~1800	0.15~0.18	0.15~0.18	3D銼 (3D MILLING)
RTD0405	14	150	12000~13000	1400~1800	0.07~0.1	0.07~0.1	3D銼 (3D MILLING)
RTD0505	17	90	5800~6400	800~1000	0.15~0.18	3~5	溝銼 (SLOTTING)
RTD0505	17	115	7200~7600	1000~1200	0.07~0.1	3~5	溝銼 (SLOTTING)
RTD0505	17	85	5400~6000	800~1000	5~10	0.15~0.18	側銼 (SIDE MILLING)
RTD0505	17	90	5800~6400	600~800	5~10	0.07~0.1	側銼 (SIDE MILLING)
RTD0505	17	95	6000~7000	1000~1200	5~10	0.15~0.18	側銼 (SIDE MILLING)
RTD0505	17	95	6000~7000	800~1000	5~10	0.07~0.1	側銼 (SIDE MILLING)
RTD0505	17	130	8000~8500	800~1200	0.15~0.18	0.15~0.18	3D銼 (3D MILLING)
RTD0505	17	130	8000~8500	1000~1400	0.07~0.1	0.07~0.1	3D銼 (3D MILLING)
RTD0505	17	160	10000~11000	1600~1800	0.15~0.18	0.15~0.18	3D銼 (3D MILLING)
RTD0505	17	160	10000~11000	1300~1700	0.07~0.1	0.07~0.1	3D銼 (3D MILLING)
RTD0510	17	90	5800~6400	800~1000	0.15~0.18	2~5	溝銼 (SLOTTING)
RTD0510	17	115	7200~7600	1000~1200	0.07~0.1	2~5	溝銼 (SLOTTING)
RTD0510	17	85	5400~6000	800~1000	5~10	0.15~0.18	側銼 (SIDE MILLING)
RTD0510	17	90	5800~6400	600~800	5~10	0.07~0.1	側銼 (SIDE MILLING)
RTD0510	17	95	6000~7000	1000~1200	5~10	0.15~0.18	側銼 (SIDE MILLING)
RTD0510	17	95	6000~7000	800~1000	5~10	0.07~0.1	側銼 (SIDE MILLING)
RTD0510	17	130	8000~8500	800~1200	0.15~0.18	0.15~0.18	3D銼 (3D MILLING)
RTD0510	17	130	8000~8500	1000~1400	0.07~0.1	0.07~0.1	3D銼 (3D MILLING)
RTD0510	17	160	10000~11000	1600~1800	0.15~0.18	0.15~0.18	3D銼 (3D MILLING)
RTD0510	17	160	10000~11000	1300~1700	0.07~0.1	0.07~0.1	3D銼 (3D MILLING)

RTD

切削條件表

Milling Conditions

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)

冷卻方式 Coolant Type

濕式切削 Wet coolant

型號 Type NO.	刀具伸長量 Extension Length(mm)	切削速度 (m/min) Cutting Speed	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
RTD0605	20	90	4800~5400	1000~1400	0.15~0.2	4~6	溝銼 (SLOTTING)
RTD0605	20	115	6000~6400	1200~1400	0.07~0.1	4~6	溝銼 (SLOTTING)
RTD0605	20	85	4500~5000	800~1000	6~12	0.15~0.2	側銼 (SIDE MILLING)
RTD0605	20	90	4800~5200	600~800	6~12	0.07~0.1	側銼 (SIDE MILLING)
RTD0605	20	160	8500~9000	1000~1400	0.15~0.2	0.15~0.2	3D銼 (3D MILLING)
RTD0605	20	160	8500~9000	1400~1800	0.07~0.1	0.07~0.1	3D銼 (3D MILLING)
RTD0610	20	90	4800~5400	1000~1400	0.15~0.2	3~6	溝銼 (SLOTTING)
RTD0610	20	115	6000~6400	1200~1400	0.07~0.1	3~6	溝銼 (SLOTTING)
RTD0610	20	85	4500~5000	800~1000	6~12	0.15~0.2	側銼 (SIDE MILLING)
RTD0610	20	90	4800~5200	600~800	6~12	0.07~0.1	側銼 (SIDE MILLING)
RTD0610	20	160	8500~9000	1000~1400	0.15~0.2	0.15~0.2	3D銼 (3D MILLING)
RTD0610	20	160	8500~9000	1400~1800	0.07~0.1	0.07~0.1	3D銼 (3D MILLING)
RTD0805	30	100	4000~4500	700~1000	0.2~0.25	6~8	溝銼 (SLOTTING)
RTD0805	30	140	5500~6000	800~1000	0.07~0.11	6~8	溝銼 (SLOTTING)
RTD0805	30	90	3500~4000	700~900	8~16	0.2~0.25	側銼 (SIDE MILLING)
RTD0805	30	90	3500~4000	600~800	8~16	0.07~0.11	側銼 (SIDE MILLING)
RTD0805	30	100	4000~4500	1400~1800	0.2~0.25	0.2~0.25	3D銼 (3D MILLING)
RTD0805	30	185	7200~7700	1200~1600	0.07~0.11	0.07~0.11	3D銼 (3D MILLING)
RTD0810	30	100	4000~4500	700~1000	0.2~0.25	5~8	溝銼 (SLOTTING)
RTD0810	30	140	5500~6000	800~1000	0.07~0.11	5~8	溝銼 (SLOTTING)
RTD0810	30	90	3500~4000	700~900	8~16	0.2~0.25	側銼 (SIDE MILLING)
RTD0810	30	90	3500~4000	600~800	8~16	0.07~0.11	側銼 (SIDE MILLING)
RTD0810	30	100	4000~4500	1400~1800	0.2~0.25	0.2~0.25	3D銼 (3D MILLING)
RTD0810	30	185	7200~7700	1200~1600	0.07~0.11	0.07~0.11	3D銼 (3D MILLING)
RTD1005Z	30	100	3200~3600	800~1100	0.25~0.3	8~10	溝銼 (SLOTTING)
RTD1005Z	30	140	4400~4800	800~1000	0.08~0.13	8~10	溝銼 (SLOTTING)
RTD1005Z	30	90	2800~3200	700~1000	10~20	0.25~0.3	側銼 (SIDE MILLING)
RTD1005Z	30	90	2800~3200	600~800	10~20	0.08~0.13	側銼 (SIDE MILLING)
RTD1005Z	30	100	3200~3600	1600~2000	0.25~0.3	0.25~0.3	3D銼 (3D MILLING)
RTD1005Z	30	185	5800~6200	1300~1700	0.08~0.13	0.08~0.13	3D銼 (3D MILLING)
RTD1005	35	100	3200~3600	800~1100	0.25~0.3	8~10	溝銼 (SLOTTING)
RTD1005	35	140	4400~4800	800~1000	0.08~0.13	8~10	溝銼 (SLOTTING)
RTD1005	35	90	2800~3200	700~1000	10~20	0.25~0.3	側銼 (SIDE MILLING)
RTD1005	35	90	2800~3200	600~800	10~20	0.08~0.13	側銼 (SIDE MILLING)
RTD1005	35	100	3200~3600	1600~2000	0.25~0.3	0.25~0.3	3D銼 (3D MILLING)
RTD1005	35	185	5800~6200	1300~1700	0.08~0.13	0.08~0.13	3D銼 (3D MILLING)

RTD

切削條件表

Milling Conditions

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)

冷卻方式 Coolant Type

濕式切削 Wet coolant

型號 Type NO.	刀具伸長量 Extension Length(mm)	切削速度 (m/min) Cutting Speed	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
RTD1010Z	30	100	3200~3600	800~1100	0.25~0.3	7~10	溝銑 (SLOTTING)
RTD1010Z	30	140	4400~4800	800~1000	0.08~0.13	7~10	溝銑 (SLOTTING)
RTD1010Z	30	90	2800~3200	700~1000	10~20	0.25~0.3	側銑 (SIDE MILLING)
RTD1010Z	30	90	2800~3200	600~800	10~20	0.08~0.13	側銑 (SIDE MILLING)
RTD1010Z	30	100	3200~3600	1600~2000	0.25~0.3	0.25~0.3	3D銑 (3D MILLING)
RTD1010Z	30	185	5800~6200	1300~1700	0.08~0.13	0.08~0.13	3D銑 (3D MILLING)
RTD1010	35	100	3200~3600	800~1100	0.25~0.3	7~10	溝銑 (SLOTTING)
RTD1010	35	140	4400~4800	800~1000	0.08~0.13	7~10	溝銑 (SLOTTING)
RTD1010	35	90	2800~3200	700~1000	10~20	0.25~0.3	側銑 (SIDE MILLING)
RTD1010	35	90	2800~3200	600~800	10~20	0.08~0.13	側銑 (SIDE MILLING)
RTD1010	35	100	3200~3600	1600~2000	0.25~0.3	0.25~0.3	3D銑 (3D MILLING)
RTD1010	35	185	5800~6200	1300~1700	0.08~0.13	0.08~0.13	3D銑 (3D MILLING)
RTD1020Z	30	100	3200~3600	800~1100	0.25~0.3	5~10	溝銑 (SLOTTING)
RTD1020Z	30	140	4400~4800	800~1000	0.08~0.13	5~10	溝銑 (SLOTTING)
RTD1020Z	30	90	2800~3200	700~1000	10~20	0.25~0.3	側銑 (SIDE MILLING)
RTD1020Z	30	90	2800~3200	600~800	10~20	0.08~0.13	側銑 (SIDE MILLING)
RTD1020Z	30	100	3200~3600	1600~2000	0.25~0.3	0.25~0.3	3D銑 (3D MILLING)
RTD1020Z	30	185	5800~6200	1300~1700	0.08~0.13	0.08~0.13	3D銑 (3D MILLING)
RTD1020	35	100	3200~3600	800~1100	0.25~0.3	5~10	溝銑 (SLOTTING)
RTD1020	35	140	4400~4800	800~1000	0.08~0.13	5~10	溝銑 (SLOTTING)
RTD1020	35	90	2800~3200	700~1000	10~20	0.25~0.3	側銑 (SIDE MILLING)
RTD1020	35	90	2800~3200	600~800	10~20	0.08~0.13	側銑 (SIDE MILLING)
RTD1020	35	100	3200~3600	1600~2000	0.25~0.3	0.25~0.3	3D銑 (3D MILLING)
RTD1020	35	185	5800~6200	1300~1700	0.08~0.13	0.08~0.13	3D銑 (3D MILLING)
RTD1030Z	30	100	3200~3600	800~1100	0.25~0.3	3~10	溝銑 (SLOTTING)
RTD1030Z	30	140	4400~4800	800~1000	0.08~0.13	3~10	溝銑 (SLOTTING)
RTD1030Z	30	90	2800~3200	700~1000	10~20	0.25~0.3	側銑 (SIDE MILLING)
RTD1030Z	30	90	2800~3200	600~800	10~20	0.08~0.13	側銑 (SIDE MILLING)
RTD1030Z	30	100	3200~3600	1600~2000	0.25~0.3	0.25~0.3	3D銑 (3D MILLING)
RTD1030Z	30	185	5800~6200	1300~1700	0.08~0.13	0.08~0.13	3D銑 (3D MILLING)
RTD1030	35	100	3200~3600	800~1100	0.25~0.3	3~10	溝銑 (SLOTTING)
RTD1030	35	140	4400~4800	800~1000	0.08~0.13	3~10	溝銑 (SLOTTING)
RTD1030	35	90	2800~3200	700~1000	10~20	0.25~0.3	側銑 (SIDE MILLING)
RTD1030	35	90	2800~3200	600~800	10~20	0.08~0.13	側銑 (SIDE MILLING)
RTD1030	35	100	3200~3600	1600~2000	0.25~0.3	0.25~0.3	3D銑 (3D MILLING)
RTD1030	35	185	5800~6200	1300~1700	0.08~0.13	0.08~0.13	3D銑 (3D MILLING)

RTD

切削條件表

Milling Conditions

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)

冷卻方式 Coolant Type

濕式切削 Wet coolant

型號 Type NO.	刀具伸長量 Extension Length(mm)	切削速度 (m/min) Cutting Speed	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
RTD1210	40	90	2400~2800	800~1000	0.25~0.3	9~12	溝銑 (SLOTTING)
RTD1210	40	145	3800~4200	1200~1400	0.1~0.15	9~12	溝銑 (SLOTTING)
RTD1210	40	70	1800~2200	600~800	12~24	0.25~0.3	側銑 (SIDE MILLING)
RTD1210	40	75	1900~2300	400~600	12~24	0.1~0.15	側銑 (SIDE MILLING)
RTD1210	40	150	4000~4400	1200~1400	0.25~0.3	0.25~0.3	3D銑 (3D MILLING)
RTD1210	40	180	4700~5200	1400~1800	0.1~0.15	0.1~0.15	3D銑 (3D MILLING)
RTD1220	40	90	2400~2800	800~1000	0.25~0.3	7~12	溝銑 (SLOTTING)
RTD1220	40	145	3800~4200	1200~1400	0.1~0.15	7~12	溝銑 (SLOTTING)
RTD1220	40	70	1800~2200	600~800	12~24	0.25~0.3	側銑 (SIDE MILLING)
RTD1220	40	75	1900~2300	400~600	12~24	0.1~0.15	側銑 (SIDE MILLING)
RTD1220	40	150	4000~4400	1200~1400	0.25~0.3	0.25~0.3	3D銑 (3D MILLING)
RTD1220	40	180	4700~5200	1400~1800	0.1~0.15	0.1~0.15	3D銑 (3D MILLING)
RTD1230	40	90	2400~2800	800~1000	0.25~0.3	5~12	溝銑 (SLOTTING)
RTD1230	40	145	3800~4200	1200~1400	0.1~0.15	5~12	溝銑 (SLOTTING)
RTD1230	40	70	1800~2200	600~800	12~24	0.25~0.3	側銑 (SIDE MILLING)
RTD1230	40	75	1900~2300	400~600	12~24	0.1~0.15	側銑 (SIDE MILLING)
RTD1230	40	150	4000~4400	1200~1400	0.25~0.3	0.25~0.3	3D銑 (3D MILLING)
RTD1230	40	180	4700~5200	1400~1800	0.1~0.15	0.1~0.15	3D銑 (3D MILLING)

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

濕式切削 Wet coolant

型號 Type NO.	刀具伸長量 Extension Length(mm)	切削速度 (m/min) Cutting Speed	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
RTD0202	12	60	9000~10000	800~1000	0.1~0.12	1~2	溝銑 (SLOTTING)
RTD0202	12	60	9000~10000	800~1000	0.04~0.06	1~2	溝銑 (SLOTTING)
RTD0202	12	100	16000~17000	1000~1200	0.1~0.12	1~2	溝銑 (SLOTTING)
RTD0202	12	100	16000~17000	1000~1200	0.04~0.06	1~2	溝銑 (SLOTTING)
RTD0202	12	60	9000~10000	1000~1200	2~4	0.1~0.12	側銑 (SIDE MILLING)
RTD0202	12	60	9000~10000	700~900	2~4	0.04~0.06	側銑 (SIDE MILLING)
RTD0202	12	60	9000~10000	1000~1200	0.1~0.12	0.1~0.12	3D銑 (3D MILLING)
RTD0202	12	60	9000~10000	1000~1200	0.04~0.06	0.04~0.06	3D銑 (3D MILLING)
RTD0202	12	140	22000~23000	1200~1600	0.1~0.12	0.1~0.12	3D銑 (3D MILLING)
RTD0202	12	145	23000~24000	1200~1600	0.04~0.06	0.04~0.06	3D銑 (3D MILLING)

RTD

切削條件表

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

濕式切削 Wet coolant

型號 Type NO.	刀具伸長量 Extension Length(mm)	切削速度 (m/min) Cutting Speed	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
RTD0205	12	60	9000~10000	800~1000	0.1~0.12	0.5~2	溝銑 (SLOTTING)
RTD0205	12	60	9000~10000	800~1000	0.04~0.06	0.5~2	溝銑 (SLOTTING)
RTD0205	12	100	16000~17000	1000~1200	0.1~0.12	0.5~2	溝銑 (SLOTTING)
RTD0205	12	100	16000~17000	1000~1200	0.04~0.06	0.5~2	溝銑 (SLOTTING)
RTD0205	12	60	9000~10000	1000~1200	2~4	0.1~0.12	側銑 (SIDE MILLING)
RTD0205	12	60	9000~10000	700~900	2~4	0.04~0.06	側銑 (SIDE MILLING)
RTD0205	12	60	9000~10000	1000~1200	0.1~0.12	0.1~0.12	3D銑 (3D MILLING)
RTD0205	12	60	9000~10000	1000~1200	0.04~0.06	0.04~0.06	3D銑 (3D MILLING)
RTD0205	12	140	22000~23000	1200~1600	0.1~0.12	0.1~0.12	3D銑 (3D MILLING)
RTD0205	12	145	23000~24000	1200~1600	0.04~0.06	0.04~0.06	3D銑 (3D MILLING)
RTD0305	12	85	9000~10000	800~1000	0.12~0.15	1~3	溝銑 (SLOTTING)
RTD0305	12	85	9000~10000	800~1000	0.06~0.08	1~3	溝銑 (SLOTTING)
RTD0305	12	100	10500~11000	1100~1300	0.12~0.15	1~3	溝銑 (SLOTTING)
RTD0305	12	100	10500~11000	1000~1200	0.06~0.08	1~3	溝銑 (SLOTTING)
RTD0305	12	80	8500~9000	1000~1200	3~6	0.12~0.15	側銑 (SIDE MILLING)
RTD0305	12	80	8500~9000	700~900	3~6	0.06~0.08	側銑 (SIDE MILLING)
RTD0305	12	85	9000~10000	1000~1200	0.12~0.15	0.12~0.15	3D銑 (3D MILLING)
RTD0305	12	85	9000~10000	1000~1200	0.06~0.08	0.06~0.08	3D銑 (3D MILLING)
RTD0305	12	140	14000~15000	1400~1800	0.12~0.15	0.12~0.15	3D銑 (3D MILLING)
RTD0305	12	150	16000~17000	1400~1800	0.06~0.08	0.06~0.08	3D銑 (3D MILLING)
RTD0405	14	100	8000~8400	800~1000	0.15~0.18	2~4	溝銑 (SLOTTING)
RTD0405	14	100	8000~8400	800~1000	0.07~0.1	2~4	溝銑 (SLOTTING)
RTD0405	14	85	6800~7200	800~1000	4~8	0.15~0.18	側銑 (SIDE MILLING)
RTD0405	14	85	6500~7000	500~700	4~8	0.07~0.1	側銑 (SIDE MILLING)
RTD0405	14	110	8700~9200	800~1000	0.15~0.18	0.15~0.18	3D銑 (3D MILLING)
RTD0405	14	110	8700~9200	1000~1200	0.07~0.1	0.07~0.1	3D銑 (3D MILLING)
RTD0405	14	140	11000~12000	1400~1800	0.15~0.18	0.15~0.18	3D銑 (3D MILLING)
RTD0405	14	150	12000~13000	1400~1800	0.07~0.1	0.07~0.1	3D銑 (3D MILLING)
RTD0505	17	90	5800~6400	800~1000	0.15~0.18	3~5	溝銑 (SLOTTING)
RTD0505	17	115	7200~7600	1000~1200	0.07~0.1	3~5	溝銑 (SLOTTING)
RTD0505	17	85	5400~6000	800~1000	5~10	0.15~0.18	側銑 (SIDE MILLING)
RTD0505	17	90	5800~6400	600~800	5~10	0.07~0.1	側銑 (SIDE MILLING)
RTD0505	17	95	6000~7000	1000~1200	5~10	0.15~0.18	側銑 (SIDE MILLING)
RTD0505	17	95	6000~7000	800~1000	5~10	0.07~0.1	側銑 (SIDE MILLING)
RTD0505	17	130	8000~8500	800~1200	0.15~0.18	0.15~0.18	3D銑 (3D MILLING)
RTD0505	17	130	8000~8500	1000~1400	0.07~0.1	0.07~0.1	3D銑 (3D MILLING)
RTD0505	17	160	10000~11000	1600~1800	0.15~0.18	0.15~0.18	3D銑 (3D MILLING)
RTD0505	17	160	10000~11000	1300~1700	0.07~0.1	0.07~0.1	3D銑 (3D MILLING)

RTD

切削條件表

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

濕式切削 Wet coolant

型號 Type NO.	刀具伸長量 Extension Length(mm)	切削速度 (m/min) Cutting Speed	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
RTD0510	17	90	5800~6400	800~1000	0.15~0.18	2~5	溝銑 (SLOTTING)
RTD0510	17	115	7200~7600	1000~1200	0.07~0.1	2~5	溝銑 (SLOTTING)
RTD0510	17	85	5400~6000	800~1000	5~10	0.15~0.18	側銑 (SIDE MILLING)
RTD0510	17	90	5800~6400	600~800	5~10	0.07~0.1	側銑 (SIDE MILLING)
RTD0510	17	95	6000~7000	1000~1200	5~10	0.15~0.18	側銑 (SIDE MILLING)
RTD0510	17	95	6000~7000	800~1000	5~10	0.07~0.1	側銑 (SIDE MILLING)
RTD0510	17	130	8000~8500	800~1200	0.15~0.18	0.15~0.18	3D銑 (3D MILLING)
RTD0510	17	130	8000~8500	1000~1400	0.07~0.1	0.07~0.1	3D銑 (3D MILLING)
RTD0510	17	160	10000~11000	1600~1800	0.15~0.18	0.15~0.18	3D銑 (3D MILLING)
RTD0510	17	160	10000~11000	1300~1700	0.07~0.1	0.07~0.1	3D銑 (3D MILLING)
RTD0605	20	90	4800~5400	1000~1400	0.15~0.2	4~6	溝銑 (SLOTTING)
RTD0605	20	115	6000~6400	1200~1400	0.07~0.1	4~6	溝銑 (SLOTTING)
RTD0605	20	85	4500~5000	800~1000	6~12	0.15~0.2	側銑 (SIDE MILLING)
RTD0605	20	90	4800~5200	600~800	6~12	0.07~0.1	側銑 (SIDE MILLING)
RTD0605	20	160	8500~9000	1000~1400	0.15~0.2	0.15~0.2	3D銑 (3D MILLING)
RTD0605	20	160	8500~9000	1400~1800	0.07~0.1	0.07~0.1	3D銑 (3D MILLING)
RTD0610	20	90	4800~5400	1000~1400	0.15~0.2	3~6	溝銑 (SLOTTING)
RTD0610	20	115	6000~6400	1200~1400	0.07~0.1	3~6	溝銑 (SLOTTING)
RTD0610	20	85	4500~5000	800~1000	6~12	0.15~0.2	側銑 (SIDE MILLING)
RTD0610	20	90	4800~5200	600~800	6~12	0.07~0.1	側銑 (SIDE MILLING)
RTD0610	20	160	8500~9000	1000~1400	0.15~0.2	0.15~0.2	3D銑 (3D MILLING)
RTD0610	20	160	8500~9000	1400~1800	0.07~0.1	0.07~0.1	3D銑 (3D MILLING)
RTD0805	30	100	4000~4500	700~1000	0.2~0.25	6~8	溝銑 (SLOTTING)
RTD0805	30	140	5500~6000	800~1000	0.07~0.11	6~8	溝銑 (SLOTTING)
RTD0805	30	90	3500~4000	700~900	8~16	0.2~0.25	側銑 (SIDE MILLING)
RTD0805	30	90	3500~4000	600~800	8~16	0.07~0.11	側銑 (SIDE MILLING)
RTD0805	30	100	4000~4500	1400~1800	0.2~0.25	0.2~0.25	3D銑 (3D MILLING)
RTD0805	30	185	7200~7700	1200~1600	0.07~0.11	0.07~0.11	3D銑 (3D MILLING)
RTD0810	30	100	4000~4500	700~1000	0.2~0.25	5~8	溝銑 (SLOTTING)
RTD0810	30	140	5500~6000	800~1000	0.07~0.11	5~8	溝銑 (SLOTTING)
RTD0810	30	90	3500~4000	700~900	8~16	0.2~0.25	側銑 (SIDE MILLING)
RTD0810	30	90	3500~4000	600~800	8~16	0.07~0.11	側銑 (SIDE MILLING)
RTD0810	30	100	4000~4500	1400~1800	0.2~0.25	0.2~0.25	3D銑 (3D MILLING)
RTD0810	30	185	7200~7700	1200~1600	0.07~0.11	0.07~0.11	3D銑 (3D MILLING)
RTD1005Z	30	100	3200~3600	800~1100	0.25~0.3	8~10	溝銑 (SLOTTING)
RTD1005Z	30	140	4400~4800	800~1000	0.08~0.13	8~10	溝銑 (SLOTTING)
RTD1005Z	30	90	2800~3200	700~1000	10~20	0.25~0.3	側銑 (SIDE MILLING)
RTD1005Z	30	90	2800~3200	600~800	10~20	0.08~0.13	側銑 (SIDE MILLING)
RTD1005Z	30	100	3200~3600	1600~2000	0.25~0.3	0.25~0.3	3D銑 (3D MILLING)
RTD1005Z	30	185	5800~6200	1300~1700	0.08~0.13	0.08~0.13	3D銑 (3D MILLING)

RTD

切削條件表

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

濕式切削 Wet coolant

型號 Type NO.	刀具伸長量 Extension Length(mm)	切削速度 (m/min) Cutting Speed	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
RTD1005	35	100	3200~3600	800~1100	0.25~0.3	8~10	溝銑 (SLOTTING)
RTD1005	35	140	4400~4800	800~1000	0.08~0.13	8~10	溝銑 (SLOTTING)
RTD1005	35	90	2800~3200	700~1000	10~20	0.25~0.3	側銑 (SIDE MILLING)
RTD1005	35	90	2800~3200	600~800	10~20	0.08~0.13	側銑 (SIDE MILLING)
RTD1005	35	100	3200~3600	1600~2000	0.25~0.3	0.25~0.3	3D銑 (3D MILLING)
RTD1005	35	185	5800~6200	1300~1700	0.08~0.13	0.08~0.13	3D銑 (3D MILLING)
RTD1010Z	30	100	3200~3600	800~1100	0.25~0.3	7~10	溝銑 (SLOTTING)
RTD1010Z	30	140	4400~4800	800~1000	0.08~0.13	7~10	溝銑 (SLOTTING)
RTD1010Z	30	90	2800~3200	700~1000	10~20	0.25~0.3	側銑 (SIDE MILLING)
RTD1010Z	30	90	2800~3200	600~800	10~20	0.08~0.13	側銑 (SIDE MILLING)
RTD1010Z	30	100	3200~3600	1600~2000	0.25~0.3	0.25~0.3	3D銑 (3D MILLING)
RTD1010Z	30	185	5800~6200	1300~1700	0.08~0.13	0.08~0.13	3D銑 (3D MILLING)
RTD1010	35	100	3200~3600	800~1100	0.25~0.3	7~10	溝銑 (SLOTTING)
RTD1010	35	140	4400~4800	800~1000	0.08~0.13	7~10	溝銑 (SLOTTING)
RTD1010	35	90	2800~3200	700~1000	10~20	0.25~0.3	側銑 (SIDE MILLING)
RTD1010	35	90	2800~3200	600~800	10~20	0.08~0.13	側銑 (SIDE MILLING)
RTD1010	35	100	3200~3600	1600~2000	0.25~0.3	0.25~0.3	3D銑 (3D MILLING)
RTD1010	35	185	5800~6200	1300~1700	0.08~0.13	0.08~0.13	3D銑 (3D MILLING)
RTD1020Z	30	100	3200~3600	800~1100	0.25~0.3	5~10	溝銑 (SLOTTING)
RTD1020Z	30	140	4400~4800	800~1000	0.08~0.13	5~10	溝銑 (SLOTTING)
RTD1020Z	30	90	2800~3200	700~1000	10~20	0.25~0.3	側銑 (SIDE MILLING)
RTD1020Z	30	90	2800~3200	600~800	10~20	0.08~0.13	側銑 (SIDE MILLING)
RTD1020Z	30	100	3200~3600	1600~2000	0.25~0.3	0.25~0.3	3D銑 (3D MILLING)
RTD1020Z	30	185	5800~6200	1300~1700	0.08~0.13	0.08~0.13	3D銑 (3D MILLING)
RTD1020	35	100	3200~3600	800~1100	0.25~0.3	5~10	溝銑 (SLOTTING)
RTD1020	35	140	4400~4800	800~1000	0.08~0.13	5~10	溝銑 (SLOTTING)
RTD1020	35	90	2800~3200	700~1000	10~20	0.25~0.3	側銑 (SIDE MILLING)
RTD1020	35	90	2800~3200	600~800	10~20	0.08~0.13	側銑 (SIDE MILLING)
RTD1020	35	100	3200~3600	1600~2000	0.25~0.3	0.25~0.3	3D銑 (3D MILLING)
RTD1020	35	185	5800~6200	1300~1700	0.08~0.13	0.08~0.13	3D銑 (3D MILLING)
RTD1030Z	30	100	3200~3600	800~1100	0.25~0.3	3~10	溝銑 (SLOTTING)
RTD1030Z	30	140	4400~4800	800~1000	0.08~0.13	3~10	溝銑 (SLOTTING)
RTD1030Z	30	90	2800~3200	700~1000	10~20	0.25~0.3	側銑 (SIDE MILLING)
RTD1030Z	30	90	2800~3200	600~800	10~20	0.08~0.13	側銑 (SIDE MILLING)
RTD1030Z	30	100	3200~3600	1600~2000	0.25~0.3	0.25~0.3	3D銑 (3D MILLING)
RTD1030Z	30	185	5800~6200	1300~1700	0.08~0.13	0.08~0.13	3D銑 (3D MILLING)

RTD

切削條件表

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

濕式切削 Wet coolant

型號 Type NO.	刀具伸長量 Extension Length(mm)	切削速度 (m/min) Cutting Speed	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
RTD1030	35	100	3200~3600	800~1100	0.25~0.3	3~10	溝銑 (SLOTTING)
RTD1030	35	140	4400~4800	800~1000	0.08~0.13	3~10	溝銑 (SLOTTING)
RTD1030	35	90	2800~3200	700~1000	10~20	0.25~0.3	側銑 (SIDE MILLING)
RTD1030	35	90	2800~3200	600~800	10~20	0.08~0.13	側銑 (SIDE MILLING)
RTD1030	35	100	3200~3600	1600~2000	0.25~0.3	0.25~0.3	3D銑 (3D MILLING)
RTD1030	35	185	5800~6200	1300~1700	0.08~0.13	0.08~0.13	3D銑 (3D MILLING)
RTD1210	40	90	2400~2800	800~1000	0.25~0.3	9~12	溝銑 (SLOTTING)
RTD1210	40	145	3800~4200	1200~1400	0.1~0.15	9~12	溝銑 (SLOTTING)
RTD1210	40	70	1800~2200	600~800	12~24	0.25~0.3	側銑 (SIDE MILLING)
RTD1210	40	75	1900~2300	400~600	12~24	0.1~0.15	側銑 (SIDE MILLING)
RTD1210	40	150	4000~4400	1200~1400	0.25~0.3	0.25~0.3	3D銑 (3D MILLING)
RTD1210	40	180	4700~5200	1400~1800	0.1~0.15	0.1~0.15	3D銑 (3D MILLING)
RTD1220	40	90	2400~2800	800~1000	0.25~0.3	7~12	溝銑 (SLOTTING)
RTD1220	40	145	3800~4200	1200~1400	0.1~0.15	7~12	溝銑 (SLOTTING)
RTD1220	40	70	1800~2200	600~800	12~24	0.25~0.3	側銑 (SIDE MILLING)
RTD1220	40	75	1900~2300	400~600	12~24	0.1~0.15	側銑 (SIDE MILLING)
RTD1220	40	150	4000~4400	1200~1400	0.25~0.3	0.25~0.3	3D銑 (3D MILLING)
RTD1220	40	180	4700~5200	1400~1800	0.1~0.15	0.1~0.15	3D銑 (3D MILLING)
RTD1230	40	90	2400~2800	800~1000	0.25~0.3	5~12	溝銑 (SLOTTING)
RTD1230	40	145	3800~4200	1200~1400	0.1~0.15	5~12	溝銑 (SLOTTING)
RTD1230	40	70	1800~2200	600~800	12~24	0.25~0.3	側銑 (SIDE MILLING)
RTD1230	40	75	1900~2300	400~600	12~24	0.1~0.15	側銑 (SIDE MILLING)
RTD1230	40	150	4000~4400	1200~1400	0.25~0.3	0.25~0.3	3D銑 (3D MILLING)
RTD1230	40	180	4700~5200	1400~1800	0.1~0.15	0.1~0.15	3D銑 (3D MILLING)

RTD

切削條件表

Milling Conditions

熱處理鋼 : Hardened Steels

SKD61/ STAVAX / 17-4PH : 1.2083 / 1.2344 / 1.4542 : H13 / 420 (HRc48-54)

被切削材 Work Material

濕式切削 Wet coolant

冷卻方式 Coolant Type

型號 Type NO.	刀具伸長量 Extension Length(mm)	切削速度 (m/min) Cutting Speed	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
RTD0202	12	60	9000~10000	800~1000	0.03~0.05	1~2	溝銼 (SLOTTING)
RTD0202	12	100	16000~17000	1000~1200	0.03~0.05	1~2	溝銼 (SLOTTING)
RTD0202	12	60	9000~10000	700~900	2~4	0.03~0.05	側銼 (SIDE MILLING)
RTD0202	12	60	9000~10000	1000~1200	0.03~0.05	0.03~0.05	3D銼 (3D MILLING)
RTD0202	12	145	23000~24000	1200~1600	0.03~0.05	0.03~0.05	3D銼 (3D MILLING)
RTD0205	12	60	9000~10000	800~1000	0.03~0.05	0.5~2	溝銼 (SLOTTING)
RTD0205	12	100	16000~17000	1000~1200	0.03~0.05	0.5~2	溝銼 (SLOTTING)
RTD0205	12	60	9000~10000	700~900	2~4	0.03~0.05	側銼 (SIDE MILLING)
RTD0205	12	60	9000~10000	1000~1200	0.03~0.05	0.03~0.05	3D銼 (3D MILLING)
RTD0205	12	145	23000~24000	1200~1600	0.03~0.05	0.03~0.05	3D銼 (3D MILLING)
RTD0305	12	85	9000~10000	800~1000	0.04~0.06	1~3	溝銼 (SLOTTING)
RTD0305	12	100	10500~11000	1000~1200	0.04~0.06	1~3	溝銼 (SLOTTING)
RTD0305	12	80	8500~9000	700~900	3~6	0.04~0.06	側銼 (SIDE MILLING)
RTD0305	12	85	9000~10000	800~1000	0.04~0.06	0.04~0.06	3D銼 (3D MILLING)
RTD0305	12	150	16000~17000	1000~1200	0.04~0.06	0.04~0.06	3D銼 (3D MILLING)
RTD0405	14	100	8000~8400	800~1000	0.05~0.07	2~4	溝銼 (SLOTTING)
RTD0405	14	75	6000~6400	400~600	4~8	0.05~0.07	側銼 (SIDE MILLING)
RTD0405	14	110	8700~9200	800~1000	0.05~0.07	0.05~0.07	3D銼 (3D MILLING)
RTD0405	14	140	11000~12000	1200~1600	0.05~0.07	0.05~0.07	3D銼 (3D MILLING)
RTD0505	17	105	6600~7200	1000~1200	0.06~0.08	3~5	溝銼 (SLOTTING)
RTD0505	17	80	5000~5500	600~800	5~10	0.06~0.08	側銼 (SIDE MILLING)
RTD0505	17	150	9200~9700	1200~1400	0.06~0.08	0.06~0.08	3D銼 (3D MILLING)
RTD0505	17	160	10000~11000	1300~1500	0.06~0.08	0.06~0.08	3D銼 (3D MILLING)
RTD0510	17	105	6600~7200	1000~1200	0.06~0.08	2~5	溝銼 (SLOTTING)
RTD0510	17	80	5000~5500	600~800	5~10	0.06~0.08	側銼 (SIDE MILLING)
RTD0510	17	150	9200~9700	1200~1400	0.06~0.08	0.06~0.08	3D銼 (3D MILLING)
RTD0510	17	160	10000~11000	1300~1500	0.06~0.08	0.06~0.08	3D銼 (3D MILLING)
RTD0605	20	105	5500~6000	1000~1200	0.06~0.08	4~6	溝銼 (SLOTTING)
RTD0605	20	80	4200~4600	600~800	6~12	0.06~0.08	側銼 (SIDE MILLING)
RTD0605	20	150	7800~8300	1200~1400	0.06~0.08	0.06~0.08	3D銼 (3D MILLING)
RTD0610	20	105	5500~6000	1000~1200	0.06~0.08	3~6	溝銼 (SLOTTING)
RTD0610	20	80	4200~4600	600~800	6~12	0.06~0.08	側銼 (SIDE MILLING)
RTD0610	20	150	7800~8300	1200~1400	0.06~0.08	0.06~0.08	3D銼 (3D MILLING)
RTD0805	30	140	5500~6000	600~800	0.08~0.1	6~8	溝銼 (SLOTTING)
RTD0805	30	90	3500~4000	600~800	8~16	0.08~0.1	側銼 (SIDE MILLING)
RTD0805	30	150	6000~6500	1000~1200	0.08~0.1	0.08~0.1	3D銼 (3D MILLING)
RTD0810	30	140	5500~6000	600~800	0.08~0.1	5~8	溝銼 (SLOTTING)
RTD0810	30	90	3500~4000	600~800	8~16	0.08~0.1	側銼 (SIDE MILLING)
RTD0810	30	150	6000~6500	1000~1200	0.08~0.1	0.08~0.1	3D銼 (3D MILLING)

RTD

切削條件表

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

濕式切削 Wet coolant

型號 Type NO.	刀具伸長量 Extension Length(mm)	切削速度 (m/min) Cutting Speed	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
RTD1005Z	30	140	4400~4800	600~800	0.08~0.12	8~10	溝銼 (SLOTTING)
RTD1005Z	30	90	2800~3200	600~800	10~20	0.08~0.12	側銼 (SIDE MILLING)
RTD1005Z	30	150	4800~5200	1000~1200	0.08~0.12	0.08~0.12	3D銼 (3D MILLING)
RTD1005	35	140	4400~4800	600~800	0.08~0.12	8~10	溝銼 (SLOTTING)
RTD1005	35	90	2800~3200	600~800	10~20	0.08~0.12	側銼 (SIDE MILLING)
RTD1005	35	150	4800~5200	1000~1200	0.08~0.12	0.08~0.12	3D銼 (3D MILLING)
RTD1010Z	30	140	4400~4800	600~800	0.08~0.12	7~10	溝銼 (SLOTTING)
RTD1010Z	30	90	2800~3200	600~800	10~20	0.08~0.12	側銼 (SIDE MILLING)
RTD1010Z	30	150	4800~5200	1000~1200	0.08~0.12	0.08~0.12	3D銼 (3D MILLING)
RTD1010	35	140	4400~4800	600~800	0.08~0.12	7~10	溝銼 (SLOTTING)
RTD1010	35	90	2800~3200	600~800	10~20	0.08~0.12	側銼 (SIDE MILLING)
RTD1010	35	150	4800~5200	1000~1200	0.08~0.12	0.08~0.12	3D銼 (3D MILLING)
RTD1020Z	30	140	4400~4800	600~800	0.08~0.12	5~10	溝銼 (SLOTTING)
RTD1020Z	30	90	2800~3200	600~800	10~20	0.08~0.12	側銼 (SIDE MILLING)
RTD1020Z	30	150	4800~5200	1000~1200	0.08~0.12	0.08~0.12	3D銼 (3D MILLING)
RTD1020	35	140	4400~4800	600~800	0.08~0.12	5~10	溝銼 (SLOTTING)
RTD1020	35	90	2800~3200	600~800	10~20	0.08~0.12	側銼 (SIDE MILLING)
RTD1020	35	150	4800~5200	1000~1200	0.08~0.12	0.08~0.12	3D銼 (3D MILLING)
RTD1030Z	30	140	4400~4800	600~800	0.08~0.12	3~10	溝銼 (SLOTTING)
RTD1030Z	30	90	2800~3200	600~800	10~20	0.08~0.12	側銼 (SIDE MILLING)
RTD1030Z	30	150	4800~5200	1000~1200	0.08~0.12	0.08~0.12	3D銼 (3D MILLING)
RTD1030	35	140	4400~4800	600~800	0.08~0.12	3~10	溝銼 (SLOTTING)
RTD1030	35	90	2800~3200	600~800	10~20	0.08~0.12	側銼 (SIDE MILLING)
RTD1030	35	150	4800~5200	1000~1200	0.08~0.12	0.08~0.12	3D銼 (3D MILLING)
RTD1210	40	105	2800~3300	800~1000	0.1~0.15	9~12	溝銼 (SLOTTING)
RTD1210	40	60	1600~2000	300~500	12~24	0.1~0.15	側銼 (SIDE MILLING)
RTD1210	40	130	3400~3800	800~1200	0.1~0.15	0.1~0.15	3D銼 (3D MILLING)
RTD1220	40	105	2800~3300	800~1000	0.1~0.15	7~12	溝銼 (SLOTTING)
RTD1220	40	60	1600~2000	300~500	12~24	0.1~0.15	側銼 (SIDE MILLING)
RTD1220	40	130	3400~3800	800~1200	0.1~0.15	0.1~0.15	3D銼 (3D MILLING)
RTD1230	40	105	2800~3300	800~1000	0.1~0.15	5~12	溝銼 (SLOTTING)
RTD1230	40	60	1600~2000	300~500	12~24	0.1~0.15	側銼 (SIDE MILLING)
RTD1230	40	130	3400~3800	800~1200	0.1~0.15	0.1~0.15	3D銼 (3D MILLING)