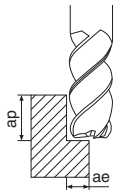
Recommended Cutting Conditions

4FESM (Shouldering)

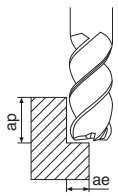
Application	Workpiece Material	Outside Dia. Dc (mm)	ø1	ø2	ø4	ø6	ø8	ø12	ø16
 Shouldering	Carbon Steel SxxC	Spindle Revolution (min^{-1})	25,500	13,000	6,600	4,400	3,300	2,200	1,700
		Feed Rate (mm/min)	335	345	580	620	625	630	600
	Alloy Steel SCM, SNCM	Spindle Revolution (min^{-1})	22,000	11,000	5,600	3,700	2,800	1,900	1,400
		Feed Rate (mm/min)	290	290	395	455	455	470	460
	Pre-hardened steel NAK, 30~45HRC	Spindle Revolution (min^{-1})	12,000	7,200	4,200	3,000	2,200	1,500	1,100
		Feed Rate (mm/min)	105	125	150	160	160	165	140
	Stainless steel SUS	Spindle Revolution (min^{-1})	22,000	11,000	5,600	3,700	2,800	1,900	1,400
		Feed Rate (mm/min)	130	145	165	165	170	175	155

Depth of Cut (ap×ae) (mm)
1.5Dc×0.05Dc (Dc < ø3) 1.5Dc×0.1Dc (Dc ≧ ø3)

* Cutting with coolant is recommended for stainless steel.

Slotting is not recommended.

4FEKM (Tough corner edge) (Shouldering)

Application	Workpiece Material	Outside Dia. Dc (mm)	ø3	ø4	ø6	ø8	ø10	ø12	ø16
 Shouldering	Carbon Steel SxxC	Spindle Revolution (min^{-1})	10,600	8,000	5,300	4,000	3,200	2,700	2,100
		Feed Rate (mm/min)	680	690	770	770	770	770	770
	Alloy Steel SCM, SNCM	Spindle Revolution (min^{-1})	8,800	6,600	4,400	3,300	2,600	2,200	2,000
		Feed Rate (mm/min)	500	550	620	630	630	630	610
	Pre-hardened steel NAK, 30~45HRC	Spindle Revolution (min^{-1})	6,400	4,800	3,200	2,400	1,900	1,600	1,200
		Feed Rate (mm/min)	180	180	180	190	190	190	190
	Stainless steel SUS	Spindle Revolution (min^{-1})	8,000	6,000	4,000	3,000	2,300	2,000	1,500
		Feed Rate (mm/min)	190	200	200	200	210	210	210

Depth of Cut (ap×ae) (mm)
1.5Dc×0.1Dc

* Cutting with coolant is recommended for stainless steel.

Slotting is not recommended.