

4YFSM, 6YFSM

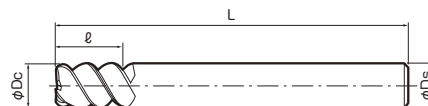
Number of Flutes: 4, 6

Semi-Finishing of Difficult-to-Cut Material



Recommended Material

★ 1st Recommendation



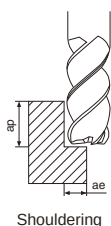
Lineup

(Unit: mm)

Description	Std.	Outside Dia.	Outside Dia. tolerance	Edge Length	Shank Dia.	Total length	Number of Flutes
		øDc		l	øDs	L	Z
4YFSM040-130-06	●	4	-0.020 -0.038	13	6	50	4
4YFSM050-130-06	●	5	-0.020 -0.038	13	6	50	4
6YFSM060-130-06	●	6	-0.020 -0.038	13	6	50	6
6YFSM080-190-08	●	8	-0.025 -0.047	19	8	63	6
6YFSM100-220-10	●	10	-0.025 -0.047	22	10	76	6
6YFSM120-260-12	●	12	-0.032 -0.059	26	12	76	6
6YFSM160-320-16	●	16	-0.032 -0.059	32	16	89	6
6YFSM200-380-20	●	20	-0.040 -0.073	38	20	104	6

- Multi-Edge Type with web thickness ratio of 60% having superior chip evacuation. It has positive type rake angle and suitable for semi-finishing of difficult-to-cut materials such as stainless steel and inconel.

Recommended Cutting Conditions



Shouldering

Shouldering

Workpiece Materials	Depth of Cut (ap×ae) (mm)	Outside Dia. (mm)	ø4	ø5	ø6	ø8	ø10	ø12	ø16	ø20
Carbon Steel < 20HRC	1.5Dc×0.1Dc	Spindle Revolution (min ⁻¹)	10,000	8,000	6,600	5,000	4,000	3,300	2,500	2,000
		Feed Rate (mm/min)	800	800	1,340	1,340	1,340	1,350	1,490	1,610
Alloy Steel < 30HRC	1.5Dc×0.1Dc	Spindle Revolution (min ⁻¹)	8,000	6,400	5,300	4,000	3,200	2,700	2,000	1,600
		Feed Rate (mm/min)	570	570	960	960	960	960	1,080	1,150
Pre-hardened Steel 30~45HRC	1.5Dc×0.1Dc	Spindle Revolution (min ⁻¹)	6,000	4,800	4,000	3,000	2,400	2,000	1,500	1,200
		Feed Rate (mm/min)	360	360	620	660	660	660	740	790
Stainless Steel	1.5Dc×0.1Dc	Spindle Revolution (min ⁻¹)	5,200	4,100	3,500	2,600	2,100	1,700	1,300	1,000
		Feed Rate (mm/min)	270	280	520	540	550	550	620	650
Heat-resistant Alloy	1Dc×0.05Dc	Spindle Revolution (min ⁻¹)	3,600	2,900	2,400	1,800	1,400	1,200	900	700
		Feed Rate (mm/min)	160	170	340	360	360	360	410	410
Titanium Alloy	1Dc×0.05Dc	Spindle Revolution (min ⁻¹)	3,600	2,900	2,400	1,800	1,400	1,200	900	700
		Feed Rate (mm/min)	160	170	340	360	360	360	410	410

* Machining with coolant is recommended for stainless steel.

Not Recommended for Slotting.