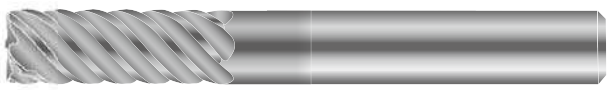
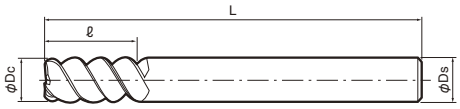
4UGSM, 6UGSM

Number of Flutes: 4, 6

Semi-Finishing of Hard Materials



Recommended Material ★ 1st Recommendation



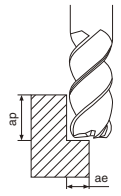
Lineup

(Unit: mm)

Description	Std.	Outside Dia.	Outside Dia. tolerance	Edge Length	Shank Dia.	Total length	Number of Flutes
		øDc		ℓ	øDs	L	Z
4UGSM030-080-06	●	3	-0.014 -0.028	8	6	50	4
4UGSM040-120-06	●	4	-0.020 -0.038	12	6	57	4
4UGSM050-130-06	●	5	-0.020 -0.038	13	6	57	4
6UGSM060-150-06	●	6	-0.020 -0.038	15	6	60	6
6UGSM080-200-08	●	8	-0.025 -0.047	20	8	75	6
6UGSM100-250-10	●	10	-0.025 -0.047	25	10	80	6
6UGSM120-300-12	●	12	-0.032 -0.059	30	12	100	6
6UGSM160-400-16	●	16	-0.032 -0.059	40	16	110	6

● In order to achieve stable machining of hard materials, negative type rake angle is adopted. Also, for attaining high efficiency, we provide six flutes type for dia. over 6mm.

Recommended Cutting Conditions



Shouldering

Shouldering

Workpiece Materials		Depth of Cut (ap×ae) (mm)	Outside Dia. (mm)	ø4	ø6	ø8	ø10	ø12	ø16
Steel	45~55HRC	1Dc×0.05Dc	Spindle Revolution (min^{-1})	11,900	8,000	6,000	4,800	4,000	3,000
			Feed Rate (mm/min)	810	1,200	1,200	1,000	980	900
	55~60HRC	1Dc×0.05Dc	Spindle Revolution (min^{-1})	8,000	5,300	4,000	3,200	2,700	2,000
			Feed Rate (mm/min)	510	760	740	610	610	540
	60~65HRC	1Dc×0.2Dc	Spindle Revolution (min^{-1})	5,200	3,500	2,600	2,100	1,700	1,300
			Feed Rate (mm/min)	290	480	450	390	370	330
	65~70HRC	1Dc×0.2Dc	Spindle Revolution (min^{-1})	2,800	1,900	1,400	1,100	900	700
			Feed Rate (mm/min)	150	250	230	200	200	170

Not Recommended for Slotting.

● : Std. Item ○ : Check Availability R : Std. Item (R-hand Only) L : Std. Item (L-hand Only)