

4PGSS, 5PGSS

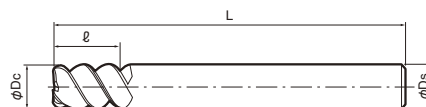
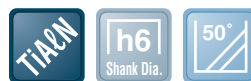
Number of Flutes: 4, 5

Deep Slotting and Semi-Finishing of Hard Materials



Recommended Material

★ 1st Recommendation



Lineup

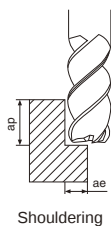
(Unit: mm)

Description	Std.	Outside Dia.	Outside Dia. tolerance	Edge Length	Shank Dia.	Total length	Number of Flutes
		ØDc		ℓ	ØDs	L	Z
4PGSS030-045-06	●	3	-0.014 -0.028	4.5	6	57	4
4PGSS040-060-06	●	4	-0.020 -0.038	6	6	57	4
4PGSS050-075-06	●	5	-0.020 -0.038	7.5	6	76	4
4PGSS060-090-06	●	6	-0.020 -0.038	9	6	76	4
4PGSS080-120-08	●	8	-0.025 -0.047	12	8	100	4
4PGSS100-150-10	●	10	-0.025 -0.047	15	10	100	4
4PGSS120-180-12	●	12	-0.032 -0.059	18	12	125	4
4PGSS160-240-16	●	16	-0.032 -0.059	24	16	125	4
4PGSS200-300-20	●	20	-0.040 -0.073	30	20	150	4
5PGSS250-380-25	●	25	-0.040 -0.073	38	25	150	5

- Web thickness ratio is 60% between the cutting edge and 1Dc and 80% for the rest. Good chip evacuation and high rigidity.

Recommended Cutting Conditions

Shouldering



Shouldering

Workpiece Materials		Depth of Cut (ap×ae) (mm)		Outside Dia. (mm)	Ø3	Ø6	Ø8	Ø10	Ø12	Ø16	Ø20	Ø25
		Roughing	Finishing									
Steel	< 30HRC	1Dc×0.2Dc	1.5Dc×0.1Dc	Spindle Revolution (min ⁻¹)	21,200	10,600	8,000	6,400	5,300	4,000	3,200	2,500
				Feed Rate (mm/min)	2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,500
	30~40HRC	1Dc×0.2Dc	1.5Dc×0.1Dc	Spindle Revolution (min ⁻¹)	19,100	9,600	7,200	5,700	4,800	3,600	2,900	2,300
				Feed Rate (mm/min)	1,900	1,900	1,900	1,900	2,000	2,000	2,100	2,100
	40~45HRC	1Dc×0.2Dc	1.5Dc×0.1Dc	Spindle Revolution (min ⁻¹)	17,000	8,500	6,400	5,100	4,200	3,200	2,500	2,000
				Feed Rate (mm/min)	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,700
	45~50HRC	1Dc×0.2Dc	1.5Dc×0.1Dc	Spindle Revolution (min ⁻¹)	12,700	6,400	4,800	3,800	3,200	2,400	1,900	1,500
				Feed Rate (mm/min)	850	850	860	860	870	870	870	1,000
	50~55HRC	1Dc×0.2Dc	1.5Dc×0.1Dc	Spindle Revolution (min ⁻¹)	8,500	4,200	3,200	2,500	2,100	1,600	1,300	1,000
				Feed Rate (mm/min)	400	400	400	410	410	410	410	450
	> 55HRC	1Dc×0.2Dc	1.5Dc×0.1Dc	Spindle Revolution (min ⁻¹)	7,400	3,700	2,800	2,200	1,900	1,400	1,100	900
				Feed Rate (mm/min)	250	250	250	260	260	280	280	310

Not Recommended for Slotting.