

ROTATING TOOLS

CHAMFER MILLING

45°



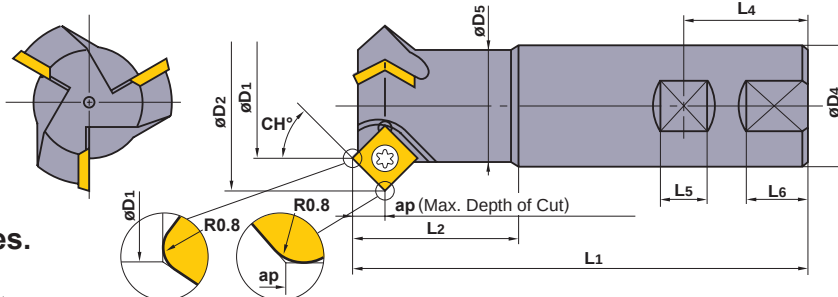
Roughing



CESP, CFSP, CGSP



- Covers 5 cutting modes.
- Excellent sharpness with 11° positive inserts.
- 30°, 45° and 60° chamfer series.



Right hand tool holder only.

Order Number	Stock	Number of Teeth	Dimensions (mm)											 *		
			R	CH°	D1	D2	L1	D4	D5	L2	L4	L5	L6	ap	Clamp Screw	Wrench
CESPR081S20	●	1	30°	8	19.6	110	20	19.5	40	25	11	—	10.2	TS52	①TKY25R	SPMW1203○○
161S20	●	1	30°	16	27.8	110	20	19.5	40	25	11	—	10.2	TS5	①TKY25R	SPMW1203○○
323S32	●	3	30°	32	43.8	125	32	31.5	45	36	14	19	10.2	TS5	①TKY25R	SPMW1203○○
CFSPR041S16S	●	1	45°	4	15.7	85	16	14.4	25	24	10	—	5.9	TS4	②TKY15F	SPMW0903○○
041S16L	●	1	45°	4	15.7	110	16	14.4	50	24	10	—	5.9	TS4	②TKY15F	SPMW0903○○
081S20	●	1	45°	8	24.6	110	20	19.5	40	25	11	—	8.3	TS5	①TKY25R	SPMW1203○○
161S20	●	1	45°	16	32.6	110	20	19.5	40	25	11	—	8.3	TS5	①TKY25R	SPMW1203○○
323S32	●	3	45°	32	48.6	125	32	31.5	45	36	14	19	8.3	TS5	①TKY25R	SPMW1203○○
CGSPR081S20	●	1	60°	8	28.4	110	20	19.5	40	25	11	—	5.9	TS5	①TKY25R	SPMW1203○○
161S20	●	1	60°	16	36.4	110	20	19.5	40	25	11	—	5.9	TS5	①TKY25R	SPMW1203○○
323S32	●	3	60°	32	52.4	125	32	31.5	45	36	14	19	5.9	TS5	①TKY25R	SPMW1203○○

★ Clamp Torque (N • m) : TS4=3.5, TS5=7.5, TS52=7.5

INSERTS

Shape	Order Number	Class	Honing	Coated		Cermet	Carbide	Dimensions (mm)			Geometry
				VP15TF	UP20M			D1	S1	Re	
	SPMW090304	M	E *	★	●	●	●	9.525	3.18	0.4	
	090308	M	E *	★	●	●	●	9.525	3.18	0.8	
	120304	M	E *	★	●	●	●	12.7	3.18	0.4	
	120308	M	E *	★	●	●	●	12.7	3.18	0.8	

★ NX2525 and NX4545 insert honing is "T" type.

RECOMMENDED CUTTING CONDITIONS

	Work Material	Hardness	Grade	Cutting Speed (m/min)	Feed per Tooth (mm/tooth)	
					Chamfer Milling	Face Milling
P	Carbon Steel Alloy Steel	180—280HB	UTi20T	180 (130—220)	0.4	0.15
			UP20M	180 (130—220)	0.4	0.2
			NX4545	180 (130—220)	0.4	0.2
		280—350HB	UTi20T	100 (70—120)	0.3	0.15
K	Cast Iron	Tensile Strength ≤450MPa	UTi20T	140 (100—170)	0.5	0.25
			HTi10	140 (100—170)	0.5	0.25

● Revolution (min⁻¹)=(1000×Cutting Speed)÷(3.14×φD1)

● Table Feed (mm/min)=Feed per Tooth×Number of Teeth×Cutter Revolution

● : Inventory maintained. ★ : Inventory maintained in Japan.

SPARE PARTS > M001
TECHNICAL DATA > N001