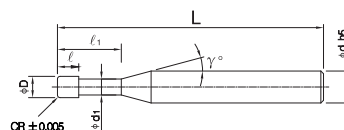


HSXRP 4-Flute Short Corner Radius End Mill



ϕD	D Tol. (mm)
D < 3	0 ~ -0.010
3 < D < 6	0 ~ -0.012
6 < D < 10	0 ~ -0.015
10 < D < 12	0 ~ -0.018

Unit : mm

Type No.	Dia.	Corner Radius	Length of Cut	Under Neck Length	Neck Dia.	Neck Taper Angle	Overall Length	Shank Dia.
	ϕD	CR	l	l_1	ϕd_1	$\gamma/^\circ$	L	ϕd
HSXRP4008R0.05 0450	0.8	R0.05	0.8	2.4	0.76	12	50	4
HSXRP4008R0.1 0450	0.8	R0.1	0.8	2.4	0.76	12	50	4
HSXRP4010R0.05 0450	1	R0.05	1	3	0.95	12	50	4
HSXRP4010R0.1 0450	1	R0.1	1	3	0.95	12	50	4
HSXRP4010R0.2 0450	1	R0.2	1	3	0.95	12	50	4
HSXRP4010R0.3 0450	1	R0.3	1	3	0.95	12	50	4
HSXRP4015R0.05 0450	1.5	R0.05	1.5	4.5	1.42	11	50	4
HSXRP4015R0.1 0450	1.5	R0.1	1.5	4.5	1.42	11	50	4
HSXRP4015R0.2 0450	1.5	R0.2	1.5	4.5	1.42	11	50	4
HSXRP4015R0.3 0450	1.5	R0.3	1.5	4.5	1.42	11	50	4
HSXRP4020R0.05 0450	2	R0.05	2	6	1.9	11	50	4
HSXRP4020R0.1 0450	2	R0.1	2	6	1.9	11	50	4
HSXRP4020R0.2 0450	2	R0.2	2	6	1.9	11	50	4
HSXRP4020R0.3 0450	2	R0.3	2	6	1.9	11	50	4
HSXRP4020R0.5 0450	2	R0.5	2	6	1.9	11	50	4
HSXRP4030R0.1 0450	3	R0.1	3	9	2.9	11	50	4
HSXRP4030R0.1 0660	3	R0.1	3	9	2.9	11	60	6
HSXRP4030R0.1 0675	3	R0.1	3	9	2.9	11	75	6
HSXRP4030R0.2 0450	3	R0.2	3	9	2.9	11	50	4
HSXRP4030R0.2 0650	3	R0.2	3	9	2.9	11	50	6
HSXRP4030R0.2 0660	3	R0.2	3	9	2.9	11	60	6
HSXRP4030R0.2 0675	3	R0.2	3	9	2.9	11	75	6
HSXRP4030R0.3 0450	3	R0.3	3	9	2.9	11	50	4
HSXRP4030R0.3 0660	3	R0.3	3	9	2.9	11	60	6
HSXRP4030R0.3 0675	3	R0.3	3	9	2.9	11	75	6
HSXRP4030R0.5 0450	3	R0.5	3	9	2.9	11	50	4
HSXRP4030R0.5 0650	3	R0.5	3	9	2.9	11	50	6



HSXRP 4-Flute Short Corner Radius End Mill

Unit : mm

Type No.	Dia.	Corner Radius	Length of Cut	Under Neck Length	Neck Dia.	Neck Taper Angle	Overall Length	Shank Dia.
	φD	CR	ℓ	ℓ ₁	φd ₁	γ/°	L	φd
HSXRP4030R0.5 0660	3	R0.5	3	9	2.9	11	60	6
HSXRP4030R0.5 0675	3	R0.5	3	9	2.9	11	75	6
HSXRP4040R0.1 0450	4	R0.1	4	12	3.9	—	50	4
HSXRP4040R0.1 0660	4	R0.1	4	12	3.9	11	60	6
HSXRP4040R0.1 0675	4	R0.1	4	12	3.9	11	75	6
HSXRP4040R0.2 0450	4	R0.2	4	12	3.9	—	50	4
HSXRP4040R0.2 0650	4	R0.2	4	12	3.9	11	50	6
HSXRP4040R0.2 0660	4	R0.2	4	12	3.9	11	60	6
HSXRP4040R0.2 0675	4	R0.2	4	12	3.9	11	75	6
HSXRP4040R0.3 0450	4	R0.3	4	12	3.9	—	50	4
HSXRP4040R0.3 0660	4	R0.3	4	12	3.9	11	60	6
HSXRP4040R0.3 0675	4	R0.3	4	12	3.9	11	75	6
HSXRP4040R0.5 0450	4	R0.5	4	12	3.9	—	50	4
HSXRP4040R0.5 0650	4	R0.5	4	12	3.9	11	50	6
HSXRP4040R0.5 0660	4	R0.5	4	12	3.9	11	60	6
HSXRP4040R0.5 0675	4	R0.5	4	12	3.9	11	75	6
HSXRP4040R1.0 0450	4	R1	4	12	3.9	—	50	4
HSXRP4040R1.0 0660	4	R1	4	12	3.9	11	60	6
HSXRP4040R1.0 0675	4	R1	4	12	3.9	11	75	6
HSXRP4060R0.1 0650	6	R0.1	6	18	5.85	—	50	6
HSXRP4060R0.1 0660	6	R0.1	6	18	5.85	—	60	6
HSXRP4060R0.1 0675	6	R0.1	6	18	5.85	—	75	6
HSXRP4060R0.2 0650	6	R0.2	6	18	5.85	—	50	6
HSXRP4060R0.2 0660	6	R0.2	6	18	5.85	—	60	6
HSXRP4060R0.2 0675	6	R0.2	6	18	5.85	—	75	6
HSXRP4060R0.2 06100	6	R0.2	6	18	5.85	—	100	6
HSXRP4060R0.3 0650	6	R0.3	6	18	5.85	—	50	6
HSXRP4060R0.3 0660	6	R0.3	6	18	5.85	—	60	6
HSXRP4060R0.3 0675	6	R0.3	6	18	5.85	—	75	6
HSXRP4060R0.3 06100	6	R0.3	6	18	5.85	—	100	6
HSXRP4060R0.5 0650	6	R0.5	6	18	5.85	—	50	6
HSXRP4060R0.5 0660	6	R0.5	6	18	5.85	—	60	6
HSXRP4060R0.5 0675	6	R0.5	6	18	5.85	—	75	6

HSXRP 4-Flute Short Corner Radius End Mill

Unit : mm

Type No.	Dia.	Corner Radius	Length of Cut	Under Neck Length	Neck Dia.	Neck Taper Angle	Overall Length	Shank Dia.
	φD	CR	ℓ	ℓ ₁	φd ₁	γ/°	L	φd
HSXRP4060R0.5 06100	6	R0.5	6	18	5.85	—	100	6
HSXRP4060R1.0 0650	6	R1	6	18	5.85	—	50	6
HSXRP4060R1.0 0660	6	R1	6	18	5.85	—	60	6
HSXRP4060R1.0 0675	6	R1	6	18	5.85	—	75	6
HSXRP4060R1.0 06100	6	R1	6	18	5.85	—	100	6
HSXRP4080R0.1 0860	8	R0.1	8	24	7.8	—	60	8
HSXRP4080R0.1 0875	8	R0.1	8	24	7.8	—	75	8
HSXRP4080R0.1 08100	8	R0.1	8	24	7.8	—	100	8
HSXRP4080R0.2 0860	8	R0.2	8	24	7.8	—	60	8
HSXRP4080R0.2 0875	8	R0.2	8	24	7.8	—	75	8
HSXRP4080R0.2 08100	8	R0.2	8	24	7.8	—	100	8
HSXRP4080R0.3 0860	8	R0.3	8	24	7.8	—	60	8
HSXRP4080R0.3 0875	8	R0.3	8	24	7.8	—	75	8
HSXRP4080R0.3 08100	8	R0.3	8	24	7.8	—	100	8
HSXRP4080R0.5 0860	8	R0.5	8	24	7.8	—	60	8
HSXRP4080R0.5 0875	8	R0.5	8	24	7.8	—	75	8
HSXRP4080R0.5 08100	8	R0.5	8	24	7.8	—	100	8
HSXRP4080R0.5 08125	8	R0.5	8	24	7.8	—	125	8
HSXRP4080R1.0 0860	8	R1	8	24	7.8	—	60	8
HSXRP4080R1.0 0875	8	R1	8	24	7.8	—	75	8
HSXRP4080R1.0 08100	8	R1	8	24	7.8	—	100	8
HSXRP4080R1.0 08125	8	R1	8	24	7.8	—	125	8
HSXRP4100R0.2 1075	10	R0.2	10	30	9.8	—	75	10
HSXRP4100R0.2 10100	10	R0.2	10	30	9.8	—	100	10
HSXRP4100R0.5 1075	10	R0.5	10	30	9.8	—	75	10
HSXRP4100R0.5 10100	10	R0.5	10	30	9.8	—	100	10
HSXRP4100R0.5 10125	10	R0.5	10	30	9.8	—	125	10
HSXRP4100R1.0 1075	10	R1	10	30	9.8	—	75	10
HSXRP4100R1.0 10100	10	R1	10	30	9.8	—	100	10
HSXRP4100R1.0 10125	10	R1	10	30	9.8	—	125	10
HSXRP4100R2.0 1075	10	R2	10	30	9.8	—	75	10
HSXRP4120R0.5 1275	12	R0.5	12	36	11.7	—	75	12
HSXRP4120R0.5 12100	12	R0.5	12	36	11.7	—	100	12



HSXRP 4-Flute Short Corner Radius End Mill

Unit : mm

Type No.	Dia.	Corner Radius	Length of Cut	Under Neck Length	Neck Dia.	Neck Taper Angle	Overall Length	Shank Dia.
	φD	CR	ℓ	ℓ ₁	φd ₁	γ/°	L	φd
HSXRP4120R0.5 12125	12	R0.5	12	36	11.7	—	125	12
HSXRP4120R1.0 1275	12	R1	12	36	11.7	—	75	12
HSXRP4120R1.0 12100	12	R1	12	36	11.7	—	100	12
HSXRP4120R1.0 12125	12	R1	12	36	11.7	—	125	12
HSXRP4120R2.0 1275	12	R2	12	36	11.7	—	75	12
HSXRP4120R2.0 12100	12	R2	12	36	11.7	—	100	12
HSXRP4120R2.0 12125	12	R2	12	36	11.7	—	125	12

Cutting Parameter

HSXRP 4-Flute Short Corner Radius End Mill Z-Level Milling

Workpiece	Pre-Hardened Steels (30-45HRC)				Hardened Steels (45-55HRC)				Hardened Steels (55-65HRC)			
	n _{min⁻¹}	V _f mm/min	a _p mm	a _e mm	n _{min⁻¹}	V _f mm/min	a _p mm	a _e mm	n _{min⁻¹}	V _f mm/min	a _p mm	a _e mm
HSXRP4008R_	28000	1450	0.03	0.05	25000	1305	0.03	0.03	23000	420	0.03	0.02
HSXRP4009R_	25000	1500	0.05	0.05	25000	1350	0.05	0.03	20000	450	0.05	0.02
HSXRP4010R_	18000	1500	0.05	0.05	16000	1350	0.05	0.05	15000	500	0.05	0.02
HSXRP4015R_	16155	1700	0.05	0.05	14360	1530	0.05	0.05	13500	600	0.05	0.02
HSXRP4025R_	15200	1880	0.05	0.1	13500	1680	0.05	0.08	12000	700	0.05	0.02
HSXRP4020R_	14301	2000	0.1	0.1	12712	1800	0.1	0.08	10000	800	0.1	0.03
HSXRP4030R_	11056	2200	0.1	0.1	9828	1980	0.1	0.08	7200	800	0.1	0.03
HSXRP4040R_	8712	2500	0.2	0.1	7744	2250	0.2	0.1	6000	1000	0.2	0.05
HSXRP4060R_	6543	2800	0.2	0.2	5808	2520	0.2	0.1	4500	1200	0.2	0.05
HSXRP4080R_	5445	3000	0.2	0.2	4840	2700	0.2	0.1	4000	1500	0.2	0.05
HSXRP4100R_	4900	3600	0.2	0.2	4356	3200	0.2	0.1	3500	1800	0.2	0.05
HSXRP4120R_	4356	3600	0.2	0.2	3872	3200	0.2	0.1	3200	2000	0.2	0.05

- For Z-level and face milling, the recommended axial depth of cut (ap) is 0.3 × CR.
- This item can be used for side milling and slotting applicaitons.

TABLE OF RECOMMENDED MILLING MATERIALS

○ Very suitable ○ Suitable

CARBON STEELS PREHARDENED STEELS	ALLOY STEELS TOOL STEELS					PREHARDENED STEELS, HARDENED STEELS	STAINLESS STEELS	CAST IRON DUCTILE CAST IRON	COPPER ALLOYS	ALUMINUM ALLOY	GRAPHITE	TITANIUM ALLOY	HEAT RESISTANT ALLOYS	PLASTIC
	~40HRC	~45HRC	~55HRC	~60HRC	~65HRC									
○	○	○	○	○	○	○	○	○	○			○	○	