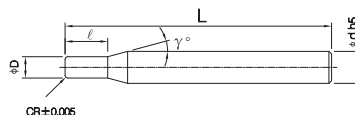


HGXR 2-Fute General Purpose Radius End Mill



Ø D	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	Neck Taper Angle	Overall Length	Shank Dia.
	φD	CR	ℓ	γ/°	L	φd
HGXR2002R0.05 0450	0.2	R0.05	0.4	12	50	4
HGXR2003R0.05 0450	0.3	R0.05	0.6	12	50	4
HGXR2004R0.05 0450	0.4	R0.05	0.8	12	50	4
HGXR2004R0.1 0450	0.4	R0.1	0.8	12	50	4
HGXR2005R0.05 0450	0.5	R0.05	1	12	50	4
HGXR2005R0.1 0450	0.5	R0.1	1	12	50	4
HGXR2006R0.05 0450	0.6	R0.05	1.2	12	50	4
HGXR2006R0.1 0450	0.6	R0.1	1.2	12	50	4
HGXR2007R0.05 0450	0.7	R0.05	1.4	12	50	4
HGXR2007R0.1 0450	0.7	R0.1	1.4	12	50	4
HGXR2008R0.05 0450	0.8	R0.05	1.6	12	50	4
HGXR2008R0.1 0450	0.8	R0.1	1.6	12	50	4
HGXR2009R0.1 0450	0.9	R0.1	1.8	12	50	4
HGXR2010R0.05 0450	1	R0.05	2	12	50	4
HGXR2010R0.1 0450	1	R0.1	2	12	50	4
HGXR2010R0.2 0450	1	R0.2	2	12	50	4
HGXR2010R0.3 0450	1	R0.3	2	12	50	4
HGXR2015R0.05 0450	1.5	R0.05	3	11	50	4
HGXR2015R0.1 0450	1.5	R0.1	3	11	50	4
HGXR2015R0.2 0450	1.5	R0.2	3	11	50	4
HGXR2015R0.3 0450	1.5	R0.3	3	11	50	4
HGXR2020R0.05 0450	2	R0.05	4	11	50	4
HGXR2020R0.1 0450	2	R0.1	4	11	50	4
HGXR2020R0.2 0450	2	R0.2	4	11	50	4
HGXR2020R0.3 0450	2	R0.3	4	11	50	4
HGXR2020R0.5 0450	2	R0.5	4	11	50	4



HGXR 2-Fute General Purpose
Radius End Mill

Unit : mm

Type No.	Dia.	Corner Radius	Length of Cut	Neck Taper Angle	Overall Length	Shank Dia.
	φD	CR	ℓ	γ/°	L	φd
HGXR2030R0.2 0450	3	R0.2	6	11	50	4
HGXR2030R0.2 0660	3	R0.2	6	11	60	6
HGXR2030R0.5 0450	3	R0.5	6	11	50	4
HGXR2030R0.5 0660	3	R0.5	6	11	60	6
HGXR2040R0.2 0450	4	R0.2	8	—	50	4
HGXR2040R0.2 0660	4	R0.2	8	11	60	6
HGXR2040R0.5 0450	4	R0.5	8	—	50	4
HGXR2040R0.5 0660	4	R0.5	8	11	60	6
HGXR2040R1.0 0450	4	R1	8	—	50	4
HGXR2040R1.0 0660	4	R1	8	11	60	6
HGXR2060R0.5 0650	6	R0.5	12	—	50	6
HGXR2060R0.5 0660	6	R0.5	12	—	60	6
HGXR2060R0.5 0675	6	R0.5	12	—	75	6
HGXR2060R0.5 06100	6	R0.5	12	—	100	6
HGXR2060R1.0 0650	6	R1	12	—	50	6
HGXR2060R1.0 0660	6	R1	12	—	60	6
HGXR2060R1.0 0675	6	R1	12	—	75	6
HGXR2060R1.0 06100	6	R1	12	—	100	6
HGXR2080R0.5 0860	8	R0.5	16	—	60	8
HGXR2080R0.5 0875	8	R0.5	16	—	75	8
HGXR2080R0.5 08100	8	R0.5	16	—	100	8
HGXR2080R1.0 0860	8	R1	16	—	60	8
HGXR2080R1.0 0875	8	R1	16	—	75	8
HGXR2080R1.0 08100	8	R1	16	—	100	8
HGXR2100R0.5 1075	10	R0.5	20	—	75	10
HGXR2100R0.5 10100	10	R0.5	20	—	100	10

HGXR 2-Fute General Purpose
Radius End Mill

Unit : mm

Type No.	Dia.	Corner Radius	Length of Cut	Neck Taper Angle	Overall Length	Shank Dia.
	φD	CR	ℓ	γ/°	L	φd
HGXR2100R1.0 1075	10	R1	20	—	75	10
HGXR2100R1.0 10100	10	R1	20	—	100	10
HGXR2120R0.5 1275	12	R0.5	24	—	75	12
HGXR2120R0.5 12100	12	R0.5	24	—	100	12
HGXR2120R1.0 1275	12	R1	24	—	75	12
HGXR2120R1.0 12100	12	R1	24	—	100	12
HGXR2120R2.0 1275	12	R2	24	—	75	12
HGXR2120R2.0 12100	12	R2	24	—	100	12

TABLE OF RECOMMENDED MILLING MATERIALS

○ Very suitable ○ Suitable

CARBON STEELS	ALLOY STEELS	PREHARDENED STEELS, HARDENED STEELS				STAINLESS STEELS	CAST IRON	COPPER ALLOYS	ALUMINUM ALLOY	GRAPHITE	TITANIUM ALLOY	HEAT RESISTANT ALLOYS	PLASTIC
PREHARDENED STEELS	TOOL STEELS						DUCTILE CAST IRON						
~40HRC		~50HRC	~55HRC	~60HRC	~65HRC	~35HRC	~350HB						
○		○	○			○	○	○	○		○	○	





Cutting Parameter

HGXR 2-Flute General Purpose Radius End Mill Face Milling

Workpiece	Carbon Steels、Alloy Steels (≤35HRC)				Pre-Hardened Steels (35~45HRC)				Hardened Steels (45-55HRC)			
Type No.	n min ⁻¹	Vf mm/min	ap mm	ae mm	n min ⁻¹	Vf mm/min	ap mm	ae mm	n min ⁻¹	Vf mm/min	ap mm	ae mm
HGXR2002R_	36000	360	0.006	0.12	30000	300	0.005	0.12	23000	200	0.003	0.1
HGXR2003R_	36000	350	0.008	0.18	30000	350	0.007	0.18	22000	300	0.003	0.15
HGXR2004R_	36000	500	0.012	0.28	30000	450	0.01	0.24	20000	400	0.005	0.2
HGXR2005R_	30000	600	0.016	0.14	25000	500	0.008	0.15	18500	400	0.006	0.1
HGXR2006R_	30000	600	0.016	0.2	25000	480	0.01	0.15	18000	384	0.007	0.1
HGXR2007R_	30000	840	0.016	0.25	25000	700	0.012	0.25	16800	560	0.01	0.15
HGXR2008R_	28000	1020	0.02	0.3	25000	850	0.014	0.25	15280	680	0.012	0.16
HGXR2009R_	25000	1200	0.05	0.3	25000	900	0.03	0.3	14000	800	0.02	0.2
HGXR2010R_	20000	1400	0.05	0.5	18000	1260	0.05	0.4	13600	1120	0.05	0.32
HGXR2015R_	17950	1500	0.05	0.65	16155	1350	0.05	0.52	13000	1200	0.05	0.4
HGXR2020R_	15890	1600	0.1	1	14301	1440	0.1	0.8	12712	1280	0.1	0.64
HGXR2030R_	12285	1800	0.1	1.5	11056	1620	0.1	1.2	9828	1440	0.1	0.96
HGXR2040R_	9680	2000	0.2	2	8712	1800	0.2	1.6	7744	1600	0.2	1.08
HGXR2060R_	7260	2500	0.2	3	6534	2250	0.2	2.4	5808	2000	0.2	1.96
HGXR2080R_	6050	2500	0.2	4	5445	2250	0.2	3.2	4840	2000	0.2	2.52
HGXR2100R_	5445	3000	0.2	5	4900	2700	0.2	4	4356	2400	0.2	3.2
HGXR2120R_	4840	3200	0.2	6	4356	2880	0.2	4.8	3872	2560	0.2	3.84

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