



HGXE 4-Flute General Purpose 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<18	0~-0.018
D>18	0~-0.020

Unit : mm

Type No.	Dia.	Length of Cut	Neck Taper Angle	Overall Length	Shank Dia.
	φD	ℓ	γ/°	L	φd
HGXE4008 0450	0.8	2.4	12	50	4
HGXE4010 0450	1	3	12	50	4
HGXE4010 0650	1	3	12	50	6
HGXE4012 0450	1.2	3.5	11	50	4
HGXE4014 0450	1.4	4	11	50	4
HGXE4015 0450	1.5	4	11	50	4
HGXE4015 0650	1.5	4	11	50	6
HGXE4016 0450	1.6	5	11	50	4
HGXE4020 0450	2	6	11	50	4
HGXE4020 0650	2	6	11	50	6
HGXE4025 0450	2.5	8	11	50	4
HGXE4025 0650	2.5	8	11	50	6
HGXE4030 0450	3	8	11	50	4
HGXE4030 0650	3	8	11	50	6
HGXE4030 0675	3	12	11	75	6
HGXE4040 0450	4	11	-	50	4
HGXE4040 0475	4	15	-	75	4
HGXE4040 0650	4	11	11	50	6
HGXE4040 0675	4	15	11	75	6
HGXE4050 0650	5	13	11	50	6
HGXE4050 0675	5	18	11	75	6
HGXE4060 0650	6	16	-	50	6
HGXE4060 0660	6	16	-	60	6
HGXE4060 0675	6	20	-	75	6

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Unit : mm

Type No.	Dia.	Length of Cut	Neck Taper Angle	Overall Length	Shank Dia.
	φD	ℓ	γ/°	L	φd
HGXE4060 06100	6	20	-	100	6
HGXE4080 0860	8	20	-	60	8
HGXE4080 0875	8	20	-	75	8
HGXE4080 08100	8	25	-	100	8
HGXE4100 1075	10	25	-	75	10
HGXE4100 10100	10	30	-	100	10
HGXE4120 1275	12	30	-	75	12
HGXE4120 12100	12	35	-	100	12
HGXE4160 16100	16	45	-	100	16
HGXE4160 16125	16	50	-	125	16
HGXE4200 20100	20	45	-	100	20
HGXE4200 20125	20	55	-	125	20

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

HGXE 4-Flute General Purpose 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
HGXE4008 0450	22000	1200	0.03	0.56	21600	1160	0.03	0.56	19800	720	0.03	0.56
HGXE4010 0450	21780	1400	0.05	0.7	19800	1240	0.05	0.7	18000	800	0.05	0.7
HGXE4012 0450	20000	1500	0.05	0.8	18000	1280	0.05	0.8	17000	850	0.05	0.8
HGXE4014 0450	18800	1680	0.05	1	17200	1320	0.05	1	16000	900	0.05	1
HGXE4015 0450	18150	1680	0.05	1.05	16500	1488	0.05	1.05	15000	960	0.05	1.05
HGXE4016 0450	18150	1680	0.05	1.1	16500	1488	0.05	1.1	15000	960	0.05	1.1
HGXE4020 0450	15125	2100	0.1	1.5	13750	1860	0.1	1.5	12500	1200	0.05	1.5
HGXE4025 0450	12100	2800	0.1	1.75	11000	2480	0.1	1.75	1100	1600	0.05	1.75
HGXE4030 0450	9680	2800	0.1	2.1	8800	2480	0.1	2.1	8000	1600	0.05	2.1
HGXE4040 0450	7865	2800	0.1	2.8	7150	2480	0.1	2.8	6500	1600	0.05	2.8
HGXE4050 0650	7260	2100	0.1	3.5	6600	1860	0.1	3.5	6000	1200	0.1	3.5
HGXE4060 0650	6050	1680	0.1	4.2	5500	1488	0.1	4.2	5000	960	0.1	4.2
HGXE4080 0860	5445	1680	0.2	5.6	4950	1488	0.2	5.6	4500	960	0.1	5.6
HGXE4100 1075	4840	1400	0.2	7	4400	1240	0.2	7	4000	800	0.1	7
HGXE4120 1275	4235	1400	0.2	8.4	3850	1240	0.2	8.4	3500	800	0.1	8.4
HGXE4140 1475	3630	1400	0.2	9.6	3300	1240	0.2	9.6	3000	800	0.1	9.6
HGXE4160 16100	3388	1400	0.2	11.2	3080	1240	0.2	11.2	2800	800	0.1	11.2
HGXE4200 20100	3025	1400	0.2	14	2750	1240	0.2	14	2500	800	0.1	14

- This item can be used for side milling and slotting applications