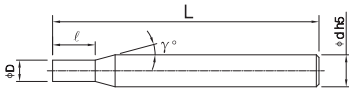




HGXEF 4-Flute Power End Mill



Ø D	D Tol. (mm)
D<3	0~-0.010
3<D<6	0~-0.012
6<D<10	0~-0.015
10<D<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
HGXEF4010 0450	1	3	12	50	4
HGXEF4010 0650	1	3	12	50	6
HGXEF4012 0450	1.2	3.5	11	50	4
HGXEF4014 0450	1.4	4	11	50	4
HGXEF4015 0450	1.5	4	11	50	4
HGXEF4015 0650	1.5	4	11	50	6
HGXEF4016 0450	1.6	5	11	50	4
HGXEF4020 0450	2	6	11	50	4
HGXEF4020 0650	2	6	11	50	6
HGXEF4025 0450	2.5	8	11	50	4
HGXEF4025 0650	2.5	8	11	50	6
HGXEF4030 0450	3	8	11	50	4
HGXEF4030 0650	3	8	11	50	6
HGXEF4030 0660	3	8	11	60	6
HGXEF4030 0675	3	12	11	75	6
HGXEF4040 0450	4	11	-	50	4
HGXEF4040 0475	4	15	-	75	4
HGXEF4040 0650	4	11	11	50	6
HGXEF4040 0660	4	11	11	60	6
HGXEF4040 0675	4	15	11	75	6
HGXEF4050 0650	5	13	11	50	6
HGXEF4050 0660	5	13	11	60	6
HGXEF4050 0675	5	18	11	75	6
HGXEF4060 0650	6	16	-	50	6
HGXEF4060 0660	6	16	-	60	6
HGXEF4060 0675	6	20	-	75	6

HGXEF 4-Flute Power End Mill

Unit : mm

Type No.	Dia.	Length of Cut	Neck Taper Angle	Overall Length	Shank Dia.
	φD	ℓ	γ/°	L	φd
HGXEF4060 06100	6	20	-	100	6
HGXEF4080 0860	8	20	-	60	8
HGXEF4080 0875	8	20	-	75	8
HGXEF4080 08100	8	25	-	100	8
HGXEF4100 1075	10	25	-	75	10
HGXEF4100 10100	10	30	-	100	10
HGXEF4100 10125	10	35	-	125	10
HGXEF4120 1275	12	30	-	75	12
HGXEF4120 12100	12	35	-	100	12
HGXEF4120 12125	12	42	-	125	12
HGXEF4160 16100	16	45	-	100	16
HGXEF4160 16150	16	50	-	150	16
HGXEF4200 20100	20	45	-	100	20
HGXEF4200 20150	20	55	-	150	20

TABLE OF RECOMMENDED MILLING MATERIALS

○ Very suitable ○ Suitable

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





Cutting Parameter

HGXEF 4-Flute Power End Mill Side 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
HGXEF4010 0450	18150	320	2	0.1	16500	320	2	0.05	15000	250	1.5	0.05
HGXEF4012 0450	18150	320	2.4	0.1	16500	320	2.4	0.05	15000	250	1.8	0.05
HGXEF4014 0450	15000	350	2.8	0.1	14000	340	2.8	0.1	13500	280	2.1	0.05
HGXEF4015 0450	14520	360	3	0.1	13200	360	3	0.1	12000	300	2.25	0.05
HGXEF4016 0450	14000	380	3.2	0.1	12500	400	3.2	0.1	11800	320	2.4	0.05
HGXEF4020 0450	12100	400	4	0.15	11000	400	4	0.1	11000	350	3	0.05
HGXEF4025 0450	10285	440	5	0.15	9350	440	5	0.1	8500	400	3.75	0.05
HGXEF4030 0450	9075	480	6	0.15	8250	480	6	0.1	7500	450	4.5	0.05
HGXEF4040 0450	7018	600	8	0.15	6380	600	8	0.1	5800	550	6	0.08
HGXEF4050 0650	6050	700	10	0.2	5500	700	10	0.1	5000	580	7.5	0.1
HGXEF4060 0660	5445	1000	12	0.2	4950	1000	12	0.1	4500	600	9	0.1
HGXEF4080 0875	4598	1500	16	0.3	4180	1500	16	0.2	3800	600	12	0.1
HGXEF4100 1075	4235	2000	20	0.3	3850	2000	20	0.2	3500	550	15	0.1
HGXEF4120 1275	3388	2500	24	0.3	3080	2500	24	0.2	2800	500	18	0.1
HGXEF4140 1475	3025	2000	28	0.3	2750	2000	28	0.2	2500	500	21	0.1
HGXEF4160 16100	2662	2000	32	0.3	2420	2000	32	0.2	2200	450	24	0.1
HGXFF4200 20100	2420	2000	40	0.3	2200	2000	40	0.2	2000	400	30	0.1