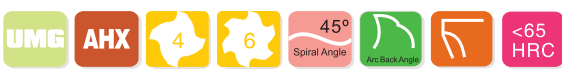


HSXHE 4/6 Flute Hard Milling End Mill



φD	D Tol. (mm)
1<D≤5	0~-0.012
6<D≤8	0~-0.015
8<D≤12	0~-0.018
12<D≤20	0~-0.02

Unit : mm

Type No.	Dia.	Length of Cut	Neck Taper Angle	Flute No.	Overall Length	Shank Dia.
	φD	ℓ	γ/°		L	φd
HSXHE4010 0650	1	3	20	4	50	6
HSXHE4015 0650	1.5	4	20	4	50	6
HSXHE4020 0650	2	6	20	4	50	6
HSXHE4025 0650	2.5	8	20	4	50	6
HSXHE4030 0650	3	8	20	4	50	6
HSXHE4040 0660	4	11	20	4	50	6
HSXHE4050 0660	5	13	20	4	60	6
HSXHE6060 0660	6	16	-	6	60	6
HSXHE6080 0875	8	20	-	6	75	8
HSXHE6100 1075	10	25	-	6	75	10
HSXHE6120 12100	12	35	-	6	100	12
HSXHE6160 16100	16	40	-	6	100	16
HSXHE6200 20100	20	45	-	6	100	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		~45HRC	~55HRC	~60HRC	~65HRC	~35HRC	~350HB						

Cutting Parameter

HSXHE 4/6-Flute Hard Milling End Mill Side Milling

Workpiece	Hardened Steels (45-55HRC)				Hardened Steels (55-65HRC)				Hardened Steels (65-70HRC)			
	Spindle Speed min	Feed mm/min	Ap mm	Ae mm	Spindle Speed min	Feed mm/min	Ap mm	Ae mm	Spindle Speed min	Feed mm/min	Ap mm	Ae mm
HSXHE4010 0650	15000	600	2	0.05	12000	480	2	0.03	10500	200	1	0.01
HSXHE4015 0650	12000	720	3	0.05	9600	576	3	0.03	8400	220	1.5	0.01
HSXHE4020 0650	10000	800	4	0.05	8000	640	4	0.03	7000	240	2	0.02
HSXHE4025 0650	8500	850	5	0.05	6800	680	5	0.03	5950	240	2.5	0.02
HSXHE4030 0650	7500	900	6	0.05	6000	720	6	0.03	5250	240	3	0.03
HSXHE4040 0660	6800	1000	8	0.1	5440	800	8	0.03	4760	280	4	0.03
HSXHE4050 0660	6000	1200	10	0.1	4800	960	10	0.05	4200	300	5	0.03

Workpiece	Hardened Steels (45-55HRC)				Hardened Steels (55-65HRC)				Hardened Steels (65-70HRC)			
	Spindle Speed min	Feed mm/min	Ap mm	Ae mm	Spindle Speed min	Feed mm/min	Ap mm	Ae mm	Spindle Speed min	Feed mm/min	Ap mm	Ae mm
HSXHE6060 0660	4000	870	15	0.1	3200	700	15	0.05	2100	360	15	0.03
HSXHE6080 0875	3500	900	18	0.1	2800	700	18	0.05	1600	360	18	0.03
HSXHE6100 1075	2800	850	25	0.1	2240	680	25	0.05	1500	340	25	0.03
HSXHE6120 12100	2500	800	30	0.1	2000	650	30	0.05	1200	325	30	0.03
HSXHE6160 16100	2200	750	35	0.1	1760	650	35	0.05	1000	325	35	0.03
HSXHE6200 20100	2000	700	40	0.1	1600	600	40	0.05	800	300	40	0.03