

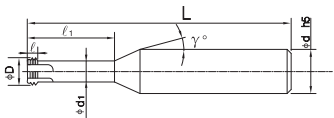
HSXDT SERIES

HSXDT Thread Mill – Highlights

- Long tool life with excellent wear resistance.
- Stable performance from optimized flute design.
- Sharper and strong edges for minimal burrs and cleaner threads.
- Left-hand cutting — use with counterclockwise rotation.
- Capable of machining materials up to 70HRC.

<70HRC

HSXDT Thread Milling Cutter-2.5D Underneck



Type No.	Dia.	Regular Thread		Pitch	Length of Cut	Under Neck Length	Neck Dia.	Neck Taper Angle	Overall Length	Shank Dia.
	φD		Z	P	ℓ	ℓ ₁	φd ₁	γ/°	L	φd
HSXDT-0.4-5 0650	1.4	M2	4	0.4	1.2	5	0.90	20	50	6
HSXDT-0.45-6.25 0650	1.8	M2.5	4	0.45	1.35	6.25	1.25	20	50	6
HSXDT-0.5-7.5 0650	2.4	M3	4	0.5	1.5	7.5	1.80	20	50	6
HSXDT-0.7-10 0650	3.1	M4	4	0.7	2.1	10	2.25	20	50	6
HSXDT-0.8-12.5 0650	3.8	M5	4	0.8	2.4	12.5	2.80	20	50	6
HSXDT-1.0-15 0650	4.6	M6	4	1	3	15	3.35	20	50	6
HSXDT-1.25-20 1075	6.2	M8	4	1.25	3.75	20	4.65	20	75	10
HSXDT-0.75-20 1075	6.2	*	4	0.75	2.25	20	5.15	20	75	10
HSXDT-1.5-25 1075	7.5	M10	4	1.5	4.50	25	5.60	20	75	10
HSXDT-1.0-25 1075	7.5	*	4	1	3	25	6.10	20	75	10
HSXDT-1.75-30 1075	9.0	M12	4	1.75	5.25	30	6.80	20	75	10
HSXDT-2-40 12100	11.5	M16	4	2	6	40	8.85	20	100	12
HSXDT-2.5-50 16125	15	M20	4	2.5	7.5	50	11.70	20	125	16

TABLE OF RECOMMENDED MILLING MATERIALS

Very suitable Suitable

CARBON STEELS	ALLOY STEELS	PREHARDENED STEELS	HARDENED STEELS				CAST IRON DUCTILE CAST IRON	COPPER ALLOYS	ALUMINUM ALLOY	GRAPHITE	TITANIUM ALLOY	HEAT RESISTANT ALLOYS	PLASTIC
			~55HRC	~60HRC	~65HRC	~70HRC							
○	○	○	○	○	○	○	○	○	○	○	○	○	○



Cutting Parameter

HSXDT Thread Milling Cutter

WorkPiece		Tool steels (25-35HRC)			Hardened Steels (≤45HRC)		
Type No.	DCmm	n min ⁻¹	F mm/min	fz mm/t	n min ⁻¹	F mm/min	fz mm/t
HSXDT-M2-0.4-5 0650	1.4	16800	121	0.0018	14280	114	0.002
HSXDT-M2.5-0.45-6.25 0650	1.8	12500	95	0.019	10625	106	0.0025
HSXDT-M3-0.5-7.5 0650	2.4	9500	87	0.0023	8075	80	0.0025
HSXDT-M4-0.7-10 0650	3.1	7500	120	0.004	6375	76	0.003
HSXDT-M5-0.8-12.5 1075	3.8	6500	130	0.005	5525	88	0.004
HSXDT-M6-1.0-15 1075	4.6	5000	120	0.006	4250	85	0.005
HSXDT-M8-1.25-20 1075	6.2	3600	109	0.007	3060	85	0.007
HSXDT-M10-1.5-25 1075	7.5	3000	120	0.01	2550	92	0.009
HSXDT-M12-1.75-30 1075	9	2700	119	0.011	2295	92	0.01
HSXDT-M16-2-40 12100	11.5	2200	123	0.014	1870	112	0.015
HSXDT-M20-2.5-50 16125	15	1600	109	0.017	1360	87	0.016

WorkPiece		Hardened Steels (≤52HRC)			Hardened Steels (58~62HRC)		
Type No.	DCmm	n min ⁻¹	F mm/min	fz mm/t	n min ⁻¹	F mm/min	fz mm/t
HSXDT-M2-0.4-5 0650	1.4	12500	100	0.002	10000	69	0.0017
HSXDT-M2.5-0.45-6.25 0650	1.8	9700	77	0.002	7760	68	0.0022
HSXDT-M3-0.5-7.5 0650	2.4	7300	58	0.002	5840	70	0.003
HSXDT-M4-0.7-10 0650	3.1	5600	67	0.003	4480	71	0.004
HSXDT-M5-0.8-12.5 1075	3.8	4600	74	0.004	3680	74	0.005
HSXDT-M6-1.0-15 1075	4.6	3800	76	0.005	3040	61	0.005
HSXDT-M8-1.25-20 1075	6.2	2800	67	0.006	2240	63	0.007
HSXDT-M10-1.5-25 1075	7.5	2300	83	0.009	1840	66	0.009
HSXDT-M12-1.75-30 1075	9	1900	84	0.011	1520	67	0.011
HSXDT-M16-2-40 12100	11.5	1500	90	0.015	1200	67	0.014
HSXDT-M20-2.5-50 16125	15	1200	77	0.016	960	69	0.018