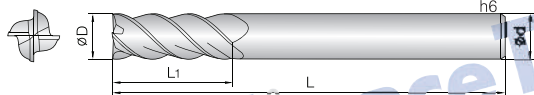
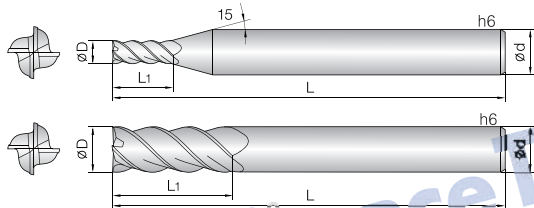


4 Flute Hard Cut 45° Helix End Mills For Hardened Steels



4HHE

- Endmills for various work materials (HRC 52~68) Pre-hardened steels and Hardened steels.
- Good wear resistance by high quality Si-based H coating.
- High-Precise edge tolerance.
- Reinforced edge design for preventing edge chipping.
- 45° helix design for high speed, feed condition.
- Good surface finish.
- Outstanding performance at high speed machining by ultra fine (0.2μm) WC grade.

Unit(mm)

Model Number	Cutting Dia. D	Length Of Cut L1	Effective Length L2	Overall Length L	Shank dia d
4HHE 010 015 445	1	1.5	-	45	4
4HHE 010 015 650	1	1.5	-	50	6
4HHE 010 025 445	1	2.5	-	45	4
4HHE 010 025 650	1	2.5	-	50	6
4HHE 010 035 445	1	3.5	-	45	4
4HHE 010 035 650	1	3.5	-	50	6
4HHE 010 050 650	1	5	-	50	6
4HHE 015 040 445	1.5	4	-	45	4
4HHE 015 040 650	1.5	4	-	50	6
4HHE 015 060 445	1.5	6	-	45	4
4HHE 015 060 650	1.5	6	-	50	6
4HHE 015 080 650	1.5	8	-	50	6
4HHE 020 030 445	2	3	-	45	4
4HHE 020 030 650	2	3	-	50	6
4HHE 020 050 445	2	5	-	45	4
4HHE 020 050 650	2	5	-	50	6
4HHE 020 080 650	2	8	-	50	6
4HHE 020 100 650	2	10	-	50	6
4HHE 025 060 445	2.5	6	-	45	4
4HHE 025 060 650	2.5	6	-	50	6
4HHE 025 080 445	2.5	8	-	45	4
4HHE 025 080 650	2.5	8	-	50	6
4HHE 025 100 650	2.5	10	-	50	6
4HHE 030 060 445	3	6	-	45	4
4HHE 030 060 650	3	6	-	50	6
4HHE 030 080 445	3	8	-	45	4

4 Flute Hard Cut 45° Helix End Mills For Hardened Steels



Unit(mm)

Model Number	Cutting Dia. D	Length Of Cut L1	Effective Length L2	Overall Length L	Shank dia d
4HHE 030 080 650	3	8	-	50	6
4HHE 030 120 650	3	12	-	50	6
4HHE 030 150 650	3	15	-	50	6
4HHE 035 080 650	3.5	8	-	50	6
4HHE 040 080 650	4	8	-	50	6
4HHE 040 110 650	4	11	-	50	6
4HHE 040 150 650	4	15	-	50	6
4HHE 040 200 660	4	20	-	60	6
4HHE 045 110 650	4.5	11	-	50	6
4HHE 050 100 650	5	10	-	50	6
4HHE 050 130 650	5	13	-	50	6
4HHE 050 200 660	5	20	-	60	6
4HHE 050 250 660	5	25	-	60	6
4HHE 050 300 675	5	30	-	75	6
4HHE 060 130 650	6	13	-	50	6
4HHE 060 150 650	6	15	-	50	6
4HHE 060 200 660	6	20	-	60	6
4HHE 060 250 675	6	25	-	75	6
4HHE 060 300 675	6	30	-	75	6
4HHE 070 160 660	7	16	-	60	8
4HHE 080 200 660	8	20	-	60	8
4HHE 080 250 875	8	25	-	75	8
4HHE 080 300 875	8	30	-	75	8
4HHE 080 400 8A0	8	40	-	100	8
4HHE 090 220 A75	9	22	-	75	10
4HHE 100 220 A75	10	22	-	75	10
4HHE 100 300 A75	10	30	-	75	10
4HHE 100 400 AA0	10	40	-	100	10
4HHE 100 500 AA0	10	50	-	100	10
4HHE 120 260 C75	12	26	-	75	12
4HHE 120 350 CA0	12	35	-	100	12
4HHE 120 500 CA0	12	50	-	100	12
4HHE 120 600 CA0	12	60	-	100	12
4HHE 140 350 EA0	14	35	-	100	14
4HHE 140 550 EA0	14	55	-	100	14
4HHE 160 350 GA0	16	35	-	100	16

ECO-CUT

WIDE-CUT

HARD-CUT

ALU-CUT

D-CUT

SUS CUT

MAGIC DRILLS

4 Flute Hard Cut 45° Helix End Mills For Hardened Steels



Unit(mm)

Model Number	Cutting Dia. D	Length Of Cut L1	Effective Length L2	Overall Length L	Shank dia d
4HHE 160 500 GA0	16	50	-	100	16
4HHE 160 700 GF0	16	70	-	150	16
4HHE 180 380 IA0	18	38	-	100	18
4HHE 200 400 KA0	20	40	-	100	20
4HHE 200 550 KC0	20	55	-	120	20
4HHE 200 750 KF0	20	75	-	150	20