



E25
UF

ULTRAFINE
GRADE HIGH-
END GRADE
WITH VERY
HIGH HARDNESS
AND
TOUGHNESS FOR
MICRO-
MACHINING



$\lambda=30^{\circ}-35^{\circ}$
 $\gamma=8^{\circ}$

VARIABLE HELIX
ANGLES 30° -
35° AND
CUTTING ANGLE
8°



angle
vif

SHARP EDGE



SIDE AND
CENTER CUT



l_1
0.5xD

CUTTING EDGE
LENGTH 0.5XD



l_3

CUTTING
LENGTH



FITTING LENGTH
SHORT



IRREGULAR
TOOTHING



λ_2
 λ_1

VARIABLE HELIX
ANGLES

MATERIAL COMPATIBILITY

●●● Excellent (3/3) ●●○ Good (2/3) ●○○ Possible (1/3) ○○○ Not recommended

Product material compatibility				
CATEGORY	MATERIAL	SPECIFICATION	GRP	24034-1.5
	Alloyed and non-alloyed steels	Rm < 450 N/mm²	1a	●○○ 1/3
	Non-alloyed steels	Rm 450–700 N/mm²	1b	○○○ 0/3
		Rm 700–900 N/mm²	1c	○○○ 0/3
		Rm > 1200 N/mm²	1d	○○○ 0/3
	Stainless steels	Rm < 650 N/mm²	2a	○○○ 0/3
	Stainless steels	Rm 650–950 N/mm²	2b	○○○ 0/3
		Rm > 950 N/mm²	2c	○○○ 0/3
	Hardened steels	44–56 HRC	3a	○○○ 0/3
	Hardened steels	57–67 HRC	3b	○○○ 0/3
	Exotic materials	< 32 HRC	4a	○○○ 0/3
	Special alloys	> 32 HRC	4b	○○○ 0/3
	Graphite		5	●○○ 1/3
	Cast iron	< 32 HRC	6a	○○○ 0/3
	Grey / nodular cast iron	> 32 HRC	6b	○○○ 0/3
	Titanium	Rm < 600 N/mm²	7a	●○○ 1/3
	Titanium alloys	600 < Rm N/mm²	7b	●○○ 1/3
	Nickel alloys	Rm < 1000 N/mm²	8a	○○○ 0/3
	Inconel, Hastelloy	Rm > 1000 N/mm²	8b	○○○ 0/3
	Copper, brass, bronze	Rm < 850 N/mm²	9a	●●● 3/3
	Copper-based	Rm > 850 N/mm²	9b	●●● 3/3
	Aluminum	Si < 0.5%	10a	●●● 3/3
	Aluminum alloys	0.5% < Si < 5%	10b	●●● 3/3
		Si > 5%	10c	○○○ 0/3
	Synthetic materials	Thermoplastic	11a	●●● 3/3
	Engineering plastics	Thermoset	11b	●●● 3/3
	Composite materials	Glass fiber / GFK	12a	●○○ 1/3
	Reinforced composites	Carbon fiber / KFK	12b	●○○ 1/3
	Precious metals	Gold	13a	●●● 3/3
	Gold, platinum, silver	Platinum	13b	○○○ 0/3

TECHNICAL DRAWING



DIMENSIONS

NOMINAL DIMENSIONS	
D (0 / -0.01)	1.5 mm
d (h5)	6 mm
L	33 mm
l1	1.5 mm
l3	5 mm
d3	–
R	–
e	–
Z	3
Chamfer K	0
w° collision angle	9°