

# FRAISE-PROFIL-ÉBAUCHE-MD-E25UF-+-EZI-ALPHA · ROUGHIN-ENDMILL-SC-E2-+-EZI-ALPHA · SCHAFT- SCHRUPPFRÄSER-HM-E25UF-+-EZI-ALPHA



SWISS MADE

21510A-3

Version 21.06.2026

E2

E2 HIGH PRECISION  
TOOL MATERIAL

$\lambda = 30^\circ$   
 $\gamma = 3^\circ$

CUTTING ANGLES  $\lambda 30^\circ$  ?  
 $\gamma 3^\circ$

45°

45° PRECISION ANGLE  
MEASUREMENT



DUAL DIRECTION  
HELICAL DRILL BIT

$h_1$   
2.2xD

2.2XD DEPTH FOR  
TOOLS



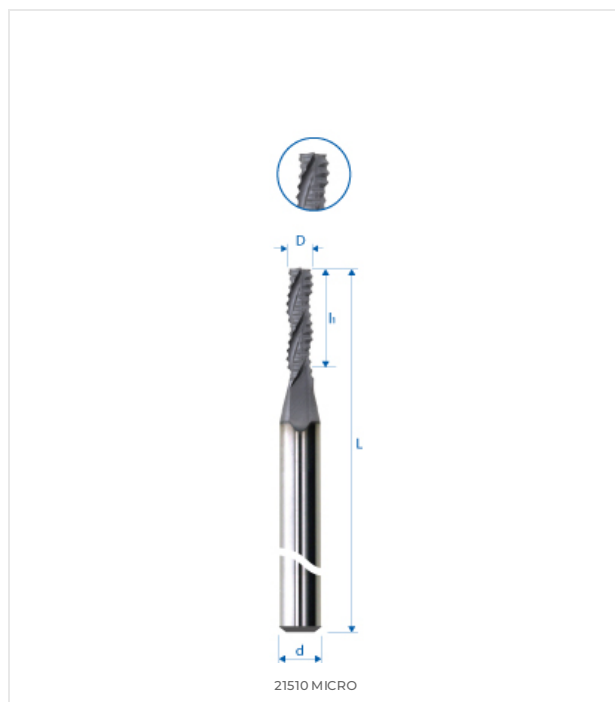
STANDARD TOOL WEAR  
INDICATOR

## MATERIAL COMPATIBILITY

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

MATERIAL	SPECIFICATION	GRP	21510A-3
<b>Alloyed and non-alloyed steels</b> Non-alloyed steels	Rm < 450 N/mm <sup>2</sup>	1a	●●○
	Rm 450–700 N/mm <sup>2</sup>	1b	●●○
	Rm 700–900 N/mm <sup>2</sup>	1c	●●○
	Rm > 1200 N/mm <sup>2</sup>	1d	●○○
<b>Stainless steels</b> Stainless steels	Rm < 650 N/mm <sup>2</sup>	2a	●●○
	Rm 650–950 N/mm <sup>2</sup>	2b	●●○
	Rm > 950 N/mm <sup>2</sup>	2c	●●○
<b>Hardened steels</b> Hardened steels	44–56 HRC	3a	○○○
	57–67 HRC	3b	○○○
<b>Exotic materials</b> Special alloys	< 32 HRC	4a	●○○
	> 32 HRC	4b	●○○
<b>Graphite</b> Industrial graphite		5	○○○
<b>Cast iron</b> Grey / nodular cast iron	< 32 HRC	6a	●●●
	> 32 HRC	6b	●●●
<b>Titanium</b> Titanium alloys	Rm < 600 N/mm <sup>2</sup>	7a	●●○
	600 < Rm N/mm <sup>2</sup>	7b	●○○
<b>Nickel alloys</b> Inconel, Hastelloy	Rm < 1000 N/mm <sup>2</sup>	8a	●○○
	Rm > 1000 N/mm <sup>2</sup>	8b	●○○
<b>Copper, brass, bronze</b> Copper-based	Rm < 850 N/mm <sup>2</sup>	9a	●●○
	Rm > 850 N/mm <sup>2</sup>	9b	●●○
<b>Aluminum</b> Aluminum alloys	Si < 0.5%	10a	○○○
	0.5% < Si < 5%	10b	○○○
	Si > 5%	10c	○○○
<b>Synthetic materials</b> Engineering plastics	Thermoplastic	11a	○○○
	Thermoset	11b	○○○
<b>Composite materials</b> Reinforced composites	Glass fiber / GFK	12a	○○○
	Carbon fiber / KFK	12b	○○○
<b>Precious metals</b> Gold, platinum, silver	Gold	13a	●●○
	Platinum	13b	●○○

## TECHNICAL DRAWING



## DIMENSIONS

### NOMINAL DIMENSIONS

D (0 / -0.01)	3 mm
d (h5)	3 mm
L	38 mm
l1	8 mm
l3	–
d3	–
R	–
e	–
Z	3
Chamfer K	0.2
w° collision	–



E-SHOP / EZI CUT  
[eskenazi.ch/eshop/21510A-3](https://eskenazi.ch/eshop/21510A-3)