

# FRAISE-PROFIL-ÉBAUCHE-MD-E2-+-EZI-ALPHA,- VERSION-COURTE · ROUGHIN-ENDMILL-SC-E2-+-EZI- ALPHA,-SHORT-VERSION · SCHAFT-SCHRUPPFÄSER- HM-E2-+-EZI-ALPHA,-KURTZE-VERSION



SWISS MADE

21520A-12 Version 21.06.2026

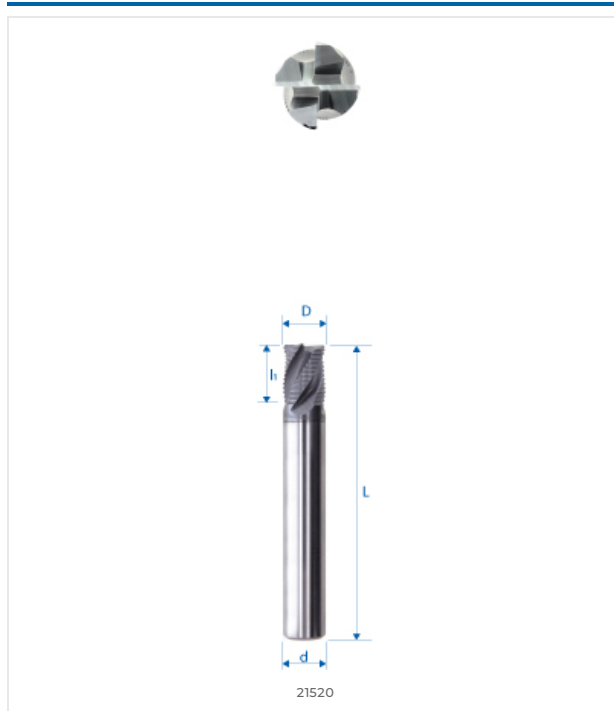
<b>E2</b> E2 HIGH PRECISION TOOL MATERIAL	$\lambda = 30^\circ$ $\gamma = 3^\circ$ CUTTING ANGLES $\approx 30^\circ$ / $3^\circ$	$45^\circ$ 45° PRECISION ANGLE MEASUREMENT	 DUAL DIRECTION HELICAL DRILL BIT	$1.5 \times D$ 1.5X D DEPTH PRECISION TOOL	 SHORT LENGTH TOOL WEAR BARS
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## MATERIAL COMPATIBILITY

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

MATERIAL	SPECIFICATION	GRP	21520A-12
<b>Alloyed and non-alloyed steels</b> <small>Non-alloyed steels</small>	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> <small>Stainless steels</small>	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> <small>Hardened steels</small>	44–56 HRC	3a	○○○
	57–67 HRC	3b	○○○
<b>Exotic materials</b> <small>Special alloys</small>	< 32 HRC	4a	●○○
	> 32 HRC	4b	●○○
<b>Graphite</b> <small>Industrial graphite</small>		5	○○○
<b>Cast iron</b> <small>Grey / nodular cast iron</small>	< 32 HRC	6a	●●●
	> 32 HRC	6b	●●●
<b>Titanium</b> <small>Titanium alloys</small>	Rm < 600 N/mm <sup>2</sup>	7a	●●○
	600 < Rm N/mm <sup>2</sup>	7b	●○○
<b>Nickel alloys</b> <small>Inconel, Hastelloy</small>	Rm < 1000 N/mm <sup>2</sup>	8a	●○○
	Rm > 1000 N/mm <sup>2</sup>	8b	●○○
<b>Copper, brass, bronze</b> <small>Copper-based</small>	Rm < 850 N/mm <sup>2</sup>	9a	●●○
	Rm > 850 N/mm <sup>2</sup>	9b	●●○
<b>Aluminum</b> <small>Aluminum alloys</small>	Si < 0.5%	10a	○○○
	0.5% < Si < 5%	10b	○○○
	Si > 5%	10c	○○○
<b>Synthetic materials</b> <small>Engineering plastics</small>	Thermoplastic	11a	○○○
	Thermoset	11b	○○○
<b>Composite materials</b> <small>Reinforced composites</small>	Glass fiber / GFK	12a	○○○
	Carbon fiber / KFK	12b	○○○
<b>Precious metals</b> <small>Gold, platinum, silver</small>	Gold	13a	●●○
	Platinum	13b	●○○

## TECHNICAL DRAWING



## DIMENSIONS

NOMINAL DIMENSIONS	
D (0 / -0.01)	12 mm
d (h5)	12 mm
L	73 mm
l1	12 mm
l3	–
d3	–
R	–
e	–
Z	4
Chamfer K	0.4
w° collision	–



**E-SHOP / EZI CUT**  
eskenazi.ch/eshop/21520A-12