

E2

E2 HIGH PRECISION TOOL MATERIAL

$\lambda=20^\circ$

20° LAMBDA CUTTING ANGLE



V-GROOVE CHAMFER TOOL SHAPE

MATERIAL COMPATIBILITY

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

MATERIAL	SPECIFICATION	GRP	48105-0.5
Alloyed and non-alloyed steels Non-alloyed steels	Rm < 450 N/mm ²	1a	●●○
	Rm 450–700 N/mm ²	1b	●●○
	Rm 700–900 N/mm ²	1c	●●○
	Rm > 1200 N/mm ²	1d	●●○
Stainless steels Stainless steels	Rm < 650 N/mm ²	2a	●●○
	Rm 650–950 N/mm ²	2b	●●○
	Rm > 950 N/mm ²	2c	●●○
Hardened steels Hardened steels	44–56 HRC	3a	○○○
	57–67 HRC	3b	○○○
Exotic materials Special alloys	< 32 HRC	4a	●●○
	> 32 HRC	4b	●●○
Graphite Industrial graphite		5	●●○
Cast iron Grey / nodular cast iron	< 32 HRC	6a	●●○
	> 32 HRC	6b	●●○
Titanium Titanium alloys	Rm < 600 N/mm ²	7a	●●○
	600 < Rm N/mm ²	7b	●●○
Nickel alloys Inconel, Hastelloy	Rm < 1000 N/mm ²	8a	●●○
	Rm > 1000 N/mm ²	8b	●●○
Copper, brass, bronze Copper-based	Rm < 850 N/mm ²	9a	●●●
	Rm > 850 N/mm ²	9b	●●●
Aluminum Aluminum alloys	Si < 0.5%	10a	●●●
	0.5% < Si < 5%	10b	●●○
	Si > 5%	10c	●○○
Synthetic materials Engineering plastics	Thermoplastic	11a	●●●
	Thermoset	11b	●●●
Composite materials Reinforced composites	Glass fiber / GFK	12a	●●○
	Carbon fiber / KFK	12b	●●○
Precious metals Gold, platinum, silver	Gold	13a	●●○
	Platinum	13b	●○○

TECHNICAL DRAWING



DIMENSIONS

NOMINAL DIMENSIONS

D (0 / -0.01)	0.5 mm
d (h5)	3 mm
L	38 mm
l1	0.9 mm
l3	–
d3	–
R	–
e	–
Z	2
Chamfer K	–
w° collision	11.4°

