

<p>E2 E2 HIGH PRECISION TOOL MATERIAL</p>	<p>λ=20° 20° LAMBDA CUTTING ANGLE</p>	<p>90° 90° RIGHT ANGLE DRILL BIT</p>	<p>STANDARD TOOL WEAR INDICATOR</p>	<p>CENTRAL COOLANT DRILL BIT</p>
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MATERIAL COMPATIBILITY

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

MATERIAL	SPECIFICATION	GRP	48380S-10.3
<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)	10.3 mm
d (h5)	12 mm
L	102 mm
l1	50 mm
l3	–
d3	–
R	–
e	–
Z	2
Chamfer K	–
w° collision	0.9°

