

<b>E2</b> E2 HIGH PRECISION TOOL MATERIAL	$\lambda=30^{\circ}\text{-}35^{\circ}$ $\gamma=8^{\circ}$ CUTTING ANGLES $730^{\circ}\text{-}35^{\circ}$ $78^{\circ}$	$0 \leq \phi < 6$ $90^{\circ}$ $45^{\circ}$ CHAMFER $\phi < 6$ $\phi > 6$ $90^{\circ}$ $45^{\circ}$	 DUAL DIRECTION HELICAL DRILL BIT	$1.5 \times D$ 1.5XD DEPTH PRECISION TOOL	 SHORT LENGTH TOOL WEAR BARS	 ADJUSTABLE ANGLE ICON	$\lambda 2$ $\lambda 1$ VARIABLE HELIX DRILL BIT
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MATERIAL COMPATIBILITY

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

MATERIAL	SPECIFICATION	GRP	21062-5-6
<b>Alloyed and non-alloyed steels</b> <small>Non-alloyed steels</small>	$R_m < 450 \text{ N/mm}^2$	1a	●○○
	$R_m 450\text{--}700 \text{ N/mm}^2$	1b	○○○
	$R_m 700\text{--}900 \text{ N/mm}^2$	1c	○○○
	$R_m > 1200 \text{ N/mm}^2$	1d	○○○
<b>Stainless steels</b> <small>Stainless steels</small>	$R_m < 650 \text{ N/mm}^2$	2a	○○○
	$R_m 650\text{--}950 \text{ N/mm}^2$	2b	○○○
	$R_m > 950 \text{ N/mm}^2$	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>	$R_m < 600 \text{ N/mm}^2$	7a	●○○
	$600 < R_m \text{ N/mm}^2$	7b	●○○
<b>Nickel alloys</b> <small>Inconel, Hastelloy</small>	$R_m < 1000 \text{ N/mm}^2$	8a	○○○
	$R_m > 1000 \text{ N/mm}^2$	8b	○○○
<b>Copper, brass, bronze</b> <small>Copper-based</small>	$R_m < 850 \text{ N/mm}^2$	9a	●●●
	$R_m > 850 \text{ N/mm}^2$	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)	5 mm
d (h5)	6 mm
L	50 mm
l1	6 mm
l3	–
d3	–
R	–
e	–
Z	3
Chamfer K	–
w° collision	3.7°

