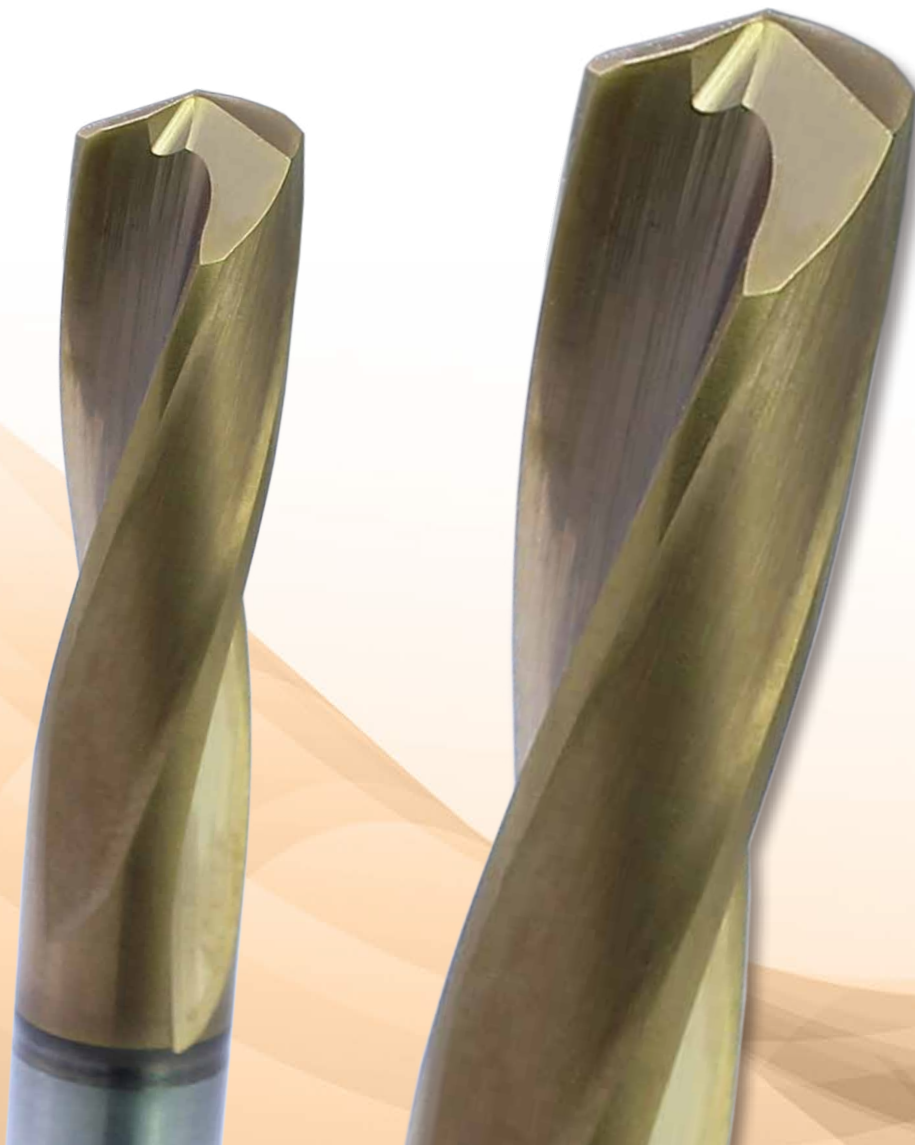


DH Solid Carbide Drill for Superalloy & Hardened Steel , HRC 45~60

P	M	K	N	S	H
○	○	○	○	●	●

- *Suitable for Superalloy and Hardened steel machining.*
- *Special RX geometry design for tip protecting.*
- *Low helix and special coating with efficiency cutting ability.*



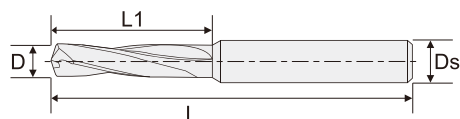
WD1821E

Solid Carbide Drills

DH Solid Carbide Drills - 3×D (External Coolant)

P	M	K	N	S	H
☐	☐	☐		☒	☒

- Reinforced Shank
- 140° Tip Angle
- Helix : 12° ~ 20°
- UNIX Coating
- Tolerance h8
- Single Margin
- RX Tip Design
- For Superalloy and Hardened steel.

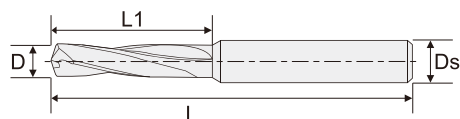


Unit:mm

[illegible]

P	M	K	N	S	H
☐	☐	☐		☒	☒

- Reinforced Shank
- 140° Tip Angle
- Helix : 12° ~ 20°
- SINIX Plus Coating
- Tolerance h8
- Double Margins
- RX Tip Design
- For Superalloy and Hardened steel.



Unit:mm

[illegible]

DH Solid Carbide Drills

Recommended Cutting Conditions

Material	Hardened Steel / Pre-Hardened Steel						Nickel Alloy	
Hardness	HRC 40 ~ 45		HRC 45 ~ 50		HRC 50 ~ 60		HRC 38 ~ 45	
VC	30 ~ 50 m/min		20 ~ 30 m/min		20 ~ 30 m/min		15 ~ 30 m/min	
Dia (mm)	RPM	Feed(mm/rev)	RPM	Feed(mm/rev)	RPM	Feed(mm/rev)	RPM	Feed(mm/rev)
4	3200	0.04 ~ 0.08	2000	0.04 ~ 0.08	2000	0.03 ~ 0.06	1600	0.04 ~ 0.08
5	2500	0.05 ~ 0.10	1600	0.05 ~ 0.10	1600	0.04 ~ 0.08	1300	0.05 ~ 0.10
6	2100	0.06 ~ 0.12	1300	0.06 ~ 0.12	1300	0.05 ~ 0.09	1100	0.06 ~ 0.12
7	1800	0.07 ~ 0.14	1100	0.07 ~ 0.14	1100	0.06 ~ 0.11	900	0.07 ~ 0.14
8	1600	0.08 ~ 0.16	1000	0.08 ~ 0.16	1000	0.06 ~ 0.12	800	0.08 ~ 0.16
9	1400	0.09 ~ 0.18	900	0.09 ~ 0.18	900	0.07 ~ 0.14	700	0.09 ~ 0.18
10	1300	0.10 ~ 0.20	800	0.10 ~ 0.20	800	0.08 ~ 0.15	600	0.10 ~ 0.20
11	1150	0.11 ~ 0.22	720	0.11 ~ 0.22	720	0.09 ~ 0.17	600	0.11 ~ 0.22
12	1100	0.12 ~ 0.24	700	0.12 ~ 0.24	700	0.10 ~ 0.18	500	0.12 ~ 0.24

Cutting Test

Material	Diameter	Coolant
Steel HRC 50	Ø6 mm	External

VC	S	Vf	fn	ap
30 m/min	1592 rpm	76 mm/min	0.05 mm/rev	6 mm



WINSTAR CUTTING TECHNOLOGIES CORP.

No. 10, Gongye 6th Road, Tainan Technology Industrial Park,
Tainan City 709, Taiwan

TEL : +886-6-3840386

FAX : +886-6-3840387

www.winstarcutting.com

info@winstarcutting.com

Dealer :