

**PRODUCT
NEWS**
PN-E-013

SERIES EXPANSION

KALIP TEKNİK

DIJET®

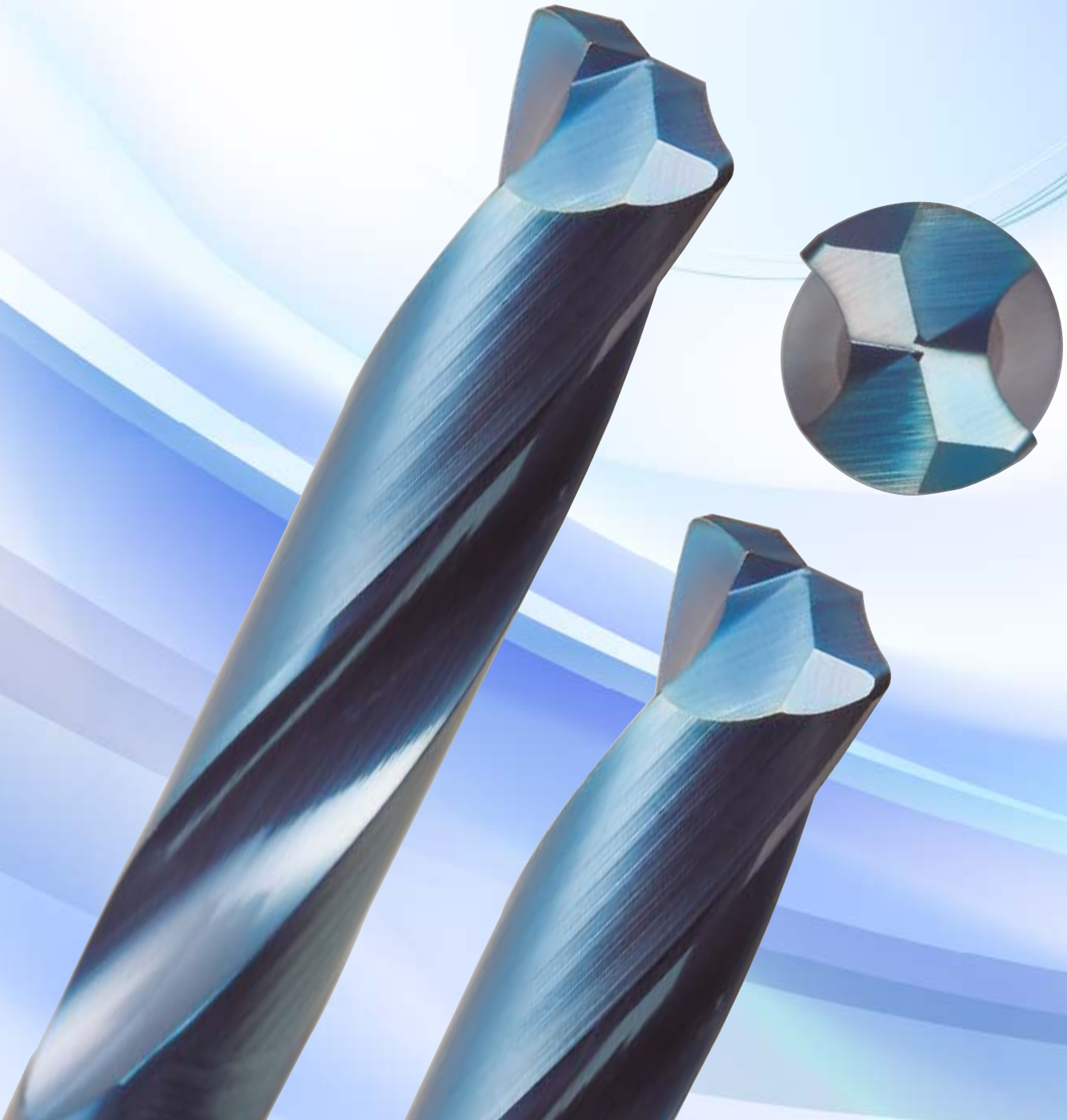
DH coat

EZ HARD DRILL

EZH type

**70
HRC**

**DH
coating**



KALIP TEKNİK

www.kalipteknik.com.tr

Features 1

**DH1 coating with high fracture toughness
carbide substrate delivers stable drilling
for high hardened materials up to 70HRC**

Features 2

Increased rigidity

Features 3

Excellent breaking resistance

Corner radius

Helix angle 15°

Optimized geometry specially
for hardened materials

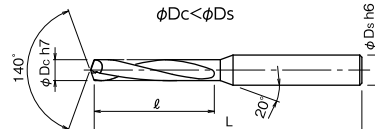
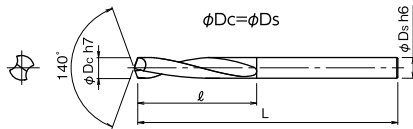
Larger web thickness

	DH1 coating	DV coating	DZ coating
Hardness (Hv)	3,500~3,700	3,300~3,500	2,800~2,900
Oxidization temperature (°C)	1,100~1,200	1,000~1,100	700~800
Coefficient of friction	0.5	0.65	0.6



EZH type

- For high hardened materials
- Drilling depth $5 \times D_c$
- helix angle 15°



Cat. No.	Stock	Dimensions (mm)			
		φDc	l	L	φDs
EZH5D0200S03	●	2	16	55	3
EZH5D0200S03-12	●	2	12	55	3
EZH5D0200S03-21	●	2	21	55	3
EZH5D0210S03	●	2.1	16	55	3
EZH5D0220S03	●	2.2	16	55	3
EZH5D0230S03	●	2.3	16	55	3
EZH5D0240S03	●	2.4	16	55	3
EZH5D0250S03	●	2.5	16	55	3
EZH5D0250S03-21	●	2.5	21	55	3
EZH5D0260S03	●	2.6	16	55	3
EZH5D0270S03	●	2.7	16	55	3
EZH5D0280S03	●	2.8	16	55	3
EZH5D0290S03	●	2.9	16	55	3
EZH5D0300S04	●	3	21	59	4
EZH5D0330S04	●	3.3	24	59	4
EZH5D0340S04	●	3.4	24	59	4
EZH5D0350S04	●	3.5	24	59	4
EZH5D0380S04	●	3.8	27	59	4
EZH5D0390S04	●	3.9	27	59	4
EZH5D0400S04	●	4	27	59	4
EZH5D0420S06	●	4.2	29	74	6
EZH5D0430S06	●	4.3	29	74	6
EZH5D0440S06	●	4.4	29	74	6
EZH5D0450S06	●	4.5	29	74	6

Cat. No.	Stock	Dimensions (mm)			
		φDc	l	L	φDs
EZH5D0490S06	●	4.9	32	74	6
EZH5D0500S06	●	5	32	74	6
EZH5D0510S06	●	5.1	34	79	6
EZH5D0520S06	●	5.2	34	79	6
EZH5D0590S06	●	5.9	36	79	6
EZH5D0600S06	●	6	41	79	6
EZH5D0680S08	●	6.8	43	88	8
EZH5D0690S08	●	6.9	43	88	8
EZH5D0700S08	●	7	43	88	8
EZH5D0790S08	●	7.9	48	93	8
EZH5D0800S08	●	8	48	93	8
EZH5D0850S10	●	8.5	53	98	10
EZH5D0860S10	●	8.6	55	98	10
EZH5D0900S10	●	9	55	98	10
EZH5D0990S10	●	9.9	60	108	10
EZH5D1000S10	●	10	60	108	10
EZH5D1030S12	●	10.3	66	117	12
EZH5D1040S12	●	10.4	66	117	12
EZH5D1100S12	●	11	68	117	12
EZH5D1190S12	●	11.9	73	117	12
EZH5D1200S12	●	12	73	117	12

EZH -LS type

- For high hardened materials
- Drilling depth $5 \times D_c$
- helix angle 15°
- Long shank



Cat. No.	Stock	Dimensions (mm)			
		φDc	l	L	φDs
EZH5D0300S04-LS	●	3	25	69	4
EZH5D0330S04-LS	●	3.3	25	79	4
EZH5D0380S04-LS	●	3.8	30	79	4
EZH5D0400S04-LS	●	4	30	79	4

Diameter	Tolerance
$D_c \leq 3$	0 -0.01
$3 < D_c \leq 6$	0 -0.012
$6 < D_c \leq 10$	0 -0.015
$10 < D_c \leq 18$	0 -0.018

Recommended cutting conditions

Work material	Hardened steel (SKD61, DAC, DHA) 48~56HRC		Hardened steel (SKD11, SLD, DC11) 57~62HRC		HSS (SKH, HAP) 63~70HRC	
Vc (m/min)	15~20(ϕ 2) 15~25(ϕ 2.5~ ϕ 12) 10~20(ϕ 13 ~ ϕ 16)		10~15(ϕ 2~ ϕ 12) 7~13(ϕ 13~ ϕ 16)		5~10(ϕ 2) 7~12(ϕ 2.5~ ϕ 12) 6~10(ϕ 13 ~ ϕ 16)	
f (mm/rev)	0.03~0.05(ϕ 3~ ϕ 4) 0.04~0.06(ϕ 5) 0.06~0.08(ϕ 6~ ϕ 7) 0.06~0.09(ϕ 8~ ϕ 9) 0.06~0.10(ϕ 10~ ϕ 11) 0.07~0.12(ϕ 12~ ϕ 16)		0.03~0.05(ϕ 2~ ϕ 4) 0.04~0.06(ϕ 5) 0.05~0.07(ϕ 6~ ϕ 7) 0.05~0.08(ϕ 8~ ϕ 9) 0.05~0.09(ϕ 10~ ϕ 11) 0.05~0.10(ϕ 12~ ϕ 13) 0.07~0.12(ϕ 14~ ϕ 16)		0.02~0.04(ϕ 2~ ϕ 4) 0.03~0.05(ϕ 5) 0.04~0.06(ϕ 6~ ϕ 9) 0.04~0.07(ϕ 10~ ϕ 11) 0.05~0.08(ϕ 12~ ϕ 13) 0.06~0.09(ϕ 14~ ϕ 16)	
Dc (mm)	n (min ⁻¹)	Vf (mm/min)	n (min ⁻¹)	Vf (mm/min)	n (min ⁻¹)	Vf (mm/min)
2	2,860	115	2,070	86	1,270	38
2.5	2,550	102	1,660	66	1,270	38
3	2,100	84	1,380	55	1,060	31
4	1,590	63	1,035	41	795	23
5	1,270	62	830	41	635	25
6	1,060	74	690	41	530	26
7	910	63	590	35	455	22
8	795	60	520	34	400	20
9	710	54	460	30	355	18
10	640	51	415	29	320	17
11	580	46	375	26	290	16
12	530	47	345	26	265	16
13	370	33	250	20	200	13
14	330	30	220	20	180	13
15	320	30	210	20	170	13
16	320	30	200	19	160	12

Drilling depth : 3Dc

Notes:

1. Use water soluble coolant.
2. Not recommended for use on non-heat treated material.
3. Recommended for material over 50 HR to 70 HRc.
4. Use on rigid machine with a precision holder.
5. Above data recommended for cutting depth of 3XD. **Peck drilling is recommended if drilling deeper than 3XD.**
6. Recommended for drilling blind hole, if drilling thru hole, use back up material underneath.
7. If using -LS type, reduce above data

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