

**DIXI**  
**COOL+**

**DIXI**  
polytool

**DIXI POLYTOOL**  
**ALWAYS**  
**FURTHER!**

**DIXI 7443-5D COOL+®**

**New DIXI COOL+® rang**

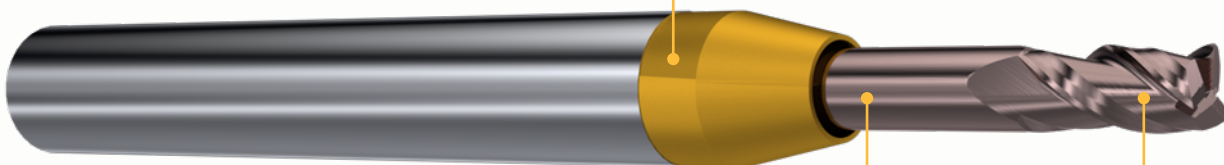
For machining deep grooves and pocket

The combination of DIXI COOL+® lubrication system and a rigid geometry allows outstanding depth of cut.



**PATENTED CONCEPT OF ORIENTED AND ACCELERATED DIXI COOL+® LUBRICATION**

- Optimal lubrication
- High performance cooling
- Perfect chip evacuation



**C-TOP COATING**

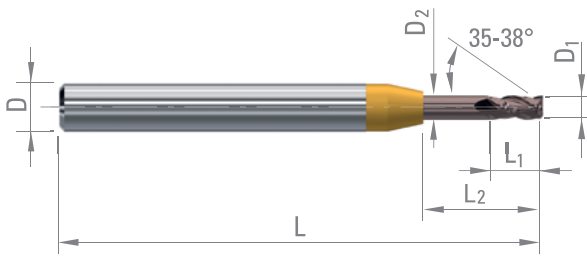
- New generation of dropless coating
- High wear and oxidation resistance

**GEOMETRY**

- Flute developed for optimal chip evacuation
- Optimized cross-section to ensure good rigidity



## 5xD<sub>1</sub> NECKED DOWN END MILLS WITH ACCELERATED LUBRICATION



$D_1$     $L_1$     $D_2$     $L_2$     $D_{h5}$     $L$    C-TOP  
 $\emptyset \leq 2.00 - 0/-0.01$   
 $\emptyset < 6.00 - 0/-0.02$   
 $\emptyset \geq 6.00 - e8$

$D_1$	$L_1$	$D_2$	$L_2$	$D_{h5}$	$L$	C-TOP
0.30	0.70	0.27	1.60	4	38	412150
0.40	0.90	0.36	2.20	4	38	412151
0.50	1.10	0.45	2.70	4	38	412152
0.60	1.40	0.54	3.20	4	38	412153
0.70	1.60	0.63	3.80	4	38	412154
0.80	1.80	0.72	4.30	4	38	412155
0.90	2.00	0.81	4.80	4	38	412156
1.00	2.20	0.90	5.20	4	38	412157
1.10	2.40	0.99	5.80	4	38	412158
1.20	2.60	1.08	6.30	4	38	412159
1.30	2.80	1.17	6.70	4	38	412160
1.40	3.00	1.26	7.30	4	38	412161
1.50	3.20	1.39	7.80	4	38	412162

Low alloyed steel	High alloyed steel	DUPLEX stainless steel	Cast iron	Refractory alloy
Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Gold	Silver

$D_1$     $L_1$     $D_2$     $L_2$     $D_{h5}$     $L$    C-TOP  
 $\emptyset \leq 2.00 - 0/-0.01$   
 $\emptyset < 6.00 - 0/-0.02$   
 $\emptyset \geq 6.00 - e8$

$D_1$	$L_1$	$D_2$	$L_2$	$D_{h5}$	$L$	C-TOP
1.60	3.40	1.48	8.30	6	55	412163
1.70	3.60	1.58	8.70	6	55	412164
1.80	3.80	1.67	9.20	6	55	412165
1.90	4.00	1.76	9.70	6	55	412166
2.00	4.50	1.85	10.30	6	55	412167
2.50	5.50	2.32	12.80	6	55	412168
3.00	6.50	2.78	15.30	6	55	412169
4.00	8.50	3.72	20.40	8	64	412170
5.00	10.60	4.65	25.40	8	80	412171
6.00	13.30	5.55	30.70	8	74	423538
8.00	18.30	7.40	42.30	10	90	423539
10.00	22.50	9.25	51.90	12	105	423540

## EXAMPLE OF APPLICATION

### Deep grooving

DIXI 7443-5D COOL+ Ø2.00 C-TOP

Material : Stainless steel 1.4441 / 316VLM

Rotation :  $n = 15'000$  rpm ( $V_c = 94$  m/min)

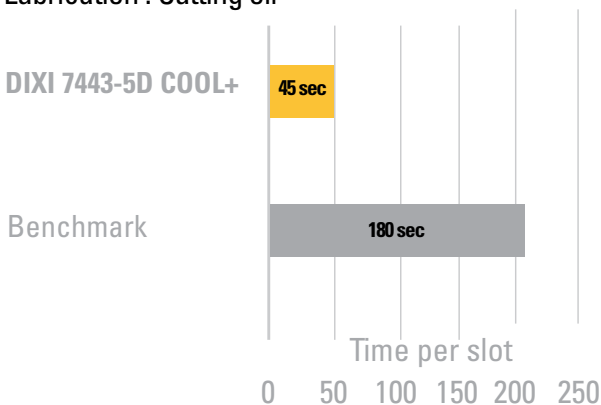
Feed rate :  $V_f = 350$  mm/min ( $f_z = 0.008$  mm/tooth)

Depth of cut :  $a_p = 3.33$  mm

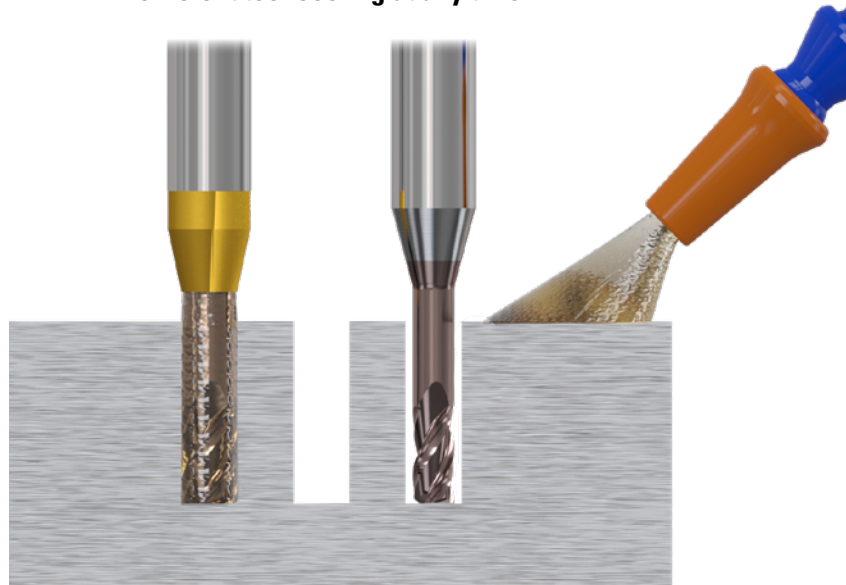
Total depth : 10.00 mm

Chip flow : 2.30 cm<sup>3</sup>/min

Lubrication : Cutting oil



The DIXI COOL+ lubrication system ensures an efficient tool cooling at any time !



**DIXI POLYTOOL S.A.**  
 Av. du Technicum 37  
 CH - 2400 Le Locle  
 T. +41 (0)32 933 54 44  
 dixipoly@dixi.ch  
 www.dixipolytool.com