DIXI polytool

News
end mills Z=4
DIXI 7584 Micro

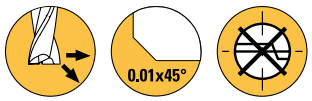
“Micro” Series: The New Standard for Your Micro-Machines

Take full advantage of the exceptional dynamic performance of your micro-machines.

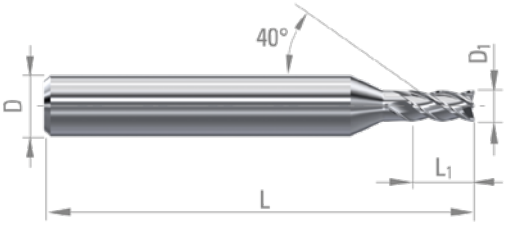
Total length of 28 mm required for ATC-E HSK-EZ 15 tool holders, reinforced shank.

DIXI 7584 Micro

Z = 4



END MILLS WITH REINFORCED SHANK



- Multi-purpose cutters designed for roughing and finishing.
- The extra smooth C-TOP coating improves tool life even at high temperatures in difficult to machine materials.
- DRYCUT coating improves tool life in non-ferrous materials.

D_1 Ø<2.00 - 0/-0.01 Ø ≤3.00 - 0/-0.02	L_1	D_{h5}	L	CARBIDE	C-TOP	DRYCUT*
0.5	1.0	4	28	456543	456557	456571
0.6	1.2	4	28	456544	456558	456572
0.7	1.4	4	28	456545	456559	456573
0.8	1.6	4	28	456546	456560	456574
0.9	1.8	4	28	456547	456561	456575
1.0	2.0	4	28	456548	456562	456576
1.1	2.2	4	28	456549	456563	456577
1.2	2.4	4	28	456550	456564	456578
1.3	2.6	4	28	456551	456565	456579
1.4	2.8	4	28	456552	456566	456580
1.5	3.0	4	28	456553	456567	456581
2.0	4.0	4	28	456554	456568	456582
2.5	5.0	4	28	456555	456569	456583
3.0	6.0	4	28	456556	456570	456584

* for non-ferrous materials

Copper, brass, and beryllium copper alloys:

- DIXI 7584 Micro Uncoated
- DIXI 7584 Micro with DRYCUT coating

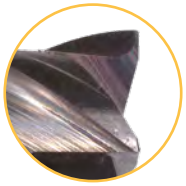
High-alloy steels, stainless steels, Durnico:

- DIXI 7584 Micro with C-TOP coating

With a robust design and reinforced tool body, these end mills deliver unmatched performance. Ideal for ultra-high-speed milling with small cuts, they truly shine in trochoidal machining.

The end grind is specially designed to facilitate penetration during helical or angular interpolation, making them ideal for creating pockets, holes, or closed grooves. No more need for a drill bit for shallow holes: guaranteed time savings and increased efficiency.

40° blades designed for easy penetration into the material and a flawless surface finish.



The chip-breaking grooves and double-angle end face facilitate angular penetration and helical interpolations.

Cross-section of the reinforced cutter

Example of circular interpolation – Brass CuZn38Pb2

DIXI 7584 Micro Ø2 x 4 x Ø4 x 28

Cutting conditions:

n = 32'000 rpm (Vc = 200 m/min)
Vf = 600 mm/min
Cutting oil

Example of trochoidal machining – 1.4441 stainless steel

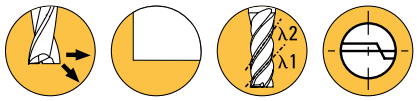
DIXI 7584 Micro Ø1 x 2 x Ø4 x 28 C-TOP

Cutting conditions for a 1.80 mm wide slot:

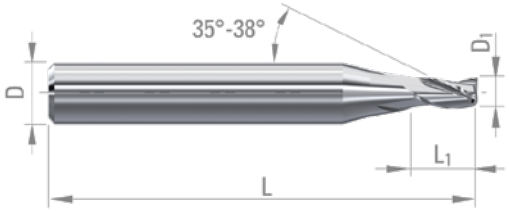
Width ae = 0.03 mm
Depth ap = 1.50 mm
n = 55'000 rpm (Vc = 170 m/min)
Vf = 1'600 mm/min
Cutting oil

DIXI 7343 Micro

Z = 3



END MILLS WITH REINFORCED SHANK AND VARIABLE HELIX



- High performance end mills with reinforced shank and variable helix, tools developed for the machining of tough materials.
- The extra smooth C-TOP coating improves tool life even at high temperatures in difficult to machine materials.

D_1 Ø<2.00 - 0/-0.01 Ø ≤3.00 - 0/-0.02	L_1	D_{h5}	L	CARBIDE	C-TOP
0.3	0.7	4	28	457999	458011
0.4	0.9	4	28	458000	458012
0.5	1.1	4	28	458001	458013
0.6	1.4	4	28	458002	458014
0.7	1.6	4	28	458003	458015
0.8	1.8	4	28	458004	458016
0.9	2.0	4	28	458005	458017
1.0	2.2	4	28	458006	458018
1.5	3.2	4	28	458007	458019
2.0	4.3	4	28	458008	458020
2.5	5.3	4	28	458009	458021
3.0	6.3	4	28	458010	458022

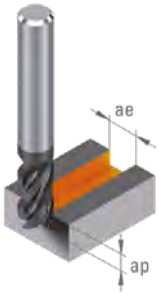
MILLS WITH A DIAMETER OF LESS THAN 1 mm

For movement parts, bridges, neck chain from steels such as Durnico strip, slotting and routing may be more suitable than trochoidal machining.

This approach is particularly relevant for cutters with a diameter of less than 1 mm, as the low cutting power required allows for deeper cuts, which increases chip removal per unit of time and reduces cycle times.

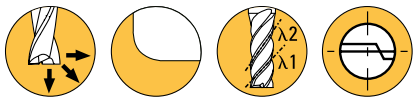
Example: Durnico - X2NiCoMo18-9-5 :
DIXI 7343 Micro Ø0.30 x 0.6 x Ø4 x 28 C-TOP

Cutting conditions:
Width ae = 0.30 mm
Depth ap = 0.20 mm
n = 38'000 rpm (Vc = 35 m/min)
Vf = 400 mm/min
Cutting oil

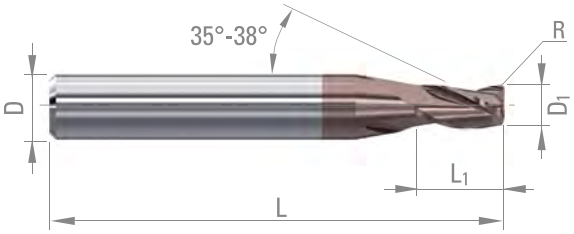


DIXI 7353 Micro

Z = 3



CORNER RADIUS END MILLS WITH VARIABLE HELIX



- Corner radius end mills with reinforced shank and symmetrical front grinding developed for the machining of tough materials.
- The extra smooth C-TOP coating improves tool life, even at high temperatures, in difficult to machine materials.

D_1 Ø >0.40 - 0/-0.01 Ø <2.00 - 0/-0.02 Ø ≤3.00 - e8	L_1	D_{h5}	L	R R ≤ 0.10 ± 0.01 R < 0.30 ± 0.015 R ≥ 0.30 ± 0.02	CARBIDE	C-TOP
0.4	0.9	4	28	0.05 0.10	458207 458208	458230 458231
0.5	1.1	4	28	0.05 0.10	458209 458210	458232 458233
0.6	1.4	4	28	0.05 0.10	458211 458212	458234 458235
0.7	1.6	4	28	0.05 0.10	458213 458214	458236 458237
0.8	1.8	4	28	0.05 0.10	458215 458216	458238 458239
0.9	2.0	4	28	0.05 0.10	458217 458218	458240 458241
1.0	2.2	4	28	0.10 0.20	458219 458220	458242 458243
1.5	3.2	4	28	0.10 0.20	458221 458222	458244 458245
2.0	4,3	4	28	0.10 0.20 0.30	458223 458224 458225	458246 458247 458248
2.5	5.3	4	28	0.20 0.30	458226 458227	458249 458250
3.0	6.3	4	28	0.20 0.30	458228 458229	458251 458252

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