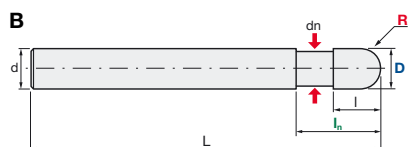
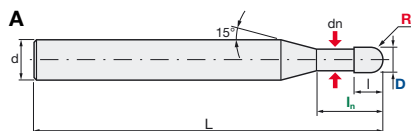
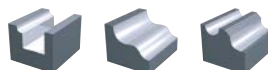


Ultra Micro Grain Solid Carbide End Mill

EHHB-ATH | Epoch High Hard Ball ATH

V max
High Speed**▽**
Roughing**▽▽**
Semi-Finishing**HRC**
72**No. of Teeth**
4**Carbide**
Micro Grain**TH60+**
Nano-PVD Coating**Rake Angle**
NegativeHelix angle 40°
d h5

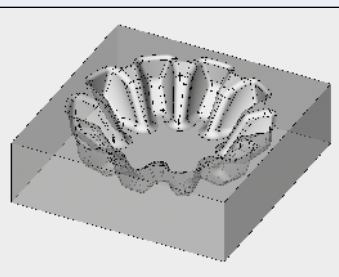
	Tolerance on R	Tolerance on D
R 0.5–1.5	± 0.005 mm	0/-0.010 mm
R 2–3	± 0.007 mm	0/-0.014 mm
R 4–6	± 0.010 mm	0/-0.020 mm

ID Code	Item Code	Z	D	R	I_n	I	d_n	L	d	Type
EP1340	EHHB-4010-S4-ATH	4	1	0.5	3	1.5	0.95	50	4	A
EP1341	EHHB-4010-S6-ATH								6	
EP1342	EHHB-4015-S4-ATH		1.5	0.75	4.5	2.5	1.43		4	
EP1343	EHHB-4015-S6-ATH								6	
EP1344	EHHB-4020-S4-ATH		2	1	6	3	1.9		4	
EP1345	EHHB-4020-S6-ATH								6	
EP1346	EHHB-4025-S4-ATH		2.5	1.25	7.5	4	2.38		4	
EP1347	EHHB-4025-S6-ATH								6	
EP1348	EHHB-4030-S4-ATH		3	1.5	9	4.5	2.9	70	4	B
EP1349	EHHB-4030-S6-ATH								6	
EP1350	EHHB-4040-S4-ATH		4	2	12	6	3.9	80	4	A
EP1351	EHHB-4040-S6-ATH								6	
EP1352	EHHB-4050-ATH		5	2.5	15	7.5	4.7	90	6	B
EP1353	EHHB-4060-ATH		6	3	18	9	5.7	100	8	
EP1354	EHHB-4080-ATH		8	4	24	12	7.6		10	
EP1355	EHHB-4100-ATH		10	5	30	15	9.5	110	10	
EP1356	EHHB-4120-ATH		12	6	36	18	11.5		12	

NOTE: For precise tool definition for the CAM system please download DXF data (QuickFinder) or contact your local Hitachi Tool staff for more details.

Roughing Application EHHB-ATH

Helical Milling + Trochoid milling + Z-constant milling -> Total cutting time: 22 min.



Work geometry
Size: 80x80x20mm
Material: 1.2379 (60HRC)



Used end mill –
less and stable wear situation



Work after roughing application

Tool: D8 x 4Z (EHHB-4080-ATH)

$n = 5,970 \text{ min}^{-1}$ ($V_c = 150 \text{ m/min}$)

$V_f = 2,860 \text{ mm/min}$ ($f_z = 0.12 \text{ mm/tooth}$)

$a_p = 9 \text{ mm}$, $a_e = 0.5 \text{ mm (max)}$

$Q = 12.9 \text{ cm}^3/\text{min}$

Dry Air blow, (HSK-A63), OH=32mm