



MOLDINO

The Edge To Innovation

MMC Hitachi Tool Engineering Europe GmbH

EHHBE/EHHRE-TH3

Epoch High Hard Ball/Radius Evolution

Multi-purpose Ball Type/Corner Radius End Mill

New TH3 Coating

D1mm ~ D12mm

- ***For High Hardened Materials up to and even beyond 68HRC***

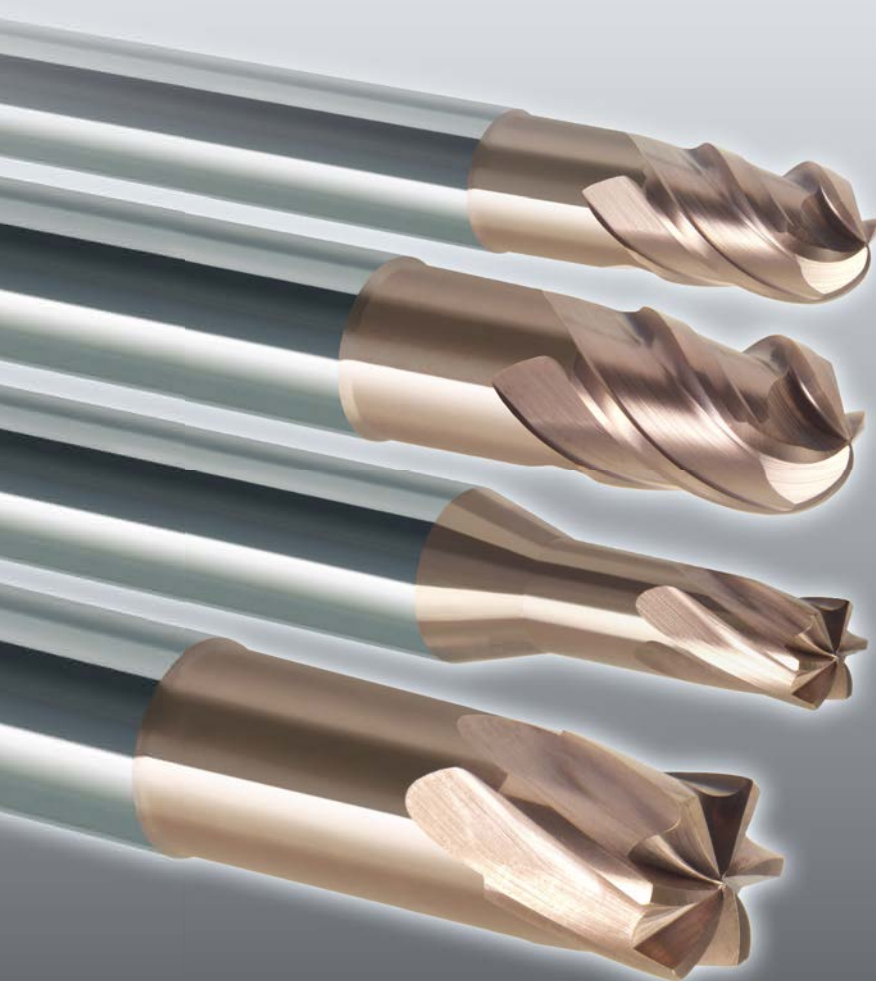
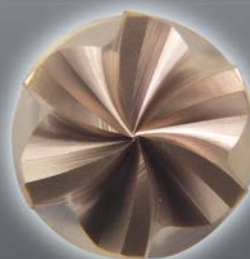
EHHBE: 4 flutes

- ***Unequal pitch (anti-vibration)***



EHHRE: 4 or 6 flutes

- ***Peripheral clearance geometry (anti-vibration)***



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EHHBE-TH3 | Epoch High Hard Ball Evolution TH3

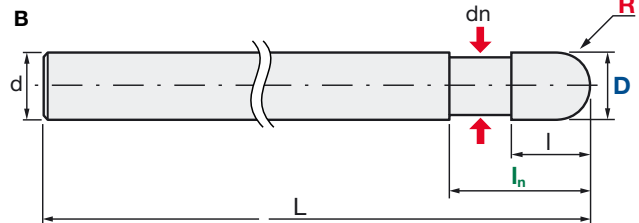
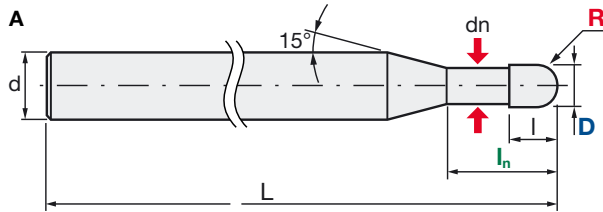
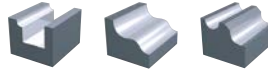
V max
High Speed

▽
Roughing

▽▽
Semi-Finishing

HRC
>68

No. of Teeth
4



Carbide
Micro Grain

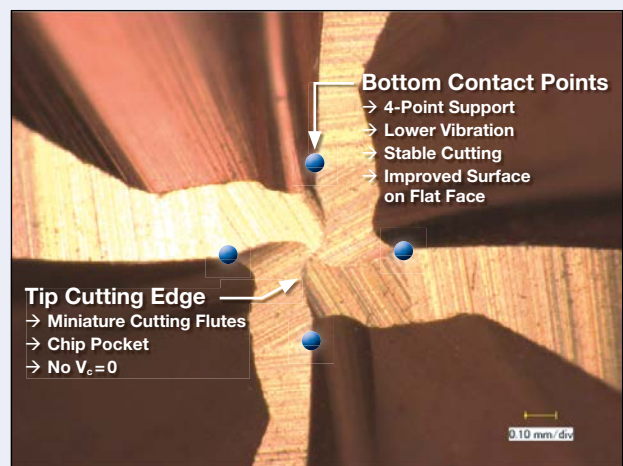
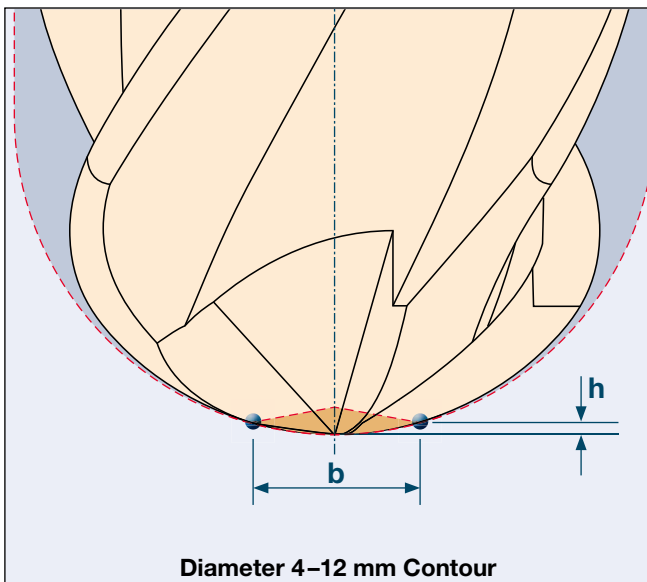
TH3
Nano-PVD Coating

Rake Angle
Negative

Helix Angle	R Tol. [mm]	D Tol. [mm]	d Tol.
40°	R0.5~R1.5: +/-0.005 R2~R3: +/-0.007 R4~R6: +/-0.01	R0.5~R1.5: 0/-0.01 R2~R3: 0/-0.014 R4~R6: 0/-0.02	h5

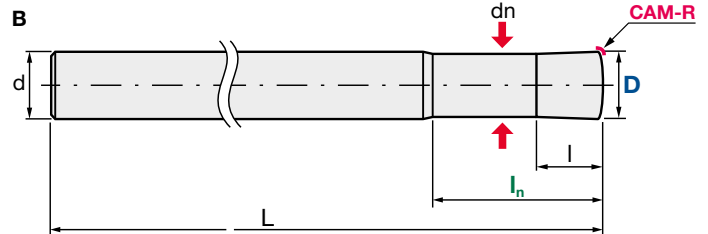
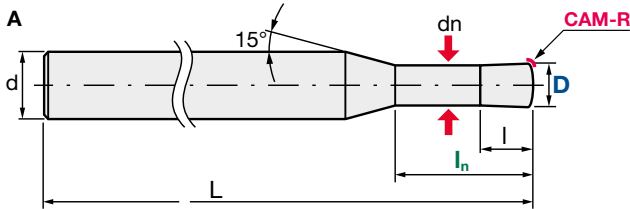
ID Code	Item Code	Z	Size [mm]									
			D	R	I _n	I	dn	L	d	b	h	Type
EP1846	EHHBE-4010-S4-TH3	4	1	0.5	3	1.5	0.95	50	4	0	0	A
EP1847	EHHBE-4010-S6-TH3								6			
EP1848	EHHBE-4015-S4-TH3		1.5	0.75	4.5	2.5	1.43		4			
EP1849	EHHBE-4015-S6-TH3								6			
EP1850	EHHBE-4020-S4-TH3		2	1	6	3	1.9		4			
EP1851	EHHBE-4020-S6-TH3								6			
EP1852	EHHBE-4025-S4-TH3		2.5	1.25	7.5	4	2.38		4			
EP1853	EHHBE-4025-S6-TH3								6			
EP1854	EHHBE-4030-S4-TH3		3	1.5	9	4.5	2.9	70	4			
EP1855	EHHBE-4030-S6-TH3								6			
EP1856	EHHBE-4040-S4-TH3		4	2	12	6	3.9		4	0.26	0.007	B
EP1857	EHHBE-4040-S6-TH3											
EP1858	EHHBE-4050-TH3		5	2.5	15	7.5	4.7	80	6	0.28		A
EP1859	EHHBE-4060-TH3		6	3	18	9	5.7	90		0.33		
EP1860	EHHBE-4080-TH3		8	4	24	12	7.6	100	8	0.45	0.010	B
EP1861	EHHBE-4100-TH3		10	5	30	15	9.5		10			
EP1862	EHHBE-4120-TH3		12	6	36	18	11.5		110	12		

NOTE: For precise tool definition for the CAM system please download DXF data (QuickFinder) or contact your local MMC Hitachi Tool staff for more details.
Specifications for the products listed in this catalog are subject to change without notice due to replacement or modification.
For diameter 1-3 mm, EHHBE has standard ball end mill cutting edge. For diameter 4-12 mm, EHHBE cutting edge geometry is as shown below.





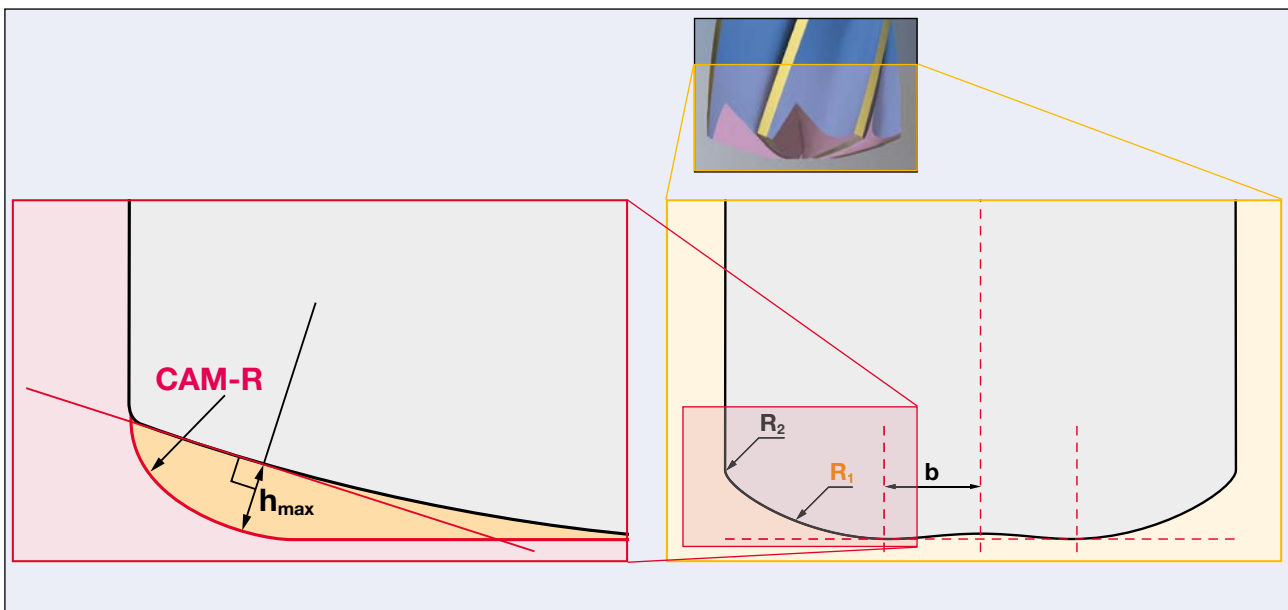
EHHRE-TH3 | Epoch High Hard Radius Evolution TH3



Helix Angle	D Tol. [mm]	d Tol.
20°	D1~D12: 0/-0.02	h5

ID Code	Item Code	Z	Size [mm]												Type														
			D	CAM-R (R _p)	I _n	I	dn	L	d	R ₁	R ₂	Lowest point to centre (b)	Max. remaining stock (h _{max})																
EP1863	EHHRE-4010-S4-TH3	4	1	0.134	3	1	0.95	50	4	1.1	0.1	0.14	0.026	A															
EP1864	EHHRE-4010-S6-TH3		2	0.194	6	2	1.9		6	2.2																			
EP1865	EHHRE-4020-S4-TH3								0.28			0.068																	
EP1866	EHHRE-4020-S6-TH3																												
EP1867	EHHRE-4030-S4-TH3							3	0.328		9	3	2.9		4	3.3	0.2	0.42	0.094										
EP1868	EHHRE-4030-S6-TH3		6	0.56	0.136																								
EP1869	EHHRE-6040-S4-TH3	6	4			0.387	12	4	3.9	60	4	4.4																	
EP1870	EHHRE-6040-S6-TH3		5			0.521	15	5	4.7		6	5.5	0.3	0.70	0.162														
EP1871	EHHRE-6050-TH3															8	0.581	18	6	5.7	6.6	0.84	0.204						
EP1872	EHHRE-6060-TH3			10	0.849									24	8									7.6	75	8	8.8	0.5	1.12
EP1873	EHHRE-6080-TH3									12																			
EP1874	EHHRE-6100-TH3		1.68			0.424																							
EP1875	EHHRE-6120-TH3																												

NOTE:	Please use CAM-R for your programming corner radius.
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