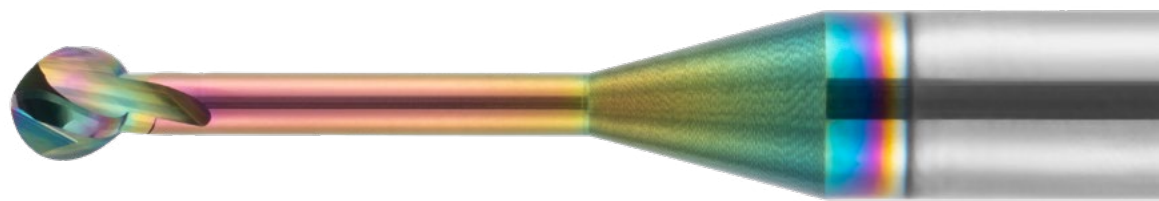
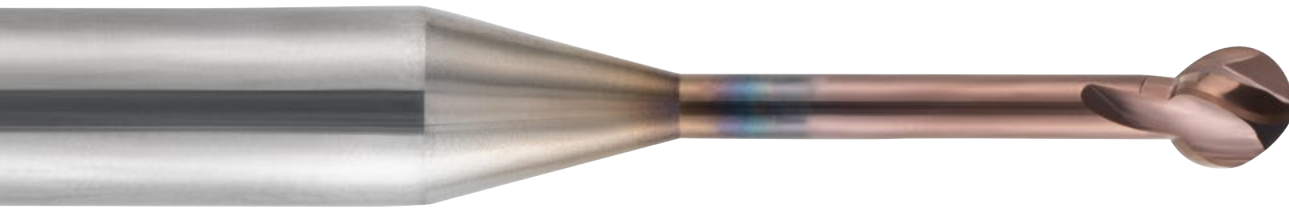
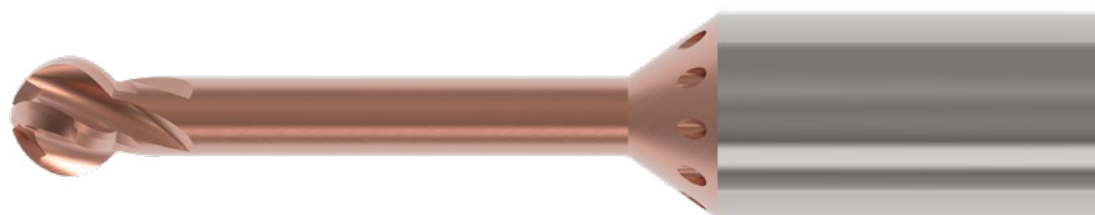
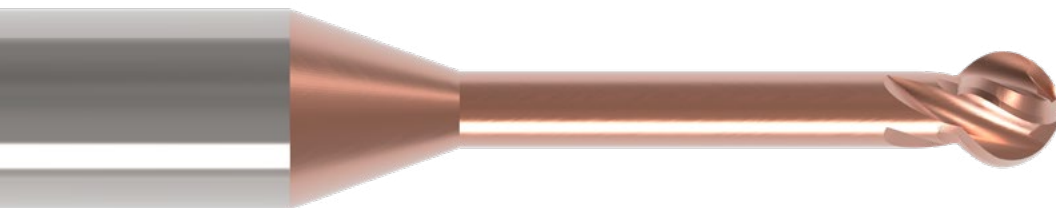
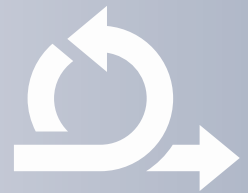


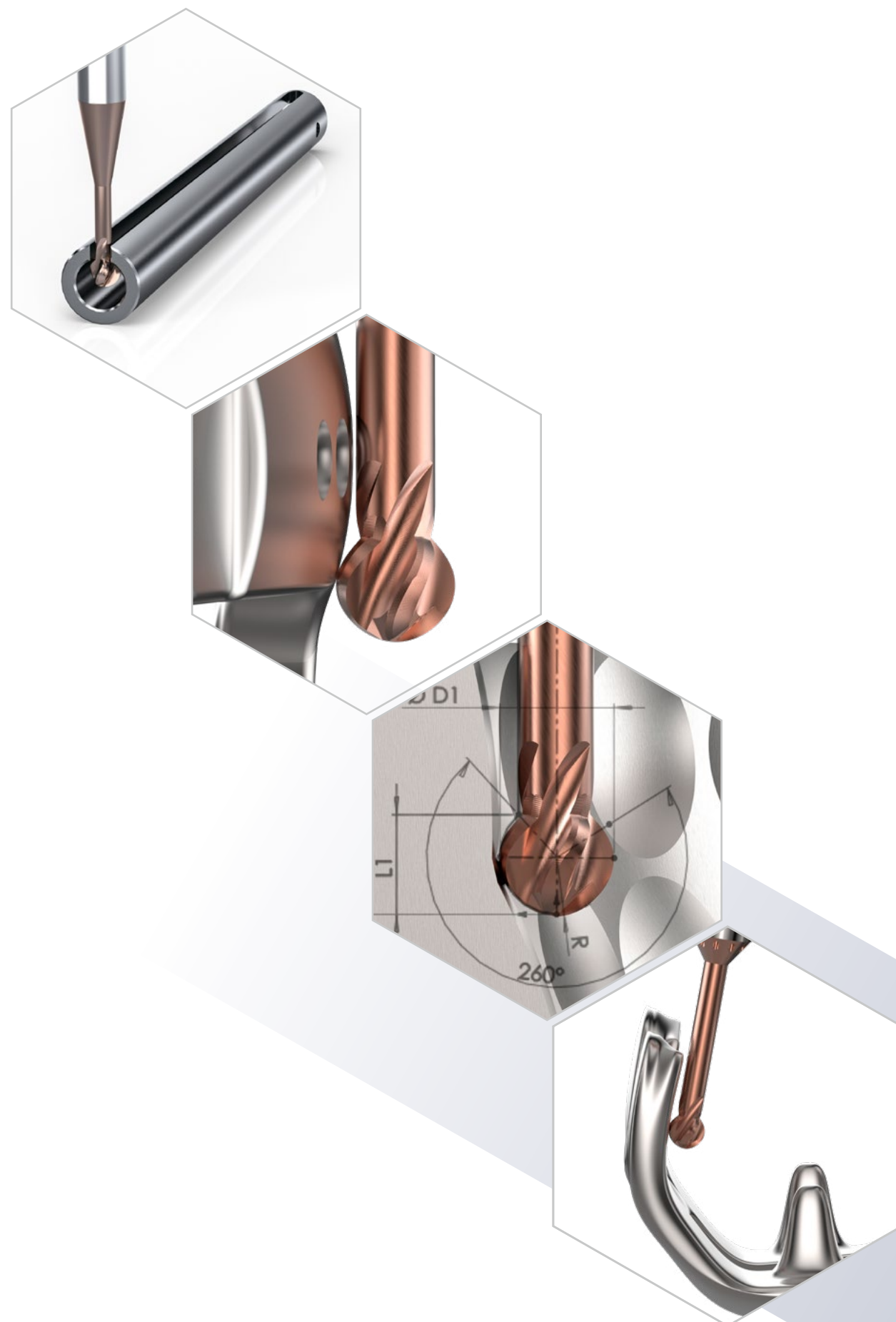
LOLLIPOP

HBMicrotec[®]
ACTIONTOOLS & ENGINEERING



ACTIONMILL[®]
by HB microtec
Lollipop





The HB microtec® deburring mill program is perfectly coordinated and offers the ideal deburring tool for every operation.

For example, when edge breaking, valuable production time can be saved with the ACTIONMILL Lollipop® by performing complete deburring directly on the machine.

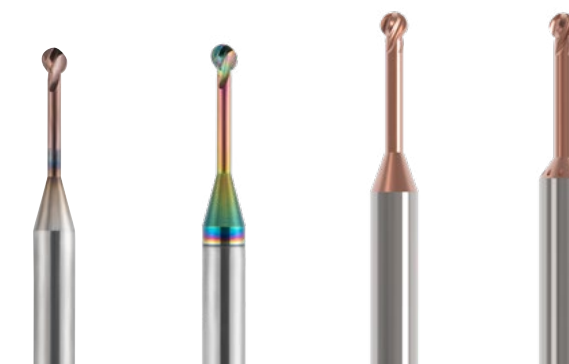
Material application areas

Titanium alloys, CoCr alloys, stainless steel alloys (INOX), steel alloys, zirconium, PMMA, PEEK, wax, aluminum alloys, brass alloys

Quality

- Finely ground flutes
- Sharp, positive geometries
- Very smooth, droplet-free coatings
- Microhardness of up to 7000 HV
- Micro tools and micro geometries with high form accuracy
- Fine-grain solid carbide materials with high fracture toughness and thermal shock resistance
- Strategy support with SolidCAM

The HB microtec® solid carbide deburring tools can be run at extremely high feed rates; thanks to the very good surface quality combined with sharp cutting edges and first-class geometries, users benefit from long tool life.



Custom made deburring tools

On request, HB microtec® also designs custom-ground special deburring shapes. Different diameters, lengths, shapes and numbers of cutting edges can be adapted to your needs.

Use our template for the individual design of your solid carbide deburring tool.

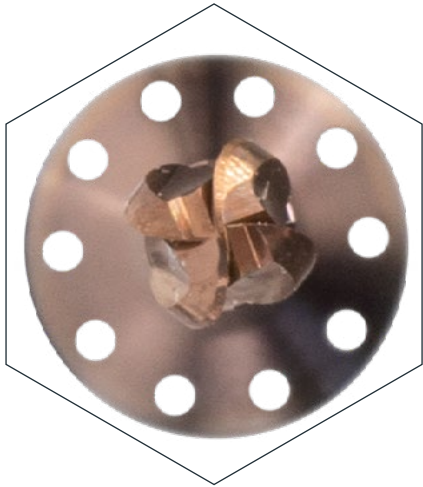
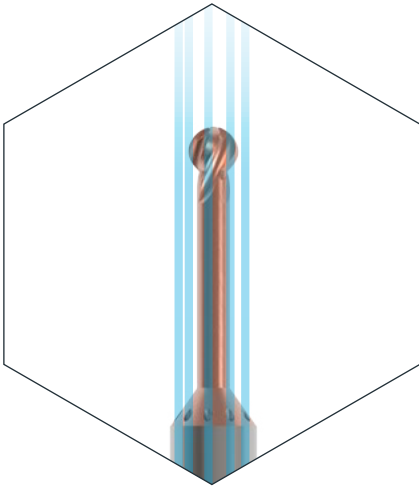
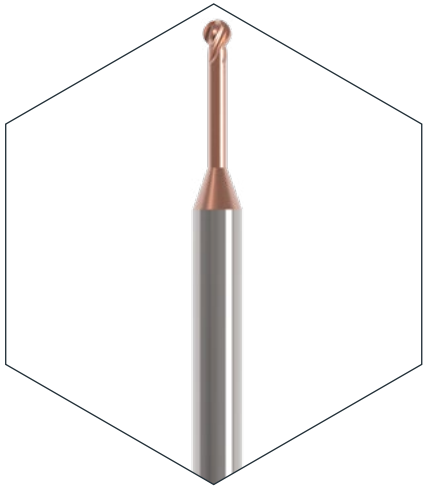
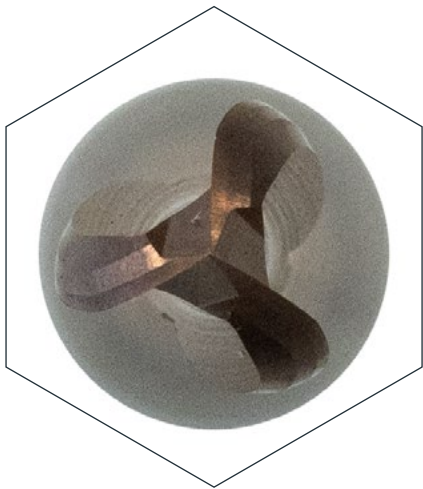
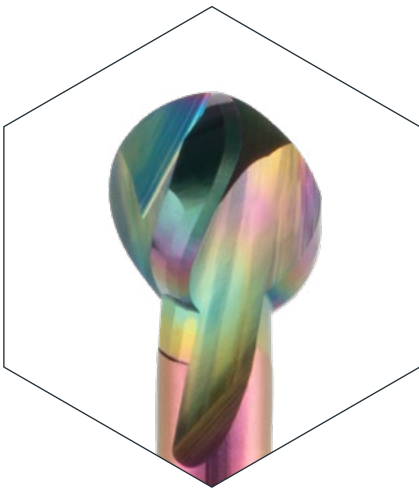
Service

Complete machining technology from a single source:

- Cutting tools – development and manufacturing
- Regrinding of your cutting tools
- Delivery and pick-up service
- 7-10 day express service (14 - 21 with coating)
- Contract grinding of your medical technology products
- Project planning of machining processes
- CAM programming

We will gladly support you in application engineering and in creating NC deburring programs with the CAM system SolidCAM.

	Product image	Product Category	Rm [N/mm²]	Page
		INOX-Lollipop	up to 1570	8
		Titan-Lollipop	up to 1570	10
		Lollipop-Z4 260°	up to 1570	14
		Lollipop-Z4 260° cooled	up to 1570	16



ACTIONMILL INOX-Lollipop

Ø 0.8 - Ø 10.0



Overview:

- High-performance Lollipop mill from Ø 0.8 mm to Ø 10 mm
- Deburring of demanding and complex contours using ball-shaped cutting edges
- 3 cutting edges cutting over 305° of the ball
- For INOX (stainless steel), titanium G3 to G5; steel and cast iron
- Deburring, chamfering or line milling with one tool

Page 8

ACTIONMILL TITAN-Lollipop

Ø 0.8 - Ø 10.0



Overview:

- High-performance Lollipop mill from Ø 0.8 mm to Ø 10 mm
- Deburring of demanding and complex contours using ball-shaped cutting edges
- 3 cutting edges cutting over 305° of the ball
- For TITANIUM G1 & G2; aluminum, plastics, brass
- Deburring, chamfering or line milling with one tool

Page 10

ACTIONMILL Lollipop-Z4 260°

Ø 1.0 - Ø 10.0



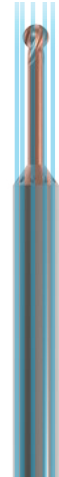
Overview:

- 260° cutting edge circumference of the full radius mill from Ø1.0 to Ø10.0 with Z4
- Undercuts possible
- High-quality and precise surfaces
- Center cutting
- Short process times and high process reliability (long service life)
- Chrome-free coating prevents cross-contamination with medical parts

Page 14

ACTIONMILL Lollipop-Z4 260° cooled

Ø 1.0 - Ø 10.0 integrated cooling



Overview:

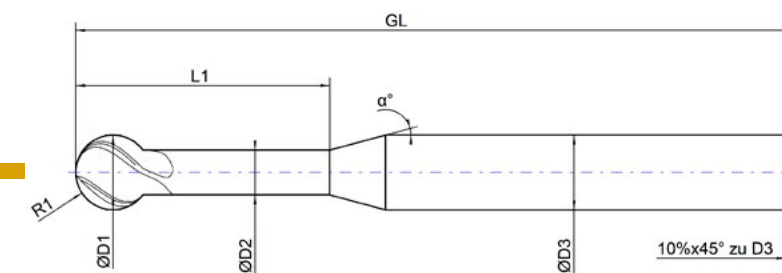
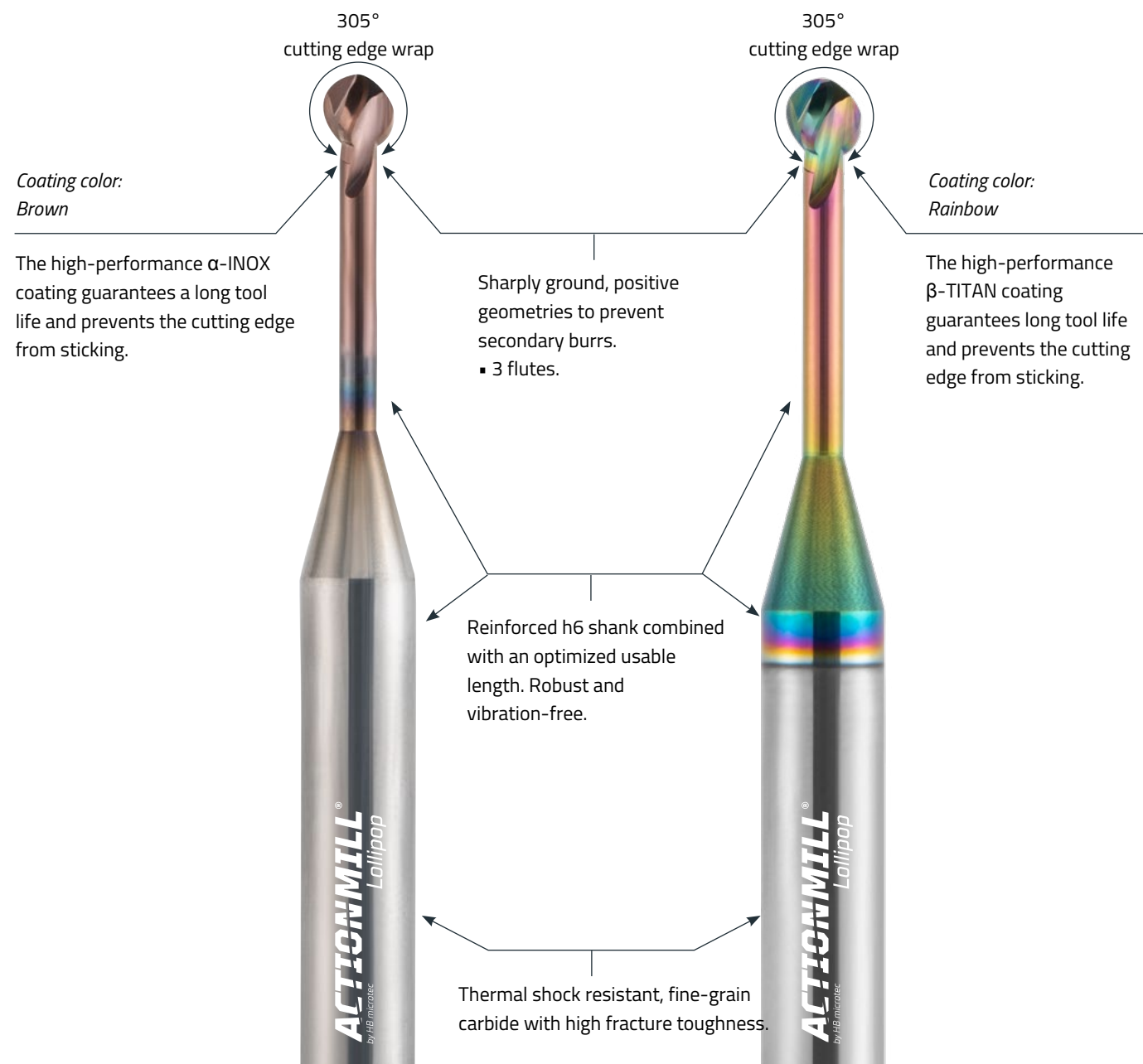
- 260° cutting edge circumference of the full radius mill from Ø1.0 to Ø10.0 with Z4
- Integrated cooling prevents chip accumulation
- High-quality and precise surfaces
- Undercuts possible & center cutting
- Short process times and high process reliability (long service life)
- Chrome-free coating prevents cross-contamination with medical parts

Page 16

INOX-Lollipop

from $\varnothing 0.8 \pm 0.02$ mm
to $\varnothing 10 \pm 0.02$ mm

TITAN-Lollipop



☐ Inquiry

☐ Order

Order number: _____

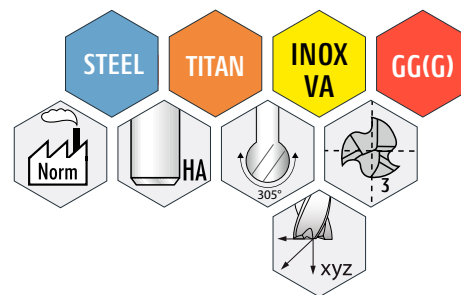
Other: _____

Dimensions: D ₁ : _____ GL: _____ R ₁ : _____ D ₂ : _____ L ₁ : _____ α : _____ D ₃ : _____ Z: _____		Coating: ☐ Coated*: _____ ☐ Uncoated	Cooling channels: ☐ No ☐ Yes
Material to be machined: _____		Shank shape: _____	Cutting direction: ☐ Right ☐ Left
Date, signature & company stamp _____			Quantity: _____
Contact person: _____			

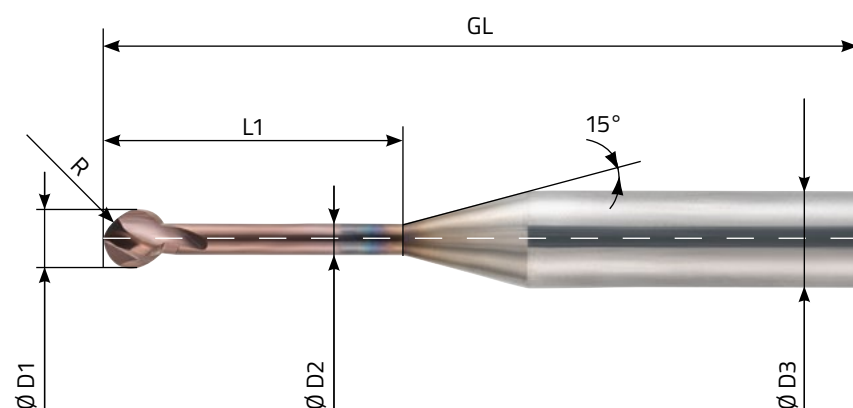
* Without further information, the most suitable coating will be used.



INOX-Lollipop



ACTIONMILL
AM.VRE.0600.080
Full radius deburrer
D1: Ø 0.8 mm
L1: 6.00 mm



5 PRO's of the ACTIONMILL:

- High-performance mill Lollipop from Ø 0.8 mm to Ø 10.0 mm
- Milling of demanding and complex contours using the 305° cutting edges
- No secondary burrs thanks to the 3 flutes
- For INOX (stainless steel), titanium G3 to G5, steel and cast iron
- Deburring, chamfering or line milling with one tool



Online shop



Flyer and cutting data



Article number	Coating	Flutes	D1 (mm)	D1 (inch)	R (mm)	D2 (mm)	D3 h6 (mm)	L1 (mm)	GL (mm)
AM.VRE.0600.080	α-INOX	3	Ø 0.800	-	0.4000	0.40	4.00	6.00	50.00
AM.VRE.0600.100	α-INOX	3	Ø 1.000	-	0.5000	0.50	4.00	6.00	50.00
AM.VRE.0800.120	α-INOX	3	Ø 1.200	-	0.6000	0.60	4.00	8.00	50.00
AM.VRE.0800.150	α-INOX	3	Ø 1.500	-	0.7500	0.75	4.00	8.00	50.00
AM.VRE.0800.1587	α-INOX	3	Ø 1.587	1 / 16"	0.7935	0.79	4.00	8.00	60.00
AM.VRE.1000.180	α-INOX	3	Ø 1.800	-	0.9000	0.90	4.00	10.00	60.00
AM.VRE.1000.200	α-INOX	3	Ø 2.000	-	1.0000	1.00	4.00	10.00	60.00
AM.VRE.1100.220	α-INOX	3	Ø 2.200	-	1.1000	1.10	4.00	11.00	60.00
AM.VRE.1100.2381	α-INOX	3	Ø 2.381	3 / 32"	1.1905	1.19	4.00	11.00	60.00
AM.VRE.1200.250	α-INOX	3	Ø 2.500	-	1.2500	1.25	4.00	12.00	60.00
AM.VRE.1400.280	α-INOX	3	Ø 2.800	-	1.4000	1.40	4.00	14.00	60.00
AM.VRE.1400.300	α-INOX	3	Ø 3.000	-	1.5000	1.50	4.00	14.00	60.00
AM.VRE.1600.3175	α-INOX	3	Ø 3.175	1 / 8"	1.5875	1.59	4.00	16.00	60.00
AM.VRE.1800.350	α-INOX	3	Ø 3.500	-	1.7500	1.75	6.00	18.00	70.00
AM.VRE.1800.380	α-INOX	3	Ø 3.800	-	1.9000	1.90	6.00	18.00	70.00
AM.VRE.1800.3968	α-INOX	3	Ø 3.968	5 / 32"	1.9840	1.99	6.00	18.00	70.00
AM.VRE.1800.400	α-INOX	3	Ø 4.000	-	2.0000	2.00	6.00	18.00	70.00
AM.VRE.1800.420	α-INOX	3	Ø 4.200	-	2.1000	2.10	6.00	18.00	70.00
AM.VRE.2400.450	α-INOX	3	Ø 4.500	-	2.2500	2.25	6.00	24.00	80.00
AM.VRE.2400.4762	α-INOX	3	Ø 4.762	3 / 16"	2.3810	2.38	6.00	24.00	80.00
AM.VRE.2500.500	α-INOX	3	Ø 5.000	-	2.5000	2.50	6.00	25.00	80.00
AM.VRE.2500.520	α-INOX	3	Ø 5.200	-	2.6000	2.60	6.00	25.00	80.00
AM.VRE.2600.5556	α-INOX	3	Ø 5.556	7 / 32"	2.7780	2.78	6.00	26.00	80.00
AM.VRE.2600.580	α-INOX	3	Ø 5.800	-	2.9000	2.90	8.00	26.00	80.00
AM.VRE.2600.600	α-INOX	3	Ø 6.000	-	3.0000	3.00	8.00	26.00	80.00
AM.VRE.2600.620	α-INOX	3	Ø 6.200	-	3.1000	3.10	8.00	26.00	80.00
AM.VRE.2600.635	α-INOX	3	Ø 6.350	1 / 4"	3.1750	3.18	8.00	26.00	80.00
AM.VRE.2800.680	α-INOX	3	Ø 6.800	-	3.4000	3.40	8.00	28.00	90.00
AM.VRE.2800.700	α-INOX	3	Ø 7.000	-	3.5000	3.50	8.00	28.00	90.00
AM.VRE.2800.800	α-INOX	3	Ø 8.000	-	4.0000	4.00	10.00	28.00	90.00
AM.VRE.3000.900	α-INOX	3	Ø 9.000	-	4.5000	4.50	10.00	30.00	90.00
AM.VRE.3200.1000	α-INOX	3	Ø 10.000	-	5.0000	5.00	12.00	32.00	100.00

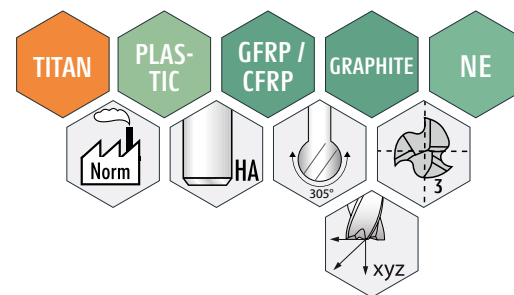
Available from stock

Overview:

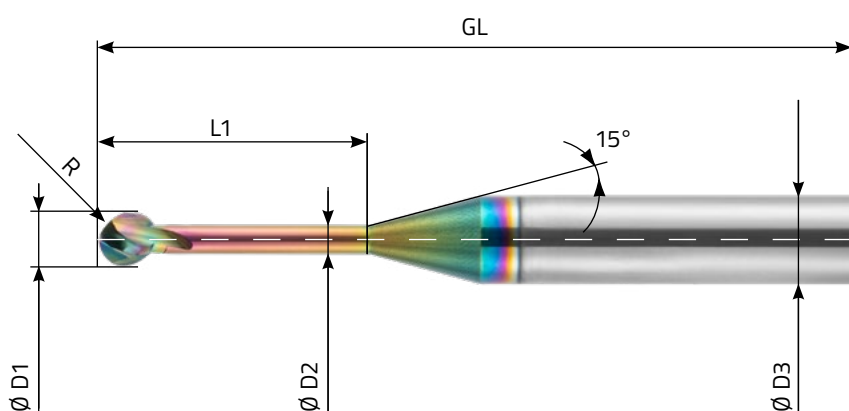
305° ±5° full-wrap cutting edges

The α-INOX coating is very temperature-stable and adhesion-reducing, with a layer thickness of 1.5 ± 0.5 µm and a microhardness of (HV) 3700 + 400, max. operating temperature 1100°C.

TITAN-Lollipop



ACTIONMILL
AM.VRE.0600.080.1 ← Titanium version
Full radius deburrer
D1: Ø 0.8 mm
L1: 6.00 mm



5 PRO's of the ACTIONMILL:

- High-performance mill Lollipop from Ø 0.8 mm to Ø 10.0 mm
- Milling of demanding and complex contours using the 305° cutting edges
- No secondary burrs thanks to the 3 flutes
- For TITANIUM G1 & G2; aluminum, plastics, brass
- Deburring, chamfering or line milling with one tool



Online shop



Flyer and cutting data



Article number	Coating	Flutes	D1 (mm)	D1 (inch)	R (mm)	D2 (mm)	D3 h6 (mm)	L1 (mm)	GL (mm)
AM.VRE.0600.080.1	β-Titan	3	Ø 0.800	-	0.4000	0.40	4.00	6.00	50.00
AM.VRE.0600.100.1	β-Titan	3	Ø 1.000	-	0.5000	0.50	4.00	6.00	50.00
AM.VRE.0800.120.1	β-Titan	3	Ø 1.200	-	0.6000	0.60	4.00	8.00	50.00
AM.VRE.0800.150.1	β-Titan	3	Ø 1.500	-	0.7500	0.75	4.00	8.00	50.00
AM.VRE.0800.1587.1	β-Titan	3	Ø 1.587	1 / 16"	0.7935	0.79	4.00	8.00	60.00
AM.VRE.1000.180.1	β-Titan	3	Ø 1.800	-	0.9000	0.90	4.00	10.00	60.00
AM.VRE.1000.200.1	β-Titan	3	Ø 2.000	-	1.0000	1.00	4.00	10.00	60.00
AM.VRE.1100.220.1	β-Titan	3	Ø 2.200	-	1.1000	1.10	4.00	11.00	60.00
AM.VRE.1100.2381.1	β-Titan	3	Ø 2.381	3 / 32"	1.1905	1.19	4.00	11.00	60.00
AM.VRE.1200.250.1	β-Titan	3	Ø 2.500	-	1.2500	1.25	4.00	12.00	60.00
AM.VRE.1400.280.1	β-Titan	3	Ø 2.800	-	1.4000	1.40	4.00	14.00	60.00
AM.VRE.1400.300.1	β-Titan	3	Ø 3.000	-	1.5000	1.50	4.00	14.00	60.00
AM.VRE.1600.3175.1	β-Titan	3	Ø 3.175	1 / 8"	1.5875	1.59	4.00	16.00	60.00
AM.VRE.1800.350.1	β-Titan	3	Ø 3.500	-	1.7500	1.75	6.00	18.00	70.00
AM.VRE.1800.380.1	β-Titan	3	Ø 3.800	-	1.9000	1.90	6.00	18.00	70.00
AM.VRE.1800.3968.1	β-Titan	3	Ø 3.968	5 / 32"	1.9840	1.99	6.00	18.00	70.00
AM.VRE.1800.400.1	β-Titan	3	Ø 4.000	-	2.0000	2.00	6.00	18.00	70.00
AM.VRE.1800.420.1	β-Titan	3	Ø 4.200	-	2.1000	2.10	6.00	18.00	70.00
AM.VRE.2400.450.1	β-Titan	3	Ø 4.500	-	2.2500	2.25	6.00	24.00	80.00
AM.VRE.2400.4762.1	β-Titan	3	Ø 4.762	3 / 16"	2.3810	2.38	6.00	24.00	80.00
AM.VRE.2500.500.1	β-Titan	3	Ø 5.000	-	2.5000	2.50	6.00	25.00	80.00
AM.VRE.2500.520.1	β-Titan	3	Ø 5.200	-	2.6000	2.60	6.00	25.00	80.00
AM.VRE.2600.5556.1	β-Titan	3	Ø 5.556	7 / 32"	2.7780	2.78	6.00	26.00	80.00
AM.VRE.2600.580.1	β-Titan	3	Ø 5.800	-	2.9000	2.90	8.00	26.00	80.00
AM.VRE.2600.600.1	β-Titan	3	Ø 6.000	-	3.0000	3.00	8.00	26.00	80.00
AM.VRE.2600.620.1	β-Titan	3	Ø 6.200	-	3.1000	3.10	8.00	26.00	80.00
AM.VRE.2600.635.1	β-Titan	3	Ø 6.350	1 / 4"	3.1750	3.18	8.00	26.00	80.00
AM.VRE.2800.680.1	β-Titan	3	Ø 6.800	-	3.4000	3.40	8.00	28.00	90.00
AM.VRE.2800.700.1	β-Titan	3	Ø 7.000	-	3.5000	3.50	8.00	28.00	90.00
AM.VRE.2800.800.1	β-Titan	3	Ø 8.000	-	4.0000	4.00	10.00	28.00	90.00
AM.VRE.3000.900.1	β-Titan	3	Ø 9.000	-	4.5000	4.50	10.00	30.00	90.00
AM.VRE.3200.1000.1	β-Titan	3	Ø 10.000	-	5.0000	5.00	12.00	32.00	100.00

Available from stock

Overview:

305° ±5° full-wrap cutting edges

The β-TITAN coating is very adhesion-reducing, with a friction coefficient of 0.07 against steel and a layer thickness of 1.5 ± 0.5 µm and a microhardness (HV) 5000 +2000, max. operating temperature 1000°C.

Lollipop-Z4 260°

Lollipop-Z4 260° cooled

260°
Edge wrapping

260°
Edge wrapping

from Ø 1.0
to Ø 10.0

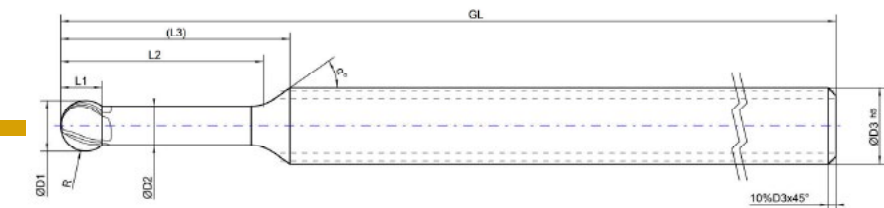
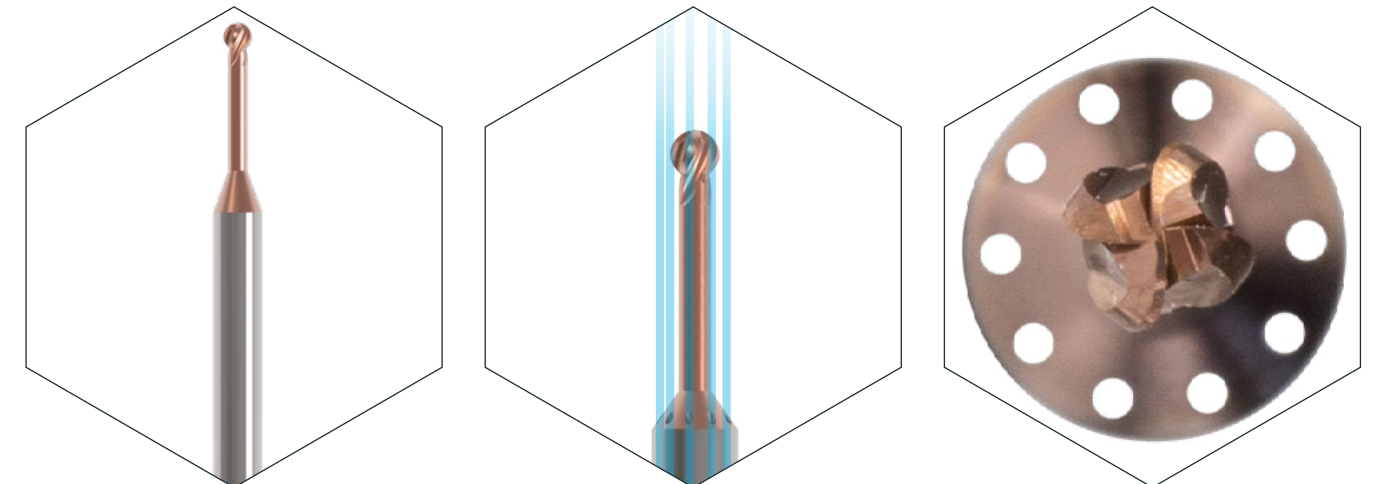
from Ø 1.0
to Ø 10.0

The high-performance α -INOX
coating guarantees a long tool
life and prevents the cutting
edge from sticking.

Integrated cooling channels
protect the tool from over-
heating when cutting titanium
alloys and stainless steels.

The reinforced shank in h6
quality combined with an
optimized effective length
makes the tool robust and
vibration-free.

High feed and cutting
speeds are made possible
by the use of fine-grain solid
carbide with high fracture
toughness.



☐ Inquiry

☐ Order

Order number: _____ Other: _____

Dimensions:

D₁: _____ GL: _____ R₁: _____
D₂: _____ L₁: _____ Z: _____
D₃: _____ L₂: _____
L₃: _____

Coating:

☐ Coated*: _____
☐ Uncoated

Cooling channels:

☐ Yes ☐ No

Cutting direction:

☐ Left ☐ Right

Material to be machined:

Shank shape:

Quantity:

Date, signature & company stamp:

Contact person:

* Without further information, the most suitable coating will be used.

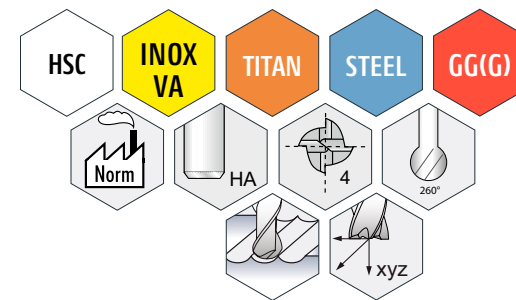


Lollipop-Z4
260°

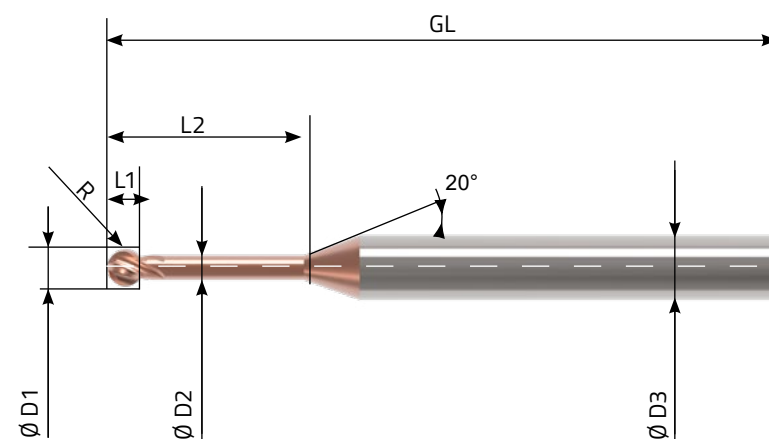


Lollipop-Z4
260° cooled

Lollipop-Z4 260°



ACTIONMILL
260° Ball-shaped head
AM.VRF.260.100.4D
4xD Neck length
Full radius mill
D1: 1.00 mm



■ α-INOX coated



Online shop



Flyer and
cutting data



5 PRO's of the ACTIONMILL:

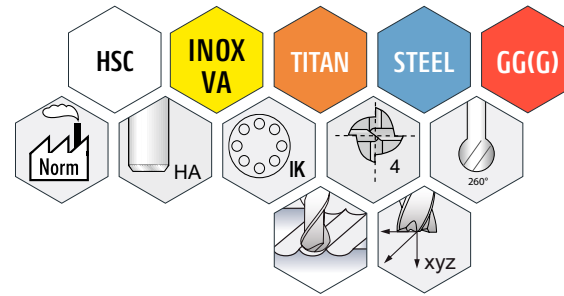
- High-performance Lollipop-Z4 end mills from Ø1 to Ø10
- Undercuts possible, milling of demanding and complex contours using the 260° cutting edges
- Shorter process times and high process reliability
- High-quality and precise surfaces
- Deburring, chamfering, and line milling (5-axis milling)

Article number	D1 (mm)	(inch)	D2 (mm)	D3 h6 (mm)	L1 (mm)	L2 (4xD1 / mm)	R (mm)	GL (mm)
AM.VRF.260.100.4D	Ø 1.000	-	Ø 0.77	Ø 4.00	0.82	4.00	0.500	55.00
AM.VRF.260.150.4D	Ø 1.500	-	Ø 1.15	Ø 4.00	1.23	6.00	0.750	55.00
AM.VRF.260.1587.4D	Ø 1.587	1/16"	Ø 1.22	Ø 4.00	1.30	6.35	0.794	55.00
AM.VRF.260.200.4D	Ø 2.000	-	Ø 1.53	Ø 4.00	1.64	8.00	1.000	55.00
AM.VRF.260.2381.4D	Ø 2.381	3/32"	Ø 1.83	Ø 4.00	1.96	9.52	1.191	55.00
AM.VRF.260.250.4D	Ø 2.500	-	Ø 1.92	Ø 4.00	2.05	10.00	1.250	55.00
AM.VRF.260.300.4D	Ø 3.000	-	Ø 2.30	Ø 6.00	2.46	12.00	1.500	58.00
AM.VRF.260.3175.4D	Ø 3.175	1/8"	Ø 2.43	Ø 6.00	2.61	12.70	1.588	58.00
AM.VRF.260.3968.4D	Ø 3.968	5/32"	Ø 3.04	Ø 6.00	3.26	15.87	1.984	83.00
AM.VRF.260.400.4D	Ø 4.000	-	Ø 3.06	Ø 6.00	3.29	16.00	2.000	83.00
AM.VRF.260.4762.4D	Ø 4.762	3/16"	Ø 3.65	Ø 6.00	3.91	19.05	2.381	83.00
AM.VRF.260.500.4D	Ø 5.000	-	Ø 3.83	Ø 8.00	4.11	20.00	2.500	80.00
AM.VRF.260.5556.4D	Ø 5.556	7/32"	Ø 2.26	Ø 8.00	4.56	22.22	2.778	80.00
AM.VRF.260.600.4D	Ø 6.000	-	Ø 4.60	Ø 8.00	4.93	24.00	3.000	80.00
AM.VRF.260.6350.4D	Ø 6.350	1/4"	Ø 4.87	Ø 8.00	5.22	25.40	3.175	80.00
AM.VRF.260.800.4D	Ø 8.000	-	Ø 6.13	Ø 10.00	6.57	32.00	4.000	100.00
AM.VRF.260.1000.4D	Ø 10.000	-	Ø 7.66	Ø 12.00	8.21	40.00	5.000	101.00

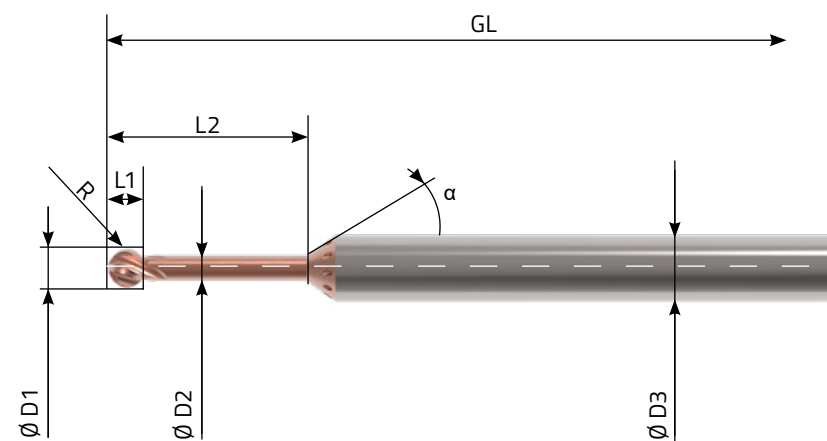
Available from stock



Lollipop-Z4 260° cooled



ACTIONMILL
260° Ball-shaped head
AM.VRF.260.100.4D.IK ← Integrated cooling
Full radius mill D1: 1.00 mm 4xD Neck length



■ α-INOX coated



Online shop



Flyer and
cutting data



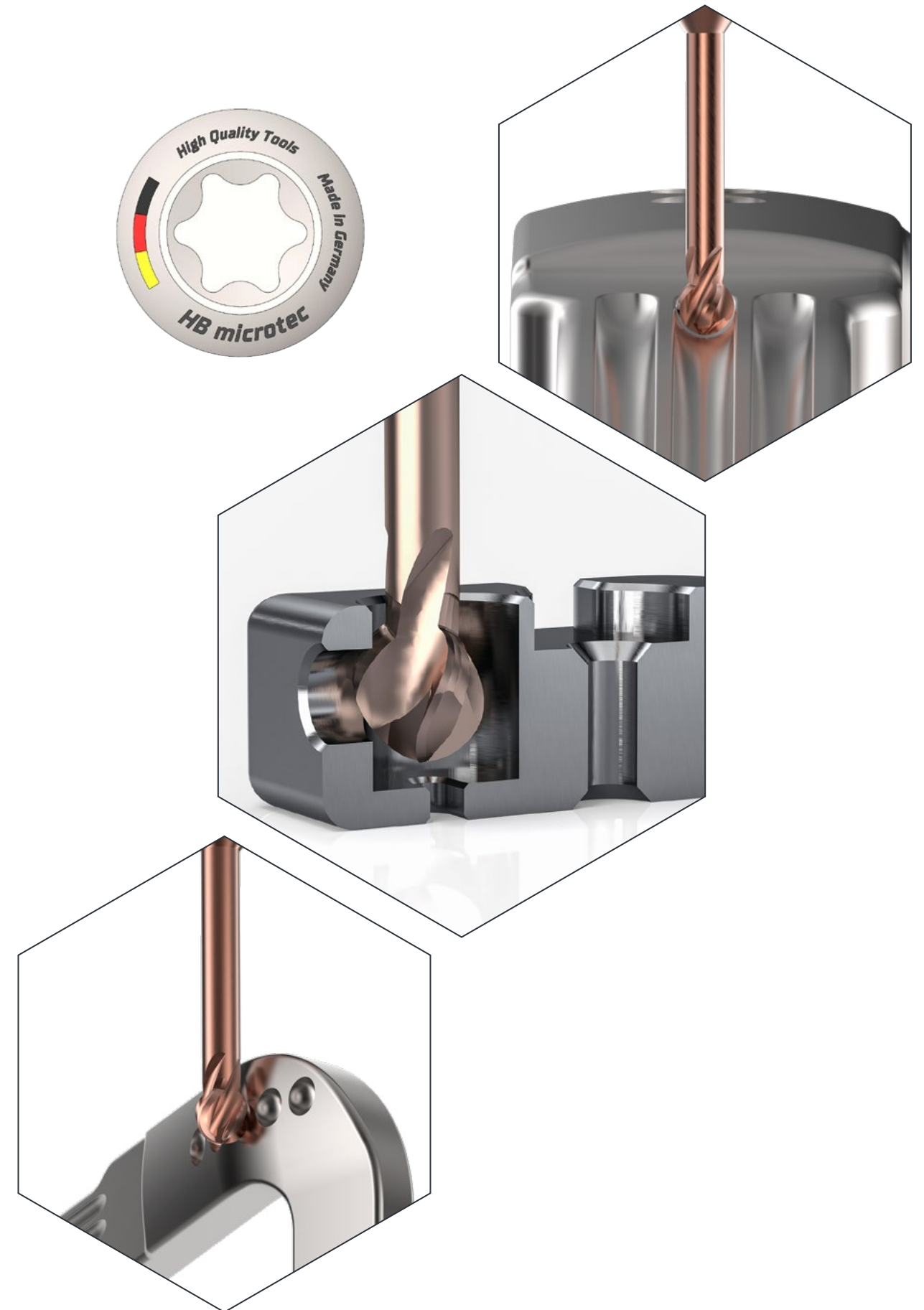
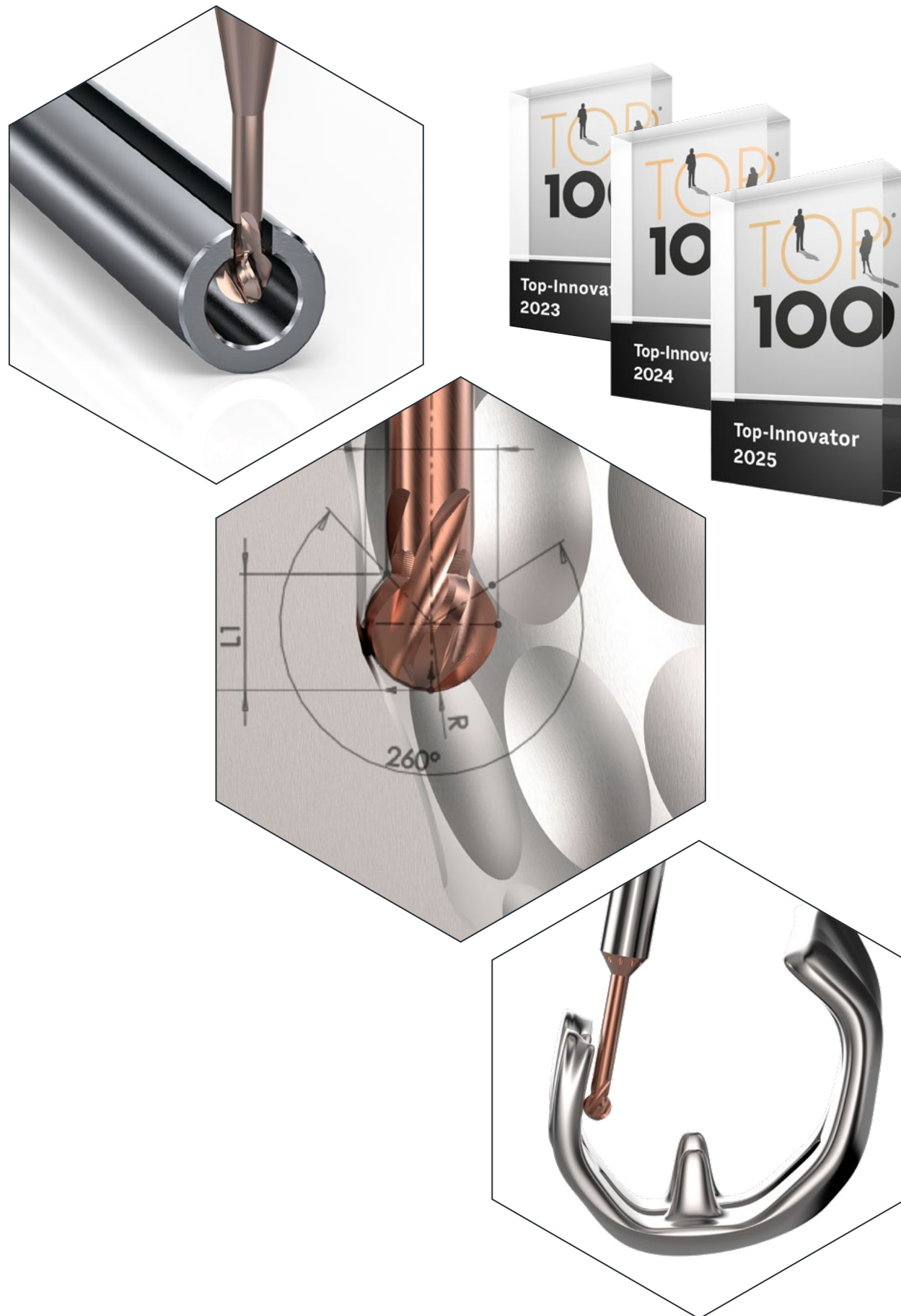
5 PRO's of the ACTIONMILL:

- High-performance Lollipop-Z4 end mills from Ø1 to Ø10
- Undercuts possible, milling of demanding and complex contours using the 260° cutting edges
- Shorter process times and high process reliability
- High-quality and precise surfaces
- Deburring, chamfering, and line milling (5-axis milling)

Article number	D1 (mm)	(inch)	D2 (mm)	D3 h6 (mm)	L1 (mm)	L2 (4xD1 / mm)	R (mm)	α (°)	GL (mm)
AM.VRF.260.100.4D.IK	Ø 1.000	-	Ø 0.77	Ø 4.00	0.82	4.00	0.500	25.00	60.00
AM.VRF.260.150.4D.IK	Ø 1.500	-	Ø 1.15	Ø 4.00	1.23	6.00	0.750	30.00	60.00
AM.VRF.260.1587.4D.IK	Ø 1.587	1/16	Ø 1.22	Ø 4.00	1.30	6.35	0.794	30.00	60.00
AM.VRF.260.200.4D.IK	Ø 2.000	-	Ø 1.53	Ø 4.00	1.64	8.00	1.000	35.00	60.00
AM.VRF.260.2381.4D.IK	Ø 2.381	3/32	Ø 1.83	Ø 4.00	1.96	9.52	1.191	35.00	60.00
AM.VRF.260.250.4D.IK	Ø 2.500	-	Ø 1.92	Ø 4.00	2.05	10.00	1.250	35.00	60.00
AM.VRF.260.300.4D.IK	Ø 3.000	-	Ø 2.30	Ø 6.00	2.46	12.00	1.500	35.00	60.00
AM.VRF.260.3175.4D.IK	Ø 3.175	1/8	Ø 2.43	Ø 6.00	2.61	12.70	1.588	35.00	60.00
AM.VRF.260.3968.4D.IK	Ø 3.968	5/32	Ø 3.04	Ø 6.00	3.26	15.87	1.984	35.00	60.00
AM.VRF.260.400.4D.IK	Ø 4.000	-	Ø 3.06	Ø 6.00	3.29	16.00	2.000	35.00	60.00
AM.VRF.260.4762.4D.IK	Ø 4.762	3/16	Ø 3.65	Ø 6.00	3.91	19.05	2.381	35.00	84.00
AM.VRF.260.500.4D.IK	Ø 5.000	-	Ø 3.83	Ø 8.00	4.11	20.00	2.500	35.00	84.00
AM.VRF.260.5556.4D.IK	Ø 5.556	7/32	Ø 2.26	Ø 8.00	4.56	22.22	2.778	35.00	84.00
AM.VRF.260.600.4D.IK	Ø 6.000	-	Ø 4.60	Ø 8.00	4.93	24.00	3.000	35.00	84.00
AM.VRF.260.6350.4D.IK	Ø 6.350	1/4	Ø 4.87	Ø 8.00	5.22	25.40	3.175	35.00	84.00
AM.VRF.260.800.4D.IK	Ø 8.000	-	Ø 6.13	Ø 10.00	6.57	32.00	4.000	35.00	93.00
AM.VRF.260.1000.4D.IK	Ø 10.000	-	Ø 7.66	Ø 12.00	8.21	40.00	5.000	35.00	101.00

Available from stock





"Install and ACTION!"

Because this is exactly what the worry-free cutting tools of the ACTIONDRILL[®] range make possible! Or tools from the TARGETDRILL[®] range that hit the target precisely!

High performance down to the last µm!

This way, the cost-benefit factor is perfectly tailored to you. Demanding and innovative high-performance drills of the highest quality require continuity not only in production, but from the entire HB microtec Team!

Repeatable!

This covers the entire process chain, from geometry development and design to the pre-treatment of the cutting edges, coating and finishing of the surfaces right through to the quality assurance of our ACTIONDRILL[®] and TARGETDRILL[®], as well as ACTIONMILL[®] and TARGETMILL[®] tools.



What to expect from the entire HB microtec team:

- Innovative specialists in "micro" machining
- State-of-the-art manufacturing equipment and measuring instruments, enabling production in the micron range
- Motivation and passion for challenges
- Repeated precision in the µm range
- Practical service:
the HB microtec team accompanies and supports you in all phases and throughout the entire life cycle of your product
- High tool performance and high service competence
- Ideas for customer-specific solutions, e.g. combination tools that often replace a number of individual tools and shorten machining time
- The highest possible standards of product quality
- Guaranteed series tool reliability and traceability (ISO 9001 certified)



We love challenges!

Put us to the test and send us your requirements today!

At HB microtec, we love challenges – and the more special they are, the clearer it becomes that we can deliver the unique features you are looking for.

Call +49 7461 1657280 or

write to us at kontakt@hb-microtec.de



ACTIONMILL[®]
by HB microtec
Lollipop

ACTIONMILL[®]
by HB microtec
Lollipop-Z4 260°

ACTIONMILL[®] by HB microtec

Lollipop



HB microtec[®]
ACTIONTOOLS & ENGINEERING

HB microtec GmbH & Co. KG

Bischof-Sproll-Straße 6

78532 Tuttlingen

Germany

Tel. +49 7461 1657280

Fax +49 7461 1657281

Email kontakt@hb-microtec.de

Web www.HB-microtec.de

