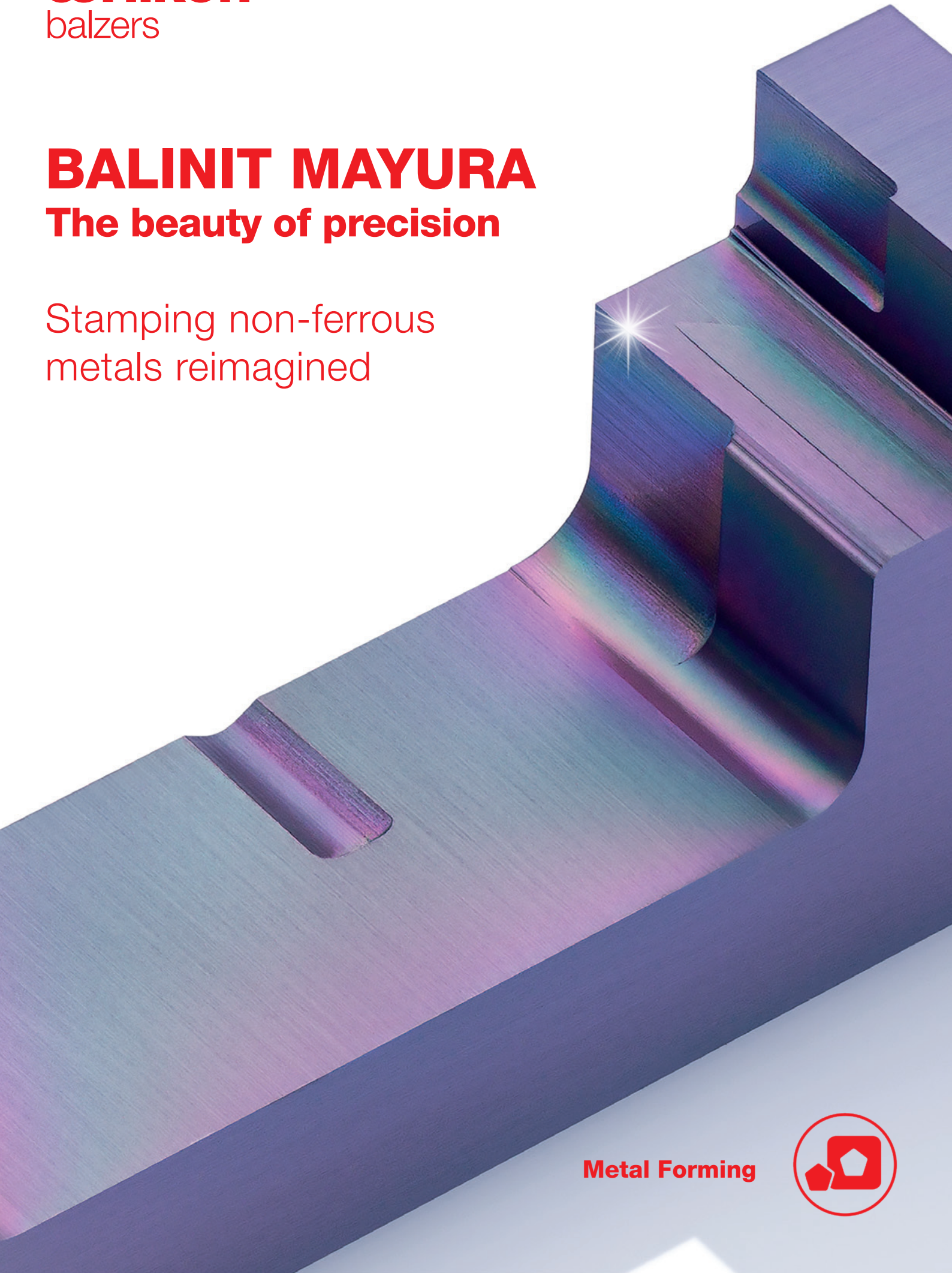


**oerlikon**  
balzers

# **BALINIT MAYURA**

## **The beauty of precision**

Stamping non-ferrous  
metals reimagined



**Metal Forming**



# BALINIT MAYURA – the next generation of carbon-based coatings for stamping non-ferrous metals

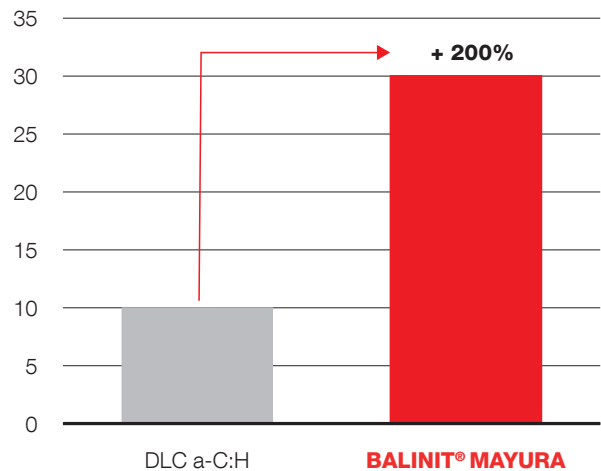
BALINIT® MAYURA catches the eye with its brilliant colours, and reveals its true value in the demanding stamping of non-ferrous metals. The coating is harder and smoother than previous coatings, which minimises material adhesion, and it is extremely thin, which keeps cutting edges sharp.

Tool manufacturers and end users benefit from increased tool life, maximum precision and higher productivity in the manufacturing process. BALINIT® MAYURA takes stamping of non-ferrous metals to the next level, whether it's aluminium or copper alloys (e.g. phosphor bronze or brass).

## BALINIT MAYURA – forming of 4 mm thick aluminium

<b>Tool</b>	Punch X155CrMoV12 / 1.2379 / D2 58-60 HRC 120 × 116 × 53 mm
<b>Workpiece</b>	Aluminium 7075-T0 – 4 mm
<b>Challenge</b>	- Reduce visual defects due to sticking - Reduce polishing time
<b>Benefit</b>	- Lower scrap rate - Less polishing time - Better productivity

Tool life [1,000 parts]



## Outstanding coating properties ...

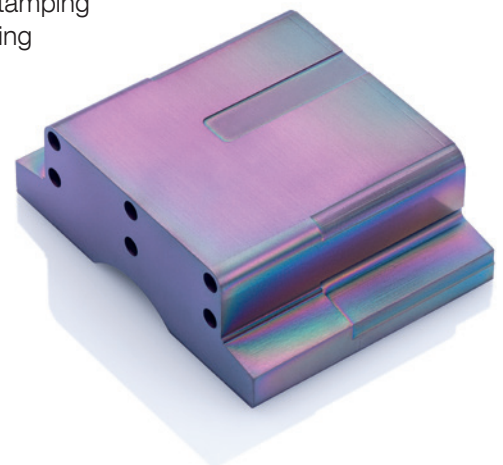
	BALINIT® MAYURA
Coating material	ta-C
Coating hardness $H_{IT}$ [GPa]	> 65
Coefficient of friction (dry)	< 0.10
Max. service temperature [°C]	> 500
Coating thickness [µm]	0.3
Coating temperature [°C]	< 150
Coating colour	rainbow / rainbow black*

\* Variations in colour depend on tool dimensions, applications and geometry.  
All given data are approximate values and depend on application, environment and test conditions.

## ... for challenging applications

### Taking your stamping process to the next level

- Aluminium alloys
- Copper alloys (e.g. phosphor bronze or brass)
- Trimming
- Flanging
- Precision stamping
- Deep drawing
- Bending



**Discover how BALINIT MAYURA boosts performance.  
Contact us now!**

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