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BALINIT MAYURA

The beauty of precision

The next level of machining
non-ferrous materials

Cutting Tools



BALINIT MAYURA – the next generation of carbon-based coatings for machining non-ferrous materials

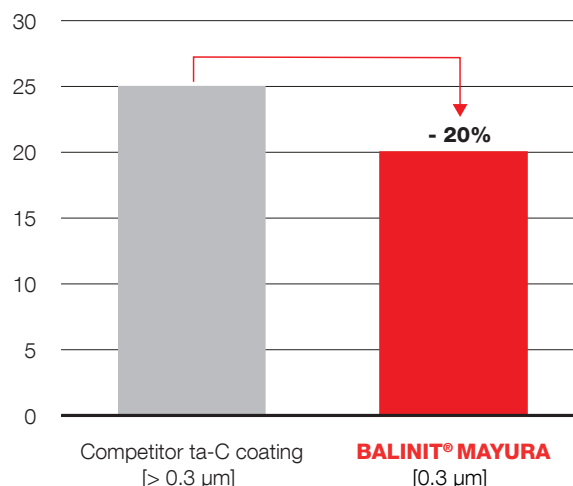
BALINIT® MAYURA catches the eye with its brilliant colours, and reveals its true value in the demanding machining of non-ferrous materials and polymers: the ta-C coating is harder and smoother than previous coatings, and at the same time extremely thin. This minimises material adhesion and ensures cutting edges remain sharp.

Tool manufacturers and end users benefit from increased tool life, maximum precision and higher productivity in the manufacturing process. BALINIT® MAYURA takes machining non-ferrous materials to the next level, whether it's aluminium alloys with up to 12% silicon content, copper and brass alloys, or polymers.

BALINIT MAYURA – drilling ADC 12

Tool	Drill (diameter: 6 mm)
Workpiece	ADC 12 (aluminium alloy with 12% Si)
Cutting data	Cutting speed: 80 m/min Feed: 0.13 mm/rev Hole depth: 18 mm No. of holes: 400
Source	Japanese tool manufacturer
Benefit	Machining aluminium with a high silicon content: - Significantly less wear - Less adhesion for sharp cutting edges

Flank wear after 400 holes [µm]



Outstanding coating properties ...

	BALINIT® MAYURA
Coating material	ta-C
Coating hardness H_{1T} [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 machining to the next level

- Aluminium alloys < 12% Si (milling, drilling, turning, threading)
- Polymers (milling, drilling, turning)
- Copper (milling, drilling, turning, threading)



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Discover how BALINIT MAYURA boosts performance. Contact us now!

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