

BALINIT FORMERA

The coating solution for Cold Forging
fasteners and components



Metal Forming



BALINIT FORMERA – The best choice for Cold Forging applications

Cold forging is being used in a wide variety of industries including fastener, automotive etc. Cold forged components are of high accuracy and surface quality.

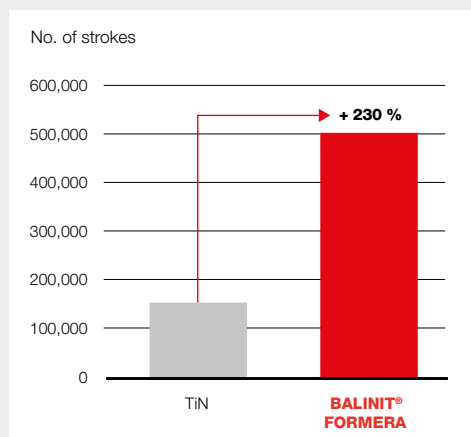
However, the plastic flow characteristics of the workpiece have to be improved by high quality tooling with added performance delivered by premium coatings.

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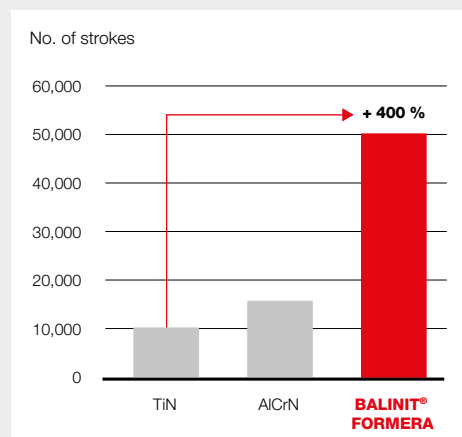


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BALINIT® FORMERA Performance



Tool	Extrusion die Ø 60 mm, 5 station cold former Collar nut manufacturing
Tool material	HSS 1.3243 – AISI M35
Challenge	Difficult forward extrusion process wears out the die
Solution	Tool life increased by 200 % Higher productivity due to less frequent tool changes
Source	Automotive fastener supplier, Europe



Tool	Piercing punch Ø 19 mm
Tool material	ASP® 2023 – HSS-PM 1.3395 – AISI M3:2 Cemented carbide tip
Challenge	High wear in tough piercing and sizing operation
Solution	Tool life increased by 400 % Burr formation reduced
Source	Global leader in cold forming components

BALINIT® FORMERA delivers superior performance in cold forging applications

- Excellent results in forward and backward extrusion, piercing, upsetting and trimming
- Better surface quality (reduced roughness) of the workpiece
- Reduction of burr after piercing operations

Take advantage of outstanding coating properties

	BALINIT® FORMERA*
Coating material	CrAlN-based
Coating hardness H _{Tr} (GPa)	28 ± 2
Coefficient of friction (dry) vs. steel	0.35
Max. coating temperature (°C)	480
Coating colour	silver-light grey

* Available in BALINIT® ADVANCED Series

Benefit from the BALINIT FORMERA coating solutions Contact us now

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All given data are approximate values and dependent on application, environment and test conditions.

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