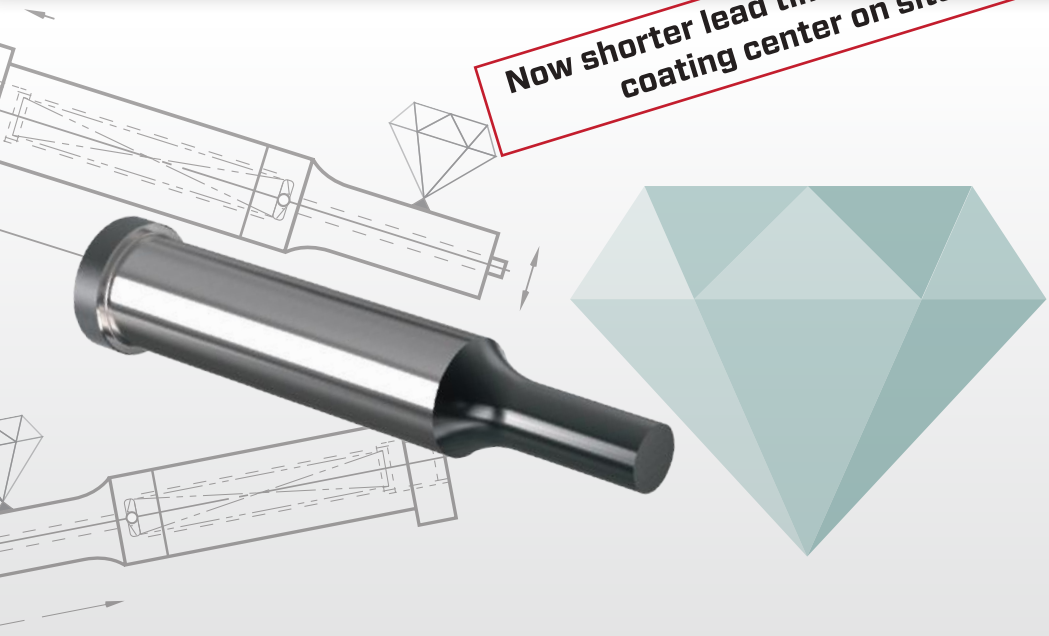
BALINIT® TRITON STAR

DLC COATING

Now shorter lead time thanks to our coating center on site.



Diamond-like-carbon

Refine your punching process

a MISUMI Group Company

DAYTON PROGRESS
We care about your time!

What does DLC coating mean?

BALINIT® TRITON STAR is a carbon-based coating. Additional lubrication is no longer required due to the nature of the material.

Areas of application

DLC coatings are used in punching processes where the hardest wear conditions prevail and high speeds are used for working. Friction losses are kept as low as possible by the coating. This makes BALINIT® TRITON STAR ideal for punching aluminium and other non-ferrous metals.

Characteristics

BALINIT® TRITON STAR is a double layered coating and thus has optimum anti-frictional properties. It provides excellent protection against abrasion, tribo-oxidation and formation of built-up edges. Stable under high surface pressure, the DLC coating prevents galling and cold welding at the punch.

How to order the DLC coating

Just add the abbreviation **XCD** at the end of our callout.
Example: *AJX 13 1990 M2 P8.0 XCD*

Coating material	CrN + aC:H
Micro-hardness (HV 0.05)	2500
Coefficient of friction(dry) vs. steel	0.1-0.2
Coating thickness (µm)	2-5
max. Application temperature	300°C

oerlikon balzers & DAYTON PROGRESS
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Other in-house* coatings

*Coating takes place at the Oerlikon Balzers Coating Centre at the DAYTON Portugal site

All-round coating	BALINIT® A (XNT)	BALINIT® B (XCN)	BALINIT® ALCRONA PRO (XNA)	BALINIT® ALCRONA PRO Advance (XNAP)
Coating material	TiN	TiCN	AlCrN	Values similar to XNA. Also suitable for use under extreme tension profiles.
Micro-hardn. (HV 0.05)	2300	3000	3200	
Friction coefficient	0.4	0.4	0.35	
Coating thickness (µm)	3±1	3±1	4±1	
Max. Application temperature °C	600	400	1100	
Area of application	Top all-rounder in punching and forming	High hardness, just slightly higher brittleness than TiN	Top all-rounder in punching and forming	

Coatings for special materials	BALINIT® D (CRN)	BALINIT® HARDLUB (XANL)	BALINIT® FUTURA NANO (XAN)	BALINIT® LUMENA
Coating material	CrN	TiAlN + WC/C	TiAlN	TiAlN
Micro-hardn. (HV 0.05)	1750	3300	3300	3300
Friction coefficient	0.3-0.5	0.2	0.35	0.35
Coating thickness (µm)	5±1	5±1	3±1	7±2
Max. Application temperature °C	700	800/400	900	900
Area of application	Punching and forming of copper or brass	Suitable punching applications at high temperatures	Punching of non-ferrous metals such as copper, aluminium or zinc.	Punching of stainless steels and high-strength materials

Coatings for plastics processing	BALINIT® C	BALINIT® CROVEGA
Coating material	WC/C	CrN
Micro-hardn. (HV 0.05)	Up to 1500	1750
Friction coefficient	0.1-0.2	0.5
Coating thickness (µm)	3±1	18±3
Max. Application temperature °C	300	700
Area of application	Plastic injection moulding	Plastic injection moulding

(Text in brackets indicates DAYTON purchase order text)

DAYTON PROGRESS

The only supplier of in-house coatings in the area of punch and die in Europe

The benefits to you of our coating centre in the factory:

- Faster lead time
- On-site specialists
- Co-operation with Oerlikon Balzers to your advantage
- Smooth-running processes

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