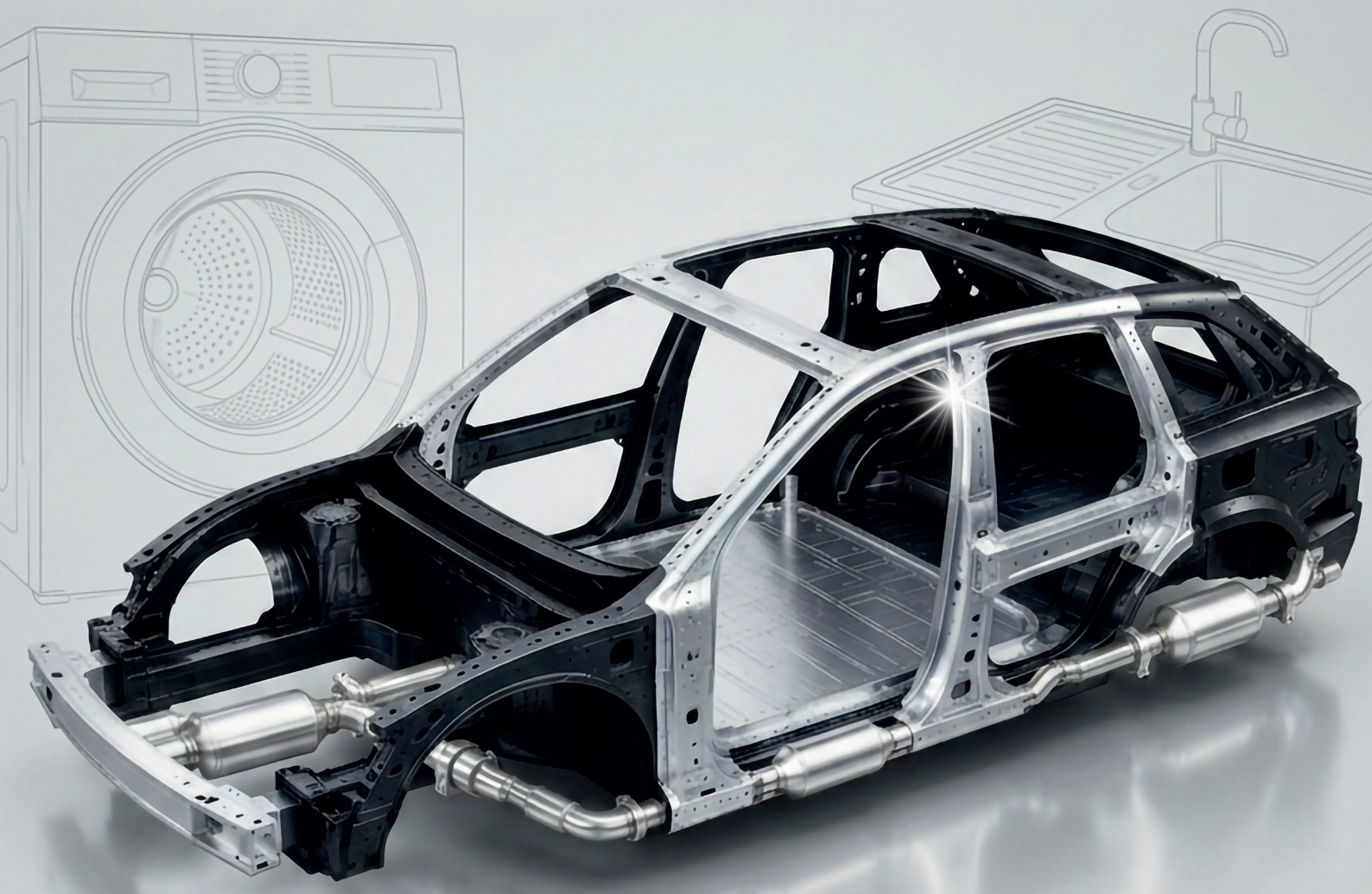
oerlikon
balzers

BALINIT FORTENSA

Advanced PVD coating for reliable forming under extreme conditions



AI generated content

Metal Forming

BALINIT FORTENSA

Performance that pays off. Stroke after stroke.

Forming AHSS, UHSS, stainless steel and thick-sheet materials demands more than force alone. It requires a coating capable of withstanding extreme mechanical loads while maintaining reliable performance over time. BALINIT® FORTENSA from Oerlikon Balzers is the next-generation PVD coating developed for demanding metalforming applications. With increased fatigue resistance, extended tool life and stable forming performance under extreme conditions, it helps manufacturers maintain consistent part quality, reduce downtime and lower production costs.

BALINIT FORTENSA applications

- Automotive
  - A-/B-pillars
  - Roof / side rails
  - Side impact & bumper beams
  - Cross members / structural reinforcements
- Non-Automotive
  - Appliance structural & reinforcement parts
  - Industrial equipment structural components
  - High-strength brackets & frames

Coating properties at a glance: BALINIT FORTENSA

Coating material	TiAl-based
Coating hardness H_{IT}[GPa]	30 ± 2
Compressive stress [GPa]	2.5 ± 1.0
Max. service temperature [°C]	< 800
Coating color	Light brown*

* Variations in colour depend on tool dimensions, applications and geometry.

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

Higher fatigue resistance

Stable forming performance and consistent part quality over extended production runs

Excellent wear resistance

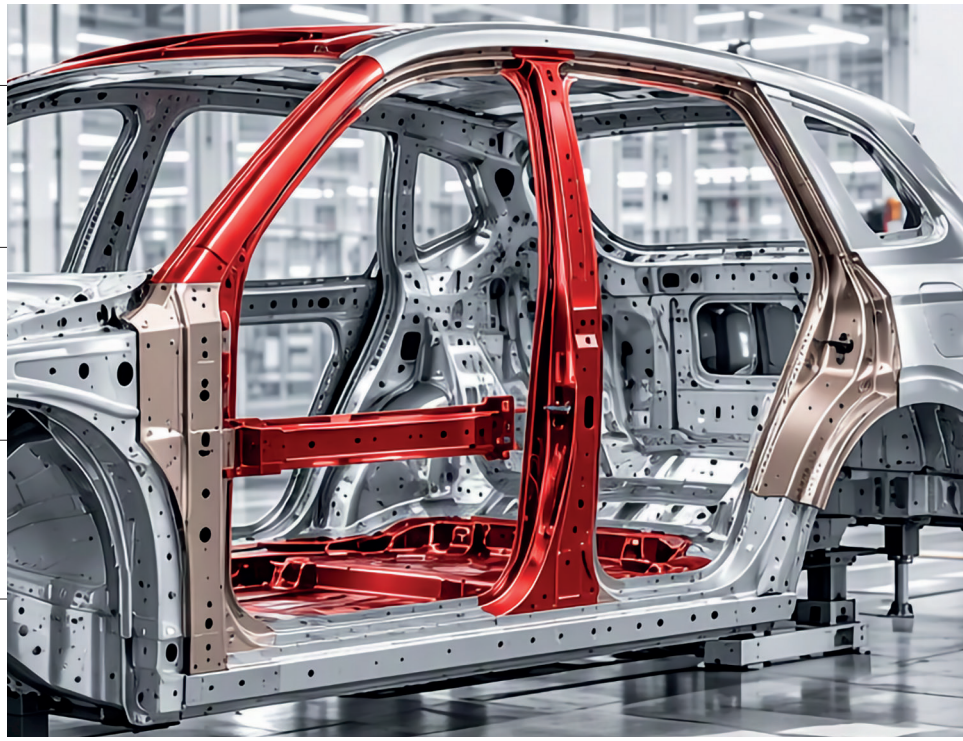
Longer tool life and reduced maintenance requirements

Reliable performance in demanding applications

Greater process stability across a wide range of demanding metal-forming applications

Long-lasting coating performance

Reduced downtime, improved productivity and lower production costs



Discover how BALINIT FORTENSA helps maximize productivity and reduce costs – connect with us!

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