

ZinKlad® 250 M



Protective coating for safety critical fasteners

ZinKlad 250 M was one of the first hexavalent chromium-free coatings to be adopted by global automotive manufacturers including Ford and GM. Introduced at the beginning of the new millennium, it continues today to deliver excellent corrosion resistance coupled with consistent performance.

ZinKlad 250 M can be applied to most fasteners requiring sacrificial protection. Its primary use is for coating high tensile fasteners, threaded or unthreaded. The benefit of using **ZinKlad 250 M** on these parts is that the zinc rich coating is free of hydrogen embrittlement according to ASTM B695 and DIN EN ISO 12683. On threaded fasteners a lubricant is often applied to give a consistent coefficient of friction of 0.15.

When it comes to providing protection for safety critical fasteners, **ZinKlad 250 M** delivers.



Features

- Global availability
- Excellent corrosion resistance
- Coating free of thread and head fill
- Coating uniformity and freedom from parts 'sticking'
- Suitable for high tensile steels:
 - No need for the hydrogen deembrittlement process
- Consistency - process steps which are always the same

Already on it.



ZinKlad 250 M

Hexavalent chromium-free coatings

Performance Data

ZinKlad 250 M combines an homogenous metallic zinc deposit of 8 microns minimum thickness, with a high build iridescent passivate and an optional clear topcoat with integral lubricant.

The zinc deposits are applied from the **MacuGuard** mechanical zinc process and completed with **TriPass ELV 1500 LT** trivalent passivate which imparts a silver-iridescent color, whilst extending corrosion resistance against the formation of white rust. An optional application of **Torque 'N' Tension 15** provides both increased corrosion resistance and modifies surface properties to ensure uniform torque and clamping characteristics.

ZinKlad 250 M consistently meets minimum performance demands for corrosion and torque modification.

Corrosion Performance (ASTM B-117 / ISO-9227)		
	First white corrosion	First red corrosion
ZinKlad 250 M	96 h	240 h

Recommended processes used to create ZinKlad 250 M coatings	
Zinc	Provides the sacrificial protection
Macuguard	Mechanical Zinc
Trivalent Passivates	Protects the zinc deposit from white rust
TriPass ELV 1500LT	Excellent corrosion resistance, low temperature application
Topcoat	Improves corrosion resistance and modifies friction properties
Torque 'N' Tension 15	Average CoF 0.15, range 0.12 – 0.18 for fasteners



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