# ZinKlad™ 250

Hexavalent Chromium-Free Coatings


## The Industry Standard For Performance Consistency

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

Specified by global automotive manufacturers including Ford, GM and VW-Audi, today there are more than 50 application lines around the world producing **ZinKlad 250**.

**ZinKlad 250** can be applied to all steel components requiring sacrificial protection. Its primary use is to satisfy fastener engineers' need for a reliable and cost effective coating with a consistent coefficient of friction.

When it comes to providing protection automotive engineers rely on, **ZinKlad 250** delivers.

## KEY FEATURES

- **Production Proven for More than 10 Years**
- **Excellent Corrosion Resistance**
- **Consistent Performance**
- **Extensively Specified**
- **Global Availability**

ZinKlad

MacDermid Enthone
INDUSTRIAL SOLUTIONS

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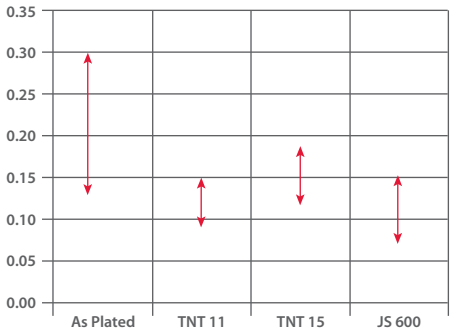
## ZinKlad 250 Performance Data

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

The zinc deposits are applied from our range of **Envirozin** and **Kenlevel** zinc electroplating processes. MacDermid **TriPass ELV** range of high build trivalent passivate films impart a silver- iridescent color, whilst extending corrosion resistance against the formation of white rust. **HydroKlad** and **Torque'n'Tension** topcoats provide increased corrosion resistance. **Torque'n'Tension** topcoats also modify surface properties to ensure uniform torque and clamping characteristics.

| Corrosion Performance (ASTM B-117) | | |
|---|---|---|
| | First White Corrosion | First Red Corrosion |
| ZinKlad 250 | 120 h | 384 h |

**CoF - MacDermid Friction Control Fluids on Zinc Electroplate**




| Recommended Processes Used To Create ZinKlad 250 Coatings | |
|---|---|
| **Zinc** | **Provides the sacrificial protection** |
| **Envirozin** | Alkaline, exceptional deposit distribution |
| **Kenlevel** | Acid, brightest deposits and fast plating speeds |
| **Trivalent Passivates** | **Protects the zinc deposit from white rust** |
| **TriPass ELV 2000** | Excellent corrosion resistance even with short immersion times |
| **TriPass ELV 1500LT** | Excellent corrosion resistance, low temperature application |
| **Topcoat** | **Improves corrosion resistance and modifies friction properties** |
| **Torque 'N' Tension 11** | Average CoF 0.11, range 0.09 – 0.15 for fasteners |
| **Torque 'N' Tension 15** | Average CoF 0.15, range 0.12 – 0.18 for fasteners |
| **HydroKlad** | Recommended for larger (rack) plated components |

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