

ZinKlad™ 1000 B

Hexavalent Chromium-Free Coatings



Black Finish High Performance Coating

ZinKlad 1000 B the high performance black coating for automotive applications. Hexavalent chromium-free, with a deposit hardness above 500 HVN it is extensively used for exterior, interior, self-thread cutting fasteners and steel pressings. Production proven for over 10 years, it delivers an exceptional black appearance and corrosion resistance.

ZinKlad 1000 B is specified by global automotive manufacturers including Chrysler-FIAT, Ford, GM, PSA, Renault and VW-Audi. Today there are more than 15 application lines around the world producing **ZinKlad 1000 B** every day.

ZinKlad 1000 B coupled with the appropriate Torque 'N' Tension coating provides exceptional corrosion resistance and a consistent coefficient of friction. It is available in 3 performance levels:

- B – Glossy finish
- B (EXP) – Glossy finish with an average 0.12 coefficient of friction
- B (HG) – High gloss finish with an average 0.11 coefficient of friction

When it comes to providing outstanding coating aesthetics and corrosion protection that automotive engineers rely on, **ZinKlad 1000 B** delivers.

KEY FEATURES

- Glossy and Uniform Black Finish
- Exceptional Corrosion Protection
- Low Coating Thicknesses
- Extensively Specified
- Global Availability



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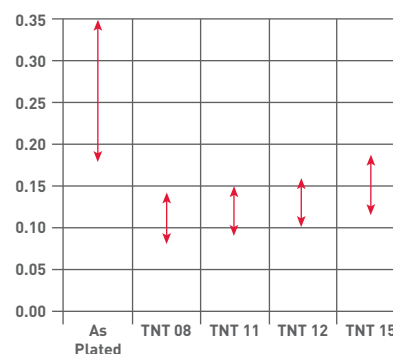


ZinKlad 1000 B Performance Data

ZinKlad 1000 B combines an homogenous metallic zinc-nickel deposit of 8 microns minimum thickness, with a black passivate. This hard metallic coating is further protected against the formation of white corrosion products by the application of trivalent passivate with an option of a specialist topcoat layer. **TriPass ELV** trivalent chromium passivates impart a black color. **Torque 'N' Tension** topcoats provide increased corrosion resistance and modify surface properties to ensure uniform torque and clamping characteristics. Combined these ensure that **ZinKlad 1000 B** consistently meets minimum performance demands for corrosion resistance and torque modification.

| Corrosion Performance (ASTM B-117) | | |
|------------------------------------|-----------------------|---------------------|
| | First White Corrosion | First Red Corrosion |
| ZinKlad 1000 B | 240 h | 1000 h |

MacDermid Friction Control on Zinc-Nickel Electroplate



Recommended Processes Used To Create ZinKlad 1000 B Coatings

| | |
|-----------------------------|--|
| Zinc-Nickel | Provides the sacrificial protection |
| Enviralloy Ni 12-15 | Alkaline, particularly recommended for plating fasteners |
| Enviralloy Ni 12-15 G2 | Alkaline, Next generation of Enviralloy Ni technology, recommended for plating fasteners |
| Enviralloy NiFlex 12 | Alkaline, deposits resist post-plate deformation |
| Enviralloy NiSpeed | Alkaline, fast plating rates for rack and barrel applications |
| Kenlevel Ni 12-15 | Acid, recommended for plating cast iron and hardened steel |
| Trivalent Passivates | Protects the zinc deposit from white rust |
| TriPass ELV 5100* | Good black appearance with excellent corrosion resistance |
| TriPass ELV 7100* | Good black appearance, cobalt free formulation |
| Topcoat | Improves corrosion resistance and modifies friction properties |
| Torque 'N' Tension 08 | Average CoF 0.11, recommended for self-cutting screws |
| Torque 'N' Tension 11,12,15 | Average CoF 0.11, 0.12, 0.15 for fasteners |
| Torque 'N' Tension 15 Black | Average CoF 0.15, fasteners |

* Recommended for use with sealer



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