

ZinKlad™ Brake 1000

Worldwide Consistent Quality Zinc-Nickel Alloy Finish for Brake Components



ZinKlad Brake 1000 – The Toughest High Performance Coating, Globally Consistent Highest Quality

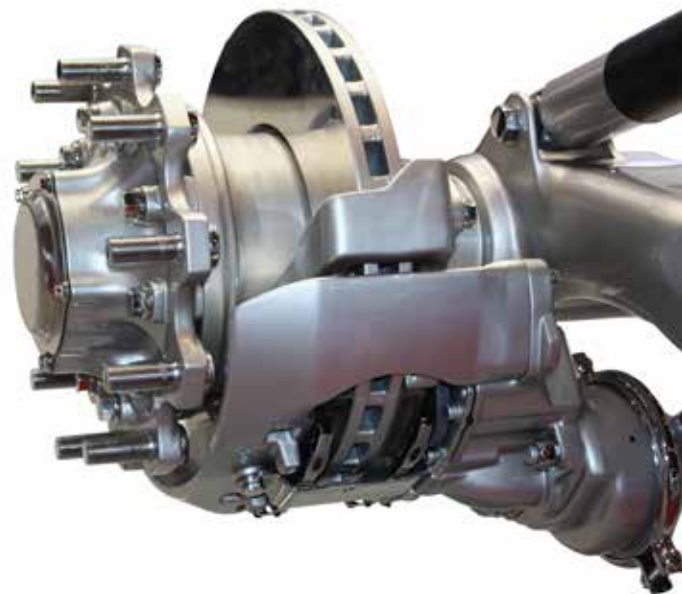
ZinKlad Brake 1000 coatings provide a highly uniform silver colored finish to cast iron parts meeting the most stringent automotive requirements for zinc-nickel alloy finished brake components. The coating is fully compliant with ELV requirements and ready for REACH regulations.

ZinKlad Brake 1000 is a 'drop in' process suitable for existing zinc-nickel electroplating lines. Our special inorganic sealer is a dedicated development for brake component finishing, provides reduced surface residues while meeting all automotive requirements such as brake fluid compatibility and high temperature resistance.

When it comes to providing outstanding corrosion protection that automotive engineers rely on, **ZinKlad Brake 1000** delivers globally consistent finish quality.

KEY FEATURES

- Consistent Exceptional Corrosion Protection
- No Galvanic Corrosion When Assembled with Aluminum Materials
- High Resistance to Mechanical Damage
- Boric Acid and Cobalt-free Solutions Available
- Global Availability



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ZinKlad Brake 1000 Performance Data

ZinKlad Brake 1000 combines an homogenous metallic zinc-nickel deposit of 8 microns minimum thickness, with a thin film cobalt-free passivate. A clear sealer is applied to further increase corrosion resistance.

The zinc-nickel deposit is applied from our mildly acidic zinc-nickel electroplating processes. The solution is formulated to provide an even deposit with very uniform nickel alloy distribution.

This hard metallic coating is further protected against the formation of white corrosion products by the application of a trivalent passivate. Finally, a specialised inorganic sealer from the **ENSEAL** product range complements the system, further reinforcing corrosion protection even after mechanical stress is exerted to the component. The inorganic sealers are formulated to provide even coverage and superior reduced residue droplet formation.

In Combination, the above features ensure that **ZinKlad Brake 1000** process consistently meets minimum performance demands for corrosion resistance in brake caliper applications.

Corrosion Performance (ASTM B-117)		
	First White Corrosion	First Red Corrosion
ZinKlad Brake 1000	240 h	1200 h

ready for
REACH



Recommended Processes Used To Create ZinKlad Brake 1000 Coatings

Zinc	Provides the sacrificial protection
ZINCROLYTE KCL-Ni IV	Production proven for the brake Industry
ZINCROLYTE KCL-NI V	Boric acid-free next generation acidic zinc-nickel
Trivalent Passivates	Protects the zinc deposit from white rust
PERMA PASS Ultra IV Plus	Cobalt-free zinc-nickel passivate, well established process without cobalt
Topcoat	Improves corrosion resistance and modifies friction properties
ENSEAL 125	Inorganic sealer with brake fluid compatibility
ENSEAL 4BRK	Inorganic reactive sealer brake fluid compatible, reduced residue formation



For more information, please contact us at:

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