

Alternative to Zinc Plating Offers Environmental Protection & Enhanced Properties

by:

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New chromium-free, water-based finish provides cost-effectiveness and significantly better corrosion protection.

Premium Products, Inc. has introduced Aquazinc®, which is an environmentally friendly, water-based, cost-competitive finish that offers superior corrosion, no hexavalent or trivalent chromium and no hydrogen embrittlement.

Environmental Protection

Aquazinc is a water-based finish. It is nonflammable and does not have a strong solvent odor. It is HAPS (Hazardous Air Pollutant) free and low in VOC (Volatile Organic Compound). Aquazinc does not contain any hazardous and declarable substances such as chromium, lead, mercury, barium, cadmium or nickel. Aquazinc coating also meets RoHS, ELV and WEE guidelines.

Properties

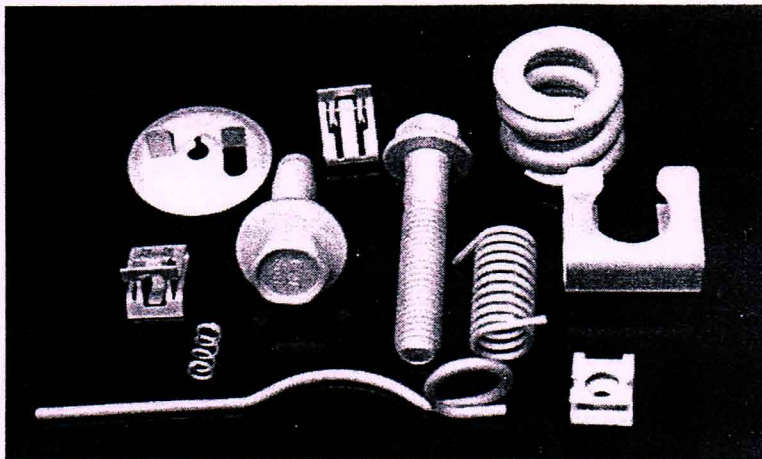
The important characteristic of Aquazinc is the coating's superior corrosion protection as compared with electrolytically deposited zinc and zinc alloys. The coating can achieve 240 hours salt spray at a lower film thickness of 3 to 6 microns as well as 1000 hour salt spray (ASTM-B-117) at 12 to 15 microns.

Aquazinc provides very good inter-coat adhesion between multiple layers. Aquazinc finish is suitable for springs and high-strength steel parts. Additional properties offered by Aquazinc coating include the following:

- No hydrogen embrittlement.
- UV protection of 2000-plus hours with resistance to chalking, fading and loss of gloss.
- Flexibility with very good chip resistance, crimping and bending.
- Sacrificial behavior.
- Good heat resistance.
- Good chemical resistance.
- Improved wear resistance.
- Good adhesion over stainless steel, galvanized metal and zinc-plated wire. *wear*
- Suitability for components requiring temperature control.
- Provides 25 to 30 Kesternich cycles.
- Due to its low DFT, is compatible with standard thread tolerance.

Application

The Aquazinc finish is applied using a dip/spin coating process to steel components such as fasteners, clips, springs, brackets and many other types of hardware parts. The coating is also applied with a spray application process to larger parts and components.



Fasteners, springs and hardware products coated with Aquazinc®.

Coefficient of Friction

This new zinc-plating alternative coating is integrated with lubricants and does not need any additional top coat to adjust the coefficient of friction values for threaded hardware parts and fasteners.

Cost Effectiveness

Cost is one of the important parts of any finishing operation. Aquazinc is a water-based finish and can be used with water during cleanup. This provides a significant saving in cost as compared to an expensive solvent cleanup cost.

Conclusion

Newly developed Aquazinc coating is cost competitive, safer to use and offers better corrosion resistance when compared to zinc plating.

To obtain additional information and technical specifications on Aquazinc coating, visit the website listed below.

www.premiumproductsinc.com

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Company Profile:

Premium Products, Inc. was founded in 1988. Since then, Premium Products has grown into a multi-national corporation with customers on every continent. Despite the company's growth, Premium Products' main goal is still complete satisfaction for every single customer. Premium Products produces water-based coatings only, creating high-quality products that are safe for the environment.

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