



Acid Chloride Zinc Nickel (ZnNi) — the Next-Generation in Appearance & Corrosion Performance

Acid Chloride Zinc Nickel (ZnNi) represents the latest advancement in high-performance electrolytic alloy coatings. Engineered for exceptional corrosion resistance, this next-generation formulation outperforms conventional zinc and other protective finishes while delivering superior deposit brightness, uniformity, and adhesion characteristics.

Designed for high-volume barrel applications, this acid chloride ZnNi system meets the rigorous demands of automotive, agriculture, construction, and heavy equipment manufacturers seeking reliable, long-term protection in harsh operating environments.

Performance & Appearance

Available in both **clear** or **black** finishes, the coating provides a bright, decorative appearance ideal for high-visibility components. The ZnNi deposit also delivers enhanced abrasion and thermal resistance, ensuring durability in underbody, under-hood, and other high-temperature or high-wear conditions.

With our approved topcoat, the ZnNi finish meets the coefficient of friction requirements for consistent clamp loads for bolted joints.

Corrosion Resistance

- **240 hours** to white corrosion (ASTM B117, NSS)
- **1000+ hours** to red corrosion
- **63+ cycles** of cyclic corrosion performance

These results position acid chloride ZnNi as a best-in-class solution for extended service life and reduced warranty risk.

Key Advantages

- **GMW4700 ZnNi Code G approved** (clear and black)
- **12–18% nickel content** for optimal alloy performance
- Excellent coverage and uniformity for complex geometry parts
- Consistent friction values per OEM specifications
- Initiates better adhesion on hardened substrates, making it ideal for high-strength fastener applications.

Modern Plating Corporation

701 South Hancock Avenue • PO Box 838 • Freeport, IL 61032

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ISO9001:2015 • NVLAP approved lab



Recommended Applications

- Brake and fuel system components
- Chassis and suspension hardware
- Engine fasteners and under-hood hardware
- Interior fasteners requiring decorative appearance
- Wind turbine and coastal-exposed fasteners
- Hydraulic fittings and fluid-power components
- Structural fasteners and anchors requiring long-term humidity resistance



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