

Zinc–nickel alloy coatings deliver a high degree of corrosion protection through a zinc and nickel alloy (12 % to 16 % Ni), applied with black passivates, grey passivates and specialized top coats.

Widely adopted by the automotive, construction, oil & gas and wind power industries, among others. Applications range from fasteners such as screws, nuts, wheel studs, retaining clips, hose clamps and clips, to components for the automotive industry.

Zinc Nickel offers a complete range of processes, including silver, yellow and black finishes for different application areas. The coatings are entirely free of Cr (VI) and meet global automotive industry requirements, among others.

Properties and Benefits

- Stable alloy providing corrosion protection superior to that of zinc.
- Top coats for CoF (Coefficient of Friction) modification.
- Over 720 hours of neutral salt spray testing without red rust (base metal) *.
- Parts may be baked after plating to relieve the hydrogen absorbed by the base metal during the process.
- Approvals for the automotive, electrical and wind power industries, among others.



Corrosion Resistance

Coating + Passivate	Sealer	Duration
5 µm	0 µm	480 hours*
8 µm	0 µm	720 hours*
8 µm	2 µm	Over 1,000 hours* + CoF modification

*Base metal corrosion resistance, in accordance with ASTM B-117.



Zinc Nickel is used to replace cadmium and hot-dip zinc coatings, and wherever corrosion resistance beyond that of conventional zinc is required.