Product Code #826

Plating Systems & Technologies

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Hyperguard™ 326™

Features, Advantages and Benefits

Our new trivalent passivate provides superior performance, particularly with regard to corrosion protection when compared to prior art trivalent passivates.

This coating is more resistant to physical damage than prior art trivalent passivates.

The process for producing this new coating is resistant to buildup in the coating solution of zinc. In prior art conversion coatings over zinc, the zinc dissolves in the passivating bath, increasing the amount of zinc in the bath. Our new trivalent passivate provides improved ecomonics since baths need not be discarded.

This new trivalent passivate is capable of providing over 240 hours of corrosion protection to white rust in the ASTM B-117 Salt Spray Test without a topcoat, and well over 400 hours of corrosion protection to base metal corrosion (red rust), without a topcoat. With a topcoat such as PolyHyperseal, 800 or more hours are achievable. Over mechanical plating, corrosion protection exceeds 360 hours to white corrosion.

The process for producing this trivalent passivate is resistant to the buildup of iron.

This coating is available in a variety of colors for article identification - such as green for electrical ground, blue for metric fasteners, and so forth. This is done in a one-step process with a single dip.

This new trivalent passivate achieves exceptional salt spray without removing zinc from the surface of the substrate. Thus, articles need not be overplated, resulting in improved productivity and improved economics.

This new process deposits the same thickness of trivalent passivate regardless of the activity or passivity of the substrate. Thus the coating weight is the same for zinc, zinc-iron, zinc-cobalt, zinc-nickel, or zinc-tin or any other alloy.

This coating may be applied over many active metal surfaces; e.g., aluminum, zinc, (whether electrodeposited, hot-dip galvanized or mechanically plated), zinc-nickel (e.g., some hot-dip galvanizing and electroplated zinc-nickel), zinc-cobalt, zinc-iron, zinc-lead (e.g., some hot-dip galvanizing), cadmium or magnesium or alloys of these compositions with other metals.

This process is operated at room temperature. The most effective trivalent passivate conversion coatings on the market today are operated at an elevated temperature, which is a disadvantage for many platers. The high temperature results in increased attack on the zinc substrate, resulting in increased zinc levels in the passivating bath; this, in turn, results in decreased performance. Often, the only corrective action that may be taken is dumping the bath and making a new solution.

Our new trivalent passivate No. 326 contains no chelators or complexing agents. The use of chelators and complexing agents reduce the ability of a surface finisher's waste or water treatment system to precipitate out heavy metals.

This new trivalent passivate gives the corrosion-protective performance of hexavalent chromates without handling hexavalent chromium at the coatings manufacturer or the applicator level. This trivalent passivate, like all other high-performance trivalent passivates, functions by generating hexavalent chromium during the corrosion cycle. This new passivate, however, elutes less hexavalent chromium (68% less) than prior art processes.