

“We’ve used Emerald Paint-Prep 380 for past seven plus years in powder and liquid paint operations. Cost of ownership, NSS results, and ease of use have been excellent.”

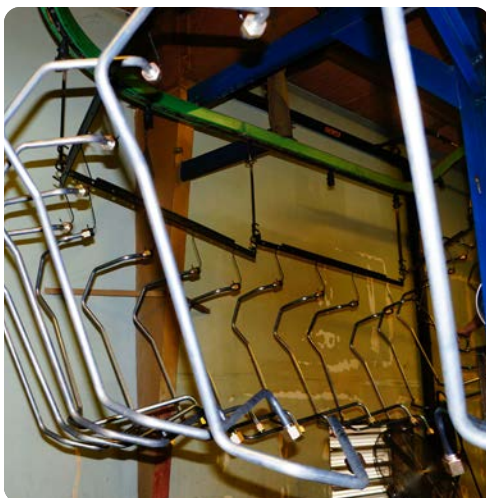
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Seacole

## Finishing the Hard to Finish

# Emerald Paint-Prep

Hubbard-Hall’s Emerald Paint-Prep line of low temperature, phosphate-free zirconium conversion coatings offers a cost-effective alternative to iron phosphate. Emerald Paint-Prep adds a nanocrystalline structure to metal surfaces which provides a longer-lasting bond for paints and powder-coat finishes.

The “nanocrystals” formed with Emerald Paint-Prep increase the surface area of the substrate thus enhancing paint adhesion, corrosion protection and salt-spray results. Typical coating weights vary



depending on the substrate, application temperatures, and method of application. Emerald Paint-Prep 380 NP operates at a comparable percentage volume to conventional iron phosphate products. It works best with a mild neutral pH type cleaner followed by one rinse stage, or an alkaline cleaner followed by two rinse stages.

## Key Features

Why Zirconium Conversion Coating?

- Effective at room temperature for energy savings
- Less sludge and no regulated heavy metals for reduced waste
- Increased corrosion protection
- Low foaming
- Short contact time needed: 15-30 seconds



Hubbard-Hall offers multiple Emerald Paint-Prep formulations for the market, including:

## Emerald Paint-Prep 380 NP

Use for the treatment of steel, zinc and aluminum surfaces. It is formulated for use in 4- to 7-stage spray washers. A low phosphate-free formula, Emerald Paint-Prep 390 LT is also available for use in steel spray equipment.

pH	< 3
Recommended Operating Temperature	Ambient
Concentration	2-4%
Soak Time	15-60 seconds
Phosphate Free	Yes
Spray wash application	N/A

## Emerald Paint-Prep 389 NP

Provides effective cleaning via a spray wand application.

pH	< 5
Recommended Operating Temperature	80-100° F
Concentration	1-5%
Soak Time	N/A
Phosphate Free	Yes
Spray wash application	Yes

Hubbard-Hall's Emerald Paint-Prep delivers several advantages over traditional phosphate coatings:

- Reduces chemistry cost due to extra-long bath life
- Delivers excellent corrosion resistance
- Reduces energy use and costs because it can be applied at room temperature
- Increases productivity with a contact time of only 15-30 seconds
- Produces less sludge, lowering waste management costs
- Prevents algae growth in nearby lakes due to non-phosphate formulations
- No regulated heavy metals in effluent
- Easy to handle and replenish

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