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COLDIP TRI-V ZnNi TRUE-BLUE 1000

TRIVALENT BLUE CHROMATE FOR
ZINC-NICKEL ELECTROPLATE
TECHNICAL DATA
11-17-10

COLDIP TRI-V ZnNi TRUE-BLUE 1000

COLDIP TRI-V ZnNi TRUE-BLUE 1000	provides a blue-bright conversion coating over acid chloride zinc-nickel and alkaline cyanide free zinc-nickel deposits.
COLDIP TRI-V ZnNi TRUE-BLUE 1000	does not require heat, operates at ambient temperature.
COLDIP TRI-V ZnNi TRUE-BLUE 1000	is an easy to use one part system that is applied by conventional immersion techniques.
COLDIP TRI-V ZnNi TRUE-BLUE 1000	works over a wide nickel alloy content of 5%-18%.
COLDIP TRI-V ZnNi TRUE-BLUE 1000	is Cobalt-free.
COLDIP TRI-V ZnNi TRUE-BLUE 1000	achieves over 350 hours to white corrosion products and over 1,000 hours to red rust.
COLDIP TRI-V ZnNi TRUE-BLUE 1000	can be used with Zinc-Chro-Shield or Zinc-Chro-PELLENT to provide over 500 hours to white corrosion products.

OPERATING RANGE

8% to 12% by volume (optimum 10%)

OPERATING TEMPERATURE

Room temperature:	70° - 95°F (22° - 35°C) 85°F (28°C) optimum

DIP TIMES

Range:	45 to 75 seconds
Optimum:	60 seconds

Note: Dip time varies depending on nickel alloy content, chromate pH, and chromate concentration -

- Higher nickel alloy content will require shorter dip times.
- Higher concentration of chromate will require lower dip times.
- Higher pH will require longer dip times.

pH RANGE

Alkaline Cyanide Free Zinc-Nickel deposits:	2.2 to 2.8 (optimum 2.5)
Acid Chloride Zinc-Nickel deposits:	1.7-2.0 (optimum 2.0)

Use Nitric Acid to adjust the pH down
Use Caustic Soda to adjust the pH up

RECOMMENDED NICKEL CONTENT

COLDIP TRI-V ZnNi TRUE-BLUE 1000 works at a very wide nickel alloy content range of 5% to 18% with optimum blue-bright appearance and corrosion resistance at 12%-15%.

If operating at 5% to 10%, the blue color can be obtained by COLDIP TRI-V ZnNi TRUE-BLUE 1000 at higher concentrations of 14%-15%, lower pH of 1.0 and longer dip times of 90 to 120 seconds

AGITATION

Agitation of chromating solution is required for complete and uniform chromate formation and coverage.

- Barrel applicators can chromate directly in the barrel. If chromating in an “off-line” basket, the basket must be agitated vigorously to allow for the chromate solutions to continually flow over the plated work.
- Rack applicators must have solution movement using mechanical, circulating pump, or air agitation.

NON-WARRANTY

The data contained in this bulletin is believed by Columbia Chemical Corp. to be accurate, true, and complete. Since, however, final methods of use of this product are in the hands of the customer and beyond our control, we cannot guarantee that the customer will obtain the results described in this bulletin, nor can we assume responsibility of the use of this product by the customer in any process which may infringe the patents of third parties