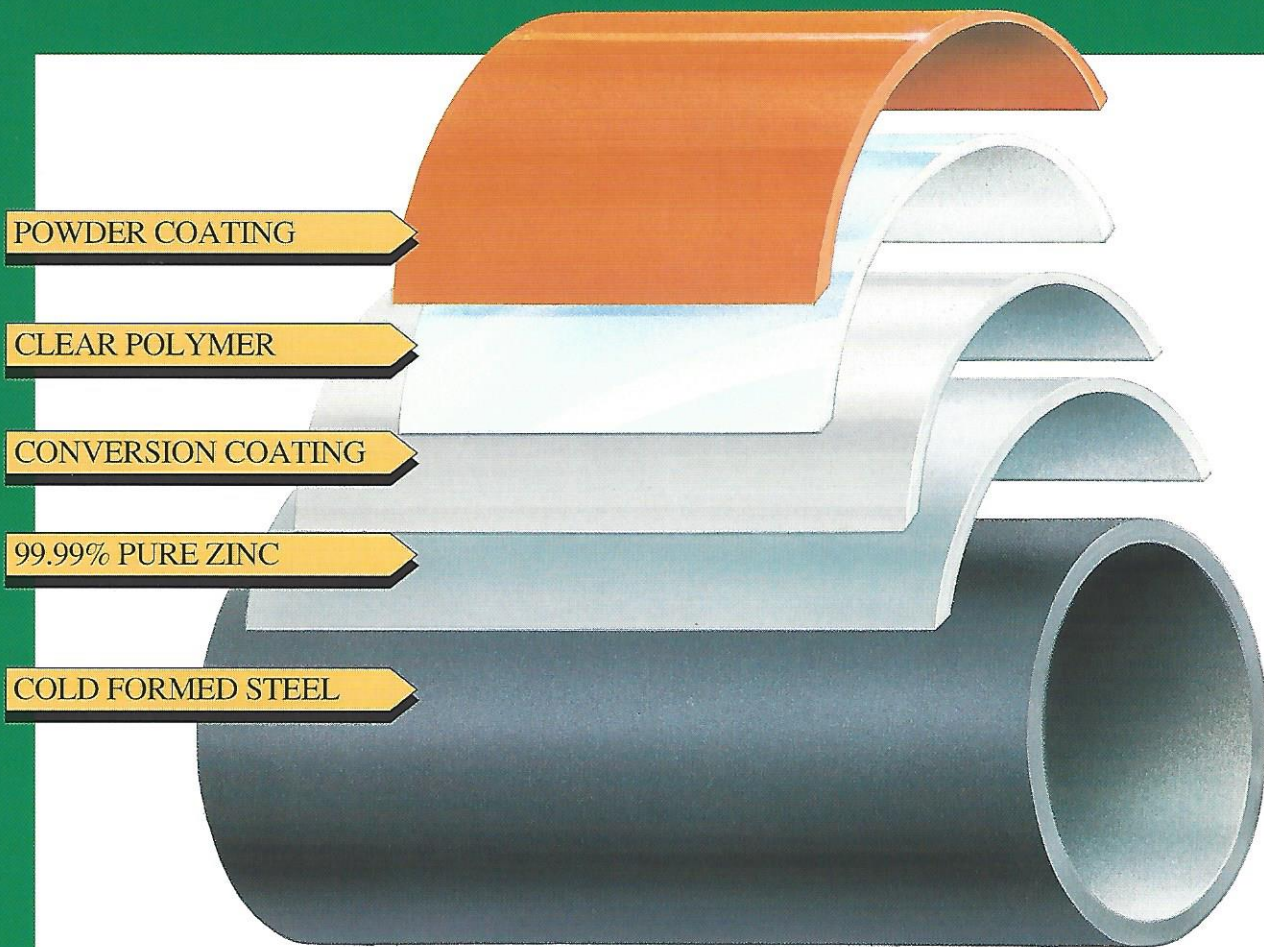


PILE ON THE PROTECTION!



Powder-Coat Over Allied's Flo-Coat[®] Process For Extra Corrosion Protection.



16100 South Lathrop Avenue
Harvey, Illinois 60426
(708) 339-1610

A **tyco** INTERNATIONAL LTD. COMPANY

Powder-coating over Allied's galvanized steel tubing provides at least 5 to 6 times greater corrosion resistance than powder coating over uncoated steel.*

Scribed powder coating over untreated substrate peels 1-1/2" after only 549 hours.
No significant creepage found at 3000 hours on Allied Flo-Coat product.**



Powder-coating over Allied galvanized tubing.

Powder-coating over uncoated steel tubing.

The Flo-Coat® Process

Allied's unique Flo-Coat process is the superior method of galvanizing steel tubing. It begins with flat strip steel, which is then cold-formed and electric-resistance or induction welded. After welding, the tube receives a triple layer of protection-zinc, conversion coating, and a clear polymer top-coat - all applied in-line to assure a uniform coating. The result is a smooth, shiny end product appearance that is unmatched in terms of strength and durability.

Flo-Coat tubing exhibits greater corrosion resistance because of the synergism created between the coatings; the conversion coating passivates the zinc to slow down the white rust growth process, and the clear top-coat then "seals in" the protection. The clear third coating also acts as a primer for powder-coating. Extensive pre-cleaning is unnecessary, and excellent adhesion and abrasion characteristics are achieved, even at high baking temperatures.

Cleaning

Surface contaminants deposited on Flo-Coat tubing during storage, transit, handling and processing must be removed prior to powder coating. Allied recommends the following cleaning process for Flo-Coat tubing:

1. Tubing should be cleaned with a mild alkaline solution at 1 to 2 oz. per gallon concentration, at 130-140°F.
2. Two-stage rinsing is preferred, with the final rinse being fresh water.
3. Dry-off should not exceed 450°F peak metal temperature.

Solvent degreasers and conversion coatings will damage Flo-Coat product. Mild phosphate or acid-based cleaners are not recommended but typically produce an acceptable result, although prolonged exposure to acid-based cleaners may damage the interior coating.

Welding

When Flo-Coat tubing is going to be welded before powder coating and there is a concern about corrosion protection in the weld area, Allied suggests four cold galvanizing compounds that are heat resistant (up to 750°F) and act as a primer for powder coatings:

1. ZRC cold galvanizing compound (battleship gray)

2. ZRC Galvilite cold galvanizing compound (shiny)
3. Rustolastic #24-A-120 (sales code 073258)
4. Kalcor 75% zinc dust epoxy

These paints are available directly from the manufacturer.

Another method of restoring corrosion resistance is thermal spray. Thermal spraying is a process by which zinc wire is continuously melted and projected by compressed air onto a prepared surface. For more information, please contact your sales representative.

Powder Coating

Allied's Flo-Coat tube is protected by a clear polymer topcoat which provides excellent adhesion properties to most thermoset powder coatings:

1. High bake thermoset acrylic, 350°F at 15 minutes.
2. High bake alkyd, 350°F at 15 minutes
3. High bake polyester, 350°F at 15 minutes.

Others may require individual evaluation.



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*Tests independently conducted by Scientific Control Laboratories, Chicago, IL in accordance with ASTM B-117 and ASTM D-1654. Detailed Scientific Laboratories' test results are readily available from your local Allied Sales Representative.