

Epoxy protective coatings for fishing pier



CASE STUDY

Challenge

United Painting & Sandblasting, Inc. was contracted to paint 38 12-inch pipe pilings, pile caps, bracings, clips and sheet pilings to support the Arrowhead Fishing Pier in St. Louis Bay on Lake Superior. Due to the intense corrosion this application faces, a 100% solids material was required for the job. The project had a very aggressive schedule for completion of their work, which necessitated an easy to use machine with fast set-up and clean up times. Additional considerations for equipment selection included inclement weather, such as fog or sudden changes in wind direction, which often occurs in marine environments.

Solution

The introduction of the Graco® XP70 Plural-Component Sprayer provided an ideal solution for this type of material and application. Though the customer has been operating an XtremeMix™, they felt that the Graco XP70 complimented the equipment offering for applications requiring fast set-up and clean up times.

Results

In total, 150 gallons of material was sprayed using a Graco XP70 Plural-Component Sprayer. United Painting commented on how easy staff training was due to the operating simplicity of the equipment. Configured to a 1:1 ratio, they also felt an added benefit was having material mixed accurately and on ratio. The XP70 ran smoothly and was easy to get running again once material had been run through it. Fast clean up times were achieved as the crew was able to put solvent in each leg and let the machine run. In total, United Painting & Sandblasting, Inc estimates the crew spent a total of two hours for clean up for the entire week versus six with other comparable equipment.



The Graco XP70 Plural-Component Sprayer is designed to pump, mix and atomize high-viscosity materials with superior results.

For more information, contact us at 1-877-844-7226 or info@graco.com. Visit us at www.graco.com

PROVEN QUALITY. LEADING TECHNOLOGY.

SPECIFICATIONS

END USER

City of Superior, WI

COATING SUPPLIER AND DISTRIBUTOR

Sherwin Williams,
Hermantown, MN

INDUSTRY

Marine

APPLICATION

Thiokol® LPE™ 5100 is a high solids, two-component, fast setting polysulfide modified epoxy novolac coating used for corrosion protection in structures immersed in tidal zones.

Material Specs:

- Thiokol LPE 5100
- Material Supplier: PolySpec® L.P.

Typical Properties

- Ratio (A:B) by volume: 1:1
- 100% solids
- Chemistry:
Polysulfide-Modified Epoxy Novolac
- Pot Life: 5 minutes at 130 F (54 C)
- Colors: black, gray

GRACO EQUIPMENT

- Graco XP70 Plural-Component Sprayer with Remote Manifold

CONFIGURATION

- Part number: 571101
- Resin pump (A): Xtreme 85
- Hardener pump (B): Xtreme 85
- Hose:
 - Water Jacketed Heated Hose
 - Dual hose bundle (248120)
 - A side: 1/2 in x 100 ft (12.7 mm x 30 m)
 - B side: 3/8 in x 100 ft (9.5 mm x 30 m)
 - 34.5 MPa (345 bar) (7250 psi)

Accessories:

- (3) Viscon® Fluid Heaters (2458863)
- Tip: XHD™ RAC® 423
- Merkur™ 45:1 Solvent Flush Pump

Delivery Method:

- XTR-7™ Gun (XTR704)



With the Graco XP70, only parts that come in contact with material must be cleaned. United Painting estimates they were able to cut clean-up time by two-thirds, resulting in saved labor costs and increased uptime.