Automatic Coating Limited

Tidal Coat Fluidized Bed Advanced Coating Process

PROBLEM STATEMENT

- Watertight fixtures are traditionally coated via line-of-sight coating applications such as powder coating or liquid coating
- The fixture heated and coated via spray, as the part is being sprayed it starts to cool resulting in nonuniform and incomplete coating
- Traditional applications do not encapsulate the gasket channel for watertight doors or behind the louver chevrons
- Traditional coating applications result in a lifecycle of only 2-3 years
- More repairs required as a result of low lifecycle
- The substrate is not preserved

BENEFITS

- 1/3 of the cost of replacement
- 5 year guarantee
- 10-15 years lifespan
- Lower lifecycle cost
- Navy analysis identified a $60-90 million in savings over 9 years utilizing the proven Tidal Coat Watertight Door System on doors
- Eliminating the hot work by remanufacturing saves the U.S Navy up to $25,000 per door
- Recycling, refurbishing and reusing

TECHNOLOGY SOLUTION

Automatic Coating Limited's

Tidal Coat Fluidized Bed powder coating process

- Completely coats and encapsulates (seals) all surfaces and crevices
- Part is heated, submerged and quickly agitated
- Fully automated system - PLC controlled, consistent results
- 10-15 plus year coating life cycle
- Preserves the substrate
- Less Repairs
- High-quality finish with same application costs as other powder coating processes but has a service life 3x as long
- Automatic Coating is part of the NACSEA 05P anti rust corrosion team

GRAPHIC



5 Years after electrostatic powder coat not coated by ACL



After 5 Years with Tidal Coat Fluidized bed system



Door Before

Door After

