Proper Application And Heat Curing Drive Successful Chemical Resistance

The correct application of MarineLine® is the first part to ensure a long service life for the coating. Advanced Polymer Coatings (APC) sets out stringent quality assurance procedures that it expects shipyards to follow for the tank coating application. APC's MarineLine Coating Advisors work closely with shipyards to recommend proper surface preparation, professional spray application of the two-coat lining, and close monitoring of heat curing, and quality inspection. APC's 6-Step Application sets the benchmark for the industry, and is presented here with accompanying illustrative photos. Each step also presents what is reviewed during that phase of operation.
1 **PRE-BLAST**
- Weld & Grind Inspection
- Staging
- Dehumidification
- Ventilation
- Rain Protection
- Surface Contamination Testing
- Surface Protection

2 **BLASTING**
- Surface Profile
- Surface Cleanliness
- Environmental Conditions
- Cleaning
- Blasting
- Visual Blast Inspection
- Rejection of Blast Quality

3 **SPRAY APPLICATION**
- Environmental Conditions
- Mixing Thinners
- Base Coat (red)
- Stripe Coat
- Top Coat (grey)

4 **INSPECTION**
- Dry Film Thickness Test
- Spark Test
APC’s MarineLine® has set the highest standards in the market with regards to heat curing and spark testing the tank surface. Heat curing enables the coating to fully cross-link so that it becomes virtually impermeable. Spark testing ensures that the cargo tank is coated properly without any voids.

After proper application and curing, the ship can leave the yard and immediately load a full range of approved liquids including aggressive cargoes. The tank coating will be very smooth and easy to clean. In addition, the coating should be easy to repair with a simple repair kit should any mechanical damage occur during the normal course of operations. We will cover both of those parts, ‘cleaning’ and ‘maintenance’ in future issues.

If you have more questions on the importance of the application procedure as part of your overall cargo tank program, contact your Advanced Polymer Coatings’ representative to see why MarineLine® is unique in the maritime industry or visit the APC website to see a more expanded version of the Step-by-Step Application for MarineLine®.