

Outstanding Protection in Tough Immersion Conditions

Coating Solutions for Water Immersion



Zero VOC, Non-Flammable, Safe

Our coating systems are truly zero VOC. They are non-flammable and have no odor, even when used in a confined space. Protect your workers and reduce VOC emissions without compromising the longevity of your coating system.



Enhanced Permeation Resistance

Corrosion sets in as soon as water permeates through a coating and reaches the substrate. Our engineered glass-flake fillers reduce the rate of water permeation, providing best-in-class longevity even in extreme conditions.



Aggressive Services, Lasting Protection

Our coating solutions can stand up to all water-immersion conditions, from the most common services in fresh, salt and brackish water to industrial wastewater and hydrocarbon contaminated water. Protect your assets even in services with aggressive microbially-induced corrosion.



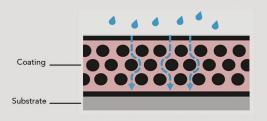
Reliability By Design

Our coating solutions are designed to eliminate the most common causes of coating failures like thin spots, pinholes, and amine blush caused by low-temperature cure, high humidity during application, or other difficult application conditions.



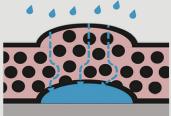
Traditional Fillers

Traditional fillers like silica and calcium carbonate have a mostly round shape so they do not enhance permeation resistance.



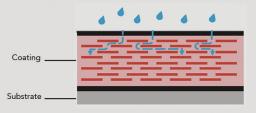


Blisters form as water molecules reach the surface and condense. Osmotic blistering is the leading cause of failures in water-immersion coatings.



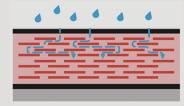
Lamellar Fillers

Glass flakes offer the best-in-class enhancement of permeation resistance in coatings by creating a "torturous path" for water.





Reducing the rate of water permeation through a film extends the service life of the coating system and prevents the formation of blisters.



Advanced FRP Systems designed a range of coatings containing glass-flake fillers that decrease the rate of water permeation through the coating by an order of magnitude. This allows us to provide a 20-year service life, even in aggressive services like hot water, salt water or purified water.

Installation Spotlight



A condenser waterbox was experiencing extreme corrosion due to a failed coating system with the most significant corrosion on the hot side of the condenser. HP-300 GF was installed to provide long-term protection in operating temperatures up to 120°F and was compatible with the existing cathodic protection system.



A traveling water screen at a power generation facility was experiencing rapid corrosion as a result of Microbially Influenced Corrosion. HP-300 Epoxy was applied successfully, pinhole-free, despite the complexity of the unit. HP-300 Epoxy reduces the accumulation of microbes on the surface and protects from chemical attack.



An underground pumping vault frequently filled with groundwater contaminated with road salts causing the previous coating to completely fail and allowed through-wall failures to develop. HP-300 Elastomer was installed to provide excellent resistance to intermittent water-immersion and physical abuse from maintenance activities.