A DYANCED SYSTEMS

Engineered to Last

Abrasion Resistant Coating Systems



Optimized for Abrasive Service Conditions

Advanced FRP Systems engineered a range of abrasion resistant coating systems, each optimized for a particular abrasion type including sliding abrasion, large particle abrasion, small particle abrasion, slurry abrasion and others. Choose a custom solution optimized for your service.



Easy to Apply

Our coating solutions feature extended working times, long overcoat windows and are designed to eliminate common causes of coating failures like thin spots, pinholes, and amine blush. They can withstand low-temp cure, high-humidity during application or other challenging application conditions.



Proven, Safe Solution

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 or durability of your coating system.



Affordable Quality and Service

Our abrasion-resistant coatings are highly effective, engineered solutions for abrasive services without the exorbitant pricing. They are designed to be reliable, durable and to be applied easily, on time, and within budget without sacrificing quality. Training and oversight available, as needed.



All Abrasive Services Are Not The Same.

Coatings for abrasive services are often designed and compared using a Taber Abrasion test. Wear rates using this rolling abrasive do not reflect the erosion resistance in other services. Fine particles and slurries wear away at the polymer-rich regions between fillers, knocking them free. Services with high impingement angles or cavitation degrade ceramic coatings with constant impacts. Systems engineered for large particles and sliding abrasion benefit from increased loading of ceramic beads along with optimized adhesion. Advanced FRP Systems designs and tests our coating solutions for each type of abrasion, maximizing the longevity of our coatings and minimizing costly downtime.

High Angle of Impact

Steel

Elastomeric materials are required to dissipate energy on erosion with a high angle of impact to prevent a brittle erosion mechanism.

Large Particle Abrasion



Fine Particle Abrasion



Engineered distribution of different sized ceramic particle for max loading of ceramic. •Small Ceramic Particle •Medium Ceramic Filler •Large Ceramic Filler Epoxy Binder

Installation Spotlight



A concrete auger was experiencing rapid erosion when used to mix iron oxide into concrete powder. Our Ceramic Repair Putty, a highly abrasion-resistant epoxy putty was used to rebuild high wear areas of the augers. Next, a roller-applied ceramic coating, HP-300 AR, was applied to ensure maximum protection from abrasion.



A coal-fired power plant shifted their coal makeup creating a corrosion/erosion mechanism that quickly degraded their coal pulverizers. Our Ceramic Repair Putty HT provided excellent abrasion resistance, even at elevated temperatures. It was applied via trowel at 125 mils over the affected areas on the pulverizer doors.



Significant degradation of the steel in a sand filtration tank was discovered during a routine inspection. Our high-strength carbon fiber was used to rebuild the structural strength of the steel followed by three coats of HP-300 AR, which can be applied via brush, roller or airless spray and provides outstanding resistance to corrosion and abrasion.

Learn more at advancedfrpsystems.com