Unique Polymer Systems LTD – Engineering Repair Systems

Unique Polymer Systems LTD Engineering Repair Systems have been designed to offer repair solutions to many industrial maintenance problems. The materials are widely used by engineers based in the oil and gas, power, marine, water, paper and chemical industries.



The benefits of using Unique Polymer Systems LTD Engineering Repair Systems include:

Reduction of life cycle cost of key operating equipment Allows engineers to perform preventative maintenance Protection of equipment from erosion and corrosion Reduction in downtime of essential process equipment



Mechanical Repair

The products are based on the latest epoxy resin and Nano particle technology and are widely used within the engineering industry for repairs to mechanical equipment and components. The materials can be used for emergency repairs such as leaking pipe work or tank seams, or as planned refurbishment work including resurfacing scored hydraulic rams or drive shafts. Once cured the materials can be machined down to fine tolerances.



Fluid Flow Protection

The ceramic enhanced product range is ideally suited to rebuilding and resurfacing mechanical equipment and components subject to erosion and corrosion in a fluid flow environment. Typical repairs can include pump casings, impellers, heat exchangers, rudders, bow thrusters and valve casings. The products are available in several grades depending on the type of equipment in need of repair and the working environment they operate in.



Elastomeric Repairs

Elastomeric Repairs are based on advanced two-component solvent free urethane polymers. All products within this range are high performance elastomers, which have been specially developed for the repair of rubber components, either by brush, roller or trowel. The properties of all the elastomers have been designed to match factory-produced elastomers.



High Temperature Immersion Protection

Available in brush or spray grade, the materials once fully cured, are capable of protecting equipment against a range of aggressive chemicals including hydrocarbons, acids, alkalis, water and steam at temperature up to 150°C.



Composite Repair of Pipework

Based on solvent free epoxy technology Unique Polymer Systems LTD Composite Repair Systems are ideal for repairs to problem pipe work ranging from 1" to 36" diameter. The products are widely used within the marine and power generating industries and allow engineers to encapsulate corroded steel or plastic pipe work.