Coatings for Process Components

Severe damage by pitting corrosion: Electric motor was efficiently restored with ARC- and Ceramic-Polymer-Systems

The Greek company “Hellenic Petroleum” owns a plant for polypropylene in Thessaloniki. Here, a medium voltage motor for pumps of cooling water circulation was effectively restored. The motor has been in use since 2000. It showed severe erosion and pitting corrosion damages at the impeller housing and connection box. The repair coating ARC 858(E) of our parent company A. W. Chesterton together with Ceramic-Polymer coating systems enables an efficient renewal and fast restart of the electric motor (type ATEX).

The company is located in Greece very close to the sea. The constantly moist, salt-laden air and the evaporation of cooling water with the contained chemicals cause heavy corrosion damages on the motor frame. Thus, protection systems against the aggressive environmental conditions were significant for this project.

Especially for process components such as pumps, machine elements and motors the premium coatings of the Chesterton series “ARC Efficiency & Protective Coatings” are qualified for the effective re-building of erosion-damaged parts. Therefore, together with the high-performance Ceramic-Polymer coatings optimum protection against corrosion and erosion is achieved!

Protection concept for aggressive industrial environments

803(E): Cleaning solution for removal of old coating
ARC 858(E): Ceramic reinforced 2-component thick film epoxy compound to protect metal surfaces subjected to erosion, corrosion and chemical attack
CERAMIC-POLYMER STP-EP-HV: 2-component ceramic composite epoxy coating providing outstanding corrosion and abrasion protection for aggressive environments
PROGUARD 169(37): UV-resistant 2-component polyurethane top coat with long-term stability

Our coatings fulfill highest protection requirements

ISO 12944-2, C5-I:
Very high atmospheric corrosiveness at industrial areas with high humidity and an aggressive environment
Resistance to chemical contents of the cooling water:
Sulfuric acid, sodium hypochlorite, NALCO (special chemical for cooling water conditioning e.g. zinc chloride, phosphoric acid, methanol, formaldehyde)
Do you need comprehensive protection against corrosion and erosion for machine parts and process elements?

Our corrosion protection experts are certified coating inspectors – they assist you competently and focused!