500 Series Heat Exchanger Vessel

32 year old heat exchange vessel

Mechanical damage with heavy pitting

Application of RS 500P a wet & rust tolerant primer

Application of RA 532 a wet tolerant glassflake filled epoxy

Industry	HVAC, Power Generation, Oil & Gas
Date	February 2012
Substrate	Cast Iron
Products	RS 500P, RA 532
Environment	Recirculated water

Challenge

The unit was manufactured in 1981 and installed shortly after. Fatigue cracking was found in some welds and localised corrosion was discovered on the tube bundle guides. Inclement weather was also a factor in determining the coating to use.

Chemco's Solution

We recommended coating with our moisture and surface tolerant epoxy RS 500P and finishing with a top coat of RA 532, a glassflake filled epoxy solvent-free system with outstanding wet tolerant properties to provide long term protection in this environment.

Scope

Identify damaged areas and check existing specification thickness
Bristle blast surface area to be repaired
Solvent wipe and square off using masking tape
Application of RS 500P in one coat to a nominal DFT of 100µm
Application of RA 532 in one coat to a minimum DFT of 250µm

Results

Chemco was able to carry out the repairs to the internals of the vessel within the strict timeframe provided by the client. This application will give at least 10 years of corrosion free service.

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