

CORROCOAT



Case study: Corrocoat 'E' series for a venturi

Client

Power Generation Industry, UK.

Application date

August 2004.

Scope of work

Refurbish and protect a venturi from a sea-water, condensate water system. The component illustrated cavitation and undercutting damage, with severe corrosion around the flange area.

Products

Corrocoat EA/EB, Fluiglide E & Plasmet ZF.

Substrate

Cast iron.

Coating system

- Grit blasted internally to ISO 8501-1 cleanliness standard SA 2½.
- Grit blasted externally to ISO 8501-1 cleanliness standard SA 2.
- Applied internally Corrocoat EA / EB to achieve a minimum dft of 2.0mm followed by a top coat of Fluiglide E.
- Applied externally 2 coats of Plasmet ZF followed by a cosmetic top coat.

Coating credentials

- Corrocoat's EA and EB series provide a high build flexibilised epoxy system with good resistance to erosion, cavitation and impact, when used at thicknesses above 1.5mm.
- Originally these components were glass lined. Corrocoat can either repair, or completely refurbish Glass lined components – depending on the level of damage, and the environment in which they are operating.
- The use of glass-flake linings, specially manufactured for their cavitation, erosion and impact resistance offers an excellent alternative to glass and other linings – subject to the environmental conditions being within the specification of the glass-flake lining.
- Glass frit lining can be expensive and time consuming due to the subsequent stoving required. The additional process steps required in glass frit lining also negates the possibility of on site application or repair if required. Glassflake linings can be applied and repaired on site.

Photographs

Left: [The venturi on arrival in our Leeds works.](#)

Middle: [Severe undercutting & cavitation damage in the flange area.](#)

Right: [Completed repair and refurbishment. Awaiting packing and despatch to customer.](#)