FIRE PUMP CASING REPAIR & PROTECTION – IOL

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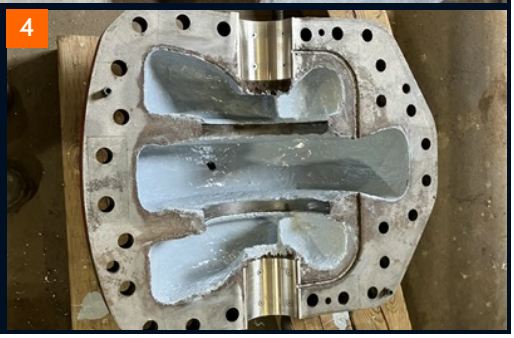

PROBLEM
A critical fire pump casing at IOL was suffering from severe pitting and corrosion due to prolonged exposure to water. The deterioration risked further wall thinning, reduced efficiency, and potential leakage. Conventional repair methods (welding or replacement) would have been costly, time-consuming, and disruptive to plant operations.

APPLICATION SITUATION
Challenge for the Customer:
The fire pump was a critical safety asset; replacing the casing or pump would have meant long procurement times and high capital expenditure.
Traditional repair methods (welding or replacement):Lead time for a new pump: several weeks to months.
Cost: easily in the tens of thousands of dollars for a new pump or extensive welding repair.
Downtime: prolonged outage of a critical fire protection system, exposing the facility to safety risks and compliance issues.
Belzona Option Offered:
Lower cost – fraction of pump replacement or welding.
Faster turnaround – repair completed in days, not weeks.
Safe & simple – cold-applied, no hot work or removal needed.
Long-term protection – restored geometry with Belzona 1121, efficiency and corrosion resistance with Belzona 1341.

APPLICATION METHOD
Surface Preparation:
The pump casing was grit-blasted to the SSPC-SP10 (Near White Metal) standard.
Achieved surface profile ~75 µm (3 mils) for optimum adhesion. Area thoroughly cleaned and degreased with solvent.
Rebuilding:
Severely pitted and corroded areas were rebuilt using Belzona 1121 (Super XL-Metal). Applied by hand to restore original casing geometry.
Belzona 9411 was used as a release agent on tools and formers during application.
Protective Coating:
Once cured and prepared, two coats of Belzona 1341 (Supermetalglide) were applied.
Provided long-term corrosion protection and efficiency improvement due to low-friction finish.

BELZONA FACTS
Alternatives: Replacement (costly, long lead time) or welding (hot work, downtime).
Belzona Solution: Cold-applied 1121 rebuild + 1341 coating, done in situ.
Savings: Fraction of replacement cost, completed in days not weeks.
Why Belzona?
Safe, efficient, long-term protection and reliability.

INDUSTRY
Oil & Gas

LOCATION
1150 Finch Ave W, Toronto, ON M3J 2E4

APPLICATION DATE
August 2025

PRODUCTS
Belzona 1121 (Super XL-Metal)
Belzona 1341 (Supermetalglide)
Belzona 9411 (Release Agent)

SUBSTRATE
Carbon steel

PHOTOS
1. The pump house before the application
2. Severe pitting in the pump housing
3. Rebuilding with Belzona 1121
4. The pump house after the application of Belzona 1341