

Repair and Rebuild

Case Studies





Condenser Water Pump

Severely Corroded Ajax Pump

Industry: Air Conditioning

Product: Corroglass 600 Series Expertise: Repair & Rebuild Plant

Left: The pump inlet as we received it. Note the deep pits and holes in the casing.

Right: The pump after repair and rebuild with Corroglass 600 series. The cause of the damage, corrosion, has been eliminated and the pump can be put back into service for many more years.





Cost Effective Valve Refurbishment

48" Butterfly Valve Refurbishment

Industry: Power

Product: Corroglass 600 Series

Expertise: Rebuild Valves

The valve flap and body had deep pits and metal loss around the sealing edges. As a result the valve had become totally ineffective. The valve was totally refurbished old for new with a 20 year life expectancy. The refurbishment of an existing valve can provide considerable savings over expensive metal castings or new valves with changes to pipework.



Sea Water Pump

Impeller Vanes Rebuilt

Industry: Oil & Gas

Product: Corroglass 600 Series, Kevlar

Matting & Fluiglide

Expertise: Repairs & Rebuilds

This impeller has been blasted, treated for salt contamination and primed with one coat of Corroglass 600. Note the severely corroded impeller vanes. They were rebuilt using a composite of Kevlar matting and 600 series. After coating the impeller is balanced and Fluiglide is applied to reduce friction and increase efficiency.



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Nash Acid Vacuum Pump

Refurbished

Industry: Process

Product: Corroglass 600 Series Expertise: Repairs and Rebuild

Prior to this photo the pump was considered scrap due to its badly corroded condition and loss of efficiency. The pump was fully refurbished by Corrocoat and after ten years shows no signs of corrosion. As well as the obvious savings in replacement costs; the original cause of the failure, corrosion, is eliminated and there is no need to change piping or footings.





Pump Overhaul

Cast Iron Water Pump - Southern Cross

Industry: Sand Mining & Processing Plant

Product: Corroglass 600 series Expertise: Repair & Rebuilds

The photo on the **left** shows the pump severely corroded and eroded with considerable metal loss due to acidic water. Prior to Corrocoat's involvement the pump was being replaced every 6 months. The photo **right** shows the fully refurbished pump which will operate with no corrosion at reduced power consumption and no loss of production.





Ship Lady Elaine

Water Box Rebuild

Industry: Marine

Product: Corroglass 600 Series & Kevlar

Matting

Expertise: Repair & Rebuild

Left: This water box was blasted, decontaminated and exhibited severe corrosion, holes through the casing and the division plates were virtually corroded away.

Right: The same water box fully refurbished with the Corroglass 600 series and Kevlar matting.



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Sea Water Condenser End Covers

Significant Metal Loss

Industry: HVAC

Product: Corroglass 600 Series & Kevlar

Matting

Expertise: Rebuild Scrap Components

This condenser end cover was considered scrap; however Corrocoat was able to rebuild it using a composite laminate of the Corroglass 600 series and Kevlar matting. Two stainless steel sockets were welded in place and the end covers put back into service without the risk of future corrosion and at a fraction of the replacement costs.





Shell & Tube Heat Exchanger End Covers

Sever Metal Loss Due to Water and Galvanic Corrosion

Industry: Process

Product: Corroglass 600 Series

Expertise: Rebuild all internal surfaces to

original profiles

Left: This cast iron end cover had been in service for 2 years and was severely corroded.

Right: The division plate was rebuilt with Corroglass 600 series and matting. The sealing faces were machined back to their original dimensions. The result provided corrosion protection and many years of trouble free service.



Worthington Pump

Cost of Repairs Paid Back in 15 months

Industry: Process

Product: Corroglass 600 Series & Fluiglide

Expertise: Repair & Rebuild

Severe corrosion, deep pitting and corrosion deposits resulted in poor performance, increased pumping costs and its untimely failure. All internals were rebuilt and re-profiled using the 600 series. The wear rings and landings were built up with Corroglass and machined to original size. A top coat of Fluiglide was applied to reduce friction. The savings in power consumption paid back the repairs in 15 months.