

Application Focus

Efficiency Enhancement – Fluid Handling Equipment

Belzona® can provide the answer to erosion corrosion in fluid handling equipment which will:

- Improve efficiency and performance
- Minimise downtime
- Increase life expectancy
- Eliminate expensive replacement costs

Typically the energy cost of a pump represents the biggest fraction of lifetime cost, much more than the capital cost. This can be as much as 95% of the lifetime costs so anything that improves efficiency and reduces energy consumption will have a significant pay-back.

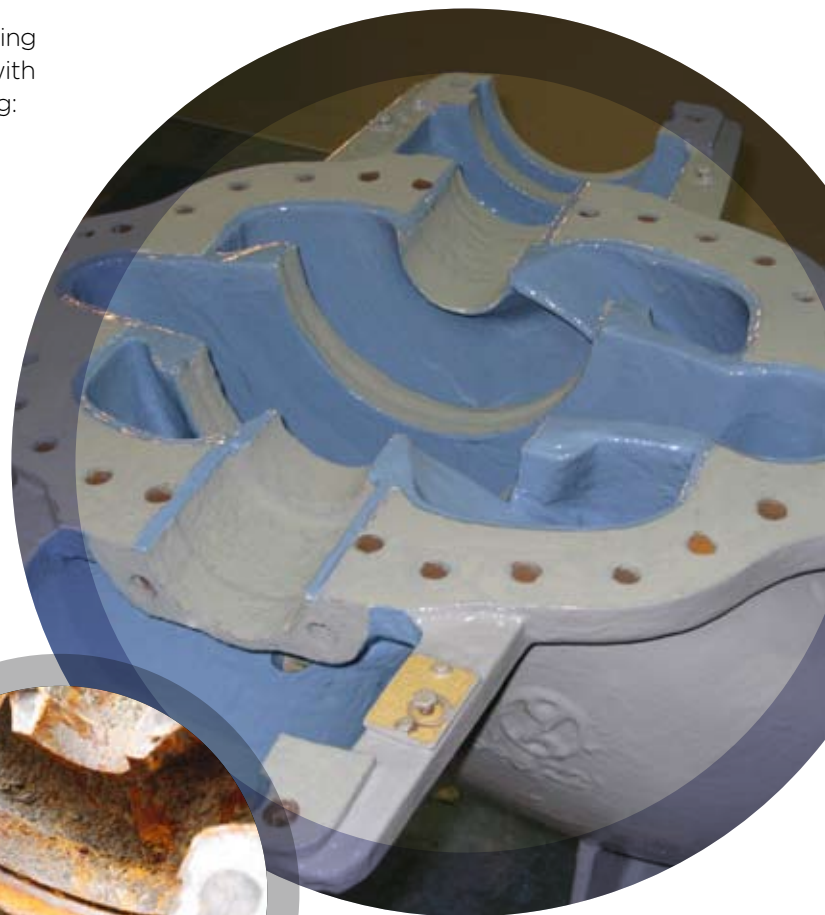
Deterioration in service can reduce efficiency leading to as much as 10-15% extra energy consumption with the potential for other costly implications including:

- Increased operating costs
- Reduced head
- Shorter service life
- Reduced flow

The Belzona® Supermetalglide System

will not only restore pumping efficiency, it will significantly reduce the rate of future deterioration. More importantly it will increase the efficiency of a pump over its “as new” condition giving a rapid pay-back in reduced energy costs.

By repairing worn and damaged equipment, or protecting new pumps, with a Belzona® Supermetalglide system, it will have an immediate effect on performance and operating costs, giving many years of power savings together with high performance erosion corrosion protection.



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Belzona® provides the solution to your repair and maintenance needs.


BELZONA®
Repair • Protect • Improve

Application Case Study

Belzona[®] 1341 Supermetalgilde was tested under strict independent laboratory conditions utilising the most up-to-date fluid flow test facilities of the National Engineering Laboratories (N.E.L.).

The test vehicle chosen was a single stage, end suction centrifugal pump with 10 inch suction and discharges branches.

The uncoated pump, running at 1300 rpm, was found to deliver 875m³/hr at 26.5 meters head with an overall peak efficiency of 83.5%.

Testing of a Belzona[®] Supermetalgilde coated pump gave a maximum 6% increase in the peak efficiency, offering a power reduction of 5.1kW at duty point. Assuming a 5,000 hour operating cycle / annum, the power saving over this period would amount 25,400kW.hr.

Belzona[®] 1341 Supermetalgilde has been proven to increase pump efficiency across its operational range, while maintaining its original head / flow characteristics.

Local Service Technical Advice

Through a network of trained Technical Consultants Belzona[®] can provide a full 24 hour on-site service with guidance and technical advice on the **Belzona[®] Supermetalgilde System**.

Backed by a specialist Belzona[®] global engineering team, the Technical Consultant will diagnose the problem, recommend the solution and where appropriate supervise the application, with training for on-site maintenance personnel also available if required.

For further detailed information refer to:
Belzona[®] **Product Specification**
Belzona[®] **Instructions For Use**
Belzona[®] **KNOW-HOW** *In Action*



 No Shrinkage Permanent repair	 Efficiency Enhancement Increased performance	 Environmentally Friendly NO VOCs
 Potable Water Certified to ANSI/NSF Standard 61	 Eliminates Dangerous Hot Work Safe	 Durable Withstands industrial environments
 High Adhesion Ensures long service life	 Hydrophobic Low surface tension	 Smooth Ra 0.078 µm Reduced turbulence

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