

# Application Focus

## Efficiency Enhancement: Fluid Handling Equipment

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:

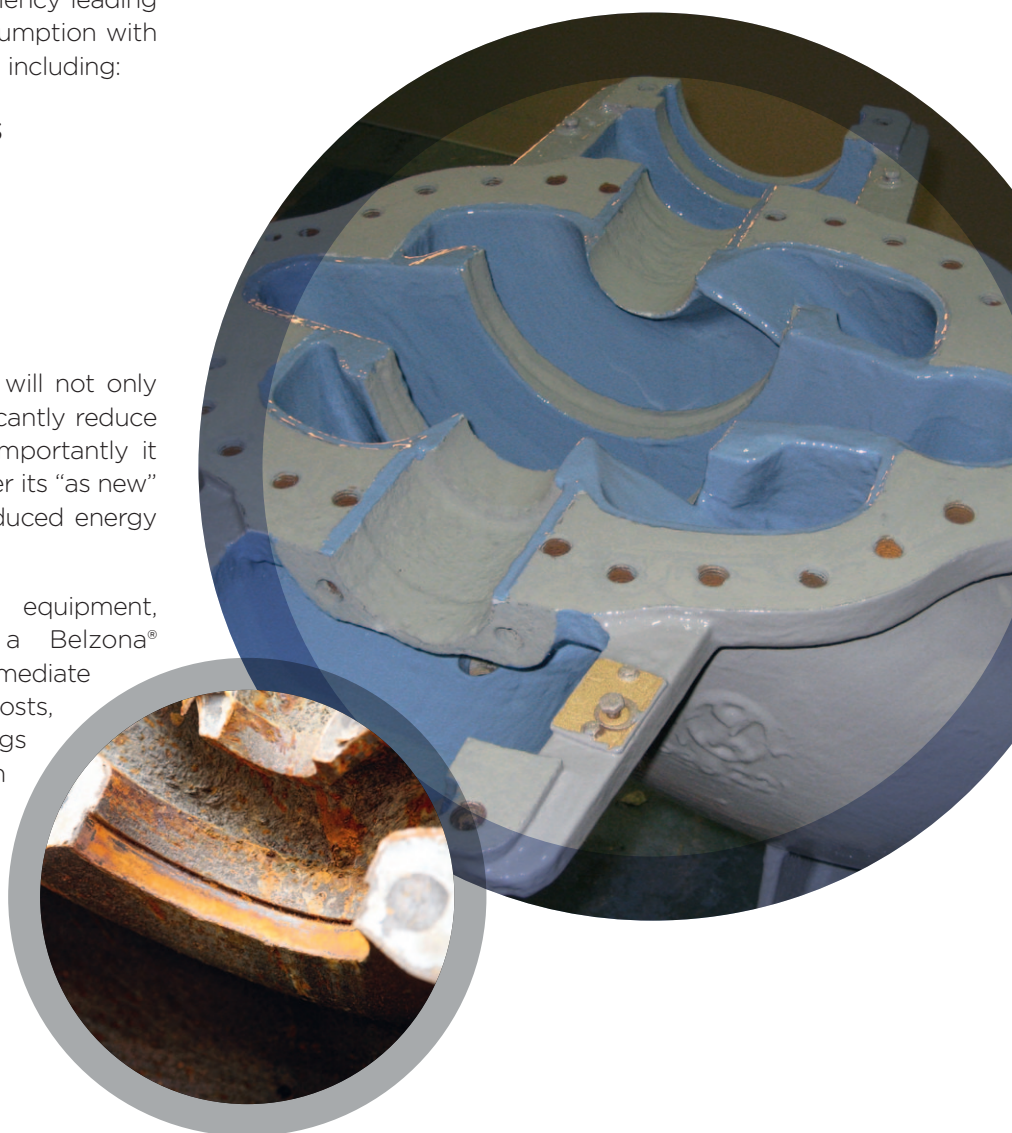
- Increased operating costs
- Reduced head
- Shorter service life
- Reduced flow

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.

**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



[www.belzona.com](http://www.belzona.com)

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 875m<sup>3</sup>/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*

For more information, please contact your local Belzona® representative:

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



Belzona products are manufactured under an ISO 9000 Registered Quality Management System

