

# 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
- Minimize downtime
- Increase life expectancy
- Eliminate expensive replacement costs

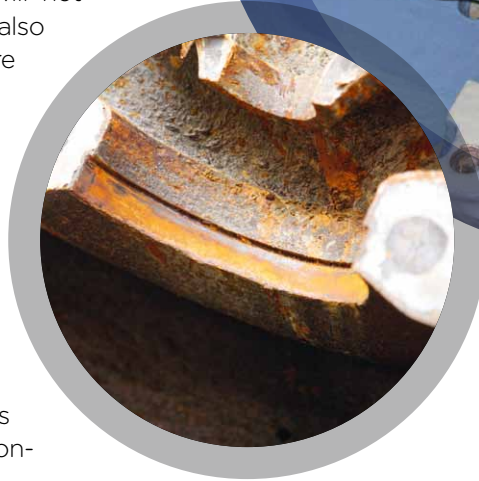
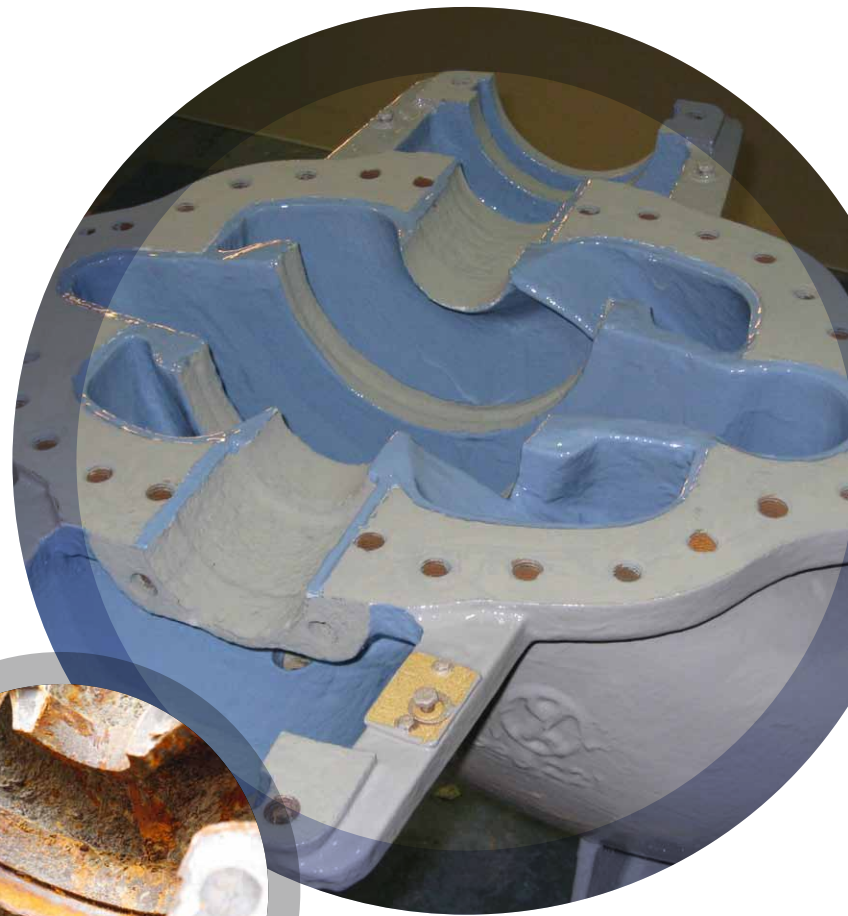
Typically, the energy cost of a pump represents the largest portion of its lifetime costs - much more than capital. In fact, operating costs can represent as much as 95% of the overall lifetime costs of the pump. Therefore, an improvement in energy efficiency will represent a significant reduction in lifetime costs.

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, but also 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 payback 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. Overall, it provides years of power savings in addition to high performance erosion-corrosion protection.



[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 utilizing 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 1,300 rpm, was found to deliver 5.55 MGD (875 m<sup>3</sup>/hr) at 86.9 ft (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 25,400kWh

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.

## QUALITY PRODUCTS - TECHNICAL SUPPORT

The Belzona product range is manufactured through stringent quality and environmental control guidelines complying with the internationally recognized requirements of **ISO 9001:2000 and ISO 14001:2004**. Belzona has a global distribution network of over 140 Distributors operating in 120 countries. Local support is provided by trained Technical Consultants who will diagnose the problem, recommend the solution, and provide 24-hour on-site application supervision.

For more information, please contact your local Belzona representative.




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**No Shrinkage**  
Permanent repair
- 


**Efficiency Enhancement**  
Increased performance
- 

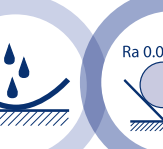
**Environmentally Friendly**  
NO VOCs
- 


**Durable**  
Withstands industrial environments

- 

**Potable Water**  
Certified to ANSI/NSF Standard 61
- 

**Eliminates Dangerous Hot Work**  
Safe
- 

**High Adhesion**  
Ensures long service life
- 

**Hydrophobic**  
Low surface tension
- 

**Smooth**  
Reduced turbulence



Certified to NSF/ANSI 61



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

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ISO 9001:2000  
Q 09335  
ISO 14001:2004  
EMS 509612

**Europe & Africa**  
**Belzona Polymerics Ltd.**  
 Harrogate, UK  
 t: +44 1423 567641  
 f: +44 1423 505967  
 e: [belzona@belzona.co.uk](mailto:belzona@belzona.co.uk)

**The Americas**  
**Belzona Inc.**  
 Miami, FL USA  
 t: +1 (305) 594-4994  
 f: +1 (305) 599-1140  
 e: [belzona@belzona.com](mailto:belzona@belzona.com)

**Asia & Oceania**  
**Belzona Asia Pacific**  
 Chonburi, Thailand  
 t: +66 38 378099  
 f: +66 38 378098  
 e: [belzona@belzona.cn](mailto:belzona@belzona.cn)

**China**  
**Belzona Hong Kong**  
 Hong Kong, China  
 t: +852 3101 7461  
 f: +852 3101 7530  
 e: [belzona@belzona.hk](mailto:belzona@belzona.hk)

