

Application Focus

Erosion-Corrosion *Heat Exchangers*

Heat exchangers are susceptible to erosion damage and galvanic corrosion due to contact between dissimilar metals, commonly used in the construction of heat exchangers.

If this damage is left untreated, the operational efficiency of the system will be seriously undermined with the potential for complete deterioration of components, leading to:

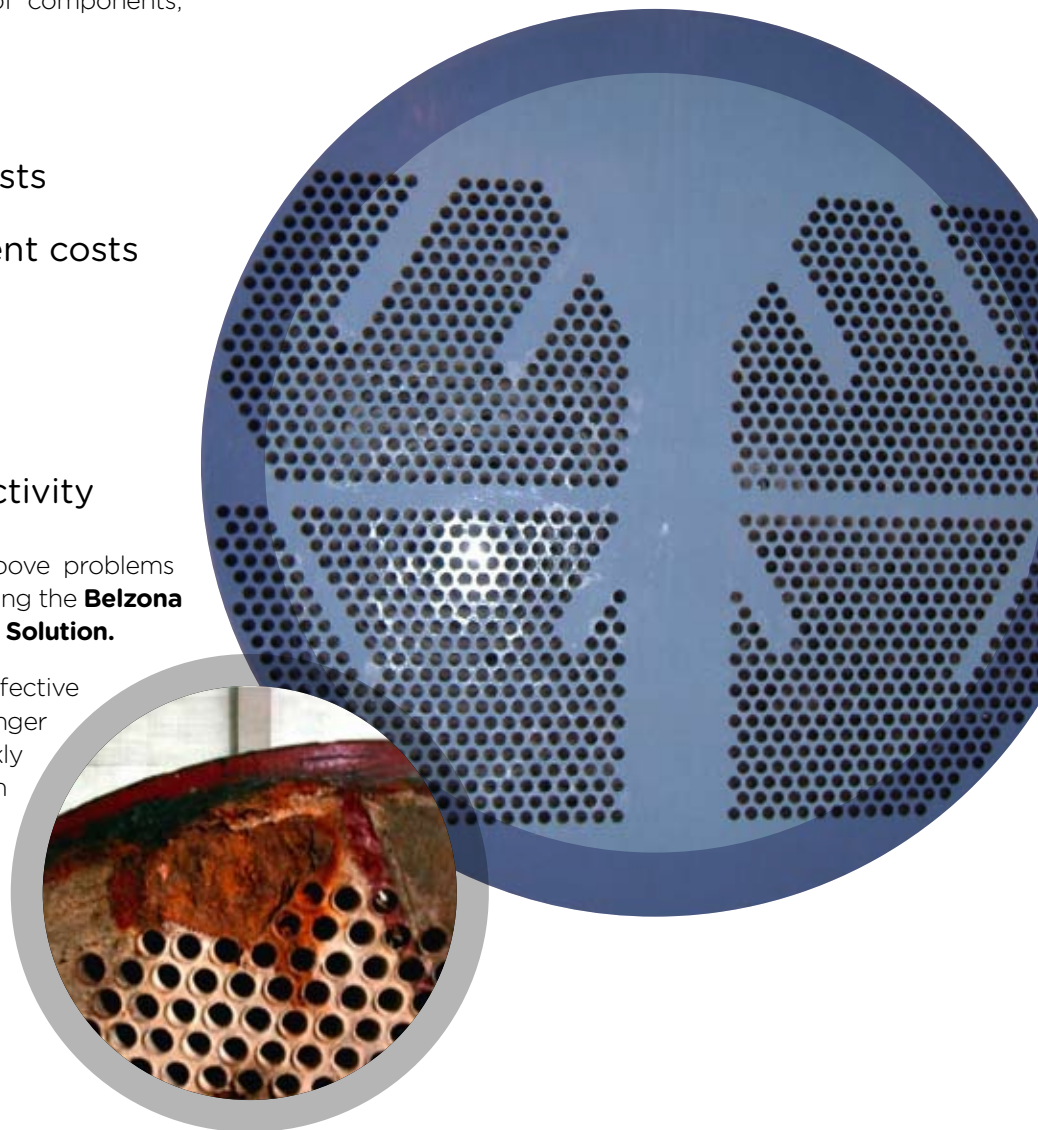
- Unplanned outage
- Increased operational costs
- Potential high replacement costs
- Reduced efficiency
- Process contamination
- Reduced thermal conductivity

The consequential cost due to the above problems can quickly and simply be prevented using the **Belzona Heat Exchanger Repair and Protection Solution**.

By utilizing a cold applied cost effective Belzona material, virtually all heat exchanger components can be treated quickly and efficiently resulting in longer term corrosion protection and preservation of the heat exchanger.

Belzona can provide the answer to erosion and galvanic corrosion in heat exchangers that will:

- Minimize downtime
- Reduce expensive replacement costs
- Eliminate the danger of repairs involving hot work
- Extend the life of components



Application Case Study

“ A customer was faced with a potentially high cost maintenance repair due to severe damage to multiple components within a heat exchanger. Following inspection, it was found that galvanic corrosion coupled with erosion had caused a loss of metal thickness on the tubesheet surface. Consequently, coolant was able to contaminate the process fluid, necessitating immediate shutdown of the system. ”

Heat Exchanger Repair & Protection Solution

Belzona provided a cost effective solution that not only rebuilt the eroded tubesheet and sealed the leaks but prevented future corrosion. The electrically insulating Belzona materials isolated the dissimilar metals used in the heat exchanger construction so eliminating further galvanic corrosion.

The heat exchanger was quickly returned to service with the full supply and fix costs for this solution a fraction of the estimated replacement costs. During a five year maintenance outage the heat exchanger was inspected and found to be in excellent operational condition.

For more information, please contact your local Belzona representative.



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.

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

Europe & Africa
Belzona Polymers Ltd.
Harrogate, UK
t: +44 1423 567641
f: +44 1423 505967
e: 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

Asia & Oceania
Belzona Asia Pacific
Chonburi, Thailand
t: +66 38 378099
f: +66 38 378098
e: belzona@belzona.com

China
Belzona Hong Kong
Hong Kong, China
t: +852 3101 7461
f: +852 3101 7530
e: belzona@belzona.hk


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