



Rumford Industrial Group Inc.

Extend Heat Exchanger / Chiller Life | September 2009

VISIT OUR LINKS:



Belzona®: The global first choice for industrial protective coatings & repair composites with application capabilities.



Belesta®: A new force in the field of boundary lubrication of Industrial Machinery and Equipment!

Would you like to

- Reduce power consumption/cost?
- Reduce equipment wear?
- Overcome problems of noise, vibration or overheating?

Belesta® can help!



Rumford Industrial Group Inc.: Anywhere and anytime, RIG/CIG consultants and applicators fly to the rescue of industry. Able to rebuild damaged equipment and machine components, Faster than conventional methods, foiling the corrosion/erosion attacks, escaping the costs of replacement while restoring them to good as new.

Our consultants are ready and able to respond to the call of distressed maintenance managers in any industry from small machine shops to large power plants. Our goal: Saving mega money and precious man-hours for our customers.

Super Consultants and Super Metals = Unbeatable Team!

Greetings,

We here at Rumford Industrial Group would like to inform you on what can happen when heat exchangers and chillers are damaged. The damage derives from combined forces of erosion-corrosion and it is accelerated by bi-metallic effects. Belzona's Advanced Polymers are widely used to rebuild damaged areas and protect the equipment for years of uninterrupted service.

Today's building maintenance specialists are charged with the responsibility of maintaining complex and expensive HVAC (heating, ventilation and air conditioning) equipment operating under demanding conditions.

Belzona's Advanced Polymers can be used to repair and protect a wide variety of equipment and areas in HVAC systems. Belzona can help reduce those maintenance costs as well as cut downtime and repair frequency. Here are some examples of how Belzona can cost effectively reduce everyday equipment problems.

SHELL & TUBE CHILLERS / HEAT EXCHANGER

- Rebuild and protect eroded-corroded tube sheets

Problem:

Predominantly chiller /heat exchanger tubes are manufactured from a different metal than the tube sheet. This leads to bi-metallic corrosion at the junction of tube and tube sheet which in turn causes leakage across the tube sheet.



Belzona Solution:

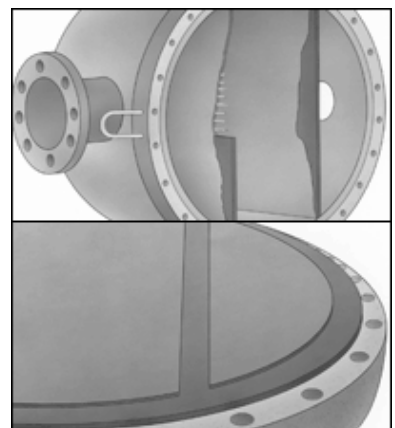
Because Belzona products are electrically non-conductive they can be used to isolate the twodiffering metals from the electrolyte thus breaking the electrical connection and thereby eliminating the galvanic corrosion.

- Rebuild division bars and seal faces

- Reform division bar seats.
- Rebuild covers and water boxes.

Problem:

When division bars and their seats (seal area) are damage by corrosion the result is short circuiting of the fluid media between passes. This of course drastically reduces the efficiency





[Listen to this live interview!](#)

Who: Rhett Role

Company: Nationwide

Nationwide has been utilizing chiller repairs with Belzona for over 20 Years!

Find out why!

[[Rumford RADIO SHOW Archive](#)]

DID YOU KNOW?

The steel ends of the "**plate type**" **heat exchangers** can become corroded and cause leaking.

Problem:

Galvanic and crevice corrosion on the plates result in leaking around the steel and a loss of efficiency.

Utilizing the **Belzona®** 1000 series hydrophobic efficiency enhancement coating will eliminate this problem.

Products:

Belzona® 1341 (Supermetalglide)

Belzona® 9411 (Release Agent)

Application Method:

Using a modified version of Belzona's engineering specifications, a plate is coated with Belzona® 9411 and used to form a thick layer of Belzona 1341 on the end cover. This procedure provides a perfect finish and excellent seal.



of the heat exchanger.

Belzona Solution:

Rebuild division bars and seats with Belzona Erosion-Corrosion resistant products. Belzona forming techniques ensure perfect corrosion resistant mating surfaces.

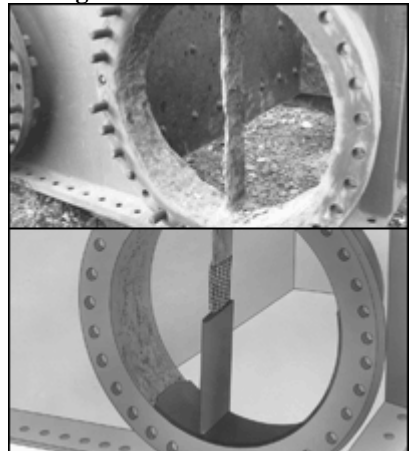
- Protect water boxes and end covers against corrosion

Problem:

Corrosion build up within waterboxes can lead to reduced turbulent flow of the fluid passing through. This in turn will lead to increased erosion and also reduce the efficiency of the heat exchanger.

Belzona Solution:

By applying a Belzona protective coating the corrosion can be eliminated. If the corrosion is eliminated the consequences of the corrosion are also eliminated. Various coatings are available which are designed to cope with a range of service conditions.



You can also:

- Repair existing linings.
- Repair and seal holed casings.
- Seal leaking tubes.
- Seal leaks at flanged joints.

LESS DOWNTIME WITH BELZONA (VIDEO):



Click the image above to learn more!

This video shows the use of Belzona® to repair and protect chillers/heat exchangers effectively and easily in any situation. We hope you enjoy and benefit from the video, interview and case history given in this newsletter.

[[Rumford HOW TO Video Archive](#)]