ONTARIO

KNOW-HOW IN ACTION

BELZONA®
GREAT LAKES

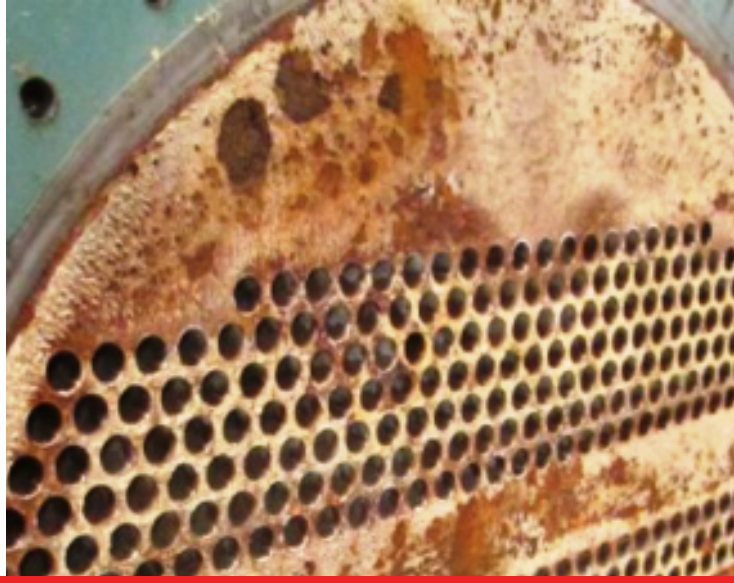
022/2021

HVAC TUBE SHEET EROSION PROTECTION

BELZONA®
Repair • Protect • Improve
AUTHORIZED DISTRIBUTOR

THE PROJECT

TUBE SHEET
SEPTEMBER, 2013



A hospital in Eastern Ontario was having issues with the tube sheet of their chiller. The chiller tube sheet was suffering from corrosion due to bi-metallic corrosion.

Chiller units are a vital part of any heating or air conditioning system. Failure to quickly protect these units allows galvanic corrosion to take place, resulting in wastage and metal loss on the tube sheet around the coolant tubes. Left untreated, the loss of metal can cause leakage of the coolant and contamination of the chilled water.

CORROSION & EROSION PROTECTION

Customer wanted to repair the chiller but could not afford an extensive downtime. They needed a repair that will only cause minimal disruption to their operations.

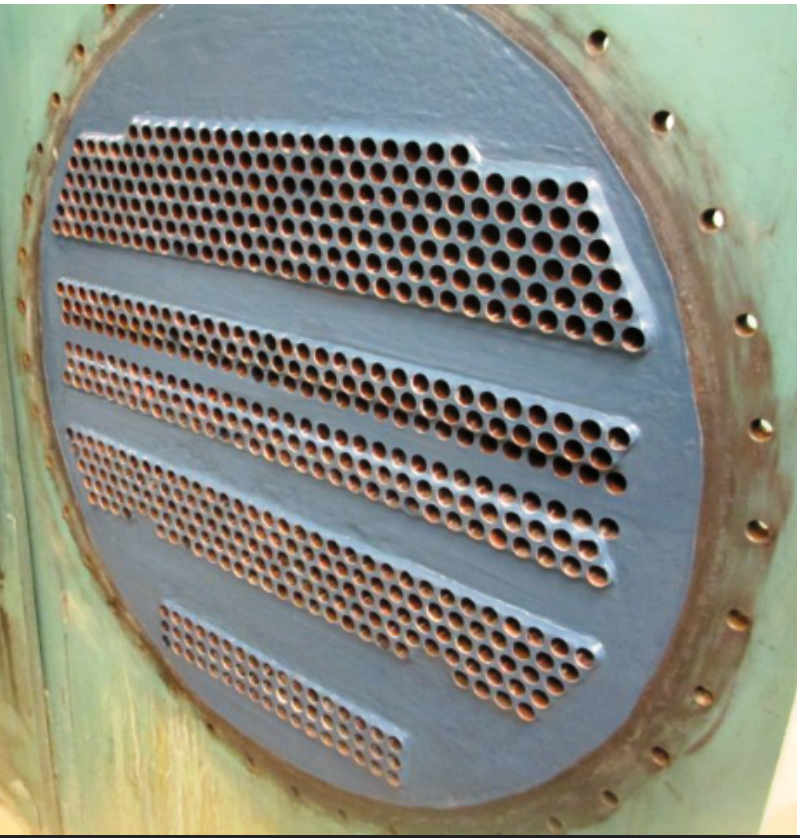
Belzona proposed a solution that met the hospital requirements. Belzona's materials are cold-applied, the system is convenient to install and allows a quick return to service.

THE SOLUTION

Belzona 1111 (Super Metal) was selected as the rebuilding material and Belzona 1321 (Ceramic S Metal) as the protective coating.

The surface was prepared by grit blasting and the surface was washed with Belzona 9111 (Cleaner Degreaser) to remove all residual blasting debris. The tubes were plugged with corks and Belzona 1111 (Super Metal) was applied to the area using an applicator. The first and second coat of Belzona 1321 (Ceramic S Metal) were applied with an short bristle brush in accordance with the Belzona Instructions For Use.

QUICK RETURN TO SERVICE



Since completion of this chiller in 2013 the customer contacted us again in 2021 to protect another chiller in their hospital. The performance of Belzona 1321 (Ceramic S Metal) exceeded their expectations.

Belzona 1321 (Ceramic S Metal) is a two component, high-strength material for the protection of equipment against erosion-corrosion. This solvent free system has ceramic fillers and offers outstanding erosion resistance under immersion conditions. Belzona 1321 (Ceramic S Metal) will not expand, shrink or distort, making it suitable for use as an injection material.