ONTARIO KNOW-HOW IN ACTION



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PULP & PAPER CLEANER CONE ABRASION PROTECTION



THE PROJECT

ABRASION PROTECTION SEPTEMBER, 2011

A customer in Easthern Ontario was having issues with their high density (HD) cleaner cone. The HD cone allows for efficient removal of contaminants like sand, glass, chips, pins, etc. from the pulp stock. However, these unwanted solids had caused severe abrasion in this unit.

The HD cone presented metal loss across its entire surface and is some areas there were perforations. These through wall defects were diminishing the efficiency of the cone.

ABRASION RESISTANT

The customer was replacing these units every few months, which was becoming very costly for them. They had tried a hardened weld overlay solution, but it did not incremented the service life of the equipment. They were looking for another repair solution that could be done in situ by their staff with a short downtime,

The customer had never used Belzona in the past but one of Belzona's representatives had been in contact with their plant maintenance manager. They decided to put the Belzona solution to the test.







THE SOLUTION



Belzona 1121 (Super XL-Metal), Belzona 9811 and Belzona 1812 (Ceramic Carbide FP) were specified for this repair.

The HD cone was grit blasted to prepare the surface before application. Then, Belzona 1121 (Super XL-Metal) was applied with an applicator, filling all the worn areas and reprofiling the cast iron. While the Belzona 1121 (Super XL-Metal) was still wet, Belzona 9811 was bonded to the internal surface of the cone.

EXTREMELY DURABLE





After, Belzona 1812 (Ceramic Carbide FP) was used for the grout between the tiles.

Belzona 9811 is an alumina tile sheet that is easily installed to create a hardwearing, abrasion resistant lining capable of forming many different contours. The alumina tiles are produced from an extremely pure micro-crystal aluminum oxide sintered at high temperature. The alumina oxide used to manufacture the tiles has a hardness of 9 on the Mohs scale.