

ONTARIO
**KNOW-HOW
IN ACTION**

BELZONA[®]
GREAT LAKES

019/2021

**PULP & PAPER
ELBOW
ABRASION PROTECTION**



BELZONA[®]
Repair • Protect • Improve
AUTHORIZED DISTRIBUTOR

THE PROJECT

ABRASION PROTECTION
AUGUST, 2015

A customer in Northeastern Ontario was having issues with some of their elbows in their line. Blown wood particles had created loss of wall thickness due to abrasion, which eventually lead to blow-outs and loss of production.

The wood chips used to produce the particleboard at this facility are recycled. The wood chips, fibers and particles are moved around the facility and processed by mechanical and pneumatic means. Whenever there is a change of direction in the pneumatic system such as an elbow, it creates a wear point in the system.

ABRASION RESISTANT

The customer had tried a hardened weld overlay solution previously, but it only lasted four months. They were looking for a repair that could be done in situ by their staff with a short downtime,

The facility had used Belzona in the past for other metal rebuild and pipe leak repairs, so they decided to try Belzona abrasion resistant products.



THE SOLUTION

Belzona 1812 was specified because of its outstanding abrasion resistant properties. The product is specifically designed to provide wear protection against small abrasive particles.

The surface was prepared by initially grinding the steel to create a clean surface and then abraded with the MBX Bristle Blaster to create the correct surface profile. Belzona 1812 was applied to the wear areas of the elbow and the replaceable back, keeping within the designated wearing surfaces.

CERAMIC FILLED



The product was applied at 1/4" thick with the use of a rigid applicator.

Belzona 1812 is a ceramic filled epoxy system designed to protect equipment surfaces exposed to severe abrasion. The product exhibits outstanding erosion resistance due to a hardness comparable to basalt. Belzona 1812 may be applied from 1/8" to unlimited thickness onto vertical or horizontal surfaces. Thicker applications will provide extended protection.

