

# BELZONA PROTECTS A NEW WASTE WATER PUMP AND IMPELLER FROM EROSION

ID: 6308

Industry: Water / Wastewater  
Application: CEP-Centrifugal Pumps  
Substrate: Cast Steel  
Products: \* Belzona 1331 ,

Customer Location: Toronto, Ontario, Canada  
Application Date: September 2015

## Problem

*Previous supplied pumps had not met the customers expectations of longevity due to the impeller and volute being worn away by the erosion caused by waste water.*



## Photograph Descriptions

- \* 1. Impeller masked and abrasive blasted awaiting coating ,
- \* 2. Volute masked and abrasive blasted awaiting coating ,
- \* 3. Finished application of 1331 on impeller ,
- \* 4. Finished application of 1331 on volute ,

## Application Situation

A leading provider of fluid transfer equipment wanted to provide a new pump to a client that would provide long service in a municipal waste water system and resist the effects of erosion and corrosion.

## Application Method

Belzona 1331 applied in accordance with the IFU and following the Belzona Know-How system leaflet CEP-03 for application of internal coatings for centrifugal pumps. The pump volute and impeller were masked off to protect machined surfaces and areas not requiring coating. The surface was then abrasive blasted to the required standard. The Belzona 1331 was applied as a two coat system. The first coat (Grey) was applied by brush at a DFT of 15 mils (375 Microns), followed by a second coat (white) also applied by brush at a DFT of 15 mils (375 microns).

## Belzona Facts

The additional cost of adding a protective coating to the volute and impeller was more cost effective than changing the substrate to

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ISO 9001:2015  
FS 695214  
ISO 14001:2015  
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an exotic alloy. The client was familiar with Belzona having used Belzona 1321 and 1341 on other pumps. As the end user wanted to extend the life of an unprotected pump, the erosion resistance test data of 1331 and ease of application gave the client confidence that this was a long term solution.

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