

CHEMICAL TANKS GIVEN SUPPORT WITH CHOCKING COMPOUND

ID: 7592



PROBLEM

Three 96" dia. x 20' long bulk sulfuric acid and caustic storage tanks located in the water treatment plant. The 1.5" - 2" thick existing grouting system between the steel supports and the concrete base has become broken and dis-bonded. This has exposed the wooden leveling shims. The wooden shims have become rotten over time and require removal and replacement.

APPLICATION SITUATION

The Courtright Nitrogen Complex is located on 700 acres of land south of Sarnia, Ontario. it has an annual capacity of up to 1.0 million tons of nitrogen products for agricultural and industrial use each year. These products include, Ammonia, Granular Urea and Urea Ammonium Nitrate (UAN).

APPLICATION METHOD

The application followed the Belzona system leaflet GSS-13. The process first involved the removal of the wooden shims and chip out of any loose chocking material and damaged concrete base. New anchors and shims were installed to secure the tank to the base. A temporary former and pouring box was created to surround the concrete base. Application of Belzona 8411 Release Agent was applied to the wooden former and anchor bolts. Temperature of the steel substrate and the IFU was used to calculate the solidifier reduction level by using the graph #2 (steel & concrete). The product was poured into the former and allowed to flow under the tank supports and fill all voids and cavities. Once cured the forms were removed and a chamfer was ground on the edge of the Belzona 7111.

BELZONA FACTS

Belzona 7111 (Industrial Grade) works in collaboration with the mechanical fixings and anchoring system to maintain the aligned "position" of the equipment critical to efficient performance.

INDUSTRY

Chemical & Petrochemical

LOCATION

Courtright, Ontario, Canada

APPLICATION DATE

October, 2017

PRODUCTS

Belzona 7111 (Industrial Grade) is a cost-effective 2-part 100% solids chocking/grouting material designed to endure the physical and thermal shock common in industrial environments. Belzona 8411 (Release Agent) is a single component liquid applied coating to prevent adhesion to surfaces not requiring to be bonded it also is a corrosion inhibitor.

SUBSTRATE

Steel and Concrete

PHOTOS

1. Failed existing grout between tank base and concrete base 2. Removal of rotten timber packing and shim material 3. Installed Belzona 7111 4. Installed Belzona 7111

For more examples of Belzona Know-How in Action, please visit khia.belzona.com

Belzona products are manufactured under an ISO 9001 Registered Quality Management System.

www.belzona.com

