# **BELZONA REPAIRS 4 YEAR OLD PRIMARY SETTLEMENT TANK**

ID: 7538

Industry: Water / Wastewater Customer Location: Waste Water Company, England

Application: TCC-Tanks and Chemical Containment Application Date: August 2017

Areas

Substrate: Concrete

Products: \* Belzona 2211 (MP Hi-Build Elastomer),

\* Belzona 4111 (Magma Quartz),

#### **Problem**

Shortly after the PST tank was constructed 4 years ago, the expansion joints between the 82 x top blocks failed and so were repaired several times by the client using cementitious materials which had again failed. This caused problems for the boom arm to rotate correctly and some of the top horizontal blocks had come loose causing them to rock when the boom arm wheel passed over them









#### **Photograph Descriptions**

- \* 1.The large PST (Primary Settlement Tank),
- \* 2. Damaged and broken expansion joints before.,
- \* 3. Damaged joint being rebuilt with B4111 creating new expansion gap using wooden formers. ,
- \* 4. Completed expansion joints after installing Belzona 2211,

### **Application Situation**

A large PST (Primary Settlement Tank) on a Waste Water site in Bedford constructed using 82 x vertical blocks of reinforced concrete bolted together with 82 x horizontal concrete blocks bolted on the top surface to create a rim on which the boom arm drive wheel runs

## **Application Method**

For more examples of Belzona Know - How In Action, please visit https://khia.belzona.com

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FS 695214 manufactured under an ISO
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Application was carried out according to Belzona Know-How System Leaflets TCC-11 and TCC-12. All the loose and broken material from the 82 x joints and other areas on the rim were removed. The damaged areas were then rebuilt with Belzona 4111 to create new expansion joint gaps using a wooden former. Belzona 2211 was installed in all the expansion joints both horizontally across the top and up both sides to create a flexible joint. A fillet of Belzona 4111 was installed underneath the horizontal blocks and onto the vertical concrete panels all around the tank to prevent the top rim blocks from rocking

#### **Belzona Facts**

The PST tank could only be out of operation for a few days and so the Customer was looking for a fast curing and permanent solution. Following the installation of Belzona 4111 and 2211 solution for this same Customer on a much smaller PST tank in 2016, they were so pleased with the result they ordered the same Belzona solution for the repairs to this large PST and to a smaller PST at another site in October 2017.

