Know-How*in Action*

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# HYDROELECTRIC GENERATING STATION SCROLL TUNNEL

## CUSTOMER
Hydroelectric power station, Alabama, USA

## APPLICATION DATE
December 2017

## APPLICATION SITUATION
Refurbishment of a Hydro electric Generating Station to allow the facility to be brought back online.

## PROBLEM
The concrete scroll tunnel walls, floor, and ceiling were deteriorating due to many years of operation. Total area to be treated was 9000 $ft^2$. Belzona 4141 lightweight Magma Build was used to restore the ceilings up to 2" thick in areas. The walls and floor were repaired with Belzona 4131. After restoring the concrete, Belzona 5811 barrier coating was used protect the entire area .

## PRODUCTS
Belzona 4141 (Magma-Build)
Belzona 4131 (Magma-Screed)
Belzona 5811 (Immersion Grade)

## SUBSTRATE
Concrete

## APPLICATION METHOD
The ceilings were rebuilt with Belzona 4141 in accordance with Belzona Know-How System Leaflet WPA-04 and the walls and floor were repaired using Belzona 4131 in accordance with Belzona Know-How System Leaflet WPA-04 and FPA-01.

## BELZONA FACTS
The client analysed and tested several materials. The physical and mechanical properties including adhesion testing of the Belzona provided the reassurance the client needed to select Belzona for the repairs and to ensure that they would have the required longevity.

## PICTURES
1. Concrete deterioration
2. Rebuilding concrete with 4131
3. Tunnel coated with 5811
4. Finished results

1.


2.


3.


4.




ISO 9001:2008
Q 09335
ISO 14001:2004
EMS 509612

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