Hydroelectric Generating Station Scroll Tunnel

ID: 8056

Industry: Power Customer Location: Hydroelectric power station, Alabama,

USA

Application: WPA-Wall Problem Areas Application Date: December 2017

Substrate: Concrete

Products: Belzona 4141 (Magma-Build)

Belzona 4131 (Magma-Screed)

Belzona 5811 (Immersion Grade),

Problem

The concrete scroll tunnel walls, floor, and ceiling were deteriorating due to many years of operation. Total area to be treated was 9000 sq. ft. 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 Magma Screed. After restoring the concrete, Belzona 5811 immersion grade barrier coating the was used protect the entire area.









Concrete deterioration

Rebuilding concrete with Belzona 4131

Tunnel coated with Belzona 5811

Finished results

Application Situation

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

Application Method

The ceilings were rebuilt with Belzona 4141 following system leaflet WPA-04 and the walls and floor were repaired using Belzona 4131 following 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.