

Chemical Factory Mezzanine

ID: 10317

Industry: Chemical & Petrochemical
Application: WPA-Wall Problem Areas
Substrate: Carbon steel
Products: Belzona 5811 (Immersion Grade)

Customer Location: Auckland
Application Date: July 2026

Problem

The underside of this mezzanine loading platform was suffering from corrosion, brought on by exposure to caustic soda and water during wash-down cycles. If left unchecked this corrosion would have eventually compromised the structural integrity of the platform resulting in HSE issues and expensive repairs. As the client was reluctant to shut down the area for more than 5 days, large scale, conventional repair work would not have been possible without unacceptable production loss.



Original condition of the underside of the mezzanine, showing corrosion and chemical deposits



Grit Blasted to SA2.5 and around 100 microns of profile using sponge blast garnet.



Midway through the first coat of Belzona 5811 (Immersion Grade), which was applied with a short-bristled brush to take full advantage of the profile



The completed two coat system with a DFT of 400 - 450 microns

Application Situation

The client could only close the loading area for a maximum of five days before production was affected. Without intervention, the corrosion on the underside of the mezzanine would have continued to cause deterioration, ultimately requiring more extensive and time consuming, repairs than could be achieved with a protective coating system alone. The cost of replacing the loading platform was estimated to exceed \$60,000, not including the significant financial impact of production downtime.

Application Method

Sponge blasting was used to reduce dust which would have impacted negatively on the rest of the facility, this took two days to complete, including cleaning once finished. Over the following two days, two coats of Belzona 5811 (Immersion Grade) were applied at around 250 microns per coat, using brushes for the first coat and rollers for the second.

Belzona Facts

The Belzona application came in around \$50,000 cheaper than the estimated replacement of the loading area and the work was completed in 4 days.

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FS 695214
ISO 14001:2015
EMS 695213

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