

## Challenge

### Issue

Previously applied coating had failed after 2 years, resulting in severe pitting and weld zone corrosion. Client was forced to replace 10% of floor plate at cost of €175K. 40% of floor experienced pitting corrosion up to 30% of plate thickness.

### Goal

Restore tank to avoid extensive plate replacement.

### Root Cause

Prior failed lining and corrosive effects of seawater.



Severe pitting corrosion found under the existing coating repaired with ARC 858

## Solution

### Preparation

- Plate replacement in 10% of surface area
- Grit blast to Sa 2.5 with 3 mil (75 µm) angular profile

### Application

1. Corroded and pitted areas were brought back to 100% of original thickness with **ARC 858**
2. Use **ARC S1PW** to stripe coat weld seams, striker plates, and transition points
3. Apply 2 coats of **ARC S1PW** via heated plural component spray equipment to a total DFT of 20 mils (500 µm)



Application of the stripe coat to all weld seams

## Results

### Client Reported

The ARC lining is still protecting the tank after 5 years.

### Client Reported Savings

- |                         |           |
|-------------------------|-----------|
| ■ 50% Plate replacement | € 175,000 |
| ■ Weld seam repair      | € 900,000 |
| ■ Previous lining       | € 150,000 |

**Total** € 1,225,000

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|--|-----------|
| ■ Total Plate replacement and ARC lining | € 375,000 |
| ■ Savings                                | € 850,000 |



Final inspection of the ARC lining to ensure a continuous pinhole free protective lining