

## **CASE STUDY**

**EQUIPMENT:** Cooling Tower Structural I-Beams **PROBLEM:** Corroded I-Beams at risk of structural failure.

## **BACKGROUND:**

Extensive corrosion was visible on the cooling tower support I-Beams. Corrosion on the I-Beams can risk structural integrity of the tower. Replacement of the beams would require the involvement of a structural engineer, and would not solve the corrosion issue. The owner was unaware of any other solution.



Original I-beam condition



Media blasting procedure



Application of Surfsil CX multi-layer coating process



UV resistant coating applied

## SOLUTION:

The structural integrity of the beams had not yet been compromised. We were able to provide a low cost solution by reconditioning the existing beams. Our proprietary multilayered coating application Surfsil CX was utilized due to is high resistance to: impact strength, chemicals, and corrosion. The steel surfaces were media blasted to SSPC/NACE standards to remove the existing corrosion and create the proper profile for our coating application. Prior to coating, a metal compound paste was applied to resurface the beams as well as remove any pit holes that would cause water and chemicals from the cooling tower to accumulate.

## **RESULTS**:

The project was completed in only 5 days while the unit was fully operational. Our solution will provide permanent protection against corrosion, chemicals, and UV attacks.

Contact Advancoat, LLC at sales@advancoat.com for information on approved cleaners.