Project Experience

Project information

Location: The Netherlands.
Project: Bollards in lock Zandkreeksluis.

Surface Preparation
SSPC SP12 Low pressure water cleaning maximal 70 Bar.
SSPC SP2 and SP3 Hand and Power Tool cleaning.

Coatings system

MCU-ALUPRIME	30 µm DFT (penetration)
MCU-ZINC	100 µm DFT
MCU-MIOMASTIC	75 µm DFT
MCU-MIOTOPCOAT	75 µm DFT

Cast iron bollards at the Dutch lock Zandkreeksluis needed maintenance due to the corrosion generated which damaged the areas between the concrete and the iron. One of the bigger restrictions is the moment for the coating application: only one door could be closed and thus only in between tidal zones could be painted. For the bollards located at the upper rows was not a problem as they had enough time to dry before immersion. But the 2 lowest rows are subject to immersion within 1 hour. To apply the full system on these lowest rows they had to paint the first layers, let the tide immerse the fresh paint and next low tide the next layers could be applied.
After a year later the coating and bollards are in perfect condition and this is a big success taking in consideration that cast iron is very porous, there only could be a minimal surface preparation and not to avoid is that in the deep pitting and porosity in there is oil form the mooring ships that floats on the water and with every tide during the years penetrated in this porosity.
Abrasive blast was impossible due to the risk of weakened steel and the content of alcohol. A mild surface prep was executed to avoid risks. Due to the minimal preparation with residues of fixed corrosion, deep pitting and some mil scale, as also the humidity of the water preparation.

MCU Coatings was the only safe choice to obtain best results long term. Our MCU primers penetrates deep in the porosity and glue all corrosion. Beside of this, our coatings will react with the water, trapped in the porosity of the surface, corrosion and pitting, resulting in absence of moisture in the porosity and avoiding thus further corrosion.