

Project Experience



Project information – Bridge Astoria Megler

Location: Astoria, Oregon, USA
Client: Oregon DOT (Department of Transportation)
Project: Seismic Retrofit and Steel Rehabilitation/Coating

Surface Preparation

SSPC SP12 High pressure water cleaning maximal 400 Bar.
SSPC SP2 and SP3 Hand and Power Tool cleaning.

Coatings System

MCU-ZINC	100 µm DFT
MCU-MIOMASTIC	75 µm DFT
MCU-MIOTOPCOAT	75 µm DFT

The Astoria Bridge was the one of the 1st major project where MCU-Coatings was used for. This structure located on the Pacific Oregon coast and subjected to constant salt fog and condensate. It was also part of a 6-year joint Federal Highways and Oregon Department of Transportation, coatings evaluation program. This test report included 10 of the top-performing technologies available including; various zinc systems, various epoxies, water-born systems, the MCU system and even rust converters. It is interesting to note that in this test the inorganic-zinc as a stand-alone coating out-performed the same primers when over-coated with epoxy and a polyurethane finish coat.

The test concluded that the MCU system was the only coating that had less than 0.01% corrosion after 6 years exposure in a marine, salt and fog environment.

At a subsequent follow-up inspection 18 years after the coating had been applied the bridge still had less than 0.01% corrosion and it was estimated that coating maintenance would probably only be required 40 years after the project had completed. The coating inspectors also noted that they were not aware of any steel structures coated with an epoxy, with or without a zinc primer, that had performed as well after just one year in a similar environment!