

HT 365

Preservation Coating



Case History for Outdoor Storage

Background

Customer is a Houston based major manufacturer of blowout preventers (BOPs). After manufacturing, parts are stored in an outdoor storage yard, where they are exposed to the elements. The problem is rust forming on equipment can render it unusable and destroy value. At a minimum, it will need to be reblasted, thus costing the owner more money for an additional step of blasting.

Customer currently uses a product that prevents rust for 45 days, but is extremely difficult to apply and remove because it is lanolin-based. The current product is very thick and is perceptible on the surface of the metal. To remove the current product alone, the customer must utilize hand cleaning which can require of 48-72 hours of labor at \$100/hour.



Hot Rolled Steel Plate

Solution

Customer needed to remove corrosion from a 2-inch hot rolled steel plate, laser cut in 12-inch diameter circular sample with visible rust and mill scale. Customer applied a complementary product to remove all rust to the molecular level as seen in the following picture.

HT 365 was applied to Side "A" and its entire edge and Side "B" was left untreated. Sample was stored outside in an uncovered area on a wooden pallet on its edge to expose both sides. After 63 days, Side "A" was observed for the first time and did not show any signs of rust after being treated with HT 365.

Application Date: 02/26/15 Observation Date: 05/01/15



After 90 days, Side "A" was observed for the second time and had just begun to show signs of rust bloom. It is estimated on the basis of the light corrosion that was observed that HT 365 began to lose its effectiveness after 80 to 85 days. During the months of March and April, temperatures ranged from 35 to 90 degrees Fahrenheit. Several heavy rain storms were documented during the month of April, 2015. The entire edge of Side "A" that was also treated with HT 365 remained rust free. Now, if the Customer needs to remove HT 365 for any reason, they may do so by pressure washing the metal with HoldTight 102 diluted at 100: 1 water to HoldTight 102, rather than costly hand cleaning, as required by their current product in use.

On Side "B" that was not treated with HT 365, heavy rusting occurred. The applicator had started to paint this side with HT 365 before being stopped (so that there would be a control side). The area where HT 365 had been applied can be seen on the bottom sliver of the plate where it is rust-free, the rest of that side is heavily corroded.



Side A: 90 Days



Side B

Results

After almost three months in outdoor storage exposed to extreme temperature swings, UV and extreme rain events, all surfaces coated with HT 365 were rust-free. This result preserves the sample for future use without the need for expensive rust and/or coating removal techniques. At the time that the piece of steel needs to be coating it should be power washed clean using HoldTight 102 and potable water.