Carboline Application Notes

Carboline products are manufactured by the Carboline Company. The test was applied to an area on the downstream waterline area of a tainter gate with an approximate test area of 18.6 m^2 (200 ft^2). For the test application the Rock Island District Corps of Engineers maintenance crew abrasive blasted the surface and applied the coating using airless spray equipment with a 619 tip. Blasting was done using Ottawa silica sand abrasive to produce a surface profile of 50-75 microns (2-2.5 mils). The surface met the requirements of SSPC SP5 White Metal Blast.

The primer, Carboline 890, was applied on Wednesday. The surface was prepared by mid morning and the application completed by mid afternoon. Ambient temperature was approximately 27° C (81° F). The 2 components of the paint were mixed and applied according to manufacturer's instructions without difficulty. Five % thinner was added. A double spray application was used to apply a dry film thickness of 150-225 microns (6-9 mils) with heavier thicknesses noted on the lower section of the test area.

On the following day the topcoat, Carboline 893, was applied. The application completed by mid afternoon. Ambient temperature was approximately 29° C (85° F). The 2 components of the paint were mixed and applied according to manufacturer's instructions without difficulty. Total system thickness was mostly in the 350-450 micron (14-18 mil) range.

Thickness on rivet lines was mostly in the 500-630 micron (20-25 mil) range. The applied coating dried hard, uniform, and without sags pinholes or other defects. The test area cured in air for 8 days prior to immersion.