

Atmospheric Corrosion of Top Coats Used to Protect Carbon Steel and Stainless Steels in Chloride Containing Environments

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ABSTRACT

This paper presents the results from a new generation of Top Coats applied to bare 1010 carbon steel and austenitic stainless steels exposed to chloride containing environments. Preliminary tests revealed that after applying the Top Coats to carbon steels and austenitic stainless steels, the presence of a nanometer size layer increase the corrosion protection of both materials when exposed to chloride containing environments (see Figure 1).

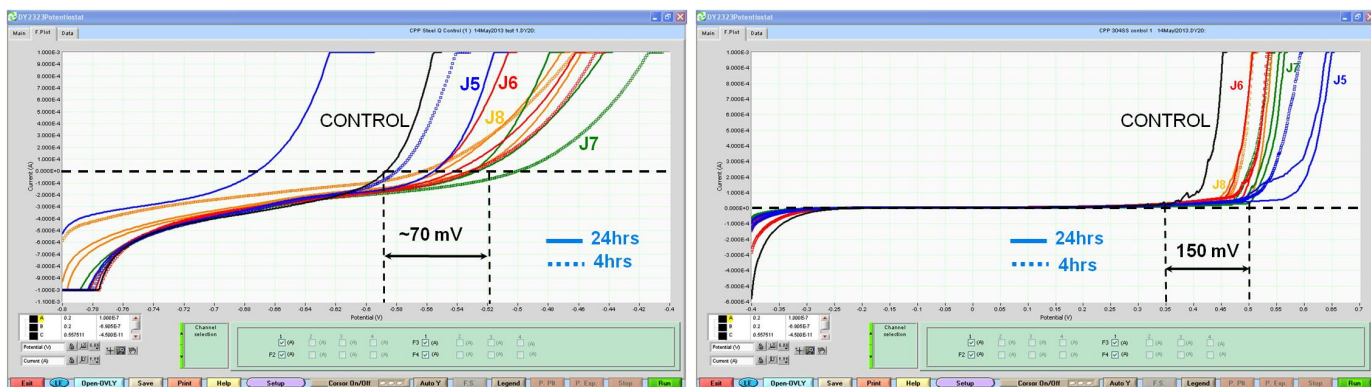


Figure 1, Anodic Polarization in artificial seawater of 1010 Carbon Steel (left) and 304 Stainless Steel (right) with different Top Coats applied to the surface and then removed after different time intervals.