

# Test Report

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## Corrosion Resistance of Oxifree TM198 Coating System

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For

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## 1. Report Title:

### Corrosion Resistance of Oxifree TM198 Coating System

## 2. Test Method:

ASTM B117 Practice for Operating Salt Spray (Fog) Apparatus. The Q-fog chamber is shown in Fig. 1.



Figure 1 Q-fog Chamber for the Corrosion Resistance Testing, ASTM B117

## 3. Test Samples

Three steel flange samples over-coated with Oxifree TM198 coating system were prepared by Oxifree Co. The test samples are listed in Table 1. A new coated flange sample is shown in Figure 2.

Table 1 Steel Flange Samples Coated with Oxifree TM198 Coating System

Sample Shape	Sample ID	DFT, mm	Test Time, hr
Steel Flange	121009-1	2.8	3,000 hr
	121009-3	3.1	3,000 hr
	121009-4	2.4	3,000 hr



Fig. 2 A New Coated Flanged Sample, steel tube OD= 1.325", both ends capped with some bare metals exposed

## 4. Test Result

After 3,000 hr ASTM B117 salt fog exposure, the steel flange samples before and after coating cutout are shown in Fig 3. The test results are listed in Table 2.

**Table 2. Test Result of the Steel Flanges Sprayed with Oxifree TM198 Coating**

Sample	Sample ID	DFT, mm	Test Time, Hr	Corrosion Resistance
Coated Steel Flange	121009-1	2.8	3,000	No rusting on flange
	121009-3	3.1	3,000	No rusting on flange
	121009-4	2.4	3,000	No rusting on flange



Fig.3A Flange #1 – After 3,000 Hr Salt Fog



Fig.3B Flange #1-After 3,000 hr Sal Fog with a Cutout



Fig.3C Flange #3 – After 3,000 Hr Salt Fog



Fig.3D Flange #3-After 3,000 hr Sal Fog with a Cutout



Fig.3E Flange #4 – After 3,000 Hr Salt Fog



Fig.3F Flange #4-After 3,000 hr Sal Fog with a Cutout

## **5. Test Summary**

Oxifree TM198 coating system has good barrier property to provide corrosion protection to the steel from rusting.