

SGS Germany GmbH

Test Report No.: H0RD0002

Order No.: H0RD

Pages: 17

Munich, Apr 10, 2014

Client: Nanoprotech OÜ
Equipment Under Test: Metal plates with different Corrosion protecting Fluids
Manufacturer: Nanoprotech OÜ
Task: Environmental test
Test Specification(s): DIN EN ISO 9227
 [covered by accreditation]
Result: The grade of corrosion is shown at the pictures in the chapter 6.

The results relate only to the items tested as described in this test report.

approved by:

Date

Signature

Garcia-Baglietto
 Lab Manager Environmental Simulation

Apr 14, 2014



This document was signed electronically.

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1 Summary

Tested Requirement(s)	Remark
EN ISO 9227 NSS	The test was performed. The grade of corrosion is shown at pictures in the chapter 6.

2 References

2.1 Specifications

- [1] **EN ISO 9227: 2012-09**
Corrosion test in artificial atmospheres –
Salt spray tests: Test NSS

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3 General Information

3.1 Identification of Client

Nanoprotech OÜ
Uus-Sadama 21
10120 Tallinn Estonia
Andrej Schechtmann

3.2 Test Laboratory

SGS Germany GmbH
Hofmannstraße 50
81379 München

3.3 Time Schedule

Delivery of EUT: Mar 28, 2014
Start of test: Apr 01, 2014
End of test: Apr 05, 2014

3.4 Participants

Name	Function	Phone	E-Mail
Claus-Peter Finsterer	Accredited testing, Editor	+49 89 787475-323	claus-peter.fensterer@sgs.com

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4 Equipment Under Test

4 Metal Plates covered with 4 different Corrosion protective sprays:

- 1) Nano Protech Protective Coating Electric
- 2) Nano Protech Grease Anticorrosion
- 3) Oil Spray WD40
- 4) Würth Corrosion Protection Spray

5 Test Equipment

5.1 Test Facility

The measurements were carried out by SGS Germany GmbH,
Department Environmental Simulation, Hofmannstraße 50, 81379 München, Germany.

5.2 Measuring Equipment

ID No.	Equipment	Type	Manufacturer	Status	Last Cal.	Next Cal.
S5534	SUA Spray Chest	5400	Weiss	chk	Jan 10, 2014	Jan 2015

cal = Calibration, car = Calibration restricted use, chk = Check, chr = Check restricted use, cpu = Check prior to use, calchk = Calibration and check, ind = for indication only, cnn = Calibration not necessary

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6 Test Specifications and Results

The test results in the report refer exclusively to the test object described in section 4 and the test period in section 3.3.

6.1 Test Specification

Test	Parameter	Test Severity	Reference	Method
Salt mist, continuous	Salt Salt solution Temperature Duration Intermediate assessment	NaCl 5% 35 °C 96 h 24h, 48h, 72h	ISO 9227	NSS

6.2 Test Performance

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Pic. 1 Metal plate #1 coated with Nano Protech Electric

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Pic. 2 Metal plate #2 coated with Nano Protech Grease Anti Corrosion



Pic. 3 Metal plate #3 coated with Oil Spray WD40

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Pic. 4 Metal plate #4 coated with Würth Corrosion Protection Spray



Pic. 5 EUTs in the salt spray chamber

6.3 Test Result



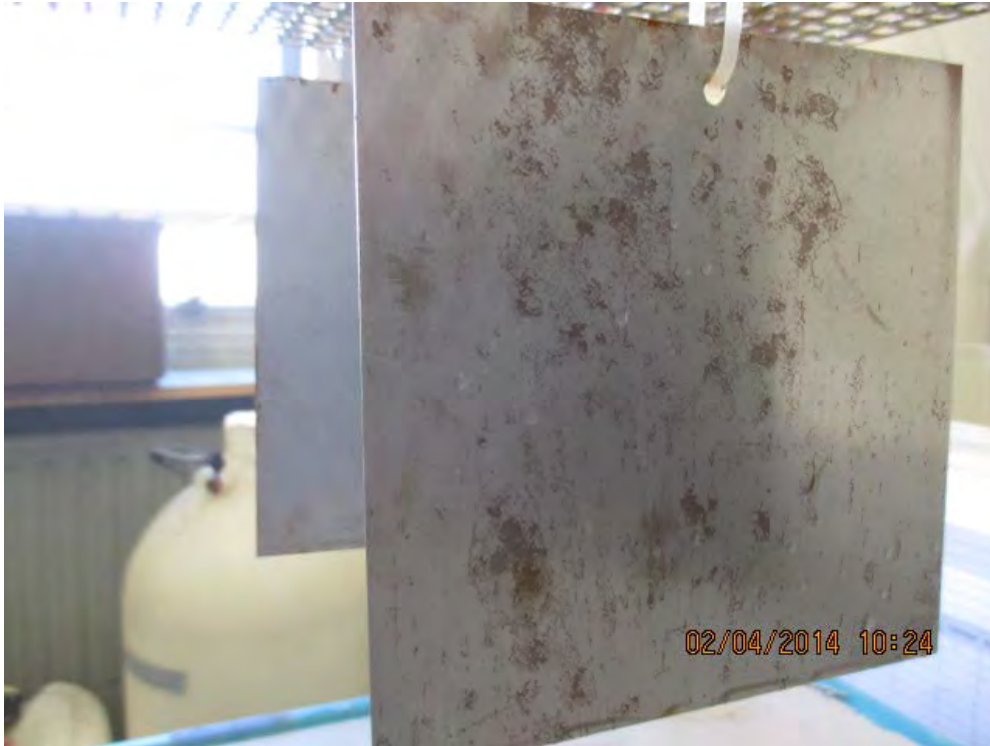
Pic. 6 Metal plate #1 after 24h salt fog exposure



Pic. 7 Metal plate #2 after 24h salt fog exposure

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Pic. 8 Metal plate #3 after 24h salt fog exposure



Pic. 9 Metal plate #4 after 24h salt fog exposure

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Pic. 10 Metal plate #1 after 48h salt fog exposure



Pic. 11 Metal plate #2 after 48h salt fog exposure

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Pic. 12 Metal plate #3 after 48h salt fog exposure

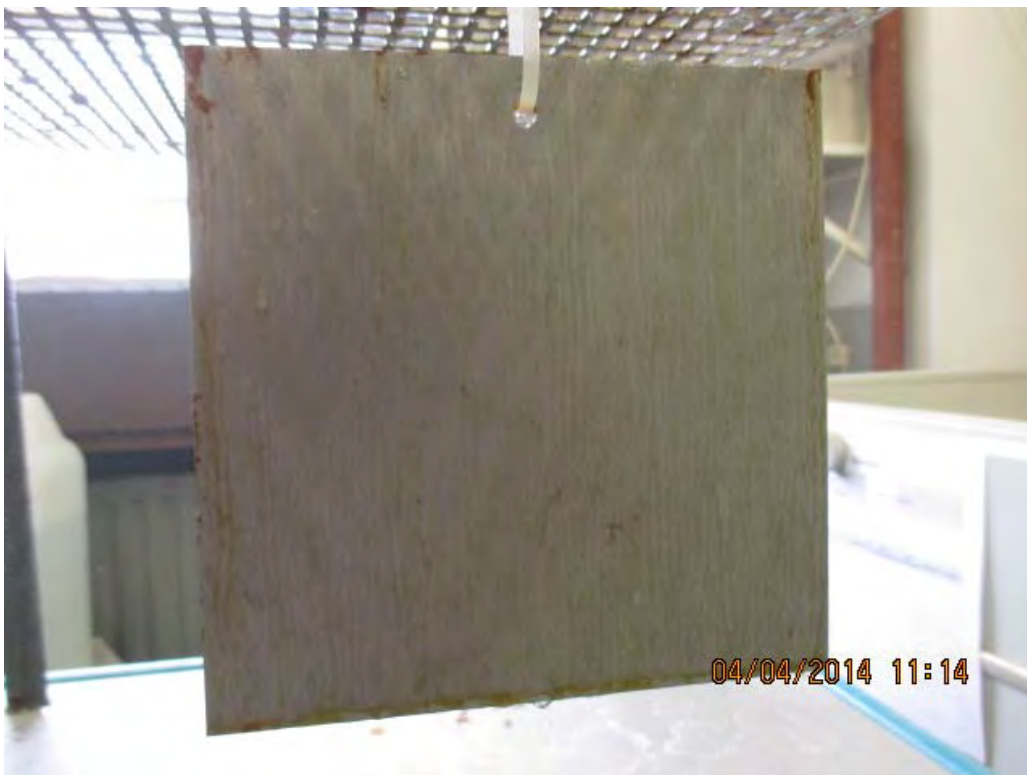


Pic. 13 Metal plate #4 after 48h salt fog exposure

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Pic. 14 Metal plate #1 after 72h salt fog exposure



Pic. 15 Metal plate #2 after 72h salt fog exposure

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Pic. 16 Metal plate #3 after 72h salt fog exposure

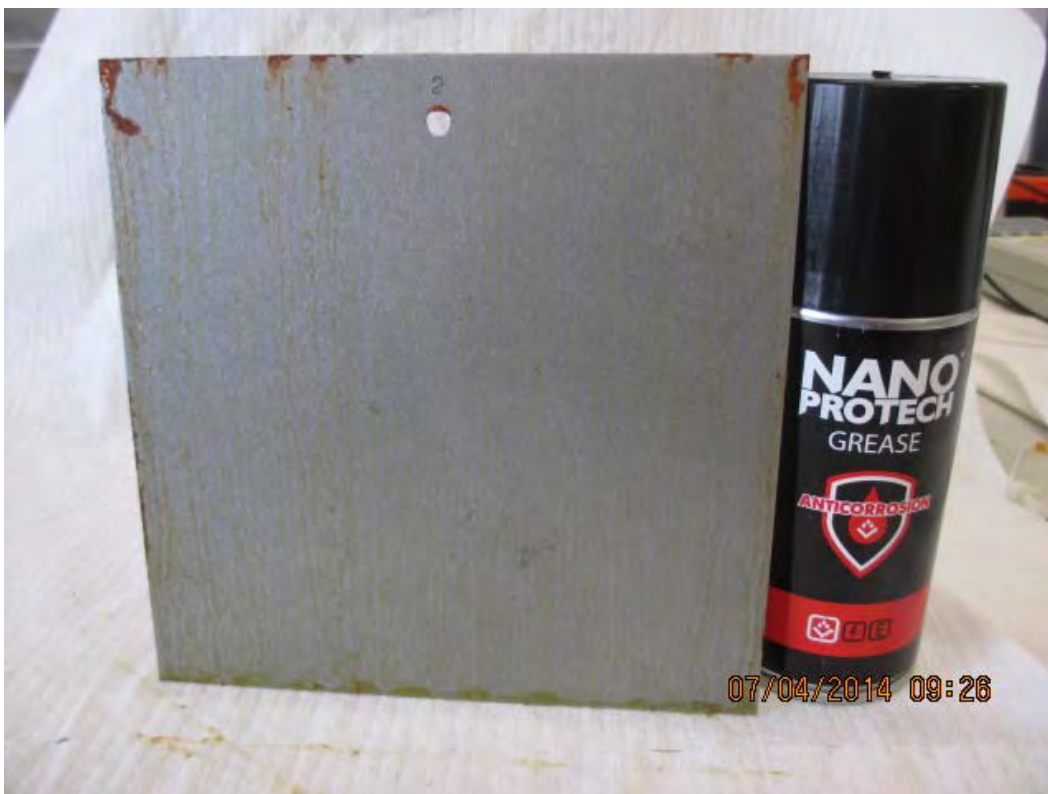


Pic. 17 Metal plate #4 after 72h salt fog exposure

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Pic. 18 Metal plate #1 after 96h salt fog exposure



Pic. 19 Metal plate #2 after 96h salt fog exposure

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Pic. 20 Metal plate #3 after 96h salt fog exposure



Pic. 21 Metal plate #4 after 96h salt fog exposure

7 Disclaimer

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