



TECHNICAL REPORT

ZINGAMETALL

SIMULATED BALLAST TANK TESTING OF
ZINGA ON BLAST CLEANED SUBSTRATE

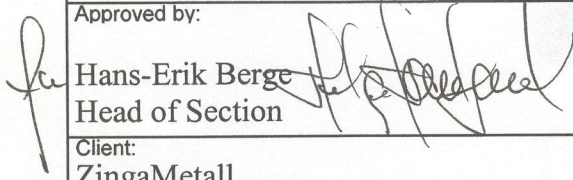
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DET NORSKE VERITAS



TECHNICAL REPORT

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Summary:

Det Norske Veritas has performed simulated ballast tank testing of Zinga applied to blast cleaned substrate.

The testing was performed according to the DNV procedure, *Testing and classification of ballast tank coatings, rev. 02* with the following modification:

The bottom panel was not supplied with a sacrificial zinc anode / artificial holiday for determination of current demand and cathodic disbondment due to the cathodic protection qualities of the coating itself. The modification was based on an agreement between ZingaMetall and DNV.

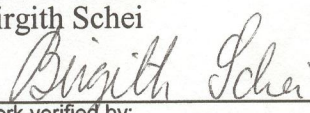
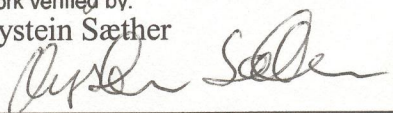
No corrosion creep from the artificial scribe was observed on any of the steel panels as result of the testing.

Blisters, formed between the steel substrate and the coating, were observed on the bottom wave tank panel. However, no corrosion of the steel substrate could be demonstrated. No visual degradation was found on any of the other test panels

Adhesion strength measurements gave relatively low values, which is often experienced for zinc rich coatings like this.

Based on the results from the testing, Zinga coating applied to blast cleaned steel surfaces, meets the requirements of a B3 classification in a classification system ranging from B1 to B6, where B1 is the superior grade. The test results do not meet the superior grades due to the blistering on the bottom panel and the relative low measured adhesion strength values.

However, the results from the performed testing show that Zinga coating has a beneficial corrosion protective performance.

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Indexing terms

Coatings
Tests
Corrosion

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