



OIL & GAS

PROTECTIVE COATINGS TESTING FOR CARGO OIL TANKS

Mandatory requirements for crude oil cargo tanks were set to follow the Performance Standard For Protective Coatings by IMO's Maritime Safety Committee (MSC) in May 2010.

Background

- The change from single hull to the introduction of double hull structural arrangements for crude oil tankers has revealed a number of double hull tankers suffering from accelerated corrosion in areas of their cargo tanks due to a thermal barrier, which promote a more aggressive corrosive environment. The aim is to ensure that crude oil cargo tank coatings remain in good condition for a minimum of 15 years.
- Standard: Performance standard for protective coatings for cargo oil tanker of crude oil tanker, resolution MSC.288 (87).
- Apply to: All coatings used within crude oil cargo tankers over 5000 dwt.

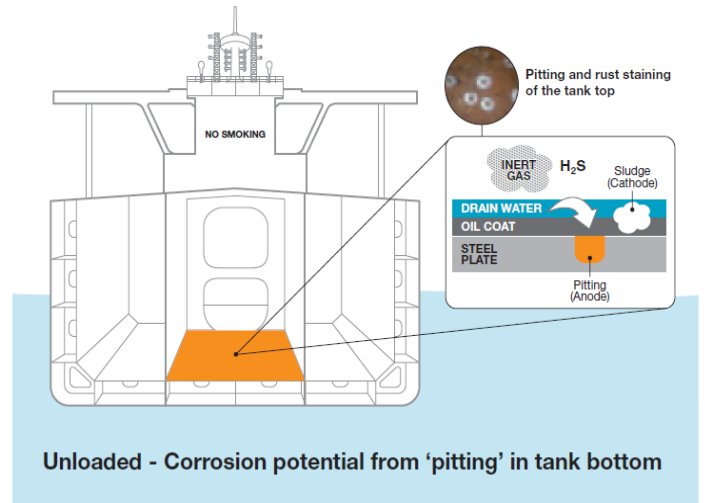
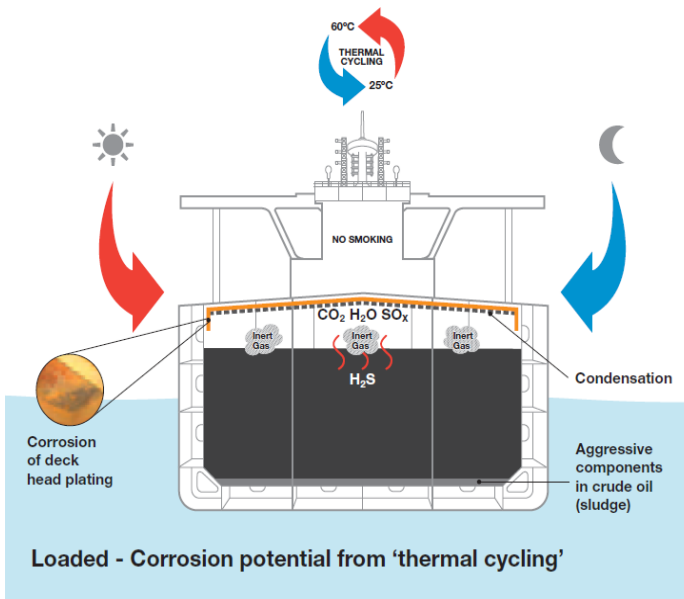
Test and criteria

- Type of tests: Vapor test at 60 °C for 90 days and Immersion test at 60 °C for 180 days.
- Acceptance criteria: No blisters and no rust observed on test panels at test termination

Our competence

- DNV GL Bergen has a long history in the area of protective coating technology. We have been actively participating in several NRC and EU research projects. We have an international team of skilled engineers in relevant disciplines, and within the global DNV GL network we are present in more than one hundred countries.

Cargo Oil Tank Corrosion



Our coating laboratory and test facilities

The DNV GL coating laboratory is Lloyd's register approved service supplier for laboratory tests of protective coating systems in accordance with IMO MSC.215(82). It is located directly at the harbor site in Bergen, Norway enabling us to use natural seawater for our exposure tests, being even closer to the real-life conditions.

- Wave tanks with and without wave movement.
- Condensation chamber.
- Immersion chamber.
- Heating cabinet.
- Gas-tight cabinet.
- Salt-spray cabinet.
- Climate cabinet.
- UV-chamber.
- Deep freeze chamber.

Exposed test panel



CONTACT

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