*NDT & Inspection company located in Stavanger Norway*

# SCANTEST

INNOVATIVE SOLUTIONS

SAFEGUARDING LIFE, PROPERTY AND THE ENVIRONMENT - DNV 1864

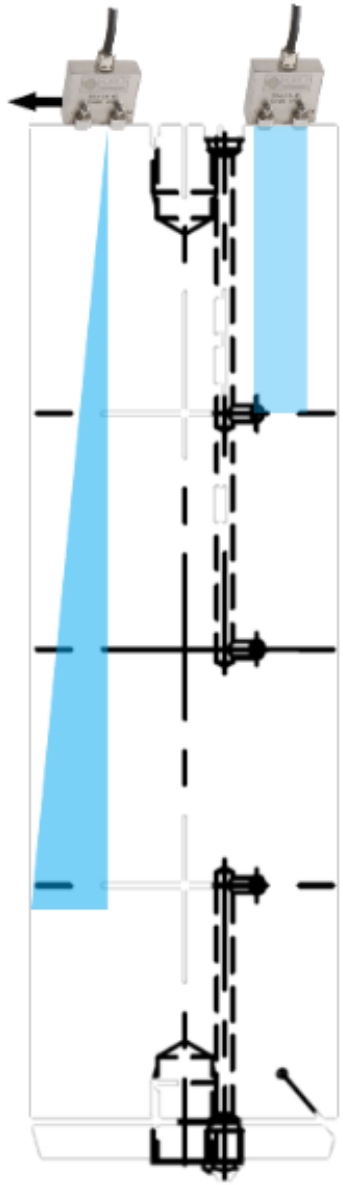
QUALITY MANAGEMENT SYSTEM ISO 9001

*In a world full of requirements and standards, we know the drill !*

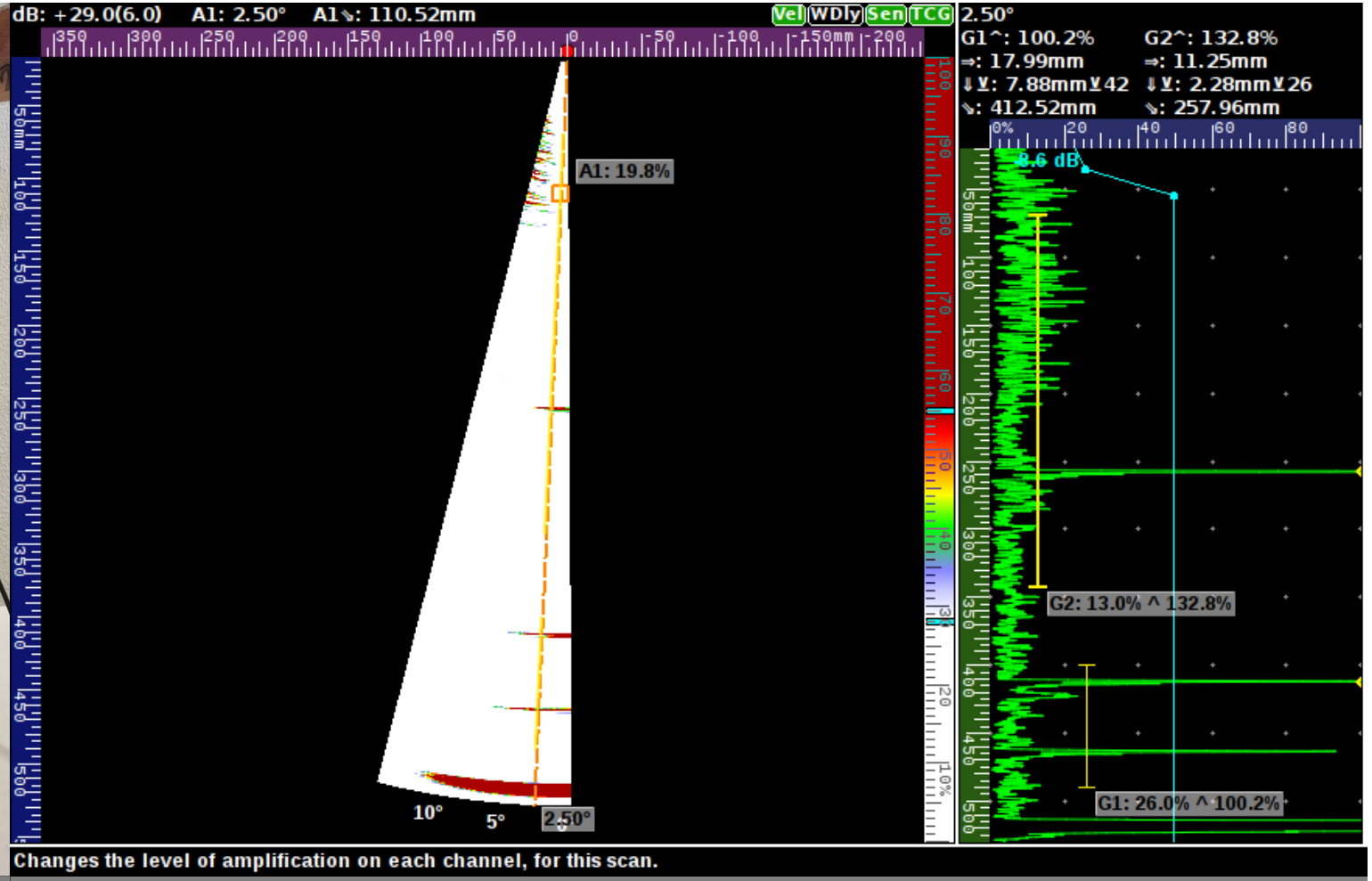
# Bolt/shaft inspection

***Linear-scan:*** emits a combined field of sound that covers a larger area.
Primarily used to reveal geometric changes in the metal such as lubrication channels/ducts, edges etc...

***Sectorial-scan:*** emits a wave front with sound that reveals a larger image in a sector with different angles.
uncovers defects with different orientations due to varying approaches.

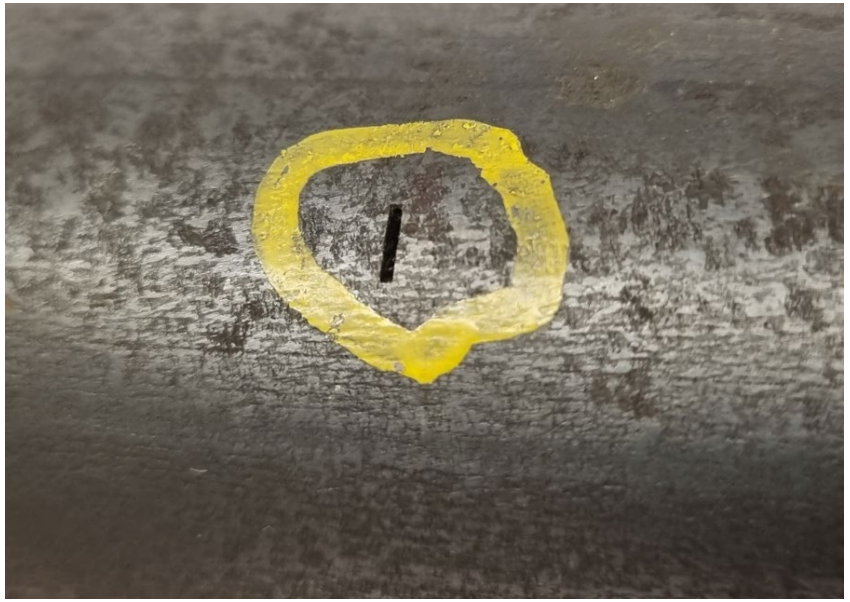


# Sensitivity & calibration

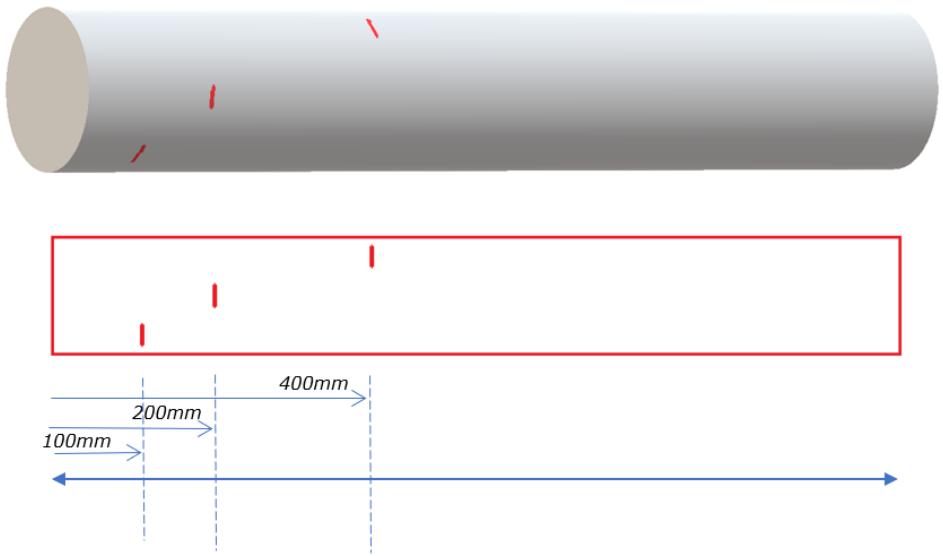



Referenceblock 2mm deep circular grooves

Sectorial scan-view and A-view with TCG



***1000mm REF Block for sensitivity configuration***

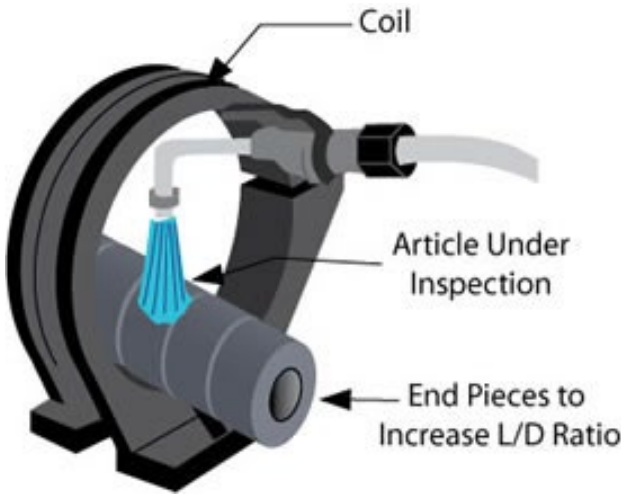



**EDM notches with a length of 4 mm and a depth of 2 mm**

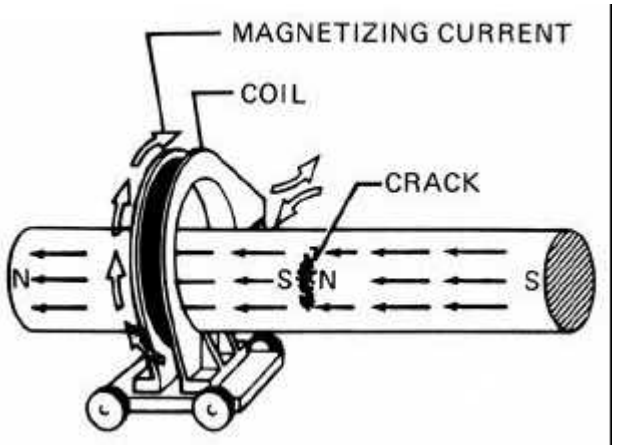
# *Requirement for DNV Approval*
# *REF-Block for sensitivity verification*

- **Equipment:**
- Sonatest 32/128 VEO3
- Probe: X2E16 5Mhz

# Phased Array replaces magnetic particle testing «*magnetic coils*»



L-10 Coil




Advantages of using Phased Array on bolts and shafts:

- No disassembly, i.e. no unnecessary damage.
- More effective
- Good sensitivity
- No risk with regard to HSE

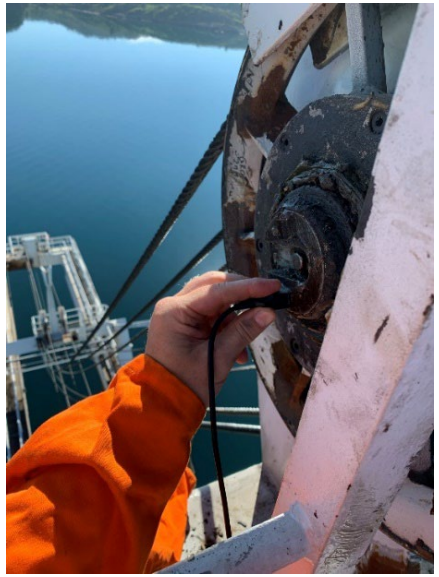
# Various Bolt and Shafts

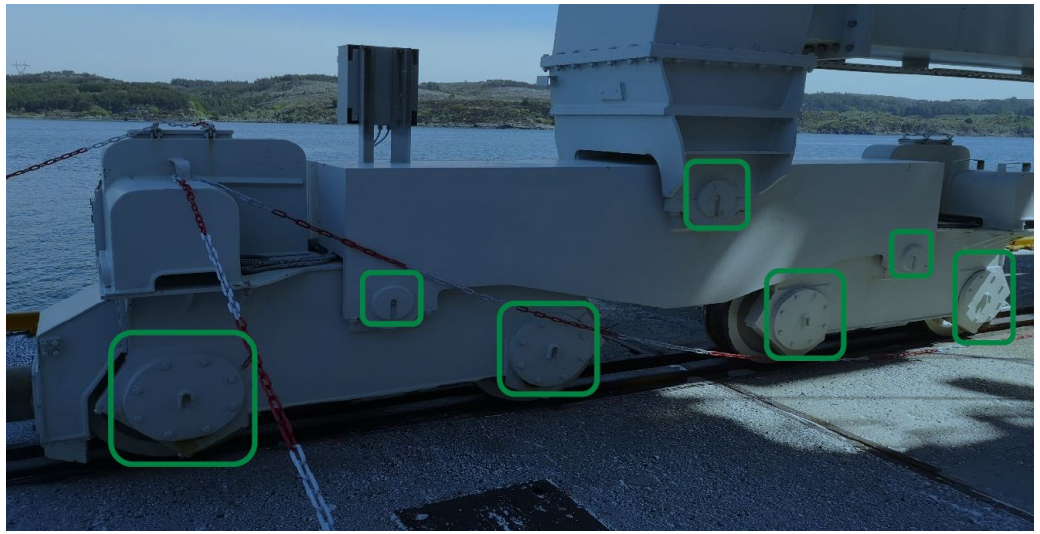
No dismantling of bolts and shafts

In-Service Inspection

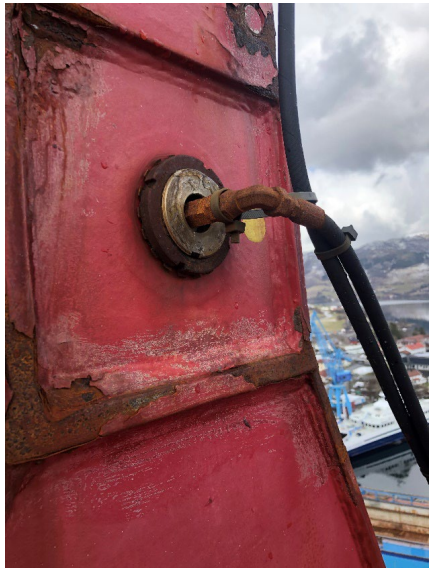
# *Harbor crane for Hydro Aluminium Norway*

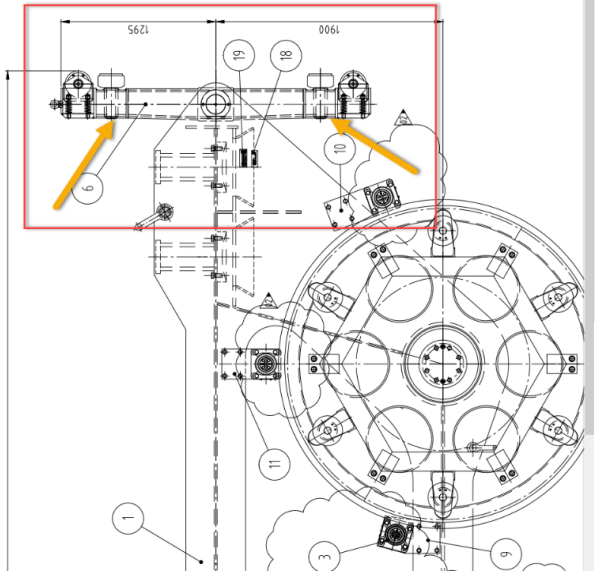
## *5 year classification*



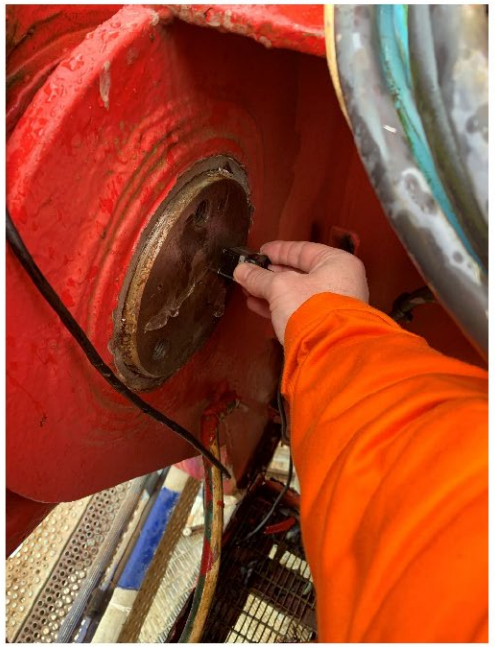


# *Transocean*
# *Phased Array Inspection of DDM Roller pins*

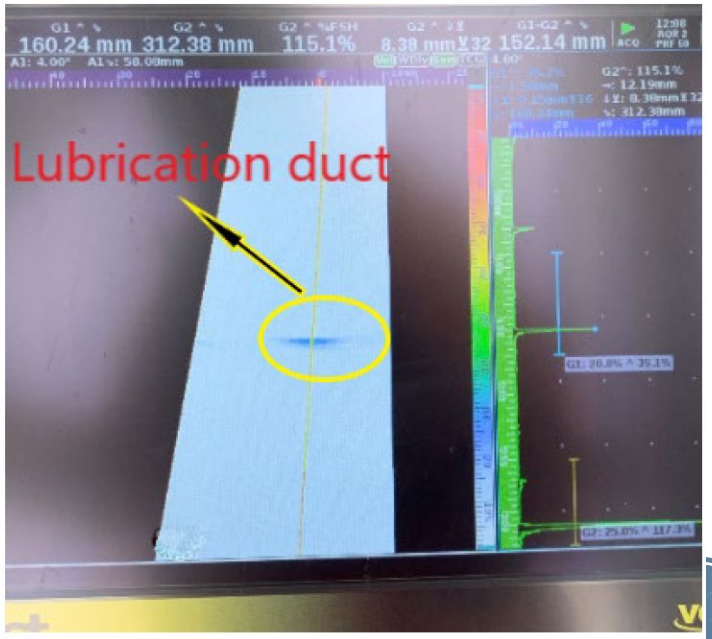




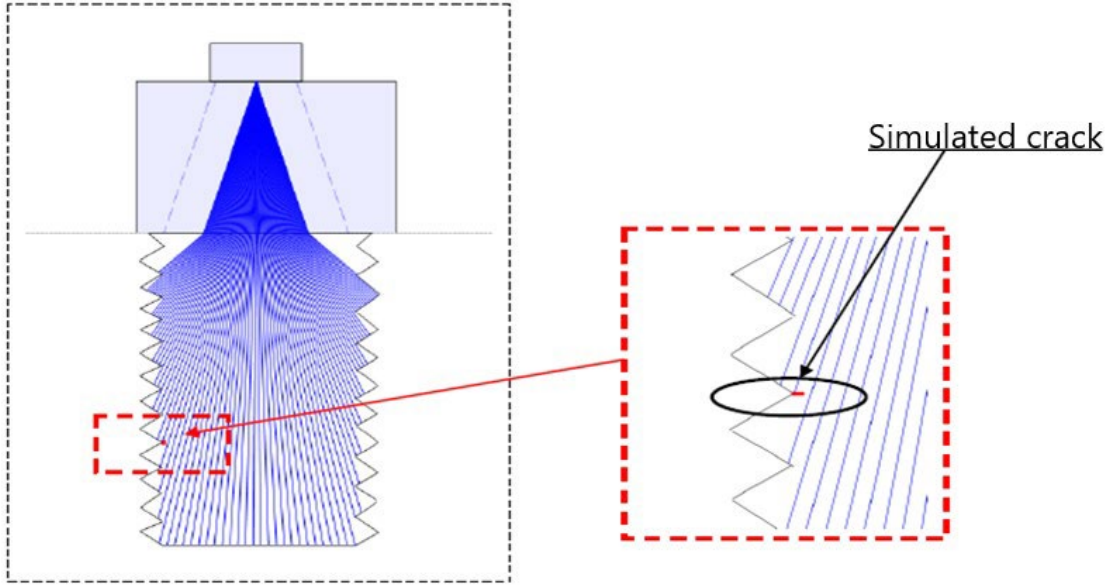
***Shaft/PIN***

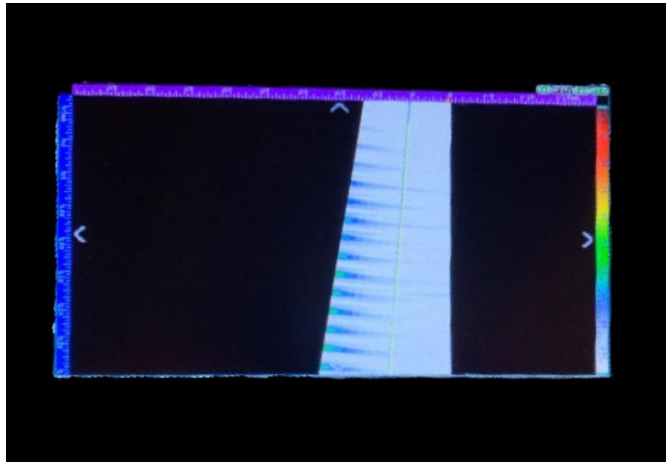


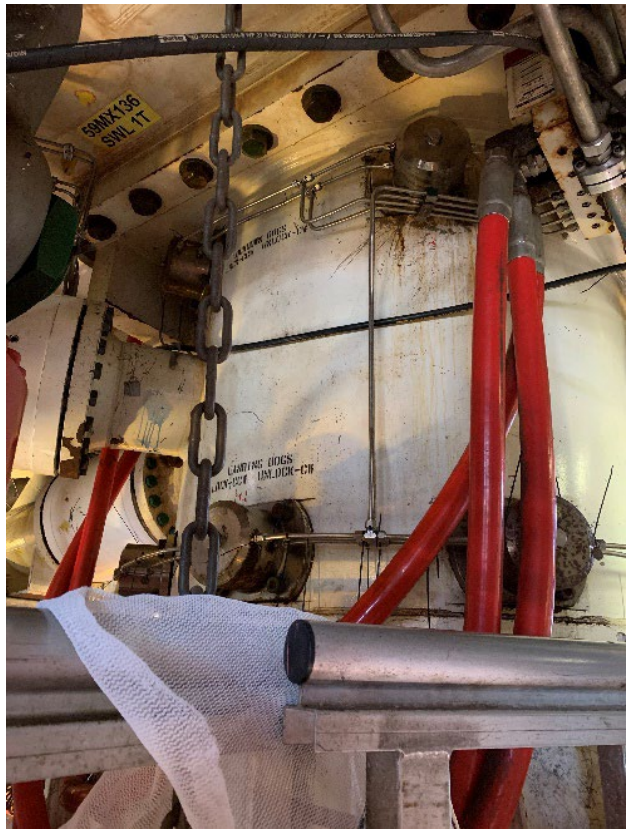
***Open sector scan towards radial surface***



# Bolts on Diverter Support Housing Transocean Barents

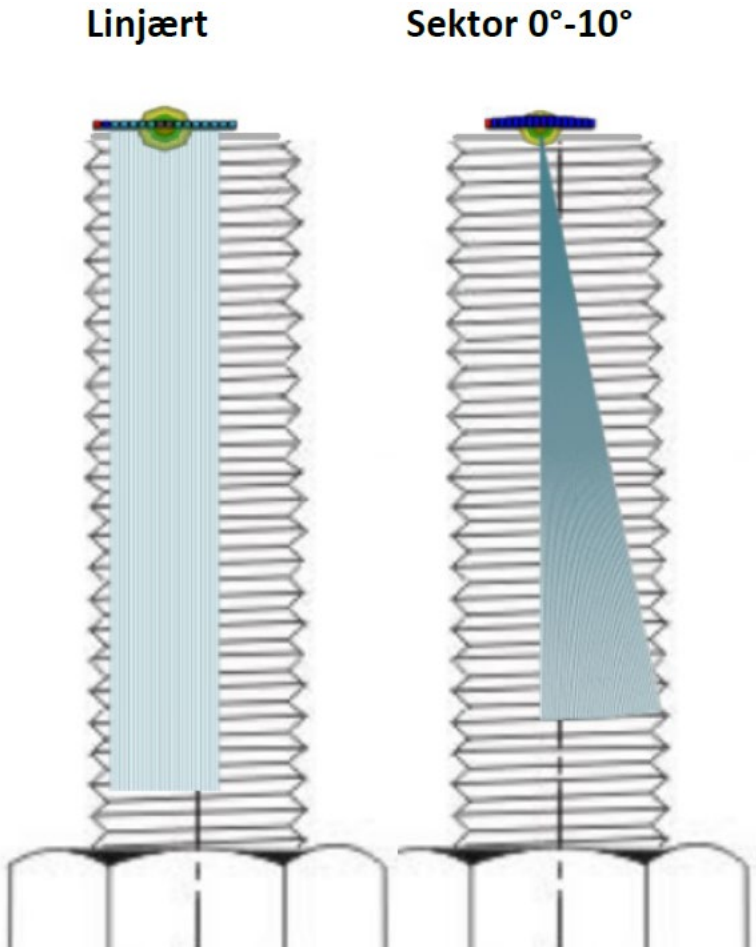




*Nygård Mountain Harstad Norway*

# Wind farm:
# Bolt inspection of foundations



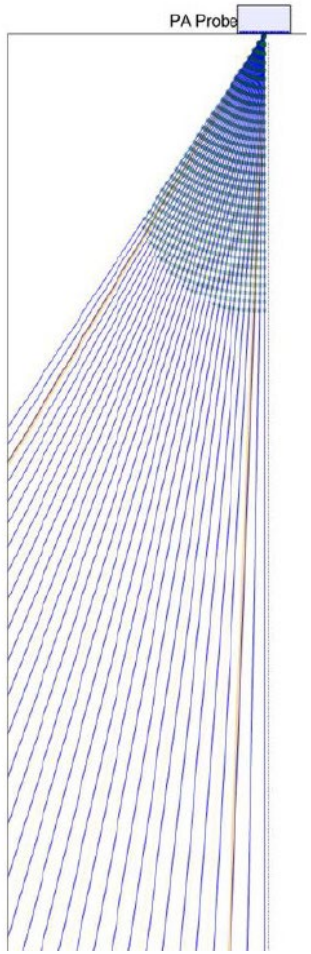
# Necessary access to bolt/shaft

**Verification of sensitivity**

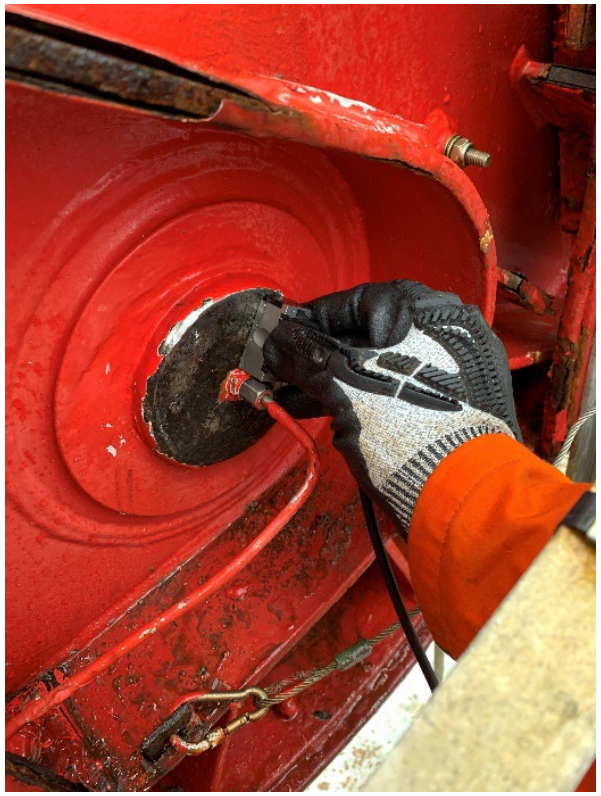
***Reference shaft dummy Ø300mm x L1000mm***

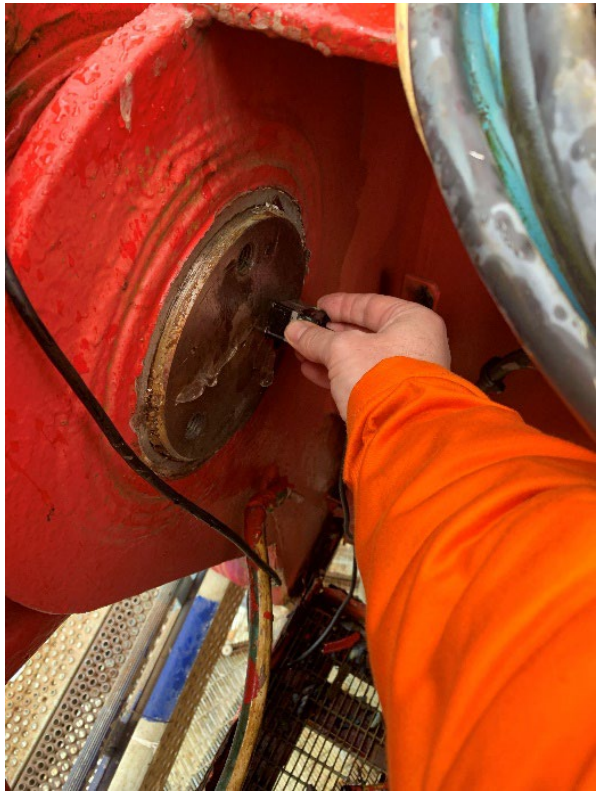
***Notches 1mm & 1,5mm in distance 400mm/750mm***

***Simulation in ES-beam tool***

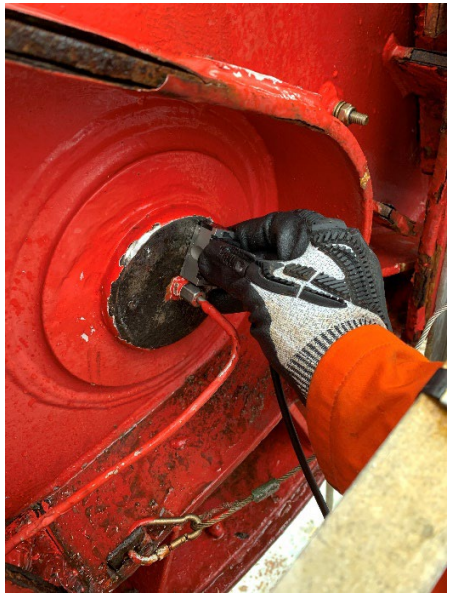


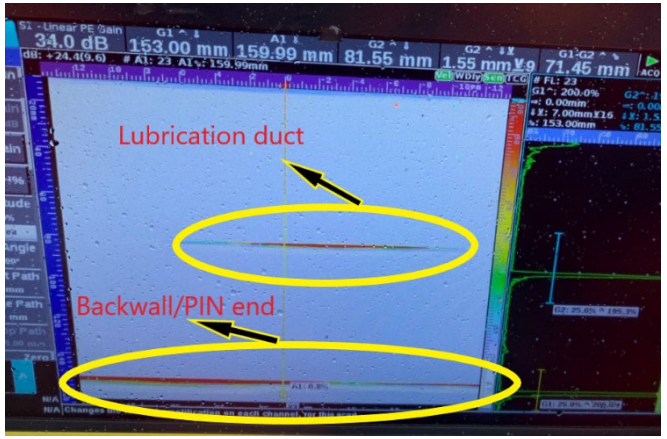

Airtight contact to the surface using ultrasound gel.

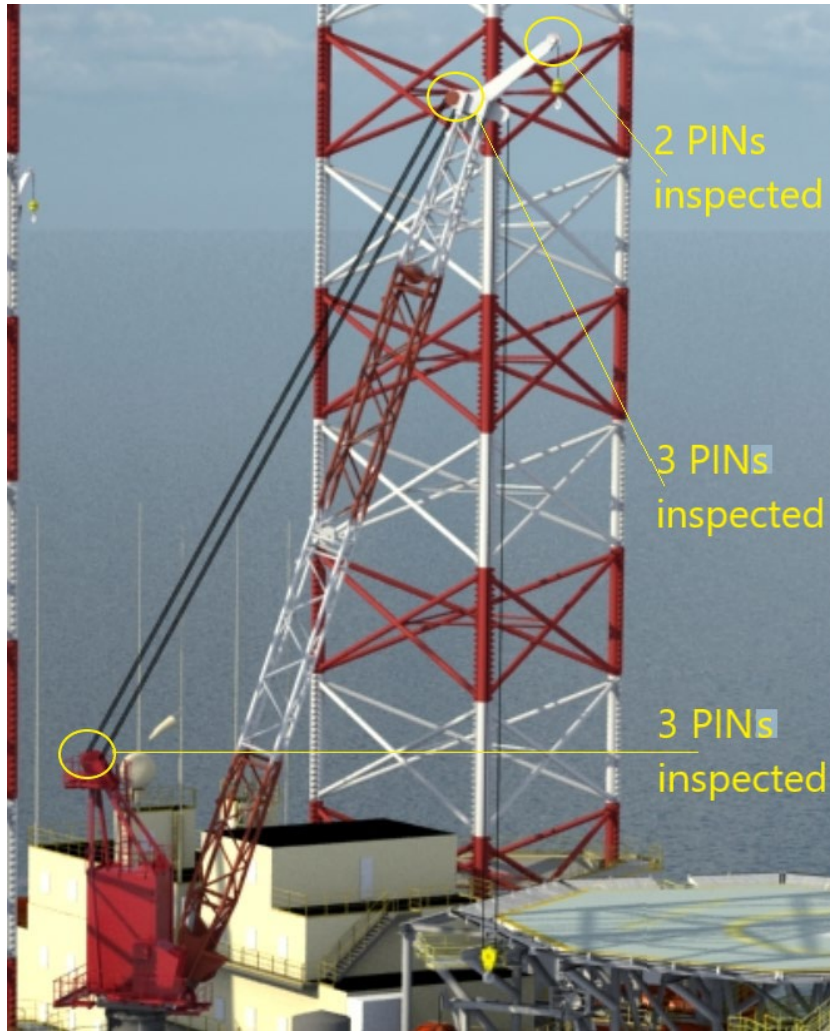




# Bolts and Pins, WellSafe Solutions







DNV

Certificate No:
**AOSS0000JK6**

# APPROVAL OF SERVICE SUPPLIERS

This is to certify that

**Scantest AS**

**Stavanger, Norway**

is granted acceptance for
**Thickness measurements on ships and mobile offshore units , in accordance with Class Programme DNVGL-CP-0484.**

**Category I: Authorised to do measurements on all types and sizes of ships**

This service supplier certificate will be accepted for use with all rule sets published by DNV.

This Certificate is valid from **2022-01-18** to (inclusive) **2025-01-17**.

This Certificate is issued on **2022-01-18**.

**for DNV**

This document has been digitally signed and will therefore not have handwritten signatures

**Kristiansen, Rune**
**Surveyor**

This Certificate may be withdrawn if:
1. The service provided has been improperly carried out or the results improperly reported.
2. The surveyor has found any deficiencies in the accepted operating systems of the service supplier.
3. The firm has failed to inform of any major changes having effect on the quality of the service rendered.
4. The conditions listed in the certificate are changed and/or are not fulfilled.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



DNV

Certificate No:
**AOSS0000JK3**

# APPROVAL OF SERVICE SUPPLIERS

This is to certify that

**Scantest AS**

**Stavanger, Norway**

is granted acceptance for
**Non-Destructive Testing (NDT) on classification projects , in accordance with Class Programme DNVGL-CP-0484.**

This service supplier certificate will be accepted for use with all rule sets published by DNV.
**See the following page(s) for details regarding application.**

This Certificate is valid from **2022-01-18** to (inclusive) **2025-01-17**.

This Certificate is issued on **2022-01-18**.

**for DNV**

This document has been digitally signed and will therefore not have handwritten signatures

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Kiwa Teknologisk Institutt
Sertifisering as
Kabelgaten 2, 0580 Oslo

# Management System
## Certificate

To certify conformity with // Godkjent overensstemmelse med
the Management System Requirements of // Styringssystemkravene i henhold til

**NS-EN ISO 9001:2015**

awarded // tildelt

SCANTEST
INNOVATIVE SOLUTIONS

**Scantest AS**
Dusavikveien 37, 4007 Stavanger

Manufacturing/supplying following products/services:
for produksjon/leveranse av følgende produkter/tjenester:

**NDT, utleie av teknisk personell, prosjektering, tilkomstteknikk, inspeksjon, sveisekontroll, korrosjonskontroll og tykkelsesmåling ved bruk av NDT og Phased Array.**

Certificate No // Sertifikat nr.:

**2200**

First issued // Utstedt første gang: 2021-03-17
Valid until // Gyldig til: 2024-03-17
Issued // Utstedt: 2021-03-17
Audit: Annual // Oppfølging: Årlig

Managing Director // Daglig leder

kiwa

# DNV: Approval of service supplier progam

*Additional approval to AOSS Certificate*

**This is to certify that**

**Scantest AS**

**Stavanger, Norway**

is granted acceptance for

**Non-Destructive Testing (NDT) on classification projects , in accordance with Class Programme DNVGL-CP-0484.**

Inspection of bolts using PAUT:

The approved procedure listed below is valid for detection of surface breaking indications on bolts with maximum length of 1000 mm if tested from both sides, and 500 mm if the testing is only carried out from one side.

- PA-10.1010 - Phased Array Procedure Bolt/Shaft, rev. 0

Scantest AS
Forusparken 22 4031 Norway
www.scantest.no

SCANTEST
INNOVATIVE SOLUTIONS

Part of the Vinje Industri Group
www.vinjeindustri.no

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