

APPROVAL OF SERVICE SUPPLIERS

This is to certify that

Vertikal Service AS

Volda, 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 GL.
See the following page(s) for details regarding application.

This Certificate is valid until **2020-07-05**.

Issued at **Oslo Materials Technology** on **2017-07-06**



for **DNV GL**

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

Gran, Terje
Group Leader

This Certificate may be withdrawn if: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.



Certificate No: **AOSS0000DBN**

Application:

The approval is granted for ET, MT, PT, RT, VT and UT on carbon and stainless steel (For Limitations refer to Remarks).

Remarks:

The enclosed certificate is based upon the following conditions:

1. The requirements stated in DNV approval Programme no. 0484, appendix B, section 4 continue to be met.
2. List of approved operators and supervisors is filed under Nauticus Certificate Production, job ID:A0421197.
3. All approved NDT procedures are filed under Nauticus Certificate Production, job ID: A0421197.
4. **Eddy Current Testing** to be done according to procedure NDT-5.14.00-NO, Rev. 01, 31st of May 2017.
5. **Magnetic Particle Testing** with the following limitations: . Yoked technique only, according to procedure No. NDT-5.11.00-EN, Rev. 01 of 20th of February 2017
6. **Penetrant Testing**. Colour contrast and fluorescent penetrant technique for welds according to procedure No. NDT-5.12.00-EN, Rev. 01 of 20th March 2017.
7. **Radiographic Testing** to be done according to procedure NDT-5.30.00-EN, Rev.02 of 25th of June 2017.
8. **Ultrasonic Testing** with the following limitations: Pulse-Echo technique of welds in plates, pipes, T- joint and Y-joint in carbon steel only to be done according to procedure No. NDT-5.13.00-EN, Rev. 2 of 22nd of March 2017.
9. **Ultrasonic testing of austenitic/stainless steel** using pulse-echo technique and compression angle beam probes to be done according to procedure NDT-5.13.10-EN, Rev. 2 of 25th June 2017.
10. **Visual testing** to be done according to procedure NDT-5.10.00-EN, Rev.01 of 29th of June 2017.