

MANUFACTURING SURVEY ARRANGEMENT

MSA No:
MSA0000B5V

Between "Manufacturer"

STAVANGER STEEL AS
JØRPELAND, Norway

and

"DNV GL"
DNV GL AS
Stavanger

Ref. Recognition Certificate: MSARC0000B5V

This Manufacturing Survey Arrangement (MSA) is applicable to **Steel Castings and Forgings** - subject to testing and inspection for conformance with the requirements of DNV GL Rules, as stated herein.

This MSA implies that the manufacturer is authorised according to scope and conditions as detailed in the subsequent pages.

The MSA is valid until **2021-06-30**

The MSA will, however, be invalid if the Recognition Certificate is invalid.

The MSA is governed by DNV GL's general terms and conditions. These may be provided upon request.

Issued at **Stavanger** on **2017-09-28**

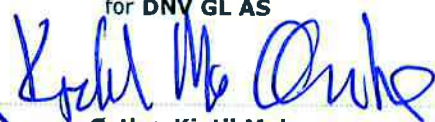
for **STAVANGER STEEL AS**



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for **DNV GL AS**



Østbø, Kjetil Moi
Station Manager



1. Scope of Work

For the above mentioned product(s) to be certified for conformance with DNV GL Rules, the following conditions will come into force:

1.1 Reference Documents

- I. DNV GL Rules for Classification of Ships Pt.2 Ch.1 and Pt.2 Ch.2
- II. DNV GL Rules for Classification of High Speed and Light Craft Pt.2 Ch.1 and Pt.2 Ch.2
- III. DNV GL Offshore Standards, Metallic Materials DNVGL-OS-B101.
- IV. Approval of Manufacturer Certificate No. AMMM0000039/AMMM000003A.
- V. Quality System Certificate (QSC) No.1596 issued by KIWA.
- VI. The Manufacturer's documented and accepted procedures for inspection and testing of approved materials, ref Quality Assurance handbook – Part 3.

1.2 Approvals

The certification of the Manufacturer's Quality System does not exempt the Manufacturer from obtaining approval of new material grades or re-approval when a new manufacturing process or heat treatment process is introduced. Application for renewal of AMM certificates must be sent to DNV GL Stavanger, 3 months before expiry date.

1.3 Testing and Inspection

The verification of correct sampling of test specimens and inspection are entrusted the Manufacturer on the basis of documented and accepted procedures and the use of qualified personnel familiar with the DNV GL Rules.

1.4 Assessments performed by DNV GL

Compliance with the conditions agreed in this MSA is subject to control and review by assessing as follows:

- a) Periodical assessments of the MSA function are to be made at 12 months intervals, based on a mutually agreed schedule.
- b) Project-specific assessments or unscheduled spot checks may be made to ensure compliance of the products with Rule requirements.

For this purpose DNV GL shall at all reasonable times be given access to the manufacturing plant and to the relevant manufacturing documents and records.

1.4.1 Agenda for the MSA assessments

The agenda for the assessments will be proposed by DNV GL in the notification of the meeting.

The agenda may typically contain:

- a) Organisation, responsibilities and qualifications of relevant personnel.
- b) The efficiency of the implementation of the MSA.
- c) Operational procedures and instructions related to the MSA agreement.
- d) Manufacturing processes, inspection and testing.
- e) Test records.
- f) Castings and forgings materials, properties and applications.
- g) Product marking and traceability and control of non-conforming product.
- h) Claims, question from clients and others.
- i) Review of possible problem areas raised from previous MSA assessments.
- j) Review of reports from Quality System Audits.
- k) Information to be updated.
- l) Statistical results from testing.

- m) Review of the Quality System Audit reports in connection with ISO QSC.
- n) News from DNV GL.

Any problems found should be handled as non-conformities. Corrective actions will be re-assessed by DNV GL.

2. Reporting by manufacturer

2.1 Manufacturing Records

Records shall be made of the relevant manufacturing data and the results of all specified testing and inspection necessary for conformance to the Rules.

This includes also detailed reports from repair welding of castings and re-inspection after repair welding. All repairs for castings shall be carried out in accordance with DNV GL Rules. Minor weld repairs of castings do not require the approval from DNV GL before the repair is commenced, but must be recorded on sketches showing the extent and positions of all weld repairs, including so called "cosmetic weld repairs". Major weld repairs of castings require the approval from DNV GL before the repair is commenced.

2.2 Documenting testing and inspections covered by this MSA agreement

Products tested and inspected under this agreement shall be marked with the DNVGL certificate number, see the section for marking. All test/inspection documents/reports shall refer to the DNVGL certificate number for traceability the the tested/inspected product.

Inspection certificates are to be prepared by the Manufacturer and the following text is to be printed or stamped on the inspection certificate:

"This is to certify that the material/product described above has been made by an approved process and has been satisfactorily tested in accordance with DNV GL Rules for Classification. This certificate is issued in accordance with the survey arrangement authorised by DNV GL in MSA No. MSA0000B5V, which is controlled by regular assessments."

A copy of the documentation of the testing and inspection shall be retained by the manufacturer as quality records and the retention period is to be as stated in the Quality System Manual.

By ordering certification of the products with reference to this MSA agreement, the manufacturer is declaring full compliance with this agreement.

2.3 Non-conformances

The manufacturer is to report any deviation from the DNV GL Rules and this MSA agreement and obtain DNV GL's written approval prior to dispatch of the product.

2.4 Information to DNV GL

The manufacturer is to report any purchaser requirement, which may extend the scope defined in the DNV GL Rules. Any additional requirements outside of the DNV GL Rules are not covered by this MSA.

All customer complaints to products delivered under this MSA agreement shall be reported to the DNV GL local office. A procedure for reporting of customer complaints has to be established by the manufacturer and approved by DNV GL. It is up to DNV GL to decide if further involvement is necessary or not at that time. However, closing of customer complaints reported to DNV GL and corrective actions implemented by the manufacturer will be discussed under the MSA assessment.

3. Reporting by DNV GL

3.1 Issuance of DNV GL certificates

The inspection reports prepared by the Manufacturer will be reviewed, endorsed and stamped by the Surveyor, and are only valid with such endorsement and stamping.

3.2 Information to manufacturer

DNV GL will inform the manufacturer of new or amended rules and regulations which would affect the arrangements authorised.

Reserved certificate numbers to be used for certification based on this MSA agreement will be communicated to the manufacturer.

3.3 MSA assessments

After each assessment a report will be prepared by DNV GL, and distributed to the involved parties.

4. Marking for Identification

4.1 Marking

Products which have been satisfactorily tested and inspected shall be marked as required by the DNV GL Rules. The product is further to be marked with the DNV GL certificate number and a VL-stamp furnished by DNV GL. Only those products covered by this arrangement are permitted to be marked with this stamp.

5. Monitoring and Administration of the MSA

The DNV GL Stavanger Office is responsible for:

- 1) Follow up of the MSA through the periodical MSA assessments.
- 2) The regular contact with the manufacturer.
- 3) Review and validation of inspection certificates.
- 5) Invoicing of the material/product certification according to the inspection certificates.

6. Fees and Payment Terms

Certification fees will be charged in accordance with DNV GL's standard fees for manufacturers holding a certified QSC and having implemented a MSA or in accordance with special written agreements, to be updated annually.

7. Regulation for the Certification Services

Regulations with respect to obligations, publications, suspension, withdrawal/cancellation and appeal are given in DNV GL CLASS PROGRAMME No. DNVGL-CP-0337 "General description of services for certification of materials and components", Section 2 [7].

8. Validity

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Any changes in production process, procedures or other matters that may influence the validity of the Recognition Certificate, the MSA agreement or the conditions stated therein are to be submitted to DNV GL for evaluation.

The MSA will be invalid if:

- a) The Recognition Certificate is invalid.
- b) The DNV GL Approval of Manufacturer Certificate(s) is invalid.
- c) The possible non-conformities from the MSA assessments are not responded to and/or corrective actions are not implemented within the agreed time.
- d) The manufacturer does not comply with the obligations of the MSA agreement.
- e) The certification fees are not paid in due time.

Either party shall have the right to terminate this MSA subject to three months written notice.

9. Liability and Indemnity

If any person suffers loss or damage which is proven to have been caused by any negligent act or omission of the Society, the Society shall pay compensation to such person for his proven direct loss or damage. However, the compensation shall not exceed an amount equal to ten times the fee charged for the service in question. The maximum compensation shall never exceed USD 2 million.

In this provision the "Society" shall mean DNV GL AS as well as its direct and indirect owners, affiliates, subsidiaries, directors, officers, employees, agents and any other person or entity acting on behalf of DNV GL AS.

10. Law and Jurisdiction

This MSA shall be governed and construed in accordance with the laws of Norway.

Any dispute arising in relation to or as a consequence of this MSA, which cannot be settled amicably through negotiations between the parties, shall be subject to the courts of Oslo, Norway.