

MANUFACTURING SURVEY ARRANGEMENT

Between "Manufacturer"

BAC VALVES S.A.
Figueres, Spain

and

"DNV GL"

DNV GL SERVICES SPAIN, S.L.
Area NB/CMC Iberia

Ref. Recognition Certificate: MSARC0000AHT

This Manufacturing Survey Arrangement (MSA) is applicable to

Valve - Ball and butterfly

subject to testing and inspection for conformance with the requirements of DNV GL Rules, as stated herein.

The MSA implies that the manufacturer is authorised to perform the testing and inspection without the attendance of DNV GL and to prepare the certificates which will be validated by DNV GL.

The MSA is valid until **2024-04-25**

The MSA will, however, be invalid if the Recognition Certificate is invalid, or if the manufacturer's Quality System Certificate No. ES060249-1 is invalid.

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

Issued at **Area NB/CMC Iberia** on **2020-09-21**

for **BAC VALVES S.A.**



Enma Guilhaumes
QHSE Manager

for **DNV GL SERVICES SPAIN, S.L.**

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Principal Surveyor

1. Scope of Work

The MSA covers inspection and testing of valves produced by BAC VALVES and identification and transfer of stamping for metallic materials purchased by BAC VALVES intended for valve components for which DNV GL certificate is required.

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 – Ships Pt.4 Ch.6 Piping systems
DNV GL rules for classification – Ships Pt.5 Ch.7 Liquefied gas tankers
DNV GL rules for classification – Ships Pt.5 Ch.6 Chemical tankers
DNV GL Offshore Standard DNVGL-OS-D101 - Marine and machinery systems equipment
DNV GL class programme DNVGL-CP-0186 – Type approval – Valves
DNV GL rules for classification – Ships Pt.2 Ch.2 Metallic materials
DNV GL Offshore Standard DNVGL-OS-B101 – Metallic materials
- II. DNV GL Approval of Manufacturer Certificates (see DNV GL Approval Finder)
- III. Type Approval Certificate No(s). TAP000001J Rev. 1 and TAP000001H Rev. 3.
- IV. Quality System Certificate (QSC) No. ES060249-1. issued by Bureau Veritas.
- V. The Manufacturer's documented and accepted procedures for inspection and testing
Title Test Procedure for Ball Valves and Butterfly Valves, No PQ-25, Revision 5.
Title Cryogenic Test Instruction, No IQ-7, Revision 3.
Title DNV GL Requirements for valves, No I-SQ-15, revision 0.
- VI. MPQA Report No. MPQA-MJV-26 dated 11-05-2020.

1.2 Approval & Scope

This MSA does not exempt the manufacturer from obtaining approval of new valves types not included on above Type Approval Certificates.

The transfer of DNV GL stamps and identification marks on materials are defined as follows:

- Identification and stamping of test samples.
- Transfer of identification stamping during various machining stages up to the final product.

1.3 Testing and Inspection

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

All testing and inspection, as defined in the MSA, are entrusted to the manufacturer on the basis of documented and accepted procedures and the use of qualified personnel (see 1.1). familiar with the DNV GL rules.

The requirements for testing as specified in this MSA are valid unless otherwise specified in the DNV GL approved drawings. All non-compliances are to be agreed by DNV GL in writing.

The measuring and control devices used for quality control are to be calibrated in compliance with the accepted Quality System.

1.3.1 Deliveries from Sub-suppliers

Sub-contractors are to be qualified and deliveries are to be checked according to the Quality System. The relevant documentation is to be forwarded upon request of DNV GL.

Suppliers of material, where a Works Certificate or a VL-Material Certificate is required, are to be approved by DNV GL for the relevant grade of material. If a supplier has no valid DNV GL-Approval, DNV GL may accept the supplier in a case-by-case basis.

The material grade has to be verified against the material specified in the type approval. This is also valid if the material grade is not a DNV GL grade.

Herewith DNV GL reserves the right to carry out random testing and/or extension of testing of products in each production stage and at any time independent from product or customer purchase order.

If a customer does not meet the specifications for a delivery intended for a DNV GL classes product, corrective actions are to be agreed with DNV GL. DNV GL certified deliveries from sub-suppliers, rejected by the manufacturer, must be reported to DNV GL.

1.3.2 Final testing of valves

The valves have to be tested including documentation according to manufacturer procedures and class rules/guidelines. Minimum:

- Verification of material traceability (pressure parts to be delivered from DNV GL approved manufacturer).
- Hydrostatic pressurer test
 - o Housing: 1.5 x PN
 - o Seat tightness: 1.1 x PN
 - o Visual inspection
 - o For cryogenic valves: Cryogenic testing consisting of valve operation and leakage verification for a minimum of 10% of each type and size for valves other than safety valves intended to be used at a working temperature below -55°C.
 - o PN = Nominal pressure

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 6 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 in the QSC implemented corrective action system. Corrective actions will be re-assessed by DNV GL.

2. Reporting by manufacturer

2.1 Test records

For each product to be certified under this agreement, the manufacturer shall prepare a test report or a manufacturer certificate. This shall include:

- Reference to the applicable DNV GL rules.
- Reference to the MSA agreement no.
- Under marking of the product state the DNV GL certificate no.

A copy of the works certificate is to be retained by the manufacturer as quality records and the retention period is to be as stated in the Quality System Manual.

By including the reference to this MSA agreement in the works certificate, the manufacturer is declaring full compliance with this MSA agreement.

2.2 Non-conformances

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

2.3 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

DNV GL will create a product certificate based on the manufacturer's works certificate. The digitally signed certificate will be sent to the manufacturer.

The manufacturer enters the order and product data in the DNV GL Veracity portal and uploads the test records. The digitally signed certificate will be finalized by the surveyor and provided to the manufacturer in the Veracity portal and additionally sent via email.

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

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by DNV GL. Only those products covered by this arrangement are permitted to be marked with this stamp.

4.2 Handling of the VL-stamp(s)

The manufacturer's signer of the MSA agreement is kept responsible for the VL-stamp(s) provided to them as part of this agreement, and the stamp(s) shall only be used by authorised personnel.

The VL-stamp(s) must not be transferred to subsidiary companies belonging to the same group or any other third party.

A worn out or damaged VL-stamp is to be returned to DNV GL who will supply a new stamp.

The VL-stamp(s) shall be returned to DNV GL when the MSA agreement is invalid.

5. Monitoring and Administration of the MSA

The DNV GL M-WI-NB. Office is responsible for:

- 1) Follow up of the MSA through the periodical MSA assessments.
- 2) The regular contact with the manufacturer.
- 3) Review of works certificates.
- 4) Issuing DNV GL certificates.
- 5) Invoicing.

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

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) / Type Approval Certificate(s) is invalid.
- c) The QSC is invalid.
- d) The possible non-conformities from the MSA assessments are not responded to and/or corrective actions are not implemented within the agreed time.
- e) 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.

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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.