

APPROVAL OF MANUFACTURER CERTIFICATE

This is to certify:

That the Manufacturer

BWB Behälter-Werk Burgau GmbH + Co.KG
Burgau, Germany

is approved for the

Manufacture of Welded Boilers and Welded Pressure Vessels Class I and II

The approval is granted on condition that

Det Norske Veritas' Rules for Classification of Ships

are complied with in all respect

Manufacturer(s) approved by this certificate is/are accepted to deliver according to DNV GL, DNV and GL rules.

This Certificate is valid until **2020-12-02**.

Issued at **Høvik** on **2015-12-02**

for **DNV GL**

DNV GL local station: **Essen**

Approval Engineer: **Tom Berg-Nielsen**

Marianne Spæren Marveng
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in production facilities and methods may render this Certificate invalid.

Job Id: **263.11-004373-1**
Certificate No: **AMT000000R**

Approval basis

BWB Behälter-Werk Burgau GmbH + Co.KG—Manufacturer of Pressure Vessels. Oil-Separators, Volume from 0,3 Liter up to 800 Liter, diameter up to 800 mm Welded Pressure Vessels Class I & II.

Product Categories: Welded Pressure Vessels Class I and II.

Activity Categories: Design, Fabrication and Testing (NDE).

Submitted documentation:

Application for Approval of Manufacturer, dated 2014.11.08 containing:

- Name and address of manufacturer.
- Product categories and activity categories.
- Types and dimensions of pressure vessels being produced.
- Organisational structure, including engineering design, purchasing, manufacturing and quality control.
- Quality Certification/ QA Assurance Scheme/ Approvals held.
- Outline of manufacturing facilities and equipment.
- Manufacturing flow chart indicating all process, inspection and test points.
- Written procedures for testing and inspection.
- Production flow chart.
- Procedure for calibration.
- Certificates of Personnel Qualifications for NDT Testing
- Equipment For Non Destructive Hydrostatic Pressure Testing.
- Qualification of personnel engaged on testing and inspection (listed by name and skill).
- Description of system used for identification and traceability of materials and products.
- Detailed Equipment List For Material Handling (Machinenliste 121112).
- Description of welding procedure specifications (WPS) used.
- List of operators and welding installations.
- Description of procedure qualification records (PQR) that cover the WPS's to be applied.
- Welding coordination and quality requirements for welding operators.
- Welder Test Records, Worker Self Inspection Procedures, Working Procedures.
- List of certified welders with qualification range, welding method, position and material type.
- Non Destructive Testing (NDT) Procedures- (NDT) Certificates. Bolt Testing Procedures.
- X- Ray Reports.
- Magnetic Particle Testing (MP) and Penetrant Testing (PT) Certificates.
- Material Testing and Calibration.

DNV Checklist Initial Approval of Manufacturers Metallic Materials dated 2014.08.11.

Certificate Retention Survey

To maintain the approved status, the manufacturer must be re-inspected every four years. Application for renewal should be made not later than three months before the expiry date of the certificate.

Any alteration to the approved condition during the period of validity, e.g. method of manufacture, maximum dimensions or conditions of supply, is to be reported to the Society. A re-inspection and / or re-testing may be required when deemed necessary by the Society.