

ASME B&PV Code - a key to winning international markets

# TÜV NORD Czech, s.r.o. a TÜV NORD Systems GmbH & Co. KG - The Authorized Inspection according to ASME Boiler and Pressure Vessel Code



“ASME” is a trademark of The American Society of Mechanical Engineers. ASME Boiler and Pressure Vessel Code (ASME B&PV Code) is a key to winning international markets in the area of design of the technological equipment. Market barriers are overcome in particular in cases, when the equipment in compliance with ASME B&PV is designed in USA, Canada and other 113 world countries.

ASME B&PV Code sets requirements for the certification of producers of equipment, a control system / quality assurance, design, production, testing and certification of boilers and their pipeline systems, pressure vessels and nuclear facility components.



## Range of requirements

A company interested in constructing pressure equipment in accordance with one of the sections of ASME B&PV Code listed below must receive from ASME so called „Certificate of Authorization“. This certificate entitles its holder to use the ASME certification mark in compliance with the rules of the relevant section of ASME B&PV Code:

| Section                                    | Designation                                 |
|--|---|
| Section I - Power Boilers                  | S; A; E; M; PP; V**                         |
| Section IV - Heating Boilers               | H; H (cast iron / cast aluminum)*; HLW*HV** |
| Section VIII Division 1 - Pressure Vessels | U; UM*; UV**; UD**                          |
| Section VIII Division 2 - Pressure Vessels | U2  |
| Section VIII Division 3 - Pressure Vessels | U3; UV3**                                   |
| Section X - Reinforced Plastic Vessels     | RP  |
| Section XII - Transport Tanks              | T; TV**; TD**                               |

\* Equipment not subject to the authorized inspection, the annual audit conducted by AIA

\*\* Equipment not subject to the authorized inspection, the audit conducted by AIA every three years

## Nuclear sections

## Designation

Rules for Construction of Nuclear Facility Components Division 1

Subsection NB - Class 1 Components N; NPT; NA

Subsection NC - Class 2 Components N; NPT; NA

Subsection NE - Class MC Components N; NPT; NA

Subsection NF - Supports -

Subsection NG - Core Support Structures N; NPT; NA

Subsection NH - Class 1 Components in Elevated Temperature Service Quality System Certificate Holder (for material organizations)

Division 3 — Containments for Transportation and Storage of Spent Nuclear Fuel and High Level Radioactive Material and Waste N3; NPT

The following certificates can be granted by the National Board of Boilers and Pressure Vessels Inspector. These certificates entitle their holders to conduct repairs and alterations of pressure equipment:

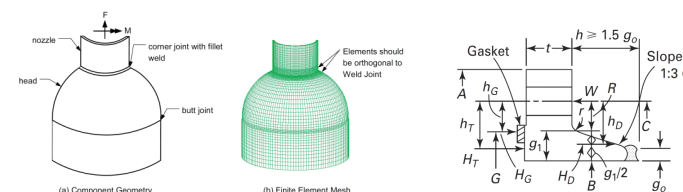
**National Board Inspection Code (NBIC)** **National Board Stamp**

Repair and Alteration R, NR

Repair of Safety Valves VR

## Target groups for the certification

Certification in accordance with ASME B&PV Code is a key to winning international markets for all manufacturing and engineering organizations operating in energy, chemical, petrochemical and nuclear industries.



## Range of services

Our experienced authorized ASME inspectors provide authorized inspection services according to all sections mentioned above, processing and review of strength calculations.

TÜV NORD Czech offers to you:

### Activities of the authorized inspection agency accredited by ASME

- ASME Code Section I - Power Boilers
- ASME Code Section III Division 1 & 3 - Nuclear Components
- ASME Code Section IV - Heating Boilers
- ASME Code Section VIII Division 1 & 3 - Pressure Vessels
- ASME Code Section X - Fiber Reinforced Plastic Pressure Vessels
- ASME B31.1 - Power Piping
- ASME Code Section XII - Transport Tanks

### Consulting and preparation for the ASME certification audit

#### (Joint Review/Nuclear Survey)

- Quality Manual
- Manufacturing and test methods
- Specifications and qualifications in the area of welding (WPS, WPQ, WOPQ, PQR)
- qualification of NDE personnel (SNT-TC-1A)
- qualification of NDE methods
- participation of TÜV NORD in ASME joint review/survey as the ASME Authorized inspector/supervisor (AIS/ANIS) and the ASME Authorized Inspector (AI/ANI)

### ASME B&PV Code seminars & workshops

- company seminars tailored to the specific needs of your company/project
- broad-based public seminars

### Strength calculations

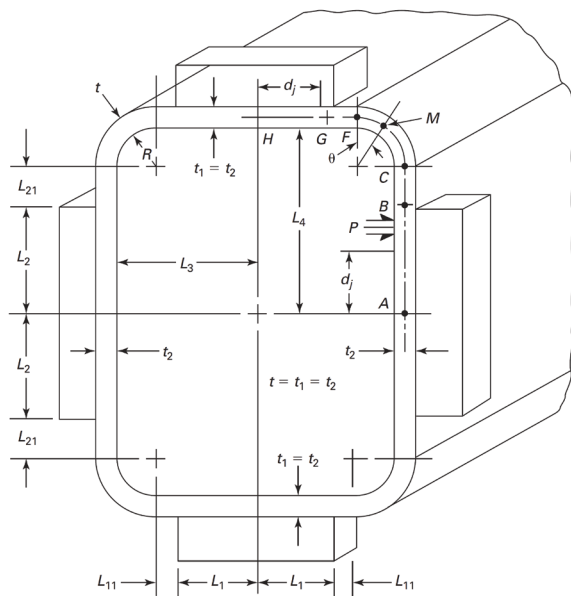
- ASME B&PV Code strength calculations for pressure vessels, boilers, pipelines, fittings, etc.
- strength calculations in accordance with other international standards (AS 1210, BS 5500, GOST, AD 2000, IBR, etc.)

### Immediate support and cooperation in meeting your needs in the area of

- ASME certification
- the authorized inspection of boilers, pressure vessels, pipeline systems and nuclear facility components
- applications of ASME B&PV Code for conformity assessment according to PED 97/23/EC
- qualification of welding methods and personnel (PQR, WPS, WPQ, WOPQ)
- qualification of NDE personnel and methods (RT, UT, PT, MT)
- Written Practice in accordance with SNT-TC-1A
- draft registration according to CSA B51 (registration for Canada, CRN)
- strength calculations for pressure equipment

### Our know-how for your success

TÜV NORD Czech is a recognized and reliable partner for inspection and certification services and testing activities. It is a member of a multinational company TÜV NORD GROUP, one of the most important certification authorities not only in Europe, but globally. TÜV NORD GROUP operates in more than 70 countries worldwide, offering not only a stable and independent customer care, but also the competence in various industries.



If you are interested, please contact us at:

**TÜV NORD Czech, s.r.o.**

Ing. David Duba

Šumavská 416/15

602 00 Brno

Tel.: +420 543 213 148-50

Mobil: +420 606 690 209

Fax: +420 543 241 530

E-mail: duba@tuev-nord.cz

www.tuev-nord.cz