

ASME Code Section VIII, Division 1 - Design Calculation of Pressure Vessels

Description: Following a brief general introduction into the ASME Code the participants will be made familiar with the applicable ASME Code Section VIII, Division 1 design requirements. Many different practical examples and exercises will offer a deep insight into the ASME Code specific design rules. The participants will have the opportunity to perform their own calculations with the assistance of an experienced design engineer who is also an Authorized Inspector.

Target: Having attended this seminar the applicants have the necessary basic knowledge to perform their own design calculations and/or review such calculations for Code compliance. Within the scope of the seminar we would also be pleased to address some of your typical projects, please send us your specific questions a few days in advance.

Duration: 2-3 days

Key Points of the Workshop:

- determining the specific Section VIII, Division 1 design data (MAWP, design pressure, test pressure, design temperature, MDMT, seismic and wind loads, external nozzle loads, etc.),
- finding the correct joint efficiency factor E and the corresponding scope of nondestructive examination,
- establishing the allowable stress values as listed in ASME Code Section II,
- calculating cylinders, cones, dished and flat heads for internal and external pressure, calculating openings (reinforcement calculation, large openings, external nozzle loads, UG-45, etc.),
- dimensioning flanges according to Appendix 2 and ASME B16.5,
- heat exchangers according to Subsection C, Part UHX,
- supports (saddles, lugs, skirts)
- special services UW-2 (lethal service, direct firing, low temperature service)
- impact test requirements as an integral design element
- considering PWHT requirements as part of the design calculation
- proof test to establish the maximum allowable working pressure MAWP
- calculations using non-ASME procedures/formulas covered by par. U-2(g) (e.g.
- FEA, British Standard, AD 2000, etc.)

for further information contact our seminar-team:

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