

# Registration form for classroom training

## 01 to 04 June 2026

### ASME Boiler Pressure Vessel Code – Section VIII Division 1 & 2 - 2025



#### What to expect when attending

This course provides foundational training for Pressure Vessel Engineers and Designers, especially in the oil, gas, and mining sectors. It focuses on the ASME Boiler Pressure Vessel Code (BPVC), specifically Section VIII Divisions 1 & 2, which are essential for compliance in pressure vessel design. The training covers design calculations and methods, guiding participants on how to navigate the Code's sections and annexes.

Division 1 lectures follow the UG sections and outline welding and metallurgical requirements, while Division 2 lectures focus on "Design by Rules". The course includes cross-references to Code equations, practical examples, and Excel spreadsheets to simplify calculations and analysis. Workflow diagrams and Excel-driven worksheets are provided for hands-on practice and homework.

Participants will work through real-world examples, such as a Division 1 Horizontal Drum and a Division 2 Napthya Stripper Tower. The course emphasizes the importance of understanding the Code, even when using advanced software, to interpret results and address deficiencies in design.



#### Who should attend this course

Technical groups involved process design, equipment / heat transfer engineer, metallurgical / corrosion / coating engineer / welding engineer / fabrication.



#### Meet our Presenter – Clive Thomas Engel

Clive Thomas Engel is a seasoned engineering consultant with over three decades of global experience in the oil & gas, refining, petrochemical, metals, mining, and power sectors. Currently serving as a Technologist at Species Analytics FZ-LLC in Abu Dhabi, he specializes in integrated project execution for piping, control systems, SCADA, and process systems. His expertise spans advanced engineering tools such as Siemens NASTRAN FEA, SmartPlant Enterprise, and SQL Server development. A member of the American Society of Mechanical Engineers (ASME) and the Instrument Society of America (ISA), Clive has contributed to major projects for leading companies including Aramco, Amec Foster Wheeler, Candu Energy, and Technip USA. His career reflects a strong focus on innovation, data-driven engineering, and multidisciplinary project integration.

**What topics will be covered****Day 1: Division 1 – Fundamentals & Design**

- **Overview of ASME BPVC Sections (2023 update)**
- **User Requirements & Datasheets:**
  - Process, mechanical, environmental, seismic, wind, and registration requirements.
- **Materials (Section II, Part D):**
  - Material tables, selection, allowable stress, and corrosion allowance.
- **Design Calculations (Subsection A):**
  - Shell thickness (internal/external pressure)
  - Minimum thickness
  - Stiffener rings (internal/external)
- **Head Design Calculations:**
  - Ellipsoidal, torispherical, hemispherical, conical, toriconical, and flat heads
  - Example calculations (e.g., Stripper Tower)

**Day 2: Division 1 – Fabrication & Application**

- **Fabrication Methods (Subsection B):**
  - Joint and weld types, joint factors, and classifications (A–D)
  - Detailed joint types (butt, fillet, angle, etc.)
  - Connections (head to shell, pressure parts, nozzles)
- **Example Vessel Calculations:**
  - Complete vessel (shell, head, conical head)
  - MAWP, MAP, MDMT, impact testing, PWHT
- **Openings & Nozzles:**
  - Reinforcement, large openings, flued openings, flat heads, limits, strength, multiple openings, pipe threads, flanges, nozzle neck thickness, inspection/manhole openings
- **Flange & Gasket Selection**
- **Skirt Supports & Saddles:** Calculations and examples
- **Appendices:** Mandatory and non-mandatory

**Day 3 and Day 4: Division 2 – Advanced Design**

- **Division 2 Overview:** Introduction to Class 1 & 2 vessels (2017 update)
  - Safety factors: 3.0 (Class 1), 2.4 (Class 2)
- **Shell & Head Calculations (Part 4)**
- **Nozzle Types & Calculations**
- **Example Vessel (Class 1 & 2)**
- **User Calculation Reports (Designer/Fabricator)**

## How to enroll



Complete the registration form and e-mail through to:  
[training@chempute.com](mailto:training@chempute.com) OR [lkylander@chempute.com](mailto:lkylander@chempute.com)

Acknowledgement will be e-mailed back to you. Final confirmation of your booking and all details of the course will be e-mailed to you only on receipt of full payment for the course.

## T's & C's



If you find it necessary to cancel your online training session, please contact our office immediately at [training@chempute.com](mailto:training@chempute.com) / [lkylander@chempute.com](mailto:lkylander@chempute.com) or +27 11 803 6559

- By signing and returning this quotation, you agree on the stipulated policy points for online training and will be liable for payment. Please ensure that you have proper authorisation to do this.
- Any cancellations received less than 3 working days before the date of the booked class, the full fee will be payable, and no refunds or credit notes will be given.
- If a registered attendee does not cancel and fails to attend the booked class, this will be treated as a cancellation and no refund or credit note will be issued.
- No refunds will be issued for missed or unused services.
- Cancellations are accepted in writing and without penalty up to 14 days prior to the start of the training.
- Delegates cancelling in writing between 7 and 14 days prior to the start of the training will be liable for 25% of the training cost.
- Delegates cancelling in writing less than 7 days prior to the start of the training will be liable for 50% of the training cost.

Sign to acknowledge Cancellation Terms: \_\_\_\_\_

# Enrolment form to attend training

## 01 to 04 June 2026

### ASME Boiler Pressure Vessel Code – Section VIII Division 1 & 2 - 2025

Cost of course	R 15 500 per person excluding VAT (10% discount is granted for every 2nd, 3rd etc. registration from the same company)
Course Times	8:30 am (SAST) - 16:30 pm (SAST)
Duration	3 Days (3 CPD)
Location	33 Riley Road, Pinewood Office Park, Woodmead, 2195, UNIT G14

#### Attendee Information

Title ((Mr. /Mrs. /Ms. /Other)		Occupation	
Cell		First Name	
Office Number		Surname	
Email			
Special Dietary Requirements			

#### Billing Information

Full Company name	
VAT Registration number	
Full Address (To which invoice must be sent):	

#### Procurement Information

Title ((Mr./Mrs./Ms./Other)		Occupation	
Cell		First Name	
Office Number		Surname	
Email			

I have read and agreed to all the conditions of enrolment and payment as stipulated in this registration form:

Signature

Date