



2KG TRAINING

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## Advanced API Storage Tanks Course: AP1650 AND API653 DESIGN, MAINTENANCE AND INSPECTION

**Presenter:** Ricky Meyer

### ABOUT THE PRESENTER: Ricky Meyer



Almost 30 years' experience in the Oil and Chemical process industries. Has been active in a wide range of applications in Operations, Maintenance, Inspection and Reliability matters, including:

API653/API650, EEMUA159, EN/BSI, NDT procedures, Tank Engineering, Pipeline Inspection, Quality management, Risk Based Inspection, Integrity Management.

Member (from 1999 – 2005 ) of the Storage Tanks Committee of the EEMUA organisation and co-author of several EEMUA publications. Due to this membership, involvement or participation in other standards (e.g. BREF, EN, BSI, API).

**Number of days:** 5

**CPD Points:** 5

### Live Virtual Classroom

2KG Training Live Virtual Courses offer participants the same instructors, training systems, course materials, personal support, and face-to-face engagement with instructors and other participants that they would expect to find in a conventional classroom.

The API 650 & 653 Advanced Storage Tanks Live Virtual Course brings participants together in a virtual classroom, where they receive training from an expert via a live video link. Participants are interconnected via audio and video, enabling them to interact both with the instructor and with their classmates. Learners can speak to their instructor at any time to ask questions, request assistance, and instructors can provide hands-on support.

### PURPOSE

To present various common storage facilities for liquid and gaseous hydrocarbons and explain their configuration, tank farm requirements, design, operation and maintenance aspects. API 650-&-653-Advanced-storage-tanks

### WHO SHOULD ATTEND

The course is suitable for storage tank engineers, inspectors and operators involved with storage tank design / fabrication / erection / modifications / maintenance and operation

### OBJECTIVE

By the end of the course, the participants will be able to:

- Distinguish function of structural parts of and fittings to conventional storage tanks
- Explain design and operational aspects of storage tanks
- Set up inspection and maintenance programmes/schedules
- Differentiate maintenance methods (condition/repair)
- Define the maintenance scope
- How to read Inspection Reports properly

### COURSE HIGHLIGHTS

Review of codes requirement, structural design, material, fabrication, and erection for new storage tanks	Tank shell, roof, bottom, and foundation evaluation
Tank Shell Design (1-foot method, Variable design point method)	Introduction to Brittle Fracture Mechanics
Tank Roof Design	Tank repair and alteration
Tank bottom layout design	Pre and post weld heat treatment
Tank material selection	Dismantling and reconstruction
Tank internal structural members design	Tank settlement criteria, measurement, and evaluation
Shell opening and Nozzle design	Tank lifting methods and stress induced on tank shell, roof and corner welds
Wind and Seismic loading analysis	Tank ventilation requirements API 2000
Tank foundation design	Tank maintenance and repair management (Tank program-data sheet)
Elevated temperature tanks design	Old riveted tank design to API 12 A, maintenance-repair
Internal external floating roof	Tank operations level set up API 2350
Tanks with external pressure	Introduction to API 580-581 Risk based Inspection Planning
Tank construction, welding qualification and procedure	Introduction to API 571 damage mechanism
Inspection of Storage Tanks, NDE tests	Introduction to Fit-For-Service API 579
Corrosion evaluation and tank life prediction calculation	Introduction to Finite Element Modeling of storage tanks



## Registration Form

Number of days: 5

CPD Points: 5

### How to register for the course:

1. Complete this registration form and fax it to Phindi Mbedzi: Tel: 011 325 0686 Fax: 011 325 0488 Email: [phindi@2kg.co.za](mailto:phindi@2kg.co.za)
2. Acknowledgement will be emailed to you.
3. Final confirmation and details will be faxed or emailed to you approximately 7 days before the commencement of the seminar.

### Cancellation Policy:

By signing and returning the registration form, the authorizing signatory on behalf of the stated company is subject to the following terms and conditions.

- All cancellations must be received in writing
- Any cancellations received less than 3 working days before the date of the event, the full fee will be payable and no refunds or credit notes will be given.
- If a registered delegate does not cancel and fails to attend the Workshop, this will be treated as a cancellation and no refund or credit note will be issued.

### Delegate information:

Title: \_\_\_\_\_ Surname: \_\_\_\_\_ Name: \_\_\_\_\_

Full Company name: \_\_\_\_\_ Job Title: \_\_\_\_\_

Postal Address (to which invoice must be sent): \_\_\_\_\_

Code: \_\_\_\_\_ VAT number: \_\_\_\_\_

Tel: (    ) \_\_\_\_\_ fax: (    ) \_\_\_\_\_

Cell: \_\_\_\_\_ Email: \_\_\_\_\_

### Contact/ Accounts information:

Title: \_\_\_\_\_ Surname: \_\_\_\_\_ Name: \_\_\_\_\_

Tel: (    ) \_\_\_\_\_ fax: (    ) \_\_\_\_\_

Cell: \_\_\_\_\_ Email: \_\_\_\_\_

Please tick the course that you would like to attend:

#### Conventional Classroom

- 24 – 28 October 2022 (5 Days)  
Graceland Hotel, Secunda  
**R19 058.00 (excl VAT)**

#### Live Virtual Classroom

- Currently unavailable, a date to be advised  
**R15 246.00 (excl VAT)**

I have read and agreed to all the conditions of registration as stipulated in this brochure.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

For more info and to register contact Phindi Mbedzi on tel: 011 325 0686 or cell: 071 125 6188 and email: [phindi@2kg.co.za](mailto:phindi@2kg.co.za) or visit [www.2kg.co.za](http://www.2kg.co.za)