



ENGINEERING AND TECHNICAL TRAINING

Mechanical Integrity and Pressure Equipment Inspection

3 day course

Classroom, online or in-house

Course overview

A three day programme on keeping ageing pressure equipment in service safely, and knowing when it cannot be. Delegates work through the degradation mechanisms that affect vessels, tanks and piping, risk based inspection methodology, and the non destructive testing methods available for each situation. Corrosion rate calculation and remaining life assessment are worked through by hand, so delegates can interrogate a number rather than accept it, and fitness for service assessment is applied to real inspection findings. The course closes on building a mechanical integrity programme aligned to recognised inspection codes, which is where most of the value sits for engineers responsible for refinery and mine processing assets that are older than their original design life.

What you will learn

- Apply risk based inspection principles to pressure equipment
- Interpret corrosion rate calculations and remaining life assessments
- Assess equipment fitness for service following inspection findings
- Plan inspection intervals and non destructive testing methods for vessels and tanks
- Develop a mechanical integrity programme aligned to recognised inspection codes
- Specify repair, alteration and rerating within code requirements
- Manage inspection records so an equipment history supports the next decision

Who should attend

- Inspection engineers
- Mechanical integrity engineers
- Plant engineers
- Asset integrity managers
- Maintenance engineers on pressure equipment duty

Course outline

- 01 Pressure equipment design and degradation mechanisms
- 02 Risk based inspection methodology
- 03 Non destructive testing methods and applications
- 04 Corrosion rate calculation and remaining life assessment
- 05 Fitness for service assessment principles
- 06 Repair, alteration and rerating within code
- 07 Inspection records and equipment history
- 08 Building a mechanical integrity management programme

Upcoming dates

Dates	Venue	Format	Fee per delegate
14 to 16 October 2026	Lagos, Nigeria	Classroom	USD 995
9 to 11 December 2026	Online	Online	R6,500
24 to 26 February 2027	Cape Town, South Africa	Classroom	R14,950
1 to 3 March 2027	Addis Ababa, Ethiopia	Classroom	USD 995



Fees and how to register

This 3 day course is **R6,500** per delegate online, **R14,950** in the classroom in South Africa, Botswana, Namibia, Lesotho and Eswatini, and **USD 995** in the classroom elsewhere in Africa. In-house training is quotation on request. Book 2 or more delegates on this course and save 10%.

To register or request an in-house proposal, visit www.afrisciencegroup.com, email info@afriscience.co.za, or WhatsApp us on **+27 63 479 1136**.

AfriScience Group | +27 61 536 6531 | info@afriscience.co.za | Pretoria, Gauteng, South Africa