TECHNICAL EDUCATION ACADEMY

School of Engineering

COURSE PROGRAMME

000271

MECH055 - International Standards for Hydraulic Testing of Pipelines

Main pipelines play a crucial role in transporting vital resources such as oil, gas, and water over long distances.



Learn from the Best in the Business!

Course overview

Duration: 5 days / 40 hours · Foundation level

Why take this course

Main pipelines play a crucial role in transporting vital resources such as oil, gas, and water over long distances. They ensure the continuous supply of necessary substances to cities, industrial enterprises, and other consumers. The efficiency and safety of pipeline operation depend on their proper design, installation, and regular maintenance, including various types of testing.

Hydrostatic testing is one of the most important procedures aimed at verifying the strength and tightness of pipelines. During these tests, the pipeline is filled with water and subjected to pressure exceeding the working pressure, which helps identify potential defects and prevent accidents.

In addition to main pipelines, testing of technological pipelines used in production facilities is also important. These tests include checking the installed pipelines, hydraulic and pneumatic tests for strength and density, flushing and blowing of the pipeline, as well as additional tightness tests. After successfully passing all tests, the pipelines are handed over and accepted.

One of the most important aspects of operating main and technological pipelines is environmental protection. This includes measures to prevent leaks, monitoring the condition of the pipeline, and using environmentally safe technologies.

Main pipelines and their testing are an integral part of modern infrastructure. Hydrostatic and pneumatic tests ensure their reliable and safe operation, prevent possible accidents, and protect the environment

Who it is for and how it helps

Engineers and managers across various disciplines, technicians, diagnostic personnel, and maintenance staff working with pipeline systems and other technical specialists

What you will learn

- Clean pipeline cavities before testing
- Perform strength tests and leak checks
- Conduct hydraulic, pneumatic, and combined tests
- Consider the importance of environmental protection during testing
- Perform hydraulic and pneumatic strength and density tests
- Flush and blow pipelines
- Conduct hydraulic tests of steam and hot water pipelines

Curriculum

Modules 01–04

01 General Concepts of Main Pipelines

- General Concepts of Main Pipelines

02 Hydrostatic Testing of Main Pipelines

- General provisions
- Cleaning pipeline cavities
- Strength tests and leak checks
- Hydraulic tests
- Pipeline testing using stress test methods
- Pneumatic tests
- Combined tests
- Pipeline testing at negative temperatures
- Drying pipeline cavities and in-pipe technical diagnostics
- Environmental protection
- Terms, definitions, symbols, and abbreviations

03 Hydrostatic and Pneumatic Testing of Technological Pipelines

- Requirements for testing and acceptance of installed pipelines
- Hydraulic strength and density tests
- Pneumatic strength and density tests
- Flushing and blowing pipelines
- Additional tightness tests
- Acceptance of Installed Pipelines

04 Hydraulic Testing of Steam and Hot Water Pipelines

- Hydraulic Testing of Steam and Hot Water Pipelines

Participation and contacts

Joining the programme

Contact the Academy and quote course code 000271 to confirm dates, delivery format, prices and enrolment terms.

Training for your team

Tell us your business goals, the roles and number of participants, and your preferred dates and location. This will help us discuss the right training option.

Preparing for the programme

The published programme does not specify any prerequisites. Contact us before enrolling to confirm how to prepare.

Discuss your training needs

mail@tecedu.org
www.tecedu.academy

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