Training - Place and Role of Equipment in Refining and Chemical Processes

ITREQ-EN-P | Face-to-face only | 6 days

This course provides a deep knowledge of the role and operating conditions of specific equipment used in various processing plants as well as a better understanding of process users: their processes, vocabulary, work environment, etc

Level

Awareness

Public

Engineers and/or technicians. Suppliers or subcontractors of the Oil & Gas processing sector or the refining and chemical industry

Objectives

Attendees will be able to implement the following skills:

- Define the role and integration of the selected material in the processes studied
- Identify standard operating conditions
- Identify impacts of changing operating conditions on this equipment

Pedagogical & technical resources

- Interactive course
- The use of 2D/3D photos and videos makes it possible to understand the size of the presented devices and units

Assessment of achievements

- Trainees are assessed throughout the training through practical application phases and interactions with the trainer
- A final on-the-spot evaluation may also be carried out at the end of the course and/or at the end of each module using tests designed to verify the learners' understanding and assimilation of the knowledge linked to the training objectives

Prerequisites

No prerequisites are necessary to follow this course

Responsable

IFP Training instructors, with expertise in the field and trained in modern teaching methods adapted to the specific needs of learners from the professional world

Program

EXAMPLE OF COURSE CONTENT RELATED TO COMPRESSORS

For each unit, the following items are discussed:

- Role and principle of the process, simplified process flow diagram, role of the compressor in the process.
- Normal operating conditions and impact of various modifications on the operation of the compressor.

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- Particular operating conditions: shutdown, start-up, regeneration of the catalyst, decoking, etc.

COMPRESSORS IN OIL & GAS PROCESSING & TRANSPORTATION — 3 days

Production of natural gas and associated gas: natural production and reinjection compressors.
Secondary oil recovery: gas lift, associated gas reinjection compressors.
Gas transportation by pipe: recompression station.
Gas storage: surface, underground.
LNG production and treatment: conventional units, ssLNG.

COMPRESSORS IN REFINING PROCESSES — 2 days

Initial fractionation of crude oil: overhead gas compressor.
Catalytic reforming: recycle, make-up, recontacting, regeneration compressors.
Hydrorefining: recycle and make-up compressors.
Fluid catalytic cracking (FCC): wet gas compressor and air blower.
Hydrocracking: recycle and make-up compressors.
Alkylation: cryogenic compressor.
Visbreaking: wet gas compressor.
Coker: wet gas compressor.

COMPRESSORS IN THE PETROCHEMICAL/CHEMICALS INDUSTRY — 4 days

Steamcracking: cracked gas and cryogenic compressors.
Commodity polymers: on-purpose propylene production (metathesis, PDH, MTP/MTO...), polyethylene and polypropylene production (gas and liquid phase), ethylene oxide production, styrenics production: transfer, refrigeration or recycle compressors, according to the process scheme.
Ammonia: air compressor, syngas compressor, refrigeration compressor.
Urea: CO2 compressor.
Nitric acid: turbocompressor, single and dual pressure units.
Sulfuric acid: air blower.
Methanol: make-up compressor, syngas compressor, air blower.

To French entities : IFP Training is referenced to DataDock ; you may contact your OPCO about potential funding.
Please contact our disabled persons referent to check the accessibility of this training program : referent.handicap@ifptraining.com

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