Training

in CO₂ removal with hollow fiber membranes.

Course objective

To provide technical knowledge of membrane CO_2 removal, as well as an overview of the system, its operation (including start-up, shutdown, troubleshooting), and maintenance.

Who should attend?

Engineers, operators, and technicians working on production units.

Upon completion of the course, participants will know the following:

- Fundamentals of CO₂ membrane separation
- Details of the CO₂ membrane unit and pre-conditioning/conditioning operations
- CO₂ removal unit control and safety philosophy
- CO₂ removal unit key parameters
- Unit operation: start-up, shutdown, emergency shutdown, and troubleshooting
- Equipment maintenance and maintenance schedule for the main equipment

Deliverables

- Training documentation
- Training execution
- Workshop participation

Location

Selected NOV training centers or client preference. Preferably on site due to membranes unit vicinity. Training can also be offered online.

Duration

3 days, depending on complexity.

Contact

process-systems@nov.com

Training course includes

- Training by experienced technology personnel
- 3 days training for up to 10 trainees
- Hard and soft copies of training material in English



process-systems@nov.com

nov.com/process-systems © 2023 NOV Inc. All rights reserved. JIG 22-CPS-PFT-0110

Course content

Welcome

- Safety moment
- Review of agenda
- Course objectives
- · Introduction of participants and their expectations

Overview

- Sweetening with membranes application practice and best available technology
- Evonik SEPURAN® NG membranes key characteristics
- Process design basis of the unit
- Review of process flow diagram and P&ID explanation
- Site visit or 3D model presentation

Fabrication

- Fabrication
- Main specification applicable
- Material selection

Control and safety philosophy

- · Process description and equipment key parameter
- Cause and effects chart
- Shutdown philosophy

Operation

- Start-up preparation
- Unit stabilization
- Troubleshooting

Maintenance

- Maintenance of equipment
- Maintenance schedule
- Spare parts management

Evaluations

- Q&A session
- Review have the learning objectives been met
- Evaluation of course





process-systems@nov.com

nov.com/process-systems