

Training - Air Separation Unit



ASU-EN-P



Face-to-face only



3 days

This course reminds the basic background and knowledge of Air Separation Unit technology and operation

Level

Skilled

Public

Operators, supervisors and plant managers involved in operation and optimization, technicians support, process engineers, process control engineers and safety personnel

Objectives

Attendees will be able to implement the following skills:

- Describe the main equipment associated with the Air Separation Unit and their function
- Explain the operating parameters and the product management for safe operation
- Detect abnormal situations by troubleshooting and implement preventive measures

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

Responsible

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

PRINCIPLES OF AIR SEPARATION UNIT

0.5 day

Overview on the air separation technology along the relevant process units:

- Introduction to air separation technology.
- Basics of the separation process.

PROCESS UNIT DETAILS, DESCRIPTION, TECHNOLOGY & OPERATING PARAMETERS

1.5 days

Air filtration system.

Air compression.

Pre-cooling system.

Front end purification.

Brazed alumina heat exchanger.

Distillation columns.
Vapor/condenser.
Cryogenic pumps/expander.
Storage and backup vaporization.

THE SPECIFIC RISK OF OXYGEN/NITROGEN

0.5 day

Introduces to oxygen risk, reactivity of material with oxygen, design of O2 installation.
Review of incidents in air separation units, causes and preventive measures.
Safe operation and maintenance of equipment.
Anoxia, deficient atmosphere.

BASIC CONTROL PRINCIPLE

0.5 day

Main control loops.
Safety loops, elements important for safety.
Transition phase: start-up, load change, shutdown.

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