An LDI Training Course

OIL & GAS PROCESSING PLANTS

by

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Introduction

By attending this course, the participants will understand the basic technology and equipment on how oil and gas produced from a well are processed and refined.

If your work is related to oil and gas production and you are not familiar with the processing techniques and the equipment used, this course is for you.

In the course you will:

- Learn the techniques and equipment to process crude oil into stock tank oil
- Know the technology and equipment to process wellhead gas into pipeline gas
- Understand the refinery processes to refine crude oil into refined products
- Know how to read a Process Flow Diagram (PFD)
- Learn how to read a Piping and Instrument Diagram (P&ID)

Who Should Attend

This course is designed for the following professionals whose works are related to oil and gas production:

- Engineers
- Technicians
- Support personnel
- Accounting and auditing professionals
- Lawyers and contracts management people
- And anyone who wants to know how oil and gas are processed.

Course Content

1. **Pre-Test**
2. **Physical Properties & Chemistry of Oil & Gas (**Molecular weight**,** Vapor pressure**,** Critical properties, Heat of combustion, etc)

3. **Overview of Production Processes** (Well fluid, Gas-Oil Separator, Units of Oil Processing Plant, Units of Gas Processing & Conditioning, etc)
4. **Production Separator & FWKO** (2 & 3-phase separator, vertical & horizontal separator, Factors affecting separation, internal & external separator components, Separator Control, Routine Checking of Separator, etc)
5. **Flash, Scrubber, and Distillation Process** (Vapor Liquid Equilibrium (VLE) Principles, Phase Behavior, Antoine Equation, Fractionation Process, Tray & bed columns, etc)
6. **Gas Sweetening Plant** (sour & sweet gas, Amine (MDEA) processes, Acid Gas Pick-up, Operating Problem (corrosion, solution degradation, foaming), Amine Reconcentration, etc)
7. **Gas Dehydration Plant** (wet & dry gas, TEG Dehydration System, MEG Injection, Amine Reconcentration, etc)
8. **Oil Processing Plant** (Oil-Water Emulsion, Heater Treater, Emulsion Treater, Desalting, Coalescers, Mercury Removal, etc)
9. **Plant Piping and Pipelines** (oil pipeline, gas pipeline, multiphase pipeline & flowline, metal & non-metal pipe, etc)
10. **Process Control and Safety Systems (**Elements of a process control system**,** Control loops**,** Control modes**,** PID, Layer of Protention, IPL / Independent Protection Layer, SIS / Safety Instrumented System, etc)
1. **Post-Test**

About Instructor

Ir. In Jumanda Kasdadi is an experienced instructor and he has been conducting training for oil and gas companies since 1997.

He has BS and MS in chemical engineering degrees from the Institute Technology Bandung.

Companies that have received Mr. Kasdadi's in-house training include Chevron, Pertamina Hulu Energi–ONWJ, ConocoPhillips, Total, Medco, Petrochina, Pertamina, Star Energy, and many others.

Ir. In Jumanda Kasdadi was involved in several front-end engineering design (FEED) and Risk-Based Inspection projects.

IJK has also taken courses for 9 topics in The Oil & Gas fields at PETEX (Petroleum Extension), University of Texas at Austin, in Houston, Texas, USA (2018).

Training Confirmation

LDI Training will provide a Confirmation Letter after we receive registration according to the required quota.

For more information please contact

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