



P&ID DevelopmentFor Process Units at the Detailed Engineering









WHY CHOOSE THIS TRAINING COURSE?

According to the important role of P&IDs in projects and the ability of observing the connection between different parts of a unit in P&IDs, this course is provided for showing the way of reviewing P&ID and also relying on the key points referring to projects' lesson learnt.

In this course which will be held for three 8-hour sessions, we're going to review the way of providing and completing the process units' P&IDs in detail engineering projects.

COURSE SYLLABUS (24 HOURS)

- What to Do Before the First Issue of P&ID
- Venting and Drainage
- Piping and Elevation Issues
- Isolation
- Steam Condensate Recovery
- Utility Distribution Diagrams
- Pressure Safety/Relief Valves
- Hold Management
- Control and Instrumentation Tip Points
- Etc.

WHO IS THIS TRAINING COURSE FOR?

This course is proper for process engineers working in consulting companies and has these prerequisites:

- At least 5 years of work experience of designing in consulting companies (oil, gas and petrochemical industry)
- The ability of providing and completing process units' P&IDs in oil, gas and petrochemical industries
- Competent in IPS-E-PR-230

WHAT ARE THE GOALS?

- Holistic approach to P&ID Development
- Attempting to classify the activities for P&ID Development



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- M.Sc. in Chemical Engineering-Separation
 Processes from Sharif University of Technology
- Process Department Principal Engineer at Nargan Co. with more than 20 years' experience in the process design
- Having an experience of instructing P&ID
 Development at Nargan Co., NIGEC, Farab,
 Nardis, Mapna, and Namvaran Consulting
 Engineers Company

THE COURSE CONTENT

Day One

- What to Do Before the First Issue of P&ID
- Vent
- Drainage and Drain Connections
- Liquid Seals for Vapor Condensation or Level Control1
- Full Symmetrical Piping
- Reducers
- Check Valves or Non-Return Valves (NRV)
- · Isolation Philosophy and Removable Spool Piece
- Equipment Details
- Warm-up Lines
- Details of Injection and Sampling Point (for analyzer)

Day Two

- Pressure Safety/Relief Valves
- Line Finishing
- Heat Tracing
- Strainers
- Equipment Elevation
- Water Coolers
- Hold Management
- Emergency Isolation
- · Connection to Top of Line
- Minimum Required Distances & Distances to be minimized
- Locking Device and Car Seal Device
- · Steam Trap and Condensate Pot

Day Three

- · Pipe Specification Break
- · Control and Instrumentation Tip Points
- Insulation Kit and Insulation Flange
- Flowmeters
- Steam Condensate Drip Legs
- Equipment Trim Number
- Utility Distribution Diagrams
- Line Size
- Typical Check List