





INTRODUCTION TO PFD, PNID, ILD AND HOOK UP DIAGRAM COURSE

Training Dates:	As per schedule	Training Venue:	Kuala Lumpur
Basic Fee:	RM2,500.00 + SST per participant (this includes course materials, meals, refreshment and attendance certificate)		

DURATION

14 hours (Two (2) days)

TARGET GROUP

Plant or process supervisors, team leaders, instrument engineers, lectures and others who need to upgrade the knowledge and a comprehensive review or new experience of advanced process control.

TARGETED INDUSTRY/INDUSTRIES

Oil and gas industries, power plant, petrochemical plant, pump oil plant, food industries and others related industries.

CERTIFICATION

This course can be certified for the continuing professional development program likes the program by the board of engineers Malaysia, TEVT, Malaysia skill certificate and instrumentation competency certificate.

COURSE OVERVIEW

The course exposes participants to the how to read, write and interpret instruments drawing. Participants will be taught on how to read and write PFD and PNID using standard symbol and principle.

COURSE OBJECTIVE

The objective of the program is to provide instrument engineers, plant tech, plant operators and others plant personnel with a good knowledge and skill to read, write and interpret PNID.

COURSE OUTCOMES

At the end of the course, the participants should be able to:

- Differentiate various drawing, PFD, PNID, ILD, isometrics and Hook-up diagram.
- Draw PFD using standard symbols.
- Differentiate the terms used related to PNID.
- Understand the basic information for PNID.



- Understand the symbols used.
- Draw PNID using the right anatomy of a drawing.
- Interpret PNID.
- Create Instrument Loop Drawing (ILD).
- Read and install the instrument as per hook-up diagram.

TRAINING METHODOLOGY

- Lecture
- Classroom discussions
- Short video presentation
- Case study

COURSE CONTENTS

- Instrument documentation.
- Basic drawing, process drawing, electrical drawing, mechanical drawing and instrument drawing.
- Basic information for PNID
- PNID legend and symbols.
- Anatomy of a drawing, title block, grid system, revision block, note and legends and engineering drawing.
- Interpret drawing.
- PNID tutorial.
- Instrument Loop Drawing, characters and principle.
- Create ILD for simple application.
- Hook-up diagram.
- Basic installation using hook-up diagram.



ABOUT THE INSTRUCTOR

Engr. Azahar bin Mat Noor, graduated with Bachelor of Engineering (Honors) in Electrical Engineering and major in control system from the University of Technology Malaysia. He is a Registered Professional Engineer (Mechanical) with Board of Engineer, Malaysia and a Member, The Institution of Engineers, Malaysia. He also holds an Instrumentation and Control System certificate from YEW Mitaka, Tokyo.

He had working experiences with several companies such as the Institute Technology Petroleum Petronas (INSTEP) and Centre for Instructor and Advanced Skill Training (CIAST). Since the past 20 years in teaching, he had delivered for several courses such as;

- Process Design and Process and Instrumentation for process engineer.
- Process control technology for Instrument Engineer.
- Process control technology and application.
- Control valves service and repair.
- Instrumentation and measurement Engineering.
- Basic Instrumentation and Fundamental of Process Control.

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