



[Visit Suncam.com for more courses](http://www.suncam.com)

Continuing Education Course #462  
Piping and Instrumentation Diagrams

1. What do the lines in P&IDs depict?
  - a. Edge of pavement
  - b. Walls
  - c. Piping and communications
2. P&IDs illustrate the relationship of which items?
  - a. Piping, instrumentation, equipment, and controllers
  - b. Piping, instrumentation, vehicles, and controllers
  - c. Piping, instrumentation, equipment, and power supplies
3. P&IDs convey \_\_\_\_\_.
  - a. Power & current
  - b. Interconnectivity
  - c. Flows & pressures
4. During which phase are P&IDs helpful?
  - a. Planning
  - b. Demolition
  - c. Design
5. Which of the following is NOT a reason for having P&IDs?
  - a. Helps coordinate instrumentation, controls, and wiring
  - b. Provides details needed for programming
  - c. Ensure proper wire sizing
6. Which diagram is normally made before a P&ID?
  - a. Process flow diagram
  - b. Wiring diagram
  - c. Instrument schematic
7. Which are NOT shown in a block flow diagram?
  - a. Instrument tags
  - b. Processes as rectangles or circles
  - c. Lines for the flow paths
8. What does PFD stand for?
  - a. Pipe flow diagram
  - b. Process field diagram
  - c. Process flow diagram

9. Which can be used as a background for P&ID drawing?
- a. Block flow diagram
  - b. Process flow diagram
  - c. Logic diagram
10. What are instrument schematics?
- a. Details for particular instruments
  - b. Control logic details for instruments
  - c. A type of P&ID
11. Which is NOT shown in a wiring diagram?
- a. Terminal blocks
  - b. I/O Cards
  - c. Piping
12. Which is NOT a type of logic diagram?
- a. Ladder
  - b. Relay
  - c. Formal
13. Which is the most common industry standard for P&IDs?
- a. ANSI/ISA 5.1
  - b. IEC 60617
  - c. PIC001
14. Why are letter designations used in P&IDs?
- a. Comply with regulations
  - b. Conserve space
  - c. Cryptography
15. Which is NOT a common instrument function designation for the letter A?
- a. Analysis
  - b. Alarm
  - c. Air fan
16. What does HOA normally stand for?
- a. Hand/On/Auto
  - b. Hand/Off/Auto
  - c. High/Off/Auto
17. What is an O/O switch?
- a. On/Off switch
  - b. Open/Off switch
  - c. Or/Out switch
18. Which item would NOT be shown with a symbol on a P&ID?
- a. Instrument
  - b. Valve
  - c. Clarifications
19. What does a circle with a solid horizontal line represent?

- a. Field mounted, normally accessible
  - b. Primary location, normally accessible
  - c. Primary location, normally inaccessible
20. How does a control loop maintain a process condition?
- a. Adjusting devices
  - b. Recording data
  - c. Operator makes adjustments
21. What helps depict control loops in a P&ID?
- a. Flow direction arrows
  - b. Communications paths
  - c. Instrument functions
22. What does cascade control mean?
- a. Controlling multiple parameters
  - b. Equalizing flow in multiple pipes
  - c. Two controllers for a single control loop
23. Which is an example of flow pacing?
- a. Adjusting pump speed to achieve a set dosage
  - b. Making slow changes to a process
  - c. Keeping the flow rate the same
24. What is feedforward control?
- a. Using future projections for control
  - b. Using upstream readings for control
  - c. Using downstream readings for control
25. What is feedback control?
- a. Using historic readings for control
  - b. Using upstream readings for control
  - c. Using downstream readings for control

[Purchase this course on Suncam.com](http://Suncam.com)