



**ASSETS PROTECTION COMPANY**  
**SECURITY AND SAFETY TRAINING CENTER**  
**(A DIVISION OF SAUDI PETRO GAS CO.)**

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**Industrial Pneumatics**

**Objectives:**

The objective of this course is to provide, enhance and promote safe technical knowledge and practices concerning actual day-to-day tasks of the trainees, wherein after the completion of the program, the participant will be able to:

- Understand about Pneumatic System, and its applications in Industries
  - Conceptualize basic terms related to Pneumatics
  - Handle Pneumatic System safely
  - Identify Pneumatic components and their symbols
  - Explain the function and application of each Pneumatic component in a circuit
  - Diagnose simple faults in a Pneumatic System and rectify them
  - Improved equipment productivity through minimization of delay
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**Course Subjects:**

- Introduction to Basic Pneumatics
  - Basic Principles of Pneumatics
  - Symbols
  - Introduction to Pneumatic Trainer Bench
  - Air Preparation
  - Compressors
  - Cooling and Drying Systems in Pneumatics
  - Pressure and Flow Measuring Instruments
  - Actuators and their mountings
  - Pneumatic Cylinders and Motors (Practical)
  - Valves – Direction Control Valves, Flow Control Valves, Pressure Control Valves
  - Intensifiers, Pressure Switch
  - Noise Control and Leak Checking
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**Participants:**

- Technical Staff, Maintenance and Production Supervisors

**Methodologies:**

- Pre-Training Assessment
- Class Room sessions
- Plant / Work visits
- Evaluation – Written & Practical Test, Oral / Viva-Voce Test

**Duration:**

- Two (2) to four (4) Weeks in general at 5 days of 8 hours each

**Course Location:**

- Security and Safety Training Center, Dhahran or at Client's Suitable Venue

**Language:**

- English / Arabic