



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

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**Maintenance Testing & Trouble Shooting Of Ac Motors**

**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:

- Check a Motor and decide whether it is serviceable or not
  - Carry out routine maintenance on the various types of AC Motors
  - Correctly identify a Motor, its type and specifications, rating etc., from the name plate and/or product description
  - Use of various tools and safety practices
  - Learn practical and safe working applications
  - Improved equipment availability through minimization of delay
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**Course Subjects:**

- Program introduction, motor types and rating of motors, types of Insulation, Degree of Protection Frame Size
  - Checking of Insulation resistance and continuity of motors by Megger (Practical exercises)
  - Basic Principle of Operations of Induction Motors, Slip ring Induction Motor, Squirrel Cage Induction Motor
  - Construction of Electrical Motors. To start the Squirrel Motors by DOL Starter and Star Delta Starter (Practical exercises)
  - Maintenance of Squirrel Cage, Slip ring, Induction Motor
  - Maintenance of Brush Gears .To start Slip ring Motor by Resistance type Starter (Practical exercises)
  - Description if different types of faults in Squirrel Cage Motor and their remedial measures
  - Description of different types of faults in slip ring Induction Motor and their remedial measures
  - Troubleshoot common faults in slip ring Motors and Squirrel Cage Induction Motors
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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

**Language:**

- English / Arabic