1. Course Details:

Course Code : ICPE-018
Course Title : Steam Turbine Operation
Course Duration : 5 Days

2. Course Overview:

- Course will focus on the Maintenance of Steam Turbines. The course will cover all aspects of Steam Turbine Maintenance including steam tur-bine systems, component maintenance and repair, assembly and dis-assembly of major items together with Steam turbine theory and operations.

3. Learning Outcomes:

- Participants will have gained a thorough understanding of the various steam turbine configurations available to virtually every industrial user
- Items discussed include mechanical design features, sizing and application criteria, maintainability, reliability, vulnerability and troubleshooting issues
- Participants will learn simple techniques and short-cut methods of machinery selection, which can take the place of tedious hand calculations and will serve as rapid means to determine sensitivity or influence of parameter changes on equipment performance
- Participants will be able to determine the most appropriate and efficient matching of compressor to steam turbine driver

4. Course Contents:

- Steam Properties
- Boiler Operations and Principles
- Basic Thermodynamics of Steam Turbines
- Steam Turbine Types
- Uses of Steam Turbines in Petrochemical Plants
- Steam Turbine Components
- Rotor Components
- Reaction and Impulse Blading
- Stator Blading
- Steam Turbine Bearings
- Steam Turbine Systems
- Lube Oil Systems
- Sealing Systems

- Governors and Control Systems
- Boiler Operations
- Feedwater Systems
- Condensers
- Boiler Control
- Steam Turbine Operations
- Startup/Shutdown Operations
- Control Valve/Stop Valve Operations
- System Operations
- Component Expansion
- Steam Turbine Maintenance
- Repair and Maintenance of Rotor Components
- Blade Removal/Replacement
- Steam Turbine Maintenance
- System Maintenance
- Repair Procedures
- Laser alignment
- Hot alignment
- Steam Turbine Troubleshooting
- Methods of Troubleshooting
- Commons Steam Turbine Problems and Solutions
- Case Studies

5. Our Methodology:

- Make coaching and monitoring innovative and using modern
- Media training also using on the go training by using interactive means and focusing on
- The exercises, practical applications and real situations study.
- Live delivery method, instructor-led training.
- Experienced consultant, trainers, and professional.
- Qualified trainer with high-level experience

6. Attendance Reports:

- Send daily attendance reports to trainingdep
- Send full attendance report to training dep. by the end of thecourse
- Attend 100 % from the course days also providedaily
- Issue attendance certificate for participant who attend minimum 80% from the course duration

7. Pre/Post Reports:

- Pre- assessment before starting training.
- Post assessment after finish training
- Full report for the deferent between Pre-& Post assessment

8. Who Should Attend?

- Engineers & Technicians involved with Steam Turbines