

مركــز المستشــار الوطنــي للتدريــب ¡National Consultant Centre For Training

NCC In-House Training Courses In

Utilities Equipment and Technology

I. <u>Utilities Technology Related Courses:</u>

- 1. Water Purification by Ion Exchange Resins
- 2. Ion Exchange Theory and Practice
- 3. Industrial Water Treatment
- 4. Technical Problems of Cooling Towers
- 5. Desalination Technologies
- 6. Multistage Flash Evaporation
- 7. Scale Formation and Descaling
- 8. Boiler Efficiency Improvement
- 9. Laboratory Technology and Instruments for Water Analysis
- 10. Fuel Additives Technology and Applications
- 11. Industrial Liquid Effluents Monitoring and Treatment
- 12. Corrosion in Power Generation Plant
- 13. Reading and Interpretation of P&I Diagrams
- 14. Thermal Insulation
- 15. Applied Combustion Technology

II. <u>Utilities Mechanical Equipment Related Courses</u>

- 1. Boilers Operation and Maintenance
- 2. Steam Turbines Operation and Maintenance
- 3. Gas Turbines Operation and Maintenance
- 4. Pumps Operation and Maintenance
- 5. Compressors Operation and Maintenance
- 6. Valve Selection, Troubleshooting and Maintenance
- 7. Heat Exchangers Design, Operation and Maintenance
- 8. Fans and Blowers Installation Operation and Maintenance
- 9. Fired Heaters Construction and Troubleshooting
- 10. Fuel and Flare Systems Design and Operation
- 11. Pipework Design, Construction and Troubleshooting
- 12. Hot Spots in Fired Process Heaters and Furnaces
- 13.Burners Selection Operation and Maintenance
- 14. Metering Pumps for Dosing Operation and Maintenance



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15.Bearings and Couplings Selection and Troubleshooting

16.Mechanical Seals Selection and Troubleshooting

17. Vibration Monitoring and Analysis

18.Shaft Alignment Techniques

19. Diesel Standby and Mobile Generators

20.Stack Design Construction Operation and Control

21.Steam Traps

22.Refractories Selection, Application and Maintenance

III. Instrumentation and Control Courses for Utilities:

- 1. Industrial Measurements and Instruments
- 2. Programmable Logic Controllers
- 3. Automatic Control
- 4. Distributed Control Systems
- 5. Pneumatic Control Systems

IV. Electrical Power Courses Related to Utilities:

- 1. Substation Maintenance
- 2. Transformers Testing and Maintenance
- 3. Protective Relays
- 4. Switchgears Function and Selection
- 5. Circuit Breakers Maintenance
- 6. Cathodic Production Systems
- 7. Cables Testing and Fault Location
- 8. Uninterrupted Power Supply
- 9. Motors and Generators
- 10.Diesel Engines
- 11.Electrical Maintenance
- 12. Electrical Safety