

Fossil-fired Power Plant Steam Turbine Equipment Technology

TRAINING OBJECTIVE

Understand the physical and chemical principles of a steam turbine, auxiliaries and water stations in a fossil-fired fuel-oil, coal and biomass-fired power station.

Length of the course: 5 days

PEDAGOGY

- Theoretical and practical training on the clients' installations
- Use of videos and industrial examples
- Individual testing of knowledge at the end of the course

TRAINING PROGRAM

- The operation of steam turbines
- Different types of steam turbines used in a thermal power plant
- Elements for admission
- Steam turbines (rotor, stator, fixed points, abutments, bearings, sealing, mobile and fixed blades, etc.)
- Auxiliary (lubrication, bearings, turning gear, security, sealing steam, expansion etc.)
- Condensers (water boxes, tube expansion, cold spots, vacuum equipment, cleaning, explosion membranes, leakage treatment, etc.)
- The various types of condenser cooling circuit (open circuit, closed circuit with cooling tower, etc.)
- The extraction pumps
- Extraction reheating by steam
- Deaerator and feedwater tank
- Feedwater pumps
- Types of corrosion and their consequences
- Water chemistry (pH, conductivity, silica, TAC, oxygen, etc.)
- The injection points and the treatment in the water circuit
- The water treatment of cooling towers
- Changing parameters during transient phases
- The monitoring of process parameters
- Preservation of known data by process parameter optimisation