Fossil-fired
Thermodynamic Cycle of a Steam Turbine

TRAINING OBJECTIVE

Understand the thermodynamic principles and functions necessary for water/steam transformers in fuel-oil, coal and biomass-fired power stations.

Length of the course: 5 days

PEDAGOGY

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

TRAINING PROGRAM

- The principles of thermodynamics
- Main thermodynamic units and their uses
- Thermodynamics in a thermal power plant
- The T.S and Mollier diagrams for water and steam
- How material components of the thermodynamic cycle of a power plant work
- The technology of the steam turbine
- The transformation process of energies
- Pressure readings, temperature and flow of air / smoke during operations in diagram form
- Changing parameters during transient phases
- Pressure readings, temperature and water hardness in the different exchangers of the thermodynamic cycle in diagram form
- The combustion power
- The power of the exchangers
- The power of the steam turbine
- The efficiency of a thermal power plant
- Measuring the drift of the installation by monitoring the thermodynamic parameters
- Heritage preservation through the optimization of thermodynamic parameters