PUMPS TECHNOLOGY MCE004

COURSE OVERVIEW

This course provides the participants with the means to properly operate and support various types of pumps and the differences between them from design, utilization and operation (start-up and shut-down) points of view in a way based on the good acquaintance with the modern technologies applied in this field. Trouble-shooting and forecasting break downs are inclusive.

COURSE GOAL

To enhance the participants' knowledge, skills, and abilities necessary to understand various types of pumps and the differences between them from design, utilization and operation (start-up and shut-down) points of view

COURSE OBJECTIVES

By the end of the course, participants will be able to:

- Identify pumps names, components and associated equipment.
- Identify characteristics of reciprocating pumps.
- Identify characteristics of rotary pumps.

WHO SHOULD ATTEND

Engineers and technicians dealing with industrial pumps.

COURSE DURATION

5 Working Days

COURSE OUTLINES

1. Introduction to Pumps
    - Pump names.
    - Identifying pumps in a process.
    - Pump components and associated equipment.
2. Reciprocating Pumps
    - Single-acting piston pumps.
    - Double-acting piston pumps.
    - Duplex piston pumps.

- Plunger pumps.
- Diaphragm pumps.

3. Rotary Pumps
    - Screw pumps.
    - Gear pumps.
    - Pressure relief devices.
    - Lobe pumps.
    - Vane pumps.
    - Tubing pumps.
4. Reciprocating Pumps Startup and Shutdown
    - Example of reciprocating pump.
    - Reciprocating pump startup.
    - Reciprocating pump shutdown.
5. Rotary Pump Startup and Shutdown
    - Example of rotary pump.
    - Rotary pump startup.
    - Rotary pump shutdown.