

Hydraulics

Basic Principles and Applications in Cement Industry

Objectives

ASEC customized basic hydraulics course provides an understanding of basic hydraulics, and an up to date training on how hydraulics work and how the common hydraulic components operate and interact with each other, Reviews preventative maintenance procedures, Discusses troubleshooting of hydraulic systems, Provides all participants with a course manual for future reference . The customized version provides hydraulic circuit training that uses the trainees hydraulic schematic and gives the knowledge needed to reduce the downtime, cut the operating costs, and do a better job of operating and maintaining hydraulic systems.

The Customized Basic Hydraulics course does all that and then goes one step further. When the trainees learn to read a hydraulic schematic and learn how various components work together in a hydraulic circuit

Participants:

This course addresses Mechanical engineers working in maintenance, preparation office, Inspection and Equipment Operators working in preventive maintenance, Purchasing Personnel, Plant Supervisors and anyone involved with the adjustment, maintenance, specification, or operation of hydraulic systems.

Course Outlines:

I. Component of Hydraulic Circuit

1. Hydraulic pumps

- Gear pump
- Vane pump
- Screw pump
- Axial piston pump
- Radial piston pump

2. Hydraulic valves

- Non return valves
- Directional control valves
- Pressure control valves
- Flow control valves
-

3. Hydraulic cylinders

4. Accumulators

5. Cartridge "logic" valves

II. Hydraulic applications in Cement Industry

- Crushers
- Stacker and Reclaimers
- Roller Mills
- Rotary Kilns
- Grate Coolers