

Mills Troubleshooting

Objectives:

Mill Maintenance Course provides an opportunity for your maintenance personnel to gain the training, contacts and confidence they need to keep your mill operating at maximum capacity.

In Cement industry the Mill is considered a significant investment in the equipment in the factory. To keep it running at peak efficiency it needs to be maintained and serviced properly. Our effective maintenance program requires qualified motivated and well-trained mechanics

Participants:

The course addresses mechanical engineers with some years of experience working in the field of Raw Material Mills and Cement Mills preparation office, inspection and preventive maintenance.

Course Outlines:

A. Tube Mills

- Mills drive
- Mills bearing
- Mills shell
- Mills liners
- Mills diaphragm
- Feed & discharge ends
- Grinding media

B) Roller Mill (Vertical Mill)

1. Plant Description

- 1.1. Raw mill department
- 1.2. Data of main machinery
- 1.3. Performance

2. Process Description

- 2.1. Feeding arrangement
- 2.2. Atox raw mill
- 2.3 Separator
- 2.4 Mill gas system.
- 2.5 Product transport.
- 2.6 Control loops
 - 2.6.1 Mill feed proportioning
 - 2.6.2 Mill feed
 - 2.6.3 Mill gas flow
 - 2.6.4 Mill outlet temperature
- 2.7 Remotely controlled devices

3. Control System And Control Loops

- 3.1. Programs for operation of mill department
- 3.2. Electrical interlocking
 - 3.2.1. Operational interlocking
 - 3.2.2. Protection interlocking

4. Start Of Grinding Installation

- 4.1 General prerequisites
- 4.2 Start of the auxiliaries
- 4.3 Start of main machinery
 - 4.3.1 Raw meal transport system
 - 4.3.2 Sealing air fan
 - 4.3.3 Roller and gear lubrication units
 - 4.3.4 Hydraulic tensioning system
 - 4.3.5 Separator and gas circuit

5 Stop Of Grinding Installation

- 5.1 Unintentional stop of installation
- 5.2 **Intentional stop of installation**
- 5.3 Stop for longer periods of time

6. Mill Operation

- 6.1 Operational records
- 6.2 Manual settings
 - 6.2.1 Grinding pressure
 - 6.2.2 Separator speed
 - 6.2.3 Water injection
 - 6.2.4 Adjustments of mill internals
 - 6.2.5 Dam ring
 - 6.2.6 Nozzle ring
- 6.3 Other influencing parameters
 - 6.3.1 Influence of feed granulometry