

Course Overview:

It is often the case in foundation design that understanding of machine, foundation and soil data can be lacking. Machine data is often used at the foundation design stage without proper awareness of its concepts. Better communication between foundation designer and machine manufacturer can serve to improve the foundation performance and thus machine performance; which can go some way to rectify this problem. Therefore it is imperative that those involved in the foundation design process completely understand all the relevant constraints.

Course Objective:

The course presents a systematic approach to fault diagnosis and failure prevention. It firstly adopts a general approach to machine deterioration, the mechanisms involved and the ways in which common deteriorative modes can be combated. It then turns to component-oriented studies of failure mechanisms in common items of plant. For each component type or machine system, the on-line and off-line symptoms of deterioration are presented, with significant emphasis being placed upon an inspection-based approach. Statistical methods of failure analysis are presented and examples are used to demonstrate best practice in the collection, analysis and interpretation of such data

Course Outline:

- Machine Foundation Design
- Types of Machine Foundations
- General Requirements of Machine Foundations dimensional Criteria
- Fundamentals of Soil Dynamics
- Foundation and Machine Types
- Design Methods and Materials
- Dynamic Design of Shallow and Pile Foundations
- Theory of Vibration Basic Understanding With Application
- Analysis and Design of Block-Type Machine Foundations
- Remedial Measures for Machine Foundations

Who Should Attend:

Mechanical, Operation, Production, and Maintenance Engineers Senior Technicians, who work in power utilities, should benefit from this course. Also Senior Engineers should update and refresh their knowledge by attending this course

Training Language:

EN / AR

Training Methodology:

- Presentation & Slides
- Audio Visual Aids
- Interactive Discussion
- Participatory Exercise
- Action Learning
- Class Activities
- Case Studies
- Workshops
- Simulation