Electrical Motors Operation, Maintenance, Protection & Troubleshooting

TE130

Course Overview:

It is estimated that electrical drives and other rotating equipment consume about 50% of the total electrical energy consumed in the world today. The cost of maintaining electrical motors can be a significant amount in the budget item of manufacturing and mining industries. This course gives you a thorough understanding of electrical motor's working, maintenance and failure modes and gives you the tools to maintain and troubleshoot electrical motors.

Course Objective:

-Understand motors operation and construction
-Specify protection requirements for motors
-Specify speed control requirements for motors
-Fix faults on motors
-Reduce downtime on electrical motors
-Improve plant safety
-Improve plant throughput

Course Outline:

-Introduction
-Motors Types, Dc Motors, Single Phase Ac Motors, Three Phase Induction Motors, Synchronous Motors
-Single Phase Induction Motors, Construction, Torque Speed Characteristics, Capacitor Start Motors, Efficiency & Power Factor
-Three Phase Induction Motors, Principle Of Operation, Rotor Slip
-Torque Speed Curve
-Synchronous Motors, Starting, Motor Loading, Power & Torque
-Selection & Application Of Motors
-Standardization & Classification Of Motors
-Choice Of Motor Speed-Rewinding Electric Motors
-Industrial Motor Control
-Motor Testing & Maintenance
-Trouble Shooting Of Motors
-Emergency Repairs Of Motors
-Applications

Who Should Attend:

Anyone associated with the use of electrical motors in the industrial or automation environment. The course will also benefit those working in system design as well as site commissioning, maintenance and troubleshooting.

Training Language:

EN

Training Methodology:

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