

Variable Frequency Drives

Description

This course is designed as the next level (Level 4) of electrical/electronic training for new and updated skilled craftsmen or a single unit course for your skilled personnel. Through lecture and hands-on training the students will learn the application, installation, programming and troubleshooting of variable speed drives. Topics include; test equipment and motor control systems;

industrial applications of VFD's; hardware identification; determining application guides, speed, torque and loading. This course may be used to train new hires, update skilled craftsmen and cross-train personnel for servicing industrial electrical and electronic equipment. This course can be customized to fit your industries needs.

Outline

- Understanding the Variable Frequency Drive System
 - Rectifier
 - AC Motor
 - Filter
 - Inverter
 - Logic
- Determine Parameter Values of VFD
 - Load
 - Torque
 - Speed
 - Location
- VFD Programming
 - Identifying Parameters
 - Range Setting
 - Failure Troubleshooting
- Installation Requirements
 - Power
 - Motor
 - Disconnect
 - Grounding
 - Isolation Needs
 - Temperature
- Maintenance
 - Test Equipment
 - Failure
 - Preventive
 - Predictive

Prerequisites

Electrical/Electronic Maintenance 2. May be used as a Single unit course in Motors for experienced electrical and maintenance personnel.

Performance Objectives

At the completion of this course the participant will have developed an understanding of the variable frequency drive system, installation requirements, VFD programming, maintenance and will be able to determine parameter values of VFD.

Course Length

32 hours/ Up to 12 participants.