

Industrial Belts and Chain Drive Systems



Description

This course will spend approximately eight hours on Belt Drive Systems and another eight hours on Chain Drive Systems. We will be addressing both Standard and Metric belts and chains and their correct applications. We will utilize a hands-on format that will present many different types of belts and chains as well as teaching troubleshooting and maintenance techniques to optimize their life expectancy. The participant will learn how to correctly select, maintain and troubleshoot belts and chains to achieve maximum life expectancy.

Outline

Belts

- Introduction to Belt Nomenclature
- Selection Procedures
- Non-Positive and Positive Displacement Belts
- Running Speeds and Torque Allowances
- Classical Industrial "V" Belts
- Metric and Standard Specifications
- Variable Speed Belts "Reeves Drives"
- Nontraditional Belts (Urethane etc.)
- How to Determine Correct Belt Tension
- Troubleshooting Belts for Cause of Failure
- Predictive Maintenance of Belts
- Inspecting a Sheave
- Establishing the Correct Belt and Pulley Combination
- Positive Displacement Belts and Their Applications

Chains

- Introduction to Chain Nomenclature
- How to Select the Correct Chain
- Types of Chain (Roller, Non-roller)
- Chain Speed and Torque Allowances
- Industrial Chain Selection
- Metric and Standard Chain
- Selecting the Correct Sprocket Ratio
- Overhung Load Ratings for Chains
- Selecting the Correct Chain
- Troubleshooting Chain Failure
- Chain Lubrication
- Preventative Maintenance of Chains

Prerequisites

Participants should possess a willingness to learn about industrial belts and chains and their correct applications.

Course Length

16 hours.

Performance Objectives

At the completion of this course the participant will be able to:

- Correctly maintain a belt drive system.
- Correctly maintain a chain drive system.
- Troubleshoot a belt or chain drive system as to cause of failure.
- Understand the selection procedures for belts and chains.
- Perform predictive and preventive maintenance on belts and chains.