

WE 290 – Industrial Power Transmission (Belts, Gears, Couplings and Chains)

Recommended for

Service, maintenance, machine repair, or plant/facility engineering staff of an industrial plant, OEM facility, institution, public utility or commercial building which uses Belts, Gears, Couplings and Chains in their rotating equipment. Managers and technicians at industrial plants and OEM facilities responsible for these power transmission products performance and reliability. Rotating equipment engineers, reliability engineers, millwrights, mechanics, and maintenance supervisors. Those interested in these power transmission and rotating equipment performance.

Course objective

The course objective is to provide information to improve the service life of the power transmission in industries (Belts, Gears, Couplings and Chains), which improves the reliability of rotating equipment.

Pre-requisites

Participants should have an understanding of industrial safety. A fundamental knowledge of and ability to use basic hand tools is required.

Course description

Industrial power transmission (Belts, Gears, Couplings and Chains) uses a combination of hands-on training, audio visuals, lectures and discussion opportunities. Specific topics include:

Belts – V and Timing Belts

- History of belts
- Construction – details by part
- Wrapped, CRE belts, Synchronous belts
- Selection criteria
- Mounting & Dismounting procedures
- Alignment care and practical tips for precision alignment
- Predictive maintenance program for belt drives
- Belts – Failure Analysis
- Energy Savings by proper selection of belts

Gear Drives

- History of Gear Drives development
- Construction - details by part
- Different types of gear drives
- Selection criteria
- Mounting & Dismounting procedures
- Lubrication selection criteria for gear drives
- Predictive maintenance program for Gear Drives
- Gear drives - Failure Analysis

Couplings

- History of Couplings development
- Construction - details by part
- Different types of couplings
- Selection criteria
- Mounting & Dismounting procedures
- Predictive maintenance program for coupling drives
- Coupling - Failure Analysis

Roller Chains

- History of Roller chains
- Construction - details by part
- Different types of roller chains
- Selection criteria
- Mounting & Dismounting procedures
- Predictive maintenance program for roller chains
- Roller chains - Failure Analysis

Course length

2 days