



MECHANICAL CONCEPTS

Condensed Course Outline

PRECISION MEASUREMENTS

- Steel rules
- Micrometers
- Calipers
- Height & depth gauges
- Dial indicators
- Digital measuring tools
- Telescoping gauges

BEARINGS & SEALS

- Bearing types & design
- Ball & roller bearings
- Bearing installation
- Bearing maintenance
- Oil seals
- O-rings
- Mechanical seals
- Pump sealing

BELT & CHAIN DRIVES

- V-belts
- Sheaves & pulleys
- Belt replacement
- Belt tensioning
- Chain types
- Sprockets
- Chain replacement
- Drive maintenance

GEARS & GEAR DRIVES

- Gear types
- Open & enclosed drives
- Gear safety
- Drive configurations
- Preventive maintenance

SHAFT ALIGNMENT & COUPLINGS

- Types of misalignment
- Alignment methods
- Precision alignment
- Laser alignment
- Coupling types
- Coupling installation
- Preventive maintenance

PIPING & HOSES

- Pipe & tubing materials
- Fittings & connections
- Hose systems
- Maintenance & safety

PUMPS

- Centrifugal pumps
- Turbine & propeller pumps
- Rotary pumps
- Reciprocating pumps
- Metering pumps

PREVENTIVE MAINTENANCE

- PM planning
- Maintenance routes
- PdM concepts
- Program implementation

RIGGING & SAFETY

- Load calculation
- Slings & hardware
- Rigging methods
- Center of gravity
- Safe lifting practices



Multi-Skill Training
SERVICES

THE INDUSTRIAL TRAINING PROFESSIONALS