

# Maintenance Technical Mechanical (MTM) Training Program Summary

The following is a list of core courses included in the Maintenance Technician Mechanical (MTM) Training Program.

## **INTRODUCTION & BASIC MATH**

- Rea5 Study Skills
- Maintenance Principles
- TRB1 Maintenance Troubleshooting Procedures
- MAT1 Whole Numbers
- MAT2 Fractions
- MAT3 Decimals
- MAT4 Algebra

#### **PRINT READING**

- PRT1 Print Reading: Orthographic Projection
- PRT2 Print Reading: Format & Dimension
- PRT3 Print Reading: Types & Symbols
- PRT4 Thread Specifications
- TPC/PRT Reading Schematics & Symbols

## **SAFETY & HEALTH**

- Personal Protective Equipment: Don't Start Work
   Without It
- Lockout/Tagout: Lightening In A Bottle
- Electrical Safety: Beware the Bite
- Machine Guarding: Safeguarding Your Future
- HazCom: In Sync with GHS
- Chemical Handling: Basic Principles
- TPC Industrial Safety & Health
- OSHA 10 HR General Industry

## **RIGGING**

- Rigging: Equipment Basics
- Rigging: Operations

## **LUBRICATION**

- MLU1 Lube Oil: Types, Properties & Handling
- MLU2 Lube Oil: Equipment & Procedures
- MLU3 Lube Grease: Types, Application & Equip.
- INS9 Lubrication System Inspection

## **DRIVE COMPONENTS**

- MDR1-Industrial Drives: Belt Drives
- MDR2-Industrial Drives: Chain Drives
- CDP1-Industrial Drives: Complete Drive Package
- INS7- Operator Inspection: Belt drive, chain drive & gear box inspection
- EDS1 Industrial Drives: Enclosed Drive System

- CBR1 Clutches & Brakes: Types, Principles & Functions
- CBR2 Clutches &Brakes Troubleshooting
- INS8 Operator Inspection: Clutch & Brake Inspection
- GGS1 Industrial Drives: Gears and Gear Systems
- SJC1 Industrial Drives: Shaft and Coupling Devices

## **SEALS**

- MPS1 Industrial Seals: Types, Materials & Properties
- MPS2 Gaskets & Packing: Inspection & Installation
- MPS3 Mechanical Face Seals: Troubleshooting

## **PUMPS**

- PUM1 Centrifugal: Pumps: Design & Function
- PUM2 Centrifugal: System Characteristics / Selection
- PUM3 Centrifugal: Operation & Maintenance
- PUM4 Centrifugal: Troubleshooting & Disassembly
- PUM5 Centrifugal: Reassembly & Installation
- TRB4 Maintenance Troubleshooting: Pumps & Compressors

## **BEARINGS**

- BRG1 Industrial Bearings: Application & Technology
- BRG2 –Bearings: Maintenance & Installation
- BRG3 Industrial Bearings: Troubleshooting

## **PIPING SYSTEMS**

• TPC Piping Systems OR TPC Maintenance Pipefitting

#### **VALVES**

- FVB1 Shutoff Valve Designs and Applications
- FVB2 Selecting Shutoff Valves & Accessories
- FVB3 Installing Shutoff Valves
- FVB4 Maintaining Shutoff Valves
- Control Valves & Actuators: Basics & Functions\*
- Control Valves: Types and Designs\*
- Control Valves: Fundamentals & Selection\*
- Control Valves: Sizing & Installation\*

## **PNEUMATICS**

- PNM1 The Power of Compressed Air
- PNM2 The Pneumatic Circuit
- PNM3 Processing Air
- PNM4 Using Compressed Air
- PNM5 Pneumatic Control Valves
- PNM6 Working Safely w/ Pneumatic Systems
- PNM7 Pneumatic System Maintenance
- PNM8 System troubleshooting
- INS1 Pneumatic System Inspection

## **HYDRAULICS**

- IDH1 Ind. Hydraulics: Principles & Application
- IDH2 Ind. Hydraulics: Types & Concepts
- IDH3 Hydraulics: Functions & Operating Principles
- IDH4 Hydraulics: Maintenance & Troubleshooting
- HDL1: Harnessing Hydraulic Power
- HDL2 The Hydraulic Circuit
- HDL3 Hydraulic Pumps & Actuators
- HDL4 Hydraulic Control Valves
- HDL5 Hydraulic Fluid
- HDL6 Hydraulic System Safety and Maintenance
- HDL7 Hydraulic Systems Troubleshooting
- HPS1 Hydraulic Power Systems: Identification & Operation
- HPS2 Hydraulic Power Systems Troubleshooting

## WELDING

• TPC Welding Principles

#### **BASIC ELECTRICITY**

- ELS1 Basic Principles
- ACDC1 Current
- ACDC2 Voltage
- ACDC3 Resistance
- ACDC4 Ohm's Law
- ACDC5 Magnetism
- ACDC6 Electrical Measurements
- ACDC7 DC Circuits

## **MEASUREMENT / INSTRUMENTATION**

- PME1 Temperature Measurement\*
- PME3 Pressure Measurement\*
- PME5 Level Measurement\*
- PME7 Flow Measurement\*

#### \* = Premium courses

## **Text / Materials** (To supplement online training)

- 1. Millwright & Mechanics Guide, Audel
- 2. Technical Print Reading, Schoolcraft
- 3. Industrial Hydraulics Manual, Eaton/Vickers
- 4. Additional titles available as appropriate

## Training packages can be customized for your business.

Hundreds of additional courses are available to suit your training needs!

Call today to speak to a program coordinator: 330-675-8809

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