MAINTENANCE

TURNKEY TRAINING

LEARNING PLANS FOR MANUFACTURING JOB ROLES

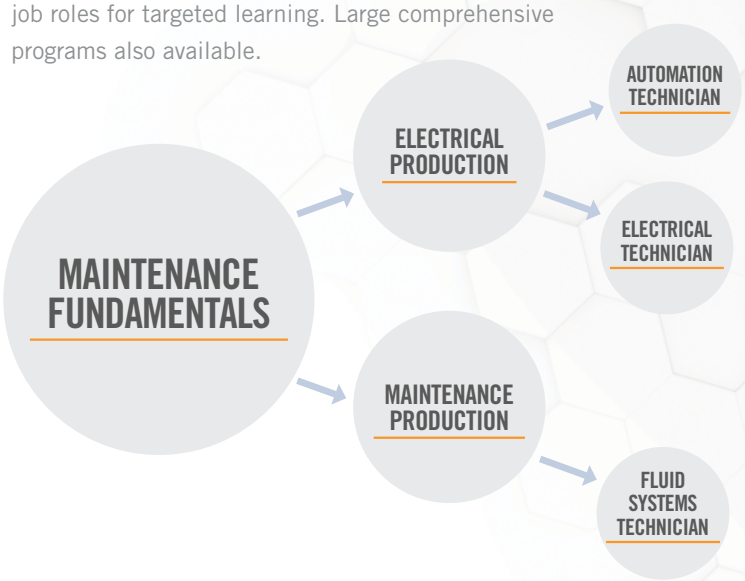
Turnkey Training from Tooling U-SME offers a quick-start, progressive road map that allows manufacturers to build career paths for employees. Turnkey Training is intended to enhance your existing OJT and help you create a job progression plan. Unlike many other training programs, Turnkey Training requires minimal preparation. It is efficient, effective training that has been developed with input from manufacturing experts.

FLEXIBLE AND CONVENIENT

Online classes are self-paced, typically taking 60 minutes to complete. On average, employees can progress through a job role in one year with as little as 4 hours a month spent online.

CAREER PATHWAYS FOR MAINTENANCE JOB ROLES

Combine job roles for learning pathways, or offer single job roles for targeted learning. Large comprehensive programs also available.



Turnkey Training offers:

- Predefined curriculum for each job role
- Engaging and interactive online classes
- Supplemental videos and a reinforcement task for each class
- Pre- or post-training knowledge assessments
- Access to Tooling U-SME's LMS
- Guidance from our Client Success team, including advice, insights, and ideas built on best practices and years of experience

Choose a starting point based on employee's experience or company goals for a quick-start training solution.

MAINTENANCE

MAINTENANCE FUNDAMENTALS Approximately 3 hours per month

- Electrical Units
- Safety for Electrical Work
- Basic Measurement
- Basics of Tolerance
- Blueprint Reading
- Calibration Fundamentals
- Hole Standards and Inspection
- Thread Standards and Inspection
- 5S Overview
- Lean Manufacturing Overview
- Ferrous Metals
- Introduction to Mechanical Properties
- Introduction to Metals
- Introduction to Physical Properties
- Forces of Machines
- Introduction to Mechanical Systems
- Safety for Mechanical Work
- Approaches to Maintenance
- ISO 9001 Review
- Bloodborne Pathogens
- Confined Spaces
- Fire Safety and Prevention
- Flammable/Combustible Liquids
- Hand and Power Tool Safety
- Intro to OSHA
- Lockout/Tagout Procedures
- Noise Reduction and Hearing Conservation
- Personal Protective Equipment
- Powered Industrial Truck Safety
- Respiratory Safety
- Safety for Lifting Devices
- SDS and Hazard Communication
- Walking and Working Surfaces
- Math Fundamentals
- Math: Fractions and Decimals
- Units of Measurement

ELECTRICAL PRODUCTION Approximately 2 hours per month

- Control Panel Functions for the CNC Lathe
- Control Panel Functions for the CNC Mill
- Introduction to CNC Machines
- AC Fundamentals
- Conductor Selection
- DC Circuit Components
- Electrical Instruments
- Electrical Print Reading
- Introduction to Circuits
- Introduction to Magnetism
- NEC(R) Overview
- Parallel Circuit Calculations
- Series Circuit Calculations
- Troubleshooting
- Essentials of Heat Treatment of Steel
- Lubricant Fundamentals
- Control Devices
- Distribution Systems
- Introduction to Electric Motors
- Limit Switches and Proximity Sensors
- Logic and Line Diagrams
- Relays, Contactors, and Motor Starters
- Algebra Fundamentals
- Geometry: Circles and Polygons
- Geometry: Lines and Angles
- Geometry: Triangles
- Trigonometry: Sine, Cosine, Tangent
- Trigonometry: The Pythagorean Theorem
- Essentials of Communication
- Essentials of Leadership
- Overview of Soldering

MAINTENANCE PRODUCTION Approximately 4 hours per month

- Battery Selection
- Parallel Circuit Calculations
- Series Circuit Calculations
- Introduction to Fastener Threads
- Overview of Non-Threaded Fasteners
- Overview of Threaded Fasteners
- Threaded Fastener Selection
- Tools for Threaded Fasteners
- Understanding Torque
- Fittings for Fluid Systems
- Introduction to Fluid Conductors
- Introduction to Hydraulic Components
- Introduction to Pneumatic Components
- Preventive Maintenance for Fluid Systems
- Safety for Hydraulics and Pneumatics
- The Forces of Fluid Power
- Troubleshooting
- Essentials of Heat Treatment of Steel
- Nonferrous Metals
- Bearing Applications
- Belt Drive Applications
- Clutch and Brake Applications
- Gear Applications
- Lubricant Fundamentals
- Mechanical Power Variables
- Spring Applications
- AC Motor Applications
- DC Motor Applications
- Distribution Systems
- Introduction to Electric Motors
- Logic and Line Diagrams
- Reduced Voltage Starting
- Reversing Motor Circuits
- Solenoids
- Specs for Servomotors
- Symbols and Diagrams for Motors
- Intro to Machine Rigging
- Rigging Equipment
- Rigging Inspection and Safety
- Rigging Mechanics
- Algebra Fundamentals
- Geometry: Circles and Polygons
- Geometry: Lines and Angles
- Geometry: Triangles
- Trigonometry: Sine, Cosine, Tangent
- Trigonometry: The Pythagorean Theorem
- Essentials of Communication
- Essentials of Leadership

AUTOMATION TECHNICIAN Approximately 4 hours per month

- Introduction to Fastener Threads
- Overview of Non-Threaded Fasteners
- Overview of Threaded Fasteners
- Threaded Fastener Selection
- Tools for Threaded Fasteners
- Understanding Torque
- Fittings for Fluid Systems
- Introduction to Fluid Conductors
- Introduction to Hydraulic Components
- Introduction to Pneumatic Components
- Safety for Hydraulics and Pneumatics
- The Forces of Fluid Power
- Bearing Applications
- Belt Drive Applications
- Clutch and Brake Applications
- Gear Applications
- Mechanical Power Variables
- Spring Applications
- Basic Programming for PLCs
- Basics of Ladder Logic
- Data Manipulation
- Hand-Held Programmers of PLCs
- Hardware for PLCs
- Introduction to PLCs
- Networking for PLCs
- Numbering Systems and Codes
- Overview of PLC Registers
- PID for PLCs
- PLC Counters and Timers
- PLC Inputs and Outputs
- PLC Installation Practices
- PLC Program Control Instructions
- Sequencer Instructions for PLCs
- Intro to Machine Rigging
- Rigging Equipment
- Rigging Inspection and Safety
- Rigging Mechanics
- Concepts of Robot Programming
- End Effectors
- Robot Axes
- Robot Components
- Robot Installations
- Robot Maintenance
- Robot Safety
- Robot Sensors
- Robot Troubleshooting
- Vision Systems

ELECTRICAL TECHNICIAN Approximately 2 hours per month

- Battery Selection
- Introduction to Fastener Threads
- Overview of Non-Threaded Fasteners
- Overview of Threaded Fasteners
- Threaded Fastener Selection
- Tools for Threaded Fasteners
- Understanding Torque
- Fittings for Fluid Systems
- Introduction to Fluid Conductors
- Introduction to Hydraulic Components
- Introduction to Pneumatic Components
- Safety for Hydraulics and Pneumatics
- The Forces of Fluid Power
- Nonferrous Metals
- Bearing Applications
- Belt Drive Applications
- Clutch and Brake Applications
- Gear Applications
- Mechanical Power Variables
- Spring Applications
- AC Motor Applications
- DC Motor Applications
- Distribution Systems
- Reduced Voltage Starting
- Reversing Motor Circuits
- Solenoids
- Specs for Servomotors
- Symbols and Diagrams for Motors
- Intro to Machine Rigging
- Rigging Equipment
- Rigging Inspection and Safety
- Rigging Mechanics

FLUID SYSTEMS TECHNICIAN Approximately 3 hours per month

- Control Panel Functions for the CNC Lathe
- Introduction to CNC Machines
- AC Fundamentals
- AC Power Sources
- Conductor Selection
- DC Circuit Components
- DC Power Sources
- Electrical Instruments
- Electrical Print Reading
- Introduction to Circuits
- Introduction to Magnetism
- NEC(R) Overview
- Actuator Applications
- Contamination and Filter Selection
- Hydraulic Control Valves
- Hydraulic Fluid Selection
- Hydraulic Power Sources
- Hydraulic Power Variables
- Hydraulic Principles and System Design
- Hydraulic Schematics and Basic Circuit Design
- Pneumatic Control Valves
- Pneumatic Power Sources
- Pneumatic Power Variables
- Pneumatic Schematics and Basic Circuit Design
- Benchwork and Layout Operations
- Control Devices
- Distribution Systems
- Limit Switches and Proximity Sensors
- Relays, Contactors, and Motor Starters
- Electrical Safety for Welding
- GMAW Applications
- Introduction to Welding
- Introduction to Welding Processes
- Overview of Soldering
- Oxyfuel Welding Applications
- Plasma Cutting
- PPE for Welding
- SMAW Applications
- Welding Fumes and Gases Safety
- Welding Safety Essentials
- What Is Oxyfuel Welding?