GUIDE

NEW HIRE ONBOARDING PLAN

Industrial Maintenance Technician

Interplay Learning

Building a Smarter, Safer Workplace

Onboarding new employees is always a challenge. Whether you are onboarding an Electrical Maintenance Technician, a Mechanical Maintenance Technician, or a Multi-Craft Maintenance Technician, the first 90 days with a new hire are critical. You have a short amount of time to get new hires ready for the job.

Likely you are trying to accomplish several things during your onboarding process:

- Train on safety protocols and instill an understanding of the importance of safety
- Familiarize new hires with key systems and equipment
- Integrate new hires into the team and team procedures
- Cultivate a proactive and problem-solving mindset

For all of these goals, relying solely on textbooks and job-shadowing means your new hires are waiting a long time before they get hands-on experience, and they are more likely to get bored or tune out. It also means that experienced, productive employees are having to take significant time out of their day to explain the fundamentals every time you hire a new team member.

Supplementing your onboarding plan with Interplay Learning's immersive, simulation-based training means your new hires can practice hands-on in a virtual environment starting day one. This type of blended learning provides several benefits, such as:

- Giving new hires engaging, hands-on training while keeping them safe.
- Ensuring new hires learn the basics on their own, so that your top employees only focus on training activities that require advanced knowledge and nuance.
- Providing diverse troubleshooting practice without waiting for equipment failures or specific worksite scenarios.

Here is what an onboarding plan can look like when you have Interplay Learning as a resource for your team.

Onboard Your Technicians With Blended Learning

Combine videos, immersive simulations, and on-the-job shadowing for a well-rounded onboarding that prepares new hires to earn key credentials and be job-ready faster.

Hands-On Skill Building

Built-In Credential Prep

On-the-Job Shadowing

90-Day Onboarding Plan with Interplay Learning

WEEK 1: FOUNDATIONS IN SAFETY AND COMPANY CULTURE

This initial week establishes the foundation for a safe, productive employee by combining cultural integration with critical safety awareness. The HR onboarding, facility tours, and team introductions build connection and belonging while basic safety courses (PPE, fire safety, hazard communication) create the safety mindset that is essential before any hands-on work. Finally, introducing hand tools and maintenance department structure provides context for their future role.

Company Orientation

- ☐ Complete all HR paperwork and benefits enrollment.
- ☐ Receive company ID, access badges, and necessary IT equipment.
- ☐ Introduction to company mission, vision, and core values.
- ☐ Tour of the facility, including key departments and emergency exits.
- ☐ Meet the immediate team and key stakeholders.
- ☐ Understand daily schedule, break times, and communication channels.

Safety Training - Part 1 (General Industrial Safety):

- ☐ SAF215: Personal Protective Equipment (PPE)
- ☐ SAF218: Intro to Fire Safety and Portable Fire Extinguishers
- ☐ SAF212: Hazard Communications
- ☐ SAF210: Bloodborne Pathogens Awareness

Introduction to the Maintenance Department:

- ☐ Overview of the maintenance department's role and structure within the facility.
- ☐ Go over the importance of preventive maintenance.
- ☐ FM119: Essential Hand Tools for Facilities Maintenance

WEEK 2: DEEP DIVE INTO INDUSTRIAL SAFETY AND BASIC OPERATIONS

Additional safety training addresses the high-risk scenarios your team faces daily. The goal is for things like lockout/tagout, electrical safety, and confined space procedures to become second nature for your new hires. The OSHA 10 credential covers key safety skills and ensures your facility remains compliant. Foundational electrical and mechanical concepts paired with observational learning create the theoretical framework needed for new hires to understand what they're observing, turning passive shadowing into active learning opportunities.

Safety Training - Part 2 (Specialized Industrial Safety):

- ☐ SAF213: Lockout/Tagout Awareness
- ☐ IM109: Machine Guarding
- ☐ HVAC053: Ladder and Fall Safety
- ☐ ELEC252: Electrically Safe to Work Procedures
- ☐ SAF227: Confined Space Awareness
- ☐ SAF200: Scissor Lift Safety

Safety Credentialing (OSHA 10):

- ☐ OSHA 10-Hour General Industry (English) or
- ☐ OSHA 10-Hour General Industry (Spanish)

Introduction to Industrial Fundamentals:

- ☐ ELEC114: Math for Electricians
- ☐ ELEC101: Fundamental Electrical Concepts
- ☐ IM100: Mechanics Introduction

Observational Learning:

- ☐ Shadow an experienced technician to observe routine maintenance tasks and safety procedures in action.
- ☐ Focus on observing equipment operation and technician interaction with machinery.

WEEKS 3-4: INDUSTRIAL MAINTENANCE FUNDAMENTALS AND MECHANICAL SYSTEMS INTRODUCTION

This period of training builds the core technical vocabulary and system understanding that any tech needs to diagnose problems effectively. Pneumatics, hydraulics, and mechanical systems training help trainees understand how these systems interact. Work order management and troubleshooting methodology provide the structured approach that prevents random trial-and-error repairs, setting up new hires to have a systematic approach to problem-solving from the beginning of their career.

Industrial Fundamentals - Continued:

- ☐ IM102: Pneumatics Introduction
- ☐ IM101: Introduction to Hydraulics
- ☐ IM115: Industrial Materials Introduction
- ☐ IM105: Metals Introduction
- ☐ IM107: Industrial Lubricants and Lubrication Introduction

Mechanical Systems - Introduction:

- ☐ IM103: Power Transmission Introduction
- ☐ IM104: Bearings Introduction
- ☐ IM114: Industrial Pumps Introduction
- ☐ IM120: Conveyor Systems Introduction

Intro to Work Order Management and Troubleshooting Basics:

- ☐ IM053: Understanding Work Order Management Systems
- ☐ IM108: Troubleshooting Methodology

WEEKS 5-6: LEARNING AND DEVELOPING BASIC TROUBLESHOOTING SKILLS AND DEEPER MECHANICAL KNOWLEDGE

Troubleshooting-focused training transforms theoretical knowledge into practical diagnostic skills. Hydraulic and pneumatic troubleshooting builds on the systems knowledge from previous weeks, while supervised hands-on mechanical work allows safe skill development. Learning about seals, gaskets, and rigging also provides the detailed component knowledge needed for quality repairs. Cross-training observations expose workers to the variety of equipment they'll eventually maintain independently, building pattern recognition across different machine types.

Troubleshooting Focus:

- ☐ IM301: Hydraulic Troubleshooting
- ☐ IM302: Pneumatics Troubleshooting

Mechanical Systems - Continued:

- ☐ Hands-on exercises with basic mechanical components (disassembly/assembly of simple machines under supervision).
- ☐ Understanding the purpose and function of various seals and gaskets.
- ☐ Introduction to basic rigging and lifting principles.

Cross-Training Observation:

- ☐ Observe technicians performing maintenance on different types of mechanical equipment (e.g., motors, pumps, conveyors).

WEEKS 7-8: ELECTRICAL SYSTEMS AND INITIAL CREDENTIAL PREPARATION

Electrical systems training is strategically placed after mechanical foundations because modern technicians require both skillsets. Plus, electrical problems often have mechanical causes or consequences. Multimeter usage, schematic reading, and circuit building provide hands-on electrical competency while shadowing electrical troubleshooting connects simulation-based learning to real-world applications. This combination ensures technicians can safely and effectively work on the electrical components integral to modern industrial equipment.

Electrical Systems - Foundations:

- ☐ ELEC108: AC Power
- ☐ ELEC113: How to Use a Multimeter
- ☐ ELEC115: Reading Schematics and Drawings
- ☐ ELEC117: Building DC Circuits
- ☐ ELEC118: Building DC Combination Circuits

Practical Application:

- ☐ Shadow technicians performing basic electrical checks and troubleshooting (e.g., verifying power, continuity checks).

WEEKS 9-10: ADVANCED INDUSTRIAL FUNDAMENTALS AND CREDENTIALS

HMI and PLC training addresses the reality that modern industrial maintenance involves computerized control systems, not just mechanical repairs. These advanced topics build on previous electrical knowledge while introducing the digital interfaces your team uses daily for diagnostics and system monitoring. Control room observations show how individual system knowledge integrates into facility-wide operations, preparing technicians to understand their role in broader production processes.

Industrial Fundamentals - Advanced Topics:

- ☐ IM125: Human Machine Interface (HMI) Introduction
- ☐ IM200: Introduction to PLCs
- ☐ IM300: Basic PLC Troubleshooting

Operational Shadowing:

- ☐ Observe control room operations and how HMIs can monitor and control equipment.

WEEKS 11-12: APPLIED SKILLS, CREDENTIAL COMPLETION, AND FUTURE PLANNING

This final phase of onboarding validates learning through supervised real-world application, ensuring new hires can safely transition from training to productive work. Performing actual preventive maintenance and minor repairs under supervision builds confidence while applying learned troubleshooting techniques in real scenarios. The 90-day review and personalized development planning ensures continued growth momentum, preventing the common post-onboarding skill development plateau while aligning individual career goals with organizational maintenance needs.

Applied Skills and Supervised Tasks:

- ☐ Perform supervised preventive maintenance tasks (e.g., lubrication routes, basic inspections).
- ☐ Assist in minor repairs under direct supervision, applying troubleshooting techniques.
- ☐ Participate in team discussions on maintenance issues and problem-solving.

Credential Completion:

- ☐ Take and pass the OSHA 10 credential exam.
- ☐ Complete any other identified foundational certification exams

Performance Review and Future Planning:

- ☐ Complete the Industrial Maintenance Welcome Assessment to identify areas of mastery and areas that should be prioritized for additional training.
- ☐ Participate in a 90-day performance review with the immediate supervisor.
  - ☐ Discuss strengths, areas for improvement, and career aspirations.
  - ☐ Set goals for ongoing skill enhancement and next-level training.