OJT CORE COMPETENCIES

Fabricator

TERM OF APPRENTICESHIP

The term of the apprenticeship is 4 years.

APPRENTICESHIP APPROACH

Time-based ☐ Competency-based ☒ Hybrid ☐

Apprenticeships may be time-based, requiring a set number of OJT (on-the-job training) and RTI (related technical instruction) hours; competency-based, allowing completion once all skills are mastered; or hybrid, blending both time and competency requirements.

SCHEDULE AND CHECKLIST

Essential Job Categories	Competencies
Safety	• Maintains a clean and organized workspace • Demonstrates knowledge, proper use, and storage of hazardous materials • Demonstrates proper use, maintenance, and safe storage of tools/equipment • Properly disposes of waste according to company policies and procedures and in accordance with OSHA, EPA, and local regulations and guidelines • Demonstrates knowledge and use of proper lifting/hoisting equipment and techniques • Describes proper response and reporting of safety incidents • Employer-specific task • Maintains a clean and organized workspace • Demonstrates knowledge, proper use, and storage of hazardous materials
Blueprint Reading	• Study engineering drawings and blueprints to determine materials requirements and task sequences • Employer-specific task
Tools and Equipment	• Care for, clean, and lubricate tools • Set up and operate fabricating machines to bend, cut, form, punch, drill, or otherwise form and assemble metal components • Move parts into position, manually or with hoists or cranes • Set up face blocks, jigs, and fixtures • Position or tighten braces, jacks, clamps, ropes, or bolt straps, or bolt parts in position for welding or riveting • Employer-specific task

OJT CORE COMPETENCIES

Fabricator

SCHEDULE AND CHECKLIST

Essential Job Categories	Competencies
Fabrication	• Hammer, chip, and grind workpieces to cut, bend, and straighten metal • Straighten warped or bent parts, using sledges, hand torches, straightening presses, or bulldozers • Smooth workpiece edges and fix taps, tubes, and valves • Align and fit parts according to specifications, using jacks, turnbuckles, wedges, drift pins, pry bars, and hammers • Locate and mark workpiece bending and cutting lines, allowing for stock thickness, machine and welding shrinkage, and other component specifications • Position, align, fit, and weld parts to form complete units or subunits, following blueprints and layout specifications, and using jigs, welding torches, and hand tools. • Remove high spots and cut bevels, using hand files, portable grinders, and cutting torches. • Employer-specific task
Inspection / Quality Assurance	• Use of precision measuring instruments • Layout and examine metal stock or workpieces to be processed to ensure that specifications are met • Measure dimensions of completed products or workpieces to verify conformance to specifications • Employer-specific task
Welding	• Knowledge of welding processes, such as electric, acetylene, and heliarc • Operate welding equipment • Preheat workpieces to make them malleable, using hand torches or furnaces • Heat-treat parts, using acetylene torches • Tack-weld fitted parts together • Direct welders to build up low spots or short pieces with weld • Employer-specific task