

## A5: Skilled Trades Occupations Evaluated in Phase 2 and Associated Job Descriptions and Sample Job Titles

Occupation	Job Description	Sample Job Titles
<b>Chemical Technicians</b>	Conduct chemical and physical laboratory tests to assist scientists in making qualitative and quantitative analyses of solids, liquids, and gaseous materials for purposes such as research and development of new products or processes, quality control, maintenance of environmental standards, and other work involving experimental, theoretical, or practical application of chemistry and related sciences. Jobs are in industrial laboratory environments.	Chemical Technician, Formulation Technician, Lab Analyst, Lab Tech, Lab Tester, Research Associate, Research and Development Technician, and Research Technician.
<b>Electronics Technicians and Repairers</b>	Troubleshoot, diagnose and repair electronic machine control equipment; Test and modify electrical machinery, electrical-control equipment, and circuitry in industrial plants and laboratories. Repair, test, adjust, and install electronic equipment, such as industrial controls, transmitters and antennas.	Control Technician, Electrical Design Technician, Electronics Technician, Electronics Maintenance, Electronics Mechanic, Electronics Technician, Engineering Assistant, Engineering Technician, Equipment Engineering Technician, Industrial Electrician, Instrument and Electrical Technician, Machine Control Technician, and Test Technician.
<b>(Industrial) Electricians</b>	Install, maintain, and repair electrical wiring, equipment, and fixtures in a manufacturing plant. Ensure work is in accordance with relevant codes. May install electrical control systems.	Electrician, Industrial Electrician, Journeyman Electrician, and Maintenance Electrician.
<b>Machine Maintenance Specialists</b>	Repair, install, adjust, lubricate and maintain industrial production and processing machinery or refinery and pipeline distribution systems. Diagnose machine performance problems.	Building Maintenance Mechanic, Engineering Technician, Equipment Engineering Technician, Industrial Electrician, Industrial Machinery Mechanic, Industrial Maintenance Millwright, Machine Repairer, Maintenance Mechanic, Maintenance Technician, Master Mechanic, Mechanic, and Overhauer.
<b>(CNC and Conventional) Machine Tool Operators</b>	After machines are programmed or setup by others, operate, or tend machines to cut, drill, bore, grind, mill, plane, polish, ream, saw, sharpen, thread, or turn metal or plastic. Operate computer-controlled machine tools or robots. Perform quality checks to insure conformance to specifications.	Bore Mill Operator, Cell Operator, Cell Technician, Centerless Grinder Operator, Die Maintenance Technician, Die Repairman, Drill Operator, Drill Press Operator, Drill Setup Operator, Grinder, Grinder Operator, Lathe Operator, Machine Technician, Radial Drill Operator, Saw Operator, Screw Machine Operator, CNC Drilling Operator, CNC Lathe Operator, CNC Machine Operator, CNC Machinist, CNC Mill Operator, CNC Operator, Machine Operator, and Production Machinist.
<b>(CNC and Conventional) Machinists</b>	In addition to the work performed by "Machine Tool Operators" (Repair, install, adjust, lubricate and maintain industrial production and processing machinery or refinery and pipeline distribution systems & diagnose machine performance problems), Machinists in this classification setup and/or operate a variety of machine tools to produce precision parts. Edit CNC programs to optimize performance; change and adjust machine parameters and tooling as needed to meet dimensional and output requirements. Problem-solve machining issues when performance is not satisfactory.	CNC Machinist, Machinist, Machinist - Tool and Die, CNC Technician, and Setup Machinist.
<b>Manufacturing Technicians</b>	Operate precision machinery, systems and processes. Typical skills expected in these positions might include: CAD skills, computer controlled machine programming, precision measurement, process and machine trouble-shooting, problem-solving, machine maintenance, use diagnostic and statistical tools. These positions generally describe someone who has enough broad-based knowledge about a multi-step process to successfully trouble-shoot and cure problems beyond the scope of typical "machine operators." These positions may also describe someone charged with developing/refining prototype fabrication methods for new products.	Operator, Production Operator, Production Technician, Technician, Chemical Equipment Operator, Chemical Operator, Fixers, CNC Technician, Manufacturing Technician, and Production Manufacturing Specialist.
<b>Printing Machine Operators</b>	Setup or operate various types of printing machines. Setup and prepare material for printing presses.	Desktop Operator, Electronic Prepress Operator, Electronic Prepress Technician, Lithographic Press Operator, Offset Press Operator, Offset Pressman, Plate Maker, Plate Mounter, Prepress Operator, Prepress Proofer, Prepress Stripper, Prepress Technician, Press Operator, Press Technician, Pressman, Printer, Printing Press Operator, Production Manager, Printing Pressman, and Typesetter.
<b>Welders</b>	Use programmed, automatic hand-held or flame equipment to weld or join metal components or to fill holes, indentations, or seams of fabricated metal products. Setup, operate, or tend welding, flame-cutting, plasma cutting, or brazing machines or robots. Braze components to assemble fabricated metal parts.	Brazer, Connector, Fabricator, Maintenance Welder, Mig Welder, Sheet Metal Mechanic, Sub Arc Operator, Welder, and Welder-Fitter.