

Apprentice Name: _____

Start Date: _____

Competencies Checklist		
Measure dimensions of completed products or workpieces to verify conformance to specifications.		
Competencies	Date Completed	Initial
Calculate dimensions or tolerances, using instruments, such as micrometers or vernier calipers.		
Measure, examine, or test completed units to check for defects and ensure conformance to specifications, using precision instruments, such as micrometers.		

Calculate dimensions of workpieces, products, or equipment.		
Competencies	Date Completed	Initial
Calculate dimensions or tolerances, using instruments, such as micrometers or vernier calipers.		

Operate cutting equipment.		
Competencies	Date Completed	Initial
Machine parts to specifications, using machine tools, such as lathes, milling machines, shapers, or grinders.		
Set up or operate metalworking, brazing, heat-treating, welding, or cutting equipment.		

Operate material processing equipment.		
Competencies	Date Completed	Initial
Machine parts to specifications, using machine tools, such as lathes, milling machines, shapers, or grinders.		

Operate metal or plastic forming equipment.		
Competencies	Date Completed	Initial
Set up, adjust, or operate basic or specialized machine tools used to perform precision machining operations.		
Operate equipment to verify operational efficiency.		

Operate equipment to perform production tasks.		
Competencies	Date Completed	Initial
Operate computers or electronic instruments, such as numerically controlled machine tools.		

Monitor equipment operation to ensure proper functioning.		
Competencies	Date Completed	Initial
Monitor the feed and speed of machines during the machining process.		

Review blueprints or other instructions to determine operational methods or sequences.		
Competencies	Date Completed	Initial
Study sample parts, blueprints, drawings, or engineering information to determine methods or sequences of operations needed to fabricate products.		

Maintain production or processing equipment.		
Competencies	Date Completed	Initial
Maintain machine tools in proper operational condition.		

Assemble machine tools, parts, or fixtures.		
Competencies	Date Completed	Initial
Fit and assemble parts to make or repair machine tools.		

Determine metal or plastic production methods.		
Competencies	Date Completed	Initial
Support production from planning and fabrication through assembly, inspection, and testing, using knowledge of machine functions, material properties, and mathematics.		

Prepare fabrics or materials for processing or production.		
Competencies	Date Completed	Initial
Support production from planning and fabrication through assembly, inspection, and testing, using knowledge of machine functions, metal properties, and mathematics.		

Mount attachments or tools onto production equipment.		
Competencies	Date Completed	Initial
Align and secure holding fixtures, cutting tools, attachments, accessories, or materials onto machines.		
Install repaired parts into equipment or install new equipment.		

Conduct test runs of production equipment.		
Competencies	Date Completed	Initial
Operate equipment to verify operational efficiency.		
Test experimental models under simulated operating conditions, for purposes such as development, standardization, or feasibility of design.		

Exchange information with colleagues.		
Competencies	Date Completed	Initial
Confer with numerical control programmers to check and ensure that new programs or machinery will function properly and that output will meet specifications.		
Confer with engineering, supervisory, or manufacturing personnel to exchange technical information.		

Advise others on ways to improve processes or products.		
Competencies	Date Completed	Initial
Evaluate machining procedures and recommend changes or modifications for improved efficiency or adaptability.		
Advise clients about the materials being used for finished products.		

Install mechanical components in production equipment.		
Competencies	Date Completed	Initial
Install repaired parts into equipment or install new equipment.		

Design tools, fixtures, or other devices for production equipment.		
Competencies	Date Completed	Initial
Assist in the design fixtures, tooling, or experimental parts to meet special engineering needs.		

Diagnose equipment malfunctions.		
Competencies	Date Completed	Initial
Diagnose machine malfunctions to determine need for adjustments or repairs.		

Dispose of trash or waste materials.		
Competencies	Date Completed	Initial
Dispose of scrap or waste material in accordance with company policies and environmental regulations.		

Draw guidelines or markings on materials or workpieces using patterns or other references.		
Competencies	Date Completed	Initial
Lay out, measure, and mark materials to display placement of cuts.		

Measure materials to mark reference points, cutting lines, or other indicators.		
Competencies	Date Completed	Initial
Lay out, measure, and mark materials to display placement of cuts.		

Disassemble equipment for maintenance or repair.		
Competencies	Date Completed	Initial
Dismantle machines or equipment, using hand tools or power tools to examine parts for defects and replace defective parts where needed.		

Replace worn equipment components.		
Competencies	Date Completed	Initial
Dismantle machines or equipment, using hand tools or power tools to examine parts for defects and replace defective parts where needed.		

Sort recyclable materials.

Competencies	Date Completed	Initial
Separate scrap waste and related materials for reuse, recycling, or disposal.		

Test materials, solutions, or samples.

Competencies	Date Completed	Initial
Test experimental models under simulated operating conditions, for purposes such as development, standardization, or feasibility of design.		

Monitor lubrication of equipment or workpieces.

Competencies	Date Completed	Initial
Check work pieces to ensure that they are properly lubricated or cooled.		

Create diagrams or blueprints for workpieces or products.

Competencies	Date Completed	Initial
Prepare working sketches for the illustration of product appearance.		

Plan production or operational procedures or sequences.

Competencies	Date Completed	Initial
Establish work procedures for fabricating products, using a variety of machines.		

Assemble systems.

Competencies	Date Completed	Initial
Install parts or assemblies, such as hydraulic systems, metal components, or lubricants into machines or mechanisms.		

Date Completed: _____

Apprentice: _____

Mentor: _____

Supervisor: _____

Sponsor: _____