

Apprentice Name: \_\_\_\_\_

Start Date: \_\_\_\_\_

<b>Competency Checklist</b>			
	<b>Design</b>	<b>Proficient in Task</b>	<b>Completion Date</b>
1.	Able to effectively review blueprints, specifications and other documentation in preparation for production		
2.	Able to complete detailed design of materials, geometry, fits, tolerances, and instructions on dimensional drawings for new and modified parts/assemblies using 3D CAD software		
3.	Communicate with quoting department to ensure correct material and minimize lead time needed to process work orders on all new part quotes		
4.	Demonstrate ability to maintain notes, design calculations and other documentation (bill of materials, list of design parameters and performance standards,) for future reference using the departmental filing guidelines		
5.	Able to revise and update existing drawings to reflect design changes in collaboration with engineers, designers, and/or requestors		
6.	Able to follow through project execution with machine shop, welding, assembly, and any other necessary departments		
	<b>Manufacturing</b>	<b>Proficient in Task</b>	<b>Completion Date</b>
7.	Able to perform basic machining processes accurately within specified tolerances		
8.	Able to create and test prototypes and/or new parts for existing machines		
9.	Demonstrate ability to consistently and correctly assemble machine components, sub-assemblies, nests and gauges independently		
10.	Demonstrate knowledge of welding and basic machine safety		
11.	Able to suggest improvements to current production models and processes		
12	Able to effectively estimate time, cost, and quality for projects including fabrication of individual components/assemblies and making simple machine modifications.		
12.	Demonstrate knowledge of LEAN manufacturing by implementing its principles throughout projects		
	<b>Quality/Measurements</b>	<b>Proficient in Task</b>	<b>Completion Date</b>
13.	Demonstrate proficiency in the use of precise measurement equipment such as calipers, micrometers, etc.		
14.	Able to inspect machined and purchased components to ensure quality		

15.	Able to evaluate components and processes to identify opportunities for improvements in quality and reliability.		
	<b>Mechanical</b>	Proficient in Task	Completion Date
16.	Able to correctly troubleshoot and repair various mechanical problems		
17.	Able to select proper mechanical components for a given application		
18.	Demonstrate ability to correctly perform preventative maintenance procedures on existing equipment.		
	<b>Electrical</b>	Proficient in Task	Completion Date
19.	Able to correctly troubleshoot & repair various electrical problems		
20.	Demonstrate ability to read and write electrical schematics and modify electrical control boxes.		
21.	Demonstrates knowledge of electrical standards and codes		
22.	Demonstrate ability to select, install, and wire standard industrial control components according to project requirements and design intent with minimal support from an electrical designer or engineer		
23.	Demonstrate ability to select proper electrical components for a given application. Able to evaluate several options based on technical information and make an informed decision.		
24.	Able to correctly maintain existing equipment		
	<b>Miscellaneous</b>	Proficient in Task	Completion Date
25.	Demonstrate ability to adapt to new technologies through formal training, seminars, publications, mentoring, and/or self-teaching		
26.	Demonstrate ability to utilize tools such as Gantt charts, risk analysis, network diagrams, workflow tools, etc. for project management purposes		
27.	Able to utilize basic computer programs (Word, spreadsheets, PowerPoint, etc.) to effectively organize, compute, and present information		
28.	Demonstrate ability to communicate professionally with peers and mentors to obtain feedback, document the interactions, and implement recommended changes		
29.	Able to identify personal strengths that can benefit a problem-solving team		
30.	Understand the significance of teamwork and communication		

Date Completed: \_\_\_\_\_

Apprentice: \_\_\_\_\_

Mentor: \_\_\_\_\_