



Production Operations

Youth Apprenticeship

PRODUCTION OPERATIONS

Production Operation youth apprentices gain skills related to the procedures and tools associated with manufacturing operations. Foundation tools, data analysis and troubleshooting are integrated. Apprentices must adhere to industry safety and security standards.

Length of Apprenticeship: One year

REQUIRED COMPETENCIES

Youth apprentices must become proficient in both general employability and occupation-specific competencies. All of these, and examples of how each can be demonstrated, are found in the following pages. A total of 16 occupational competencies must be learned for this occupation. (All 7 Manufacturing Fundamentals competencies with no substitutions, and 9 Production Operations competencies.) Employers may substitute out one of these competencies and should write in the competency they are adding. Where necessary, skills can be simulated. Youth apprentices must be evaluated on these competencies at least two times each year of their apprenticeship.

Note: Students who completed a previous Manufacturing YA program do not need to repeat the Manufacturing Fundamentals Competencies.

Manufacturing Fundamentals Competencies	Production Operations Competencies
<ol style="list-style-type: none">1. Focus on customer needs2. Use various instruments3. Operate tools and equipment safely4. Practice quality assurance principles5. Follow personal safety requirements6. Maintain a safe work environment7. Demonstrate professional role to be used in an emergency	<ol style="list-style-type: none">1. Assist recording and summarizing financial data2. Support coordination of work schedules and duty assignments3. Use quality tools4. Calibrate tools and equipment (W/S)5. Analyze production productivity processes6. Monitor operations for product and process quality7. Support investigation of root causes of product and/or process failure8. Take corrective action to restore or maintain quality9. Participate in quality improvement processes

W/S = Worksite Experience or In Simulation

REGISTERED APPRENTICESHIP BRIDGING OPPORTUNITIES

The following Registered Apprenticeship is available in this area:

- Industrial Manufacturing Technician

POST-SECONDARY PATHWAY OPPORTUNITIES

There are several post-secondary pathway opportunities in this area. The following is a partial list.

- Industrial Maintenance Mechanic Technical Diploma
- Manufacturing Quality



Production Operations

Youth Apprenticeship

ON-THE-JOB LEARNING PERFORMANCE STANDARDS GUIDE

YOUTH APPRENTICE INFORMATION

Youth Apprentice Name
YA Coordinator
YA Consortium
School District

SIGNATURES

The On-the-Job Learning Performance Standards Guide includes a list of competencies youth apprentices learn through mentoring and training at the worksite.

Instructions for the Worksite Employers/Mentors and School-Based or YA coordinators: This document should be reviewed with the employer/mentor, school-based or YA coordinator on a regular basis with the youth apprentice to record progress and plan future steps to ensure completion of the required competencies. Mentors, school-based/YA coordinator, and the apprentice sign below.

Employer/Mentor

1st Evaluation (Required)

2nd Evaluation (Required)

Employer/Mentor Signature	Employer/Mentor Signature
Employer/Mentor	Employer/Mentor
Business/Company	Business/Company
Date Signed	Date Signed

3rd Evaluation (Optional)

4th Evaluation (Optional)

Employer/Mentor Signature	Employer/Mentor Signature
Employer/Mentor	Employer/Mentor
Business/Company	Business/Company
Date Signed	Date Signed

School-Based and/or YA Coordinator

1st Evaluation (Required)

2nd Evaluation (Required)

School-Based and/or YA Coordinator Signature	School-Based and/or YA Coordinator Signature
School-Based and/or YA Coordinator	School-Based and/or YA Coordinator
School District or Organization	School District or Organization
Date Signed	Date Signed

3rd Evaluation (Optional)

4th Evaluation (Optional)

School-Based and/or YA Coordinator Signature	School-Based and/or YA Coordinator Signature
School-Based and/or YA Coordinator	School-Based and/or YA Coordinator
School District or Organization	School District or Organization
Date Signed	Date Signed

Youth Apprentice

1st Evaluation (Required)

2nd Evaluation (Required)

Youth Apprentice Signature	Youth Apprentice Signature
Youth Apprentice	Youth Apprentice
School District / High School	School District / High School
Date Signed	Date Signed

3rd Evaluation (Optional)

4th Evaluation (Optional)

Youth Apprentice Signature	Youth Apprentice Signature
Youth Apprentice	Youth Apprentice
School District / High School	School District / High School
Date Signed	Date Signed

EMPLOYABILITY SKILLS (TO BE COMPLETED BY YA EMPLOYER/MENTOR)

All youth apprentices must demonstrate the key employability skills listed below in order to complete the YA program. They do so by earning at least a "Meets Expectation" rating in each. **At least two evaluations are required each year of a youth apprenticeship.** More columns are included below for those who choose to conduct more frequent reviews.

1	Working to Meet Expectations: Needs improvement; requires much assistance and supervision; rarely displays this behavior
2	Meets Expectations: Meets entry-level criteria; requires some supervision; often displays this behavior
3	Exceeds Expectations: Exceeds entry-level criteria; requires minimal supervision; consistently displays this behavior

Employability Skills		Rating			
Competency and Rating Criteria		Initial	Mid Year 1	Mid Year 2	Final
1. Develops positive work relationships with others. <i>Examples of qualities and habits that the employee might exhibit include:</i>	<ul style="list-style-type: none"> Interacts with others with respect and in a non-judgmental manner Responds to others in an appropriate and non-offensive manner Helps co-workers and peers accomplish tasks or goals Applies problem-solving strategies to improve relations with others When managing others, shows traits such as compassion, listening, coaching, team development, and appreciation 	<input type="checkbox"/> 1	<input type="checkbox"/> 1	<input type="checkbox"/> 1	<input type="checkbox"/> 1
		<input type="checkbox"/> 2	<input type="checkbox"/> 2	<input type="checkbox"/> 2	<input type="checkbox"/> 2
		<input type="checkbox"/> 3	<input type="checkbox"/> 3	<input type="checkbox"/> 3	<input type="checkbox"/> 3
2. Communicates effectively with others <i>Examples of qualities and habits that the employee might exhibit include . . .</i>	<ul style="list-style-type: none"> Adjusts the communication approach for the target audience, purpose, and situation to maximize impact Organizes messages/information in a logical and helpful manner Speaks clearly and writes legibly Models behaviors to show active listening Applies what was read to actual practice Asks appropriate questions for clarity 	<input type="checkbox"/> 1	<input type="checkbox"/> 1	<input type="checkbox"/> 1	<input type="checkbox"/> 1
		<input type="checkbox"/> 2	<input type="checkbox"/> 2	<input type="checkbox"/> 2	<input type="checkbox"/> 2
		<input type="checkbox"/> 3	<input type="checkbox"/> 3	<input type="checkbox"/> 3	<input type="checkbox"/> 3
3. Collaborates with others <i>Examples of qualities and habits that the employee might exhibit include . . .</i>	<ul style="list-style-type: none"> Works effectively in teams with people of diverse backgrounds regardless of sex, race, ethnicity, nationality, sexuality, religion, political views, and abilities Shares responsibility for collaborative work and decision making Uses the problem-solving process to work through differences of opinion in a constructive manner to achieve a reasonable compromise Avoids contributing to an unproductive group conflict Shares information and carries out responsibilities in a timely manner 	<input type="checkbox"/> 1	<input type="checkbox"/> 1	<input type="checkbox"/> 1	<input type="checkbox"/> 1
		<input type="checkbox"/> 2	<input type="checkbox"/> 2	<input type="checkbox"/> 2	<input type="checkbox"/> 2
		<input type="checkbox"/> 3	<input type="checkbox"/> 3	<input type="checkbox"/> 3	<input type="checkbox"/> 3

Employability Skills		Rating			
Competency and Rating Criteria		Initial	Mid Year 1	Mid Year 2	Final
4. Maintains composure under pressure <i>Examples of qualities and habits that the employee might exhibit include . . .</i>	<ul style="list-style-type: none"> • Uses critical thinking to determine the best options or outcomes when faced with a challenging situation • Carries out assigned duties while under pressure • Acts in a respectful, professional, and non-offensive manner while under pressure • Applies stress management techniques to cope under pressure 	<input type="checkbox"/> 1	<input type="checkbox"/> 1	<input type="checkbox"/> 1	<input type="checkbox"/> 1
		<input type="checkbox"/> 2	<input type="checkbox"/> 2	<input type="checkbox"/> 2	<input type="checkbox"/> 2
		<input type="checkbox"/> 3	<input type="checkbox"/> 3	<input type="checkbox"/> 3	<input type="checkbox"/> 3
5. Demonstrates integrity <i>Examples of qualities and habits that the employee might exhibit include . . .</i>	<ul style="list-style-type: none"> • Carries out responsibilities in an ethical, legal and confidential manner • Responds to situations in a timely manner • Takes personal responsibility to correct problems • Models behaviors that demonstrate self-discipline, reliability, and dependability 	<input type="checkbox"/> 1	<input type="checkbox"/> 1	<input type="checkbox"/> 1	<input type="checkbox"/> 1
		<input type="checkbox"/> 2	<input type="checkbox"/> 2	<input type="checkbox"/> 2	<input type="checkbox"/> 2
		<input type="checkbox"/> 3	<input type="checkbox"/> 3	<input type="checkbox"/> 3	<input type="checkbox"/> 3
6. Performs quality work <i>Examples of qualities and habits that the employee might exhibit include . . .</i>	<ul style="list-style-type: none"> • Carries out written and verbal directions accurately • Completes work efficiently and effectively • Performs calculations accurately • Conserves resources, supplies, and materials to minimize costs and environmental impact • Uses equipment, technology, and work strategies to improve workflow • Applies problem-solving strategies to improve productivity • Adheres to worksite regulations and practices • Maintains an organized work area 	<input type="checkbox"/> 1	<input type="checkbox"/> 1	<input type="checkbox"/> 1	<input type="checkbox"/> 1
		<input type="checkbox"/> 2	<input type="checkbox"/> 2	<input type="checkbox"/> 2	<input type="checkbox"/> 2
		<input type="checkbox"/> 3	<input type="checkbox"/> 3	<input type="checkbox"/> 3	<input type="checkbox"/> 3
7. Provides quality goods or services (internal and external) <i>Examples of qualities and habits that the employee might exhibit include . . .</i>	<ul style="list-style-type: none"> • Shows support for the organizational goals and principles by own personal actions • Displays a respectful and professional image to customers • Displays an enthusiastic attitude and desire to take care of customer needs • Seeks out ways to increase customer satisfaction • Produces goods to workplace specifications 	<input type="checkbox"/> 1	<input type="checkbox"/> 1	<input type="checkbox"/> 1	<input type="checkbox"/> 1
		<input type="checkbox"/> 2	<input type="checkbox"/> 2	<input type="checkbox"/> 2	<input type="checkbox"/> 2
		<input type="checkbox"/> 3	<input type="checkbox"/> 3	<input type="checkbox"/> 3	<input type="checkbox"/> 3
8. Shows initiative and self-direction <i>Examples of qualities and habits that the employee might exhibit include . . .</i>	<ul style="list-style-type: none"> • Prioritizes and carries out responsibilities without being told • Responds with enthusiasm and flexibility to handle tasks that need immediate attention • Reflects on any unsatisfactory outcome as an opportunity to learn • Improves personal performance by doing something different or differently • Analyzes how own actions impact the overall organization • Supports own action with sound reasoning and principles • Balances personal activities to minimize interference with work responsibilities 	<input type="checkbox"/> 1	<input type="checkbox"/> 1	<input type="checkbox"/> 1	<input type="checkbox"/> 1
		<input type="checkbox"/> 2	<input type="checkbox"/> 2	<input type="checkbox"/> 2	<input type="checkbox"/> 2
		<input type="checkbox"/> 3	<input type="checkbox"/> 3	<input type="checkbox"/> 3	<input type="checkbox"/> 3

Employability Skills		Rating			
Competency and Rating Criteria		Initial	Mid Year 1	Mid Year 2	Final
9. Adapts to change <i>Examples of qualities and habits that the employee might exhibit include . . . Shows flexibility and willingness to learn new skills for various job roles</i>	<ul style="list-style-type: none"> • Uses problem-solving and critical-thinking skills to cope with changing circumstances • Modifies own work behavior based on feedback, unsatisfactory outcomes, efficiency, and effectiveness • Displays a "can do" attitude 	<input type="checkbox"/> 1	<input type="checkbox"/> 1	<input type="checkbox"/> 1	<input type="checkbox"/> 1
		<input type="checkbox"/> 2	<input type="checkbox"/> 2	<input type="checkbox"/> 2	<input type="checkbox"/> 2
		<input type="checkbox"/> 3	<input type="checkbox"/> 3	<input type="checkbox"/> 3	<input type="checkbox"/> 3
10. Demonstrates safety and security regulations and practices <i>Examples of qualities and habits that the employee might exhibit include . . .</i>	<ul style="list-style-type: none"> • Follows personal safety requirements • Maintains a safe work environment • Demonstrates professional role in an emergency • Follows security procedures • Maintains confidentiality 	<input type="checkbox"/> 1	<input type="checkbox"/> 1	<input type="checkbox"/> 1	<input type="checkbox"/> 1
		<input type="checkbox"/> 2	<input type="checkbox"/> 2	<input type="checkbox"/> 2	<input type="checkbox"/> 2
		<input type="checkbox"/> 3	<input type="checkbox"/> 3	<input type="checkbox"/> 3	<input type="checkbox"/> 3
11. Applies job-related technology, information, and media <i>Examples of qualities and habits that the employee might exhibit include . . .</i>	<ul style="list-style-type: none"> • Applies technology effectively in the workplace • Assesses and evaluates information on the job • Assesses training manuals, website, and other media related to the job 	<input type="checkbox"/> 1	<input type="checkbox"/> 1	<input type="checkbox"/> 1	<input type="checkbox"/> 1
		<input type="checkbox"/> 2	<input type="checkbox"/> 2	<input type="checkbox"/> 2	<input type="checkbox"/> 2
		<input type="checkbox"/> 3	<input type="checkbox"/> 3	<input type="checkbox"/> 3	<input type="checkbox"/> 3
12. Fulfills training or certification requirements for employment <i>Examples of this requirement may include . . .</i>	<ul style="list-style-type: none"> • Participation in required career-related training and/or educational programs • Passing certification tests to qualify for licensure and/or certification • Participation in company training or orientation 	<input type="checkbox"/> 1	<input type="checkbox"/> 1	<input type="checkbox"/> 1	<input type="checkbox"/> 1
		<input type="checkbox"/> 2	<input type="checkbox"/> 2	<input type="checkbox"/> 2	<input type="checkbox"/> 2
		<input type="checkbox"/> 3	<input type="checkbox"/> 3	<input type="checkbox"/> 3	<input type="checkbox"/> 3
13. Sets personal goals for improvement <i>Examples of this requirement may include . . .</i>	<ul style="list-style-type: none"> • Setting goals that are specific and measurable • Setting work-related goals that align with the organization's mission • Identifying strategies to reach goals • Reflecting on goal progress to regularly evaluate and modify goals 	<input type="checkbox"/> 1	<input type="checkbox"/> 1	<input type="checkbox"/> 1	<input type="checkbox"/> 1
		<input type="checkbox"/> 2	<input type="checkbox"/> 2	<input type="checkbox"/> 2	<input type="checkbox"/> 2
		<input type="checkbox"/> 3	<input type="checkbox"/> 3	<input type="checkbox"/> 3	<input type="checkbox"/> 3

OCCUPATIONAL COMPETENCIES

(TO BE COMPLETE BY YA EMPLOYER/MENTOR)

Youth apprentices must earn a rating of at least "MEETS EXPECTATIONS" in each competency by the conclusion of the apprenticeship. A total of 16 competencies, 15 must be from the list below. (All 7 Manufacturing Fundamentals competencies with no substitutions, plus 9 Production Operations competencies.) Employers may substitute one of these competencies with another occupationally appropriate skill. That skill should be added to the competency list for assessment. Where necessary, skills can be simulated. **At least two evaluations are required each year of a youth apprenticeship.** More columns are included below for those who choose to conduct more frequent reviews.

Note: Students who completed a previous Manufacturing YA program do not need to repeat the Manufacturing Fundamentals Competencies.

1	Working to Meet Expectations: Needs improvement; requires much assistance and supervision; rarely displays this behavior
2	Meets Expectations: Meets entry-level criteria; requires some supervision; often displays this behavior
3	Exceeds Expectations: Exceeds entry-level criteria; requires minimal supervision; consistently displays this behavior

Employability Skills		Rating			
Competency and Rating Criteria		Evaluation Minimum Rating of 2 for EACH Check Rating			
		Initial	Mid Year 1	Mid Year 2	Final
1. Focus on customer needs		<input type="checkbox"/> 1	<input type="checkbox"/> 1	<input type="checkbox"/> 1	<input type="checkbox"/> 1
<ul style="list-style-type: none"> identify internal and external customers impacted by the production process 		<input type="checkbox"/> 2	<input type="checkbox"/> 2	<input type="checkbox"/> 2	<input type="checkbox"/> 2
<ul style="list-style-type: none"> satisfy internal and external customer's expectations 		<input type="checkbox"/> 3	<input type="checkbox"/> 3	<input type="checkbox"/> 3	<input type="checkbox"/> 3
<ul style="list-style-type: none"> collaborate with team 					
<ul style="list-style-type: none"> assist work site professional to keep internal and/or external customers informed of project progress and decisions that may affect them 					
<ul style="list-style-type: none"> define the impact of the Voice of the Customer 					
<ul style="list-style-type: none"> determine the impact of your work to the internal and external customer 					

Employability Skills		Rating			
Competency and Rating Criteria		Evaluation Minimum Rating of 2 for EACH Check Rating			
		Initial	Mid Year 1	Mid Year 2	Final
2. Use various instruments <ul style="list-style-type: none"> consider the degree of precision required by the part feature choose correct measuring instrument for task verify equipment is available for use and in working order verify equipment preventative maintenance and/or calibration inspect tools and work area for safety considerations clean and adjust measuring instrument prior to use use gauges, calipers, and micrometer instruments use semi-precision and precision layout tools use digital gauges, checking fixtures use digital scales, thermometers confirm measurement accuracy record measurement correctly including unit of measurement at proper interval calibrate, clean, and store measuring instruments properly convert standard to metric – metric to standard measurement units 		<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3
3. Operate tools and equipment safely <ul style="list-style-type: none"> operate only tool/equipment that he/she is trained on choose correct tool/equipment for the task follow tool check list verify tool/equipment is available for use and in working order verify tool/equipment is current for preventative maintenance and/or calibration wear appropriate Personal Protective Equipment (PPE) inspect tool/equipment and work area for safety considerations prepare tool/equipment for safe operation operate tool/equipment safely with guarding devices monitor tool/equipment for safe operation while operating compare tool/equipment performance regularly to optimal equipment operations follow facility procedures for clean-up and shut down after use perform required preventative maintenance procedures report abnormal tool/equipment conditions properly shuts down and labels any tool/equipment that is not operating as expected follow Lock Out/Tag Out procedures as applicable document use and maintenance 		<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3

Employability Skills		Rating			
Competency and Rating Criteria		Evaluation Minimum Rating of 2 for EACH Check Rating			
		Initial	Mid Year 1	Mid Year 2	Final
4. Practice quality assurance principles <ul style="list-style-type: none"> inspect materials/piece/product at all stages of production identify quality or condition of materials/piece/product monitor materials, processes, equipment, tools, and products throughout the production process inspect final product/piece to ensure it meets specifications identify and segregate materials and/or product that do not meet specification communicate with work site professional if materials/product do not meet requirements document all quality checks participate in root-cause analysis of process/product take ownership of work collaborate with work site professional on corrective action 		<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3
5. Follow personal safety requirements (safety) <ul style="list-style-type: none"> participate in required safety training follow all worksite guidelines for personal safety apply principles of proper body mechanics report exposures, injuries, near misses, or accidents, personal or to others immediately locate key information on Material Safety Data Sheets (MSDS) handle and dispose of any hazardous materials appropriately operate equipment that he/she is trained on adhere to equipment safety standards visually inspect equipment before operation wear required Personal Protective Equipment (PPE) at all times follow company emergency action plan identify hazardous conditions and restricted areas in the workplace avoid pinch points be aware of surroundings 		<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3

Production Operations (TO BE COMPLETED BY YA EMPLOYER/MENTOR)

Occupational Competencies		Rating			
Competency and Rating Criteria		Evaluation			
		Minimum Rating of 2 for EACH Check Rating			
		Initial	Mid Year 1	Mid Year 2	Final
1. Assist recording and summarizing financial data <ul style="list-style-type: none"> support processing of financial information such as bills of lading, accounts receivable, and accounts payable records calculate and summarize costs estimate required resources including staff time, staff training, equipment time, equipment maintenance and repair costs, support services and staff required, facility modifications estimate raw materials quantities needed including costs associated with handling, shipping, and transport estimate time requirements with times for approvals, delays, and repairs build an estimated budget for the production process support preparation of financial reports 		<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3
2. Support coordination of work schedules and duty assignments <ul style="list-style-type: none"> determine the amount of staff needed for services schedule staff according to hours required, employee status and service coverage required schedule staff to minimize labor costs incorporate coverage for vacations or leaves communicate schedules to staff maintain changes to master schedule with worksite professional 		<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3
3. Use quality tools <ul style="list-style-type: none"> define question/problem to be assessed determine data analysis tool decide which data needs to be collected determine when and how to collect data collect data organize data using quality tools (i.e. check sheet, pareto chart, scatter diagram, histogram, etc.) analyze data collected 		<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3
4. Calibrate tools and equipment (W/S) <ul style="list-style-type: none"> follow schedule to calibrate tools and equipment check tool/equipment certification documentation check tool/equipment certification through observation of use clean and adjust instruments before calibrating calibrate tools and instruments accurately and correctly re-calibrate tools according to procedure label tools and equipment that have been calibrated document all calibration activities 		<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3

Occupational Competencies		Rating			
Competency and Rating Criteria		Evaluation Minimum Rating of 2 for EACH Check Rating			
		Initial	Mid Year 1	Mid Year 2	Final
5. Analyze production productivity processes <ul style="list-style-type: none"> assist work site professional/team to evaluate a production process use quality tools analyze the process to identify staff, tools, equipment, materials, environment, training, safety requirements, and procedures required to produce product calculate productivity and/or cycle time for the process assist work site professional/team to identify gaps and brainstorm solutions in productivity 		<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3
6. Monitor operations for product and process quality <ul style="list-style-type: none"> review process control data to ensure process is meeting product specifications assess process cycle time to ensure that customer and facility needs are met sample and test materials/products to ensure they meet customer specifications regularly compare current equipment performance to optimal equipment operations investigate and report abnormal equipment conditions in a timely manner monitor equipment correction solved problem use quality tools and methods to monitor operations document all quality monitoring activities 		<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3
7. Support investigation of root causes of product and/or process failure <ul style="list-style-type: none"> participate on team investigation gather data pertaining to the problem (magnitude, location, timing) review relevant data and quality monitoring tools develop a description of the problem or process failure identify potential contributory relationships explore solution options 		<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3

Occupational Competencies		Rating			
Competency and Rating Criteria		Evaluation Minimum Rating of 2 for EACH Check Rating			
		Initial	Mid Year 1	Mid Year 2	Final
8. Take corrective action to restore or maintain quality <ul style="list-style-type: none"> • apply problem solving steps to reported production issues • use quality tools • review previous documentation on similar production issues to identify possible solutions • create an improvement plan • determine appropriate action for sub-standard piece/product • correct the piece/product and/or process to meet quality standards • communicate quality problems • suggest continuous improvements to process, piece/product, and/or maintenance to improve production and/or reduce waste • document corrective actions and outcome • corrective actions occur in a timely manner • verify corrective actions are supported by data • monitor corrective action to validate effectiveness 		<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3
9. Participate in quality improvement processes <ul style="list-style-type: none"> • use quality tools to map a production process • identify performance and training issues related to quality • identify performance indicators to monitor • assist worksite professionals to monitor production operations, equipment, and/or operator performance measures for product and process quality • review quality measures for trends • support periodic internal quality audit activities including testing of raw materials, of product at different production stages, and prior to final release • document the results of quality tests or audits • support assessment of customer feedback • participate in the creation of an improvement plan • outline changes in improvement plan • support improvement plan with data 		<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3

