Assembly and Packaging



Youth Apprenticeship

ASSEMBLY AND PACKAGING

Assembly and Packaging youth apprentices follow processes to prepare goods and materials for shipping, including set up of assembly and packaging equipment and machinery. Apprentices must adhere to industry safety and security standards.

Length of Apprenticeship: One year

COMPETENCIES

Assembly and Packaging youth apprentices must complete **a total of 19** competencies per year. All **7** Manufacturing Fundamentals Competencies must be complete. No substitutions to this list. **Eleven** of the 12 Assembly and Packaging competencies must be from the list below. If necessary, employers can substitute up to **1** competency with another occupationally appropriate skill. That skill must be added to the competency list for assessment. Note that where necessary, skills can be simulated.

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

Γ	Manufacturing Fundamentals Competencies		Assembly and Packaging Competencies
1.	Focus on customer needs	1.	Read technical drawings and work orders
2.	Use various instruments	2.	Interpret assembly and packaging symbols
3.	Operate tools and equipment safely		and procedures
4.	Practice quality assurance principles	3.	Identify set up for assembly
5.	Follow personal safety requirements	4.	Select tools and materials
6.	Maintain a safe work environment	5.	Perform safety checks
7.	Demonstrate professional role to be used in	6.	Perform assembly set up
	an emergency	7.	Verify assembly set up
		8.	Perform assembly
		9.	Perform quality checks
		10.	Build packaging
		11.	Package product
		12.	Process packaging documents

REGISTERED APPRENTICESHIP BRIDGING OPPORTUNITIES

Some of the related instruction courses can bridge into the following registered apprenticeship:

- Machinist
- Maintenance Technician
- Tool and Die Maker

POST-SECONDARY PATHWAY OPPORTUNITIES

There are several post-secondary pathway opportunities in this area. Following is partial list.

- Automated Packaging Systems Technician Technical Diploma
- Automation Systems Technology





Youth Apprenticeship ON-THE-JOB LEARNING PERFORMANCE STANDARDS GUIDE

YOUTH APPRENTICE INFORMATION

Youth Apprentice Name	
YA Coordinator	YA Consortium
School District	High School Graduation Date

REQUIREMENTS

Requirements

Youth apprentices must complete ALL the items listed below. Check completed areas.

- □ Competency checklist
- Employability Skills checklist (in this job book) or the DPI Employability Skills Certificate
- □ Related instruction equal to 1 high school credit or at least 3 college credits
- □ Minimum of 450 work hours

HOURS

Record the hours the youth apprentice worked.

Total Hours Employed	Company Name	Telephone Number

CAREER PREPARATION

Youth apprentices must complete **one** of the following during Youth Apprenticeship participation:

 \Box 1. Student is participating in a local or regional career pathway*.

Identify the pathway below:

For more information contact the <u>Wisconsin Department of Public Instruction</u>. Additional help may be found on the WI DPI <u>Wisconsin Pathways – Regional Career Pathways</u> and <u>DPI Career</u> <u>Clusters and Pathways</u> web pages.

*Local and Regional career pathways as defined by the WI DPI means that a student is participating in or has completed at least one CTE class in a cluster pathway sequence and has completed at least one of the other career pathway components: instructional related course, work-based learning, dual college credit, and/or career and technical student organization.

 \Box 2. Student has completed one of the following certificates during their YA program or possess current certification earned previously.

A copy of the certificate must be uploaded with the completed checklist. Select the certificate from the list below.

□ OSHA Safety Training (10 or 30)

- □ Leadership Certificate (DPI)
- DWD-BAS: Wisconsin Department of Workforce Development, Bureau of (Adult)
- Apprenticeship Standards
- □ Manufacturing Skill Standards Certification (MSSC)
- Other certificates identified by the CTE Approved Certifications List related to this occupational field (or related to this occupation)
 <u>dwd.wisconsin.gov/det/cteincentive/</u> (YA certificates excluded)

Title of Certification:

□ 3. Student is participating in a <u>Dual Enrollment Course</u> connected to any postsecondary education provider including UW System, Wisconsin Association of Independent Colleges and Universities (WAICU), and any of the 16 Wisconsin Technical Colleges (WTCS).

College Name:

College Course Title:

Course Number:

For more information on Dual Enrollment opportunities, please click on one of the below resources:

- WTCS
- WAICU
- UW System connect with the college of choice.

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-Base 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 Signature	Employer/Mentor Signature
Employer/Mentor	Employer/Mentor
Business/Company	Business/Company
Date Signed	Date Signed
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 Signature	Youth Apprentice Signature
Youth Apprentice	Youth Apprentice
School District / High School	School District / High School
Date Signed	Date Signed

EMPLOYABILITY SKILLS

Youth apprentices must demonstrate key employability skills.

The DWD YA program employability skills requirement may be attained and demonstrated through two processes. (See options listed below.) Employability skills must be completed for every year a student is in the program. The DPI Employability Skills Certificate may be counted as meeting one of those two years, provided the certificate is earned in the same year the student is enrolled in youth apprenticeship or they can complete the YA Employability Skills in the OJL. The Employability Skills Certificate must be obtained through the DPI.

 If a student has successfully completed a Wisconsin Department of Public Instruction (DPI) State-Certified Cooperative Education, <u>Co-Op Employability Skill certification</u> then they have met the YA Employability Skills requirement for that year. A copy of the student's DPI Co-Op Employability Skill Certificate must be maintained on file with their YA regional consortium.

□ Earned Wisconsin Employability Skills Certificate (checked if applicable) or,

2. Completed and rated "Employability Skills" through this YA OJL guide as described below.

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

The following skills are required of all youth apprentices.

	Employability Skills	Rating		
	Competency and Rating Criteria	Minimum Rating of 2 for EAC Check Rating		
		1	2	3
1.	 Develops positive work relationships with others. Examples of qualities and habits that the employee might exhibit include 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 			
2.	 Communicates effectively with others Examples of qualities and habits that the employee might exhibit include Adjust the communication approach for the target audience, purpose, and situation to maximize impact Organizes messages/information in a logical and helpful manner 			

	Employability Skills	Rating		
			n Rating of	2 for EACH
	Competency and Rating Criteria		Check Ratir	ng
		1	2	3
	 Speaks clearly and writes legibly Models behaviors to show active listening Applies what was read to actual practice Asks appropriate questions for clarity 			
3.	 Collaborates with others Examples of qualities and habits that the employee might exhibit include 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 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 			
4.	 Maintains composure under pressure Examples of qualities and habits that the employee might exhibit include 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 			
5.	 Demonstrates integrity Examples of qualities and habits that the employee might exhibit include Carries our 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 			
6.	 Performs quality work Examples of qualities and habits that the employee might exhibit include Carries out written and verbal directions accurately Completes work efficiently and effectively Preforms 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 			

	Employability Skills	Rating		
		Minimun	Minimum Rating of 2	
	Competency and Rating Criteria		Check Ratir	-
	Maintains an organized work area	1	2	3
7.	 Provides quality goods or services (internal and external) <i>Examples of qualities and habits that the employee might exhibit include</i> 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 			
8.	 Shows initiative and self-direction Examples of qualities and habits that the employee might exhibit include 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 			
9.	 Adapts to change Examples of qualities and habits that the employee might exhibit include Shows flexibility and willingness to learn new skills for various job roles 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 			
10.	 Demonstrates safety and security regulations and practices <i>Examples of qualities and habits that the employee might exhibit include</i> Follows personal safety requirements Maintains a safe work environment Demonstrates professional role in an emergency Follows security procedures Maintains confidentiality 			

Employability Skills	Rating		
Competency and Rating Criteria		Minimum Rating of 2 for Check Rating	
	1	2	3
 11. Applies job-related technology, information, and media Examples of qualities and habits that the employee might exhibit include Applies technology effectively in the workplace Assesses and evaluates information on the job Assesses training manuals, website, and other media related to the job 			
 12. Fulfills training or certification requirements for employment <i>Examples of qualities and habits that the employee might exhibit include</i> 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 			
 13. Sets personal goals for improvement Examples of qualities and habits that the employee might exhibit include 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 			

COMPETENCIES

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Rating Scale

3: Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior

- 2: Meets entry level criteria | Requires some supervision | Often displays this behavior
- 1: Needs improvement | Requires much assistance and supervision | Rarely displays behavior

MANUFACTURING FUNDAMENTALS – Complete all competencies

	Competency and Rating Criteria		n Rating of 2 Check Rating	
		1	2	3
1.	 Focus on customer needs Identify internal and external customers impacted by the production process Satisfy internal and external customer's expectations Collaborate with team Assist work site professional to keep internal and/or external customers informed of project progress and decisions that may affect them Define the impact of the Voice of the Customer Determine the impact of your work to the internal and external customer 			

	Competency and Rating Criteria		Rating of 2 Check Rating	
		1	2	3
2.	 Use various instruments 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 			
3.	 Operate tools and equipment safely 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 for safe operation Operate 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 			

	Competency and Rating Criteria		Rating of 2 Check Rating	
		1	2	3
4.	 Practice quality assurance principles 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 			
5.	 Follow personal safety requirements (safety) 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 			

Competency and Rating Criteria		Minimum Rating of 2 for EACH			
	Competency and Kating Criteria		Check Rating		
		1	2	3	
6.	Maintain a safe work environment (safety)				
	 Comply with posted safety warnings and symbols 				
	 Identify unsafe conditions and/or work habits 				
	 Report unsafe conditions and/or work habits 				
	Help maintain a clean and safe working environment free				
	of debris and obstacles				
	 Maintain clean, organized work area 				
	Use hazardous materials according to company procedure				
	Report any indications of insects or pests, if necessary				
	 Follow appropriate Lock out – tag out procedures 				
	• Adhere to Occupational Safety and Health Administration				
	(OSHA) Safety guidelines				
	• Follow rules for operating equipment (Powered Industrial				
	Vehicle PIV)				
	Identify applicable Emergency Stops				
7.	Demonstrate professional role to be used in an				
	emergency (safety)				
	 Participate in emergency safety simulations and drills 				
	Describe company's policy and procedures for work site				
	incidents, accidents, electrical, fire, tornado, bomb				
	threats, robbery, hostage situations, and other emergency				
	situations				
	 Identify the closest fire alarms and emergency exits 				
	Identify the fire extinguishers				
	 Identify appropriate alarms and procedures for using 				
	alarms				
	 Contact emergency personnel in the event of an 				
	emergency				
	Contribute to emergency incident documentation				

ASSEMBLY AND PACKAGING

Competency and Rating Criteria		Minimum Rating of 2 for EACH Check Rating		
	1	2	3	
 Read technical drawings and work orders Review technical drawing Gather reference materials as needed Determine type of print and views used Determine material specifications Determine critical dimensions and tolerances Analyze supplementary data Determine product or job instructions and specifications Interpret assembly and packaging symbols and procedures 				
 2. Interpret assembly and packaging symbols and procedures Interpret technical drawings accurately as needed for job task Use appropriate terminology Identify lines, views, symbols, and representations on the drawings Interpret dimensions, tolerances, and scale on the drawings Interpret threads, tapers, and shop notes on the drawings Interpret the assembly and packaging plan from a technical drawing which includes tools, equipment, speeds, feeds, fixtures, and holders as applicable 				
 3. Identify set up for assembly Locate and review applicable technical drawings, work orders, and/or procedures for assembly processing Plan sequencing, tools, and equipment needed for assembly Identify set up needed Consult with worksite professional to verify assembly schedule, deadlines, and timeframes 				
 4. Select tools and materials Select tools and assembly equipment to be used Check assembly pieces needed against work order Verify assembly pieces and materials meet specifications Gather all resources needed at the workstation Notify work site professional of any discrepancies 				

Competency and Rating Criteria	Minimum Rating of 2 for EACH Check Rating		
	1	2	3
 5. Perform safety checks Review assembly procedure to be used Review safety requirements of assembly procedure Verify safety equipment and Personal Protective Equipment (PPE) needed for assembly process Inspect tools and work area for safety considerations Examine assembly equipment labeling and safeguarding 			
 6. Perform assembly set up Assemble and adjust tools and assembly equipment as required Verify assembly equipment is available for use and in working order Verify assembly equipment is current for preventative maintenance and/or calibration Set assembly equipment parameters as required for the procedure Stage pieces and materials for assembly 			
 7. Verify assembly set up Verify set up meets assembly requirements and product specifications Examine first assembled final product for visual and/or dimensional specification Make adjustments to ensure final assembly meets specification if needed Verify repeatability of set up if applicable Document assembly set up procedure for repeatability if applicable Document startup/set up procedure 			
 8. Perform assembly Operate assembly equipment safely in the manner required for the job task Operate assembly equipment according to machine requirements Wear Personal Protective Equipment (PPE) required for the operation of the equipment Monitor equipment for safe operation while operating Inspect final assembled product Make adjustments ensuring assembled product meets specification Document assembly procedure 			

Competency and Rating Criteria	Minimum Rating of 2 for EACH Check Rating		
	1	2	3
 9. Perform quality checks Test assembled product for function and/or compliance Label assembled products for compliance or non-compliance Document quality control checks 			
 10. Build packaging Verify testing of assembled product(s) is complete Identify package needed Assembly package Inspect package Stage finished package 			
 11. Package product Verify proper packaging procedure Retrieve packaging Use required protective packaging materials Place final compliant product in packaging Seal package Inspect package for relevant work order information Handle package to prevent damage Verify label meets regulatory and safety specifications Verify package meets shipping specifications 			
 12. Process packaging documents Verify packaging documentation included matches the final packaged product Apply shipping documentation Communicate package availability to proper parties Verify documentation is legible Complete package documentation in appropriate format 			
Competency Substitute (if you replaced a competency above, note the competency and rating)			
Comments:			

RELATED INSTRUCTION

Indicate which related instruction courses the youth apprentice completed:

Course Title	Credits	Location

Post-Program Completion Survey



Youth Apprenticeship

YA POST-PROGRAM COMPLETION SURVEY

The <u>Post-Program Completion Survey</u> form is to be provided to each student completing the Youth Apprenticeship program to capture information on the student's plans after leaving the program. The form should be filled out during the final meeting between the student, mentor, and Local Youth Apprenticeship Coordinator, when the final checklist if filled out and signed. Information captured on this form must be entered online using the Youth Apprenticeship Online Data Application (YODA) System.

DWD is an equal opportunity employer and service provider. If you have a disability and need assistance with this information, please dial 7-1-1 for Wisconsin Relay Service. Please contact the Division of Employment and Training at 888-258-9966 and press 6 to request information in an alternate format, including translated to another language.

