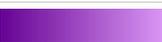




TORQ Analysis of Helpers--Production Workers to Sewing Machine Operators

ANALYSIS INPUT					
Transfer	Title	O*NET	Filters		
From Title:	Helpers--Production Workers	51-9198.00	Abilities:	Importance Level: 50	Weight: 1
To Title:	Sewing Machine Operators	51-6031.00	Skills:	Importance Level: 69	Weight: 1
Labor Market Area:	Maine Statewide		Knowledge:	Importance Level: 69	Weight: 1

TORQ RESULTS																	
Grand TORQ:												83					
Ability TORQ				Skills TORQ				Knowledge TORQ									
Level				88		Level				84		Level				77	
Gaps To Narrow if Possible				Upgrade These Skills				Knowledge to Add									
Ability	Level	Gap	Impt	Skill	Level	Gap	Impt	Knowledge	Level	Gap	Impt						
Visual Color Discrimination	46	12	56	No Skills Upgrade Required!				No Knowledge Upgrades Required!									
Rate Control	39	7	59														
Arm-Hand Steadiness	51	3	65														
Finger Dexterity	44	3	56														
Visualization	39	2	50														
<p>LEVEL and IMPT (IMPORTANCE) refer to the Target Sewing Machine Operators. GAP refers to level difference between Helpers--Production Workers and Sewing Machine Operators.</p>																	

ASK ANALYSIS			
Ability Level Comparison - Abilities with importance scores over 50			
Description	Helpers--Production Workers	Sewing Machine Operators	Importance
Arm-Hand Steadiness	48 	51 	65 
Manual Dexterity	42 	42 	62 
Control Precision	50 	42 	62 
Rate Control	32 	39 	59 
Information Ordering	37 	37 	56 
Finger Dexterity	41 	44 	56 
Near Vision	48 	48 	56 
Visual Color Discrimination	34 	46 	56 
Problem Sensitivity	39 	39 	53 
Multilimb Coordination	44 	37 	53 
Deductive Reasoning	37 	35 	50 
Visualization	37 	39 	50 



Skill Level Comparison - Abilities with importance scores over 69

Description	Helpers--Production Workers	Sewing Machine Operators	Importance
Knowledge Level Comparison - Knowledge with importance scores over 69			
Description	Helpers--Production Workers	Sewing Machine Operators	Importance

Experience & Education Comparison

Related Work Experience Comparison				Required Education Level Comparison		
Description	Helpers--Production Workers		Sewing Machine Operators	Description	Helpers--Production Workers	Sewing Machine Operators
10+ years	0%		0%	Doctoral	0%	0%
8-10 years	0%		0%	Professional Degree	0%	0%
6-8 years	0%		0%	Post-Masters Cert	0%	0%
4-6 years	0%		8%	Master's Degree	0%	0%
2-4 years	0%		13%	Post-Bachelor Cert	0%	0%
1-2 years	13%		9%	Bachelors	0%	2%
6-12 months	39%		11%	AA or Equiv	0%	0%
3-6 months	7%		0%	Some College	0%	8%
1-3 months	1%		5%	Post-Secondary Certificate	11%	2%
0-1 month	10%		0%	High School Diploma or GED	51%	12%
None	27%		51%	No HSD or GED	36%	73%

Helpers--Production Workers

Sewing Machine Operators

Most Common Educational/Training Requirement:

Short-term on-the-job training

Moderate-term on-the-job training

Job Zone Comparison

1 - Job Zone One: Little or No Preparation Needed

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No previous work-related skill, knowledge, or experience is needed for these occupations. For example, a person can become a cashier even if he/she has never worked before.

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These occupations may require a high school diploma or GED certificate. Some may require a formal training course to obtain a license.

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Employees in these occupations need anywhere from a few days to a few months of training. Usually, an experienced worker could show you how to do the job.

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Tasks

Helpers--Production Workers

Sewing Machine Operators

Core Tasks

Core Tasks

Generalized Work Activities:

Generalized Work Activities:

- Handling and Moving Objects - Using hands and arms in handling, installing, positioning, and moving materials, and manipulating things.
- Performing General Physical Activities - Performing physical activities that require considerable use of your arms and legs and moving your whole body, such as climbing, lifting, balancing, walking, stooping, and

- Getting Information - Observing, receiving, and otherwise obtaining information from all relevant sources.
- Controlling Machines and Processes - Using either control mechanisms or direct physical activity to operate machines or processes (not including computers or vehicles).
- Handling and Moving Objects - Using hands



ing, balancing, walking, stooping, and handling of materials.

- Controlling Machines and Processes - Using either control mechanisms or direct physical activity to operate machines or processes (not including computers or vehicles).
- Getting Information - Observing, receiving, and otherwise obtaining information from all relevant sources.
- Identifying Objects, Actions, and Events - Identifying information by categorizing, estimating, recognizing differences or similarities, and detecting changes in circumstances or events.

Specific Tasks

Occupation Specific Tasks:

- Attach slings, ropes, and cables to objects such as pipes, hoses, and bundles.
- Break up defective products for reprocessing.
- Change machine gears, using wrenches.
- Clean and lubricate equipment.
- Count finished products to determine if product orders are complete.
- Cut or break flashing from materials or products.
- Dump materials such as prepared ingredients into machine hoppers prior to mixing.
- Examine products to verify conformance to quality standards.
- Fold products and product parts during processing.
- Help production workers by performing duties of lesser skill, such as supplying or holding materials or tools, and cleaning work areas and equipment.
- Lift raw materials, finished products, and packed items, manually or using hoists.
- Load and unload items from machines, conveyors, and conveyances.
- Mark or tag identification on parts.
- Measure amounts of products, lengths of extruded articles, or weights of filled containers to ensure conformance to specifications.
- Mix ingredients according to specified procedures and formulas.
- Observe equipment operations so that malfunctions can be detected, and notify operators of any malfunctions.
- Operate machinery used in the production process, or assist machine operators.
- Pack and store materials and products.
- Pack food products in paper bags and boxes, and stack them in warehouses and coolers.
- Perform minor repairs to machines, such as replacing damaged or worn parts.
- Place products in equipment or on work surfaces for further processing, inspecting, or wrapping.
- Position spouts or chutes of storage bins so

and arms in handling, installing, positioning, and moving materials, and manipulating things.

- Inspecting Equipment, Structures, or Material - Inspecting equipment, structures, or materials to identify the cause of errors or other problems or defects.
- Communicating with Supervisors, Peers, or Subordinates - Providing information to supervisors, co-workers, and subordinates by telephone, in written form, e-mail, or in person.

Specific Tasks

Occupation Specific Tasks:

- Attach buttons, hooks, zippers, fasteners, or other accessories to fabric, using feeding hoppers or clamp holders.
- Attach tape, trim, appliques, or elastic to specified garments or garment parts, according to item specifications.
- Baste edges of material to align and temporarily secure parts for final assembly.
- Cut excess material or thread from finished products.
- Cut materials according to specifications, using blades, scissors, or electric knives.
- Draw markings or pin appliques on fabric to obtain variations in design.
- Examine and measure finished articles to verify conformance to standards, using rulers.
- Fold or stretch edges or lengths of items while sewing, in order to facilitate forming specified sections.
- Guide garments or garment parts under machine needles and presser feet to sew parts together.
- Inspect garments, and examine repair tags and markings on garments to locate defects or damage, and mark errors as necessary.
- Match cloth pieces in correct sequences prior to sewing them, and verify that dye lots and patterns match.
- Monitor machine operation to detect problems such as defective stitching, breaks in thread, or machine malfunctions.
- Mount attachments, such as needles, cutting blades, or pattern plates, and adjust machine guides according to specifications.
- Perform equipment maintenance tasks such as replacing needles, sanding rough areas of needles, or cleaning and oiling sewing machines.
- Perform specialized or automatic sewing machine functions, such as buttonhole making or tacking.
- Place spools of thread, cord, or other materials on spindles, insert bobbins, and thread ends through machine guides and components.
- Position and mark patterns on materials to prepare for sewing.
- Position items under needles, using marks



that containers can be filled.

- Prepare raw materials for processing.
- Read gauges and charts, and record data obtained.
- Record information such as the number of products tested, meter readings, and dates and times of product production.
- Remove products, machine attachments, and waste material from machines.
- Separate products according to weight, grade, size, and composition of materials used to produce them.
- Signal coworkers to direct them to move products during the production process.
- Start machines or equipment in order to begin production processes.
- Thread ends of items such as thread, cloth, and lace through needles and rollers, and around take-up tubes.
- Tie products in bundles for further processing or shipment, following prescribed procedures.
- Transfer finished products, raw materials, tools, or equipment between storage and work areas of plants and warehouses, by hand or using hand trucks or powered lift trucks.
- Turn valves to regulate flow of liquids or air, to reverse machines, to start pumps, or to regulate equipment.
- Unclamp and hoist full reels from braiding, winding, and other fabricating machines, using power hoists.
- Wash work areas, machines, equipment, vehicles, and products.

Detailed Tasks

Detailed Work Activities:

- adjust production equipment/machinery setup
- attach or mark identification onto products or containers
- clean equipment or machinery
- clean rooms or work areas
- examine products or work to verify conformance to specifications
- load or unload material or workpiece into machinery
- load, unload, or stack containers, materials, or products
- lubricate machinery, equipment, or parts
- maintain or repair industrial or related equipment/machinery
- maintain production or work records
- measure, weigh, or count products or materials
- mix paint, ingredients, or chemicals, according to specifications
- monitor production machinery/equipment operation to detect problems
- move or fit heavy objects

Position items and needles, using marks on machines, clamps, templates, or cloth as guides.

- Position material or articles in clamps, templates, or hoop frames prior to automatic operation of machines.
- Record quantities of materials processed.
- Remove holding devices and finished items from machines.
- Repair or alter items by adding replacement parts or missing stitches.
- Select supplies such as fasteners and thread, according to job requirements.
- Start and operate or tend machines, such as single or double needle serging and flat-bed felling machines, to automatically join, reinforce, or decorate material or articles.
- Tape or twist together thread or cord to repair breaks.
- Turn knobs, screws, and dials to adjust settings of machines, according to garment styles and equipment performance.

Detailed Tasks

Detailed Work Activities:

- adjust production equipment/machinery setup
- clean equipment or machinery
- cut or trim fabric or leather
- examine products or work to verify conformance to specifications
- install equipment or attachments on machinery or related structures
- load or unload material or workpiece into machinery
- maintain consistent production quality
- maintain production or work records
- monitor production machinery/equipment operation to detect problems
- operate sewing machine
- perform safety inspections in manufacturing or industrial setting
- read work order, instructions, formulas, or processing charts
- repair tears or defects in fabrics, garments, or leather products
- sew by hand
- use hand or power tools
- use portable electric fabric cutter

Technology - Examples



- operate food processing production equipment/machinery
- operate hoist, winch, or hydraulic boom
- operate metal or plastic fabricating equipment/machinery
- operate ore refining/foundry equipment/machinery
- operate packaging or banding machine or equipment
- operate pulp or paper making equipment
- operate textile production equipment/machinery
- operate woodworking equipment/machinery
- package goods for shipment or storage
- perform repetitive tasks in assembly setting
- perform safety inspections in manufacturing or industrial setting
- read work order, instructions, formulas, or processing charts
- signal directions or warnings to coworkers
- sort manufacturing materials or products
- wrap products

Technology - Examples

Data base user interface and query software

- Data entry software

Spreadsheet software

- Microsoft Excel

Word processing software

- Microsoft Word

Tools - Examples

- Adjustable wrenches
- Hand files
- Industrial platform scales
- Forklifts
- Grease guns
- Claw hammers
- Handtrucks
- Power hoists
- Hydraulic booms
- Hand jacks
- Label-making machines
- Platform ladders
- Locking pliers



- Personal computers
- Planing tools
- Jackhammers
- Power drills
- Power grinders
- Power nail guns
- Power sanders
- Power saws
- Pressure wands
- Hand saws
- Phillips head screwdrivers
- Skid steer loaders
- Material-hoisting slings
- Power staple guns
- Measuring tapes
- Utility knives
- Industrial vacuum cleaners
- Hydraulic winches

Labor Market Comparison

Maine Department of Labor.

Description	Helpers--Production Workers	Sewing Machine Operators	Difference
Median Wage	\$ 22,260	\$ 22,440	\$ 180
10th Percentile Wage	\$ 17,160	\$ 16,350	\$(810)
25th Percentile Wage	N/A	N/A	N/A
75th Percentile Wage	\$ 25,210	\$ 27,200	\$ 1,990
90th Percentile Wage	\$ 30,870	\$ 31,710	\$ 840
Mean Wage	\$ 23,130	\$ 23,030	\$(100)
Total Employment - 2625	1,490	1,080	-410
Employment Base - 2006	1,522	1,077	-445
Projected Employment - 2634	1,365	990	-375
Projected Job Growth - 2006-2634	-10.3 %	-8.1 %	2.2 %
Projected Annual Openings - 2006-2634	37	10	-27
Special			

Special Occupations:

National Job Posting Trends

Trend for Helpers--Production Workers and Sewing Machine Operators



Data from [Indeed](http://Indeed.com)

Programs

No information on programs or the occupation.

Maine Statewide Promotion Opportunities for Helpers--Production Workers

O*NET Code	Title	Grand TORQ	Job Zone	Employment	Median Wage	Difference	Growth	Annual Job Openings	Special
51-9198.00	Helpers--Production Workers	100	1	1,490	\$22,260.00	\$0.00	-10%	37	
51-6031.00	Sewing Machine Operators	83	1	1,080	\$22,440.00	\$180.00	-8%	10	
51-2021.00	Coil Winders, Tapers, and Finishers	83	2	90	\$31,910.00	\$9,650.00	-53%	1	
43-5053.00	Postal Service Mail Sorters, Processors, and Processing Machine Operators	80	2	970	\$41,950.00	\$19,690.00	-12%	10	
43-9051.00	Mail Clerks and Mail Machine Operators, Except Postal Service	80	1	490	\$23,250.00	\$990.00	-19%	13	
51-7021.00	Furniture Finishers	80	2	70	\$28,550.00	\$6,290.00	-31%	2	



51-2092.00	Team Assemblers	80	2	3,850	\$23,730.00	\$1,470.00	-7%	82	
51-4121.06	Welders, Cutters, and Welder Fitters	80	2	1,610	\$38,030.00	\$15,770.00	7%	49	★
51-6041.00	Shoe and Leather Workers and Repairers	80	2	90	\$25,030.00	\$2,770.00	-19%	3	
51-6062.00	Textile Cutting Machine Setters, Operators, and Tenders	80	3	110	\$24,860.00	\$2,600.00	-13%	4	
51-4121.07	Solderers and Brazers	79	2	1,610	\$38,030.00	\$15,770.00	7%	49	★
51-3092.00	Food Batchmakers	78	2	640	\$25,410.00	\$3,150.00	-7%	14	
51-7042.00	Woodworking Machine Setters, Operators, and Tenders, Except Sawing	78	2	900	\$23,040.00	\$780.00	-12%	23	
51-9191.00	Cementing and Gluing Machine Operators and Tenders	78	1	80	\$27,620.00	\$5,360.00	-15%	2	
51-9022.00	Grinding and Polishing Workers, Hand	78	1	270	\$31,060.00	\$8,800.00	4%	5	

Special Occupations:

Top Industries for Sewing Machine Operators

Industry	NAICS	% of Industry	Employment	Projected Employment	% Change
Cut and sew apparel manufacturing	315200	37.46%	87,218	36,829	-57.77%
Other textile product mills	314900	8.50%	19,797	17,782	-10.18%
Textile furnishings mills	314100	7.91%	18,422	16,690	-9.40%
Self-employed workers, primary job	000601	7.29%	16,967	18,076	6.54%
Household and institutional furniture manufacturing	337120	6.35%	14,794	12,383	-16.30%
Apparel accessories and other apparel manufacturing	315900	2.75%	6,400	4,026	-37.09%
Apparel knitting mills	315100	2.14%	4,987	2,805	-43.75%
Medical equipment and supplies manufacturing	339100	2.01%	4,674	4,781	2.29%
Other furniture related product manufacturing	337900	1.88%	4,384	4,577	4.40%
Printing and related support activities	323100	1.73%	4,029	3,192	-20.77%
Motor vehicle parts manufacturing	336300	1.48%	3,443	2,741	-20.39%
Fabric mills	313200	1.36%	3,162	2,233	-29.38%



Drycleaning and laundry services	812300	1.35%	3,133	3,133	0.01%
Clothing stores	448100	1.31%	3,053	2,973	-2.63%
Footwear manufacturing	316200	0.92%	2,134	1,000	-53.16%

Top Industries for Helpers--Production Workers

Industry	NAICS	% of Industry	Employment	Projected Employment	% Change
Employment services	561300	22.19%	120,164	142,842	18.87%
Animal slaughtering and processing	311600	5.61%	30,385	36,112	18.85%
Printing and related support activities	323100	4.49%	24,300	19,253	-20.77%
Converted paper product manufacturing	322200	3.76%	20,372	17,096	-16.08%
Plastics product manufacturing	326100	3.35%	18,157	19,247	6.00%
Bakeries and tortilla manufacturing	311800	2.61%	14,121	14,424	2.15%
Architectural and structural metals manufacturing	332300	2.49%	13,499	14,418	6.80%
Other wood product manufacturing	321900	2.45%	13,261	12,496	-5.77%
Fruit and vegetable preserving and specialty food manufacturing	311400	1.83%	9,936	9,009	-9.33%
Motor vehicle parts manufacturing	336300	1.77%	9,606	7,648	-20.39%
Coating, engraving, heat treating, and allied activities	332800	1.68%	9,101	7,459	-18.03%
Household and institutional furniture manufacturing	337120	1.32%	7,166	5,452	-23.91%
Machine shops	332710	1.30%	7,021	5,808	-17.28%
Cement and concrete product manufacturing	327300	1.17%	6,321	6,861	8.55%
Other fabricated metal product manufacturing	332900	1.15%	6,215	5,507	-11.39%



TORQ Analysis of Helpers--Production Workers to Graders and Sorters, Agricultural Products

ANALYSIS INPUT					
Transfer	Title	O*NET	Filters		
From Title:	Helpers--Production Workers	51-9198.00	Abilities:	Importance Level: 50	Weight: 1
To Title:	Graders and Sorters, Agricultural Products	45-2041.00	Skills:	Importance Level: 69	Weight: 1
Labor Market Area:	Maine Statewide		Knowledge:	Importance Level: 69	Weight: 1

TORQ RESULTS											
Grand TORQ:				82							
Ability TORQ		Skills TORQ		Knowledge TORQ							
Level	 88	Level	 79	Level	 80						
Gaps To Narrow if Possible		Upgrade These Skills		Knowledge to Add							
Ability	Level	Gap	Imp	Skill	Level	Gap	Imp	Knowledge	Level	Gap	Imp
No Critical Gaps Recorded!				No Skills Upgrade Required!				No Knowledge Upgrades Required!			
<p>LEVEL and IMPT (IMPORTANCE) refer to the Target Graders and Sorters, Agricultural Products. GAP refers to level difference between Helpers--Production Workers and Graders and Sorters, Agricultural Products.</p>											

ASK ANALYSIS			
Ability Level Comparison - Abilities with importance scores over 50			
Description	Helpers--Production Workers	Graders and Sorters, Agricultural Products	Importance
Category Flexibility	35 	34 	53 
Arm-Hand Steadiness	48 	35 	50 
Skill Level Comparison - Abilities with importance scores over 69			
Description	Helpers--Production Workers	Graders and Sorters, Agricultural Products	Importance
Knowledge Level Comparison - Knowledge with importance scores over 69			
Description	Helpers--Production Workers	Graders and Sorters, Agricultural Products	Importance

Experience & Education Comparison					
Related Work Experience Comparison			Required Education Level Comparison		
Description	Helpers--Production Workers	Graders and Sorters, Agricultural Products	Description	Helpers--Production Workers	Graders and Sorters, Agricultural Products
10+ years	0%	0%	Doctoral	0%	0%
8-10 years	0%	0%			



6-8 years	0%	0%	Professional Degree	0%	0%
4-6 years	0%	1%	Post-Masters Cert	0%	0%
2-4 years	0%	0%	Master's Degree	0%	0%
1-2 years	13%	0%	Post-Bachelor Cert	0%	0%
6-12 months	39%	0%	Bachelors	0%	0%
3-6 months	7%	2%	AA or Equiv	0%	0%
1-3 months	1%	0%	Some College	0%	1%
0-1 month	10%	0%	Post-Secondary Certificate	11%	0%
None	27%	95%	High School Diploma or GED	51%	37%
			No HSD or GED	36%	60%

Helpers--Production Workers	Graders and Sorters, Agricultural Products
Most Common Educational/Training Requirement:	
Short-term on-the-job training	Work experience in a related occupation
Job Zone Comparison	
1 - Job Zone One: Little or No Preparation Needed	1 - Job Zone One: Little or No Preparation Needed
No previous work-related skill, knowledge, or experience is needed for these occupations. For example, a person can become a cashier even if he/she has never worked before.	No previous work-related skill, knowledge, or experience is needed for these occupations. For example, a person can become a cashier even if he/she has never worked before.
These occupations may require a high school diploma or GED certificate. Some may require a formal training course to obtain a license.	These occupations may require a high school diploma or GED certificate. Some may require a formal training course to obtain a license.
Employees in these occupations need anywhere from a few days to a few months of training. Usually, an experienced worker could show you how to do the job.	Employees in these occupations need anywhere from a few days to a few months of training. Usually, an experienced worker could show you how to do the job.

Tasks

Helpers--Production Workers	Graders and Sorters, Agricultural Products
<p style="text-align: center; background-color: #f2f2f2; margin: 0;">Core Tasks</p> <p>Generalized Work Activities:</p> <ul style="list-style-type: none"> Handling and Moving Objects - Using hands and arms in handling, installing, positioning, and moving materials, and manipulating things. Performing General Physical Activities - Performing physical activities that require considerable use of your arms and legs and moving your whole body, such as climbing, lifting, balancing, walking, stooping, and handling of materials. Controlling Machines and Processes - Using either control mechanisms or direct physical activity to operate machines or processes (not including computers or vehicles). Getting Information - Observing, receiving, and otherwise obtaining information from all relevant sources. Identifying Objects, Actions, and Events - Identifying information by categorizing, estimating, recognizing differences or similarities, and detecting changes in circumstances or events. 	<p style="text-align: center; background-color: #f2f2f2; margin: 0;">Core Tasks</p> <p>Generalized Work Activities:</p> <ul style="list-style-type: none"> Identifying Objects, Actions, and Events - Identifying information by categorizing, estimating, recognizing differences or similarities, and detecting changes in circumstances or events. Handling and Moving Objects - Using hands and arms in handling, installing, positioning, and moving materials, and manipulating things. Judging the Qualities of Things, Services, or People - Assessing the value, importance, or quality of things or people. Documenting/Recording Information - Entering, transcribing, recording, storing, or maintaining information in written or electronic/magnetic form. Getting Information - Observing, receiving, and otherwise obtaining information from all relevant sources. Inspecting Equipment, Structures, or Material - Inspecting equipment, structures, or materials to identify the cause of errors or other problems or defects.
<p style="text-align: center; background-color: #f2f2f2; margin: 0;">Specific Tasks</p> <p>Occupation Specific Tasks:</p>	<p style="text-align: center; background-color: #f2f2f2; margin: 0;">Specific Tasks</p>



- Attach slings, ropes, and cables to objects such as pipes, hoses, and bundles.
- Break up defective products for reprocessing.
- Change machine gears, using wrenches.
- Clean and lubricate equipment.
- Count finished products to determine if product orders are complete.
- Cut or break flashing from materials or products.
- Dump materials such as prepared ingredients into machine hoppers prior to mixing.
- Examine products to verify conformance to quality standards.
- Fold products and product parts during processing.
- Help production workers by performing duties of lesser skill, such as supplying or holding materials or tools, and cleaning work areas and equipment.
- Lift raw materials, finished products, and packed items, manually or using hoists.
- Load and unload items from machines, conveyors, and conveyances.
- Mark or tag identification on parts.
- Measure amounts of products, lengths of extruded articles, or weights of filled containers to ensure conformance to specifications.
- Mix ingredients according to specified procedures and formulas.
- Observe equipment operations so that malfunctions can be detected, and notify operators of any malfunctions.
- Operate machinery used in the production process, or assist machine operators.
- Pack and store materials and products.
- Pack food products in paper bags and boxes, and stack them in warehouses and coolers.
- Perform minor repairs to machines, such as replacing damaged or worn parts.
- Place products in equipment or on work surfaces for further processing, inspecting, or wrapping.
- Position spouts or chutes of storage bins so that containers can be filled.
- Prepare raw materials for processing.
- Read gauges and charts, and record data obtained.
- Record information such as the number of products tested, meter readings, and dates and times of product production.
- Remove products, machine attachments, and waste material from machines.
- Separate products according to weight, grade, size, and composition of materials used to produce them.
- Signal coworkers to direct them to move products during the production process.
- Start machines or equipment in order to

Occupation Specific Tasks:

- Discard inferior or defective products and/or foreign matter, and place acceptable products in containers for further processing.
- Examine product fibers through microscopes to determine maturity and spirality of fibers.
- Grade and sort products according to factors such as color, species, length, width, appearance, feel, smell, and quality to ensure correct processing and usage.
- Place products in containers according to grade and mark grades on containers.
- Record grade and/or identification numbers on tags or on shipping, receiving, or sales sheets.
- Separate fiber tufts between fingers to assess strength, uniformity, and cohesive quality of fibers.
- Weigh products or estimate their weight, visually or by feel.

Detailed Tasks

Detailed Work Activities:

- attach or mark identification onto products or containers
- grade, classify, or sort products according to specifications
- identify crop characteristics
- maintain safe work environment
- mark items for acceptance or rejection, according to conformance to specifications
- measure, weigh, or count products or materials
- perform safety inspections in agricultural, forestry, or fishing setting
- recognize plant diseases
- record test results, test procedures, or inspection data
- sort manufacturing materials or products
- understand second language
- use hazardous materials information
- use microscope
- use oral or written communication techniques
- use quality assurance techniques

Technology - Examples



begin production processes.

- Thread ends of items such as thread, cloth, and lace through needles and rollers, and around take-up tubes.
- Tie products in bundles for further processing or shipment, following prescribed procedures.
- Transfer finished products, raw materials, tools, or equipment between storage and work areas of plants and warehouses, by hand or using hand trucks or powered lift trucks.
- Turn valves to regulate flow of liquids or air, to reverse machines, to start pumps, or to regulate equipment.
- Unclamp and hoist full reels from braiding, winding, and other fabricating machines, using power hoists.
- Wash work areas, machines, equipment, vehicles, and products.

Detailed Tasks

Detailed Work Activities:

- adjust production equipment/machinery setup
- attach or mark identification onto products or containers
- clean equipment or machinery
- clean rooms or work areas
- examine products or work to verify conformance to specifications
- load or unload material or workpiece into machinery
- load, unload, or stack containers, materials, or products
- lubricate machinery, equipment, or parts
- maintain or repair industrial or related equipment/machinery
- maintain production or work records
- measure, weigh, or count products or materials
- mix paint, ingredients, or chemicals, according to specifications
- monitor production machinery/equipment operation to detect problems
- move or fit heavy objects
- operate food processing production equipment/machinery
- operate hoist, winch, or hydraulic boom
- operate metal or plastic fabricating equipment/machinery
- operate ore refining/foundry equipment/machinery
- operate packaging or banding machine or equipment
- operate pulp or paper making equipment
- operate textile production equipment/machinery
- operate woodworking equipment/machinery
- package goods for shipment or storage



- perform repetitive tasks in assembly setting
- perform safety inspections in manufacturing or industrial setting
- read work order, instructions, formulas, or processing charts
- signal directions or warnings to coworkers
- sort manufacturing materials or products
- wrap products

Technology - Examples

Data base user interface and query software

- Data entry software

Spreadsheet software

- Microsoft Excel

Word processing software

- Microsoft Word

Tools - Examples

- Adjustable wrenches
- Hand files
- Industrial platform scales
- Forklifts
- Grease guns
- Claw hammers
- Handtrucks
- Power hoists
- Hydraulic booms
- Hand jacks
- Label-making machines
- Platform ladders
- Locking pliers
- Personal computers
- Planing tools
- Jackhammers
- Power drills
- Power grinders
- Power nail guns
- Power sanders
- Power saws



- Pressure wands
- Hand saws
- Phillips head screwdrivers
- Skid steer loaders
- Material-hoisting slings
- Power staple guns
- Measuring tapes
- Utility knives
- Industrial vacuum cleaners
- Hydraulic winches

Labor Market Comparison

Maine Department of Labor.

Description	Helpers--Production Workers	Graders and Sorters, Agricultural Products	Difference
Median Wage	\$ 22,260	\$ 17,170	\$(5,090)
10th Percentile Wage	\$ 17,160	\$ 14,650	\$(2,510)
25th Percentile Wage	N/A	N/A	N/A
75th Percentile Wage	\$ 25,210	\$ 19,150	\$(6,060)
90th Percentile Wage	\$ 30,870	\$ 22,610	\$(8,260)
Mean Wage	\$ 23,130	\$ 17,900	\$(5,230)
Total Employment - 2625	1,490	170	-1,320
Employment Base - 2006	1,522	287	-1,235
Projected Employment - 2634	1,365	228	-1,137
Projected Job Growth - 2006-2634	-10.3 %	-20.5 %	-10.2 %
Projected Annual Openings - 2006-2634	37	4	-33
Special			

Special Occupations:

National Job Posting Trends

Trend for Helpers--Production Workers and Graders and Sorters, Agricultural Products



Data from [Indeed](http://Indeed.com)

Programs	
Related Programs	
Agricultural and Food Products Processing Operatio	
<p>Agricultural and Food Products Processing. A program that prepares individuals to receive, inspect, store, process, and package agricultural products in the form of human food consumables, animal or plant food, or other industrial products. Includes instruction in the nutrient and industrial properties of various agricultural products; logistics and storage procedures; chemical and mechanical processing operations; packaging; safety and health requirements; and related technical and business principles.</p> <p>No information on schools for the program</p>	
Agricultural/Farm Supplies Retailing and Wholesaling	
<p>Agricultural/Farm Supplies Retailing and Wholesaling. A program that prepares individuals to sell agricultural products and supplies, provide support services to agricultural enterprises, and purchase and market agricultural products. Includes instruction in basic business management, marketing, retailing and wholesaling operations, and applicable principles of agriculture and agricultural operations.</p> <p>No information on schools for the program</p>	

Maine Statewide Promotion Opportunities for Helpers--Production Workers									
O* NET Code	Title	Grand TORQ	Job Zone	Employment	Median Wage	Difference	Growth	Annual Job Openings	Special
51-9198.00	Helpers--Production Workers	100	1	1,490	\$22,260.00	\$0.00	-10%	37	
51-6031.00	Sewing Machine Operators	83	1	1,080	\$22,440.00	\$180.00	-8%	10	
51-2021.00	Coil Winders, Tapers, and Finishers	83	2	90	\$31,910.00	\$9,650.00	-53%	1	



43-5053.00	Postal Service Mail Sorters, Processors, and Processing Machine Operators	80	2	970	\$41,950.00	\$19,690.00	-12%	10	
43-9051.00	Mail Clerks and Mail Machine Operators, Except Postal Service	80	1	490	\$23,250.00	\$990.00	-19%	13	
51-7021.00	Furniture Finishers	80	2	70	\$28,550.00	\$6,290.00	-31%	2	
51-2092.00	Team Assemblers	80	2	3,850	\$23,730.00	\$1,470.00	-7%	82	
51-4121.06	Welders, Cutters, and Welder Fitters	80	2	1,610	\$38,030.00	\$15,770.00	7%	49	★
51-6041.00	Shoe and Leather Workers and Repairers	80	2	90	\$25,030.00	\$2,770.00	-19%	3	
51-6062.00	Textile Cutting Machine Setters, Operators, and Tenders	80	3	110	\$24,860.00	\$2,600.00	-13%	4	
51-4121.07	Solderers and Brazers	79	2	1,610	\$38,030.00	\$15,770.00	7%	49	★
51-3092.00	Food Batchmakers	78	2	640	\$25,410.00	\$3,150.00	-7%	14	
51-7042.00	Woodworking Machine Setters, Operators, and Tenders, Except Sawing	78	2	900	\$23,040.00	\$780.00	-12%	23	
51-9191.00	Cementing and Gluing Machine Operators and Tenders	78	1	80	\$27,620.00	\$5,360.00	-15%	2	
51-9022.00	Grinding and Polishing Workers, Hand	78	1	270	\$31,060.00	\$8,800.00	4%	5	

Special Occupations:

Top Industries for Graders and Sorters, Agricultural Products					
Industry	NAICS	% of Industry	Employment	Projected Employment	% Change
Grocery and related product wholesalers	424400	15.19%	6,392	6,990	9.35%
Support activities for agriculture and forestry; primary job	115000	10.55%	4,442	4,283	-3.59%
Crop production; primary job	111000	9.50%	4,001	2,652	-33.71%
Grocery stores	445100	8.75%	3,684	4,020	9.11%
Animal production; primary job	112000	8.65%	3,642	3,229	-11.34%
Fruit and vegetable preserving and specialty food manufacturing	311400	7.60%	3,200	2,901	-9.33%



Employment services	561300	7.37%	3,103	3,928	26.56%
Animal slaughtering and processing	311600	6.85%	2,883	3,290	14.13%
Farm product raw material merchant wholesalers	424500	6.73%	2,831	2,111	-25.46%
Federal government, excluding postal service	919999	4.20%	1,767	1,671	-5.47%
Other food manufacturing	311900	3.53%	1,487	1,559	4.85%
Miscellaneous nondurable goods merchant wholesalers	424900	2.05%	861	936	8.72%
Seafood product preparation and packaging	311700	1.87%	786	701	-10.80%
Specialty food stores	445200	1.67%	701	667	-4.91%
Forestry; primary job	113132	1.44%	605	565	-6.60%

Top Industries for Helpers--Production Workers

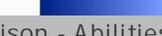
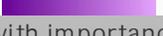
Industry	NAICS	% of Industry	Employment	Projected Employment	% Change
Employment services	561300	22.19%	120,164	142,842	18.87%
Animal slaughtering and processing	311600	5.61%	30,385	36,112	18.85%
Printing and related support activities	323100	4.49%	24,300	19,253	-20.77%
Converted paper product manufacturing	322200	3.76%	20,372	17,096	-16.08%
Plastics product manufacturing	326100	3.35%	18,157	19,247	6.00%
Bakeries and tortilla manufacturing	311800	2.61%	14,121	14,424	2.15%
Architectural and structural metals manufacturing	332300	2.49%	13,499	14,418	6.80%
Other wood product manufacturing	321900	2.45%	13,261	12,496	-5.77%
Fruit and vegetable preserving and specialty food manufacturing	311400	1.83%	9,936	9,009	-9.33%
Motor vehicle parts manufacturing	336300	1.77%	9,606	7,648	-20.39%
Coating, engraving, heat treating, and allied activities	332800	1.68%	9,101	7,459	-18.03%
Household and institutional furniture manufacturing	337120	1.32%	7,166	5,452	-23.91%
Machine shops	332710	1.30%	7,021	5,808	-17.28%
Cement and concrete product manufacturing	327300	1.17%	6,321	6,861	8.55%
Other fabricated metal product manufacturing	332900	1.15%	6,215	5,507	-11.39%



TORQ Analysis of Helpers--Production Workers to Coil Winders, Tapers, and Finishers

ANALYSIS INPUT					
Transfer	Title	O* NET	Filters		
From Title:	Helpers--Production Workers	51-9198.00	Abilities:	Importance Level: 50	Weight: 1
To Title:	Coil Winders, Tapers, and Finishers	51-2021.00	Skills:	Importance Level: 69	Weight: 1
Labor Market Area:	Maine Statewide		Knowledge:	Importance Level: 69	Weight: 1

TORQ RESULTS											
Grand TORQ:					83						
Ability TORQ		Skills TORQ		Knowledge TORQ							
Level	 93	Level	 81	Level	 75						
Gaps To Narrow if Possible		Upgrade These Skills		Knowledge to Add							
Ability	Level	Gap	Imp	Skill	Level	Gap	Imp	Knowledge	Level	Gap	Imp
Oral Expression	44	7	50	No Skills Upgrade Required!				No Knowledge Upgrades Required!			
Finger Dexterity	44	3	62								
<p>LEVEL and IMPT (IMPORTANCE) refer to the Target Coil Winders, Tapers, and Finishers. GAP refers to level difference between Helpers--Production Workers and Coil Winders, Tapers, and Finishers.</p>											

ASK ANALYSIS			
Ability Level Comparison - Abilities with importance scores over 50			
Description	Helpers--Production Workers	Coil Winders, Tapers, and Finishers	Importance
Arm-Hand Steadiness	48 	44 	68 
Finger Dexterity	41 	44 	62 
Manual Dexterity	42 	42 	59 
Control Precision	50 	44 	59 
Near Vision	48 	44 	59 
Oral Comprehension	44 	42 	53 
Oral Expression	37 	44 	50 
Skill Level Comparison - Abilities with importance scores over 69			
Description	Helpers--Production Workers	Coil Winders, Tapers, and Finishers	Importance
Knowledge Level Comparison - Knowledge with importance scores over 69			
Description	Helpers--Production Workers	Coil Winders, Tapers, and Finishers	Importance



Experience & Education Comparison

Related Work Experience Comparison			Required Education Level Comparison		
Description	Helpers--Production Workers	Coil Winders, Tapers, and Finishers	Description	Helpers--Production Workers	Coil Winders, Tapers, and Finishers
10+ years	0%	0%	Doctoral	0%	0%
8-10 years	0%	0%	Professional Degree	0%	0%
6-8 years	0%	0%	Post-Masters Cert	0%	0%
4-6 years	0%	0%	Master's Degree	0%	0%
2-4 years	0%	2%	Post-Bachelor Cert	0%	0%
1-2 years	13%	18%	Bachelors	0%	0%
6-12 months	39%	28%	AA or Equiv	0%	0%
3-6 months	7%	5%	Some College	0%	0%
1-3 months	1%	1%	Post-Secondary Certificate	11%	2%
0-1 month	10%	5%	High School Diploma or GED	51%	51%
None	27%	38%	No HSD or GED	36%	46%
Helpers--Production Workers			Coil Winders, Tapers, and Finishers		
Most Common Educational/Training Requirement:					
Short-term on-the-job training			Short-term on-the-job training		
Job Zone Comparison					
1 - Job Zone One: Little or No Preparation Needed			2 - Job Zone Two: Some Preparation Needed		
<p>No previous work-related skill, knowledge, or experience is needed for these occupations. For example, a person can become a cashier even if he/she has never worked before.</p> <p>These occupations may require a high school diploma or GED certificate. Some may require a formal training course to obtain a license.</p> <p>Employees in these occupations need anywhere from a few days to a few months of training. Usually, an experienced worker could show you how to do the job.</p>			<p>Some previous work-related skill, knowledge, or experience may be helpful in these occupations, but usually is not needed. For example, a teller might benefit from experience working directly with the public, but an inexperienced person could still learn to be a teller with little difficulty.</p> <p>These occupations usually require a high school diploma and may require some vocational training or job-related course work. In some cases, an associate's or bachelor's degree could be needed.</p> <p>Employees in these occupations need anywhere from a few months to one year of working with experienced employees.</p>		

Tasks

Helpers--Production Workers	Coil Winders, Tapers, and Finishers
<p>Core Tasks</p> <p>Generalized Work Activities:</p> <ul style="list-style-type: none"> • Handling and Moving Objects - Using hands and arms in handling, installing, positioning, and moving materials, and manipulating things. • Performing General Physical Activities - Performing physical activities that require considerable use of your arms and legs and moving your whole body, such as climbing, lifting, balancing, walking, stooping, and handling of materials. • Controlling Machines and Processes - Using either control mechanisms or direct physical activity to operate machines or processes 	<p>Core Tasks</p> <p>Generalized Work Activities:</p> <ul style="list-style-type: none"> • Controlling Machines and Processes - Using either control mechanisms or direct physical activity to operate machines or processes (not including computers or vehicles). • Handling and Moving Objects - Using hands and arms in handling, installing, positioning, and moving materials, and manipulating things. • Getting Information - Observing, receiving, and otherwise obtaining information from all relevant sources. • Training and Teaching Others - Identifying the educational needs of others, developing



(not including computers or vehicles).

- Getting Information - Observing, receiving, and otherwise obtaining information from all relevant sources.
- Identifying Objects, Actions, and Events - Identifying information by categorizing, estimating, recognizing differences or similarities, and detecting changes in circumstances or events.

Specific Tasks

Occupation Specific Tasks:

- Attach slings, ropes, and cables to objects such as pipes, hoses, and bundles.
- Break up defective products for reprocessing.
- Change machine gears, using wrenches.
- Clean and lubricate equipment.
- Count finished products to determine if product orders are complete.
- Cut or break flashing from materials or products.
- Dump materials such as prepared ingredients into machine hoppers prior to mixing.
- Examine products to verify conformance to quality standards.
- Fold products and product parts during processing.
- Help production workers by performing duties of lesser skill, such as supplying or holding materials or tools, and cleaning work areas and equipment.
- Lift raw materials, finished products, and packed items, manually or using hoists.
- Load and unload items from machines, conveyors, and conveyances.
- Mark or tag identification on parts.
- Measure amounts of products, lengths of extruded articles, or weights of filled containers to ensure conformance to specifications.
- Mix ingredients according to specified procedures and formulas.
- Observe equipment operations so that malfunctions can be detected, and notify operators of any malfunctions.
- Operate machinery used in the production process, or assist machine operators.
- Pack and store materials and products.
- Pack food products in paper bags and boxes, and stack them in warehouses and coolers.
- Perform minor repairs to machines, such as replacing damaged or worn parts.
- Place products in equipment or on work surfaces for further processing, inspecting, or wrapping.
- Position spouts or chutes of storage bins so that containers can be filled.
- Prepare raw materials for processing.
- Read gauges and charts, and record data obtained.

formal educational or training programs or classes, and teaching or instructing others.

- Communicating with Supervisors, Peers, or Subordinates - Providing information to supervisors, co-workers, and subordinates by telephone, in written form, e-mail, or in person.

Specific Tasks

Occupation Specific Tasks:

- Apply solutions or paints to wired electrical components, using hand tools; and bake components.
- Attach, alter, and trim materials such as wire, insulation, and coils, using hand tools.
- Cut, strip, and bend wire leads at ends of coils, using pliers and wire scrapers.
- Disassemble and assemble motors, and repair and maintain electrical components and machinery parts, using hand tools.
- Examine and test wired electrical components such as motors, armatures, and stators, using measuring devices; and record test results.
- Line slots with sheet insulation, and insert coils into slots.
- Operate or tend wire-coiling machines to wind wire coils used in electrical components such as resistors and transformers, and in electrical equipment and instruments such as bobbins and generators.
- Record production and operational data on specified forms.
- Review work orders and specifications to determine materials needed and types of parts to be processed.
- Select and load materials such as workpieces, objects, and machine parts onto equipment used in coiling processes.
- Stop machines to remove completed components, using hand tools.

Detailed Tasks

Detailed Work Activities:

- examine products or work to verify conformance to specifications
- load or unload material or workpiece into machinery
- maintain or repair industrial or related equipment/machinery
- maintain production or work records
- monitor production machinery/equipment operation to detect problems
- monitor the quantity of assembly output
- operate coil winding machines
- perform repetitive tasks in assembly setting
- read blueprints
- read technical drawings
- read work order, instructions, formulas, or processing charts



- record information such as the number of products tested, meter readings, and dates and times of product production.
- Remove products, machine attachments, and waste material from machines.
- Separate products according to weight, grade, size, and composition of materials used to produce them.
- Signal coworkers to direct them to move products during the production process.
- Start machines or equipment in order to begin production processes.
- Thread ends of items such as thread, cloth, and lace through needles and rollers, and around take-up tubes.
- Tie products in bundles for further processing or shipment, following prescribed procedures.
- Transfer finished products, raw materials, tools, or equipment between storage and work areas of plants and warehouses, by hand or using hand trucks or powered lift trucks.
- Turn valves to regulate flow of liquids or air, to reverse machines, to start pumps, or to regulate equipment.
- Unclamp and hoist full reels from braiding, winding, and other fabricating machines, using power hoists.
- Wash work areas, machines, equipment, vehicles, and products.

- repair or replace electrical wiring, circuits, fixtures, or equipment
- solder electrical or electronic connections or components
- solder metal parts or components together
- test manufactured products or materials
- understand service or repair manuals
- understand technical operating, service or repair manuals
- use electronic calibration devices
- use hand or power tools
- use oscilloscopes in electronics repair
- use precision tools in electronics repair
- use soldering equipment
- use voltmeter, ammeter, or ohmmeter

Technology - Examples

Detailed Tasks

Detailed Work Activities:

- adjust production equipment/machinery setup
- attach or mark identification onto products or containers
- clean equipment or machinery
- clean rooms or work areas
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Employment Base - 2006	1,522	77	-1,445
Projected Employment - 2634	1,365	36	-1,329
Projected Job Growth - 2006-2634	-10.3 %	-53.2 %	-42.9 %
Projected Annual Openings - 2006-2634	37	1	-36
Special			

Special Occupations:



Programs

Related Programs

Industrial Electronics Installer and Repairer

Industrial Electronics Technology/Technician. A program that prepares individuals to apply technical knowledge and skills to assemble, install, operate, maintain, and repair electrical/electronic equipment used in industry and manufacturing. Includes instruction in installing, maintaining and testing various types of equipment.

No information on schools for the program

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Special Occupations:

Top Industries for Coil Winders, Tapers, and Finishers

Industry	NAICS	% of Industry	Employment	Projected Employment	% Change
Electrical equipment manufacturing	335300	33.68%	7,692	5,229	-32.03%
Semiconductor and other electronic component manufacturing	334400	22.01%	5,025	3,514	-30.07%
Nonferrous metal (except aluminum) production and processing	331400	6.62%	1,512	846	-44.04%
Other electrical equipment and component manufacturing	335900	5.64%	1,289	955	-25.87%
Motor vehicle parts manufacturing	336300	4.97%	1,136	723	-36.31%
Navigational, measuring, electromedical, and control instruments manufacturing	334500	4.51%	1,030	789	-23.41%
Spring and wire product manufacturing	332600	2.32%	529	313	-40.78%



Commercial and industrial machinery and equipment (except automotive and electronic) repair and maintenance	811300	2.16%	494	418	-15.34%
Employment services	561300	2.08%	475	481	1.25%
Alumina and aluminum production and processing	331300	1.53%	348	194	-44.32%
Communications equipment manufacturing	334200	1.34%	306	247	-19.36%
Household appliance manufacturing	335200	1.16%	265	161	-39.46%
Electric lighting equipment manufacturing	335100	1.00%	227	136	-40.21%
Steel product manufacturing from purchased steel	331200	0.72%	164	116	-29.20%
Engine, turbine, and power transmission equipment manufacturing	333600	0.35%	80	54	-32.85%

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Animal slaughtering and processing	311600	5.61%	30,385	36,112	18.85%
Printing and related support activities	323100	4.49%	24,300	19,253	-20.77%
Converted paper product manufacturing	322200	3.76%	20,372	17,096	-16.08%
Plastics product manufacturing	326100	3.35%	18,157	19,247	6.00%
Bakeries and tortilla manufacturing	311800	2.61%	14,121	14,424	2.15%
Architectural and structural metals manufacturing	332300	2.49%	13,499	14,418	6.80%
Other wood product manufacturing	321900	2.45%	13,261	12,496	-5.77%
Fruit and vegetable preserving and specialty food manufacturing	311400	1.83%	9,936	9,009	-9.33%
Motor vehicle parts manufacturing	336300	1.77%	9,606	7,648	-20.39%
Coating, engraving, heat treating, and allied activities	332800	1.68%	9,101	7,459	-18.03%
Household and institutional furniture manufacturing	337120	1.32%	7,166	5,452	-23.91%
Machine shops	332710	1.30%	7,021	5,808	-17.28%
Cement and concrete product manufacturing	327300	1.17%	6,321	6,861	8.55%
Other fabricated metal product manufacturing	332900	1.15%	6,215	5,507	-11.39%



TORQ Analysis of Helpers--Production Workers to Textile Cutting Machine Setters, Operators, and Tenders

ANALYSIS INPUT					
Transfer	Title	O*NET	Filters		
From Title:	Helpers--Production Workers	51-9198.00	Abilities:	Importance Level: 50	Weight: 1
To Title:	Textile Cutting Machine Setters, Operators, and Tenders	51-6062.00	Skills:	Importance Level: 69	Weight: 1
Labor Market Area:	Maine Statewide		Knowledge:	Importance Level: 69	Weight: 1

TORQ RESULTS											
Grand TORQ:								80			
Ability TORQ			Skills TORQ				Knowledge TORQ				
Level			88	Level			77	Level			77
Gaps To Narrow if Possible				Upgrade These Skills				Knowledge to Add			
Ability	Level	Gap	Imp	Skill	Level	Gap	Imp	Knowledge	Level	Gap	Imp
Rate Control	46	14	56	No Skills Upgrade Required!				No Knowledge Upgrades Required!			
Reaction Time	51	14	50								
Visual Color Discrimination	46	12	56								
Visualization	50	13	50								
Arm-Hand Steadiness	55	7	65								
Hearing Sensitivity	39	7	50								
Category Flexibility	41	6	50								
Multilimb Coordination	48	4	62								
Manual Dexterity	46	4	59								
Information Ordering	41	4	53								
Finger Dexterity	44	3	56								
Problem Sensitivity	42	3	53								
Speech Clarity	35	3	50								
Depth Perception	37	2	53								
Auditory Attention	41	2	53								
Deductive Reasoning	39	2	50								
Speech Recognition	35	1	53								
LEVEL and IMPT (IMPORTANCE) refer to the Target Textile Cutting Machine Setters, Operators, and Tenders. GAP refers to level difference between Helpers--Production Workers and Textile Cutting Machine Setters, Operators, and Tenders.											



ASK ANALYSIS

Ability Level Comparison - Abilities with importance scores over 50

Description	Helpers--Production Workers	Textile Cutting Machine Setters, Operators, and Tenders	Importance
Arm-Hand Steadiness	48	55	65
Multilimb Coordination	44	48	62
Manual Dexterity	42	46	59
Control Precision	50	50	59
Near Vision	48	48	59
Finger Dexterity	41	44	56
Rate Control	32	46	56
Trunk Strength	48	42	56
Visual Color Discrimination	34	46	56
Oral Comprehension	44	42	53
Problem Sensitivity	39	42	53
Information Ordering	37	41	53
Depth Perception	35	37	53
Auditory Attention	39	41	53
Speech Recognition	34	35	53
Deductive Reasoning	37	39	50
Category Flexibility	35	41	50
Perceptual Speed	42	39	50
Visualization	37	50	50
Reaction Time	37	51	50
Static Strength	39	39	50
Hearing Sensitivity	32	39	50
Speech Clarity	32	35	50

Skill Level Comparison - Abilities with importance scores over 69

Description	Helpers--Production Workers	Textile Cutting Machine Setters, Operators, and Tenders	Importance
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Knowledge Level Comparison - Knowledge with importance scores over 69

Description	Helpers--Production Workers	Textile Cutting Machine Setters, Operators, and Tenders	Importance
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Experience & Education Comparison

Related Work Experience Comparison				Required Education Level Comparison			
Description	Helpers--Production Workers	Textile Cutting Machine Setters, Operators, and Tenders		Description	Helpers--Production Workers	Textile Cutting Machine Setters, Operators, and Tenders	
10+ years	0%	9%					
8-10 years	0%	0%					
6-8 years	0%	0%		Doctoral	0%	0%	
4-6 years	0%	0%		Professional Degree	0%	0%	



2-4 years	0%	0%	Post-Masters Cert	0%	0%
1-2 years	13%	31%	Master's Degree	0%	0%
6-12 months	39%	9%	Post-Bachelor Cert	0%	0%
3-6 months	7%	2%	Bachelors	0%	0%
1-3 months	1%	9%	AA or Equiv	0%	0%
0-1 month	10%	2%	Some College	0%	27%
None	27%	33%	Post-Secondary Certificate	11%	8%
			High School Diploma or GED	51%	43%
			No HSD or GED	36%	20%

Helpers--Production Workers

Textile Cutting Machine Setters, Operators, and Tenders

Most Common Educational/Training Requirement:

Short-term on-the-job training

Moderate-term on-the-job training

Job Zone Comparison

1 - Job Zone One: Little or No Preparation Needed

3 - Job Zone Three: Medium Preparation Needed

No previous work-related skill, knowledge, or experience is needed for these occupations. For example, a person can become a cashier even if he/she has never worked before.

Previous work-related skill, knowledge, or experience is required for these occupations. For example, an electrician must have completed three or four years of apprenticeship or several years of vocational training, and often must have passed a licensing exam, in order to perform the job.

These occupations may require a high school diploma or GED certificate. Some may require a formal training course to obtain a license.

Most occupations in this zone require training in vocational schools, related on-the-job experience, or an associate's degree. Some may require a bachelor's degree.

Employees in these occupations need anywhere from a few days to a few months of training. Usually, an experienced worker could show you how to do the job.

Employees in these occupations usually need one or two years of training involving both on-the-job experience and informal training with experienced workers.

Tasks

Helpers--Production Workers

Textile Cutting Machine Setters, Operators, and Tenders

Core Tasks

Core Tasks

Generalized Work Activities:

Generalized Work Activities:

- Handling and Moving Objects - Using hands and arms in handling, installing, positioning, and moving materials, and manipulating things.
- Performing General Physical Activities - Performing physical activities that require considerable use of your arms and legs and moving your whole body, such as climbing, lifting, balancing, walking, stooping, and handling of materials.
- Controlling Machines and Processes - Using either control mechanisms or direct physical activity to operate machines or processes (not including computers or vehicles).
- Getting Information - Observing, receiving, and otherwise obtaining information from all relevant sources.
- Identifying Objects, Actions, and Events - Identifying information by categorizing, estimating, recognizing differences or similarities, and detecting changes in circumstances or events.

- Inspecting Equipment, Structures, or Material - Inspecting equipment, structures, or materials to identify the cause of errors or other problems or defects.
- Monitor Processes, Materials, or Surroundings - Monitoring and reviewing information from materials, events, or the environment, to detect or assess problems.
- Repairing and Maintaining Mechanical Equipment - Servicing, repairing, adjusting, and testing machines, devices, moving parts, and equipment that operate primarily on the basis of mechanical (not electronic) principles.
- Controlling Machines and Processes - Using either control mechanisms or direct physical activity to operate machines or processes (not including computers or vehicles).
- Getting Information - Observing, receiving, and otherwise obtaining information from all relevant sources.
- Handling and Moving Objects - Using hands and arms in handling, installing, positioning, and moving materials, and manipulating things.

Specific Tasks

Occupation Specific Tasks:

- Attach slings, ropes, and cables to objects

Specific Tasks



such as pipes, hoses, and bundles.

- Break up defective products for reprocessing.
- Change machine gears, using wrenches.
- Clean and lubricate equipment.
- Count finished products to determine if product orders are complete.
- Cut or break flashing from materials or products.
- Dump materials such as prepared ingredients into machine hoppers prior to mixing.
- Examine products to verify conformance to quality standards.
- Fold products and product parts during processing.
- Help production workers by performing duties of lesser skill, such as supplying or holding materials or tools, and cleaning work areas and equipment.
- Lift raw materials, finished products, and packed items, manually or using hoists.
- Load and unload items from machines, conveyors, and conveyances.
- Mark or tag identification on parts.
- Measure amounts of products, lengths of extruded articles, or weights of filled containers to ensure conformance to specifications.
- Mix ingredients according to specified procedures and formulas.
- Observe equipment operations so that malfunctions can be detected, and notify operators of any malfunctions.
- Operate machinery used in the production process, or assist machine operators.
- Pack and store materials and products.
- Pack food products in paper bags and boxes, and stack them in warehouses and coolers.
- Perform minor repairs to machines, such as replacing damaged or worn parts.
- Place products in equipment or on work surfaces for further processing, inspecting, or wrapping.
- Position spouts or chutes of storage bins so that containers can be filled.
- Prepare raw materials for processing.
- Read gauges and charts, and record data obtained.
- Record information such as the number of products tested, meter readings, and dates and times of product production.
- Remove products, machine attachments, and waste material from machines.
- Separate products according to weight, grade, size, and composition of materials used to produce them.
- Signal coworkers to direct them to move products during the production process.
- Start machines or equipment in order to begin production processes.
- Thread ends of items such as thread, cloth,

Occupation Specific Tasks:

- Adjust cutting techniques to types of fabrics and styles of garments.
- Adjust machine controls, such as heating mechanisms, tensions, and/or speeds to produce specified products.
- Clean, oil, and lubricate machines, using air hoses, cleaning solutions, rags, oilcans, and grease guns.
- Confer with coworkers to obtain information about orders, processes, or problems.
- Inspect machinery to determine whether repairs are needed.
- Inspect products to ensure that specifications are met and to determine whether machines require adjustment.
- Install, level, and align components, such as gears, chains, guides, dies, cutters, and/or needles to set up machinery for operation.
- Notify supervisors of mechanical malfunctions.
- Operate machines for test runs to verify adjustments and to obtain product samples.
- Operate machines to cut multiple layers of fabric into parts for articles such as canvas goods, house furnishings, garments, hats, or stuffed toys.
- Place patterns on top of layers of fabric and cut fabric following patterns, using electric or manual knives, cutters, or computer numerically controlled cutting devices.
- Program electronic equipment.
- Record information about work completed and machine settings.
- Repair or replace worn or defective parts or components, using hand tools.
- Start machines, monitor operations, and make adjustments as needed.
- Stop machines when specified amounts of product have been produced.
- Study guides, samples, charts, and specification sheets; or confer with supervisors or engineering staff to determine setup requirements.
- Thread yarn, thread, or fabric through guides, needles, and rollers of machines.

Detailed Tasks

Detailed Work Activities:

- adjust production equipment/machinery setup
- clean equipment or machinery
- confer with engineering, technical or manufacturing personnel
- examine products or work to verify conformance to specifications
- inspect machinery or equipment to determine adjustments or repairs needed
- install equipment or attachments on machinery or related structures
- load or unload material or workpieces into



and lace through needles and rollers, and around take-up tubes.

- Tie products in bundles for further processing or shipment, following prescribed procedures.
- Transfer finished products, raw materials, tools, or equipment between storage and work areas of plants and warehouses, by hand or using hand trucks or powered lift trucks.
- Turn valves to regulate flow of liquids or air, to reverse machines, to start pumps, or to regulate equipment.
- Unclamp and hoist full reels from braiding, winding, and other fabricating machines, using power hoists.
- Wash work areas, machines, equipment, vehicles, and products.

Detailed Tasks

Detailed Work Activities:

- adjust production equipment/machinery setup
- attach or mark identification onto products or containers
- clean equipment or machinery
- clean rooms or work areas
- examine products or work to verify conformance to specifications
- load or unload material or workpiece into machinery
- load, unload, or stack containers, materials, or products
- lubricate machinery, equipment, or parts
- maintain or repair industrial or related equipment/machinery
- maintain production or work records
- measure, weigh, or count products or materials
- mix paint, ingredients, or chemicals, according to specifications
- monitor production machinery/equipment operation to detect problems
- move or fit heavy objects
- operate food processing production equipment/machinery
- operate hoist, winch, or hydraulic boom
- operate metal or plastic fabricating equipment/machinery
- operate ore refining/foundry equipment/machinery
- operate packaging or banding machine or equipment
- operate pulp or paper making equipment
- operate textile production equipment/machinery
- operate woodworking equipment/machinery
- package goods for shipment or storage
- perform repetitive tasks in assembly setting

- load or unload material or workpiece into machinery
- maintain consistent production quality
- maintain or repair industrial or related equipment/machinery
- monitor production machinery/equipment operation to detect problems
- move or fit heavy objects
- operate textile production equipment/machinery
- perform safety inspections in manufacturing or industrial setting
- read specifications
- read work order, instructions, formulas, or processing charts
- recognize characteristics of cloth or fabric
- set up production equipment or machinery
- understand technical operating, service or repair manuals
- use hand or power tools
- use precision measuring tools or equipment

Technology - Examples



- perform safety inspections in manufacturing or industrial setting
- read work order, instructions, formulas, or processing charts
- signal directions or warnings to coworkers
- sort manufacturing materials or products
- wrap products

Technology - Examples

Data base user interface and query software

- Data entry software

Spreadsheet software

- Microsoft Excel

Word processing software

- Microsoft Word

Tools - Examples

- Adjustable wrenches
- Hand files
- Industrial platform scales
- Forklifts
- Grease guns
- Claw hammers
- Handtrucks
- Power hoists
- Hydraulic booms
- Hand jacks
- Label-making machines
- Platform ladders
- Locking pliers
- Personal computers
- Planing tools
- Jackhammers
- Power drills
- Power grinders
- Power nail guns
- Power sanders
- Power saws
- Pressure wands



- Hand saws
- Phillips head screwdrivers
- Skid steer loaders
- Material-hoisting slings
- Power staple guns
- Measuring tapes
- Utility knives
- Industrial vacuum cleaners
- Hydraulic winches

Labor Market Comparison

Maine Department of Labor.

Description	Helpers--Production Workers	Textile Cutting Machine Setters, Operators, and Tenders	Difference
Median Wage	\$ 22,260	\$ 24,860	\$ 2,600
10th Percentile Wage	\$ 17,160	\$ 15,530	\$(1,630)
25th Percentile Wage	N/A	N/A	N/A
75th Percentile Wage	\$ 25,210	\$ 29,340	\$ 4,130
90th Percentile Wage	\$ 30,870	\$ 33,940	\$ 3,070
Mean Wage	\$ 23,130	\$ 24,400	\$ 1,270
Total Employment - 2625	1,490	110	-1,380
Employment Base - 2006	1,522	104	-1,418
Projected Employment - 2634	1,365	90	-1,275
Projected Job Growth - 2006-2634	-10.3 %	-13.5 %	-3.2 %
Projected Annual Openings - 2006-2634	37	4	-33
Special			

Special Occupations:

National Job Posting Trends

Trend for Helpers--Production Workers and Textile Cutting Machine Setters, Operators, and Tenders



Data from [Indeed](http://Indeed.com)

Programs			
Related Programs			
Industrial Machinery Main. and Repairer			
Industrial Mechanics and Maintenance Technology. A program that prepares individuals to apply technical knowledge and skills to repair and maintain industrial machinery and equipment such as cranes, pumps, engines and motors, pneumatic tools, conveyor systems, production machinery, marine deck machinery, and steam propulsion, refinery, and pipeline-distribution systems.			
Institution	Address	City	URL
Kennebec Valley Community College	92 Western Ave	Fairfield	www.kvcc.me.edu

Maine Statewide Promotion Opportunities for Helpers--Production Workers									
O*NET Code	Title	Grand TORQ	Job Zone	Employment	Median Wage	Difference	Growth	Annual Job Openings	Special
51-9198.00	Helpers--Production Workers	100	1	1,490	\$22,260.00	\$0.00	-10%	37	
51-6031.00	Sewing Machine Operators	83	1	1,080	\$22,440.00	\$180.00	-8%	10	
51-2021.00	Coil Winders, Tapers, and Finishers	83	2	90	\$31,910.00	\$9,650.00	-53%	1	
43-5053.00	Postal Service Mail Sorters, Processors, and Processing Machine Operators	80	2	970	\$41,950.00	\$19,690.00	-12%	10	



51-6041.00	Shoe and Leather Workers and Repairers	80	2	90	\$25,030.00	\$2,770.00	-19%	3	
51-6062.00	Textile Cutting Machine Setters, Operators, and Tenders	80	3	110	\$24,860.00	\$2,600.00	-13%	4	
51-2092.00	Team Assemblers	80	2	3,850	\$23,730.00	\$1,470.00	-7%	82	
51-4121.06	Welders, Cutters, and Welder Fitters	80	2	1,610	\$38,030.00	\$15,770.00	7%	49	★
43-9051.00	Mail Clerks and Mail Machine Operators, Except Postal Service	80	1	490	\$23,250.00	\$990.00	-19%	13	
51-7021.00	Furniture Finishers	80	2	70	\$28,550.00	\$6,290.00	-31%	2	
51-4121.07	Solderers and Brazers	79	2	1,610	\$38,030.00	\$15,770.00	7%	49	★
51-3092.00	Food Batchmakers	78	2	640	\$25,410.00	\$3,150.00	-7%	14	
51-9022.00	Grinding and Polishing Workers, Hand	78	1	270	\$31,060.00	\$8,800.00	4%	5	
51-7042.00	Woodworking Machine Setters, Operators, and Tenders, Except Sawing	78	2	900	\$23,040.00	\$780.00	-12%	23	
51-9191.00	Cementing and Gluing Machine Operators and Tenders	78	1	80	\$27,620.00	\$5,360.00	-15%	2	

Special Occupations:

Top Industries for Textile Cutting Machine Setters, Operators, and Tenders						
Industry	NAICS	% of Industry	Employment	Projected Employment	% Change	
Cut and sew apparel manufacturing	315200	27.94%	5,222	2,205	-57.77%	
Textile furnishings mills	314100	9.79%	1,829	1,657	-9.40%	
Other textile product mills	314900	9.59%	1,792	1,610	-10.18%	
Household and institutional furniture manufacturing	337120	9.27%	1,732	1,318	-23.91%	
Fabric mills	313200	8.18%	1,528	1,079	-29.38%	
Textile and fabric finishing and fabric coating mills	313300	4.31%	806	497	-38.33%	
Apparel accessories and other apparel manufacturing	315900	3.33%	623	435	-30.10%	
Fiber, yarn, and thread mills	313100	3.21%	600	505	-15.78%	
Other furniture related product manufacturing	337900	2.62%	490	511	4.40%	



Apparel knitting mills	315100	2.27%	424	265	-37.50%
Apparel, piece goods, and notions merchant wholesalers	424300	1.88%	351	358	1.97%
Motor vehicle parts manufacturing	336300	1.21%	225	179	-20.39%
Management of companies and enterprises	551100	1.14%	212	245	15.28%
Furniture and home furnishing merchant wholesalers	423200	1.06%	197	217	9.75%
Electronic shopping and mail-order houses	454100	1.04%	194	243	25.08%

Top Industries for Helpers--Production Workers					
Industry	NAICS	% of Industry	Employment	Projected Employment	% Change
Employment services	561300	22.19%	120,164	142,842	18.87%
Animal slaughtering and processing	311600	5.61%	30,385	36,112	18.85%
Printing and related support activities	323100	4.49%	24,300	19,253	-20.77%
Converted paper product manufacturing	322200	3.76%	20,372	17,096	-16.08%
Plastics product manufacturing	326100	3.35%	18,157	19,247	6.00%
Bakeries and tortilla manufacturing	311800	2.61%	14,121	14,424	2.15%
Architectural and structural metals manufacturing	332300	2.49%	13,499	14,418	6.80%
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Fruit and vegetable preserving and specialty food manufacturing	311400	1.83%	9,936	9,009	-9.33%
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Household and institutional furniture manufacturing	337120	1.32%	7,166	5,452	-23.91%
Machine shops	332710	1.30%	7,021	5,808	-17.28%
Cement and concrete product manufacturing	327300	1.17%	6,321	6,861	8.55%
Other fabricated metal product manufacturing	332900	1.15%	6,215	5,507	-11.39%

TORQ Analysis of Helpers--Production Workers to Shoe and Leather Workers and Repairers

ANALYSIS INPUT					
Transfer	Title	O*NET	Filters		
From Title:	Helpers--Production Workers	51-9198.00	Abilities:	Importance Level: 50	Weight: 1
To Title:	Shoe and Leather Workers and Repairers	51-6041.00	Skills:	Importance Level: 69	Weight: 1
Labor Market Area:	Maine Statewide		Knowledge:	Importance Level: 69	Weight: 1

TORQ RESULTS											
Grand TORQ:					80						
Ability TORQ		Skills TORQ		Knowledge TORQ							
Level	 92	Level	 79	Level	 67						
Gaps To Narrow if Possible		Upgrade These Skills		Knowledge to Add							
Ability	Level	Gap	Impt	Skill	Level	Gap	Impt	Knowledge	Level	Gap	Impt
Arm-Hand Steadiness	53	5	53	No Skills Upgrade Required!				No Knowledge Upgrades Required!			
Finger Dexterity	42	1	56								
LEVEL and IMPT (IMPORTANCE) refer to the Target Shoe and Leather Workers and Repairers. GAP refers to level difference between Helpers--Production Workers and Shoe and Leather Workers and Repairers.											

ASK ANALYSIS			
Ability Level Comparison - Abilities with importance scores over 50			
Description	Helpers--Production Workers	Shoe and Leather Workers and Repairers	Importance
Manual Dexterity	42 	42 	56 
Finger Dexterity	41 	42 	56 
Near Vision	48 	46 	56 
Arm-Hand Steadiness	48 	53 	53 
Control Precision	50 	35 	50 
Multilimb Coordination	44 	32 	50 
Skill Level Comparison - Abilities with importance scores over 69			
Description	Helpers--Production Workers	Shoe and Leather Workers and Repairers	Importance
Knowledge Level Comparison - Knowledge with importance scores over 69			
Description	Helpers--Production Workers	Shoe and Leather Workers and Repairers	Importance



Experience & Education Comparison

Related Work Experience Comparison			Required Education Level Comparison		
Description	Helpers--Production Workers	Shoe and Leather Workers and Repairers	Description	Helpers--Production Workers	Shoe and Leather Workers and Repairers
10+ years	0%	0%	Doctoral	0%	1%
8-10 years	0%	0%	Professional Degree	0%	0%
6-8 years	0%	0%	Post-Masters Cert	0%	0%
4-6 years	0%	8%	Master's Degree	0%	0%
2-4 years	0%	3%	Post-Bachelor Cert	0%	0%
1-2 years	13%	15%	Bachelors	0%	0%
6-12 months	39%	4%	AA or Equiv	0%	2%
3-6 months	7%	10%	Some College	0%	21%
1-3 months	1%	11%	Post-Secondary Certificate	11%	0%
0-1 month	10%	2%	High School Diploma or GED	51%	56%
None	27%	43%	No HSD or GED	36%	17%

Helpers--Production Workers

Shoe and Leather Workers and Repairers

Most Common Educational/Training Requirement:

Short-term on-the-job training

Long-term on-the-job training

Job Zone Comparison

1 - Job Zone One: Little or No Preparation Needed

2 - Job Zone Two: Some Preparation Needed

No previous work-related skill, knowledge, or experience is needed for these occupations. For example, a person can become a cashier even if he/she has never worked before.

Some previous work-related skill, knowledge, or experience may be helpful in these occupations, but usually is not needed. For example, a teller might benefit from experience working directly with the public, but an inexperienced person could still learn to be a teller with little difficulty.

These occupations may require a high school diploma or GED certificate. Some may require a formal training course to obtain a license.

These occupations usually require a high school diploma and may require some vocational training or job-related course work. In some cases, an associate's or bachelor's degree could be needed.

Employees in these occupations need anywhere from a few days to a few months of training. Usually, an experienced worker could show you how to do the job.

Employees in these occupations need anywhere from a few months to one year of working with experienced employees.

Tasks

Helpers--Production Workers

Shoe and Leather Workers and Repairers

Core Tasks

Core Tasks

Generalized Work Activities:

Generalized Work Activities:

- Handling and Moving Objects - Using hands and arms in handling, installing, positioning, and moving materials, and manipulating things.
- Performing General Physical Activities - Performing physical activities that require considerable use of your arms and legs and moving your whole body, such as climbing, lifting, balancing, walking, stooping, and handling of materials.
- Controlling Machines and Processes - Using either control mechanisms or direct physical activity to operate machines or processes (not including computers or vehicles).

- Handling and Moving Objects - Using hands and arms in handling, installing, positioning, and moving materials, and manipulating things.
- Controlling Machines and Processes - Using either control mechanisms or direct physical activity to operate machines or processes (not including computers or vehicles).
- Inspecting Equipment, Structures, or Material - Inspecting equipment, structures, or materials to identify the cause of errors or other problems or defects.
- Getting Information - Observing, receiving, and otherwise obtaining information from all



- Getting Information - Observing, receiving, and otherwise obtaining information from all relevant sources.
- Identifying Objects, Actions, and Events - Identifying information by categorizing, estimating, recognizing differences or similarities, and detecting changes in circumstances or events.

Specific Tasks

Occupation Specific Tasks:

- Attach slings, ropes, and cables to objects such as pipes, hoses, and bundles.
- Break up defective products for reprocessing.
- Change machine gears, using wrenches.
- Clean and lubricate equipment.
- Count finished products to determine if product orders are complete.
- Cut or break flashing from materials or products.
- Dump materials such as prepared ingredients into machine hoppers prior to mixing.
- Examine products to verify conformance to quality standards.
- Fold products and product parts during processing.
- Help production workers by performing duties of lesser skill, such as supplying or holding materials or tools, and cleaning work areas and equipment.
- Lift raw materials, finished products, and packed items, manually or using hoists.
- Load and unload items from machines, conveyors, and conveyances.
- Mark or tag identification on parts.
- Measure amounts of products, lengths of extruded articles, or weights of filled containers to ensure conformance to specifications.
- Mix ingredients according to specified procedures and formulas.
- Observe equipment operations so that malfunctions can be detected, and notify operators of any malfunctions.
- Operate machinery used in the production process, or assist machine operators.
- Pack and store materials and products.
- Pack food products in paper bags and boxes, and stack them in warehouses and coolers.
- Perform minor repairs to machines, such as replacing damaged or worn parts.
- Place products in equipment or on work surfaces for further processing, inspecting, or wrapping.
- Position spouts or chutes of storage bins so that containers can be filled.
- Prepare raw materials for processing.
- Read gauges and charts, and record data obtained.
- Record information such as the number of

relevant sources.

- Evaluating Information to Determine Compliance with Standards - Using relevant information and individual judgment to determine whether events or processes comply with laws, regulations, or standards.
- Monitor Processes, Materials, or Surroundings - Monitoring and reviewing information from materials, events, or the environment, to detect or assess problems.

Specific Tasks

Occupation Specific Tasks:

- Align and stitch or glue materials such as fabric, fleece, leather, or wood, in order to join parts.
- Attach accessories or ornamentation to decorate or protect products.
- Attach insoles to shoe lasts, affix shoe uppers, and apply heels and outsoles.
- Cement, nail, or sew soles and heels to shoes.
- Check the texture, color, and strength of leather to ensure that it is adequate for a particular purpose.
- Clean and polish shoes.
- Construct, decorate, or repair leather products according to specifications, using sewing machines, needles and thread, leather lacing, glue, clamps, hand tools, and/or rivets.
- Cut out parts following patterns or outlines, using knives, shears, scissors, or machine presses.
- Cut, insert, position, and secure paddings, cushioning, and/or linings, using stitches or glue.
- Draw patterns, using measurements, designs, plaster casts, or customer specifications, and position or outline patterns on work pieces.
- Dress and otherwise finish boots or shoes, as by trimming the edges of new soles and heels to the shoe shape.
- Drill or punch holes; then insert or attach metal rings, handles, and fastening hardware such as buckles.
- Dye, soak, polish, paint, stamp, stitch, stain, buff, or engrave leather or other materials to obtain desired effects, decorations, or shapes.
- Estimate the costs of requested products or services such as custom footwear or footwear repair, and receive payment from customers.
- Inspect articles for defects, and remove damaged or worn parts, using hand tools.
- Make, modify, and repair orthopedic or therapeutic footwear according to doctors' prescriptions, or modify existing footwear for people with foot problems and special needs.
- Measure customers for fit, and discuss with them the type of footwear to be made, recommending details such as leather quality.



products tested, meter readings, and dates and times of product production.

- Remove products, machine attachments, and waste material from machines.
- Separate products according to weight, grade, size, and composition of materials used to produce them.
- Signal coworkers to direct them to move products during the production process.
- Start machines or equipment in order to begin production processes.
- Thread ends of items such as thread, cloth, and lace through needles and rollers, and around take-up tubes.
- Tie products in bundles for further processing or shipment, following prescribed procedures.
- Transfer finished products, raw materials, tools, or equipment between storage and work areas of plants and warehouses, by hand or using hand trucks or powered lift trucks.
- Turn valves to regulate flow of liquids or air, to reverse machines, to start pumps, or to regulate equipment.
- Unclamp and hoist full reels from braiding, winding, and other fabricating machines, using power hoists.
- Wash work areas, machines, equipment, vehicles, and products.

Detailed Tasks

Detailed Work Activities:

- adjust production equipment/machinery setup
- attach or mark identification onto products or containers
- clean equipment or machinery
- clean rooms or work areas
- examine products or work to verify conformance to specifications
- load or unload material or workpiece into machinery
- load, unload, or stack containers, materials, or products
- lubricate machinery, equipment, or parts
- maintain or repair industrial or related equipment/machinery
- maintain production or work records
- measure, weigh, or count products or materials
- mix paint, ingredients, or chemicals, according to specifications
- monitor production machinery/equipment operation to detect problems
- move or fit heavy objects
- operate food processing production equipment/machinery
- operate hoist, winch, or hydraulic boom
- operate metal or plastic fabricating equipment/machinery

- Nail heel and toe cleats onto shoes.
- Place shoes on lasts to remove soles and heels, using knives and/or pliers.
- Prepare inserts, heel pads, and lifts from casts of customers' feet.
- Re-sew seams, and replace handles and linings of suitcases or handbags.
- Read prescriptions or specifications, and take measurements to establish the type of product to be made, using calipers, tape measures, or rules.
- Repair and recondition leather products such as trunks, luggage, shoes, saddles, belts, purses, and baseball gloves.
- Repair or replace soles, heels, and other parts of footwear, using sewing, buffing and other shoe repair machines, materials, and equipment.
- Select materials and patterns, and trace patterns onto materials to be cut out.
- Shape shoe heels with a knife, and sand them on a buffing wheel for smoothness.
- Stretch shoes, first dampening parts; then inserting and twisting parts, using an adjustable stretcher.

Detailed Tasks

Detailed Work Activities:

- apply adhesives, caulking, sealants, or coatings
- calculate dimensions or specifications of fabric or leather pattern
- cut or trim fabric or leather
- draw master pattern for fabric or leather goods
- dye fabric or leather articles
- engrave variety of materials and products
- examine products or work to verify conformance to specifications
- fabricate, assemble, or disassemble manufactured products by hand
- measure and mark reference points or cutting lines on workpieces
- measure, weigh, or count products or materials
- operate sewing machine
- read specifications
- read tape measure
- read work order, instructions, formulas, or processing charts
- repair tears or defects in fabrics, garments, or leather products
- sew by hand
- understand technical operating, service or repair manuals
- use hand or power tools
- use leather fabrication or repair equipment
- use portable electric fabric cutter



- operate ore refining/foundry equipment/machinery
- operate packaging or banding machine or equipment
- operate pulp or paper making equipment
- operate textile production equipment/machinery
- operate woodworking equipment/machinery
- package goods for shipment or storage
- perform repetitive tasks in assembly setting
- perform safety inspections in manufacturing or industrial setting
- read work order, instructions, formulas, or processing charts
- signal directions or warnings to coworkers
- sort manufacturing materials or products
- wrap products

Technology - Examples

Data base user interface and query software

- Data entry software

Spreadsheet software

- Microsoft Excel

Word processing software

- Microsoft Word

Tools - Examples

- Adjustable wrenches
- Hand files
- Industrial platform scales
- Forklifts
- Grease guns
- Claw hammers
- Handtrucks
- Power hoists
- Hydraulic booms
- Hand jacks
- Label-making machines
- Platform ladders
- Locking pliers
- Personal computers
- Planing tools
- Jackhammers

- use shoe repair materials

Technology - Examples



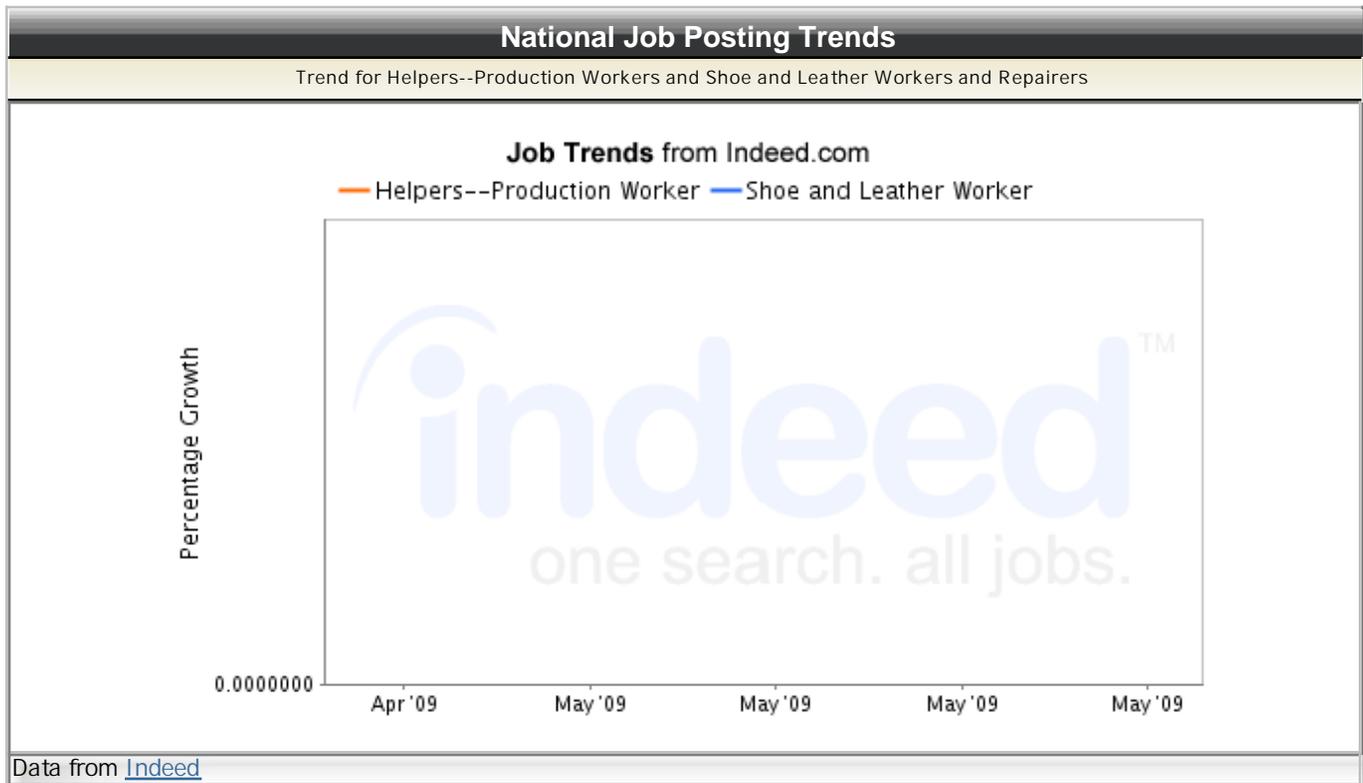
- Power drills
- Power grinders
- Power nail guns
- Power sanders
- Power saws
- Pressure wands
- Hand saws
- Phillips head screwdrivers
- Skid steer loaders
- Material-hoisting slings
- Power staple guns
- Measuring tapes
- Utility knives
- Industrial vacuum cleaners
- Hydraulic winches

Labor Market Comparison

Maine Department of Labor.

Description	Helpers--Production Workers	Shoe and Leather Workers and Repairers	Difference
Median Wage	\$ 22,260	\$ 25,030	\$ 2,770
10th Percentile Wage	\$ 17,160	\$ 18,110	\$ 950
25th Percentile Wage	N/A	N/A	N/A
75th Percentile Wage	\$ 25,210	\$ 29,300	\$ 4,090
90th Percentile Wage	\$ 30,870	\$ 35,580	\$ 4,710
Mean Wage	\$ 23,130	\$ 25,870	\$ 2,740
Total Employment - 2625	1,490	90	-1,400
Employment Base - 2006	1,522	151	-1,371
Projected Employment - 2634	1,365	122	-1,243
Projected Job Growth - 2006-2634	-10.3 %	-19.2 %	-8.9 %
Projected Annual Openings - 2006-2634	37	3	-34
Special			

Special Occupations:



Programs

Related Programs

Leatherworkers and Upholsterers, Other
Leatherworking and Upholstery, Other. Any instructional program in leatherworking and upholstering not listed above. No information on schools for the program
Shoe, Boot and Leather Repairer
Shoe, Boot and Leather Repair. A program that prepares individuals to apply technical knowledge and skills to repair all types of footwear, including replacement and mending of worn parts; repairing orthopedic footwear, refinishing and dyeing leather; and repairing other leather goods such as handbags, belts, and luggage. No information on schools for the program

Maine Statewide Promotion Opportunities for Helpers--Production Workers

O*NET Code	Title	Grand TORQ	Job Zone	Employment	Median Wage	Difference	Growth	Annual Job Openings	Special
51-9198.00	Helpers--Production Workers	100	1	1,490	\$22,260.00	\$0.00	-10%	37	
51-6031.00	Sewing Machine Operators	83	1	1,080	\$22,440.00	\$180.00	-8%	10	
51-2021.00	Coil Winders, Tapers, and Finishers	83	2	90	\$31,910.00	\$9,650.00	-53%	1	



43-5053.00	Postal Service Mail Sorters, Processors, and Processing Machine Operators	80	2	970	\$41,950.00	\$19,690.00	-12%	10	
51-6041.00	Shoe and Leather Workers and Repairers	80	2	90	\$25,030.00	\$2,770.00	-19%	3	
51-6062.00	Textile Cutting Machine Setters, Operators, and Tenders	80	3	110	\$24,860.00	\$2,600.00	-13%	4	
51-2092.00	Team Assemblers	80	2	3,850	\$23,730.00	\$1,470.00	-7%	82	
51-4121.06	Welders, Cutters, and Welder Fitters	80	2	1,610	\$38,030.00	\$15,770.00	7%	49	★
43-9051.00	Mail Clerks and Mail Machine Operators, Except Postal Service	80	1	490	\$23,250.00	\$990.00	-19%	13	
51-7021.00	Furniture Finishers	80	2	70	\$28,550.00	\$6,290.00	-31%	2	
51-4121.07	Solderers and Brazers	79	2	1,610	\$38,030.00	\$15,770.00	7%	49	★
51-3092.00	Food Batchmakers	78	2	640	\$25,410.00	\$3,150.00	-7%	14	
51-9022.00	Grinding and Polishing Workers, Hand	78	1	270	\$31,060.00	\$8,800.00	4%	5	
51-7042.00	Woodworking Machine Setters, Operators, and Tenders, Except Sawing	78	2	900	\$23,040.00	\$780.00	-12%	23	
51-9191.00	Cementing and Gluing Machine Operators and Tenders	78	1	80	\$27,620.00	\$5,360.00	-15%	2	

Special Occupations:

Top Industries for Shoe and Leather Workers and Repairers

Industry	NAICS	% of Industry	Employment	Projected Employment	% Change
Self-employed workers, primary job	000601	49.81%	7,758	8,265	6.54%
Footwear manufacturing	316200	12.71%	1,980	927	-53.16%
Personal and household goods repair and maintenance	811400	12.44%	1,937	1,798	-7.19%
Self-employed workers, secondary job	000602	2.57%	401	399	-0.45%
Shoe stores	448200	2.48%	386	322	-16.58%
Apparel accessories and other apparel manufacturing	315900	0.90%	140	98	-30.10%

Clothing stores	448100	0.61%	95	99	4.97%
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Top Industries for Helpers--Production Workers					
Industry	NAICS	% of Industry	Employment	Projected Employment	% Change
Employment services	561300	22.19%	120,164	142,842	18.87%
Animal slaughtering and processing	311600	5.61%	30,385	36,112	18.85%
Printing and related support activities	323100	4.49%	24,300	19,253	-20.77%
Converted paper product manufacturing	322200	3.76%	20,372	17,096	-16.08%
Plastics product manufacturing	326100	3.35%	18,157	19,247	6.00%
Bakeries and tortilla manufacturing	311800	2.61%	14,121	14,424	2.15%
Architectural and structural metals manufacturing	332300	2.49%	13,499	14,418	6.80%
Other wood product manufacturing	321900	2.45%	13,261	12,496	-5.77%
Fruit and vegetable preserving and specialty food manufacturing	311400	1.83%	9,936	9,009	-9.33%
Motor vehicle parts manufacturing	336300	1.77%	9,606	7,648	-20.39%
Coating, engraving, heat treating, and allied activities	332800	1.68%	9,101	7,459	-18.03%
Household and institutional furniture manufacturing	337120	1.32%	7,166	5,452	-23.91%
Machine shops	332710	1.30%	7,021	5,808	-17.28%
Cement and concrete product manufacturing	327300	1.17%	6,321	6,861	8.55%
Other fabricated metal product manufacturing	332900	1.15%	6,215	5,507	-11.39%

Industry & Occupational Data Sources

TORQ Results: The TORQ Scores is based upon an proprietary algorithm applied against Knowledge, Skills and Ability levels and importance derived from O*NET 12.

ASK Analysis, Experience & Education Levels and Tasks: O*Net 12

Labor Market Comparisons Occupational Projections data from Maine Department of Labor

National Posting Trends Indeed.com

Labor Pool & Promotions Opportunities: Occupational Projections data from Maine Department of Labor

Top Industries: Occupational Employment Statistics program (U.S. Bureau of Labor Statistics)