



TORQ Analysis of Packaging and Filling Machine Operators and Tenders to Woodworking Machine Setters, Operators, and Tenders, Except Sawing

ANALYSIS INPUT					
Transfer	Title	O*NET	Filters		
From Title:	Packaging and Filling Machine Operators and Tenders	51-9111.00	Abilities:	Importance Level: 50	Weight: 1
To Title:	Woodworking Machine Setters, Operators, and Tenders, Except Sawing	51-7042.00	Skills:	Importance Level: 69	Weight: 1
Labor Market Area:	Maine Statewide		Knowledge:	Importance Level: 69	Weight: 1

TORQ RESULTS											
Grand TORQ:								88			
Ability TORQ			Skills TORQ				Knowledge TORQ				
Level		91	Level		88	Level		84			
Gaps To Narrow if Possible				Upgrade These Skills				Knowledge to Add			
Ability	Level	Gap	Impt	Skill	Level	Gap	Impt	Knowledge	Level	Gap	Impt
Oral Comprehension	51	7	62	No Skills Upgrade Required!				No Knowledge Upgrades Required!			
Arm-Hand Steadiness	48	6	59								
Speech Recognition	41	4	53								
Rate Control	44	3	59								
Visualization	51	3	56								
Information Ordering	44	2	53								
<p>LEVEL and IMPT (IMPORTANCE) refer to the Target Woodworking Machine Setters, Operators, and Tenders, Except Sawing. GAP refers to level difference between Packaging and Filling Machine Operators and Tenders and Woodworking Machine Setters, Operators, and Tenders, Except Sawing.</p>											

ASK ANALYSIS			
Ability Level Comparison - Abilities with importance scores over 50			
Description	Packaging and Filling Machine Operators and Tenders	Woodworking Machine Setters, Operators, and Tenders, Except Sawing	Importance
Reaction Time	60	60	68
Control Precision	60	51	65
Near Vision	60	51	65
Oral Comprehension	44	51	62
Manual Dexterity	53	48	62
Problem Sensitivity	48	44	59



Arm-Hand Steadiness	42	48	59
Rate Control	41	44	59
Trunk Strength	50	42	59
Auditory Attention	60	50	59
Oral Expression	44	44	56
Flexibility of Closure	57	37	56
Perceptual Speed	73	39	56
Visualization	48	51	56
Selective Attention	60	53	56
Multilimb Coordination	48	44	56
Response Orientation	50	46	56
Static Strength	60	42	56
Far Vision	50	44	56
Speech Clarity	41	35	56
Information Ordering	42	44	53
Finger Dexterity	55	44	53
Extent Flexibility	57	39	53
Speech Recognition	37	41	53
Written Comprehension	44	44	50
Deductive Reasoning	44	42	50
Inductive Reasoning	46	41	50
Visual Color Discrimination	41	41	50
Depth Perception	41	41	50

Skill Level Comparison - Abilities with importance scores over 69

Description	Packaging and Filling Machine Operators and Tenders	Woodworking Machine Setters, Operators, and Tenders, Except Sawing	Importance
-------------	-----------------------------------------------------	--------------------------------------------------------------------	------------

Knowledge Level Comparison - Knowledge with importance scores over 69

Description	Packaging and Filling Machine Operators and Tenders	Woodworking Machine Setters, Operators, and Tenders, Except Sawing	Importance
-------------	-----------------------------------------------------	--------------------------------------------------------------------	------------

Experience & Education Comparison

Related Work Experience Comparison			Required Education Level Comparison		
Description	Packaging and Filling Machine Operators and Tenders	Woodworking Machine Setters, Operators, and Tenders, Except Sawing	Description	Packaging and Filling Machine Operators and Tenders	Woodworking Machine Setters, Operators, and Tenders, Except Sawing
10+ years	0%	1%	Doctoral	0%	0%
8-10 years	0%	0%	Professional Degree	0%	0%
6-8 years	14%	0%	Post-Masters Cert	0%	8%
4-6 years	0%	0%	Master's Degree	0%	0%
2-4 years	0%	2%	Post-Bachelor Cert	0%	0%
1-2 years	0%	24%	Bachelors	0%	0%

14% 8%



6-12 months	54%	26%	Some College	0%	0%
3-6 months	0%	14%	Post-Secondary Certificate	0%	3%
1-3 months	0%	19%	High School Diploma or GED	71%	70%
0-1 month	5%	2%	No HSD or GED	13%	8%
None	25%	9%			

Packaging and Filling Machine Operators and Tenders	Woodworking Machine Setters, Operators, and Tenders, Except Sawing
Most Common Educational/Training Requirement:	
Short-term on-the-job training	Moderate-term on-the-job training
Job Zone Comparison	
2 - Job Zone Two: Some Preparation Needed	2 - Job Zone Two: Some Preparation Needed
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.	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 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.	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 months to one year of working with experienced employees.	Employees in these occupations need anywhere from a few months to one year of working with experienced employees.

Tasks

Packaging and Filling Machine Operators and Tenders	Woodworking Machine Setters, Operators, and Tenders, Except Sawing
Core Tasks	Core Tasks
<p>Generalized Work Activities:</p> <ul style="list-style-type: none"> Communicating with Supervisors, Peers, or Subordinates - Providing information to supervisors, co-workers, and subordinates by telephone, in written form, e-mail, or in person. 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. 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. Making Decisions and Solving Problems - Analyzing information and evaluating results to choose the best solution and solve problems. Scheduling Work and Activities - Scheduling events, programs, and activities, as well as the work of others. 	<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. 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.
Specific Tasks	Specific Tasks
<p>Specific Tasks</p>	<p>Occupation Specific Tasks:</p> <ul style="list-style-type: none"> Adjust machine tables or cutting devices and set controls on machines to produce specified cuts or operations. Attach and adjust guides, stops, clamps.



Occupation Specific Tasks:

- Adjust machine components and machine tension and pressure according to size or processing angle of product.
- Attach identification labels to finished packaged items, or cut stencils and stencil information on containers, such as lot numbers or shipping destinations.
- Clean and remove damaged or otherwise inferior materials to prepare raw products for processing.
- Clean packaging containers, line and pad crates, or assemble cartons to prepare for product packing.
- Clean, oil, and make minor adjustments or repairs to machinery and equipment, such as opening valves or setting guides.
- Count and record finished and rejected packaged items.
- Inspect and remove defective products and packaging material.
- Monitor the production line, watching for problems such as pile-ups, jams, or glue that isn't sticking properly.
- Observe machine operations to ensure quality and conformity of filled or packaged products to standards.
- Package the product in the form in which it will be sent out, for example, filling bags with flour from a chute or spout.
- Regulate machine flow, speed, or temperature.
- Remove finished packaged items from machine and separate rejected items.
- Secure finished packaged items by hand tying, sewing, gluing, stapling, or attaching fastener.
- Sort, grade, weigh, and inspect products, verifying and adjusting product weight or measurement to meet specifications.
- Stack finished packaged items, or wrap protective material around each item and pack the items in cartons or containers.
- Start machine by engaging controls.
- Stock and sort product for packaging or filling machine operation, and replenish packaging supplies, such as wrapping paper, plastic sheet, boxes, cartons, glue, ink, or labels.
- Stop or reset machines when malfunctions occur, clear machine jams, and report malfunctions to a supervisor.
- Supply materials to spindles, conveyors, hoppers, or other feeding devices and unload packaged product.
- Tend or operate machine that packages product.

Detailed Tasks

chucks, and feed mechanisms, using hand tools.

- Change alignment and adjustment of sanding, cutting, or boring machine guides in order to prevent defects in finished products, using hand tools.
- Clean and maintain products, machines, and work areas.
- Control hoists to remove parts or products from work stations.
- Determine product specifications and materials, work methods, and machine setup requirements, according to blueprints, oral or written instructions, drawings, or work orders.
- Examine finished workpieces for smoothness, shape, angle, depth-of-cut, and conformity to specifications, and verify dimensions, visually and using hands, rules, calipers, templates, or gauges.
- Examine raw woodstock for defects, and to ensure conformity to size and other specification standards.
- Feed stock through feed mechanisms or conveyors into planing, shaping, boring, mortising, or sanding machines to produce desired components.
- Inspect and mark completed workpieces and stack them on pallets, in boxes, or on conveyors so that they can be moved to the next workstation.
- Inspect pulleys, drive belts, guards, and fences on machines to ensure that machines will operate safely.
- Install and adjust blades, cutterheads, boring-bits, or sanding-belts, using hand tools and rules.
- Monitor operation of machines, and make adjustments to correct problems and ensure conformance to specifications.
- Operate gluing machines to glue pieces of wood together, or to press and affix wood veneer to wood surfaces.
- Push or hold workpieces against, under, or through cutting, boring or shaping mechanisms.
- Remove and replace worn parts, bits, belts, sandpaper, and shaping tools.
- Secure woodstock against a guide or in a holding device, place woodstock on a conveyor, or dump woodstock in a hopper to feed woodstock into machines.
- Select knives, saws, blades, cutter heads, cams, bits, or belts, according to workpiece, machine functions, and product specifications.
- Set up, program, and control computer-aided design (CAD) or computer numerical control (CNC) machines.
- Set up, program, operate, or tend computerized or manual woodworking

**Detailed Work Activities:**

- adjust production equipment/machinery setup
- attach or mark identification onto products or containers
- clean equipment or machinery
- examine products or work to verify conformance to specifications
- grade, classify, or sort products according to specifications
- load or unload material or workpiece into machinery
- load, unload, or stack containers, materials, or products
- maintain consistent production quality
- maintain or repair industrial or related equipment/machinery
- maintain production or work records
- measure, weigh, or count products or materials
- monitor production machinery/equipment operation to detect problems
- operate packaging or banding machine or equipment
- package goods for shipment or storage
- perform safety inspections in manufacturing or industrial setting
- stock or organize goods
- test manufactured products or materials
- wrap products

Technology - Examples

Data base user interface and query software

- Data entry software

Electronic mail software

- Email software

Label making software

- Label printing software

Spreadsheet software

- Spreadsheet software

Word processing software

- Word processing software

Tools - Examples

- Adjustable wrenches
- Dial calipers
- Desktop computers
- Industrial platform scales
- Forklifts

machines, such as drill presses, lathes, shapers, routers, sanders, planers, and wood-nailing machines.

- Sharpen knives, bits, and other cutting and shaping tools.
- Start machines and move levers to engage hydraulic lifts that press woodstocks into desired forms, and disengage lifts after appropriate drying times.
- Start machines, adjust controls, and make trial cuts to ensure that machinery is operating properly.
- Trim wood parts according to specifications, using planes, chisels, and wood files or sanders.
- Unclamp workpieces and remove them from machines.

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
- cut, shape, fit, or join wood or other construction materials
- 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 workpiece into machinery
- load, unload, or stack containers, materials, or products
- 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 hoist, winch, or hydraulic boom
- operate lathes
- operate woodworking equipment/machinery
- perform safety inspections in manufacturing or industrial setting
- read blueprints
- read production layouts
- read specifications
- read technical drawings
- read work order, instructions, formulas, or processing charts
- set up computer numerical control machines
- set up production equipment or machinery
- understand technical operating, service or



- Glue guns

- Claw hammers

- Handtrucks

- Pallet jacks

- Label-making machines

- Powered roll lifts

- Locking pliers

- Pallet movers

- Personal computers

- Power drills

- Box cutters

- Scanners

- Phillips head screwdrivers

- Industrial sewing machines

- Power staple guns

- Stencils

- Step stools

- Measuring tapes

- Space measuring gauges

- Utility knives

- Wire brushes

repair manuals

- use hand or power tools
- use hand or power woodworking tools
- use precision measuring tools or equipment

Technology - Examples

Labor Market Comparison

Maine Department of Labor.

Description	Packaging and Filling Machine Operators and Tenders	Woodworking Machine Setters, Operators, and Tenders, Except Sawing	Difference
Median Wage	\$ 24,800	\$ 23,040	\$(1,760)
10th Percentile Wage	\$ 17,150	\$ 16,810	\$(340)
25th Percentile Wage	N/A	N/A	N/A
75th Percentile Wage	\$ 29,350	\$ 28,300	\$(1,050)
90th Percentile Wage	\$ 41,440	\$ 33,900	\$(7,540)
Mean Wage	\$ 26,470	\$ 24,150	\$(2,320)



Total Employment - 2613	1,710	900	-810
Employment Base - 2006	1,787	926	-861
Projected Employment - 2622	1,569	815	-754
Projected Job Growth - 2006-2622	-12.2 %	-12.0 %	0.2 %
Projected Annual Openings - 2006-2622	33	23	-10
Special			
Special Occupations:			

National Job Posting Trends

Trend for Packaging and Filling Machine Operators and Tenders and Woodworking Machine Setters, Operators, and Tenders, Except Sawing



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

Programs

Related Programs

Cabinet Maker and Millworker

Cabinetmaking and Millwork/Millwright. A program that prepares individuals to apply technical knowledge and skills to set up, operate and repair industrial woodworking machinery, and to use such machinery to design and fabricate wooden components and complete articles.

No information on schools for the program

Woodworkers, General



Woodworking, General. A program that generally prepares individuals to apply technical knowledge and skills to lay out and shape stock; assemble wooden articles or subassemblies; mark, bind, saw, carve, and sand wooden products; repair wooden articles, and use a variety of hand and power tools.

No information on schools for the program

Maine Statewide Promotion Opportunities for Packaging and Filling Machine Operators and Tenders

O* NET Code	Title	Grand TORQ	Job Zone	Employment	Median Wage	Difference	Growth	Annual Job Openings	Special
51-9111.00	Packaging and Filling Machine Operators and Tenders	100	2	1,710	\$24,800.00	\$0.00	-12%	33	
53-7063.00	Machine Feeders and Offbearers	88	1	480	\$26,820.00	\$2,020.00	-22%	9	
51-9121.00	Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	88	2	850	\$38,860.00	\$14,060.00	-26%	19	
51-9196.00	Paper Goods Machine Setters, Operators, and Tenders	88	2	910	\$38,230.00	\$13,430.00	-26%	23	
51-6064.00	Textile Winding, Twisting, and Drawing Out Machine Setters, Operators, and Tenders	87	3	290	\$25,840.00	\$1,040.00	0%	0	
51-9032.00	Cutting and Slicing Machine Setters, Operators, and Tenders	87	2	710	\$31,350.00	\$6,550.00	-23%	12	



51-9041.00	Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders	87	2	260	\$28,330.00	\$3,530.00	-7%	5	
51-2031.00	Engine and Other Machine Assemblers	87	3	20	\$29,010.00	\$4,210.00	-45%	1	
51-5021.00	Job Printers	87	3	140	\$31,890.00	\$7,090.00	-10%	2	
51-4122.00	Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders	87	2	120	\$36,960.00	\$12,160.00	2%	3	
51-9051.00	Furnace, Kiln, Oven, Drier, and Kettle Operators and Tenders	86	2	300	\$32,980.00	\$8,180.00	-18%	9	
51-6062.00	Textile Cutting Machine Setters, Operators, and Tenders	85	3	110	\$24,860.00	\$60.00	-13%	4	
51-9191.00	Cementing and Gluing Machine Operators and Tenders	85	1	80	\$27,620.00	\$2,820.00	-15%	2	
51-4121.07	Solderers and Brazers	84	2	1,610	\$38,030.00	\$13,230.00	7%	49	
51-4191.00	Heat Treating Equipment Setters, Operators, and Tenders, Metal and Plastic	84	2	40	\$32,470.00	\$7,670.00	-6%	1	

Special Occupations:



Top Industries for Woodworking Machine Setters, Operators, and Tenders, Except Sawing

Industry	NAICS	% of Industry	Employment	Projected Employment	% Change
Other wood product manufacturing	321900	36.45%	36,277	37,604	3.66%
Veneer, plywood, and engineered wood product manufacturing	321200	11.85%	11,792	14,125	19.78%
Household and institutional furniture manufacturing	337120	11.01%	10,956	9,170	-16.30%
Wood kitchen cabinet and countertop manufacturing	337110	10.35%	10,303	12,549	21.79%
Sawmills and wood preservation	321100	7.40%	7,366	6,496	-11.81%
Office furniture (including fixtures) manufacturing	337200	6.70%	6,668	6,897	3.43%
Building material and supplies dealers	444100	3.48%	3,466	4,872	40.57%
Self-employed workers, primary job	000601	2.74%	2,725	3,194	17.19%
Lumber and other construction materials merchant wholesalers	423300	1.07%	1,064	1,344	26.35%
Employment services	561300	0.78%	776	1,081	39.22%
Pulp, paper, and paperboard mills	322100	0.43%	428	326	-23.70%
Other furniture related product manufacturing	337900	0.37%	367	422	14.84%
Management of companies and enterprises	551100	0.35%	352	447	26.81%
Medical equipment and supplies manufacturing	339100	0.23%	226	254	12.52%
Ship and boat building	336600	0.17%	165	203	23.12%

Top Industries for Packaging and Filling Machine Operators and Tenders

Industry	NAICS	% of Industry	Employment	Projected Employment	% Change
Employment services	561300	15.91%	61,399	69,938	13.91%
Fruit and vegetable preserving and specialty food manufacturing	311400	6.27%	24,207	19,753	-18.40%
Pharmaceutical and medicine manufacturing	325400	5.30%	20,448	23,193	13.42%
Beverage manufacturing	312100	5.21%	20,102	16,990	-15.48%
Animal slaughtering and processing	311600	4.44%	17,134	17,599	2.71%
Other food manufacturing	311900	4.04%	15,606	14,726	-5.63%
Plastics product manufacturing	326100	4.03%	15,570	14,854	-4.60%
Bakeries and tortilla manufacturing	311800	3.58%	13,834	12,718	-8.07%
Soap, cleaning compound, and toilet preparation manufacturing	325600	3.46%	13,344	11,539	-13.53%



Other support services	561900	3.44%	13,269	16,360	23.29%
Dairy product manufacturing	311500	3.40%	13,143	11,702	-10.96%
Grocery and related product wholesalers	424400	2.79%	10,767	10,596	-1.59%
Warehousing and storage	493100	1.86%	7,173	8,622	20.21%
Grain and oilseed milling	311200	1.80%	6,939	5,446	-21.51%
Sugar and confectionery product manufacturing	311300	1.63%	6,276	4,758	-24.20%



TORQ Analysis of Packaging and Filling Machine Operators and Tenders to Paper Goods Machine Setters, Operators, and Tenders

ANALYSIS INPUT

Transfer	Title	O*NET	Filters		
From Title:	Packaging and Filling Machine Operators and Tenders	51-9111.00	Abilities:	Importance Level: 50	Weight: 1
To Title:	Paper Goods Machine Setters, Operators, and Tenders	51-9196.00	Skills:	Importance Level: 69	Weight: 1
Labor Market Area:	Maine Statewide		Knowledge:	Importance Level: 69	Weight: 1

TORQ RESULTS

Grand TORQ:

88

Ability TORQ		Skills TORQ		Knowledge TORQ	
Level	90	Level	81	Level	94

Gaps To Narrow if Possible				Upgrade These Skills				Knowledge to Add			
Ability	Level	Gap	Impt	Skill	Level	Gap	Impt	Knowledge	Level	Gap	Impt
No Critical Gaps Recorded!				Operation Monitoring	62	13	78	No Knowledge Upgrades Required!			
				Operation and Control	60	7	75				
				Judgment and Decision Making	58	7	70				
				Reading Comprehension	54	7	69				
				Equipment Maintenance	58	3	74				

LEVEL and IMPT (IMPORTANCE) refer to the Target Paper Goods Machine Setters, Operators, and Tenders. GAP refers to level difference between Packaging and Filling Machine Operators and Tenders and Paper Goods Machine Setters, Operators, and Tenders.

ASK ANALYSIS

Ability Level Comparison - Abilities with importance scores over 50

Description	Packaging and Filling Machine Operators and Tenders	Paper Goods Machine Setters, Operators, and Tenders	Importance
Problem Sensitivity	48	39	59
Arm-Hand Steadiness	42	42	59
Selective Attention	60	44	56
Control Precision	60	48	56
Near Vision	60	48	56
Oral Comprehension	44	44	53



Information Ordering	42	42	53
Manual Dexterity	53	41	53
Finger Dexterity	55	42	53
Oral Expression	44	42	50
Deductive Reasoning	44	37	50
Auditory Attention	60	46	50

Skill Level Comparison - Abilities with importance scores over 69

Description	Packaging and Filling Machine Operators and Tenders	Paper Goods Machine Setters, Operators, and Tenders	Importance
Operation Monitoring	49	62	78
Operation and Control	53	60	75
Equipment Maintenance	55	58	74
Judgment and Decision Making	51	58	70
Reading Comprehension	47	54	69

Knowledge Level Comparison - Knowledge with importance scores over 69

Description	Packaging and Filling Machine Operators and Tenders	Paper Goods Machine Setters, Operators, and Tenders	Importance
-------------	-----------------------------------------------------	-----------------------------------------------------	------------

Experience & Education Comparison

Related Work Experience Comparison			Required Education Level Comparison		
Description	Packaging and Filling Machine Operators and Tenders	Paper Goods Machine Setters, Operators, and Tenders	Description	Packaging and Filling Machine Operators and Tenders	Paper Goods Machine Setters, Operators, and Tenders
10+ years	0%	0%	Doctoral	0%	0%
8-10 years	0%	3%	Professional Degree	0%	0%
6-8 years	14%	0%	Post-Masters Cert	0%	0%
4-6 years	0%	0%	Master's Degree	0%	0%
2-4 years	0%	0%	Post-Bachelor Cert	0%	0%
1-2 years	0%	41%	Bachelors	0%	0%
6-12 months	54%	1%	AA or Equiv	14%	0%
3-6 months	0%	5%	Some College	0%	0%
1-3 months	0%	16%	Post-Secondary Certificate	0%	0%
0-1 month	5%	3%	High School Diploma or GED	71%	74%
None	25%	27%	No HSD or GED	13%	24%

Packaging and Filling Machine Operators and Tenders

Paper Goods 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

2 - Job Zone Two: Some Preparation Needed

2 - Job Zone Two: Some Preparation Needed



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 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 months to one year of working with experienced employees.

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 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 months to one year of working with experienced employees.

Tasks

Packaging and Filling Machine Operators and Tenders

Core Tasks

Generalized Work Activities:

- Communicating with Supervisors, Peers, or Subordinates - Providing information to supervisors, co-workers, and subordinates by telephone, in written form, e-mail, or in person.
- 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.
- 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.
- Making Decisions and Solving Problems - Analyzing information and evaluating results to choose the best solution and solve problems.
- Scheduling Work and Activities - Scheduling events, programs, and activities, as well as the work of others.

Specific Tasks

Occupation Specific Tasks:

- Adjust machine components and machine tension and pressure according to size or processing angle of product.
- Attach identification labels to finished packaged items, or cut stencils and stencil information on containers, such as lot numbers or shipping destinations.
- Clean and remove damaged or otherwise inferior materials to prepare raw products for processing.
- Clean packaging containers, line and pad crates, or assemble cartons to prepare for product packing.
- Clean, oil, and make minor adjustments or repairs to machinery and equipment, such

Paper Goods Machine Setters, Operators, and Tenders

Core Tasks

Generalized Work Activities:

- Controlling Machines and Processes - Using either control mechanisms or direct physical activity to operate machines or processes (not including computers or vehicles).
- Monitor Processes, Materials, or Surroundings - Monitoring and reviewing information from materials, events, or the environment, to detect or assess problems.
- 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.
- Handling and Moving Objects - Using hands and arms in handling, installing, positioning, and moving materials, and manipulating things.

Specific Tasks

Occupation Specific Tasks:

- Adjust guide assemblies, forming bars, and folding mechanisms according to specifications, using hand tools.
- Cut products to specified dimensions, using hand or power cutters.
- Disassemble machines to maintain, repair, or replace broken or worn parts, using hand or power tools.
- Examine completed work to detect defects and verify conformance to work orders, and adjust machinery as necessary to correct production problems.
- Fill glue and paraffin reservoirs, and position rollers to dispense glue onto paperboard.
- Install attachments to machines for gluing, folding, printing, or cutting.
- Lift tote boxes of finished cartons, and dump cartons into feed hoppers.
- Load automatic stapling mechanisms.



as opening valves or setting guides.

- Count and record finished and rejected packaged items.
- Inspect and remove defective products and packaging material.
- Monitor the production line, watching for problems such as pile-ups, jams, or glue that isn't sticking properly.
- Observe machine operations to ensure quality and conformity of filled or packaged products to standards.
- Package the product in the form in which it will be sent out, for example, filling bags with flour from a chute or spout.
- Regulate machine flow, speed, or temperature.
- Remove finished packaged items from machine and separate rejected items.
- Secure finished packaged items by hand tying, sewing, gluing, stapling, or attaching fastener.
- Sort, grade, weigh, and inspect products, verifying and adjusting product weight or measurement to meet specifications.
- Stack finished packaged items, or wrap protective material around each item and pack the items in cartons or containers.
- Start machine by engaging controls.
- Stock and sort product for packaging or filling machine operation, and replenish packaging supplies, such as wrapping paper, plastic sheet, boxes, cartons, glue, ink, or labels.
- Stop or reset machines when malfunctions occur, clear machine jams, and report malfunctions to a supervisor.
- Supply materials to spindles, conveyors, hoppers, or other feeding devices and unload packaged product.
- Tend or operate machine that packages product.

Detailed Tasks

Detailed Work Activities:

- adjust production equipment/machinery setup
- attach or mark identification onto products or containers
- clean equipment or machinery
- examine products or work to verify conformance to specifications
- grade, classify, or sort products according to specifications
- load or unload material or workpiece into machinery
- load, unload, or stack containers, materials,

- Measure, space, and set saw blades, cutters, and perforators, according to product specifications.
- Monitor finished cartons as they drop from forming machines into rotating hoppers and then into gravity feed chutes, in order to prevent jamming.
- Observe operation of various machines to detect and correct machine malfunctions such as improper forming, glue flow, or pasteboard tension.
- Place rolls of paper or cardboard on machine feedtracks, and thread paper through gluing, coating, and slitting rollers.
- Remove finished cores, and stack or place them on conveyors for transfer to other work areas.
- Stamp products with information such as dates, using hand stamps or automatic stamping devices.
- Start machines and move controls to regulate tension on pressure rolls, to synchronize speed of machine components, and to adjust temperatures of glue or paraffin.

Detailed Tasks

Detailed Work Activities:

- adjust production equipment/machinery setup
- 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
- load, unload, or stack containers, materials, or products
- 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 pulp or paper making equipment
- read specifications
- read work order, instructions, formulas, or processing charts
- 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



or products

- maintain consistent production quality
- maintain or repair industrial or related equipment/machinery
- maintain production or work records
- measure, weigh, or count products or materials
- monitor production machinery/equipment operation to detect problems
- operate packaging or banding machine or equipment
- package goods for shipment or storage
- perform safety inspections in manufacturing or industrial setting
- stock or organize goods
- test manufactured products or materials
- wrap products

Technology - Examples

Data base user interface and query software

- Data entry software

Electronic mail software

- Email software

Label making software

- Label printing software

Spreadsheet software

- Spreadsheet software

Word processing software

- Word processing software

Tools - Examples

- Adjustable wrenches
- Dial calipers
- Desktop computers
- Industrial platform scales
- Forklifts
- Glue guns
- Claw hammers
- Handtrucks
- Pallet jacks
- Label-making machines
- Powered roll lifts
- Locking pliers



- Pallet movers
- Personal computers
- Power drills
- Box cutters
- Scanners
- Phillips head screwdrivers
- Industrial sewing machines
- Power staple guns
- Stencils
- Step stools
- Measuring tapes
- Space measuring gauges
- Utility knives
- Wire brushes

Labor Market Comparison

Maine Department of Labor.

Description	Packaging and Filling Machine Operators and Tenders	Paper Goods Machine Setters, Operators, and Tenders	Difference
Median Wage	\$ 24,800	\$ 38,230	\$ 13,430
10th Percentile Wage	\$ 17,150	\$ 25,850	\$ 8,700
25th Percentile Wage	N/A	N/A	N/A
75th Percentile Wage	\$ 29,350	\$ 45,200	\$ 15,850
90th Percentile Wage	\$ 41,440	\$ 51,680	\$ 10,240
Mean Wage	\$ 26,470	\$ 38,330	\$ 11,860
Total Employment - 2613	1,710	910	-800
Employment Base - 2006	1,787	951	-836
Projected Employment - 2622	1,569	700	-869
Projected Job Growth - 2006-2622	-12.2 %	-26.4 %	-14.2 %
Projected Annual Openings - 2006-2622	33	23	-10
Special			

Special Occupations:

**National Job Posting Trends**

Trend for Packaging and Filling Machine Operators and Tenders and Paper Goods Machine Setters, Operators, and Tenders

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

No information on programs or the occupation.

Maine Statewide Promotion Opportunities for Packaging and Filling Machine Operators and Tenders

O*NET Code	Title	Grand TORQ	Job Zone	Employment	Median Wage	Difference	Growth	Annual Job Openings	Special
51-9111.00	Packaging and Filling Machine Operators and Tenders	100	2	1,710	\$24,800.00	\$0.00	-12%	33	
53-7063.00	Machine Feeders and Offbearers	88	1	480	\$26,820.00	\$2,020.00	-22%	9	
51-9121.00	Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	88	2	850	\$38,860.00	\$14,060.00	-26%	19	



51-9196.00	Paper Goods Machine Setters, Operators, and Tenders	88	2	910	\$38,230.00	\$13,430.00	-26%	23
51-6064.00	Textile Winding, Twisting, and Drawing Out Machine Setters, Operators, and Tenders	87	3	290	\$25,840.00	\$1,040.00	0%	0
51-9032.00	Cutting and Slicing Machine Setters, Operators, and Tenders	87	2	710	\$31,350.00	\$6,550.00	-23%	12
51-4122.00	Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders	87	2	120	\$36,960.00	\$12,160.00	2%	3
51-9041.00	Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders	87	2	260	\$28,330.00	\$3,530.00	-7%	5
51-2031.00	Engine and Other Machine Assemblers	87	3	20	\$29,010.00	\$4,210.00	-45%	1
51-5021.00	Job Printers	87	3	140	\$31,890.00	\$7,090.00	-10%	2
51-9051.00	Furnace, Kiln, Oven, Drier, and Kettle Operators and Tenders	86	2	300	\$32,980.00	\$8,180.00	-18%	9
51-9191.00	Cementing and Gluing Machine Operators and Tenders	85	1	80	\$27,620.00	\$2,820.00	-15%	2



51-6062.00	Textile Cutting Machine Setters, Operators, and Tenders	85	3	110	\$24,860.00	\$60.00	-13%	4
51-5011.00	Bindery Workers	84	2	350	\$26,130.00	\$1,330.00	-20%	5
51-5023.00	Printing Machine Operators	84	2	790	\$29,710.00	\$4,910.00	-3%	18

Special Occupations:

Top Industries for Paper Goods Machine Setters, Operators, and Tenders

Industry	NAICS	% of Industry	Employment	Projected Employment	% Change
Converted paper product manufacturing	322200	60.48%	68,412	57,411	-16.08%
Pulp, paper, and paperboard mills	322100	21.93%	24,800	17,202	-30.64%
Printing and related support activities	323100	8.22%	9,293	7,363	-20.77%
Newspaper publishers	511110	1.36%	1,536	1,316	-14.33%
Plastics product manufacturing	326100	1.27%	1,439	1,525	6.00%
Wholesale electronic markets and agents and brokers	425100	0.67%	762	865	13.48%
Employment services	561300	0.55%	618	783	26.56%
Animal slaughtering and processing	311600	0.46%	521	595	14.13%
Advertising and related services	541800	0.40%	448	505	12.83%
Paper and paper product merchant wholesalers	424100	0.39%	440	470	6.83%
Other general purpose machinery manufacturing	333900	0.19%	219	198	-9.73%
Miscellaneous durable goods merchant wholesalers	423900	0.09%	100	114	14.81%
Warehousing and storage	493100	0.07%	76	101	33.58%
Other electrical equipment and component manufacturing	335900	0.06%	69	64	-7.34%
Fruit and vegetable preserving and specialty food manufacturing	311400	0.05%	61	55	-9.33%

Top Industries for Packaging and Filling Machine Operators and Tenders

Industry	NAICS	% of Industry	Employment	Projected Employment	% Change
Employment services	561300	15.91%	61,399	69,938	13.91%



Fruit and vegetable preserving and specialty food manufacturing	311400	6.27%	24,207	19,753	-18.40%
Pharmaceutical and medicine manufacturing	325400	5.30%	20,448	23,193	13.42%
Beverage manufacturing	312100	5.21%	20,102	16,990	-15.48%
Animal slaughtering and processing	311600	4.44%	17,134	17,599	2.71%
Other food manufacturing	311900	4.04%	15,606	14,726	-5.63%
Plastics product manufacturing	326100	4.03%	15,570	14,854	-4.60%
Bakeries and tortilla manufacturing	311800	3.58%	13,834	12,718	-8.07%
Soap, cleaning compound, and toilet preparation manufacturing	325600	3.46%	13,344	11,539	-13.53%
Other support services	561900	3.44%	13,269	16,360	23.29%
Dairy product manufacturing	311500	3.40%	13,143	11,702	-10.96%
Grocery and related product wholesalers	424400	2.79%	10,767	10,596	-1.59%
Warehousing and storage	493100	1.86%	7,173	8,622	20.21%
Grain and oilseed milling	311200	1.80%	6,939	5,446	-21.51%
Sugar and confectionery product manufacturing	311300	1.63%	6,276	4,758	-24.20%



TORQ Analysis of Packaging and Filling Machine Operators and Tenders to Sewing Machine Operators

ANALYSIS INPUT

Transfer	Title	O*NET	Filters		
From Title:	Packaging and Filling Machine Operators and Tenders	51-9111.00	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:



88

Ability TORQ		Skills TORQ		Knowledge TORQ	
Level	86	Level	91	Level	85

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	51	9	65	No Skills Upgrade Required!				No Knowledge Upgrades Required!			
Visual Color Discrimination	46	5	56								

LEVEL and IMPT (IMPORTANCE) refer to the Target Sewing Machine Operators. GAP refers to level difference between Packaging and Filling Machine Operators and Tenders and Sewing Machine Operators.

ASK ANALYSIS

Ability Level Comparison - Abilities with importance scores over 50

Description	Packaging and Filling Machine Operators and Tenders	Sewing Machine Operators	Importance
Arm-Hand Steadiness	42	51	65
Manual Dexterity	53	42	62
Control Precision	60	42	62
Rate Control	41	39	59
Information Ordering	42	37	56
Finger Dexterity	55	44	56
Near Vision	60	48	56
Visual Color Discrimination	41	46	56
Problem Sensitivity	48	39	53
Multilimb Coordination	48	37	53
Deductive Reasoning	44	35	50



Visualization	48	39	50
Skill Level Comparison - Abilities with importance scores over 69			
Description	Packaging and Filling Machine Operators and Tenders	Sewing Machine Operators	Importance
Knowledge Level Comparison - Knowledge with importance scores over 69			
Description	Packaging and Filling Machine Operators and Tenders	Sewing Machine Operators	Importance

Experience & Education Comparison					
Related Work Experience Comparison			Required Education Level Comparison		
Description	Packaging and Filling Machine Operators and Tenders	Sewing Machine Operators	Description	Packaging and Filling Machine Operators and Tenders	Sewing Machine Operators
10+ years	0%	0%	Doctoral	0%	0%
8-10 years	0%	0%	Professional Degree	0%	0%
6-8 years	14%	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	0%	9%	Bachelors	0%	2%
6-12 months	54%	11%	AA or Equiv	14%	0%
3-6 months	0%	0%	Some College	0%	8%
1-3 months	0%	5%	Post-Secondary Certificate	0%	2%
0-1 month	5%	0%	High School Diploma or GED	71%	12%
None	25%	51%	No HSD or GED	13%	73%
Packaging and Filling Machine Operators and Tenders			Sewing Machine Operators		
Most Common Educational/Training Requirement:					
Short-term on-the-job training			Moderate-term on-the-job training		
Job Zone Comparison					
2 - Job Zone Two: Some Preparation Needed			1 - Job Zone One: Little or No Preparation Needed		
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.			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 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.			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 months to one year of working with experienced employees.			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

Packaging and Filling Machine Operators and Tenders

Sewing Machine Operators



Core Tasks

Generalized Work Activities:

- Communicating with Supervisors, Peers, or Subordinates - Providing information to supervisors, co-workers, and subordinates by telephone, in written form, e-mail, or in person.
- 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.
- 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.
- Making Decisions and Solving Problems - Analyzing information and evaluating results to choose the best solution and solve problems.
- Scheduling Work and Activities - Scheduling events, programs, and activities, as well as the work of others.

Specific Tasks

Occupation Specific Tasks:

- Adjust machine components and machine tension and pressure according to size or processing angle of product.
- Attach identification labels to finished packaged items, or cut stencils and stencil information on containers, such as lot numbers or shipping destinations.
- Clean and remove damaged or otherwise inferior materials to prepare raw products for processing.
- Clean packaging containers, line and pad crates, or assemble cartons to prepare for product packing.
- Clean, oil, and make minor adjustments or repairs to machinery and equipment, such as opening valves or setting guides.
- Count and record finished and rejected packaged items.
- Inspect and remove defective products and packaging material.
- Monitor the production line, watching for problems such as pile-ups, jams, or glue that isn't sticking properly.
- Observe machine operations to ensure quality and conformity of filled or packaged products to standards.
- Package the product in the form in which it will be sent out, for example, filling bags with flour from a chute or spout.
- Regulate machine flow, speed, or temperature.

Core Tasks

Generalized Work Activities:

- 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 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



- Remove finished packaged items from machine and separate rejected items.
- Secure finished packaged items by hand tying, sewing, gluing, stapling, or attaching fastener.
- Sort, grade, weigh, and inspect products, verifying and adjusting product weight or measurement to meet specifications.
- Stack finished packaged items, or wrap protective material around each item and pack the items in cartons or containers.
- Start machine by engaging controls.
- Stock and sort product for packaging or filling machine operation, and replenish packaging supplies, such as wrapping paper, plastic sheet, boxes, cartons, glue, ink, or labels.
- Stop or reset machines when malfunctions occur, clear machine jams, and report malfunctions to a supervisor.
- Supply materials to spindles, conveyors, hoppers, or other feeding devices and unload packaged product.
- Tend or operate machine that packages product.

Detailed Tasks

Detailed Work Activities:

- adjust production equipment/machinery setup
- attach or mark identification onto products or containers
- clean equipment or machinery
- examine products or work to verify conformance to specifications
- grade, classify, or sort products according to specifications
- load or unload material or workpiece into machinery
- load, unload, or stack containers, materials, or products
- maintain consistent production quality
- maintain or repair industrial or related equipment/machinery
- maintain production or work records
- measure, weigh, or count products or materials
- monitor production machinery/equipment operation to detect problems
- operate packaging or banding machine or equipment
- package goods for shipment or storage
- perform safety inspections in manufacturing or industrial setting
- stock or organize goods
- test manufactured products or materials
- wrap products

Technology - Examples

... equipment malfunctions 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 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



Data base user interface and query software

- Data entry software

Electronic mail software

- Email software

Label making software

- Label printing software

Spreadsheet software

- Spreadsheet software

Word processing software

- Word processing software

Tools - Examples

- Adjustable wrenches
- Dial calipers
- Desktop computers
- Industrial platform scales
- Forklifts
- Glue guns
- Claw hammers
- Handtrucks
- Pallet jacks
- Label-making machines
- Powered roll lifts
- Locking pliers
- Pallet movers
- Personal computers
- Power drills
- Box cutters
- Scanners
- Phillips head screwdrivers
- Industrial sewing machines
- Power staple guns
- Stencils
- Step stools
- Measuring tapes

- sew by hand
- use hand or power tools
- use portable electric fabric cutter

Technology - Examples



- Space measuring gauges
- Utility knives
- Wire brushes

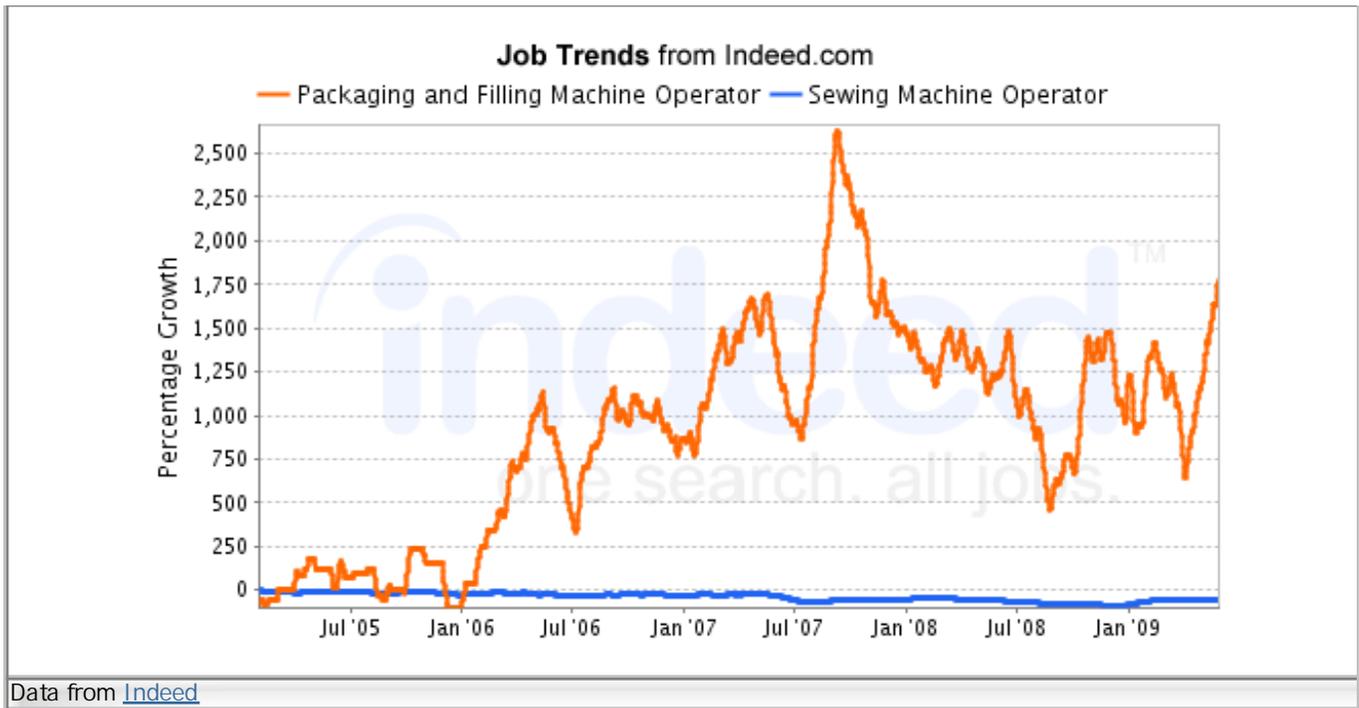
Labor Market Comparison

Maine Department of Labor.

Description	Packaging and Filling Machine Operators and Tenders	Sewing Machine Operators	Difference
Median Wage	\$ 24,800	\$ 22,440	\$(2,360)
10th Percentile Wage	\$ 17,150	\$ 16,350	\$(800)
25th Percentile Wage	N/A	N/A	N/A
75th Percentile Wage	\$ 29,350	\$ 27,200	\$(2,150)
90th Percentile Wage	\$ 41,440	\$ 31,710	\$(9,730)
Mean Wage	\$ 26,470	\$ 23,030	\$(3,440)
Total Employment - 2613	1,710	1,080	-630
Employment Base - 2006	1,787	1,077	-710
Projected Employment - 2622	1,569	990	-579
Projected Job Growth - 2006-2622	-12.2 %	-8.1 %	4.1 %
Projected Annual Openings - 2006-2622	33	10	-23
Special			
Special Occupations:			

National Job Posting Trends

Trend for Packaging and Filling Machine Operators and Tenders and Sewing Machine Operators



Programs

No information on programs or the occupation.

Maine Statewide Promotion Opportunities for Packaging and Filling Machine Operators and Tenders

O*NET Code	Title	Grand TORQ	Job Zone	Employment	Median Wage	Difference	Growth	Annual Job Openings	Special
51-9111.00	Packaging and Filling Machine Operators and Tenders	100	2	1,710	\$24,800.00	\$0.00	-12%	33	
53-7063.00	Machine Feeders and Offbearers	88	1	480	\$26,820.00	\$2,020.00	-22%	9	
51-9121.00	Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	88	2	850	\$38,860.00	\$14,060.00	-26%	19	



51-9196.00	Paper Goods Machine Setters, Operators, and Tenders	88	2	910	\$38,230.00	\$13,430.00	-26%	23
51-6064.00	Textile Winding, Twisting, and Drawing Out Machine Setters, Operators, and Tenders	87	3	290	\$25,840.00	\$1,040.00	0%	0
51-9032.00	Cutting and Slicing Machine Setters, Operators, and Tenders	87	2	710	\$31,350.00	\$6,550.00	-23%	12
51-4122.00	Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders	87	2	120	\$36,960.00	\$12,160.00	2%	3
51-9041.00	Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders	87	2	260	\$28,330.00	\$3,530.00	-7%	5
51-2031.00	Engine and Other Machine Assemblers	87	3	20	\$29,010.00	\$4,210.00	-45%	1
51-5021.00	Job Printers	87	3	140	\$31,890.00	\$7,090.00	-10%	2
51-9051.00	Furnace, Kiln, Oven, Drier, and Kettle Operators and Tenders	86	2	300	\$32,980.00	\$8,180.00	-18%	9
51-9191.00	Cementing and Gluing Machine Operators and Tenders	85	1	80	\$27,620.00	\$2,820.00	-15%	2



51-6062.00	Textile Cutting Machine Setters, Operators, and Tenders	85	3	110	\$24,860.00	\$60.00	-13%	4
51-5011.00	Bindery Workers	84	2	350	\$26,130.00	\$1,330.00	-20%	5
51-5023.00	Printing Machine Operators	84	2	790	\$29,710.00	\$4,910.00	-3%	18

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 Packaging and Filling Machine Operators and Tenders

Industry	NAICS	% of Industry	Employment	Projected Employment	% Change
Employment services	561300	15.91%	61,399	69,938	13.91%
Fruit and vegetable preserving and specialty food manufacturing	311400	6.27%	24,207	19,753	-18.40%



Pharmaceutical and medicine manufacturing	325400	5.30%	20,448	23,193	13.42%
Beverage manufacturing	312100	5.21%	20,102	16,990	-15.48%
Animal slaughtering and processing	311600	4.44%	17,134	17,599	2.71%
Other food manufacturing	311900	4.04%	15,606	14,726	-5.63%
Plastics product manufacturing	326100	4.03%	15,570	14,854	-4.60%
Bakeries and tortilla manufacturing	311800	3.58%	13,834	12,718	-8.07%
Soap, cleaning compound, and toilet preparation manufacturing	325600	3.46%	13,344	11,539	-13.53%
Other support services	561900	3.44%	13,269	16,360	23.29%
Dairy product manufacturing	311500	3.40%	13,143	11,702	-10.96%
Grocery and related product wholesalers	424400	2.79%	10,767	10,596	-1.59%
Warehousing and storage	493100	1.86%	7,173	8,622	20.21%
Grain and oilseed milling	311200	1.80%	6,939	5,446	-21.51%
Sugar and confectionery product manufacturing	311300	1.63%	6,276	4,758	-24.20%



TORO Analysis of Packaging and Filling Machine Operators and Tenders to Coating, Painting, and Spraying Machine Setters, Operators, and Tenders

ANALYSIS INPUT					
Transfer	Title	O*NET	Filters		
From Title:	Packaging and Filling Machine Operators and Tenders	51-9111.00	Abilities:	Importance Level: 50	Weight: 1
To Title:	Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	51-9121.00	Skills:	Importance Level: 69	Weight: 1
Labor Market Area:	Maine Statewide		Knowledge:	Importance Level: 69	Weight: 1

TORQ RESULTS											
Grand TORQ:								88			
Ability TORQ			Skills TORQ				Knowledge TORQ				
Level			87	Level			87	Level			88
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	59	18	75	No Skills Upgrade Required!				No Knowledge Upgrades Required!			
Arm-Hand Steadiness	48	6	65								
Rate Control	46	5	59								
Multilimb Coordination	50	2	59								
<p>LEVEL and IMPT (IMPORTANCE) refer to the Target Coating, Painting, and Spraying Machine Setters, Operators, and Tenders. GAP refers to level difference between Packaging and Filling Machine Operators and Tenders and Coating, Painting, and Spraying Machine Setters, Operators, and Tenders.</p>											

ASK ANALYSIS			
Ability Level Comparison - Abilities with importance scores over 50			
Description	Packaging and Filling Machine Operators and Tenders	Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	Importance
Visual Color Discrimination	41	59	75
Control Precision	60	50	68
Arm-Hand Steadiness	42	48	65
Manual Dexterity	53	48	62
Near Vision	60	46	62
Finger Dexterity	55	48	59
Multilimb Coordination	48	50	59



Rate Control	41	46	59
Static Strength	60	46	59
Trunk Strength	50	50	59
Far Vision	50	48	59
Information Ordering	42	42	56
Perceptual Speed	73	46	56
Visualization	48	46	56
Problem Sensitivity	48	42	53
Selective Attention	60	42	53
Hearing Sensitivity	48	42	53
Written Comprehension	44	41	50
Deductive Reasoning	44	41	50
Flexibility of Closure	57	41	50
Reaction Time	60	50	50
Speech Recognition	37	37	50

Skill Level Comparison - Abilities with importance scores over 69

Description	Packaging and Filling Machine Operators and Tenders	Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	Importance
-------------	-----------------------------------------------------	-------------------------------------------------------------------------	------------

Knowledge Level Comparison - Knowledge with importance scores over 69

Description	Packaging and Filling Machine Operators and Tenders	Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	Importance
-------------	-----------------------------------------------------	-------------------------------------------------------------------------	------------

Experience & Education Comparison

Related Work Experience Comparison			Required Education Level Comparison		
Description	Packaging and Filling Machine Operators and Tenders	Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	Description	Packaging and Filling Machine Operators and Tenders	Coating, Painting, and Spraying Machine Setters, Operators, and Tenders
10+ years	0%	0%	Doctoral	0%	0%
8-10 years	0%	0%	Professional Degree	0%	0%
6-8 years	14%	17%	Post-Masters Cert	0%	0%
4-6 years	0%	0%	Master's Degree	0%	0%
2-4 years	0%	20%	Post-Bachelor Cert	0%	0%
1-2 years	0%	13%	Bachelors	0%	0%
6-12 months	54%	5%	AA or Equiv	14%	0%
3-6 months	0%	14%	Some College	0%	0%
1-3 months	0%	0%	Post-Secondary Certificate	0%	16%
0-1 month	5%	12%	High School Diploma or GED	71%	49%
None	25%	16%	No HSD or GED	13%	34%

Packaging and Filling Machine Operators and Tenders

Coating, Painting, and Spraying 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	
2 - Job Zone Two: Some Preparation Needed	2 - Job Zone Two: Some Preparation Needed
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.	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 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.	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 months to one year of working with experienced employees.	Employees in these occupations need anywhere from a few months to one year of working with experienced employees.

Tasks

Packaging and Filling Machine Operators and Tenders	Coating, Painting, and Spraying Machine Setters, Operators, and Tenders
Core Tasks	Core Tasks
Generalized Work Activities: <ul style="list-style-type: none"> • Communicating with Supervisors, Peers, or Subordinates - Providing information to supervisors, co-workers, and subordinates by telephone, in written form, e-mail, or in person. • 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. • 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. • Making Decisions and Solving Problems - Analyzing information and evaluating results to choose the best solution and solve problems. • Scheduling Work and Activities - Scheduling events, programs, and activities, as well as the work of others. 	Generalized Work Activities: <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). • 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 relevant sources. • Monitor Processes, Materials, or Surroundings - Monitoring and reviewing information from materials, events, or the environment, to detect or assess problems. • 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.
Specific Tasks	Specific Tasks
Occupation Specific Tasks: <ul style="list-style-type: none"> • Adjust machine components and machine tension and pressure according to size or processing angle of product. • Attach identification labels to finished packaged items, or cut stencils and stencil information on containers, such as lot numbers or shipping destinations. • Clean and remove damaged or otherwise inferior materials to prepare raw products for processing. • Clean packaging containers, line and pad crates, or assemble cartons to prepare for 	Occupation Specific Tasks: <ul style="list-style-type: none"> • Attach and align machine parts such as rollers, guides, brushes, and blades, using hand tools. • Attach hoses or nozzles to machines, using wrenches and pliers, and make adjustments to obtain the proper dispersion of spray. • Clean machines, related equipment, and work areas, using water, solvents and other cleaning aids. • Determine paint flow, viscosity, and coating quality by performing visual inspections, or by using viscometers. • Examine, measure, weigh, or test sample products to ensure conformance to specifications. • Fill hoppers, reservoirs, troughs, or pans



product packing.

- Clean, oil, and make minor adjustments or repairs to machinery and equipment, such as opening valves or setting guides.
- Count and record finished and rejected packaged items.
- Inspect and remove defective products and packaging material.
- Monitor the production line, watching for problems such as pile-ups, jams, or glue that isn't sticking properly.
- Observe machine operations to ensure quality and conformity of filled or packaged products to standards.
- Package the product in the form in which it will be sent out, for example, filling bags with flour from a chute or spout.
- Regulate machine flow, speed, or temperature.
- Remove finished packaged items from machine and separate rejected items.
- Secure finished packaged items by hand tying, sewing, gluing, stapling, or attaching fastener.
- Sort, grade, weigh, and inspect products, verifying and adjusting product weight or measurement to meet specifications.
- Stack finished packaged items, or wrap protective material around each item and pack the items in cartons or containers.
- Start machine by engaging controls.
- Stock and sort product for packaging or filling machine operation, and replenish packaging supplies, such as wrapping paper, plastic sheet, boxes, cartons, glue, ink, or labels.
- Stop or reset machines when malfunctions occur, clear machine jams, and report malfunctions to a supervisor.
- Supply materials to spindles, conveyors, hoppers, or other feeding devices and unload packaged product.
- Tend or operate machine that packages product.

Detailed Tasks

Detailed Work Activities:

- adjust production equipment/machinery setup
- attach or mark identification onto products or containers
- clean equipment or machinery
- examine products or work to verify conformance to specifications
- grade, classify, or sort products according to specifications
- load or unload material or workpiece into machinery
- load, unload, or stack containers, materials, or products
- maintain consistent production quality

from hoppers, conveyors, augers, or pans with material used to coat, paint, or spray, using conveyors or pails.

- Hold or position spray guns to direct spray onto articles.
- Observe machine gauges and equipment operation to detect defects or deviations from standards, and make adjustments as necessary.
- Operate auxiliary machines or equipment used in coating or painting processes.
- Paint small items and perform touch-up painting, using paint brushes.
- Perform test runs to ensure that equipment is set up properly.
- Place items or products on feedracks, spindles, or reel strands to coat, paint, or spray them, using hands, hoists, or trucklifts.
- Prepare and apply stencils, computer-generated decals, or other decorative items to finished products.
- Record operational data on specified forms.
- Remove materials, parts, or workpieces from painting or coating machines, using hand tools.
- Select appropriate coatings, paints, or sprays, or prepare them by mixing substances according to formulas, using automated paint mixing equipment.
- Set up and operate machines to paint or coat products with such materials as silver and copper solution, rubber, paint, glaze, oil, or rustproofing materials.
- Spray coated products with salt solutions to determine how they will resist corrosion.
- Start and stop operation of machines, using levers or buttons.
- Start pumps to mix solutions and fill tanks.
- Thread or feed items or products through or around machine rollers and dryers.
- Transfer completed items or products from machines to drying or storage areas, using handcarts, handtrucks, or cranes.
- Turn dials, handwheels, valves, or switches to regulate conveyor speeds, machine temperature, air pressure and circulation, and the flow or spray of coatings or paints.
- Weigh or measure chemicals, coatings, or paints before adding them to machines.

Detailed Tasks

Detailed Work Activities:

- adjust production equipment/machinery setup
- apply adhesives, caulking, sealants, or coatings
- clean equipment or machinery
- clean rooms or work areas
- control operation of compressors
- examine products or work to verify



- maintain consistent production quality
- maintain or repair industrial or related equipment/machinery
- maintain production or work records
- measure, weigh, or count products or materials
- monitor production machinery/equipment operation to detect problems
- operate packaging or banding machine or equipment
- package goods for shipment or storage
- perform safety inspections in manufacturing or industrial setting
- stock or organize goods
- test manufactured products or materials
- wrap products

Technology - Examples

Data base user interface and query software

- Data entry software

Electronic mail software

- Email software

Label making software

- Label printing software

Spreadsheet software

- Spreadsheet software

Word processing software

- Word processing software

Tools - Examples

- Adjustable wrenches
- Dial calipers
- Desktop computers
- Industrial platform scales
- Forklifts
- Glue guns
- Claw hammers
- Handtrucks
- Pallet jacks
- Label-making machines
- Powered roll lifts
- Locking pliers
- Pallet movers

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
- 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 forklift
- operate glass or stone working equipment/machinery
- operate hoist, winch, or hydraulic boom
- operate metal or plastic fabricating equipment/machinery
- operate mix or blending machine
- operate paint or coating application production machinery
- operate power driven pumps
- operate pulp or paper making equipment
- perform safety inspections in manufacturing or industrial setting
- set up production equipment or machinery
- test manufactured products or materials
- understand technical operating, service or repair manuals
- use hand or power tools
- use precision measuring tools or equipment
- use spray application production equipment
- use spray paint equipment

Technology - Examples



- Personal computers
- Power drills
- Box cutters
- Scanners
- Phillips head screwdrivers
- Industrial sewing machines
- Power staple guns
- Stencils
- Step stools
- Measuring tapes
- Space measuring gauges
- Utility knives
- Wire brushes

Labor Market Comparison

Maine Department of Labor.

Description	Packaging and Filling Machine Operators and Tenders	Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	Difference
Median Wage	\$ 24,800	\$ 38,860	\$ 14,060
10th Percentile Wage	\$ 17,150	\$ 21,280	\$ 4,130
25th Percentile Wage	N/A	N/A	N/A
75th Percentile Wage	\$ 29,350	\$ 47,830	\$ 18,480
90th Percentile Wage	\$ 41,440	\$ 56,160	\$ 14,720
Mean Wage	\$ 26,470	\$ 38,450	\$ 11,980
Total Employment - 2613	1,710	850	-860
Employment Base - 2006	1,787	968	-819
Projected Employment - 2622	1,569	721	-848
Projected Job Growth - 2006-2622	-12.2 %	-25.5 %	-13.3 %
Projected Annual Openings - 2006-2622	33	19	-14
Special			

Special Occupations:



National Job Posting Trends

Trend for Packaging and Filling Machine Operators and Tenders and Coating, Painting, and Spraying Machine Setters, Operators, and Tenders



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

Programs

Related Programs

Auto/Automotive Body Repairer

Autobody/Collision and Repair Technology/Technician. A program that prepares individuals to apply technical knowledge and skills to repair, reconstruct and finish automobile bodies, fenders, and external features. Includes instruction in structure analysis, damage repair, non-structural analysis, mechanical and electrical components, plastics and adhesives, painting and refinishing techniques, and damage analysis and estimating.

Institution	Address	City	URL
Northern Maine Community College	33 Edgemont Dr	Presque Isle	www.nmcc.edu
Northern Maine Community College	33 Edgemont Dr	Presque Isle	www.nmcc.edu
Northern Maine Community College	33 Edgemont Dr	Presque Isle	www.nmcc.edu

Maine Statewide Promotion Opportunities for Packaging and Filling Machine Operators and Tenders

O*NET Code	Title	Grand TORQ	Job Zone	Employment	Median Wage	Difference	Growth	Annual Job Openings	Special
------------	-------	------------	----------	------------	-------------	------------	--------	---------------------	---------



51-9111.00	Packaging and Filling Machine Operators and Tenders	100	2	1,710	\$24,800.00	\$0.00	-12%	33
53-7063.00	Machine Feeders and Offbearers	88	1	480	\$26,820.00	\$2,020.00	-22%	9
51-9121.00	Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	88	2	850	\$38,860.00	\$14,060.00	-26%	19
51-9196.00	Paper Goods Machine Setters, Operators, and Tenders	88	2	910	\$38,230.00	\$13,430.00	-26%	23
51-6064.00	Textile Winding, Twisting, and Drawing Out Machine Setters, Operators, and Tenders	87	3	290	\$25,840.00	\$1,040.00	0%	0
51-9032.00	Cutting and Slicing Machine Setters, Operators, and Tenders	87	2	710	\$31,350.00	\$6,550.00	-23%	12
51-4122.00	Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders	87	2	120	\$36,960.00	\$12,160.00	2%	3
51-9041.00	Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders	87	2	260	\$28,330.00	\$3,530.00	-7%	5



51-2031.00	Engine and Other Machine Assemblers	87	3	20	\$29,010.00	\$4,210.00	-45%	1
51-5021.00	Job Printers	87	3	140	\$31,890.00	\$7,090.00	-10%	2
51-9051.00	Furnace, Kiln, Oven, Drier, and Kettle Operators and Tenders	86	2	300	\$32,980.00	\$8,180.00	-18%	9
51-9191.00	Cementing and Gluing Machine Operators and Tenders	85	1	80	\$27,620.00	\$2,820.00	-15%	2
51-6062.00	Textile Cutting Machine Setters, Operators, and Tenders	85	3	110	\$24,860.00	\$60.00	-13%	4
51-5011.00	Bindery Workers	84	2	350	\$26,130.00	\$1,330.00	-20%	5
51-5023.00	Printing Machine Operators	84	2	790	\$29,710.00	\$4,910.00	-3%	18

Special Occupations:

Top Industries for Coating, Painting, and Spraying Machine Setters, Operators, and Tenders

Industry	NAICS	% of Industry	Employment	Projected Employment	% Change
Coating, engraving, heat treating, and allied activities	332800	9.61%	10,229	7,965	-22.13%
Architectural and structural metals manufacturing	332300	6.06%	6,454	6,548	1.46%
Plastics product manufacturing	326100	5.19%	5,529	5,567	0.70%
Converted paper product manufacturing	322200	5.18%	5,513	4,395	-20.28%
Wood kitchen cabinet and countertop manufacturing	337110	4.58%	4,877	5,129	5.18%
Self-employed workers, primary job	000601	3.78%	4,020	4,069	1.21%
Other fabricated metal product manufacturing	332900	3.43%	3,648	3,071	-15.83%
Motor vehicle parts manufacturing	336300	3.34%	3,553	2,687	-24.37%
Other general purpose machinery manufacturing	333900	3.17%	3,378	2,897	-14.24%
Other wood product manufacturing	321900	2.75%	2,929	2,622	-10.48%



Boiler, tank, and shipping container manufacturing	332400	2.59%	2,755	2,358	-14.39%
Household and institutional furniture manufacturing	337120	2.27%	2,418	1,748	-27.71%
Office furniture (including fixtures) manufacturing	337200	2.24%	2,387	2,132	-10.67%
Commercial and service industry machinery manufacturing	333300	1.75%	1,861	1,551	-16.67%
Ventilation, heating, air-conditioning, and commercial refrigeration equipment manufacturing	333400	1.67%	1,780	1,555	-12.61%

Top Industries for Packaging and Filling Machine Operators and Tenders

Industry	NAICS	% of Industry	Employment	Projected Employment	% Change
Employment services	561300	15.91%	61,399	69,938	13.91%
Fruit and vegetable preserving and specialty food manufacturing	311400	6.27%	24,207	19,753	-18.40%
Pharmaceutical and medicine manufacturing	325400	5.30%	20,448	23,193	13.42%
Beverage manufacturing	312100	5.21%	20,102	16,990	-15.48%
Animal slaughtering and processing	311600	4.44%	17,134	17,599	2.71%
Other food manufacturing	311900	4.04%	15,606	14,726	-5.63%
Plastics product manufacturing	326100	4.03%	15,570	14,854	-4.60%
Bakeries and tortilla manufacturing	311800	3.58%	13,834	12,718	-8.07%
Soap, cleaning compound, and toilet preparation manufacturing	325600	3.46%	13,344	11,539	-13.53%
Other support services	561900	3.44%	13,269	16,360	23.29%
Dairy product manufacturing	311500	3.40%	13,143	11,702	-10.96%
Grocery and related product wholesalers	424400	2.79%	10,767	10,596	-1.59%
Warehousing and storage	493100	1.86%	7,173	8,622	20.21%
Grain and oilseed milling	311200	1.80%	6,939	5,446	-21.51%
Sugar and confectionery product manufacturing	311300	1.63%	6,276	4,758	-24.20%



TORQ Analysis of Packaging and Filling Machine Operators and Tenders to Machine Feeders and Offbearers

ANALYSIS INPUT

Transfer	Title	O*NET	Filters		
From Title:	Packaging and Filling Machine Operators and Tenders	51-9111.00	Abilities:	Importance Level: 50	Weight: 1
To Title:	Machine Feeders and Offbearers	53-7063.00	Skills:	Importance Level: 69	Weight: 1
Labor Market Area:	Maine Statewide		Knowledge:	Importance Level: 69	Weight: 1

TORQ RESULTS

Grand TORQ:					88		
Ability TORQ		Skills TORQ		Knowledge TORQ			
Level		92	Level		81		
Level			Level		89		
Gaps To Narrow if Possible				Upgrade These Skills		Knowledge to Add	
Ability	Level	Gap	Impt	Skill	Level	Gap	Impt
Rate Control	44	3	56	No Skills Upgrade Required!			
Arm-Hand Steadiness	44	2	65	No Knowledge Upgrades Required!			

LEVEL and IMPT (IMPORTANCE) refer to the Target Machine Feeders and Offbearers. GAP refers to level difference between Packaging and Filling Machine Operators and Tenders and Machine Feeders and Offbearers.

ASK ANALYSIS

Ability Level Comparison - Abilities with importance scores over 50

Description	Packaging and Filling Machine Operators and Tenders	Machine Feeders and Offbearers	Importance
Arm-Hand Steadiness	42	44	65
Control Precision	60	53	65
Manual Dexterity	53	46	59
Multilimb Coordination	48	46	59
Reaction Time	60	48	59
Near Vision	60	46	59
Problem Sensitivity	48	39	56
Finger Dexterity	55	46	56
Rate Control	41	44	56
Oral Comprehension	44	42	53
Information Ordering	42	39	53
Perceptual Speed	73	44	53



Trunk Strength	50		44		53
Oral Expression	44		42		50
Deductive Reasoning	44		37		50
Inductive Reasoning	46		37		50
Category Flexibility	50		39		50
Flexibility of Closure	57		41		50
Selective Attention	60		44		50
Static Strength	60		46		50

Skill Level Comparison - Abilities with importance scores over 69

Description	Packaging and Filling Machine Operators and Tenders	Machine Feeders and Offbearers	Importance
Knowledge Level Comparison - Knowledge with importance scores over 69			
Description	Packaging and Filling Machine Operators and Tenders	Machine Feeders and Offbearers	Importance

Experience & Education Comparison

Related Work Experience Comparison			Required Education Level Comparison		
Description	Packaging and Filling Machine Operators and Tenders	Machine Feeders and Offbearers	Description	Packaging and Filling Machine Operators and Tenders	Machine Feeders and Offbearers
10+ years	0%	0%	Doctoral	0%	0%
8-10 years	0%	0%	Professional Degree	0%	0%
6-8 years	14%	0%	Post-Masters Cert	0%	0%
4-6 years	0%	0%	Master's Degree	0%	0%
2-4 years	0%	0%	Post-Bachelor Cert	0%	0%
1-2 years	0%	8%	Bachelors	0%	0%
6-12 months	54%	0%	AA or Equiv	14%	7%
3-6 months	0%	11%	Some College	0%	0%
1-3 months	0%	3%	Post-Secondary Certificate	0%	8%
0-1 month	5%	26%	High School Diploma or GED	71%	61%
None	25%	48%	No HSD or GED	13%	22%

Packaging and Filling Machine Operators and Tenders

Machine Feeders and Offbearers

Most Common Educational/Training Requirement:

Short-term on-the-job training

Short-term on-the-job training

Job Zone Comparison

2 - Job Zone Two: Some Preparation Needed

1 - Job Zone One: Little or No Preparation Needed

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.

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 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.

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 months to one year of working with experienced employees.

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

Packaging and Filling Machine Operators and Tenders

Core Tasks

Generalized Work Activities:

- Communicating with Supervisors, Peers, or Subordinates - Providing information to supervisors, co-workers, and subordinates by telephone, in written form, e-mail, or in person.
- 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.
- 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.
- Making Decisions and Solving Problems - Analyzing information and evaluating results to choose the best solution and solve problems.
- Scheduling Work and Activities - Scheduling events, programs, and activities, as well as the work of others.

Specific Tasks

Occupation Specific Tasks:

- Adjust machine components and machine tension and pressure according to size or processing angle of product.
- Attach identification labels to finished packaged items, or cut stencils and stencil information on containers, such as lot numbers or shipping destinations.
- Clean and remove damaged or otherwise inferior materials to prepare raw products for processing.
- Clean packaging containers, line and pad crates, or assemble cartons to prepare for product packing.
- Clean, oil, and make minor adjustments or repairs to machinery and equipment, such as opening valves or setting guides.
- Count and record finished and rejected packaged items.
- Inspect and remove defective products and packaging material.
- Monitor the production line, watching for problems such as pile-ups, jams, or glue that isn't sticking properly.

Machine Feeders and Offbearers

Core Tasks

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.
- 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.
- Controlling Machines and Processes - Using either control mechanisms or direct physical activity to operate machines or processes (not including computers or vehicles).

Specific Tasks

Occupation Specific Tasks:

- Add chemicals, solutions, or ingredients to machines or equipment as required by the manufacturing process.
- Clean and maintain machinery, equipment, and work areas to ensure proper functioning and safe working conditions.
- Fasten, package, or stack materials and products, using hand tools and fastening equipment.
- Identify and mark materials, products, and samples, following instructions.
- Inspect materials and products for defects, and to ensure conformance to specifications.
- Load materials and products into machines and equipment, or onto conveyors, using hand tools and moving devices.
- Open and close gates of belt and pneumatic conveyors on machines that are fed directly from preceding machines.
- Push dual control buttons and move controls in order to start, stop, or adjust machinery and equipment.
- Record production and operational data, such as amount of materials processed.
- Remove materials and products from machines and equipment, and place them



- Observe machine operations to ensure quality and conformity of filled or packaged products to standards.
- Package the product in the form in which it will be sent out, for example, filling bags with flour from a chute or spout.
- Regulate machine flow, speed, or temperature.
- Remove finished packaged items from machine and separate rejected items.
- Secure finished packaged items by hand tying, sewing, gluing, stapling, or attaching fastener.
- Sort, grade, weigh, and inspect products, verifying and adjusting product weight or measurement to meet specifications.
- Stack finished packaged items, or wrap protective material around each item and pack the items in cartons or containers.
- Start machine by engaging controls.
- Stock and sort product for packaging or filling machine operation, and replenish packaging supplies, such as wrapping paper, plastic sheet, boxes, cartons, glue, ink, or labels.
- Stop or reset machines when malfunctions occur, clear machine jams, and report malfunctions to a supervisor.
- Supply materials to spindles, conveyors, hoppers, or other feeding devices and unload packaged product.
- Tend or operate machine that packages product.

Detailed Tasks

Detailed Work Activities:

- adjust production equipment/machinery setup
- attach or mark identification onto products or containers
- clean equipment or machinery
- examine products or work to verify conformance to specifications
- grade, classify, or sort products according to specifications
- load or unload material or workpiece into machinery
- load, unload, or stack containers, materials, or products
- maintain consistent production quality
- maintain or repair industrial or related equipment/machinery
- maintain production or work records
- measure, weigh, or count products or materials
- monitor production machinery/equipment operation to detect problems
- operate packaging or banding machine or equipment
- package goods for shipment or storage

in boxes, trucks or conveyors, using hand tools and moving devices.

- Shovel or scoop materials into containers, machines, or equipment for processing, storage, or transport.
- Transfer materials and products to and from machinery and equipment, using industrial trucks or hand trucks.
- Weigh or measure materials or products to ensure conformance to specifications.

Detailed Tasks

Detailed Work Activities:

- 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
- maintain production or work records
- measure, weigh, or count products or materials
- move or fit heavy objects
- operate hoist, winch, or hydraulic boom
- perform safety inspections in manufacturing or industrial setting
- sort manufacturing materials or products
- use hand or power tools

Technology - Examples



- perform safety inspections in manufacturing or industrial setting
- stock or organize goods
- test manufactured products or materials
- wrap products

Technology - Examples

Data base user interface and query software

- Data entry software

Electronic mail software

- Email software

Label making software

- Label printing software

Spreadsheet software

- Spreadsheet software

Word processing software

- Word processing software

Tools - Examples

- Adjustable wrenches
- Dial calipers
- Desktop computers
- Industrial platform scales
- Forklifts
- Glue guns
- Claw hammers
- Handtrucks
- Pallet jacks
- Label-making machines
- Powered roll lifts
- Locking pliers
- Pallet movers
- Personal computers
- Power drills
- Box cutters
- Scanners
- Phillips head screwdrivers
- Industrial sewing machines



- Power staple guns
- Stencils
- Step stools
- Measuring tapes
- Space measuring gauges
- Utility knives
- Wire brushes

Labor Market Comparison

Maine Department of Labor.

Description	Packaging and Filling Machine Operators and Tenders	Machine Feeders and Offbearers	Difference
Median Wage	\$ 24,800	\$ 26,820	\$ 2,020
10th Percentile Wage	\$ 17,150	\$ 19,120	\$ 1,970
25th Percentile Wage	N/A	N/A	N/A
75th Percentile Wage	\$ 29,350	\$ 29,840	\$ 490
90th Percentile Wage	\$ 41,440	\$ 35,200	\$(6,240)
Mean Wage	\$ 26,470	\$ 26,870	\$ 400
Total Employment - 2613	1,710	480	-1,230
Employment Base - 2006	1,787	485	-1,302
Projected Employment - 2622	1,569	378	-1,191
Projected Job Growth - 2006-2622	-12.2 %	-22.1 %	-9.9 %
Projected Annual Openings - 2006-2622	33	9	-24
Special			

Special Occupations:

National Job Posting Trends

Trend for Packaging and Filling Machine Operators and Tenders and Machine Feeders and Offbearers



Programs

No information on programs or the occupation.

Maine Statewide Promotion Opportunities for Packaging and Filling Machine Operators and Tenders

O*NET Code	Title	Grand TORQ	Job Zone	Employment	Median Wage	Difference	Growth	Annual Job Openings	Special
51-9111.00	Packaging and Filling Machine Operators and Tenders	100	2	1,710	\$24,800.00	\$0.00	-12%	33	
53-7063.00	Machine Feeders and Offbearers	88	1	480	\$26,820.00	\$2,020.00	-22%	9	
51-9121.00	Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	88	2	850	\$38,860.00	\$14,060.00	-26%	19	



51-9196.00	Paper Goods Machine Setters, Operators, and Tenders	88	2	910	\$38,230.00	\$13,430.00	-26%	23
51-6064.00	Textile Winding, Twisting, and Drawing Out Machine Setters, Operators, and Tenders	87	3	290	\$25,840.00	\$1,040.00	0%	0
51-9032.00	Cutting and Slicing Machine Setters, Operators, and Tenders	87	2	710	\$31,350.00	\$6,550.00	-23%	12
51-9041.00	Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders	87	2	260	\$28,330.00	\$3,530.00	-7%	5
51-2031.00	Engine and Other Machine Assemblers	87	3	20	\$29,010.00	\$4,210.00	-45%	1
51-5021.00	Job Printers	87	3	140	\$31,890.00	\$7,090.00	-10%	2
51-4122.00	Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders	87	2	120	\$36,960.00	\$12,160.00	2%	3
51-9051.00	Furnace, Kiln, Oven, Drier, and Kettle Operators and Tenders	86	2	300	\$32,980.00	\$8,180.00	-18%	9



51-6062.00	Textile Cutting Machine Setters, Operators, and Tenders	85	3	110	\$24,860.00	\$60.00	-13%	4	
51-9191.00	Cementing and Gluing Machine Operators and Tenders	85	1	80	\$27,620.00	\$2,820.00	-15%	2	
51-4121.07	Solderers and Brazers	84	2	1,610	\$38,030.00	\$13,230.00	7%	49	★
51-4191.00	Heat Treating Equipment Setters, Operators, and Tenders, Metal and Plastic	84	2	40	\$32,470.00	\$7,670.00	-6%	1	

Special Occupations:

Top Industries for Machine Feeders and Offbearers

Industry	NAICS	% of Industry	Employment	Projected Employment	% Change
Printing and related support activities	323100	8.45%	12,487	8,904	-28.69%
Newspaper publishers	511110	6.58%	9,719	7,493	-22.90%
Converted paper product manufacturing	322200	6.30%	9,315	7,036	-24.47%
Other wood product manufacturing	321900	5.62%	8,311	7,048	-15.19%
Plastics product manufacturing	326100	4.99%	7,369	7,030	-4.60%
Sawmills and wood preservation	321100	4.82%	7,129	5,144	-27.84%
Veneer, plywood, and engineered wood product manufacturing	321200	4.54%	6,716	6,582	-2.00%
Animal slaughtering and processing	311600	3.07%	4,541	4,664	2.71%
Pharmaceutical and medicine manufacturing	325400	2.77%	4,088	4,637	13.42%
Bakeries and tortilla manufacturing	311800	2.52%	3,716	3,417	-8.07%
Coating, engraving, heat treating, and allied activities	332800	1.91%	2,829	2,087	-26.23%
Pulp, paper, and paperboard mills	322100	1.76%	2,595	1,620	-37.57%
Fruit and vegetable preserving and specialty food manufacturing	311400	1.62%	2,389	1,949	-18.40%
Household and institutional furniture manufacturing	337120	1.43%	2,112	1,447	-31.52%



Glass and glass product manufacturing	327200	0.98%	1,450	1,139	-21.48%
---------------------------------------	--------	-------	-------	-------	---------

Top Industries for Packaging and Filling Machine Operators and Tenders

Industry	NAICS	% of Industry	Employment	Projected Employment	% Change
Employment services	561300	15.91%	61,399	69,938	13.91%
Fruit and vegetable preserving and specialty food manufacturing	311400	6.27%	24,207	19,753	-18.40%
Pharmaceutical and medicine manufacturing	325400	5.30%	20,448	23,193	13.42%
Beverage manufacturing	312100	5.21%	20,102	16,990	-15.48%
Animal slaughtering and processing	311600	4.44%	17,134	17,599	2.71%
Other food manufacturing	311900	4.04%	15,606	14,726	-5.63%
Plastics product manufacturing	326100	4.03%	15,570	14,854	-4.60%
Bakeries and tortilla manufacturing	311800	3.58%	13,834	12,718	-8.07%
Soap, cleaning compound, and toilet preparation manufacturing	325600	3.46%	13,344	11,539	-13.53%
Other support services	561900	3.44%	13,269	16,360	23.29%
Dairy product manufacturing	311500	3.40%	13,143	11,702	-10.96%
Grocery and related product wholesalers	424400	2.79%	10,767	10,596	-1.59%
Warehousing and storage	493100	1.86%	7,173	8,622	20.21%
Grain and oilseed milling	311200	1.80%	6,939	5,446	-21.51%
Sugar and confectionery product manufacturing	311300	1.63%	6,276	4,758	-24.20%

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)