



TORQ Analysis of Sewing Machine Operators to Mail Clerks and Mail Machine Operators, Except Postal Service

ANALYSIS INPUT

Transfer	Title	O*NET	Filters		
From Title:	Sewing Machine Operators	51-6031.00	Abilities:	Importance Level: 50	Weight: 1
To Title:	Mail Clerks and Mail Machine Operators, Except Postal Service	43-9051.00	Skills:	Importance Level: 69	Weight: 1
Labor Market Area:	Maine Statewide		Knowledge:	Importance Level: 69	Weight: 1

TORQ RESULTS

Grand TORQ:

80

Ability TORQ		Skills TORQ		Knowledge TORQ	
Level	83	Level	71	Level	86

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	44	9	50	No Skills Upgrade Required!				No Knowledge Upgrades Required!			
Selective Attention	39	4	53								
Speech Recognition	37	3	50								
Category Flexibility	41	2	53								

LEVEL and IMPT (IMPORTANCE) refer to the Target Mail Clerks and Mail Machine Operators, Except Postal Service. GAP refers to level difference between Sewing Machine Operators and Mail Clerks and Mail Machine Operators, Except Postal Service.

ASK ANALYSIS

Ability Level Comparison - Abilities with importance scores over 50

Description	Sewing Machine Operators	Mail Clerks and Mail Machine Operators, Except Postal Service	Importance
Near Vision	48	41	59
Category Flexibility	39	41	53
Selective Attention	35	39	53
Oral Comprehension	35	44	50
Problem Sensitivity	39	37	50
Information Ordering	37	37	50
Finger Dexterity	44	41	50
Speech Recognition	34	37	50



Skill Level Comparison - Abilities with importance scores over 69

Description	Sewing Machine Operators	Mail Clerks and Mail Machine Operators, Except Postal Service	Importance
Knowledge Level Comparison - Knowledge with importance scores over 69			
Description	Sewing Machine Operators	Mail Clerks and Mail Machine Operators, Except Postal Service	Importance

Experience & Education Comparison

Related Work Experience Comparison				Required Education Level Comparison		
Description	Sewing Machine Operators	Mail Clerks and Mail Machine Operators, Except Postal Service		Description	Sewing Machine Operators	Mail Clerks and Mail Machine Operators, Except Postal Service
10+ years	0%	0%		Doctoral	0%	0%
8-10 years	0%	0%		Professional Degree	0%	0%
6-8 years	0%	0%		Post-Masters Cert	0%	0%
4-6 years	8%	3%		Master's Degree	0%	0%
2-4 years	13%	1%		Post-Bachelor Cert	0%	0%
1-2 years	9%	3%		Bachelors	2%	0%
6-12 months	11%	10%		AA or Equiv	0%	0%
3-6 months	0%	4%		Some College	8%	6%
1-3 months	5%	7%		Post-Secondary Certificate	2%	1%
0-1 month	0%	5%		High School Diploma or GED	12%	37%
None	51%	63%		No HSD or GED	73%	54%
Sewing Machine Operators				Mail Clerks and Mail Machine Operators, Except Postal Service		
Most Common Educational/Training Requirement:						
Moderate-term on-the-job training				Short-term on-the-job training		
Job Zone Comparison						
1 - Job Zone One: Little or No Preparation Needed				1 - Job Zone One: Little or No Preparation Needed		
No previous work-related skill, knowledge, or experience is needed for these occupations. For example, a person can become a cashier even if he/she has never worked before.				No previous work-related skill, knowledge, or experience is needed for these occupations. For example, a person can become a cashier even if he/she has never worked before.		
These occupations may require a high school diploma or GED certificate. Some may require a formal training course to obtain a license.				These occupations may require a high school diploma or GED certificate. Some may require a formal training course to obtain a license.		
Employees in these occupations need anywhere from a few days to a few months of training. Usually, an experienced worker could show you how to do the job.				Employees in these occupations need anywhere from a few days to a few months of training. Usually, an experienced worker could show you how to do the job.		

Tasks

Sewing Machine Operators	Mail Clerks and Mail Machine Operators, Except Postal Service
Core Tasks	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 as replacing needles, sanding rough areas of needles, or cleaning and oiling sewing

Generalized Work Activities:

- Handling and Moving Objects - Using hands and arms in handling, installing, positioning, and moving materials, and manipulating things.
- Controlling Machines and Processes - Using either control mechanisms or direct physical activity to operate machines or processes (not including computers or vehicles).
- 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.
- Getting Information - Observing, receiving, and otherwise obtaining information from all relevant sources.
- Evaluating Information to Determine Compliance with Standards - Using relevant information and individual judgment to determine whether events or processes comply with laws, regulations, or standards.

Specific Tasks

Occupation Specific Tasks:

- Accept and check containers of mail or parcels from large volume mailers, couriers, and contractors.
- Add ink, fill paste reservoirs, and change machine ribbons when necessary.
- Adjust guides, rollers, loose card inserters, weighing machines, and tying arms, using rules and hand tools.
- Affix postage to packages or letters by hand, or stamp materials, using postage meters.
- Answer inquiries regarding shipping or mailing policies.
- Clear jams in sortation equipment.
- Contact delivery or courier services to arrange delivery of letters and parcels.
- Determine manner in which mail is to be sent, and prepare it for delivery to mailing facilities.
- Fold letters or circulars and insert them in envelopes.
- Insert material for printing or addressing into loading racks on machines, select type or die sizes, and position plates, stencils, or tapes in machine magazines.
- Inspect mail machine output for defects; determine how to eliminate causes of any defects.
- Lift and unload containers of mail or parcels onto equipment for transportation to sortation stations.
- Mail merchandise samples or promotional literature in response to requests.
- Operate computer-controlled keyboards or voice recognition equipment in order to direct items according to established routing



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
- sew by hand
- use hand or power tools

schemes.

- Operate embossing machines or typewriters to make corrections, additions, and changes to address plates.
- Place incoming or outgoing letters or packages into sacks or bins based on destination or type, and place identifying tags on sacks or bins.
- Read production orders to determine types and sizes of items scheduled for printing and mailing.
- Release packages or letters to customers upon presentation of written notices or other identification.
- Remove containers of sorted mail/parcels, and transfer them to designated areas according to established procedures.
- Remove from machines printed materials such as labeled articles, postmarked envelopes or tape, and folded sheets.
- Seal or open envelopes, by hand or by using machines.
- Sell mail products, and accept payment for products and mailing charges.
- Sort and route incoming mail, and collect outgoing mail, using carts as necessary.
- Stamp dates and times of receipt of incoming mail.
- Start machines that automatically feed plates, stencils, or tapes through mechanisms, and observe machine operations in order to detect any malfunctions.
- Use equipment such as forklifts and automated "trains" to move containers of mail.
- Verify that items are addressed correctly, marked with the proper postage, and in suitable condition for processing.
- Weigh packages or letters to determine postage needed, using weighing scales and rate charts.
- Wrap packages or bundles by hand, or by using tying machines.

Detailed Tasks

Detailed Work Activities:

- answer customer or public inquiries
- demonstrate or explain assembly or use of equipment
- distribute correspondence or mail
- fill out business or government forms
- insert mail into slots of mail rack
- inspect mail preparation or handling machine output for defects
- inspect outgoing mail for conformance to standards or accuracy
- maintain inventory of office forms
- maintain records, reports, or files
- measure, weigh, or count products or



- use portable electric fabric cutter

materials

- monitor operation of document sorting machine
- monitor operation of mail preparation or handling machines
- operate alpha or numeric mail sorting systems
- operate business machines
- operate printing equipment/machinery
- package goods for shipment or storage
- process mail through postage machine
- process orders for merchandise
- proofread printed or written material
- provide customer service
- provide customer service in postal or mail service setting
- read work order, instructions, formulas, or processing charts
- set up production equipment or machinery
- sort mail letters or packages
- use computers to enter, access or retrieve data
- use oral or written communication techniques

Labor Market Comparison

Maine Department of Labor.

Description	Sewing Machine Operators	Mail Clerks and Mail Machine Operators, Except Postal Service	Difference
Median Wage	\$ 22,440	\$ 23,250	\$ 810
10th Percentile Wage	\$ 16,350	\$ 15,120	\$(1,230)
25th Percentile Wage	N/A	N/A	N/A
75th Percentile Wage	\$ 27,200	\$ 28,470	\$ 1,270
90th Percentile Wage	\$ 31,710	\$ 33,170	\$ 1,460
Mean Wage	\$ 23,030	\$ 23,730	\$ 700
Total Employment - 2576	1,080	490	-590
Employment Base - 2006	1,077	485	-592
Projected Employment - 2585	990	395	-595
Projected Job Growth - 2006-2585	-8.1 %	-18.5 %	-10.5 %
Projected Annual Openings - 2006-2585	10	13	3
Special			

Special Occupations:

**National Job Posting Trends**

Trend for Sewing Machine Operators and Mail Clerks and Mail Machine Operators, Except Postal Service

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

Related Programs

General Office/Clerical and Typing Services

General Office Occupations and Clerical Services. A program that prepares individuals to provide basic administrative support under the supervision of office managers, administrative assistants, secretaries, and other office personnel. Includes instruction in typing, keyboarding, filing, general business correspondence, office equipment operation, and communications skills.

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

Maine Statewide Promotion Opportunities for Sewing Machine Operators

O*NET Code	Title	Grand TORQ	Job Zone	Employment	Median Wage	Difference	Growth	Annual Job Openings	Special
51-6031.00	Sewing Machine Operators	100	1	1,080	\$22,440.00	\$0.00	-8%	10	



51-6064.00	Textile Winding, Twisting, and Drawing Out Machine Setters, Operators, and Tenders	80	3	290	\$25,840.00	\$3,400.00	0%	0
43-9051.00	Mail Clerks and Mail Machine Operators, Except Postal Service	80	1	490	\$23,250.00	\$810.00	-19%	13
51-6062.00	Textile Cutting Machine Setters, Operators, and Tenders	79	3	110	\$24,860.00	\$2,420.00	-13%	4
51-2021.00	Coil Winders, Tapers, and Finishers	78	2	90	\$31,910.00	\$9,470.00	-53%	1
51-6041.00	Shoe and Leather Workers and Repairers	78	2	90	\$25,030.00	\$2,590.00	-19%	3
43-5053.00	Postal Service Mail Sorters, Processors, and Processing Machine Operators	78	2	970	\$41,950.00	\$19,510.00	-12%	10
51-2092.00	Team Assemblers	77	2	3,850	\$23,730.00	\$1,290.00	-7%	82
51-9196.00	Paper Goods Machine Setters, Operators, and Tenders	77	2	910	\$38,230.00	\$15,790.00	-26%	23
51-9032.00	Cutting and Slicing Machine Setters, Operators, and Tenders	76	2	710	\$31,350.00	\$8,910.00	-23%	12
51-9041.00	Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders	76	2	260	\$28,330.00	\$5,890.00	-7%	5



51-9191.00	Cementing and Gluing Machine Operators and Tenders	75	1	80	\$27,620.00	\$5,180.00	-15%	2	
51-4121.07	Solderers and Brazers	75	2	1,610	\$38,030.00	\$15,590.00	7%	49	★
51-5023.00	Printing Machine Operators	75	2	790	\$29,710.00	\$7,270.00	-3%	18	
51-7042.00	Woodworking Machine Setters, Operators, and Tenders, Except Sawing	75	2	900	\$23,040.00	\$600.00	-12%	23	

Special Occupations:

Top Industries for Mail Clerks and Mail Machine Operators, Except Postal Service

Industry	NAICS	% of Industry	Employment	Projected Employment	% Change
Advertising and related services	541800	13.09%	19,902	20,577	3.39%
Employment services	561300	6.47%	9,834	9,148	-6.98%
Newspaper publishers	511110	5.47%	8,311	5,233	-37.03%
Federal government, excluding postal service	919999	4.85%	7,382	5,130	-30.52%
Management of companies and enterprises	551100	3.77%	5,728	4,853	-15.27%
Religious organizations	813100	3.71%	5,649	4,983	-11.79%
Data processing, hosting, and related services	518200	3.58%	5,446	5,411	-0.64%
Colleges, universities, and professional schools, public and private	611300	3.16%	4,809	3,954	-17.77%
Printing and related support activities	323100	2.83%	4,298	2,503	-41.76%
Couriers	492100	2.30%	3,494	2,760	-21.02%
Direct insurance (except life, health, and medical) carriers	524120	2.24%	3,403	2,615	-23.18%
Depository credit intermediation	522100	2.16%	3,284	2,461	-25.06%
Electronic shopping and mail-order houses	454100	1.84%	2,798	2,572	-8.06%
Legal services	541100	1.82%	2,760	2,228	-19.27%
Insurance agencies and brokerages	524210	1.42%	2,165	1,800	-16.86%

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%



TORQ Analysis of Sewing Machine Operators to Textile Winding, Twisting, and Drawing Out Machine Setters, Operators, and Tenders

ANALYSIS INPUT					
Transfer	Title	O*NET	Filters		
From Title:	Sewing Machine Operators	51-6031.00	Abilities:	Importance Level: 50	Weight: 1
To Title:	Textile Winding, Twisting, and Drawing Out Machine Setters, Operators, and Tenders	51-6064.00	Skills:	Importance Level: 69	Weight: 1
Labor Market Area:	Maine Statewide		Knowledge:	Importance Level: 69	Weight: 1

TORQ RESULTS											
Grand TORQ:								80			
Ability TORQ			Skills TORQ				Knowledge TORQ				
Level			85	Level			66	Level			90
Gaps To Narrow if Possible				Upgrade These Skills				Knowledge to Add			
Ability	Level	Gap	Impt	Skill	Level	Gap	Impt	Knowledge	Level	Gap	Impt
Gross Body Coordination	39	18	53	No Skills Upgrade Required!				No Knowledge Upgrades Required!			
Auditory Attention	44	18	53								
Reaction Time	53	14	65								
Trunk Strength	44	14	59								
Extent Flexibility	50	16	50								
Static Strength	41	13	53								
Perceptual Speed	46	11	59								
Hearing Sensitivity	44	12	53								
Stamina	35	12	50								
Arm-Hand Steadiness	59	8	68								
Finger Dexterity	53	9	59								
Control Precision	50	8	59								
Multilimb Coordination	44	7	62								
Problem Sensitivity	46	7	59								
Manual Dexterity	48	6	62								
Selective Attention	42	7	50								



Visualization	44	5	53
Visual Color Discrimination	50	4	59
Flexibility of Closure	41	4	53
Oral Expression	39	4	50
Depth Perception	41	4	50
Rate Control	42	3	59
Speech Clarity	35	3	50
Near Vision	50	2	56
Far Vision	44	2	53
Category Flexibility	41	2	50

LEVEL and IMPT (IMPORTANCE) refer to the Target Textile Winding, Twisting, and Drawing Out Machine Setters, Operators, and Tenders. GAP refers to level difference between Sewing Machine Operators and Textile Winding, Twisting, and Drawing Out Machine Setters, Operators, and Tenders.

ASK ANALYSIS

Ability Level Comparison - Abilities with importance scores over 50

Description	Sewing Machine Operators	Textile Winding, Twisting, and Drawing Out Machine Setters, Operators, and Tenders	Importance
Arm-Hand Steadiness	51	59	68
Reaction Time	39	53	65
Manual Dexterity	42	48	62
Multilimb Coordination	37	44	62
Problem Sensitivity	39	46	59
Perceptual Speed	35	46	59
Finger Dexterity	44	53	59
Control Precision	42	50	59
Rate Control	39	42	59
Trunk Strength	30	44	59
Visual Color Discrimination	46	50	59
Near Vision	48	50	56
Flexibility of Closure	37	41	53
Visualization	39	44	53
Static Strength	28	41	53
Gross Body Coordination	21	39	53
Far Vision	42	44	53
Hearing Sensitivity	32	44	53
Auditory Attention	26	44	53
Oral Expression	35	39	50
Information Ordering	37	37	50
Category Flexibility	39	41	50
Selective Attention	35	42	50



Stamina	23	35	50
Extent Flexibility	34	50	50
Depth Perception	37	41	50
Speech Clarity	32	35	50

Skill Level Comparison - Abilities with importance scores over 69

Description	Sewing Machine Operators	Textile Winding, Twisting, and Drawing Out Machine Setters, Operators, and Tenders	Importance
-------------	--------------------------	--	------------

Knowledge Level Comparison - Knowledge with importance scores over 69

Description	Sewing Machine Operators	Textile Winding, Twisting, and Drawing Out Machine Setters, Operators, and Tenders	Importance
-------------	--------------------------	--	------------

Experience & Education Comparison

Related Work Experience Comparison			Required Education Level Comparison		
Description	Sewing Machine Operators	Textile Winding, Twisting, and Drawing Out Machine Setters, Operators, and Tenders	Description	Sewing Machine Operators	Textile Winding, Twisting, and Drawing Out Machine Setters, Operators, and Tenders
10+ years	0%	0%	Doctoral	0%	0%
8-10 years	0%	0%	Professional Degree	0%	0%
6-8 years	0%	0%	Post-Masters Cert	0%	0%
4-6 years	8%	11%	Master's Degree	0%	0%
2-4 years	13%	0%	Post-Bachelor Cert	0%	0%
1-2 years	9%	5%	Bachelors	2%	0%
6-12 months	11%	2%	AA or Equiv	0%	0%
3-6 months	0%	0%	Some College	8%	0%
1-3 months	5%	19%	Post-Secondary Certificate	2%	1%
0-1 month	0%	10%	High School Diploma or GED	12%	78%
None	51%	50%	No HSD or GED	73%	19%

Sewing Machine Operators

Textile Winding, Twisting, and Drawing Out Machine Setters, Operators, and Tenders

Most Common Educational/Training Requirement:

Moderate-term on-the-job training

Moderate-term on-the-job training

Job Zone Comparison

1 - Job Zone One: Little or No Preparation Needed

3 - Job Zone Three: Medium Preparation Needed

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

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

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

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



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

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

Tasks

Sewing Machine Operators

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 dve

Textile Winding, Twisting, and Drawing Out Machine Setters, Operators, and Tenders

Core Tasks

Generalized Work Activities:

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

Specific Tasks

Occupation Specific Tasks:

- Adjust machine settings such as speed or tension to produce products that meet specifications.
- Clean, oil, and lubricate machines, using air hoses, cleaning solutions, rags, oilcans, and grease guns.
- Inspect machinery to determine whether repairs are needed.
- Inspect products to verify that they meet specifications and to determine whether machine adjustment is needed.
- Install, level, and align machine components such as gears, chains, guides, dies, cutters, and/or needles to set up machinery for operation.
- Measure bobbins periodically, using gauges; and turn screws to adjust tension if bobbins are not of specified size.
- Notify supervisors or mechanics of equipment malfunctions.
- Observe bobbins as they are winding; and cut threads to remove loaded bobbins, using knives.



prior to sewing them, and verify that they
lots and patterns match.

- Monitor machine operation to detect problems such as defective stitching, breaks in thread, or machine malfunctions.
- Mount attachments, such as needles, cutting blades, or pattern plates, and adjust machine guides according to specifications.
- Perform equipment maintenance tasks such as replacing needles, sanding rough areas of needles, or cleaning and oiling sewing machines.
- Perform specialized or automatic sewing machine functions, such as buttonhole making or tacking.
- Place spools of thread, cord, or other materials on spindles, insert bobbins, and thread ends through machine guides and components.
- Position and mark patterns on materials to prepare for sewing.
- Position items under needles, using marks 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

- Observe operations to detect defects, malfunctions, or supply shortages.
- Operate machines for test runs to verify adjustments and to obtain product samples.
- Place bobbins on spindles and insert spindles into bobbin-winding machines.
- Record production data such as numbers and types of bobbins wound.
- Remove spindles from machines and bobbins from spindles.
- Repair or replace worn or defective parts or components, using hand tools.
- Replace depleted supply packages with full packages.
- Start machines, monitor operation, and make adjustments as needed.
- Stop machines when specified amount of products has been produced.
- Study guides, samples, charts, and specification sheets, or confer with supervisors or engineering staff to determine setup requirements.
- Tend machines that twist together two or more strands of yarn or insert additional twists into single strands of yarn to increase strength, smoothness, and/or uniformity of yarn.
- Tend machines that wind wire onto bobbins, preparatory to formation of wire netting used in reinforcing sheet glass.
- Tend machines with multiple winding units that wind thread onto shuttle bobbins for use on sewing machines or other kinds of bobbins for sole-stitching, knitting, or weaving machinery.
- Tend spinning frames that draw out and twist roving or sliver into yarn.
- Thread yarn, thread, and/or fabric through guides, needles, and rollers of machines.
- Unwind lengths of yarn, thread, or twine from spools and wind onto bobbins.

Detailed Tasks

Detailed Work Activities:

- adjust production equipment/machinery setup
- clean equipment or machinery
- confer with engineering, technical or manufacturing personnel
- examine products or work to verify conformance to specifications
- inspect machinery or equipment to determine adjustments or repairs needed
- load or unload material or workpiece into machinery
- maintain consistent production quality
- maintain or repair industrial or related equipment/machinery
- monitor production machinery/equipment operation to detect problems



- operate sewing machine
- perform safety inspections in manufacturing or industrial setting
- read work order, instructions, formulas, or processing charts
- repair tears or defects in fabrics, garments, or leather products
- sew by hand
- use hand or power tools
- use portable electric fabric cutter

- move or lift heavy objects
- operate textile production equipment/machinery
- perform safety inspections in manufacturing or industrial setting
- read specifications
- read work order, instructions, formulas, or processing charts
- recognize characteristics of cloth or fabric
- set up production equipment or machinery
- understand technical operating, service or repair manuals
- use hand or power tools
- use precision measuring tools or equipment

Labor Market Comparison

Maine Department of Labor.

Description	Sewing Machine Operators	Textile Winding, Twisting, and Drawing Out Machine Setters, Operators, and Tenders	Difference
Median Wage	\$ 22,440	\$ 25,840	\$ 3,400
10th Percentile Wage	\$ 16,350	\$ 17,060	\$ 710
25th Percentile Wage	N/A	N/A	N/A
75th Percentile Wage	\$ 27,200	\$ 29,370	\$ 2,170
90th Percentile Wage	\$ 31,710	\$ 31,830	\$ 120
Mean Wage	\$ 23,030	\$ 25,210	\$ 2,180
Total Employment - 2576	1,080	290	-790
Employment Base - 2006	1,077	N/A	N/A
Projected Employment - 2585	990	N/A	N/A
Projected Job Growth - 2006-2585	-8.1 %	0.0 %	8.1 %
Projected Annual Openings - 2006-2585	10	0	-10
Special			

Special Occupations:

National Job Posting Trends

Trend for Sewing Machine Operators and Textile Winding, Twisting, and Drawing Out Machine Setters, Operators, and Tenders



Programs

Related Programs

Industrial Machinery Main. and Repairer

Industrial Mechanics and Maintenance Technology. A program that prepares individuals to apply technical knowledge and skills to repair and maintain industrial machinery and equipment such as cranes, pumps, engines and motors, pneumatic tools, conveyor systems, production machinery, marine deck machinery, and steam propulsion, refinery, and pipeline-distribution systems.

Institution	Address	City	URL
Kennebec Valley Community College	92 Western Ave	Fairfield	www.kvcc.me.edu

Maine Statewide Promotion Opportunities for Sewing Machine Operators

O*NET Code	Title	Grand TORQ	Job Zone	Employment	Median Wage	Difference	Growth	Annual Job Openings	Special
51-6031.00	Sewing Machine Operators	100	1	1,080	\$22,440.00	\$0.00	-8%	10	
43-9051.00	Mail Clerks and Mail Machine Operators, Except Postal Service	80	1	490	\$23,250.00	\$810.00	-19%	13	



51-6064.00	Textile Winding, Twisting, and Drawing Out Machine Setters, Operators, and Tenders	80	3	290	\$25,840.00	\$3,400.00	0%	0	
51-6062.00	Textile Cutting Machine Setters, Operators, and Tenders	79	3	110	\$24,860.00	\$2,420.00	-13%	4	
51-6041.00	Shoe and Leather Workers and Repairers	78	2	90	\$25,030.00	\$2,590.00	-19%	3	
51-2021.00	Coil Winders, Tapers, and Finishers	78	2	90	\$31,910.00	\$9,470.00	-53%	1	
43-5053.00	Postal Service Mail Sorters, Processors, and Processing Machine Operators	78	2	970	\$41,950.00	\$19,510.00	-12%	10	
51-2092.00	Team Assemblers	77	2	3,850	\$23,730.00	\$1,290.00	-7%	82	
51-9196.00	Paper Goods Machine Setters, Operators, and Tenders	77	2	910	\$38,230.00	\$15,790.00	-26%	23	
51-9041.00	Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders	76	2	260	\$28,330.00	\$5,890.00	-7%	5	
51-9032.00	Cutting and Slicing Machine Setters, Operators, and Tenders	76	2	710	\$31,350.00	\$8,910.00	-23%	12	
51-4121.07	Solderers and Brazers	75	2	1,610	\$38,030.00	\$15,590.00	7%	49	
51-5023.00	Printing Machine Operators	75	2	790	\$29,710.00	\$7,270.00	-3%	18	



51-9191.00	Cementing and Gluing Machine Operators and Tenders	75	1	80	\$27,620.00	\$5,180.00	-15%	2
51-7042.00	Woodworking Machine Setters, Operators, and Tenders, Except Sawing	75	2	900	\$23,040.00	\$600.00	-12%	23

Special Occupations:

Top Industries for Textile Winding, Twisting, and Drawing Out Machine Setters, Operators, and Tenders

Industry	NAICS	% of Industry	Employment	Projected Employment	% Change
Fiber, yarn, and thread mills	313100	45.53%	19,735	15,068	-23.65%
Fabric mills	313200	19.64%	8,510	5,609	-34.09%
Textile furnishings mills	314100	15.93%	6,906	5,947	-13.89%
Other textile product mills	314900	5.53%	2,395	2,088	-12.83%
Textile and fabric finishing and fabric coating mills	313300	4.29%	1,860	1,107	-40.47%
Apparel knitting mills	315100	0.96%	418	213	-49.01%
Glass and glass product manufacturing	327200	0.92%	397	283	-28.82%
Employment services	561300	0.64%	277	286	3.27%
Management of companies and enterprises	551100	0.40%	174	163	-5.94%

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%



TORQ Analysis of Sewing Machine Operators to Textile Cutting Machine Setters, Operators, and Tenders

ANALYSIS INPUT					
Transfer	Title	O*NET	Filters		
From Title:	Sewing Machine Operators	51-6031.00	Abilities:	Importance Level: 50	Weight: 1
To Title:	Textile Cutting Machine Setters, Operators, and Tenders	51-6062.00	Skills:	Importance Level: 69	Weight: 1
Labor Market Area:	Maine Statewide		Knowledge:	Importance Level: 69	Weight: 1

TORQ RESULTS					
Grand TORQ:					79
Ability TORQ		Skills TORQ		Knowledge TORQ	
Level	 86	Level	 76	Level	 75

Gaps To Narrow if Possible				Upgrade These Skills				Knowledge to Add			
Ability	Level	Gap	Imp	Skill	Level	Gap	Imp	Knowledge	Level	Gap	Imp
Auditory Attention	41	15	53	No Skills Upgrade Required!				No Knowledge Upgrades Required!			
Multilimb Coordination	48	11	62								
Trunk Strength	42	12	56								
Reaction Time	51	12	50								
Visualization	50	11	50								
Static Strength	39	11	50								
Control Precision	50	8	59								
Rate Control	46	7	56								
Oral Comprehension	42	7	53								
Hearing Sensitivity	39	7	50								
Arm-Hand Steadiness	55	4	65								
Manual Dexterity	46	4	59								
Information Ordering	41	4	53								
Deductive Reasoning	39	4	50								
Perceptual Speed	39	4	50								
Problem Sensitivity	42	3	53								
Speech Clarity	35	3	50								



Category Flexibility	41	2	50
Speech Recognition	35	1	53

LEVEL and IMPT (IMPORTANCE) refer to the Target Textile Cutting Machine Setters, Operators, and Tenders. GAP refers to level difference between Sewing Machine Operators and Textile Cutting Machine Setters, Operators, and Tenders.

ASK ANALYSIS

Ability Level Comparison - Abilities with importance scores over 50

Description	Sewing Machine Operators	Textile Cutting Machine Setters, Operators, and Tenders	Importance
Arm-Hand Steadiness	51	55	65
Multilimb Coordination	37	48	62
Manual Dexterity	42	46	59
Control Precision	42	50	59
Near Vision	48	48	59
Finger Dexterity	44	44	56
Rate Control	39	46	56
Trunk Strength	30	42	56
Visual Color Discrimination	46	46	56
Oral Comprehension	35	42	53
Problem Sensitivity	39	42	53
Information Ordering	37	41	53
Depth Perception	37	37	53
Auditory Attention	26	41	53
Speech Recognition	34	35	53
Deductive Reasoning	35	39	50
Category Flexibility	39	41	50
Perceptual Speed	35	39	50
Visualization	39	50	50
Reaction Time	39	51	50
Static Strength	28	39	50
Hearing Sensitivity	32	39	50
Speech Clarity	32	35	50

Skill Level Comparison - Abilities with importance scores over 69

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



Experience & Education Comparison

Related Work Experience Comparison				Required Education Level Comparison		
Description	Sewing Machine Operators	Textile Cutting Machine Setters, Operators, and Tenders	Description	Sewing Machine Operators	Textile Cutting Machine Setters, Operators, and Tenders	
10+ years	0%	9%	Doctoral	0%	0%	
8-10 years	0%	0%	Professional Degree	0%	0%	
6-8 years	0%	0%	Post-Masters Cert	0%	0%	
4-6 years	8%	0%	Master's Degree	0%	0%	
2-4 years	13%	0%	Post-Bachelor Cert	0%	0%	
1-2 years	9%	31%	Bachelors	2%	0%	
6-12 months	11%	9%	AA or Equiv	0%	0%	
3-6 months	0%	2%	Some College	8%	27%	
1-3 months	5%	9%	Post-Secondary Certificate	2%	8%	
0-1 month	0%	2%	High School Diploma or GED	12%	43%	
None	51%	33%	No HSD or GED	73%	20%	

Sewing Machine Operators	Textile Cutting Machine Setters, Operators, and Tenders
Most Common Educational/Training Requirement:	
Moderate-term on-the-job training	Moderate-term on-the-job training
Job Zone Comparison	
1 - Job Zone One: Little or No Preparation Needed No previous work-related skill, knowledge, or experience is needed for these occupations. For example, a person can become a cashier even if he/she has never worked before. These occupations may require a high school diploma or GED certificate. Some may require a formal training course to obtain a license. Employees in these occupations need anywhere from a few days to a few months of training. Usually, an experienced worker could show you how to do the job.	3 - Job Zone Three: Medium Preparation Needed Previous work-related skill, knowledge, or experience is required for these occupations. For example, an electrician must have completed three or four years of apprenticeship or several years of vocational training, and often must have passed a licensing exam, in order to perform the job. Most occupations in this zone require training in vocational schools, related on-the-job experience, or an associate's degree. Some may require a bachelor's degree. Employees in these occupations usually need one or two years of training involving both on-the-job experience and informal training with experienced workers.

Tasks

Sewing Machine Operators	Textile Cutting Machine Setters, Operators, and Tenders
Core Tasks Generalized Work Activities: <ul style="list-style-type: none"> • 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 	Core Tasks Generalized Work Activities: <ul style="list-style-type: none"> • Inspecting Equipment, Structures, or Material - Inspecting equipment, structures, or materials to identify the cause of errors or other problems or defects. • Monitor Processes, Materials, or Surroundings - Monitoring and reviewing information from materials, events, or the environment, to detect or assess problems. • Repairing and Maintaining Mechanical Equipment - Servicing, repairing, adjusting, and testing machines, devices, moving parts, and equipment that operate primarily



Material - Inspecting equipment, structures, or materials to identify the cause of errors or other problems or defects.

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

Specific Tasks

Occupation Specific Tasks:

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

on the basis of mechanical (not electronic) principles.

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

Specific Tasks

Occupation Specific Tasks:

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



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

Detailed Tasks

Detailed Work Activities:

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

Detailed Tasks

Detailed Work Activities:

- adjust production equipment/machinery setup
- clean equipment or machinery
- confer with engineering, technical or manufacturing personnel
- examine products or work to verify conformance to specifications
- inspect machinery or equipment to determine adjustments or repairs needed
- install equipment or attachments on machinery or related structures
- load or unload material or workpiece into machinery
- maintain consistent production quality
- maintain or repair industrial or related equipment/machinery
- monitor production machinery/equipment operation to detect problems
- move or fit heavy objects
- operate textile production equipment/machinery
- perform safety inspections in manufacturing or industrial setting
- read specifications
- read work order, instructions, formulas, or processing charts
- recognize characteristics of cloth or fabric
- set up production equipment or machinery
- understand technical operating, service or repair manuals
- use hand or power tools
- use precision measuring tools or equipment

Labor Market Comparison

Maine Department of Labor.

Description	Sewing Machine Operators	Textile Cutting Machine Setters, Operators, and Tenders	Difference
Median Wage	\$ 22,440	\$ 24,860	\$ 2,420
10th Percentile Wage	\$ 16,350	\$ 15,530	\$(820)



25th Percentile Wage	N/A	N/A	N/A
75th Percentile Wage	\$ 27,200	\$ 29,340	\$ 2,140
90th Percentile Wage	\$ 31,710	\$ 33,940	\$ 2,230
Mean Wage	\$ 23,030	\$ 24,400	\$ 1,370
Total Employment - 2576	1,080	110	-970
Employment Base - 2006	1,077	104	-973
Projected Employment - 2585	990	90	-900
Projected Job Growth - 2006-2585	-8.1 %	-13.5 %	-5.4 %
Projected Annual Openings - 2006-2585	10	4	-6
Special			
Special Occupations:			

National Job Posting Trends

Trend for Sewing Machine Operators and Textile Cutting Machine Setters, Operators, and Tenders



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

Programs

Related Programs

Industrial Machinery Main. and Repairer

Industrial Mechanics and Maintenance Technology. A program that prepares individuals to apply technical knowledge and skills to repair and maintain industrial machinery and equipment such as cranes, pumps, engines and motors, pneumatic tools, conveyor systems, production machinery, marine deck machinery, and steam propulsion, refinery, and pipeline-distribution systems.



Institution	Address	City	URL
Kennebec Valley Community College	92 Western Ave	Fairfield	www.kvcc.me.edu

Maine Statewide Promotion Opportunities for Sewing Machine Operators

O*NET Code	Title	Grand TORQ	Job Zone	Employment	Median Wage	Difference	Growth	Annual Job Openings	Special
51-6031.00	Sewing Machine Operators	100	1	1,080	\$22,440.00	\$0.00	-8%	10	
51-6064.00	Textile Winding, Twisting, and Drawing Out Machine Setters, Operators, and Tenders	80	3	290	\$25,840.00	\$3,400.00	0%	0	
43-9051.00	Mail Clerks and Mail Machine Operators, Except Postal Service	80	1	490	\$23,250.00	\$810.00	-19%	13	
51-6062.00	Textile Cutting Machine Setters, Operators, and Tenders	79	3	110	\$24,860.00	\$2,420.00	-13%	4	
51-2021.00	Coil Winders, Tapers, and Finishers	78	2	90	\$31,910.00	\$9,470.00	-53%	1	
51-6041.00	Shoe and Leather Workers and Repairers	78	2	90	\$25,030.00	\$2,590.00	-19%	3	
43-5053.00	Postal Service Mail Sorters, Processors, and Processing Machine Operators	78	2	970	\$41,950.00	\$19,510.00	-12%	10	
51-2092.00	Team Assemblers	77	2	3,850	\$23,730.00	\$1,290.00	-7%	82	



51-9196.00	Paper Goods Machine Setters, Operators, and Tenders	77	2	910	\$38,230.00	\$15,790.00	-26%	23	
51-9032.00	Cutting and Slicing Machine Setters, Operators, and Tenders	76	2	710	\$31,350.00	\$8,910.00	-23%	12	
51-9041.00	Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders	76	2	260	\$28,330.00	\$5,890.00	-7%	5	
51-9191.00	Cementing and Gluing Machine Operators and Tenders	75	1	80	\$27,620.00	\$5,180.00	-15%	2	
51-4121.07	Solderers and Brazers	75	2	1,610	\$38,030.00	\$15,590.00	7%	49	★
51-5023.00	Printing Machine Operators	75	2	790	\$29,710.00	\$7,270.00	-3%	18	
51-7042.00	Woodworking Machine Setters, Operators, and Tenders, Except Sawing	75	2	900	\$23,040.00	\$600.00	-12%	23	

Special Occupations:

Top Industries for Textile Cutting Machine Setters, Operators, and Tenders

Industry	NAICS	% of Industry	Employment	Projected Employment	% Change
Cut and sew apparel manufacturing	315200	27.94%	5,222	2,205	-57.77%
Textile furnishings mills	314100	9.79%	1,829	1,657	-9.40%
Other textile product mills	314900	9.59%	1,792	1,610	-10.18%
Household and institutional furniture manufacturing	337120	9.27%	1,732	1,318	-23.91%
Fabric mills	313200	8.18%	1,528	1,079	-29.38%
Textile and fabric finishing and fabric coating mills	313300	4.31%	806	497	-38.33%
Apparel accessories and other apparel manufacturing	315900	3.33%	623	435	-30.10%



Fiber, yarn, and thread mills	313100	3.21%	600	505	-15.78%
Other furniture related product manufacturing	337900	2.62%	490	511	4.40%
Apparel knitting mills	315100	2.27%	424	265	-37.50%
Apparel, piece goods, and notions merchant wholesalers	424300	1.88%	351	358	1.97%
Motor vehicle parts manufacturing	336300	1.21%	225	179	-20.39%
Management of companies and enterprises	551100	1.14%	212	245	15.28%
Furniture and home furnishing merchant wholesalers	423200	1.06%	197	217	9.75%
Electronic shopping and mail-order houses	454100	1.04%	194	243	25.08%

Top Industries for 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%



TORQ Analysis of Sewing Machine Operators to Shoe and Leather Workers and Repairers

ANALYSIS INPUT					
Transfer	Title	O*NET	Filters		
From Title:	Sewing Machine Operators	51-6031.00	Abilities:	Importance Level: 50	Weight: 1
To Title:	Shoe and Leather Workers and Repairers	51-6041.00	Skills:	Importance Level: 69	Weight: 1
Labor Market Area:	Maine Statewide		Knowledge:	Importance Level: 69	Weight: 1

TORQ RESULTS											
Grand TORQ:					78						
Ability TORQ		Skills TORQ		Knowledge TORQ							
Level	 94	Level	 69	Level	 71						
Gaps To Narrow if Possible			Upgrade These Skills		Knowledge to Add						
Ability	Level	Gap	Impt	Skill	Level	Gap	Impt	Knowledge	Level	Gap	Impt
Arm-Hand Steadiness	53	2	53	No Skills Upgrade Required!		No Knowledge Upgrades Required!					
LEVEL and IMPT (IMPORTANCE) refer to the Target Shoe and Leather Workers and Repairers. GAP refers to level difference between Sewing Machine Operators and Shoe and Leather Workers and Repairers.											

ASK ANALYSIS			
Ability Level Comparison - Abilities with importance scores over 50			
Description	Sewing Machine Operators	Shoe and Leather Workers and Repairers	Importance
Manual Dexterity	42 	42 	56 
Finger Dexterity	44 	42 	56 
Near Vision	48 	46 	56 
Arm-Hand Steadiness	51 	53 	53 
Control Precision	42 	35 	50 
Multilimb Coordination	37 	32 	50 
Skill Level Comparison - Abilities with importance scores over 69			
Description	Sewing Machine Operators	Shoe and Leather Workers and Repairers	Importance
Knowledge Level Comparison - Knowledge with importance scores over 69			
Description	Sewing Machine Operators	Shoe and Leather Workers and Repairers	Importance



Experience & Education Comparison

Related Work Experience Comparison				Required Education Level Comparison		
Description	Sewing Machine Operators	Shoe and Leather Workers and Repairers		Description	Sewing Machine Operators	Shoe and Leather Workers and Repairers
10+ years	0%	0%		Doctoral	0%	1%
8-10 years	0%	0%		Professional Degree	0%	0%
6-8 years	0%	0%		Post-Masters Cert	0%	0%
4-6 years	8%	8%		Master's Degree	0%	0%
2-4 years	13%	3%		Post-Bachelor Cert	0%	0%
1-2 years	9%	15%		Bachelors	2%	0%
6-12 months	11%	4%		AA or Equiv	0%	2%
3-6 months	0%	10%		Some College	8%	21%
1-3 months	5%	11%		Post-Secondary Certificate	2%	0%
0-1 month	0%	2%		High School Diploma or GED	12%	56%
None	51%	43%		No HSD or GED	73%	17%

Sewing Machine Operators

Shoe and Leather Workers and Repairers

Most Common Educational/Training Requirement:

Moderate-term on-the-job training

Long-term on-the-job training

Job Zone Comparison

1 - Job Zone One: Little or No Preparation Needed

2 - Job Zone Two: Some Preparation Needed

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

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

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

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

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

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

Tasks

Sewing Machine Operators

Shoe and Leather Workers and Repairers

Core Tasks

Core Tasks

Generalized Work Activities:

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.

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



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

Specific Tasks

Occupation Specific Tasks:

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

or other problems or defects.

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

Specific Tasks

Occupation Specific Tasks:

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



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

Detailed Tasks

Detailed Work Activities:

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

for people with foot problems and special needs.

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

Detailed Tasks

Detailed Work Activities:

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



- understand technical operating, service or repair manuals
- use hand or power tools
- use leather fabrication or repair equipment
- use portable electric fabric cutter
- use shoe repair materials

Labor Market Comparison

Maine Department of Labor.

Description	Sewing Machine Operators	Shoe and Leather Workers and Repairers	Difference
Median Wage	\$ 22,440	\$ 25,030	\$ 2,590
10th Percentile Wage	\$ 16,350	\$ 18,110	\$ 1,760
25th Percentile Wage	N/A	N/A	N/A
75th Percentile Wage	\$ 27,200	\$ 29,300	\$ 2,100
90th Percentile Wage	\$ 31,710	\$ 35,580	\$ 3,870
Mean Wage	\$ 23,030	\$ 25,870	\$ 2,840
Total Employment - 2576	1,080	90	-990
Employment Base - 2006	1,077	151	-926
Projected Employment - 2585	990	122	-868
Projected Job Growth - 2006-2585	-8.1 %	-19.2 %	-11.1 %
Projected Annual Openings - 2006-2585	10	3	-7
Special			

Special Occupations:

National Job Posting Trends

Trend for Sewing Machine Operators and Shoe and Leather Workers and Repairers



Programs

Related Programs

Leatherworkers and Upholsterers, Other

Leatherworking and Upholstery, Other. Any instructional program in leatherworking and upholstering not listed above.

No information on schools for the program

Shoe, Boot and Leather Repairer

Shoe, Boot and Leather Repair. A program that prepares individuals to apply technical knowledge and skills to repair all types of footwear, including replacement and mending of worn parts; repairing orthopedic footwear, refinishing and dyeing leather; and repairing other leather goods such as handbags, belts, and luggage.

No information on schools for the program

Maine Statewide Promotion Opportunities for Sewing Machine Operators

O*NET Code	Title	Grand TORQ	Job Zone	Employment	Median Wage	Difference	Growth	Annual Job Openings	Special
51-6031.00	Sewing Machine Operators	100	1	1,080	\$22,440.00	\$0.00	-8%	10	
43-9051.00	Mail Clerks and Mail Machine Operators, Except Postal Service	80	1	490	\$23,250.00	\$810.00	-19%	13	



51-6064.00	Textile Winding, Twisting, and Drawing Out Machine Setters, Operators, and Tenders	80	3	290	\$25,840.00	\$3,400.00	0%	0	
51-6062.00	Textile Cutting Machine Setters, Operators, and Tenders	79	3	110	\$24,860.00	\$2,420.00	-13%	4	
51-6041.00	Shoe and Leather Workers and Repairers	78	2	90	\$25,030.00	\$2,590.00	-19%	3	
51-2021.00	Coil Winders, Tapers, and Finishers	78	2	90	\$31,910.00	\$9,470.00	-53%	1	
43-5053.00	Postal Service Mail Sorters, Processors, and Processing Machine Operators	78	2	970	\$41,950.00	\$19,510.00	-12%	10	
51-2092.00	Team Assemblers	77	2	3,850	\$23,730.00	\$1,290.00	-7%	82	
51-9196.00	Paper Goods Machine Setters, Operators, and Tenders	77	2	910	\$38,230.00	\$15,790.00	-26%	23	
51-9041.00	Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders	76	2	260	\$28,330.00	\$5,890.00	-7%	5	
51-9032.00	Cutting and Slicing Machine Setters, Operators, and Tenders	76	2	710	\$31,350.00	\$8,910.00	-23%	12	
51-4121.07	Solderers and Brazers	75	2	1,610	\$38,030.00	\$15,590.00	7%	49	★
51-5023.00	Printing Machine Operators	75	2	790	\$29,710.00	\$7,270.00	-3%	18	



51-9191.00	Cementing and Gluing Machine Operators and Tenders	75	1	80	\$27,620.00	\$5,180.00	-15%	2
51-7042.00	Woodworking Machine Setters, Operators, and Tenders, Except Sawing	75	2	900	\$23,040.00	\$600.00	-12%	23

Special Occupations:

Top Industries for Shoe and Leather Workers and Repairers

Industry	NAICS	% of Industry	Employment	Projected Employment	% Change
Self-employed workers, primary job	000601	49.81%	7,758	8,265	6.54%
Footwear manufacturing	316200	12.71%	1,980	927	-53.16%
Personal and household goods repair and maintenance	811400	12.44%	1,937	1,798	-7.19%
Self-employed workers, secondary job	000602	2.57%	401	399	-0.45%
Shoe stores	448200	2.48%	386	322	-16.58%
Apparel accessories and other apparel manufacturing	315900	0.90%	140	98	-30.10%
Clothing stores	448100	0.61%	95	99	4.97%

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%

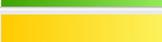
Motor vehicle parts manufacturing	336300	1.48%	3,443	2,741	-20.39%
Fabric mills	313200	1.36%	3,162	2,233	-29.38%
Drycleaning and laundry services	812300	1.35%	3,133	3,133	0.01%
Clothing stores	448100	1.31%	3,053	2,973	-2.63%
Footwear manufacturing	316200	0.92%	2,134	1,000	-53.16%



TORQ Analysis of Sewing Machine Operators to Coil Winders, Tapers, and Finishers

ANALYSIS INPUT					
Transfer	Title	O*NET	Filters		
From Title:	Sewing Machine Operators	51-6031.00	Abilities:	Importance Level: 50	Weight: 1
To Title:	Coil Winders, Tapers, and Finishers	51-2021.00	Skills:	Importance Level: 69	Weight: 1
Labor Market Area:	Maine Statewide		Knowledge:	Importance Level: 69	Weight: 1

TORQ RESULTS							
Grand TORQ:					78		
Ability TORQ		Skills TORQ		Knowledge TORQ			
Level	 90	Level	 60	Level	 83		
Gaps To Narrow if Possible				Upgrade These Skills		Knowledge to Add	
Ability	Level	Gap	Impt	Skill	Level	Gap	Impt
Oral Expression	44	9	50	No Skills Upgrade Required!		No Knowledge Upgrades Required!	
Oral Comprehension	42	7	53				
Control Precision	44	2	59				
LEVEL and IMPT (IMPORTANCE) refer to the Target Coil Winders, Tapers, and Finishers. GAP refers to level difference between Sewing Machine Operators and Coil Winders, Tapers, and Finishers.							

ASK ANALYSIS			
Ability Level Comparison - Abilities with importance scores over 50			
Description	Sewing Machine Operators	Coil Winders, Tapers, and Finishers	Importance
Arm-Hand Steadiness	51 	44 	68 
Finger Dexterity	44 	44 	62 
Manual Dexterity	42 	42 	59 
Control Precision	42 	44 	59 
Near Vision	48 	44 	59 
Oral Comprehension	35 	42 	53 
Oral Expression	35 	44 	50 
Skill Level Comparison - Abilities with importance scores over 69			
Description	Sewing Machine Operators	Coil Winders, Tapers, and Finishers	Importance



Knowledge Level Comparison - Knowledge with importance scores over 69

Description	Sewing Machine Operators	Coil Winders, Tapers, and Finishers	Importance
-------------	--------------------------	-------------------------------------	------------

Experience & Education Comparison

Related Work Experience Comparison				Required Education Level Comparison		
Description	Sewing Machine Operators	Coil Winders, Tapers, and Finishers	Description	Sewing Machine Operators	Coil Winders, Tapers, and Finishers	
10+ years	0%	0%	Doctoral	0%	0%	
8-10 years	0%	0%	Professional Degree	0%	0%	
6-8 years	0%	0%	Post-Masters Cert	0%	0%	
4-6 years	8%	0%	Master's Degree	0%	0%	
2-4 years	13%	2%	Post-Bachelor Cert	0%	0%	
1-2 years	9%	18%	Bachelors	2%	0%	
6-12 months	11%	28%	AA or Equiv	0%	0%	
3-6 months	0%	5%	Some College	8%	0%	
1-3 months	5%	1%	Post-Secondary Certificate	2%	2%	
0-1 month	0%	5%	High School Diploma or GED	12%	51%	
None	51%	38%	No HSD or GED	73%	46%	

Sewing Machine Operators

Coil Winders, Tapers, and Finishers

Most Common Educational/Training Requirement:

Moderate-term on-the-job training

Short-term on-the-job training

Job Zone Comparison

1 - Job Zone One: Little or No Preparation Needed

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

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

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

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.

Tasks

Sewing Machine Operators

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

Coil Winders, Tapers, and Finishers

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).
- Handling and Moving Objects - Using hands and arms in handling, installing, positioning,



(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 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.

and moving materials, and manipulating things.

- Getting Information - Observing, receiving, and otherwise obtaining information from all relevant sources.
- Training and Teaching Others - Identifying the educational needs of others, developing formal educational or training programs or classes, and teaching or instructing others.
- Communicating with Supervisors, Peers, or Subordinates - Providing information to supervisors, co-workers, and subordinates by telephone, in written form, e-mail, or in person.

Specific Tasks

Occupation Specific Tasks:

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

Detailed Tasks

Detailed Work Activities:

- examine products or work to verify conformance to specifications
- load or unload material or workpiece into machinery
- maintain or repair industrial or related equipment/machinery
- maintain production or work records
- monitor production machinery/equipment operation to detect problems



- 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.

- monitor the quantity of assembly output
- operate coil winding machines
- perform repetitive tasks in assembly setting
- read blueprints
- read technical drawings
- read work order, instructions, formulas, or processing charts
- repair or replace electrical wiring, circuits, fixtures, or equipment
- solder electrical or electronic connections or components
- solder metal parts or components together
- test manufactured products or materials
- understand service or repair manuals
- understand technical operating, service or repair manuals
- use electronic calibration devices
- use hand or power tools
- use oscilloscopes in electronics repair
- use precision tools in electronics repair
- use soldering equipment
- use voltmeter, ammeter, or ohmmeter

Detailed Tasks

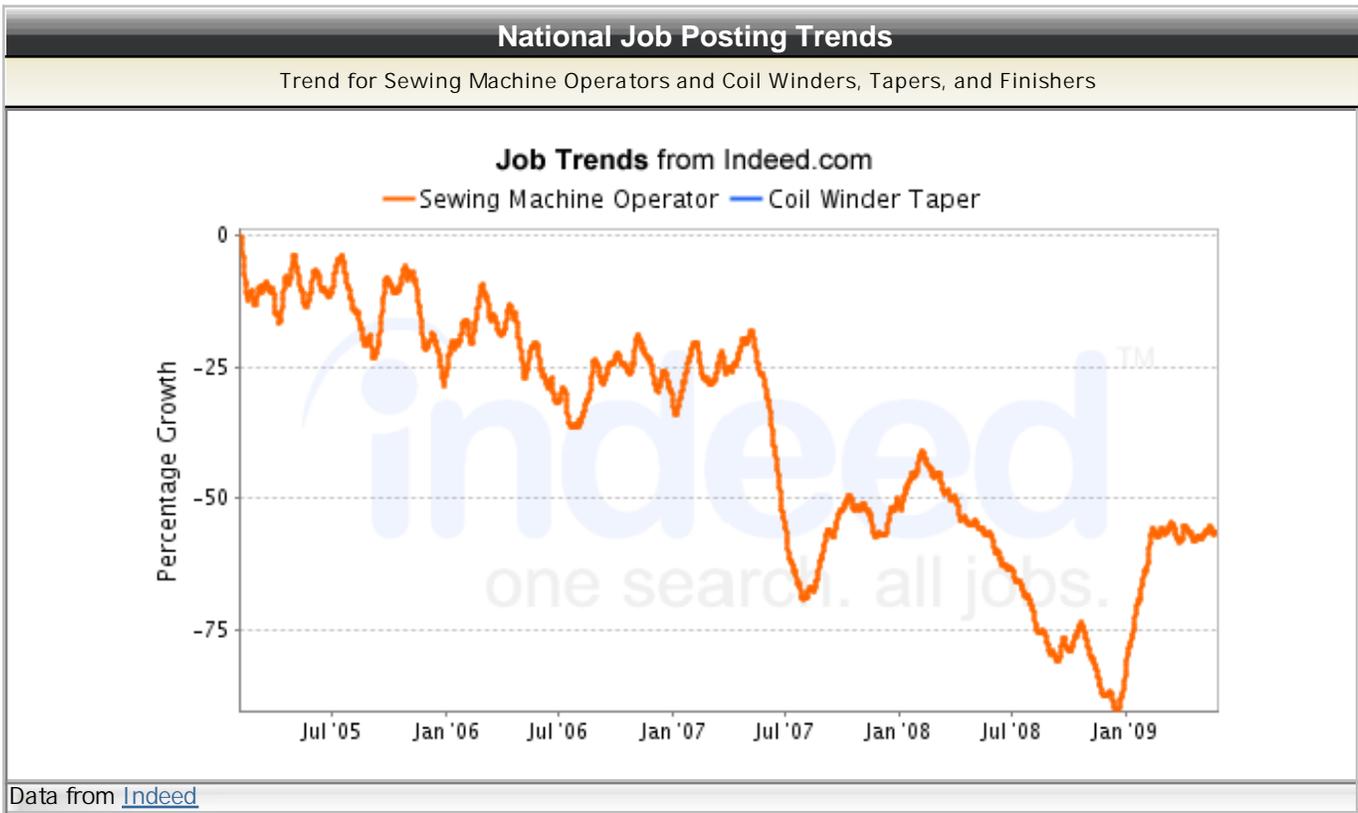
Detailed Work Activities:

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

Labor Market Comparison

Maine Department of Labor.

Description	Sewing Machine Operators	Coil Winders, Tapers, and Finishers	Difference
Median Wage	\$ 22,440	\$ 31,910	\$ 9,470
10th Percentile Wage	\$ 16,350	\$ 18,350	\$ 2,000
25th Percentile Wage	N/A	N/A	N/A
75th Percentile Wage	\$ 27,200	\$ 34,740	\$ 7,540
90th Percentile Wage	\$ 31,710	\$ 36,440	\$ 4,730
Mean Wage	\$ 23,030	\$ 29,130	\$ 6,100
Total Employment - 2576	1,080	90	-990
Employment Base - 2006	1,077	77	-1,000
Projected Employment - 2585	990	36	-954
Projected Job Growth - 2006-2585	-8.1 %	-53.2 %	-45.2 %
Projected Annual Openings - 2006-2585	10	1	-9
Special			
Special Occupations:			



Programs
Related Programs
Industrial Electronics Installer and Repairer



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

No information on schools for the program

Maine Statewide Promotion Opportunities for Sewing Machine Operators

O*NET Code	Title	Grand TORQ	Job Zone	Employment	Median Wage	Difference	Growth	Annual Job Openings	Special
51-6031.00	Sewing Machine Operators	100	1	1,080	\$22,440.00	\$0.00	-8%	10	
51-6064.00	Textile Winding, Twisting, and Drawing Out Machine Setters, Operators, and Tenders	80	3	290	\$25,840.00	\$3,400.00	0%	0	
43-9051.00	Mail Clerks and Mail Machine Operators, Except Postal Service	80	1	490	\$23,250.00	\$810.00	-19%	13	
51-6062.00	Textile Cutting Machine Setters, Operators, and Tenders	79	3	110	\$24,860.00	\$2,420.00	-13%	4	
43-5053.00	Postal Service Mail Sorters, Processors, and Processing Machine Operators	78	2	970	\$41,950.00	\$19,510.00	-12%	10	
51-6041.00	Shoe and Leather Workers and Repairers	78	2	90	\$25,030.00	\$2,590.00	-19%	3	
51-2021.00	Coil Winders, Tapers, and Finishers	78	2	90	\$31,910.00	\$9,470.00	-53%	1	
51-2092.00	Team Assemblers	77	2	3,850	\$23,730.00	\$1,290.00	-7%	82	



51-9196.00	Paper Goods Machine Setters, Operators, and Tenders	77	2	910	\$38,230.00	\$15,790.00	-26%	23	
51-9032.00	Cutting and Slicing Machine Setters, Operators, and Tenders	76	2	710	\$31,350.00	\$8,910.00	-23%	12	
51-9041.00	Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders	76	2	260	\$28,330.00	\$5,890.00	-7%	5	
51-9191.00	Cementing and Gluing Machine Operators and Tenders	75	1	80	\$27,620.00	\$5,180.00	-15%	2	
51-7042.00	Woodworking Machine Setters, Operators, and Tenders, Except Sawing	75	2	900	\$23,040.00	\$600.00	-12%	23	
51-4121.07	Solderers and Brazers	75	2	1,610	\$38,030.00	\$15,590.00	7%	49	★
51-5023.00	Printing Machine Operators	75	2	790	\$29,710.00	\$7,270.00	-3%	18	

Special Occupations:

Top Industries for Coil Winders, Tapers, and Finishers

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



Spring and wire product manufacturing	332600	2.32%	529	313	-40.78%
Commercial and industrial machinery and equipment (except automotive and electronic) repair and maintenance	811300	2.16%	494	418	-15.34%
Employment services	561300	2.08%	475	481	1.25%
Alumina and aluminum production and processing	331300	1.53%	348	194	-44.32%
Communications equipment manufacturing	334200	1.34%	306	247	-19.36%
Household appliance manufacturing	335200	1.16%	265	161	-39.46%
Electric lighting equipment manufacturing	335100	1.00%	227	136	-40.21%
Steel product manufacturing from purchased steel	331200	0.72%	164	116	-29.20%
Engine, turbine, and power transmission equipment manufacturing	333600	0.35%	80	54	-32.85%

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%

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)