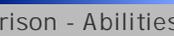
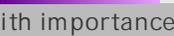




TORQ Analysis of Fiberglass Laminators and Fabricators to Helpers--Production Workers

| ANALYSIS INPUT | | | | | |
|--------------------|---------------------------------------|------------|------------|----------------------|-----------|
| Transfer | Title | O*NET | Filters | | |
| From Title: | Fiberglass Laminators and Fabricators | 51-2091.00 | Abilities: | Importance Level: 50 | Weight: 1 |
| To Title: | Helpers--Production Workers | 51-9198.00 | Skills: | Importance Level: 69 | Weight: 1 |
| Labor Market Area: | Maine Statewide | | Knowledge: | Importance Level: 69 | Weight: 1 |

| TORQ RESULTS | | | | | | | |
|--|--|--|--|-----------------------------|--|---------------------------------|------|
| Grand TORQ: | |  | | | | 89 | |
| Ability TORQ | | Skills TORQ | | Knowledge TORQ | | | |
| Level |  94 | Level |  85 | Level |  87 | | |
| Gaps To Narrow if Possible | | | | Upgrade These Skills | | Knowledge to Add | |
| Ability | Level | Gap | Impt | Skill | Level | Gap | Impt |
| Control Precision | 50 | 6 | 53 | No Skills Upgrade Required! | | No Knowledge Upgrades Required! | |
| Trunk Strength | 48 | 4 | 59 | | | | |
| LEVEL and IMPT (IMPORTANCE) refer to the Target Helpers--Production Workers. GAP refers to level difference between Fiberglass Laminators and Fabricators and Helpers--Production Workers. | | | | | | | |

| ASK ANALYSIS | | | |
|---|--|---|--|
| Ability Level Comparison - Abilities with importance scores over 50 | | | |
| Description | Fiberglass Laminators and Fabricators | Helpers--Production Workers | Importance |
| Near Vision | 48  | 48  | 62  |
| Trunk Strength | 44  | 48  | 59  |
| Arm-Hand Steadiness | 48  | 48  | 56  |
| Problem Sensitivity | 41  | 39  | 53  |
| Control Precision | 44  | 50  | 53  |
| Oral Comprehension | 44  | 44  | 50  |
| Oral Expression | 39  | 37  | 50  |
| Deductive Reasoning | 41  | 37  | 50  |
| Manual Dexterity | 48  | 42  | 50  |
| Multilimb Coordination | 51  | 44  | 50  |
| Skill Level Comparison - Abilities with importance scores over 69 | | | |



| Description | Fiberglass Laminators and Fabricators | Helpers--Production Workers | Importance |
|---|---------------------------------------|-----------------------------|------------|
| Knowledge Level Comparison - Knowledge with importance scores over 69 | | | |
| Description | Fiberglass Laminators and Fabricators | Helpers--Production Workers | Importance |

Experience & Education Comparison

| Related Work Experience Comparison | | | Required Education Level Comparison | | |
|------------------------------------|---------------------------------------|-----------------------------|-------------------------------------|---------------------------------------|-----------------------------|
| Description | Fiberglass Laminators and Fabricators | Helpers--Production Workers | Description | Fiberglass Laminators and Fabricators | Helpers--Production Workers |
| 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 | 9% | 0% | Master's Degree | 0% | 0% |
| 2-4 years | 11% | 0% | Post-Bachelor Cert | 0% | 0% |
| 1-2 years | 0% | 13% | Bachelors | 0% | 0% |
| 6-12 months | 18% | 39% | AA or Equiv | 3% | 0% |
| 3-6 months | 14% | 7% | Some College | 11% | 0% |
| 1-3 months | 8% | 1% | Post-Secondary Certificate | 7% | 11% |
| 0-1 month | 0% | 10% | High School Diploma or GED | 47% | 51% |
| None | 35% | 27% | No HSD or GED | 30% | 36% |

| | |
|---------------------------------------|-----------------------------|
| Fiberglass Laminators and Fabricators | Helpers--Production Workers |
|---------------------------------------|-----------------------------|

Most Common Educational/Training Requirement:

| | |
|--|--------------------------------|
| | Short-term on-the-job training |
|--|--------------------------------|

Job Zone Comparison

| | |
|---|--|
| - | <p>1 - Job Zone One: Little or No Preparation Needed</p> <p>No previous work-related skill, knowledge, or experience is needed for these occupations. For example, a person can become a cashier even if he/she has never worked before.</p> <p>These occupations may require a high school diploma or GED certificate. Some may require a formal training course to obtain a license.</p> <p>Employees in these occupations need anywhere from a few days to a few months of training. Usually, an experienced worker could show you how to do the job.</p> |
|---|--|

Tasks

| Fiberglass Laminators and Fabricators | Helpers--Production Workers |
|---|--|
| Core Tasks | Core Tasks |
| <p>Generalized Work Activities: No information about "Generalized Work Activities" for this occupation is available.</p> <p>Detailed Work Activities:</p> <ul style="list-style-type: none"> • examine products or work to verify conformance to specifications • fabricate, assemble, or disassemble manufactured products by hand | <p>Generalized Work Activities:</p> <ul style="list-style-type: none"> • Handling and Moving Objects - Using hands and arms in handling, installing, positioning, and moving materials, and manipulating things. • Performing General Physical Activities - Performing physical activities that require considerable use of your arms and legs and moving your whole body, such as climbing. |



- measure, weigh, or count products or materials
- mix paint, ingredients, or chemicals, according to specifications
- perform repetitive tasks in assembly setting
- read blueprints
- read specifications
- read work order, instructions, formulas, or processing charts
- use hand or power tools
- use spray application production equipment

Specific Tasks

Occupation Specific Tasks:

- Apply lacquers and waxes to mold surfaces to facilitate assembly and removal of laminated parts.
- Apply layers of plastic resin to mold surfaces prior to placement of fiberglass mats, repeating layers until products have the desired thicknesses and plastics have jelled.
- Bond wood reinforcing strips to decks and cabin structures of watercraft, using resin-saturated fiberglass.
- Check all dies, templates, and cutout patterns to be used in the manufacturing process to ensure that they conform to dimensional data, photographs, blueprints, samples, and/or customer specifications.
- Check completed products for conformance to specifications and for defects by measuring with rulers or micrometers, by checking them visually, or by tapping them to detect bubbles or dead spots.
- Cure materials by letting them set at room temperature, placing them under heat lamps, or baking them in ovens.
- Inspect, clean, and assemble molds before beginning work.
- Mask off mold areas which are not to be laminated, using cellophane, wax paper, masking tape, or special sprays containing mold-release substances.
- Mix catalysts into resins, and saturate cloth and mats with mixtures, using brushes.
- Pat or press layers of saturated mat or cloth into place on molds, using brushes or hands, and smooth out wrinkles and air bubbles with hands or squeegees.
- Release air bubbles and smooth seams, using rollers.
- Repair or modify damaged or defective glass-fiber parts, checking thicknesses, densities, and contours to ensure a close fit after repair.
- Select precut fiberglass mats, cloth, and woodbracing materials as required by projects being assembled.
- Spray chopped fiberglass, resins, and catalysts onto prepared molds or dies using

moving your torso body, such as climbing, lifting, balancing, walking, stooping, and handling of materials.

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

Specific Tasks

Occupation Specific Tasks:

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



pneumatic spray guns with chopper attachments.

- Trim cured materials by sawing them with diamond-impregnated cutoff wheels.
- Trim excess materials from molds, using hand shears or trimming knives.

Detailed Tasks

Detailed Work Activities:

- examine products or work to verify conformance to specifications
- fabricate, assemble, or disassemble manufactured products by hand
- measure, weigh, or count products or materials
- mix paint, ingredients, or chemicals, according to specifications
- perform repetitive tasks in assembly setting
- read blueprints
- read specifications
- read work order, instructions, formulas, or processing charts
- use hand or power tools
- use spray application production equipment

Technology - Examples

Data base user interface and query software

- Data entry software

Spreadsheet software

- Spreadsheet software

Word processing software

- Word processing software

Tools - Examples

- Fiber reinforced polymer FRP rollers
- Vacuum bags
- Heat lamps
- Ladders
- Micrometers
- Paint application brushes
- Paint application rollers
- High-volume low-pressure HVLP spray guns
- Curing ovens
- Personal computers
- Rotating mandrels

- Place products in equipment or on work surfaces for further processing, inspecting, or wrapping.

- Position spouts or chutes of storage bins so that containers can be filled.

- Prepare raw materials for processing.

- Read gauges and charts, and record data obtained.

- Record information such as the number of products tested, meter readings, and dates and times of product production.

- Remove products, machine attachments, and waste material from machines.

- Separate products according to weight, grade, size, and composition of materials used to produce them.

- Signal coworkers to direct them to move products during the production process.

- Start machines or equipment in order to begin production processes.

- Thread ends of items such as thread, cloth, and lace through needles and rollers, and around take-up tubes.

- Tie products in bundles for further processing or shipment, following prescribed procedures.

- Transfer finished products, raw materials, tools, or equipment between storage and work areas of plants and warehouses, by hand or using hand trucks or powered lift trucks.

- Turn valves to regulate flow of liquids or air, to reverse machines, to start pumps, or to regulate equipment.

- Unclamp and hoist full reels from braiding, winding, and other fabricating machines, using power hoists.

- Wash work areas, machines, equipment, vehicles, and products.

Detailed Tasks

Detailed Work Activities:

- adjust production equipment/machinery setup
- attach or mark identification onto products or containers
- clean equipment or machinery
- clean rooms or work areas
- examine products or work to verify conformance to specifications
- load or unload material or workpiece into machinery
- load, unload, or stack containers, materials, or products
- lubricate machinery, equipment, or parts
- maintain or repair industrial or related equipment/machinery
- maintain production or work records
- measure, weigh, or count products or



- Power drills
- Power grinders
- Power sanders
- Cutoff saws
- Power drivers
- Chopper guns
- Respirators
- Rulers
- Scaffolding
- Hand shears
- Squeegees
- Trimming knives
- Vacuum pumps

materials

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

Technology - Examples

Data base user interface and query software

- Data entry software

Spreadsheet software

- Microsoft Excel

Word processing software

- Microsoft Word

Tools - Examples

- Adjustable wrenches
- Hand files
- Industrial platform scales
- Forklifts
- Grease guns
- Claw hammers
- Handtrucks
- Power hoists
- Hydraulic booms



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

Labor Market Comparison

Maine Department of Labor.

| Description | Fiberglass Laminators and Fabricators | Helpers--Production Workers | Difference |
|----------------------|---------------------------------------|-----------------------------|-------------|
| Median Wage | \$ 33,960 | \$ 22,260 | \$(11,700) |
| 10th Percentile Wage | \$ 24,630 | \$ 17,160 | \$(7,470) |
| 25th Percentile Wage | N/A | N/A | N/A |
| 75th Percentile Wage | \$ 37,560 | \$ 25,210 | \$(12,350) |
| 90th Percentile Wage | \$ 40,040 | \$ 30,870 | \$(9,170) |
| Mean Wage | \$ 32,850 | \$ 23,130 | \$(9,720) |

| | | | |
|---------------------------------------|-------|---------|---------|
| Total Employment - 2541 | 440 | 1,490 | 1,050 |
| Employment Base - 2006 | 436 | 1,522 | 1,086 |
| Projected Employment - 2550 | 456 | 1,365 | 909 |
| Projected Job Growth - 2006-2550 | 4.6 % | -10.3 % | -14.9 % |
| Projected Annual Openings - 2006-2550 | 11 | 37 | 26 |
| Special | | | |
| Special Occupations: | | | |



Programs

No information on programs or the occupation.

Maine Statewide Promotion Opportunities for Fiberglass Laminators and Fabricators

| O* NET Code | Title | Grand TORQ | Job Zone | Employment | Median Wage | Difference | Growth | Annual Job Openings | Special |
|-------------|---------------------------------------|------------|----------|------------|-------------|------------|--------|---------------------|---------|
| 51-2091.00 | Fiberglass Laminators and Fabricators | 100 | | 440 | \$33,960.00 | \$0.00 | 5% | 11 | |



| | | | | | | | | |
|------------|---|----|---|-------|-------------|------------|------|----|
| 51-9121.00 | Coating, Painting, and Spraying Machine Setters, Operators, and Tenders | 87 | 2 | 850 | \$38,860.00 | \$4,900.00 | -26% | 19 |
| 51-4121.06 | Welders, Cutters, and Welder Fitters | 86 | 2 | 1,610 | \$38,030.00 | \$4,070.00 | 7% | 49 |
| 51-4121.07 | Solderers and Brazers | 85 | 2 | 1,610 | \$38,030.00 | \$4,070.00 | 7% | 49 |
| 51-4122.00 | Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders | 83 | 2 | 120 | \$36,960.00 | \$3,000.00 | 2% | 3 |
| 51-9196.00 | Paper Goods Machine Setters, Operators, and Tenders | 83 | 2 | 910 | \$38,230.00 | \$4,270.00 | -26% | 23 |
| 51-9023.00 | Mixing and Blending Machine Setters, Operators, and Tenders | 81 | 1 | 420 | \$36,040.00 | \$2,080.00 | -9% | 7 |
| 43-5053.00 | Postal Service Mail Sorters, Processors, and Processing Machine Operators | 80 | 2 | 970 | \$41,950.00 | \$7,990.00 | -12% | 10 |
| 51-4192.00 | Lay-Out Workers, Metal and Plastic | 80 | 2 | 180 | \$43,870.00 | \$9,910.00 | -24% | 3 |
| 47-5021.00 | Earth Drillers, Except Oil and Gas | 79 | 3 | 140 | \$37,470.00 | \$3,510.00 | 2% | 4 |
| 47-4061.00 | Rail-Track Laying and Maintenance Equipment Operators | 78 | 1 | 120 | \$36,960.00 | \$3,000.00 | 8% | 4 |



| | | | | | | | | |
|------------|---|----|---|-----|-------------|-------------|------|----|
| 47-2132.00 | Insulation Workers, Mechanical | 77 | 3 | 180 | \$35,060.00 | \$1,100.00 | 2% | 4 |
| 51-4034.00 | Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic | 77 | 3 | 110 | \$34,350.00 | \$390.00 | -9% | 2 |
| 49-9096.00 | Riggers | 76 | 3 | 250 | \$39,140.00 | \$5,180.00 | -12% | 2 |
| 51-8013.00 | Power Plant Operators | 76 | 3 | 480 | \$50,240.00 | \$16,280.00 | 10% | 21 |

Special Occupations:

Top Industries for Helpers--Production Workers

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

Top Industries for Fiberglass Laminators and Fabricators



| Industry | NAICS | % of Industry | Employment | Projected Employment | % Change |
|--|--------|---------------|------------|----------------------|----------|
| Ship and boat building | 336600 | 39.50% | 13,152 | 14,721 | 11.93% |
| Plastics product manufacturing | 326100 | 19.90% | 6,627 | 7,024 | 6.00% |
| Motor vehicle body and trailer manufacturing | 336200 | 5.77% | 1,923 | 1,881 | -2.15% |
| Aerospace product and parts manufacturing | 336400 | 4.06% | 1,352 | 1,376 | 1.84% |
| Glass and glass product manufacturing | 327200 | 3.00% | 1,000 | 873 | -12.76% |
| Employment services | 561300 | 2.34% | 779 | 986 | 26.56% |
| Personal and household goods repair and maintenance | 811400 | 1.96% | 652 | 605 | -7.19% |
| Motor vehicle parts manufacturing | 336300 | 1.74% | 580 | 462 | -20.39% |
| Other transportation equipment manufacturing | 336900 | 1.58% | 525 | 527 | 0.42% |
| Self-employed workers, primary job | 000601 | 1.35% | 448 | 478 | 6.54% |
| Wood kitchen cabinet and countertop manufacturing | 337110 | 1.04% | 348 | 385 | 10.72% |
| Office furniture (including fixtures) manufacturing | 337200 | 0.93% | 309 | 291 | -5.97% |
| Lumber and other construction materials merchant wholesalers | 423300 | 0.60% | 199 | 228 | 14.86% |
| Motor vehicle manufacturing | 336100 | 0.36% | 119 | 116 | -3.11% |
| Rubber product manufacturing | 326200 | 0.36% | 119 | 84 | -29.38% |



TORQ Analysis of Fiberglass Laminators and Fabricators to Team Assemblers

| ANALYSIS INPUT | | | | | |
|--------------------|---------------------------------------|------------|------------|----------------------|-----------|
| Transfer | Title | O* NET | Filters | | |
| From Title: | Fiberglass Laminators and Fabricators | 51-2091.00 | Abilities: | Importance Level: 50 | Weight: 1 |
| To Title: | Team Assemblers | 51-2092.00 | Skills: | Importance Level: 69 | Weight: 1 |
| Labor Market Area: | Maine Statewide | | Knowledge: | Importance Level: 69 | Weight: 1 |

| TORQ RESULTS | | | | | | | | | | | |
|--|-------|-------------|------|-----------------------------|-----------|-----|------|---------------------------------|-------|-----|------|
| Grand TORQ: | | | | | 87 | | | | | | |
| Ability TORQ | | Skills TORQ | | Knowledge TORQ | | | | | | | |
| Level | 89 | Level | 84 | 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 |
| Oral Expression | 48 | 9 | 59 | No Skills Upgrade Required! | | | | No Knowledge Upgrades Required! | | | |
| Oral Comprehension | 51 | 7 | 62 | | | | | | | | |
| Speech Clarity | 41 | 7 | 50 | | | | | | | | |
| Speech Recognition | 41 | 6 | 50 | | | | | | | | |
| Written Expression | 37 | 2 | 50 | | | | | | | | |
| LEVEL and IMPT (IMPORTANCE) refer to the Target Team Assemblers. GAP refers to level difference between Fiberglass Laminators and Fabricators and Team Assemblers. | | | | | | | | | | | |

| ASK ANALYSIS | | | |
|---|---------------------------------------|-----------------|------------|
| Ability Level Comparison - Abilities with importance scores over 50 | | | |
| Description | Fiberglass Laminators and Fabricators | Team Assemblers | Importance |
| Oral Comprehension | 44 | 51 | 62 |
| Manual Dexterity | 48 | 41 | 62 |
| Oral Expression | 39 | 48 | 59 |
| Information Ordering | 44 | 42 | 56 |
| Arm-Hand Steadiness | 48 | 39 | 56 |
| Finger Dexterity | 44 | 42 | 56 |
| Near Vision | 48 | 44 | 56 |
| Problem Sensitivity | 41 | 41 | 53 |
| Control Precision | 44 | 44 | 53 |



| | | | |
|---|---------------------------------------|-----------------|------------|
| Written Expression | 35 | 37 | 50 |
| Deductive Reasoning | 41 | 41 | 50 |
| Speech Recognition | 35 | 41 | 50 |
| Speech Clarity | 34 | 41 | 50 |
| Skill Level Comparison - Abilities with importance scores over 69 | | | |
| Description | Fiberglass Laminators and Fabricators | Team Assemblers | Importance |
| Knowledge Level Comparison - Knowledge with importance scores over 69 | | | |
| Description | Fiberglass Laminators and Fabricators | Team Assemblers | Importance |

| Experience & Education Comparison | | | | | |
|---|---------------------------------------|-----------------|---|---------------------------------------|-----------------|
| Related Work Experience Comparison | | | Required Education Level Comparison | | |
| Description | Fiberglass Laminators and Fabricators | Team Assemblers | Description | Fiberglass Laminators and Fabricators | Team Assemblers |
| 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 | 9% | 0% | Master's Degree | 0% | 0% |
| 2-4 years | 11% | 4% | Post-Bachelor Cert | 0% | 0% |
| 1-2 years | 0% | 6% | Bachelors | 0% | 0% |
| 6-12 months | 18% | 10% | AA or Equiv | 3% | 0% |
| 3-6 months | 14% | 2% | Some College | 11% | 1% |
| 1-3 months | 8% | 6% | Post-Secondary Certificate | 7% | 11% |
| 0-1 month | 0% | 17% | High School Diploma or GED | 47% | 63% |
| None | 35% | 50% | No HSD or GED | 30% | 22% |
| Fiberglass Laminators and Fabricators | | | Team Assemblers | | |
| Most Common Educational/Training Requirement: | | | | | |
| | | | Moderate-term on-the-job training | | |
| Job Zone Comparison | | | | | |
| - | | | 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 | |
|---------------------------------------|-----------------|
| Fiberglass Laminators and Fabricators | Team Assemblers |



Core Tasks

Generalized Work Activities: No information about "Generalized Work Activities" for this occupation is available.

Detailed Work Activities:

- examine products or work to verify conformance to specifications
- fabricate, assemble, or disassemble manufactured products by hand
- measure, weigh, or count products or materials
- mix paint, ingredients, or chemicals, according to specifications
- perform repetitive tasks in assembly setting
- read blueprints
- read specifications
- read work order, instructions, formulas, or processing charts
- use hand or power tools
- use spray application production equipment

Specific Tasks

Occupation Specific Tasks:

- Apply lacquers and waxes to mold surfaces to facilitate assembly and removal of laminated parts.
- Apply layers of plastic resin to mold surfaces prior to placement of fiberglass mats, repeating layers until products have the desired thicknesses and plastics have jelled.
- Bond wood reinforcing strips to decks and cabin structures of watercraft, using resin-saturated fiberglass.
- Check all dies, templates, and cutout patterns to be used in the manufacturing process to ensure that they conform to dimensional data, photographs, blueprints, samples, and/or customer specifications.
- Check completed products for conformance to specifications and for defects by measuring with rulers or micrometers, by checking them visually, or by tapping them to detect bubbles or dead spots.
- Cure materials by letting them set at room temperature, placing them under heat lamps, or baking them in ovens.
- Inspect, clean, and assemble molds before beginning work.
- Mask off mold areas which are not to be laminated, using cellophane, wax paper, masking tape, or special sprays containing mold-release substances.
- Mix catalysts into resins, and saturate cloth and mats with mixtures, using brushes.
- Pat or press layers of saturated mat or cloth into place on molds, using brushes or hands, and smooth out wrinkles and air

Core Tasks

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).
- Communicating with Supervisors, Peers, or Subordinates - Providing information to supervisors, co-workers, and subordinates by telephone, in written form, e-mail, or in person.
- Inspecting Equipment, Structures, or Material - Inspecting equipment, structures, or materials to identify the cause of errors or other problems or defects.
- Identifying Objects, Actions, and Events - Identifying information by categorizing, estimating, recognizing differences or similarities, and detecting changes in circumstances or events.

Specific Tasks

Occupation Specific Tasks:

- Determine work assignments and procedures.
- Operate heavy equipment such as forklifts.
- Provide assistance in the production of wiring assemblies.
- Rotate through all the tasks required in a particular production process.
- Shovel and sweep work areas.

Detailed Tasks

Detailed Work Activities:

- confer with engineering, technical or manufacturing personnel
- direct and coordinate activities of workers or staff
- examine products or work to verify conformance to specifications
- fabricate, assemble, or disassemble manufactured products by hand
- perform safety inspections in manufacturing or industrial setting
- read work order, instructions, formulas, or processing charts
- use computers to enter, access or retrieve data
- use hand or power tools
- work as a team member

Technology - Examples

Computer aided design CAD software



bubbles with hands or squeegees.

- Release air bubbles and smooth seams, using rollers.
- Repair or modify damaged or defective glass-fiber parts, checking thicknesses, densities, and contours to ensure a close fit after repair.
- Select precut fiberglass mats, cloth, and woodbracing materials as required by projects being assembled.
- Spray chopped fiberglass, resins, and catalysts onto prepared molds or dies using pneumatic spray guns with chopper attachments.
- Trim cured materials by sawing them with diamond-impregnated cutoff wheels.
- Trim excess materials from molds, using hand shears or trimming knives.

Detailed Tasks

Detailed Work Activities:

- examine products or work to verify conformance to specifications
- fabricate, assemble, or disassemble manufactured products by hand
- measure, weigh, or count products or materials
- mix paint, ingredients, or chemicals, according to specifications
- perform repetitive tasks in assembly setting
- read blueprints
- read specifications
- read work order, instructions, formulas, or processing charts
- use hand or power tools
- use spray application production equipment

Technology - Examples

Data base user interface and query software

- Data entry software

Spreadsheet software

- Spreadsheet software

Word processing software

- Word processing software

Tools - Examples

- Fiber reinforced polymer FRP rollers
- Vacuum bags
- Heat lamps
- Ladders
- Micrometers

- Computer aided design CAD software

Data base user interface and query software

- Data entry software

Office suite software

- Microsoft Office

Spreadsheet software

- Microsoft Excel
- Spreadsheet software

Word processing software

- Microsoft Word
- Word processing software

Tools - Examples

- Adjustable wrenches
- Bearing installation tools
- Bench vises
- Welding torches
- Dial calipers
- Metal chisels
- Dividers
- Burring tools
- Desktop computers
- Protective ear muffs
- Protective ear plugs
- Engine repair stands
- Fiber reinforced polymer FRP rollers
- Feeler gauges
- Hand files
- Torque angle meters
- Forklifts
- Arc welding equipment
- Dial indicators
- Vacuum bags
- Grinding machines
- Material guiding jigs



- Paint application brushes
- Paint application rollers
- High-volume low-pressure HVLP spray guns
- Curing ovens
- Personal computers
- Rotating mandrels
- Power drills
- Power grinders
- Power sanders
- Cutoff saws
- Power drivers
- Chopper guns
- Respirators
- Rulers
- Scaffolding
- Hand shears
- Squeegees
- Trimming knives
- Vacuum pumps
- Claw hammers
- Hand clamps
- Heat guns
- Pin protrusion gauges
- Allen wrenches
- Power hoists
- Ring squeezers
- Hydraulic press frames
- Power wrenches
- Heating furnaces
- Threaded insert tools
- Hand jacks
- Heat lamps
- Ladders
- Lathes
- Transits
- Locking pliers
- End milling machines
- Plastic mallets
- Metal inert gas MIG welders
- Electrochemical etching devices
- Micrometers
- Computerized numerical control CNC metal-cutting machines
- Milling machines
- Needlenose pliers
- Nut drivers
- Paint application brushes
- Paint application rollers
- High-volume low-pressure HVLP spray guns
- Curing ovens
- Assembly robots
- Rotating mandrels



- Tube cutters
- Flame cutters
- Pneumatic drills
- First assembly jigs
- Power chippers
- Cordless drills
- Bench grinders
- Edge planers
- Belt sanders
- Cutoff saws
- Power drivers
- Anti-vibration gloves
- Protractors
- Pry bars
- Gear pullers
- Center punches
- Ratchets
- Line reamers
- Chopper guns
- Respirators
- Snap ring pliers
- Alligator jaw compression riveters
- Steel rules
- Safety glasses
- Scaffolding
- Straight screwdrivers
- Scribes
- Adhesive application robots
- Beverly shears
- Socket wrenches
- Soldering guns
- Spanner wrenches



- Case wrenches
- Timing lights
- Layout squares
- Squeegees
- Bearing staking tools
- Measuring tapes
- Taps
- Drafting templates
- Tensiometers
- Fuel control wrenches
- Beading tools
- Crimping tools
- Lapping tools
- Tungsten inert gas TIG welding equipment
- Turnbuckles
- Radial drills
- Ultrasonic inspection equipment
- Trimming knives
- Vacuum pumps
- Wedges
- Tack welding equipment
- Welding hoods
- Welding robots
- Spot welding equipment
- Cable cutters
- Jib cranes
- Brakes

Labor Market Comparison

Maine Department of Labor.

| Description | Fiberglass Laminators and Fabricators | Team Assemblers | Difference |
|-------------|---------------------------------------|-----------------|------------|
| Median Wage | \$ 33,960 | \$ 23,730 | \$(10,230) |



| | | | |
|---------------------------------------|-----------|-----------|-------------|
| 10th Percentile Wage | \$ 24,630 | \$ 18,550 | \$ (6,080) |
| 25th Percentile Wage | N/A | N/A | N/A |
| 75th Percentile Wage | \$ 37,560 | \$ 28,380 | \$ (9,180) |
| 90th Percentile Wage | \$ 40,040 | \$ 32,810 | \$ (7,230) |
| Mean Wage | \$ 32,850 | \$ 25,040 | \$ (7,810) |
| Total Employment - 2541 | 440 | 3,850 | 3,410 |
| Employment Base - 2006 | 436 | 3,958 | 3,522 |
| Projected Employment - 2550 | 456 | 3,691 | 3,235 |
| Projected Job Growth - 2006-2550 | 4.6 % | -6.7 % | -11.3 % |
| Projected Annual Openings - 2006-2550 | 11 | 82 | 71 |
| Special | | | |
| Special Occupations: | | | |

National Job Posting Trends

Trend for Fiberglass Laminators and Fabricators and Team Assemblers



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

Programs

Related Programs

Sheet Metal Worker

Sheet Metal Technology/Sheetworking. A program that prepares individuals to apply technical knowledge and skills to form, shape, bend and fold extruded metals, including the creation of new products, using hand tools and machines such as cornice brakes, forming rolls, and squaring shears.



| Institution | Address | City | URL |
|---|----------------|--------------|--|
| Northern Maine Community College | 33 Edgemont Dr | Presque Isle | www.nmcc.edu |
| Shoe, Boot and Leather Repairer | | | |
| Machine Shop Technology/Assistant. A program that prepares individuals to apply technical knowledge and skills to fabricate and modify metal parts in support of other manufacturing, repair or design activities, or as an independent business. | | | |
| No information on schools for the program | | | |
| Window Treatment Maker and Installer | | | |
| Electromechanical Technology/Electromechanical Engineering Technology. A program that prepares individuals to apply basic engineering principles and technical skills in support of engineers engaged in developing and testing automated, servomechanical, and other electromechanical systems. Includes instruction in prototype testing, manufacturing and operational testing, systems analysis and maintenance procedures, and report preparation. | | | |
| Institution | Address | City | URL |
| Central Maine Community College | 1250 Turner St | Auburn | www.cmcc.edu |
| Central Maine Community College | 1250 Turner St | Auburn | www.cmcc.edu |

Maine Statewide Promotion Opportunities for Fiberglass Laminators and Fabricators

| O* NET Code | Title | Grand TORQ | Job Zone | Employment | Median Wage | Difference | Growth | Annual Job Openings | Special |
|-------------|---|------------|----------|------------|-------------|------------|--------|---------------------|---------|
| 51-2091.00 | Fiberglass Laminators and Fabricators | 100 | | 440 | \$33,960.00 | \$0.00 | 5% | 11 | |
| 51-9121.00 | Coating, Painting, and Spraying Machine Setters, Operators, and Tenders | 87 | 2 | 850 | \$38,860.00 | \$4,900.00 | -26% | 19 | |
| 51-4121.06 | Welders, Cutters, and Welder Fitters | 86 | 2 | 1,610 | \$38,030.00 | \$4,070.00 | 7% | 49 | |
| 51-4121.07 | Solderers and Brazers | 85 | 2 | 1,610 | \$38,030.00 | \$4,070.00 | 7% | 49 | |
| 51-4122.00 | Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders | 83 | 2 | 120 | \$36,960.00 | \$3,000.00 | 2% | 3 | |



| | | | | | | | | |
|------------|---|----|---|-----|-------------|-------------|------|----|
| 51-9196.00 | Paper Goods Machine Setters, Operators, and Tenders | 83 | 2 | 910 | \$38,230.00 | \$4,270.00 | -26% | 23 |
| 51-9023.00 | Mixing and Blending Machine Setters, Operators, and Tenders | 81 | 1 | 420 | \$36,040.00 | \$2,080.00 | -9% | 7 |
| 43-5053.00 | Postal Service Mail Sorters, Processors, and Processing Machine Operators | 80 | 2 | 970 | \$41,950.00 | \$7,990.00 | -12% | 10 |
| 51-4192.00 | Lay-Out Workers, Metal and Plastic | 80 | 2 | 180 | \$43,870.00 | \$9,910.00 | -24% | 3 |
| 47-5021.00 | Earth Drillers, Except Oil and Gas | 79 | 3 | 140 | \$37,470.00 | \$3,510.00 | 2% | 4 |
| 47-4061.00 | Rail-Track Laying and Maintenance Equipment Operators | 78 | 1 | 120 | \$36,960.00 | \$3,000.00 | 8% | 4 |
| 47-2132.00 | Insulation Workers, Mechanical | 77 | 3 | 180 | \$35,060.00 | \$1,100.00 | 2% | 4 |
| 51-4034.00 | Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic | 77 | 3 | 110 | \$34,350.00 | \$390.00 | -9% | 2 |
| 49-9096.00 | Riggers | 76 | 3 | 250 | \$39,140.00 | \$5,180.00 | -12% | 2 |
| 51-8013.00 | Power Plant Operators | 76 | 3 | 480 | \$50,240.00 | \$16,280.00 | 10% | 21 |

Special Occupations:

Top Industries for Team Assemblers



| Industry | NAICS | % of Industry | Employment | Projected Employment | % Change |
|--|--------|---------------|------------|----------------------|----------|
| Employment services | 561300 | 15.68% | 199,847 | 252,932 | 26.56% |
| Motor vehicle parts manufacturing | 336300 | 7.79% | 99,321 | 80,278 | -19.17% |
| Motor vehicle manufacturing | 336100 | 4.50% | 57,395 | 57,191 | -0.35% |
| Other wood product manufacturing | 321900 | 3.65% | 46,477 | 43,797 | -5.77% |
| Motor vehicle body and trailer manufacturing | 336200 | 3.47% | 44,237 | 44,350 | 0.25% |
| Plastics product manufacturing | 326100 | 3.40% | 43,379 | 45,983 | 6.00% |
| Architectural and structural metals manufacturing | 332300 | 2.80% | 35,620 | 38,043 | 6.80% |
| Medical equipment and supplies manufacturing | 339100 | 2.66% | 33,860 | 34,635 | 2.29% |
| Other fabricated metal product manufacturing | 332900 | 2.47% | 31,442 | 27,859 | -11.39% |
| Ventilation, heating, air-conditioning, and commercial refrigeration equipment manufacturing | 333400 | 2.41% | 30,715 | 28,255 | -8.01% |
| Other general purpose machinery manufacturing | 333900 | 2.36% | 30,035 | 27,113 | -9.73% |
| Navigational, measuring, electromedical, and control instruments manufacturing | 334500 | 1.84% | 23,417 | 22,419 | -4.26% |
| Agriculture, construction, and mining machinery manufacturing | 333100 | 1.79% | 22,809 | 21,297 | -6.63% |
| Household appliance manufacturing | 335200 | 1.65% | 21,088 | 15,957 | -24.33% |
| Semiconductor and other electronic component manufacturing | 334400 | 1.65% | 21,011 | 18,365 | -12.59% |

Top Industries for Fiberglass Laminators and Fabricators

| Industry | NAICS | % of Industry | Employment | Projected Employment | % Change |
|---|--------|---------------|------------|----------------------|----------|
| Ship and boat building | 336600 | 39.50% | 13,152 | 14,721 | 11.93% |
| Plastics product manufacturing | 326100 | 19.90% | 6,627 | 7,024 | 6.00% |
| Motor vehicle body and trailer manufacturing | 336200 | 5.77% | 1,923 | 1,881 | -2.15% |
| Aerospace product and parts manufacturing | 336400 | 4.06% | 1,352 | 1,376 | 1.84% |
| Glass and glass product manufacturing | 327200 | 3.00% | 1,000 | 873 | -12.76% |
| Employment services | 561300 | 2.34% | 779 | 986 | 26.56% |
| Personal and household goods repair and maintenance | 811400 | 1.96% | 652 | 605 | -7.19% |
| Motor vehicle parts manufacturing | 336300 | 1.74% | 580 | 462 | -20.39% |
| Other transportation equipment manufacturing | 336900 | 1.58% | 525 | 527 | 0.42% |
| Self-employed workers, primary job | 000601 | 1.35% | 448 | 478 | 6.54% |
| Wood kitchen cabinet and countertop manufacturing | 337110 | 1.04% | 348 | 385 | 10.72% |



| | | | | | |
|--|--------|-------|-----|-----|---------|
| Office furniture (including fixtures) manufacturing | 337200 | 0.93% | 309 | 291 | -5.97% |
| Lumber and other construction materials merchant wholesalers | 423300 | 0.60% | 199 | 228 | 14.86% |
| Motor vehicle manufacturing | 336100 | 0.36% | 119 | 116 | -3.11% |
| Rubber product manufacturing | 326200 | 0.36% | 119 | 84 | -29.38% |



TORQ Analysis of Fiberglass Laminators and Fabricators to Furniture Finishers

| ANALYSIS INPUT | | | | | |
|--------------------|---------------------------------------|------------|------------|----------------------|-----------|
| Transfer | Title | O*NET | Filters | | |
| From Title: | Fiberglass Laminators and Fabricators | 51-2091.00 | Abilities: | Importance Level: 50 | Weight: 1 |
| To Title: | Furniture Finishers | 51-7021.00 | Skills: | Importance Level: 69 | Weight: 1 |
| Labor Market Area: | Maine Statewide | | Knowledge: | Importance Level: 69 | Weight: 1 |

| TORQ RESULTS | | | | | | | | | | | |
|--|---|-----|--|-----------------------------|---|-----|----------------|---------------------------------|---|-----|------|
| Grand TORQ: | | |  | | | | 87 | | | | |
| Ability TORQ | | | Skills TORQ | | | | Knowledge TORQ | | | | |
| Level |  | | 95 | Level |  | | 75 | Level |  | | 91 |
| Gaps To Narrow if Possible | | | | Upgrade These Skills | | | | Knowledge to Add | | | |
| Ability | Level | Gap | Impt | Skill | Level | Gap | Impt | Knowledge | Level | Gap | Impt |
| Visualization | 53 | 7 | 56 | No Skills Upgrade Required! | | | | No Knowledge Upgrades Required! | | | |
| Visual Color Discrimination | 50 | 6 | 65 | | | | | | | | |
| Near Vision | 51 | 3 | 68 | | | | | | | | |
| Manual Dexterity | 51 | 3 | 62 | | | | | | | | |
| Finger Dexterity | 46 | 2 | 56 | | | | | | | | |
| Auditory Attention | 46 | 2 | 53 | | | | | | | | |
| Oral Expression | 41 | 2 | 50 | | | | | | | | |
| Deductive Reasoning | 42 | 1 | 56 | | | | | | | | |
| Inductive Reasoning | 42 | 1 | 53 | | | | | | | | |
| Selective Attention | 42 | 1 | 50 | | | | | | | | |
| LEVEL and IMPT (IMPORTANCE) refer to the Target Furniture Finishers. GAP refers to level difference between Fiberglass Laminators and Fabricators and Furniture Finishers. | | | | | | | | | | | |

| ASK ANALYSIS | | | |
|---|--|---|--|
| Ability Level Comparison - Abilities with importance scores over 50 | | | |
| Description | Fiberglass Laminators and Fabricators | Furniture Finishers | Importance |
| Near Vision | 48  | 51  | 68  |
| Arm-Hand Steadiness | 48  | 46  | 65  |



| | | | |
|-----------------------------|----|----|----|
| Visual Color Discrimination | 44 | 50 | 65 |
| Manual Dexterity | 48 | 51 | 62 |
| Control Precision | 44 | 41 | 59 |
| Multilimb Coordination | 51 | 44 | 59 |
| Trunk Strength | 44 | 44 | 59 |
| Deductive Reasoning | 41 | 42 | 56 |
| Category Flexibility | 44 | 44 | 56 |
| Visualization | 46 | 53 | 56 |
| Finger Dexterity | 44 | 46 | 56 |
| Static Strength | 46 | 46 | 56 |
| Problem Sensitivity | 41 | 41 | 53 |
| Inductive Reasoning | 41 | 42 | 53 |
| Information Ordering | 44 | 42 | 53 |
| Flexibility of Closure | 50 | 41 | 53 |
| Dynamic Strength | 37 | 35 | 53 |
| Stamina | 39 | 35 | 53 |
| Far Vision | 48 | 44 | 53 |
| Auditory Attention | 44 | 46 | 53 |
| Oral Expression | 39 | 41 | 50 |
| Selective Attention | 41 | 42 | 50 |
| Reaction Time | 42 | 39 | 50 |
| Extent Flexibility | 48 | 48 | 50 |
| Speech Clarity | 34 | 34 | 50 |

Skill Level Comparison - Abilities with importance scores over 69

| Description | Fiberglass Laminators and Fabricators | Furniture Finishers | Importance |
|---|---------------------------------------|---------------------|------------|
| Knowledge Level Comparison - Knowledge with importance scores over 69 | | | |
| Description | Fiberglass Laminators and Fabricators | Furniture Finishers | Importance |

Experience & Education Comparison

| Related Work Experience Comparison | | | Required Education Level Comparison | | |
|------------------------------------|---------------------------------------|---------------------|-------------------------------------|---------------------------------------|---------------------|
| Description | Fiberglass Laminators and Fabricators | Furniture Finishers | Description | Fiberglass Laminators and Fabricators | Furniture 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 | 9% | 0% | Master's Degree | 0% | 0% |
| 2-4 years | 11% | 21% | Post-Bachelor Cert | 0% | 0% |
| 1-2 years | 0% | 6% | Bachelors | 0% | 0% |
| 6-12 months | 18% | 15% | AA or Equiv | 3% | 0% |
| 3-6 months | 14% | 10% | Some College | 11% | 0% |
| 1-3 months | 8% | 0% | Post-Secondary Certificate | 7% | 0% |



| | | | | | |
|---|-----|-----|---|-----|-----|
| O-1 month | 0% | 0% | Certificate | | |
| None | 35% | 44% | High School Diploma or GED | 47% | 42% |
| | | | No HSD or GED | 30% | 57% |
| Fiberglass Laminators and Fabricators | | | Furniture Finishers | | |
| Most Common Educational/Training Requirement: | | | | | |
| | | | Long-term on-the-job training | | |
| Job Zone Comparison | | | | | |
| - | | | 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 | |
|---|---|
| Fiberglass Laminators and Fabricators | Furniture Finishers |
| <p>Core Tasks</p> <p>Generalized Work Activities: No information about "Generalized Work Activities" for this occupation is available.</p> <p>Detailed Work Activities:</p> <ul style="list-style-type: none"> • examine products or work to verify conformance to specifications • fabricate, assemble, or disassemble manufactured products by hand • measure, weigh, or count products or materials • mix paint, ingredients, or chemicals, according to specifications • perform repetitive tasks in assembly setting • read blueprints • read specifications • read work order, instructions, formulas, or processing charts • use hand or power tools • use spray application production equipment | <p>Core Tasks</p> <p>Generalized Work Activities:</p> <ul style="list-style-type: none"> • Handling and Moving Objects - Using hands and arms in handling, installing, positioning, and moving materials, and manipulating things. • Getting Information - Observing, receiving, and otherwise obtaining information from all relevant sources. • Identifying Objects, Actions, and Events - Identifying information by categorizing, estimating, recognizing differences or similarities, and detecting changes in circumstances or events. • Inspecting Equipment, Structures, or Material - Inspecting equipment, structures, or materials to identify the cause of errors or other problems or defects. • 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. |
| <p>Specific Tasks</p> <p>Occupation Specific Tasks:</p> <ul style="list-style-type: none"> • Apply lacquers and waxes to mold surfaces to facilitate assembly and removal of laminated parts. • Apply layers of plastic resin to mold surfaces prior to placement of fiberglass mats, repeating layers until products have the desired thicknesses and plastics have jelled. • Bond wood reinforcing strips to decks and | <p>Specific Tasks</p> <p>Occupation Specific Tasks:</p> <ul style="list-style-type: none"> • Brush bleaching agents on wood surfaces to restore natural color. • Brush, spray, or hand-rub finishing ingredients, such as paint, oil, stain, or wax, onto and into wood grain; then apply lacquer or other sealers. • Confer with customers to determine furniture colors and/or finishes. |



cabin structures of watercraft, using resin-saturated fiberglass.

- Check all dies, templates, and cutout patterns to be used in the manufacturing process to ensure that they conform to dimensional data, photographs, blueprints, samples, and/or customer specifications.
- Check completed products for conformance to specifications and for defects by measuring with rulers or micrometers, by checking them visually, or by tapping them to detect bubbles or dead spots.
- Cure materials by letting them set at room temperature, placing them under heat lamps, or baking them in ovens.
- Inspect, clean, and assemble molds before beginning work.
- Mask off mold areas which are not to be laminated, using cellophane, wax paper, masking tape, or special sprays containing mold-release substances.
- Mix catalysts into resins, and saturate cloth and mats with mixtures, using brushes.
- Pat or press layers of saturated mat or cloth into place on molds, using brushes or hands, and smooth out wrinkles and air bubbles with hands or squeegees.
- Release air bubbles and smooth seams, using rollers.
- Repair or modify damaged or defective glass-fiber parts, checking thicknesses, densities, and contours to ensure a close fit after repair.
- Select precut fiberglass mats, cloth, and woodbracing materials as required by projects being assembled.
- Spray chopped fiberglass, resins, and catalysts onto prepared molds or dies using pneumatic spray guns with chopper attachments.
- Trim cured materials by sawing them with diamond-impregnated cutoff wheels.
- Trim excess materials from molds, using hand shears or trimming knives.

Detailed Tasks

Detailed Work Activities:

- examine products or work to verify conformance to specifications
- fabricate, assemble, or disassemble manufactured products by hand
- measure, weigh, or count products or materials
- mix paint, ingredients, or chemicals, according to specifications
- perform repetitive tasks in assembly setting
- read blueprints
- read specifications

- Design, create, and decorate entire pieces or specific parts of furniture, such as draws for cabinets.
- Disassemble items to prepare them for finishing, using hand tools.
- Distress surfaces with woodworking tools or abrasives before staining to create an antique appearance, or rub surfaces to bring out highlights and shadings.
- Examine furniture to determine the extent of damage or deterioration, and to decide on the best method for repair or restoration.
- Fill and smooth cracks or depressions, remove marks and imperfections, and repair broken parts, using plastic or wood putty, glue, nails, and/or screws.
- Follow blueprints to produce specific designs.
- Mix finish ingredients to obtain desired colors or shades.
- Paint metal surfaces electrostatically, or by using a spray gun or other painting equipment.
- Recommend woods, colors, finishes, and furniture styles, using knowledge of wood products, fashions, and styles.
- Remove accessories prior to finishing, and mask areas that should not be exposed to finishing processes or substances.
- Remove excess solvent, using cloths soaked in paint thinner.
- Remove old finishes and damaged or deteriorated parts, using hand tools, stripping tools, sandpaper, steel wool, abrasives, solvents, and/or dip baths.
- Replace or refurbish upholstery of items, using tacks, adhesives, softeners, solvents, stains, or polish.
- Select appropriate finishing ingredients such as paint, stain, lacquer, shellac, or varnish, depending on factors such as wood hardness and surface type.
- Smooth, shape, and touch-up surfaces to prepare them for finishing, using sandpaper, pumice stones, steel wool, chisels, sanders, or grinders.
- Spread graining ink over metal portions of furniture in order to simulate wood-grain finish.
- Stencil, gild, emboss, mark, or paint designs or borders to reproduce the original appearance of restored pieces, or to decorate new pieces.
- Treat warped or stained surfaces to restore original contours and colors.
- Wash surfaces to prepare them for finish application.

Detailed Tasks



• read specifications

- read work order, instructions, formulas, or processing charts
- use hand or power tools
- use spray application production equipment

Technology - Examples

Data base user interface and query software

- Data entry software

Spreadsheet software

- Spreadsheet software

Word processing software

- Word processing software

Tools - Examples

- Fiber reinforced polymer FRP rollers
- Vacuum bags
- Heat lamps
- Ladders
- Micrometers
- Paint application brushes
- Paint application rollers
- High-volume low-pressure HVLP spray guns
- Curing ovens
- Personal computers
- Rotating mandrels
- Power drills
- Power grinders
- Power sanders
- Cutoff saws
- Power drivers
- Chopper guns
- Respirators
- Rulers
- Scaffolding
- Hand shears
- Squeegees
- Trimming knives

Detailed Work Activities:

- apply adhesives, caulking, sealants, or coatings
- apply protective coating to products
- cut, shape, fit, or join wood or other construction materials
- examine products or work to verify conformance to specifications
- fabricate, assemble, or disassemble manufactured products by hand
- finish or refinish floor, furniture, or related wood surfaces
- make independent judgment in assembly procedures
- mix paint, ingredients, or chemicals, according to specifications
- move or fit heavy objects
- perform safety inspections in manufacturing or industrial setting
- prepare building surfaces for paint, finishes, wallpaper, or adhesives
- read production layouts
- read technical drawings
- recognize wood species characteristics
- use hand or power tools

Technology - Examples



- Vacuum pumps

Labor Market Comparison

Maine Department of Labor.

| Description | Fiberglass Laminators and Fabricators | Furniture Finishers | Difference |
|---------------------------------------|---------------------------------------|---------------------|------------|
| Median Wage | \$ 33,960 | \$ 28,550 | \$(5,410) |
| 10th Percentile Wage | \$ 24,630 | \$ 22,580 | \$(2,050) |
| 25th Percentile Wage | N/A | N/A | N/A |
| 75th Percentile Wage | \$ 37,560 | \$ 31,370 | \$(6,190) |
| 90th Percentile Wage | \$ 40,040 | \$ 36,310 | \$(3,730) |
| Mean Wage | \$ 32,850 | \$ 28,730 | \$(4,120) |
| Total Employment - 2541 | 440 | 70 | -370 |
| Employment Base - 2006 | 436 | 91 | -345 |
| Projected Employment - 2550 | 456 | 63 | -393 |
| Projected Job Growth - 2006-2550 | 4.6 % | -30.8 % | -35.3 % |
| Projected Annual Openings - 2006-2550 | 11 | 2 | -9 |
| Special | | | |

Special Occupations:

National Job Posting Trends

Trend for Fiberglass Laminators and Fabricators and Furniture Finishers



Programs

Related Programs

Furniture Designer and Maker

Furniture Design and Manufacturing. A program that prepares individuals to apply technical knowledge and skills to prepare and execute furniture design projects; assemble and finish furniture articles or subassemblies; repair furniture; and use a variety of hand and power tools.

No information on schools for the program

Maine Statewide Promotion Opportunities for Fiberglass Laminators and Fabricators

| O* NET Code | Title | Grand TORQ | Job Zone | Employment | Median Wage | Difference | Growth | Annual Job Openings | Special |
|-------------|---|------------|----------|------------|-------------|------------|--------|---------------------|---------|
| 51-2091.00 | Fiberglass Laminators and Fabricators | 100 | | 440 | \$33,960.00 | \$0.00 | 5% | 11 | |
| 51-9121.00 | Coating, Painting, and Spraying Machine Setters, Operators, and Tenders | 87 | 2 | 850 | \$38,860.00 | \$4,900.00 | -26% | 19 | |
| 51-4121.06 | Welders, Cutters, and Welder Fitters | 86 | 2 | 1,610 | \$38,030.00 | \$4,070.00 | 7% | 49 | |



| | | | | | | | | | |
|------------|---|----|---|-------|-------------|------------|------|----|--|
| 51-4121.07 | Solderers and Brazers | 85 | 2 | 1,610 | \$38,030.00 | \$4,070.00 | 7% | 49 | |
| 51-9196.00 | Paper Goods Machine Setters, Operators, and Tenders | 83 | 2 | 910 | \$38,230.00 | \$4,270.00 | -26% | 23 | |
| 51-4122.00 | Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders | 83 | 2 | 120 | \$36,960.00 | \$3,000.00 | 2% | 3 | |
| 51-9023.00 | Mixing and Blending Machine Setters, Operators, and Tenders | 81 | 1 | 420 | \$36,040.00 | \$2,080.00 | -9% | 7 | |
| 51-4192.00 | Lay-Out Workers, Metal and Plastic | 80 | 2 | 180 | \$43,870.00 | \$9,910.00 | -24% | 3 | |
| 43-5053.00 | Postal Service Mail Sorters, Processors, and Processing Machine Operators | 80 | 2 | 970 | \$41,950.00 | \$7,990.00 | -12% | 10 | |
| 47-5021.00 | Earth Drillers, Except Oil and Gas | 79 | 3 | 140 | \$37,470.00 | \$3,510.00 | 2% | 4 | |
| 47-4061.00 | Rail-Track Laying and Maintenance Equipment Operators | 78 | 1 | 120 | \$36,960.00 | \$3,000.00 | 8% | 4 | |
| 47-2132.00 | Insulation Workers, Mechanical | 77 | 3 | 180 | \$35,060.00 | \$1,100.00 | 2% | 4 | |
| 51-4034.00 | Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic | 77 | 3 | 110 | \$34,350.00 | \$390.00 | -9% | 2 | |
| 49-9096.00 | Riggers | 76 | 3 | 250 | \$39,140.00 | \$5,180.00 | -12% | 2 | |



| | | | | | | | | |
|----------------------|-----------------------|----|---|-----|-------------|-------------|-----|----|
| 51-8013.00 | Power Plant Operators | 76 | 3 | 480 | \$50,240.00 | \$16,280.00 | 10% | 21 |
| Special Occupations: | | | | | | | | |

Top Industries for Furniture Finishers

| Industry | NAICS | % of Industry | Employment | Projected Employment | % Change |
|---|--------|---------------|------------|----------------------|----------|
| Household and institutional furniture manufacturing | 337120 | 23.68% | 7,417 | 5,644 | -23.91% |
| Self-employed workers, primary job | 000601 | 20.25% | 6,344 | 6,759 | 6.54% |
| Wood kitchen cabinet and countertop manufacturing | 337110 | 14.73% | 4,613 | 5,107 | 10.72% |
| Office furniture (including fixtures) manufacturing | 337200 | 11.39% | 3,568 | 3,355 | -5.97% |
| Personal and household goods repair and maintenance | 811400 | 10.84% | 3,396 | 3,151 | -7.19% |
| Furniture stores | 442100 | 6.83% | 2,140 | 2,183 | 2.03% |
| Other wood product manufacturing | 321900 | 3.38% | 1,058 | 997 | -5.76% |
| Used merchandise stores | 453300 | 1.63% | 510 | 574 | 12.73% |
| Furniture and home furnishing merchant wholesalers | 423200 | 0.96% | 301 | 330 | 9.75% |
| Private households, primary jobs | 814100 | 0.93% | 292 | 304 | 3.99% |
| Warehousing and storage | 493100 | 0.67% | 209 | 280 | 33.56% |
| Home furnishings stores | 442200 | 0.62% | 193 | 222 | 15.32% |
| General freight trucking | 484100 | 0.32% | 102 | 115 | 13.11% |
| Other furniture related product manufacturing | 337900 | 0.20% | 63 | 66 | 4.41% |
| Independent artists, writers, and performers | 711500 | 0.19% | 60 | 83 | 39.81% |

Top Industries for Fiberglass Laminators and Fabricators

| Industry | NAICS | % of Industry | Employment | Projected Employment | % Change |
|--|--------|---------------|------------|----------------------|----------|
| Ship and boat building | 336600 | 39.50% | 13,152 | 14,721 | 11.93% |
| Plastics product manufacturing | 326100 | 19.90% | 6,627 | 7,024 | 6.00% |
| Motor vehicle body and trailer manufacturing | 336200 | 5.77% | 1,923 | 1,881 | -2.15% |
| Aerospace product and parts manufacturing | 336400 | 4.06% | 1,352 | 1,376 | 1.84% |
| Glass and glass product manufacturing | 327200 | 3.00% | 1,000 | 873 | -12.76% |
| Employment services | 561300 | 2.34% | 779 | 986 | 26.56% |



| | | | | | |
|--|--------|-------|-----|-----|---------|
| Personal and household goods repair and maintenance | 811400 | 1.96% | 652 | 605 | -7.19% |
| Motor vehicle parts manufacturing | 336300 | 1.74% | 580 | 462 | -20.39% |
| Other transportation equipment manufacturing | 336900 | 1.58% | 525 | 527 | 0.42% |
| Self-employed workers, primary job | 000601 | 1.35% | 448 | 478 | 6.54% |
| Wood kitchen cabinet and countertop manufacturing | 337110 | 1.04% | 348 | 385 | 10.72% |
| Office furniture (including fixtures) manufacturing | 337200 | 0.93% | 309 | 291 | -5.97% |
| Lumber and other construction materials merchant wholesalers | 423300 | 0.60% | 199 | 228 | 14.86% |
| Motor vehicle manufacturing | 336100 | 0.36% | 119 | 116 | -3.11% |
| Rubber product manufacturing | 326200 | 0.36% | 119 | 84 | -29.38% |



TORQ Analysis of Fiberglass Laminators and Fabricators to Coating, Painting, and Spraying Machine Setters, Operators, and Tenders

| ANALYSIS INPUT | | | | | |
|--------------------|---|------------|------------|----------------------|-----------|
| Transfer | Title | O*NET | Filters | | |
| From Title: | Fiberglass Laminators and Fabricators | 51-2091.00 | 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: | | | | | | | | 87 | | | |
| Ability TORQ | | | Skills TORQ | | | | Knowledge TORQ | | | | |
| Level | | 93 | Level | | 82 | 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 |
| Visual Color Discrimination | 59 | 15 | 75 | Operation Monitoring | 61 | 27 | 71 | No Knowledge Upgrades Required! | | | |
| Control Precision | 50 | 6 | 68 | Instructing | 61 | 10 | 75 | | | | |
| Reaction Time | 50 | 8 | 50 | Writing | 43 | 2 | 70 | | | | |
| Trunk Strength | 50 | 6 | 59 | | | | | | | | |
| Rate Control | 46 | 5 | 59 | | | | | | | | |
| Finger Dexterity | 48 | 4 | 59 | | | | | | | | |
| Perceptual Speed | 46 | 4 | 56 | | | | | | | | |
| Hearing Sensitivity | 42 | 3 | 53 | | | | | | | | |
| Speech Recognition | 37 | 2 | 50 | | | | | | | | |
| Problem Sensitivity | 42 | 1 | 53 | | | | | | | | |
| Selective Attention | 42 | 1 | 53 | | | | | | | | |
| LEVEL and IMPT (IMPORTANCE) refer to the Target Coating, Painting, and Spraying Machine Setters, Operators, and Tenders. GAP refers to level difference between Fiberglass Laminators and Fabricators and Coating, Painting, and Spraying Machine Setters, Operators, and Tenders. | | | | | | | | | | | |

ASK ANALYSIS



Ability Level Comparison - Abilities with importance scores over 50

| Description | Fiberglass Laminators and Fabricators | Coating, Painting, and Spraying Machine Setters, Operators, and Tenders | Importance |
|-----------------------------|---------------------------------------|---|------------|
| Visual Color Discrimination | 44 | 59 | 75 |
| Control Precision | 44 | 50 | 68 |
| Arm-Hand Steadiness | 48 | 48 | 65 |
| Manual Dexterity | 48 | 48 | 62 |
| Near Vision | 48 | 46 | 62 |
| Finger Dexterity | 44 | 48 | 59 |
| Multilimb Coordination | 51 | 50 | 59 |
| Rate Control | 41 | 46 | 59 |
| Static Strength | 46 | 46 | 59 |
| Trunk Strength | 44 | 50 | 59 |
| Far Vision | 48 | 48 | 59 |
| Information Ordering | 44 | 42 | 56 |
| Perceptual Speed | 42 | 46 | 56 |
| Visualization | 46 | 46 | 56 |
| Problem Sensitivity | 41 | 42 | 53 |
| Selective Attention | 41 | 42 | 53 |
| Hearing Sensitivity | 39 | 42 | 53 |
| Written Comprehension | 41 | 41 | 50 |
| Deductive Reasoning | 41 | 41 | 50 |
| Flexibility of Closure | 50 | 41 | 50 |
| Reaction Time | 42 | 50 | 50 |
| Speech Recognition | 35 | 37 | 50 |

Skill Level Comparison - Abilities with importance scores over 69

| Description | Fiberglass Laminators and Fabricators | Coating, Painting, and Spraying Machine Setters, Operators, and Tenders | Importance |
|----------------------|---------------------------------------|---|------------|
| Instructing | 51 | 61 | 75 |
| Operation Monitoring | 34 | 61 | 71 |
| Writing | 41 | 43 | 70 |

Knowledge Level Comparison - Knowledge with importance scores over 69

| Description | Fiberglass Laminators and Fabricators | Coating, Painting, and Spraying Machine Setters, Operators, and Tenders | Importance |
|-------------|---------------------------------------|---|------------|
|-------------|---------------------------------------|---|------------|

Experience & Education Comparison

Related Work Experience Comparison

Required Education Level Comparison



| Fiberglass Laminators and Fabricators | | Coating, Painting, and Spraying Machine Setters, Operators, and Tenders | |
|---------------------------------------|-----|---|--|
| 10+ years | 0% | 0% | |
| 8-10 years | 0% | 0% | |
| 6-8 years | 0% | 17% | |
| 4-6 years | 9% | 0% | |
| 2-4 years | 11% | 20% | |
| 1-2 years | 0% | 13% | |
| 6-12 months | 18% | 5% | |
| 3-6 months | 14% | 14% | |
| 1-3 months | 8% | 0% | |
| 0-1 month | 0% | 12% | |
| None | 35% | 16% | |

| Fiberglass Laminators and Fabricators | | Coating, Painting, and Spraying Machine Setters, Operators, and Tenders | |
|---------------------------------------|-----|---|--|
| Doctoral | 0% | 0% | |
| Professional Degree | 0% | 0% | |
| Post-Masters Cert | 0% | 0% | |
| Master's Degree | 0% | 0% | |
| Post-Bachelor Cert | 0% | 0% | |
| Bachelors | 0% | 0% | |
| AA or Equiv | 3% | 0% | |
| Some College | 11% | 0% | |
| Post-Secondary Certificate | 7% | 16% | |
| High School Diploma or GED | 47% | 49% | |
| No HSD or GED | 30% | 34% | |

| | |
|--|---|
| Fiberglass Laminators and Fabricators | Coating, Painting, and Spraying Machine Setters, Operators, and Tenders |
| Most Common Educational/Training Requirement: | |
| | Moderate-term on-the-job training |
| Job Zone Comparison | |
| - | 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

| Fiberglass Laminators and Fabricators | Coating, Painting, and Spraying Machine Setters, Operators, and Tenders |
|---|--|
| Core Tasks | Core Tasks |
| <p>Generalized Work Activities: No information about "Generalized Work Activities" for this occupation is available.</p> <p>Detailed Work Activities:</p> <ul style="list-style-type: none"> • examine products or work to verify conformance to specifications • fabricate, assemble, or disassemble manufactured products by hand • measure, weigh, or count products or materials • mix paint, ingredients, or chemicals, according to specifications • perform repetitive tasks in assembly setting • read blueprints | <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). • 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. |



- read specifications
- read work order, instructions, formulas, or processing charts
- use hand or power tools
- use spray application production equipment

Specific Tasks

Occupation Specific Tasks:

- Apply lacquers and waxes to mold surfaces to facilitate assembly and removal of laminated parts.
- Apply layers of plastic resin to mold surfaces prior to placement of fiberglass mats, repeating layers until products have the desired thicknesses and plastics have jelled.
- Bond wood reinforcing strips to decks and cabin structures of watercraft, using resin-saturated fiberglass.
- Check all dies, templates, and cutout patterns to be used in the manufacturing process to ensure that they conform to dimensional data, photographs, blueprints, samples, and/or customer specifications.
- Check completed products for conformance to specifications and for defects by measuring with rulers or micrometers, by checking them visually, or by tapping them to detect bubbles or dead spots.
- Cure materials by letting them set at room temperature, placing them under heat lamps, or baking them in ovens.
- Inspect, clean, and assemble molds before beginning work.
- Mask off mold areas which are not to be laminated, using cellophane, wax paper, masking tape, or special sprays containing mold-release substances.
- Mix catalysts into resins, and saturate cloth and mats with mixtures, using brushes.
- Pat or press layers of saturated mat or cloth into place on molds, using brushes or hands, and smooth out wrinkles and air bubbles with hands or squeegees.
- Release air bubbles and smooth seams, using rollers.
- Repair or modify damaged or defective glass-fiber parts, checking thicknesses, densities, and contours to ensure a close fit after repair.
- Select precut fiberglass mats, cloth, and woodbracing materials as required by projects being assembled.
- Spray chopped fiberglass, resins, and catalysts onto prepared molds or dies using pneumatic spray guns with chopper attachments.
- Trim cured materials by sawing them with diamond-impregnated cutoff wheels.
- Trim excess materials from molds, using hand shears or trimming knives.

- 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

Occupation Specific Tasks:

- 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 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.



Detailed Tasks

Detailed Work Activities:

- examine products or work to verify conformance to specifications
- fabricate, assemble, or disassemble manufactured products by hand
- measure, weigh, or count products or materials
- mix paint, ingredients, or chemicals, according to specifications
- perform repetitive tasks in assembly setting
- read blueprints
- read specifications
- read work order, instructions, formulas, or processing charts
- use hand or power tools
- use spray application production equipment

Technology - Examples

Data base user interface and query software

- Data entry software

Spreadsheet software

- Spreadsheet software

Word processing software

- Word processing software

Tools - Examples

- Fiber reinforced polymer FRP rollers
- Vacuum bags
- Heat lamps
- Ladders
- Micrometers
- Paint application brushes
- Paint application rollers
- High-volume low-pressure HVLP spray guns
- Curing ovens
- Personal computers
- Rotating mandrels
- Power drills
- Power grinders
- Power sanders
- Cutoff saws

Levels of 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 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



- Power drivers
- Chopper guns
- Respirators
- Rulers
- Scaffolding
- Hand shears
- Squeegees
- Trimming knives
- Vacuum pumps

- use spray application production equipment
- use spray paint equipment

Technology - Examples

Labor Market Comparison

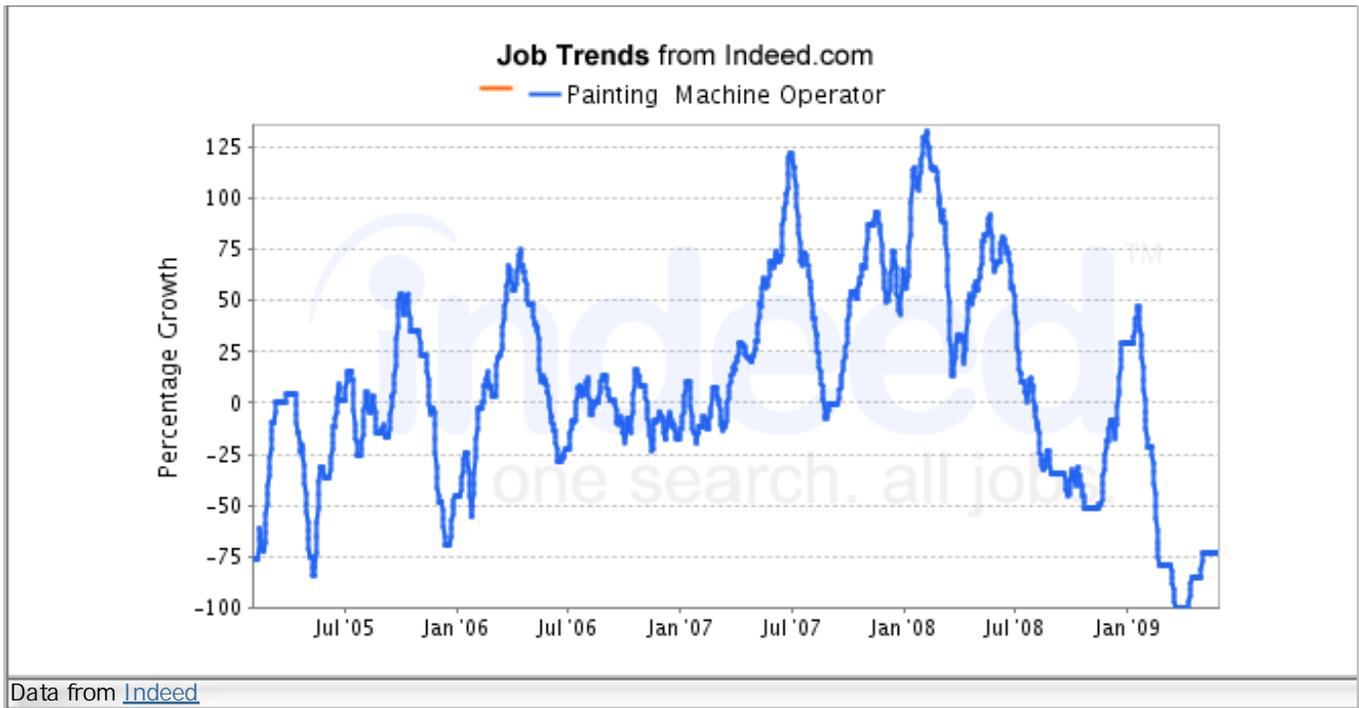
Maine Department of Labor.

| Description | Fiberglass Laminators and Fabricators | Coating, Painting, and Spraying Machine Setters, Operators, and Tenders | Difference |
|---------------------------------------|---------------------------------------|---|------------|
| Median Wage | \$ 33,960 | \$ 38,860 | \$ 4,900 |
| 10th Percentile Wage | \$ 24,630 | \$ 21,280 | \$(3,350) |
| 25th Percentile Wage | N/A | N/A | N/A |
| 75th Percentile Wage | \$ 37,560 | \$ 47,830 | \$ 10,270 |
| 90th Percentile Wage | \$ 40,040 | \$ 56,160 | \$ 16,120 |
| Mean Wage | \$ 32,850 | \$ 38,450 | \$ 5,600 |
| Total Employment - 2541 | 440 | 850 | 410 |
| Employment Base - 2006 | 436 | 968 | 532 |
| Projected Employment - 2550 | 456 | 721 | 265 |
| Projected Job Growth - 2006-2550 | 4.6 % | -25.5 % | -30.1 % |
| Projected Annual Openings - 2006-2550 | 11 | 19 | 8 |
| Special | | | |

Special Occupations:

National Job Posting Trends

Trend for Fiberglass Laminators and Fabricators and Coating, Painting, and Spraying Machine Setters, Operators, and Tenders



| 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 Fiberglass Laminators and Fabricators | | | | | | | | | |
|---|---------------------------------------|------------|----------|------------|-------------|------------|--------|---------------------|---------|
| O*NET Code | Title | Grand TORQ | Job Zone | Employment | Median Wage | Difference | Growth | Annual Job Openings | Special |
| 51-2091.00 | Fiberglass Laminators and Fabricators | 100 | | 440 | \$33,960.00 | \$0.00 | 5% | 11 | |



| | | | | | | | | |
|------------|---|----|---|-------|-------------|------------|------|----|
| 51-9121.00 | Coating, Painting, and Spraying Machine Setters, Operators, and Tenders | 87 | 2 | 850 | \$38,860.00 | \$4,900.00 | -26% | 19 |
| 51-4121.06 | Welders, Cutters, and Welder Fitters | 86 | 2 | 1,610 | \$38,030.00 | \$4,070.00 | 7% | 49 |
| 51-4121.07 | Solderers and Brazers | 85 | 2 | 1,610 | \$38,030.00 | \$4,070.00 | 7% | 49 |
| 51-4122.00 | Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders | 83 | 2 | 120 | \$36,960.00 | \$3,000.00 | 2% | 3 |
| 51-9196.00 | Paper Goods Machine Setters, Operators, and Tenders | 83 | 2 | 910 | \$38,230.00 | \$4,270.00 | -26% | 23 |
| 51-9023.00 | Mixing and Blending Machine Setters, Operators, and Tenders | 81 | 1 | 420 | \$36,040.00 | \$2,080.00 | -9% | 7 |
| 43-5053.00 | Postal Service Mail Sorters, Processors, and Processing Machine Operators | 80 | 2 | 970 | \$41,950.00 | \$7,990.00 | -12% | 10 |
| 51-4192.00 | Lay-Out Workers, Metal and Plastic | 80 | 2 | 180 | \$43,870.00 | \$9,910.00 | -24% | 3 |
| 47-5021.00 | Earth Drillers, Except Oil and Gas | 79 | 3 | 140 | \$37,470.00 | \$3,510.00 | 2% | 4 |
| 47-4061.00 | Rail-Track Laying and Maintenance Equipment Operators | 78 | 1 | 120 | \$36,960.00 | \$3,000.00 | 8% | 4 |



| | | | | | | | | |
|------------|---|----|---|-----|-------------|-------------|------|----|
| 47-2132.00 | Insulation Workers, Mechanical | 77 | 3 | 180 | \$35,060.00 | \$1,100.00 | 2% | 4 |
| 51-4034.00 | Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic | 77 | 3 | 110 | \$34,350.00 | \$390.00 | -9% | 2 |
| 49-9096.00 | Riggers | 76 | 3 | 250 | \$39,140.00 | \$5,180.00 | -12% | 2 |
| 51-8013.00 | Power Plant Operators | 76 | 3 | 480 | \$50,240.00 | \$16,280.00 | 10% | 21 |

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 Fiberglass Laminators and Fabricators

| Industry | NAICS | % of Industry | Employment | Projected Employment | % Change |
|--|--------|---------------|------------|----------------------|----------|
| Ship and boat building | 336600 | 39.50% | 13,152 | 14,721 | 11.93% |
| Plastics product manufacturing | 326100 | 19.90% | 6,627 | 7,024 | 6.00% |
| Motor vehicle body and trailer manufacturing | 336200 | 5.77% | 1,923 | 1,881 | -2.15% |
| Aerospace product and parts manufacturing | 336400 | 4.06% | 1,352 | 1,376 | 1.84% |
| Glass and glass product manufacturing | 327200 | 3.00% | 1,000 | 873 | -12.76% |
| Employment services | 561300 | 2.34% | 779 | 986 | 26.56% |
| Personal and household goods repair and maintenance | 811400 | 1.96% | 652 | 605 | -7.19% |
| Motor vehicle parts manufacturing | 336300 | 1.74% | 580 | 462 | -20.39% |
| Other transportation equipment manufacturing | 336900 | 1.58% | 525 | 527 | 0.42% |
| Self-employed workers, primary job | 000601 | 1.35% | 448 | 478 | 6.54% |
| Wood kitchen cabinet and countertop manufacturing | 337110 | 1.04% | 348 | 385 | 10.72% |
| Office furniture (including fixtures) manufacturing | 337200 | 0.93% | 309 | 291 | -5.97% |
| Lumber and other construction materials merchant wholesalers | 423300 | 0.60% | 199 | 228 | 14.86% |
| Motor vehicle manufacturing | 336100 | 0.36% | 119 | 116 | -3.11% |
| Rubber product manufacturing | 326200 | 0.36% | 119 | 84 | -29.38% |



TORQ Analysis of Fiberglass Laminators and Fabricators to Painters, Transportation Equipment

| ANALYSIS INPUT | | | | | |
|--------------------|---------------------------------------|------------|------------|----------------------|-----------|
| Transfer | Title | O*NET | Filters | | |
| From Title: | Fiberglass Laminators and Fabricators | 51-2091.00 | Abilities: | Importance Level: 50 | Weight: 1 |
| To Title: | Painters, Transportation Equipment | 51-9122.00 | Skills: | Importance Level: 69 | Weight: 1 |
| Labor Market Area: | Maine Statewide | | Knowledge: | Importance Level: 69 | Weight: 1 |

| TORQ RESULTS | | | | | | | | | | | |
|--|-------|-------------|----------------------|-----------------|-----------|------------------|------|---------------------------------|-------|-----|------|
| Grand TORQ: | | | | | 87 | | | | | | |
| Ability TORQ | | Skills TORQ | | Knowledge TORQ | | | | | | | |
| Level | 89 | Level | 81 | 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 |
| Visual Color Discrimination | 60 | 16 | 65 | Monitoring | 66 | 21 | 72 | No Knowledge Upgrades Required! | | | |
| Finger Dexterity | 48 | 4 | 56 | Time Management | 47 | 3 | 73 | | | | |
| Oral Expression | 42 | 3 | 50 | | | | | | | | |
| Extent Flexibility | 50 | 2 | 56 | | | | | | | | |
| LEVEL and IMPT (IMPORTANCE) refer to the Target Painters, Transportation Equipment. GAP refers to level difference between Fiberglass Laminators and Fabricators and Painters, Transportation Equipment. | | | | | | | | | | | |

| ASK ANALYSIS | | | |
|---|--|---|------------|
| Ability Level Comparison - Abilities with importance scores over 50 | | | |
| Description | Fiberglass Laminators and Fabricators | Painters, Transportation Equipment | Importance |
| Visual Color Discrimination | 44  |  60 | 65 |
| Arm-Hand Steadiness | 48  |  44 | 62 |
| Trunk Strength | 44  |  44 | 62 |
| Manual Dexterity | 48  |  46 | 59 |
| Near Vision | 48  |  48 | 59 |
| Finger Dexterity | 44  |  48 | 56 |
| Extent Flexibility | 48  |  50 | 56 |
| Control Precision | 44  |  44 | 53 |
| Multilimb Coordination | 51  |  42 | 53 |



| | | | |
|--------------------|----|----|----|
| Speech Recognition | 35 | 35 | 53 |
| Oral Expression | 39 | 42 | 50 |
| Static Strength | 46 | 42 | 50 |

Skill Level Comparison - Abilities with importance scores over 69

| Description | Fiberglass Laminators and Fabricators | Painters, Transportation Equipment | Importance |
|-----------------|---------------------------------------|------------------------------------|------------|
| Time Management | 44 | 47 | 73 |
| Monitoring | 45 | 66 | 72 |

Knowledge Level Comparison - Knowledge with importance scores over 69

| Description | Fiberglass Laminators and Fabricators | Painters, Transportation Equipment | Importance |
|-------------|---------------------------------------|------------------------------------|------------|
|-------------|---------------------------------------|------------------------------------|------------|

Experience & Education Comparison

| Related Work Experience Comparison | | | Required Education Level Comparison | | |
|------------------------------------|---------------------------------------|------------------------------------|-------------------------------------|---------------------------------------|------------------------------------|
| Description | Fiberglass Laminators and Fabricators | Painters, Transportation Equipment | Description | Fiberglass Laminators and Fabricators | Painters, Transportation Equipment |
| 10+ years | 0% | 0% | Doctoral | 0% | 0% |
| 8-10 years | 0% | 0% | Professional Degree | 0% | 0% |
| 6-8 years | 0% | 18% | Post-Masters Cert | 0% | 0% |
| 4-6 years | 9% | 7% | Master's Degree | 0% | 0% |
| 2-4 years | 11% | 25% | Post-Bachelor Cert | 0% | 0% |
| 1-2 years | 0% | 21% | Bachelors | 0% | 0% |
| 6-12 months | 18% | 3% | AA or Equiv | 3% | 0% |
| 3-6 months | 14% | 0% | Some College | 11% | 0% |
| 1-3 months | 8% | 4% | Post-Secondary Certificate | 7% | 25% |
| 0-1 month | 0% | 13% | High School Diploma or GED | 47% | 45% |
| None | 35% | 6% | No HSD or GED | 30% | 27% |

Fiberglass Laminators and Fabricators

Painters, Transportation Equipment

Most Common Educational/Training Requirement:

Long-term on-the-job training

Job Zone Comparison

| | |
|---|---|
| - | 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



Fiberglass Laminators and Fabricators

Core Tasks

Generalized Work Activities: No information about "Generalized Work Activities" for this occupation is available.

Detailed Work Activities:

- examine products or work to verify conformance to specifications
- fabricate, assemble, or disassemble manufactured products by hand
- measure, weigh, or count products or materials
- mix paint, ingredients, or chemicals, according to specifications
- perform repetitive tasks in assembly setting
- read blueprints
- read specifications
- read work order, instructions, formulas, or processing charts
- use hand or power tools
- use spray application production equipment

Specific Tasks

Occupation Specific Tasks:

- Apply lacquers and waxes to mold surfaces to facilitate assembly and removal of laminated parts.
- Apply layers of plastic resin to mold surfaces prior to placement of fiberglass mats, repeating layers until products have the desired thicknesses and plastics have jelled.
- Bond wood reinforcing strips to decks and cabin structures of watercraft, using resin-saturated fiberglass.
- Check all dies, templates, and cutout patterns to be used in the manufacturing process to ensure that they conform to dimensional data, photographs, blueprints, samples, and/or customer specifications.
- Check completed products for conformance to specifications and for defects by measuring with rulers or micrometers, by checking them visually, or by tapping them to detect bubbles or dead spots.
- Cure materials by letting them set at room temperature, placing them under heat lamps, or baking them in ovens.
- Inspect, clean, and assemble molds before beginning work.
- Mask off mold areas which are not to be laminated, using cellophane, wax paper, masking tape, or special sprays containing mold-release substances.
- Mix catalysts into resins, and saturate cloth and mats with mixtures, using brushes.
- Pat or press layers of saturated mat or cloth into place on molds, using brushes or

Painters, Transportation Equipment

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

Specific Tasks

Occupation Specific Tasks:

- Adjust controls on infrared ovens, heat lamps, portable ventilators, and exhaust units in order to speed the drying of vehicles between coats.
- Allow the sprayed product to dry, and then touch up any spots that may have been missed.
- Apply designs, lettering, or other identifying or decorative items to finished products, using paint brushes or paint sprayers.
- Apply primer over any repairs made to vehicle surfaces.
- Apply rust-resistant undercoats, and caulk and seal seams.
- Buff and wax the finished paintwork.
- Disassemble, clean, and reassemble sprayers and power equipment, using solvents, wire brushes, and cloths for cleaning duties.
- Dispose of hazardous waste in an appropriate manner.
- Fill small dents and scratches with body fillers, and smooth surfaces in order to prepare vehicles for painting.
- Lay out logos, symbols, or designs on painted surfaces, according to blueprint specifications, using measuring instruments, stencils, and patterns.
- Mix paints to match color specifications or vehicles' original colors, then stir and thin the paints, using spatulas or power mixing equipment.



into place on molds, using brushes or hands, and smooth out wrinkles and air bubbles with hands or squeegees.

- Release air bubbles and smooth seams, using rollers.
- Repair or modify damaged or defective glass-fiber parts, checking thicknesses, densities, and contours to ensure a close fit after repair.
- Select precut fiberglass mats, cloth, and woodbracing materials as required by projects being assembled.
- Spray chopped fiberglass, resins, and catalysts onto prepared molds or dies using pneumatic spray guns with chopper attachments.
- Trim cured materials by sawing them with diamond-impregnated cutoff wheels.
- Trim excess materials from molds, using hand shears or trimming knives.

Detailed Tasks

Detailed Work Activities:

- examine products or work to verify conformance to specifications
- fabricate, assemble, or disassemble manufactured products by hand
- measure, weigh, or count products or materials
- mix paint, ingredients, or chemicals, according to specifications
- perform repetitive tasks in assembly setting
- read blueprints
- read specifications
- read work order, instructions, formulas, or processing charts
- use hand or power tools
- use spray application production equipment

Technology - Examples

Data base user interface and query software

- Data entry software

Spreadsheet software

- Spreadsheet software

Word processing software

- Word processing software

Tools - Examples

- Fiber reinforced polymer FRP rollers
- Vacuum bags
- Heat lamps
- Ladders
- Micrometers

- Monitor painting operations in order to identify flaws such as blisters and streaks so that their causes can be corrected.
- Operate lifting and moving devices in order to move equipment or materials so that areas to be painted are accessible.
- Paint by hand areas that cannot be reached with a spray gun, or those that need retouching, using brushes.
- Pour paint into spray guns, and adjust nozzles and paint mixes in order to get the proper paint flow and coating thickness.
- Remove accessories from vehicles, such as chrome or mirrors, and mask other surfaces with tape or paper in order to protect them from paint.
- Remove grease, dirt, paint, and rust from vehicle surfaces in preparation for paint application, using abrasives, solvents, brushes, blowtorches, washing tanks, or sandblasters.
- Sand the final finish, and apply sealer once a vehicle has dried properly.
- Sand vehicle surfaces between coats of paint and/or primer in order to remove flaws and enhance adhesion for subsequent coats.
- Select paint according to company requirements, and match colors of paint following specified color charts.
- Select the correct spray gun system for the material being applied.
- Set up portable equipment such as ventilators, exhaust units, ladders, and scaffolding.
- Spray prepared surfaces with specified amounts of primers and decorative or finish coatings.
- Verify paint consistency, using a viscosity meter.

Detailed Tasks

Detailed Work Activities:

- apply adhesives, caulking, sealants, or coatings
- apply cleaning solvents
- clean equipment or machinery
- control operation of compressors
- distinguish colors
- mask vehicle body in preparation for painting
- mix paint, ingredients, or chemicals, according to specifications
- operate mix or blending machine
- operate sandblasting equipment
- prime or paint vehicle or transportation equipment surfaces
- read blueprints
- read technical drawings
- read vehicle manufacturer's specifications



- Paint application brushes
- Paint application rollers
- High-volume low-pressure HVLP spray guns
- Curing ovens
- Personal computers
- Rotating mandrels
- Power drills
- Power grinders
- Power sanders
- Cutoff saws
- Power drivers
- Chopper guns
- Respirators
- Rulers
- Scaffolding
- Hand shears
- Squeegees
- Trimming knives
- Vacuum pumps

- read work order, instructions, formulas, or processing charts
- understand service or repair manuals
- understand technical operating, service or repair manuals
- use auto or vehicular body repair equipment
- use hand or power tools
- use lifting equipment in vehicle repair setting
- use pneumatic tools
- use precision measuring devices in mechanical repair work
- use spray paint equipment

Technology - Examples

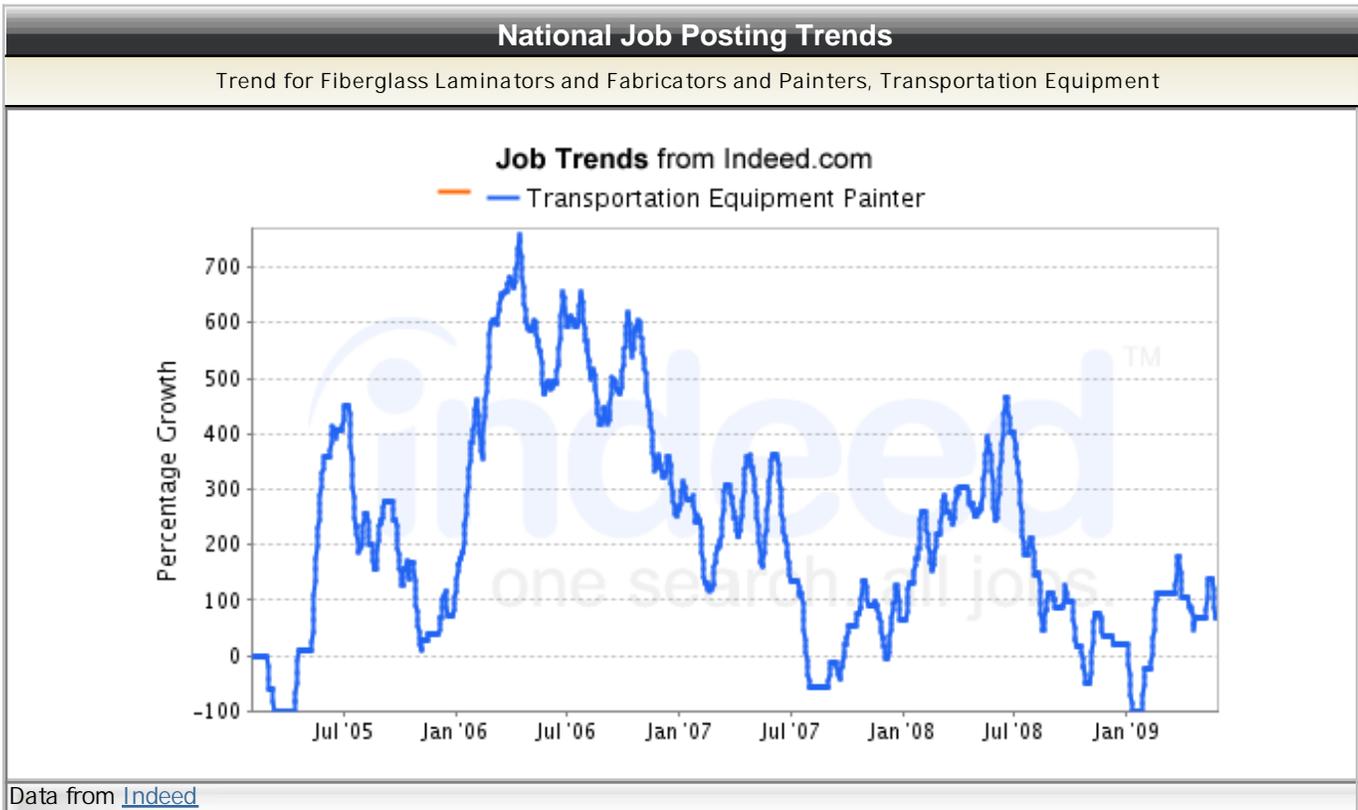
Labor Market Comparison

Maine Department of Labor.

| Description | Fiberglass Laminators and Fabricators | Painters, Transportation Equipment | Difference |
|-----------------------------|---------------------------------------|------------------------------------|------------|
| Median Wage | \$ 33,960 | \$ 32,230 | \$(1,730) |
| 10th Percentile Wage | \$ 24,630 | \$ 20,150 | \$(4,480) |
| 25th Percentile Wage | N/A | N/A | N/A |
| 75th Percentile Wage | \$ 37,560 | \$ 38,580 | \$ 1,020 |
| 90th Percentile Wage | \$ 40,040 | \$ 45,080 | \$ 5,040 |
| Mean Wage | \$ 32,850 | \$ 32,300 | \$(550) |
| Total Employment - 2541 | 440 | 320 | -120 |
| Employment Base - 2006 | 436 | 348 | -88 |
| Projected Employment - 2550 | 456 | 355 | -101 |



| | | | |
|---------------------------------------|-------|-------|--------|
| Projected Job Growth - 2006-2550 | 4.6 % | 2.0 % | -2.6 % |
| Projected Annual Openings - 2006-2550 | 11 | 8 | -3 |
| Special | | | |
| Special Occupations: | | | |



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 Fiberglass Laminators and Fabricators**

| O* NET Code | Title | Grand TORQ | Job Zone | Employment | Median Wage | Difference | Growth | Annual Job Openings | Special |
|-------------|---|------------|----------|------------|-------------|------------|--------|---------------------|---------|
| 51-2091.00 | Fiberglass Laminators and Fabricators | 100 | | 440 | \$33,960.00 | \$0.00 | 5% | 11 | |
| 51-9121.00 | Coating, Painting, and Spraying Machine Setters, Operators, and Tenders | 87 | 2 | 850 | \$38,860.00 | \$4,900.00 | -26% | 19 | |
| 51-4121.06 | Welders, Cutters, and Welder Fitters | 86 | 2 | 1,610 | \$38,030.00 | \$4,070.00 | 7% | 49 | |
| 51-4121.07 | Solderers and Brazers | 85 | 2 | 1,610 | \$38,030.00 | \$4,070.00 | 7% | 49 | |
| 51-9196.00 | Paper Goods Machine Setters, Operators, and Tenders | 83 | 2 | 910 | \$38,230.00 | \$4,270.00 | -26% | 23 | |
| 51-4122.00 | Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders | 83 | 2 | 120 | \$36,960.00 | \$3,000.00 | 2% | 3 | |
| 51-9023.00 | Mixing and Blending Machine Setters, Operators, and Tenders | 81 | 1 | 420 | \$36,040.00 | \$2,080.00 | -9% | 7 | |
| 51-4192.00 | Lay-Out Workers, Metal and Plastic | 80 | 2 | 180 | \$43,870.00 | \$9,910.00 | -24% | 3 | |



| | | | | | | | | |
|------------|---|----|---|-----|-------------|-------------|------|----|
| 43-5053.00 | Postal Service Mail Sorters, Processors, and Processing Machine Operators | 80 | 2 | 970 | \$41,950.00 | \$7,990.00 | -12% | 10 |
| 47-5021.00 | Earth Drillers, Except Oil and Gas | 79 | 3 | 140 | \$37,470.00 | \$3,510.00 | 2% | 4 |
| 47-4061.00 | Rail-Track Laying and Maintenance Equipment Operators | 78 | 1 | 120 | \$36,960.00 | \$3,000.00 | 8% | 4 |
| 47-2132.00 | Insulation Workers, Mechanical | 77 | 3 | 180 | \$35,060.00 | \$1,100.00 | 2% | 4 |
| 51-4034.00 | Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic | 77 | 3 | 110 | \$34,350.00 | \$390.00 | -9% | 2 |
| 49-9096.00 | Riggers | 76 | 3 | 250 | \$39,140.00 | \$5,180.00 | -12% | 2 |
| 51-8013.00 | Power Plant Operators | 76 | 3 | 480 | \$50,240.00 | \$16,280.00 | 10% | 21 |

Special Occupations:

Top Industries for Painters, Transportation Equipment

| Industry | NAICS | % of Industry | Employment | Projected Employment | % Change |
|---|--------|---------------|------------|----------------------|----------|
| Automotive body, paint, interior, and glass repair | 811120 | 39.42% | 21,414 | 25,002 | 16.76% |
| Automobile dealers | 441100 | 10.28% | 5,582 | 5,934 | 6.31% |
| Motor vehicle manufacturing | 336100 | 9.60% | 5,217 | 5,055 | -3.10% |
| Motor vehicle body and trailer manufacturing | 336200 | 8.39% | 4,557 | 4,013 | -11.94% |
| Ship and boat building | 336600 | 4.33% | 2,352 | 2,633 | 11.93% |
| Aerospace product and parts manufacturing | 336400 | 4.18% | 2,271 | 2,313 | 1.84% |
| Self-employed workers, primary job | 000601 | 3.80% | 2,067 | 2,202 | 6.54% |
| Support activities for air transportation | 488100 | 2.56% | 1,393 | 1,683 | 20.80% |
| Automotive mechanical and electrical repair and maintenance | 811110 | 1.90% | 1,030 | 1,223 | 18.73% |



| | | | | | |
|---|--------|-------|-----|-----|---------|
| Railroad rolling stock manufacturing | 336500 | 1.65% | 895 | 741 | -17.16% |
| Motor vehicle parts manufacturing | 336300 | 1.27% | 688 | 548 | -20.39% |
| Personal and household goods repair and maintenance | 811400 | 1.23% | 666 | 618 | -7.19% |
| Other transportation equipment manufacturing | 336900 | 1.02% | 553 | 555 | 0.42% |
| Motor vehicle and motor vehicle parts and supplies merchant wholesalers | 423100 | 0.93% | 506 | 578 | 14.14% |
| Automotive parts, accessories, and tire stores | 441300 | 0.68% | 367 | 358 | -2.44% |

Top Industries for Fiberglass Laminators and Fabricators

| Industry | NAICS | % of Industry | Employment | Projected Employment | % Change |
|--|--------|---------------|------------|----------------------|----------|
| Ship and boat building | 336600 | 39.50% | 13,152 | 14,721 | 11.93% |
| Plastics product manufacturing | 326100 | 19.90% | 6,627 | 7,024 | 6.00% |
| Motor vehicle body and trailer manufacturing | 336200 | 5.77% | 1,923 | 1,881 | -2.15% |
| Aerospace product and parts manufacturing | 336400 | 4.06% | 1,352 | 1,376 | 1.84% |
| Glass and glass product manufacturing | 327200 | 3.00% | 1,000 | 873 | -12.76% |
| Employment services | 561300 | 2.34% | 779 | 986 | 26.56% |
| Personal and household goods repair and maintenance | 811400 | 1.96% | 652 | 605 | -7.19% |
| Motor vehicle parts manufacturing | 336300 | 1.74% | 580 | 462 | -20.39% |
| Other transportation equipment manufacturing | 336900 | 1.58% | 525 | 527 | 0.42% |
| Self-employed workers, primary job | 000601 | 1.35% | 448 | 478 | 6.54% |
| Wood kitchen cabinet and countertop manufacturing | 337110 | 1.04% | 348 | 385 | 10.72% |
| Office furniture (including fixtures) manufacturing | 337200 | 0.93% | 309 | 291 | -5.97% |
| Lumber and other construction materials merchant wholesalers | 423300 | 0.60% | 199 | 228 | 14.86% |
| Motor vehicle manufacturing | 336100 | 0.36% | 119 | 116 | -3.11% |
| Rubber product manufacturing | 326200 | 0.36% | 119 | 84 | -29.38% |

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)