



TORO Analysis of Bindery Workers to Plating and Coating Machine Setters, Operators, and Tenders, Metal and Plastic

INPUT SECTION:

Transfer	Title	O* NET	Filters		
From Title:	Bindery Workers	51-5011.00	Abilities:	Importance Level: 50	Weight: 1
To Title:	Plating and Coating Machine Setters, Operators, and Tenders, Metal and Plastic	51-4193.00	Skills:	Importance Level: 69	Weight: 1
Labor Market Area:	Maine Statewide		Knowledge:	Importance Level: 69	Weight: 1

OUTPUT SECTION:

Grand TORQ:				87							
Ability TORQ		Skills TORQ		Knowledge TORQ							
Level	93	Level	88	Level 80							
Gaps To Narrow if Possible		Upgrade These Skills		Knowledge to Add							
Ability	Level	Gap	Impt	Skill	Level	Gap	Impt	Knowledge	Level	Gap	Impt
No Critical Gaps Recorded!				No Skills Upgrade Required!				No Knowledge Upgrades Required!			

LEVEL and IMPT (IMPORTANCE) refer to the Target Plating and Coating Machine Setters, Operators, and Tenders, Metal and Plastic. GAP refers to level difference between Bindery Workers and Plating and Coating Machine Setters, Operators, and Tenders, Metal and Plastic.

ASK ANALYSIS

Ability Level Comparison - Abilities with importance scores over 50

Description	Bindery Workers	Plating and Coating Machine Setters, Operators, and Tenders, Metal and Plastic	Importance
Control Precision	52	44	66
Manual Dexterity	44	36	52
Information Ordering	41	39	50

Skill Level Comparison - Abilities with importance scores over 69

Description	Bindery Workers	Plating and Coating Machine Setters, Operators, and Tenders, Metal and Plastic	Importance

Knowledge Level Comparison - Knowledge with importance scores over 69



Description	Bindery Workers	Plating and Coating Machine Setters, Operators, and Tenders, Metal and Plastic	Importance
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Experience & Education Comparison

Related Work Experience Comparison				Required Education Level Comparison			
Description	Bindery Workers	Plating and Coating Machine Setters, Operators, and Tenders, Metal and Plastic		Description	Bindery Workers	Plating and Coating Machine Setters, Operators, and Tenders, Metal and Plastic	
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	2%	0%		Master's Degree	0%	0%	
2-4 years	7%	5%		Post-Bachelor Cert	0%	0%	
1-2 years	24%	1%		Bachelors	0%	0%	
6-12 months	16%	3%		AA or Equiv	0%	0%	
3-6 months	0%	0%		Some College	0%	0%	
1-3 months	0%	15%		Post-Secondary Certificate	0%	4%	
0-1 month	3%	16%		High School Diploma or GED	56%	67%	
None	44%	55%		No HSD or GED	42%	28%	

Bindery Workers	Plating and Coating Machine Setters, Operators, and Tenders, Metal and Plastic
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Most Common Educational/Training Requirement:

Short-term on-the-job training	Moderate-term on-the-job training
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Job Zone Comparison

<p>2 - Job Zone Two: Some Preparation Needed</p> <p>Some previous work-related skill, knowledge, or experience may be helpful in these occupations, but usually is not needed. For example, a teller might benefit from experience working directly with the public, but an inexperienced person could still learn to be a teller with little difficulty.</p> <p>These occupations usually require a high school diploma and may require some vocational training or job-related course work. In some cases, an associate's or bachelor's degree could be needed.</p> <p>Employees in these occupations need anywhere from a few months to one year of working with experienced employees.</p>	<p>2 - Job Zone Two: Some Preparation Needed</p> <p>Some previous work-related skill, knowledge, or experience may be helpful in these occupations, but usually is not needed. For example, a teller might benefit from experience working directly with the public, but an inexperienced person could still learn to be a teller with little difficulty.</p> <p>These occupations usually require a high school diploma and may require some vocational training or job-related course work. In some cases, an associate's or bachelor's degree could be needed.</p> <p>Employees in these occupations need anywhere from a few months to one year of working with experienced employees.</p>
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Tasks

<p>Bindery Workers</p> <p>Core Tasks</p> <p>Generalized Work Activities</p>	<p>Plating and Coating Machine Setters, Operators, and Tenders, Metal and Plastic</p> <p>Core Tasks</p>
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Generalized Work Activities:

- Getting Information - Observing, receiving, and otherwise obtaining information from all relevant sources.
- Handling and Moving Objects - Using hands and arms in handling, installing, positioning, and moving materials, and manipulating things.
- Controlling Machines and Processes - Using either control mechanisms or direct physical activity to operate machines or processes (not including computers or vehicles).
- Performing General Physical Activities - Performing physical activities that require considerable use of your arms and legs and moving your whole body, such as climbing, lifting, balancing, walking, stooping, and handling of materials.
- Communicating with Supervisors, Peers, or Subordinates - Providing information to supervisors, co-workers, and subordinates by telephone, in written form, e-mail, or in person.

Specific Tasks

Occupation Specific Tasks:

- Clean work areas, and maintain equipment and work stations, using hand tools.
- Crease or compress signatures before affixing covers; then place paper jackets on finished books.
- Examine stitched, collated, bound, and unbound product samples for defects such as imperfect bindings, ink spots, torn or loose pages, and loose and uncut threads.
- Feed books and related articles such as periodicals and pamphlets into binding machines, following specifications.
- Fill glue reservoirs, turn switches to activate heating elements, and adjust flow of glue and speed of conveyors.
- Fill machine paper feeds.
- Install and adjust bindery machine devices, such as knives, guides, rollers, rounding forms, creasing rams, and clamps, in order to accommodate sheets, signatures, or books of specified sizes, using hand tools.
- Lubricate and clean machine parts, and make minor repairs in order to keep machines in working condition.
- Maintain records of daily production, using specified forms.
- Mount and secure rolls or reels of wire, cloth, paper, or other material onto machine spindles.
- Move controls to adjust and activate bindery machines.
- Observe and monitor machine operations to detect malfunctions and to determine

Generalized Work Activities:

- 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.
- Handling and Moving Objects - Using hands and arms in handling, installing, positioning, and moving materials, and manipulating things.
- Communicating with Supervisors, Peers, or Subordinates - Providing information to supervisors, co-workers, and subordinates by telephone, in written form, e-mail, or in person.
- Documenting/Recording Information - Entering, transcribing, recording, storing, or maintaining information in written or electronic/magnetic form.
- Getting Information - Observing, receiving, and otherwise obtaining information from all relevant sources.

Specific Tasks

Occupation Specific Tasks:

- Adjust controls to set temperatures of coating substances and speeds of machines and equipment.
- Adjust dials to regulate flow of current and voltage supplied to terminals in order to control plating processes.
- Attach nozzles, position guns, connect hoses, and thread wire in order to set up metal-spraying machines.
- Charge furnaces.
- Clean and maintain equipment, using water hoses and scrapers.
- Clean workpieces, using wire brushes.
- Cut metal or other materials, using shears or band saws.
- Determine sizes and compositions of objects to be plated, and amounts of electrical current and time required.
- Examine completed objects to determine thicknesses of metal deposits, or measure thicknesses by using instruments such as micrometers.
- Immerse objects to be coated or plated into cleaning solutions, or spray objects with conductive solutions to prepare them for plating.
- Immerse workpieces in coating solutions or liquid metal or plastic for specified times.
- Inspect coated or plated areas for defects such as air bubbles or uneven coverage.
- Install gears and holding devices on conveyor equipment.
- Maintain production records.
- Measure and set stops, rolls, brushes,



whether adjustments are needed.

- Open machines and remove and replace damaged covers and books, using hand tools.
- Punch holes in paper sheets, and fasten sheets, signatures, or other material, using hand or machine punches or staplers.
- Read work orders to determine setup specifications and instructions.
- Record production sheet information such as the amount of time spent on specific tasks.
- Remove broken wire pieces from machines, and load machines with new spools of wire.
- Remove printed material or finished products from machines or conveyors, wrap products in plastic, and stack them on pallets or skids or pack them in boxes.
- Secure reels of stitching wire on spindles, and thread wire through feeding, cutting, stitch forming, and driving mechanisms to load stitcher heads for stapling.
- Set machine controls to adjust lengths and thicknesses of folds, stitches, or cuts, to synchronize speed of feeding devices and stitching, and to adjust tension on creasing blades and folding rollers.
- Set up, or set up and operate, machines that perform binding operations such as pressing, folding, and trimming on books and related articles.
- Start machines and make trial runs to verify accuracy of machine setups.
- Stitch or glue endpapers, bindings, and signatures to attach them.
- Stock supplies such as signatures, books, or paper.
- Stop machines, cut threads that connect books, and stack separated books.
- Thread spirals in perforated holes of items to be bound, using spindles or rollers.
- Train workers to set up, operate, and use automatic bindery 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
- collate printed materials
- demonstrate or explain assembly or use of equipment
- examine products or work to verify conformance to specifications
- fabricate, assemble, or disassemble

and guides on automatic reeders and conveying equipment or coating machines, using micrometers, rules, and hand tools.

- Measure or weigh materials, using rulers, calculators, and scales.
- Measure, mark, and mask areas to be excluded from plating.
- Mix and test solutions, and turn valves to fill tanks with solutions.
- Monitor and measure thicknesses of electroplating on component parts in order to verify conformance to specifications, using micrometers.
- Observe gauges to ensure that machines are operating properly; make adjustments or stop machines when problems occur.
- Operate hoists to place workpieces onto machine feed carriages or spindles.
- Operate sandblasting equipment to roughen and clean surfaces of workpieces.
- Perform equipment maintenance such as cleaning tanks and lubricating moving parts of conveyors.
- Place plated or coated materials on racks and transfer them to ovens to dry for specified periods of time.
- Plate small objects such as nuts or bolts, using motor-driven barrels.
- Position and feed materials into processing machines, by hand or by using automated equipment.
- Position containers to receive parts, and load or unload materials in containers, using dollies or handtrucks.
- Position objects to be plated in frames, or suspend them from positive or negative terminals of power supplies.
- Preheat workpieces in ovens.
- Read production schedules to determine setups of equipment and machines.
- Remove excess materials or impurities from objects, using air hoses or grinding machines.
- Remove objects from solutions at periodic intervals and observe objects to verify conformance to specifications.
- Replace worn parts and adjust equipment components, using hand tools.
- Rinse coated objects in cleansing liquids; then dry them with cloths, centrifugal driers, or by tumbling in sawdust-filled barrels.
- Set up, operate, or tend plating or coating machines to coat metal or plastic products with chromium, zinc, copper, cadmium, nickel, or other metal to protect or decorate surfaces.
- Spray coating in specified patterns according to instructions.
- Suspend objects such as parts or molds from cathode rods (negative terminals), and immerse objects in plating solutions.



manufactured products by manu

- install equipment or attachments on machinery or related structures
- load or unload material or workpiece into machinery
- load, unload, or stack containers, materials, or products
- maintain consistent production quality
- maintain or repair industrial or related equipment/machinery
- maintain production or work records
- monitor production machinery/equipment operation to detect problems
- move or fit heavy objects
- operate collating machine
- operate printing equipment/machinery
- package goods for shipment or storage
- perform safety inspections in manufacturing or industrial setting
- read work order, instructions, formulas, or processing charts
- set up production equipment or machinery
- use hand or power tools
- wrap products

- Suspend sticks or pieces of plating metal from anodes (positive terminals) and immerse metal in plating solutions.
- Test machinery to ensure that it is operating properly.

Detailed Tasks

Detailed Work Activities:

- adjust production equipment/machinery setup
- apply adhesives, caulking, sealants, or coatings
- clean equipment or machinery
- examine products or work to verify conformance to specifications
- install equipment or attachments on machinery or related structures
- load or unload material or workpiece into machinery
- load, unload, or stack containers, materials, or products
- maintain or repair industrial or related equipment/machinery
- maintain production or work records
- measure, weigh, or count products or materials
- mix paint, ingredients, or chemicals, according to specifications
- monitor production machinery/equipment operation to detect problems
- move or fit heavy objects
- operate hoist, winch, or hydraulic boom
- operate metal or plastic fabricating equipment/machinery
- perform safety inspections in manufacturing or industrial setting
- read specifications
- read work order, instructions, formulas, or processing charts
- set up computer numerical control machines
- set up production equipment or machinery
- understand technical operating, service or repair manuals
- use hand or power tools
- use precision measuring tools or equipment
- use spray application production equipment

Labor Market Comparison

Labor Market Comparison			
Description	Bindery Workers	Plating and Coating Machine Setters, Operators, and Tenders, Metal and Plastic	Difference



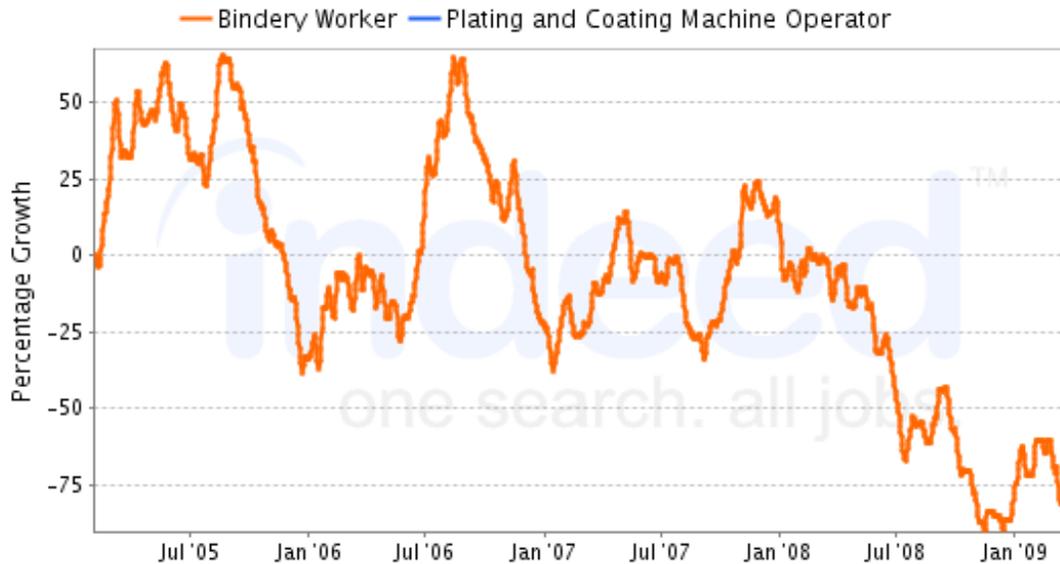
Median Wage	\$ 26,130	\$ 32,160	\$ 6,030
10th Percentile Wage	\$ 17,110	\$ 21,560	\$ 4,450
25th Percentile Wage	N/A	N/A	N/A
75th Percentile Wage	\$ 31,490	\$ 36,780	\$ 5,290
90th Percentile Wage	\$ 36,420	\$ 43,000	\$ 6,580
Mean Wage	\$ 26,320	\$ 31,530	\$ 5,210
Total Employment - 2007	350	120	-230
Employment Base - 2006	366	115	-251
Projected Employment - 2016	293	133	-160
Projected Job Growth - 2006-2016	-19.9 %	15.7 %	35.6 %
Projected Annual Openings - 2006-2016	5	5	0

National Job Posting Trends

Trend for Bindery Workers

Trend for Plating and Coating Machine Setters, Operators, and Tenders, Metal and Plastic

Job Trends from Indeed.com



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

Recommended Programs

Precision Metal Workers, Other

Precision Metal Working, Other. Any instructional program in precision metal work not listed above.



No schools available for the program

Maine Statewide Promotion Opportunities for Bindery Workers

O*NET Code	Title	Grand TORQ	Job Zone	Employment	Median Wage	Difference	Growth	Annual Job Openings
51-5011.00	Bindery Workers	100	2	350	\$26,130.00	\$0.00	-20%	5
51-4122.00	Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders	88	2	120	\$36,960.00	\$10,830.00	2%	3
51-4031.00	Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	88	2	450	\$27,500.00	\$1,370.00	-14%	11
51-5023.00	Printing Machine Operators	87	2	790	\$29,710.00	\$3,580.00	-3%	18
51-4193.00	Plating and Coating Machine Setters, Operators, and Tenders, Metal and Plastic	87	2	120	\$32,160.00	\$6,030.00	16%	5
45-4022.00	Logging Equipment Operators	81	1	1,390	\$29,280.00	\$3,150.00	4%	46
51-9191.00	Cementing and Gluing Machine Operators and Tenders	81	1	80	\$27,620.00	\$1,490.00	-15%	2
51-9032.00	Cutting and Slicing Machine Setters, Operators, and Tenders	81	2	710	\$31,350.00	\$5,220.00	-23%	12
51-9196.00	Paper Goods Machine Setters, Operators, and Tenders	81	2	910	\$38,230.00	\$12,100.00	-26%	23
51-9041.00	Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders	80	2	260	\$28,330.00	\$2,200.00	-7%	5
51-2031.00	Engine and Other Machine Assemblers	79	3	20	\$29,010.00	\$2,880.00	-45%	1



51-4034.00	Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic	79	3	110	\$34,350.00	\$8,220.00	-9%	2
51-9195.07	Molding and Casting Workers	79	2	0	\$26,980.00	\$850.00	7%	20
51-4121.06	Welders, Cutters, and Welder Fitters	79	2	1,610	\$38,030.00	\$11,900.00	7%	49
51-9051.00	Furnace, Kiln, Oven, Drier, and Kettle Operators and Tenders	79	2	300	\$32,980.00	\$6,850.00	-18%	9

Top Industries for Plating and Coating Machine Setters, Operators, and Tenders, Metal and Plastic

Industry	NAICS	% in Industry	Employment	Projected Employment	% Change
Coating, engraving, heat treating, and allied activities	332800	50.92%	21,333	18,249	-14.46%
Semiconductor and other electronic component manufacturing	334400	9.46%	3,964	3,616	-8.78%
Other electrical equipment and component manufacturing	335900	3.84%	1,609	1,556	-3.29%
Other fabricated metal product manufacturing	332900	3.20%	1,340	1,239	-7.53%
Motor vehicle parts manufacturing	336300	2.97%	1,246	1,036	-16.91%
Alumina and aluminum production and processing	331300	2.13%	894	650	-27.36%
Iron and steel mills and ferroalloy manufacturing	331100	1.81%	759	533	-29.75%
Architectural and structural metals manufacturing	332300	1.59%	665	742	11.47%
Federal government, excluding postal service	919999	1.29%	540	533	-1.34%
Aerospace product and parts manufacturing	336400	1.17%	488	519	6.29%
Machine shops	332710	0.96%	401	347	-13.67%
Foundries	331500	0.92%	384	291	-24.33%
Turned product and screw, nut, and bolt manufacturing	332720	0.88%	369	279	-24.36%
Manufacturing and reproducing magnetic and optical media	334600	0.86%	362	371	2.55%
Steel product manufacturing from purchased steel	331200	0.85%	358	331	-7.64%

Top Industries for Bindery Workers



Industry	NAICS	% in Industry	Employment	Projected Employment	% Change
Printing and related support activities	323100	75.67%	49,078	34,998	-28.69%
Employment services	561300	4.66%	3,020	3,822	26.56%
Converted paper product manufacturing	322200	2.30%	1,489	1,125	-24.47%
Advertising and related services	541800	1.69%	1,095	1,112	1.55%
Newspaper publishers	511110	1.53%	993	765	-22.90%
Self-employed workers, primary job	000601	1.32%	853	818	-4.12%
Specialized design services	541400	0.81%	528	636	20.43%
Colleges, universities, and professional schools, public and private	611300	0.42%	271	273	0.69%
Federal government, excluding postal service	919999	0.36%	234	199	-14.92%
Paper and paper product merchant wholesalers	424100	0.33%	214	206	-3.85%
Other support services	561900	0.29%	189	233	23.30%
Management of companies and enterprises	551100	0.17%	109	113	3.75%
State government, excluding education and hospitals	929200	0.15%	100	88	-11.68%
Elementary and secondary schools, public and private	611100	0.11%	71	68	-5.16%
Industrial machinery manufacturing	333200	0.11%	70	52	-26.26%