



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

INPUT SECTION:

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

OUTPUT SECTION:

Grand TORQ:		83
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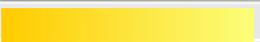
Ability TORQ		Skills TORQ		Knowledge TORQ	
Level		93	Level		81
			Level		75

Gaps To Narrow if Possible				Upgrade These Skills				Knowledge to Add			
Ability	Level	Gap	Impt	Skill	Level	Gap	Impt	Knowledge	Level	Gap	Impt
Oral Expression	44	7	50	No Skills Upgrade Required!				No Knowledge Upgrades Required!			
Finger Dexterity	44	3	62								

LEVEL and IMPT (IMPORTANCE) refer to the Target Coil Winders, Tapers, and Finishers. GAP refers to level difference between Helpers--Production Workers and Coil Winders, Tapers, and Finishers.

ASK ANALYSIS

Ability Level Comparison - Abilities with importance scores over 50

Description	Helpers--Production Workers	Coil Winders, Tapers, and Finishers	Importance
Arm-Hand Steadiness	48 	44 	68 
Finger Dexterity	41 	44 	62 
Manual Dexterity	42 	42 	59 
Control Precision	50 	44 	59 
Near Vision	48 	44 	59 
Oral Comprehension	44 	42 	53 
Oral Expression	37 	44 	50 

Skill Level Comparison - Abilities with importance scores over 69

Description	Helpers--Production Workers	Coil Winders, Tapers, and Finishers	Importance



Knowledge Level Comparison - Knowledge with importance scores over 69

Description	Helpers--Production Workers	Coil Winders, Tapers, and Finishers	Importance
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Experience & Education Comparison

Related Work Experience Comparison				Required Education Level Comparison			
Description	Helpers--Production Workers	Coil Winders, Tapers, and Finishers		Description	Helpers--Production Workers	Coil Winders, Tapers, and Finishers	
10+ years	0%	0%		Doctoral	0%	0%	
8-10 years	0%	0%		Professional Degree	0%	0%	
6-8 years	0%	0%		Post-Masters Cert	0%	0%	
4-6 years	0%	0%		Master's Degree	0%	0%	
2-4 years	0%	2%		Post-Bachelor Cert	0%	0%	
1-2 years	13%	18%		Bachelors	0%	0%	
6-12 months	39%	28%		AA or Equiv	0%	0%	
3-6 months	7%	5%		Some College	0%	0%	
1-3 months	1%	1%		Post-Secondary Certificate	11%	2%	
0-1 month	10%	5%		High School Diploma or GED	51%	51%	
None	27%	38%		No HSD or GED	36%	46%	

Helpers--Production Workers

Coil Winders, Tapers, and Finishers

Most Common Educational/Training Requirement:

Short-term on-the-job training

Short-term on-the-job training

Job Zone Comparison

1 - Job Zone One: Little or No Preparation Needed

2 - Job Zone Two: Some Preparation Needed

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

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

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

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

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

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

Tasks

Helpers--Production Workers

Coil Winders, Tapers, and Finishers

Core Tasks

Core Tasks

Generalized Work Activities:

Generalized Work Activities:

- Handling and Moving Objects - Using hands and arms in handling, installing, positioning, and moving materials, and manipulating things.
- Performing General Physical Activities -

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

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

- Handling and Moving Objects - Using hands and arms in handling, installing, positioning, and moving materials, and manipulating things.
- Getting Information - Observing, receiving, and otherwise obtaining information from all relevant sources.
- Training and Teaching Others - Identifying the educational needs of others, developing formal educational or training programs or classes, and teaching or instructing others.
- Communicating with Supervisors, Peers, or Subordinates - Providing information to supervisors, co-workers, and subordinates by telephone, in written form, e-mail, or in person.

Specific Tasks

Occupation Specific Tasks:

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

Detailed Tasks

Detailed Work Activities:

- examine products or work to verify conformance to specifications
- load or unload material or workpiece into machinery
- maintain or repair industrial or related equipment/machinery



boxes, and stack them in warehouses and coolers.

- Perform minor repairs to machines, such as replacing damaged or worn parts.
- Place products in equipment or on work surfaces for further processing, inspecting, or wrapping.
- Position spouts or chutes of storage bins so that containers can be filled.
- Prepare raw materials for processing.
- Read gauges and charts, and record data obtained.
- Record information such as the number of products tested, meter readings, and dates and times of product production.
- Remove products, machine attachments, and waste material from machines.
- Separate products according to weight, grade, size, and composition of materials used to produce them.
- Signal coworkers to direct them to move products during the production process.
- Start machines or equipment in order to begin production processes.
- Thread ends of items such as thread, cloth, 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
- monitor production machinery/equipment operation to detect problems
- monitor the quantity of assembly output
- operate coil winding machines
- perform repetitive tasks in assembly setting
- read blueprints
- read technical drawings
- read work order, instructions, formulas, or processing charts
- repair or replace electrical wiring, circuits, fixtures, or equipment
- solder electrical or electronic connections or components
- solder metal parts or components together
- test manufactured products or materials
- understand service or repair manuals
- understand technical operating, service or repair manuals
- use electronic calibration devices
- use hand or power tools
- use oscilloscopes in electronics repair
- use precision tools in electronics repair
- use soldering equipment
- use voltmeter, ammeter, or ohmmeter

Technology - Examples



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

Technology - Examples

Data base user interface and query software

- Data entry software

Spreadsheet software

- Microsoft Excel

Word processing software

- Microsoft Word

Tools - Examples

- Adjustable wrenches
- Hand files
- Industrial platform scales
- Forklifts
- Grease guns
- Claw hammers
- Handtrucks



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

Labor Market Comparison

Description	Helpers--Production Workers	Coil Winders, Tapers, and Finishers	Difference
Median Wage	\$ 22,260	\$ 31,910	\$ 9,650
10th Percentile Wage	\$ 17,160	\$ 18,350	\$ 1,190
25th Percentile Wage	N/A	N/A	N/A
75th Percentile Wage	\$ 25,210	\$ 34,740	\$ 9,530

90th Percentile Wage	\$ 30,870	\$ 36,440	\$ 5,570
Mean Wage	\$ 23,130	\$ 29,130	\$ 6,000
Total Employment - 2007	1,490	90	-1,400
Employment Base - 2006	1,522	77	-1,445
Projected Employment - 2016	1,365	36	-1,329
Projected Job Growth - 2006-2016	-10.3 %	-53.2 %	-42.9 %
Projected Annual Openings - 2006-2016	37	1	-36

National Job Posting Trends

Trend for Helpers--Production Workers

Trend for Coil Winders, Tapers, and Finishers



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

Recommended Programs

Industrial Electronics Installer and Repairer

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

No schools available for the program

Maine Statewide Promotion Opportunities for Helpers--Production Workers

O*NET Code	Title	Grand TORQ	Job Zone	Employment	Median Wage	Difference	Growth	Annual Job Openings
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51-9198.00	Helpers--Production Workers	100	1	1,490	\$22,260.00	\$0.00	-10%	37
51-6031.00	Sewing Machine Operators	83	1	1,080	\$22,440.00	\$180.00	-8%	10
51-6063.00	Textile Knitting and Weaving Machine Setters, Operators, and Tenders	83	3	0	\$23,830.00	\$1,570.00	0%	0
51-2021.00	Coil Winders, Tapers, and Finishers	83	2	90	\$31,910.00	\$9,650.00	-53%	1
43-5053.00	Postal Service Mail Sorters, Processors, and Processing Machine Operators	80	2	970	\$41,950.00	\$19,690.00	-12%	10
43-9051.00	Mail Clerks and Mail Machine Operators, Except Postal Service	80	1	490	\$23,250.00	\$990.00	-19%	13
51-4121.06	Welders, Cutters, and Welder Fitters	80	2	1,610	\$38,030.00	\$15,770.00	7%	49
51-7021.00	Furniture Finishers	80	2	70	\$28,550.00	\$6,290.00	-31%	2
51-6041.00	Shoe and Leather Workers and Repairers	80	2	90	\$25,030.00	\$2,770.00	-19%	3
51-6062.00	Textile Cutting Machine Setters, Operators, and Tenders	80	3	110	\$24,860.00	\$2,600.00	-13%	4
51-2092.00	Team Assemblers	80	2	3,850	\$23,730.00	\$1,470.00	-7%	82
51-4121.07	Solderers and Brazers	79	2	1,610	\$38,030.00	\$15,770.00	7%	49
51-9195.07	Molding and Casting Workers	79	2	0	\$26,980.00	\$4,720.00	7%	20
51-3092.00	Food Batchmakers	78	2	640	\$25,410.00	\$3,150.00	-7%	14
51-7042.00	Woodworking Machine Setters, Operators, and Tenders, Except Sawing	78	2	900	\$23,040.00	\$780.00	-12%	23

Top Industries for Coil Winders, Tapers, and Finishers

Industry	NAICS	% in Industry	Employment	Projected Employment	% Change
Electrical equipment manufacturing	335300	33.68%	7,692	5,229	-32.03%
Semiconductor and other electronic component manufacturing	334400	22.01%	5,025	3,514	-30.07%
Nonferrous metal (except aluminum) production and processing	331400	6.62%	1,512	846	-44.04%



Other electrical equipment and component manufacturing	335900	5.64%	1,289	955	-25.87%
Motor vehicle parts manufacturing	336300	4.97%	1,136	723	-36.31%
Navigational, measuring, electromedical, and control instruments manufacturing	334500	4.51%	1,030	789	-23.41%
Spring and wire product manufacturing	332600	2.32%	529	313	-40.78%
Commercial and industrial machinery and equipment (except automotive and electronic) repair and maintenance	811300	2.16%	494	418	-15.34%
Employment services	561300	2.08%	475	481	1.25%
Alumina and aluminum production and processing	331300	1.53%	348	194	-44.32%
Communications equipment manufacturing	334200	1.34%	306	247	-19.36%
Household appliance manufacturing	335200	1.16%	265	161	-39.46%
Electric lighting equipment manufacturing	335100	1.00%	227	136	-40.21%
Steel product manufacturing from purchased steel	331200	0.72%	164	116	-29.20%
Engine, turbine, and power transmission equipment manufacturing	333600	0.35%	80	54	-32.85%

Top Industries for Helpers--Production Workers					
Industry	NAICS	% in 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%