



TORO Analysis of Sawing Machine Setters, Operators, and Tenders, Wood to Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic

INPUT SECTION:

Transfer	Title	O*NET	Filters		
From Title:	Sawing Machine Setters, Operators, and Tenders, Wood	51-7041.00	Abilities:	Importance Level: 50	Weight: 1
To Title:	Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic	51-4034.00	Skills:	Importance Level: 69	Weight: 1
Labor Market Area:	Maine Statewide		Knowledge:	Importance Level: 69	Weight: 1

OUTPUT SECTION:

Grand TORQ:

91

Ability TORQ		Skills TORQ		Knowledge TORQ	
Level	96	Level	85	Level	92

Gaps To Narrow if Possible				Upgrade These Skills				Knowledge to Add			
Ability	Level	Gap	Impt	Skill	Level	Gap	Impt	Knowledge	Level	Gap	Impt
Finger Dexterity	46	4	62	Mathematics	66	20	78	Mechanical	68	10	72
Problem Sensitivity	46	4	56	Equipment Selection	61	15	69				
Static Strength	42	3	53	Operation Monitoring	63	10	77				
Near Vision	48	2	59								
Control Precision	51	1	68								
Information Ordering	42	1	50								
Trunk Strength	42	1	50								

LEVEL and IMPT (IMPORTANCE) refer to the Target Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic. GAP refers to level difference between Sawing Machine Setters, Operators, and Tenders, Wood and Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic.

ASK ANALYSIS

Ability Level Comparison - Abilities with importance scores over 50

Description	Sawing Machine Setters, Operators, and Tenders, Wood	Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic	Importance
Control Precision	50	51	68



Arm-Hand Steadiness	48	42	65
Finger Dexterity	42	46	62
Reaction Time	44	44	62
Near Vision	46	48	59
Problem Sensitivity	42	46	56
Oral Comprehension	48	46	53
Oral Expression	48	42	53
Selective Attention	41	41	53
Manual Dexterity	42	41	53
Multilimb Coordination	46	44	53
Static Strength	39	42	53
Information Ordering	41	42	50
Trunk Strength	41	42	50

Skill Level Comparison - Abilities with importance scores over 69

Description	Sawing Machine Setters, Operators, and Tenders, Wood	Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic	Importance
Mathematics	46	66	78
Operation Monitoring	53	63	77
Equipment Selection	46	61	69

Knowledge Level Comparison - Knowledge with importance scores over 69

Description	Sawing Machine Setters, Operators, and Tenders, Wood	Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic	Importance
Mechanical	58	68	72

Experience & Education Comparison

Related Work Experience Comparison			Required Education Level Comparison		
Description	Sawing Machine Setters, Operators, and Tenders, Wood	Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic	Description	Sawing Machine Setters, Operators, and Tenders, Wood	Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic
10+ years	1%	3%	Doctoral	0%	0%
8-10 years	0%	1%	Professional Degree	0%	0%
6-8 years	0%	0%	Post-Masters Cert	0%	0%
4-6 years	0%	29%	Master's Degree	0%	0%
2-4 years	8%	21%	Post-Bachelor Cert	0%	0%
1-2 years	11%	18%	Bachelors	0%	0%
6-12 months	13%	7%	AA or Equiv	0%	1%
	12%	7%	Some College	1%	4%
			Post-Secondary Certificate	10%	38%



3-6 months	12%	7%	High School Diploma or GED	40%	44%
1-3 months	12%	0%	No HSD or GED	48%	8%
0-1 month	11%	1%			
None	29%	9%			
Sawing Machine Setters, Operators, and Tenders, Wood			Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic		
Most Common Educational/Training Requirement:					
Moderate-term on-the-job training			Moderate-term on-the-job training		
Job Zone Comparison					
2 - Job Zone Two: Some Preparation Needed			3 - Job Zone Three: Medium 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.			Previous work-related skill, knowledge, or experience is required for these occupations. For example, an electrician must have completed three or four years of apprenticeship or several years of vocational training, and often must have passed a licensing exam, in order to perform the job.		
These occupations 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.			Most occupations in this zone require training in vocational schools, related on-the-job experience, or an associate's degree. Some may require a bachelor's degree.		
Employees in these occupations need anywhere from a few months to one year of working with experienced employees.			Employees in these occupations usually need one or two years of training involving both on-the-job experience and informal training with experienced workers.		

Tasks

Sawing Machine Setters, Operators, and Tenders, Wood

Core Tasks

Generalized Work Activities:

- **Controlling Machines and Processes** - Using either control mechanisms or direct physical activity to operate machines or processes (not including computers or vehicles).
- **Handling and Moving Objects** - Using hands and arms in handling, installing, positioning, and moving materials, and manipulating things.
- **Inspecting Equipment, Structures, or Material** - Inspecting equipment, structures, or materials to identify the cause of errors or other problems or defects.
- **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.
- **Monitor Processes, Materials, or Surroundings** - Monitoring and reviewing information from materials, events, or the environment, to detect or assess problems.

Specific Tasks

Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic

Core Tasks

Generalized Work Activities:

- **Controlling Machines and Processes** - Using either control mechanisms or direct physical activity to operate machines or processes (not including computers or vehicles).
- **Handling and Moving Objects** - Using hands and arms in handling, installing, positioning, and moving materials, and manipulating things.
- **Getting Information** - Observing, receiving, and otherwise obtaining information from all relevant sources.
- **Making Decisions and Solving Problems** - Analyzing information and evaluating results to choose the best solution and solve problems.
- **Performing General Physical Activities** - Performing physical activities that require considerable use of your arms and legs and moving your whole body, such as climbing, lifting, balancing, walking, stooping, and handling of materials.

Specific Tasks

Occupation Specific Tasks:



Occupation Specific Tasks:

- Adjust bolts, clamps, stops, guides, and table angles and heights, using hand tools.
- Adjust saw blades, using wrenches and rulers, or by turning handwheels or pressing pedals, levers, or panel buttons.
- Clear machine jams, using hand tools.
- Count, sort, and stack finished workpieces.
- Cut grooves, bevels, and miters, saw curved or irregular designs, and sever or shape metals, according to specifications or work orders.
- Dispose of waste material after completing work assignments.
- Examine blueprints, drawings, work orders, or patterns to determine equipment set-up and selection details, procedures to be used, and dimensions of final products.
- Examine logs or lumber in order to plan the best cuts.
- Guide workpieces against saws, saw over workpieces by hand, or operate automatic feeding devices to guide cuts.
- Inspect and measure workpieces to mark for cuts and to verify the accuracy of cuts, using rulers, squares, or caliper rules.
- Inspect stock for imperfections and to estimate grades or qualities of stock or workpieces.
- Lubricate and clean machines, using wrenches, grease guns, and solvents.
- Measure and mark stock for cuts.
- Monitor sawing machines, adjusting speed and tension and clearing jams to ensure proper operation.
- Mount and bolt sawing blades or attachments to machine shafts.
- Operate panelboards of saw and conveyor systems to move stock through processes, and to cut stock to specified dimensions.
- Position and clamp stock on tables, conveyors, or carriages, using hoists, guides, stops, dogs, wedges, and wrenches.
- Pull tables back against stops, and depress pedals to advance cutterheads that shape stock ends.
- Select saw blades, types and grades of stock, and cutting procedures to be used, according to work orders or supervisors' instructions.
- Set up, operate, or tend saws and machines that cut or trim wood to specified dimensions, such as circular saws, band saws, multiple-blade sawing machines, scroll saws, rip saws, and crozer machines.
- Sharpen blades or replace defective or worn blades and bands, using hand tools.
- Trim lumber to straighten rough edges

- Adjust machine controls and change tool settings in order to keep dimensions within specified tolerances.
- Compute unspecified dimensions and machine settings, using knowledge of metal properties and shop mathematics.
- Crank machines through cycles, stopping to adjust tool positions and machine controls to ensure specified timing, clearances, and tolerances.
- Inspect sample workpieces to verify conformance with specifications, using instruments such as gauges, micrometers, and dial indicators.
- Install holding fixtures, cams, gears, and stops to control stock and tool movement, using hand tools, power tools, and measuring instruments.
- Lift metal stock or workpieces manually or using hoists, and position and secure them in machines, using fasteners and hand tools.
- Mount attachments, such as relieving or tracing attachments, to perform operations such as duplicating contours of templates or trimming workpieces.
- Move controls to set cutting speeds and depths and feed rates, and to position tools in relation to workpieces.
- Move toolholders manually or by turning handwheels, or engage automatic feeding mechanisms to feed tools to and along workpieces.
- Position, secure, and align cutting tools in toolholders on machines, using hand tools, and verify their positions with measuring instruments.
- Replace worn tools, and sharpen dull cutting tools and dies using bench grinders or cutter-grinding machines.
- Select cutting tools and tooling instructions, according to written specifications or knowledge of metal properties and shop mathematics.
- Start lath or turning machines and observe operations to ensure that specifications are met.
- Study blueprints, layouts or charts, and job orders for information on specifications and tooling instructions, and to determine material requirements and operational sequences.
- Turn valve handles to direct the flow of coolant onto work areas or to coat disks with spinning compounds.

Detailed Tasks

Detailed Work Activities:

- adjust production equipment/machinery setup
- compute production, construction, or installation specifications
- examine products or work to verify



and remove defects, using circular saws.

- Unclamp and remove finished workpieces from tables.
- Unload and roll logs from trucks to sawmill decks or to carriages, or move logs in ponds, using pike poles.

Detailed Tasks

Detailed Work Activities:

- adjust production equipment/machinery setup
- clean equipment or machinery
- examine products or work to verify conformance to specifications
- fell or buck trees
- grade, classify, or sort products according to specifications
- inspect machinery or equipment to determine adjustments or repairs needed
- install equipment or attachments on machinery or related structures
- load or unload material or workpiece into machinery
- load, unload, or stack containers, materials, or products
- maintain consistent production quality
- measure, weigh, or count products or materials
- move or fit heavy objects
- operate hoist, winch, or hydraulic boom
- operate woodworking equipment/machinery
- read blueprints
- read specifications
- read technical drawings
- read work order, instructions, formulas, or processing charts
- recognize wood species characteristics
- set up production equipment or machinery
- sort manufacturing materials or products
- understand technical operating, service or repair manuals
- use chain saws
- use fire suppression equipment
- use hand or power tools
- use precision measuring tools or equipment

conformance to specifications

- install equipment or attachments on machinery or related structures
- lay out machining, welding or precision assembly projects
- load or unload material or workpiece into machinery
- maintain or repair industrial or related equipment/machinery
- monitor production machinery/equipment operation to detect problems
- move or fit heavy objects
- operate hoist, winch, or hydraulic boom
- operate lathes
- operate metal or plastic fabricating equipment/machinery
- read blueprints
- read production layouts
- read specifications
- read technical drawings
- read work order, instructions, formulas, or processing charts
- recognize characteristics of metals
- set up computer numerical control machines
- set up production equipment or machinery
- understand machine setup instructions
- understand technical operating, service or repair manuals
- use hand or power tools
- use precision measuring tools or equipment

Labor Market Comparison

Description	Sawing Machine Setters, Operators, and Tenders, Wood	Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic	Difference
Median Wage	\$ 24,790	\$ 34,350	\$ 9,560



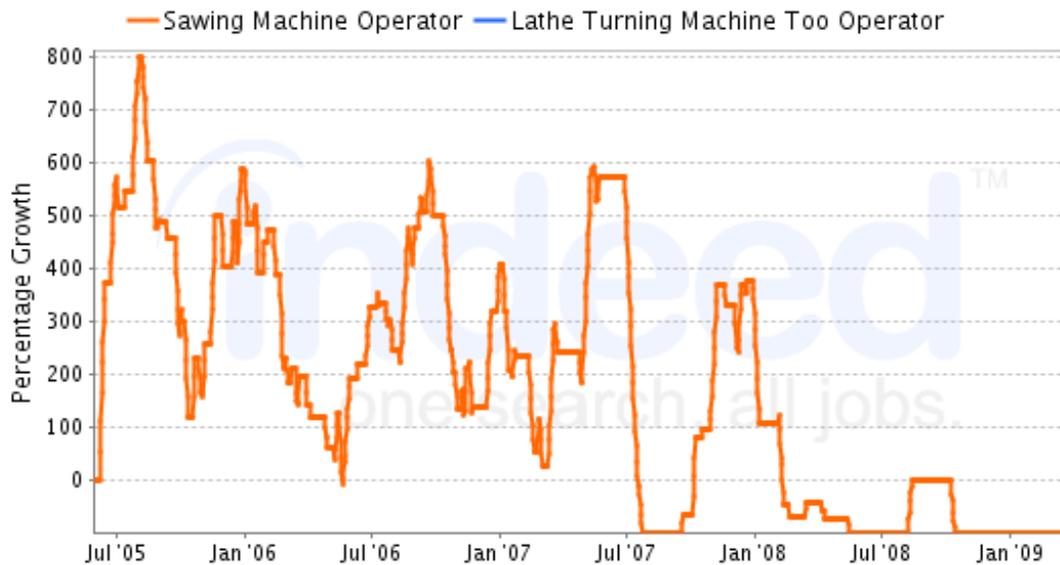
10th Percentile Wage	\$ 18,890	\$ 24,320	\$ 5,430
25th Percentile Wage	N/A	N/A	N/A
75th Percentile Wage	\$ 29,970	\$ 38,660	\$ 8,690
90th Percentile Wage	\$ 35,380	\$ 43,940	\$ 8,560
Mean Wage	\$ 25,920	\$ 33,810	\$ 7,890
Total Employment - 2007	700	110	-590
Employment Base - 2006	765	109	-656
Projected Employment - 2016	706	99	-607
Projected Job Growth - 2006-2016	-7.7 %	-9.2 %	-1.5 %
Projected Annual Openings - 2006-2016	15	2	-13

National Job Posting Trends

Trend for Sawing Machine Setters, Operators, and Tenders, Wood

Trend for Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic

Job Trends from Indeed.com



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

Recommended Programs

Machinist/Machine Technologist



Machine Tool Technology/Machinist. A program that prepares individuals to apply technical knowledge and skills to plan, manufacture, assemble, test, and repair parts, mechanisms, machines, and structures in which materials are cast, formed, shaped, molded, heat treated, cut, twisted, pressed, fused, stamped or worked.

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
Eastern Maine Community College	354 Hogan Rd	Bangor	www.emcc.edu
Eastern Maine Community College	354 Hogan Rd	Bangor	www.emcc.edu
Kennebec Valley Community College	92 Western Ave	Fairfield	www.kvcc.me.edu
Kennebec Valley Community College	92 Western Ave	Fairfield	www.kvcc.me.edu
Northern Maine Community College	33 Edgemont Dr	Presque Isle	www.nmcc.edu
Southern Maine Community College	2 Fort Road	South Portland	www.smccME.edu

Machine Shop Assistant

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 schools available for the program

Maine Statewide Promotion Opportunities for Sawing Machine Setters, Operators, and Tenders, Wood

O*NET Code	Title	Grand TORQ	Job Zone	Employment	Median Wage	Difference	Growth	Annual Job Openings
51-7041.00	Sawing Machine Setters, Operators, and Tenders, Wood	100	2	700	\$24,790.00	\$0.00	-8%	15
51-4034.00	Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic	91	3	110	\$34,350.00	\$9,560.00	-9%	2
51-4121.06	Welders, Cutters, and Welder Fitters	91	2	1,610	\$38,030.00	\$13,240.00	7%	49
51-9041.00	Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders	90	2	260	\$28,330.00	\$3,540.00	-7%	5
51-9196.00	Paper Goods Machine Setters, Operators, and Tenders	90	2	910	\$38,230.00	\$13,440.00	-26%	23
53-7063.00	Machine Feeders and Offbearers	88	1	480	\$26,820.00	\$2,030.00	-22%	9



51-2031.00	Engine and Other Machine Assemblers	88	3	20	\$29,010.00	\$4,220.00	-45%	1
51-9032.00	Cutting and Slicing Machine Setters, Operators, and Tenders	88	2	710	\$31,350.00	\$6,560.00	-23%	12
51-5011.00	Bindery Workers	87	2	350	\$26,130.00	\$1,340.00	-20%	5
51-9191.00	Cementing and Gluing Machine Operators and Tenders	87	1	80	\$27,620.00	\$2,830.00	-15%	2
51-2021.00	Coil Winders, Tapers, and Finishers	87	2	90	\$31,910.00	\$7,120.00	-53%	1
51-4022.00	Forging Machine Setters, Operators, and Tenders, Metal and Plastic	87	2	20	\$28,330.00	\$3,540.00	-18%	1
51-4071.00	Foundry Mold and Coremakers	87	2	20	\$25,420.00	\$630.00	0%	1
47-5021.00	Earth Drillers, Except Oil and Gas	86	3	140	\$37,470.00	\$12,680.00	2%	4
51-4023.00	Rolling Machine Setters, Operators, and Tenders, Metal and Plastic	86	2	0	\$33,460.00	\$8,670.00	0%	0

Top Industries for Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic

Industry	NAICS	% in Industry	Employment	Projected Employment	% Change
Motor vehicle parts manufacturing	336300	12.90%	8,743	6,265	-28.35%
Machine shops	332710	12.37%	8,385	6,243	-25.55%
Turned product and screw, nut, and bolt manufacturing	332720	10.79%	7,314	4,771	-34.77%
Other fabricated metal product manufacturing	332900	8.65%	5,864	4,676	-20.26%
Other general purpose machinery manufacturing	333900	5.82%	3,942	3,202	-18.75%
Metalworking machinery manufacturing	333500	5.23%	3,541	2,609	-26.32%
Engine, turbine, and power transmission equipment manufacturing	333600	4.18%	2,831	2,138	-24.46%
Aerospace product and parts manufacturing	336400	4.01%	2,714	2,488	-8.34%
Agriculture, construction, and mining machinery manufacturing	333100	3.16%	2,143	1,801	-15.97%



Self-employed workers, primary job	000601	2.50%	1,695	1,625	-4.12%
Foundries	331500	2.15%	1,456	950	-34.74%
Forging and stamping	332100	2.02%	1,368	963	-29.57%
Iron and steel mills and ferroalloy manufacturing	331100	1.78%	1,209	733	-39.42%
Architectural and structural metals manufacturing	332300	1.60%	1,081	1,040	-3.88%
Medical equipment and supplies manufacturing	339100	1.54%	1,045	962	-7.94%

Top Industries for Sawing Machine Setters, Operators, and Tenders, Wood

Industry	NAICS	% in Industry	Employment	Projected Employment	% Change
Other wood product manufacturing	321900	26.55%	17,269	17,901	3.66%
Sawmills and wood preservation	321100	25.90%	16,845	14,856	-11.81%
Veneer, plywood, and engineered wood product manufacturing	321200	12.25%	7,969	9,546	19.78%
Self-employed workers, primary job	000601	7.11%	4,624	5,419	17.19%
Wood kitchen cabinet and countertop manufacturing	337110	5.97%	3,881	4,726	21.79%
Household and institutional furniture manufacturing	337120	5.22%	3,395	2,842	-16.30%
Office furniture (including fixtures) manufacturing	337200	3.32%	2,159	2,233	3.43%
Lumber and other construction materials merchant wholesalers	423300	2.03%	1,317	1,664	26.35%
Building material and supplies dealers	444100	1.42%	922	1,296	40.57%
Employment services	561300	1.09%	708	985	39.22%
Self-employed workers, secondary job	000602	0.90%	584	640	9.51%
Motor vehicle parts manufacturing	336300	0.25%	163	143	-12.42%
Motor vehicle body and trailer manufacturing	336200	0.24%	157	169	7.63%
Management of companies and enterprises	551100	0.12%	80	102	26.80%