



# TORQ Analysis of First-Line Supervisors/Managers of Production and Operating Workers to Industrial Production Managers

ANALYSIS INPUT					
Transfer	Title	O*NET	Filters		
From Title:	First-Line Supervisors/Managers of Production and Operating Workers	51-1011.00	Abilities:	Importance Level: 50	Weight: 1
To Title:	Industrial Production Managers	11-3051.00	Skills:	Importance Level: 69	Weight: 1
Labor Market Area:	Maine Statewide		Knowledge:	Importance Level: 69	Weight: 1

TORQ RESULTS	
Grand TORQ:	90

Ability TORQ		Skills TORQ		Knowledge TORQ	
Level	93	Level	87	Level	89

Gaps To Narrow if Possible				Upgrade These Skills				Knowledge to Add			
Ability	Level	Gap	Impt	Skill	Level	Gap	Impt	Knowledge	Level	Gap	Impt
Problem Sensitivity	62	14	75	Judgment and Decision Making	68	9	81	Food Production	15	12	79
Mathematical Reasoning	53	16	56	Management of Financial Resources	47	10	69	Administration and Management	61	3	77
Deductive Reasoning	64	11	72	Reading Comprehension	67	4	79				
Category Flexibility	53	11	59	Persuasion	64	4	76				
Inductive Reasoning	59	8	75	Active Listening	68	3	83				
Information Ordering	59	9	65								
Visualization	57	11	50								
Oral Comprehension	62	7	78								
Oral Expression	64	7	78								
Written Comprehension	60	7	75								
Near Vision	55	7	65								
Written Expression	59	6	59								
Perceptual Speed	48	6	59								
Originality	55	5	56								
Speech Recognition	50	4	65								
Far Vision	42	1	50								

LEVEL and IMPT (IMPORTANCE) refer to the Target Industrial Production Managers. GAP refers to level difference between First-Line Supervisors/Managers of Production and Operating Workers and Industrial Production Managers.



### ASK ANALYSIS

#### Ability Level Comparison - Abilities with importance scores over 50

Description	First-Line Supervisors/Managers of Production and Operating Workers	Industrial Production Managers	Importance
Oral Comprehension	55	62	78
Oral Expression	57	64	78
Written Comprehension	53	60	75
Problem Sensitivity	48	62	75
Inductive Reasoning	51	59	75
Deductive Reasoning	53	64	72
Speech Clarity	48	46	68
Information Ordering	50	59	65
Near Vision	48	55	65
Speech Recognition	46	50	65
Written Expression	53	59	59
Category Flexibility	42	53	59
Perceptual Speed	42	48	59
Originality	50	55	56
Mathematical Reasoning	37	53	56
Visualization	46	57	50
Selective Attention	50	41	50
Far Vision	41	42	50

#### Skill Level Comparison - Abilities with importance scores over 69

Description	First-Line Supervisors/Managers of Production and Operating Workers	Industrial Production Managers	Importance
Active Listening	65	68	83
Judgment and Decision Making	59	68	81
Reading Comprehension	63	67	79
Persuasion	60	64	76
Management of Financial Resources	37	47	69

#### Knowledge Level Comparison - Knowledge with importance scores over 69

Description	First-Line Supervisors/Managers of Production and Operating Workers	Industrial Production Managers	Importance
Food Production	3	15	79
Administration and Management	58	61	77



### Experience & Education Comparison

Related Work Experience Comparison			Required Education Level Comparison		
Description	First-Line Supervisors/Managers of Production and Operating Workers	Industrial Production Managers	Description	First-Line Supervisors/Managers of Production and Operating Workers	Industrial Production Managers
10+ years	2%	0%	Doctoral	0%	0%
8-10 years	5%	0%	Professional Degree	0%	0%
6-8 years	12%	28%	Post-Masters Cert	0%	0%
4-6 years	11%	18%	Master's Degree	0%	1%
2-4 years	33%	42%	Post-Bachelor Cert	1%	4%
1-2 years	21%	0%	Bachelors	13%	18%
6-12 months	3%	7%	AA or Equiv	17%	16%
3-6 months	2%	0%	Some College	17%	12%
1-3 months	3%	0%	Post-Secondary Certificate	20%	26%
0-1 month	0%	0%	High School Diploma or GED	26%	20%
None	4%	1%	No HSD or GED	3%	0%

First-Line Supervisors/Managers of Production and Operating Workers

Industrial Production Managers

#### Most Common Educational/Training Requirement:

Work experience in a related occupation

Work experience in a related occupation

#### Job Zone Comparison

**3 - Job Zone Three: Medium Preparation Needed**  
 Previous work-related skill, knowledge, or experience is required for these occupations. For example, an electrician must have completed three or four years of apprenticeship or several years of vocational training, and often must have passed a licensing exam, in order to perform the job.  
 Most occupations in this zone require training in vocational schools, related on-the-job experience, or an associate's degree. Some may require a bachelor's degree.  
 Employees in these occupations usually need one or two years of training involving both on-the-job experience and informal training with experienced workers.

**4 - Job Zone Four: Considerable Preparation Needed**  
 A minimum of two to four years of work-related skill, knowledge, or experience is needed for these occupations. For example, an accountant must complete four years of college and work for several years in accounting to be considered qualified.  
 Most of these occupations require a four - year bachelor's degree, but some do not.  
 Employees in these occupations usually need several years of work-related experience, on-the-job training, and/or vocational training.

### Tasks

First-Line Supervisors/Managers of Production and Operating Workers

Industrial Production Managers

Core Tasks

Core Tasks

Generalized Work Activities:

Generalized Work Activities:

- Communicating with Supervisors, Peers, or Subordinates - Providing information to supervisors, co-workers, and subordinates by telephone, in written form, e-mail, or in person.
- Making Decisions and Solving Problems - Analyzing information and evaluating results to choose the best solution and solve problems.
- Coordinating the Work and Activities of Others- Getting members of a group to work together to accomplish tasks.
- Guiding, Directing, and Motivating Subordinates - Providing guidance and

- Getting Information - Observing, receiving, and otherwise obtaining information from all relevant sources.
- Communicating with Supervisors, Peers, or Subordinates - Providing information to supervisors, co-workers, and subordinates by telephone, in written form, e-mail, or in person.
- Guiding, Directing, and Motivating Subordinates - Providing guidance and direction to subordinates, including setting performance standards and monitoring performance.
- Making Decisions and Solving Problems -



direction to subordinates, including setting performance standards and monitoring performance.

- Getting Information - Observing, receiving, and otherwise obtaining information from all relevant sources.

#### Specific Tasks

##### Occupation Specific Tasks:

- Calculate labor and equipment requirements and production specifications, using standard formulas.
- Confer with management or subordinates to resolve worker problems, complaints, or grievances.
- Confer with other supervisors to coordinate operations and activities within or between departments.
- Demonstrate equipment operations and work and safety procedures to new employees, or assign employees to experienced workers for training.
- Determine standards, budgets, production goals, and rates, based on company policies, equipment and labor availability, and workloads.
- Direct and coordinate the activities of employees engaged in the production or processing of goods, such as inspectors, machine setters, and fabricators.
- Enforce safety and sanitation regulations.
- Inspect materials, products, or equipment to detect defects or malfunctions.
- Interpret specifications, blueprints, job orders, and company policies and procedures for workers.
- Maintain operations data such as time, production, and cost records, and prepare management reports of production results.
- Observe work, and monitor gauges, dials, and other indicators to ensure that operators conform to production or processing standards.
- Plan and develop new products and production processes.
- Plan and establish work schedules, assignments, and production sequences to meet production goals.
- Read and analyze charts, work orders, production schedules, and other records and reports, in order to determine production requirements and to evaluate current production estimates and outputs.
- Recommend or implement measures to motivate employees and to improve production methods, equipment performance, product quality, or efficiency.
- Recommend personnel actions such as hirings and promotions.
- Requisition materials, supplies, equipment parts, or repair services.
- Set up and adjust machines and equipment.

Analyzing information and evaluating results to choose the best solution and solve problems.

- Coordinating the Work and Activities of Others- Getting members of a group to work together to accomplish tasks.

#### Specific Tasks

##### Occupation Specific Tasks:

- Coordinate and recommend procedures for facility and equipment maintenance or modification, including the replacement of machines.
- Develop and implement production tracking and quality control systems, analyzing production, quality control, maintenance, and other operational reports, to detect production problems.
- Develop budgets and approve expenditures for supplies, materials, and human resources, ensuring that materials, labor and equipment are used efficiently to meet production targets.
- Direct and coordinate production, processing, distribution, and marketing activities of industrial organization.
- Hire, train, evaluate, and discharge staff, and resolve personnel grievances.
- Initiate and coordinate inventory and cost control programs.
- Institute employee suggestion or involvement programs.
- Maintain current knowledge of the quality control field, relying on current literature pertaining to materials use, technological advances, and statistical studies.
- Negotiate materials prices with suppliers.
- Prepare and maintain production reports and personnel records.
- Review operations and confer with technical or administrative staff to resolve production or processing problems.
- Review plans and confer with research and support staff to develop new products and processes.
- Review processing schedules and production orders to make decisions concerning inventory requirements, staffing requirements, work procedures, and duty assignments, considering budgetary limitations and time constraints.
- Set and monitor product standards, examining samples of raw products or directing testing during processing, to ensure finished products are of prescribed quality.

#### Detailed Tasks

##### Detailed Work Activities:

- analyze financial data
- analyze operational or management reports or records
- assign work to staff or employees



## Detailed Tasks

## Detailed Work Activities:

- adjust production equipment/machinery setup
- analyze operational or management reports or records
- assign work to staff or employees
- communicate technical information
- compute production, construction, or installation specifications
- conduct or attend staff meetings
- confer with other departmental heads to coordinate activities
- consult with managerial or supervisory personnel
- coordinate production materials, activities or processes
- demonstrate or explain assembly or use of equipment
- determine factors affecting production processes
- develop maintenance schedules
- direct and coordinate activities of workers or staff
- establish employee performance standards
- estimate materials or labor requirements
- examine products or work to verify conformance to specifications
- explain rules, policies or regulations
- explain work orders, specifications, or work techniques to workers
- maintain file of job openings
- maintain inventory of office equipment or furniture
- maintain job descriptions
- maintain production or work records
- maintain records, reports, or files
- manage inventories or supplies
- modify work procedures or processes to meet deadlines
- monitor production machinery/equipment operation to detect problems
- monitor worker performance
- motivate workers to achieve work goals
- orient new employees
- oversee work progress to verify safety or conformance to standards
- prepare or maintain employee records
- prepare reports
- read blueprints
- read technical drawings
- read work order, instructions, formulas, or processing charts
- recommend improvements to work methods or procedures
- requisition stock, materials, supplies or

- communicate technical information
- compute product or materials test results
- conduct meetings with staff to ensure production objectives are met
- conduct or attend staff meetings
- conduct research on work-related topics
- coordinate production maintenance activities
- coordinate production materials, activities or processes
- design manufacturing processes or methods
- determine factors affecting production processes
- develop budgets
- develop maintenance schedules
- develop management control systems
- develop plans for programs or projects
- develop policies, procedures, methods, or standards
- develop staffing plan
- direct and coordinate activities of workers or staff
- establish production schedule
- estimate time or cost for installation, repair, or construction projects
- evaluate manufacturing or processing systems
- follow manufacturing methods or techniques
- hire, discharge, transfer, or promote workers
- inspect or test materials to verify safety standards or ensure meeting of specifications
- maintain or repair industrial or related equipment/machinery
- maintain records, reports, or files
- maintain safe work environment
- make decisions
- manage industrial projects
- negotiate business contracts
- oversee execution of organizational or program policies
- perform safety inspections in industrial, manufacturing or repair setting
- perform safety inspections in manufacturing or industrial setting
- plan or organize work
- read technical drawings
- resolve personnel problems or grievances
- schedule work to meet deadlines
- supervise production workers
- supervise quality control workers
- understand technical operating, service or repair manuals
- use inventory control procedures
- use long or short term production planning techniques
- use negotiation techniques
- use oral or written communication techniques



equipment

- resolve or assist workers to resolve work problems
- resolve personnel problems or grievances
- schedule activities, classes, or events
- schedule employee work hours
- set up production equipment or machinery
- understand second language
- understand technical operating, service or repair manuals
- use oral or written communication techniques

Technology - Examples

Data base user interface and query software

- Database software
- Oracle software

Electronic mail software

- Email software
- IBM Lotus Notes
- Microsoft Outlook

Enterprise resource planning ERP software

- Bowen & Groves MI ERP
- Capterra Enterprise Resource Planning
- Encompix ERP
- Epicor Vantage ERP
- Epicor Vista ERP
- Giraffe Production Systems software
- Intacct ERP software
- Made2Manage software
- Microsoft Axapta
- NetSuite NetERP
- Resource planning software
- Retain Resource Planning
- SAP Business One
- SAP software
- SYSPRO software
- Technology Group International Enterprise 21 ERP

Human resources software

- GHG electronic employee management suite eEMS software

- use oral or written communication techniques
- use technical information in manufacturing or industrial activities

Technology - Examples

Accounting software

- Intuit QuickBooks Manufacturing & Wholesale software

Calendar and scheduling software

- Computer integrated manufacturing CIM software
- WorkSchedule software

Data base user interface and query software

- Database software

Document management software

- QUMAS software

Electronic mail software

- Microsoft Outlook

Enterprise resource planning ERP software

- Enterprise resource planning ERP software

Facilities management software

- ABB Optimize software
- Plant management software

Financial analysis software

- Financial planning software

Human resources software

- Clockware software
- Computer integrated manufacturing CIM time manager software
- Employee performance management software

Industrial control software

- Citect IIM
- CitectSCADA Reports
- CitectSCADA software
- Industrial production manager and stock control software
- Marel production system MPS software
- Prosys software
- Statistical process control software
- Wonderware DT Analyst Plant Productivity Improvement Software

Inventory management software



Internet browser software

- Netscape software

Inventory management software

- Inventory management software

Materials requirements planning logistics and supply chain software

- Integrated materials management systems
- Materials management software
- QA Software QMS Materials Management

Office suite software

- Microsoft Office

Presentation software

- Microsoft PowerPoint

Project management software

- Microsoft Total Quality Control Management
- Total quality management TQM software

Spreadsheet software

- Microsoft Excel
- Spreadsheet software

Time accounting software

- Kronos Workforce Timekeeper
- Timekeeping software
- Work Technology WorkTech Time

Word processing software

- Microsoft Word
- Word processing software

Tools - Examples

- Desktop computers
- Personal protective clothing
- Laser printers
- Notebook computers
- Personal computers
- Respirators
- Safety glasses
- Protective shoes
- Laser scanners

- Computer integrated manufacturing CIM warehouse shipping manager software

- SAP inventory software

Office suite software

- interBiz BizWorks

- Microsoft Office

Presentation software

- Microsoft PowerPoint

Project management software

- Scadex timecard20

Spreadsheet software

- Microsoft Excel

Word processing software

- CorVu software
- IBM Rational ClearQuest
- Microsoft Word

Tools - Examples

- Desktop computers
- Notebook computers
- Personal computers
- Personal digital assistants PDA
- Scanners
- Tablet computers



- Operator terminals

## Labor Market Comparison

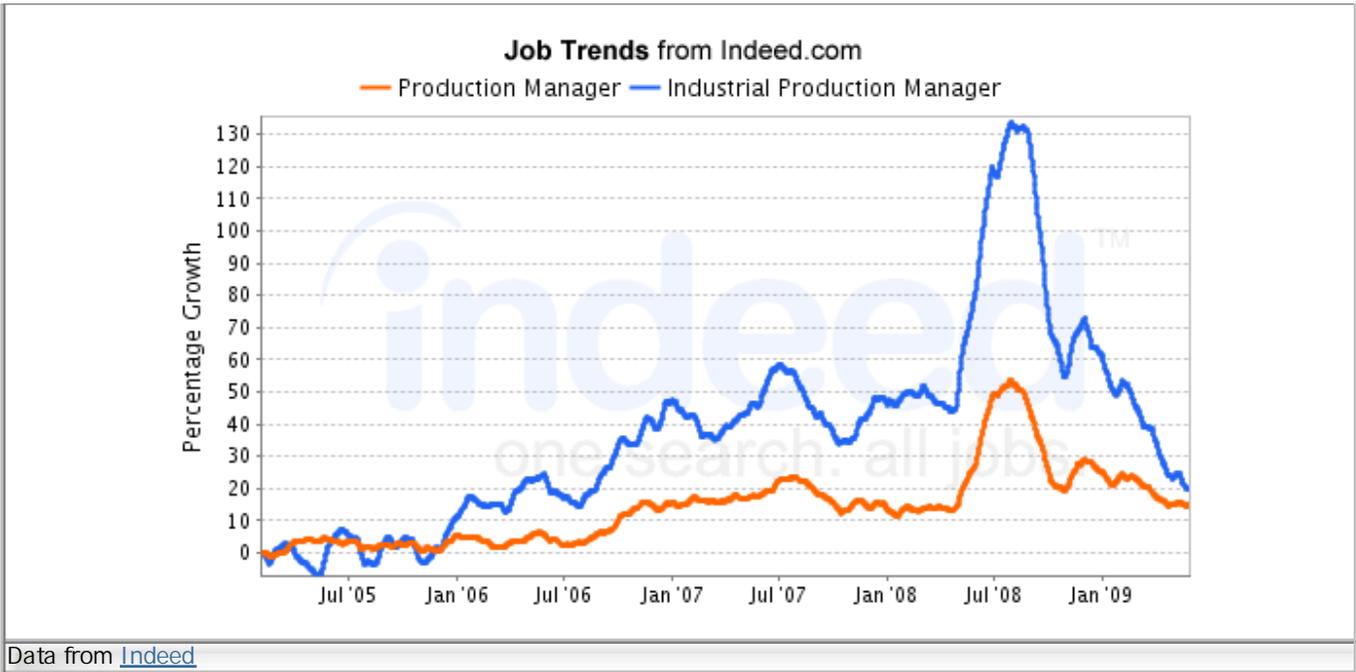
Maine Department of Labor.

Description	First-Line Supervisors/Managers of Production and Operating Workers	Industrial Production Managers	Difference
Median Wage	\$ 45,510	\$ 72,560	\$ 27,050
10th Percentile Wage	\$ 28,000	\$ 44,130	\$ 16,130
25th Percentile Wage	N/A	N/A	N/A
75th Percentile Wage	\$ 58,890	\$ 93,880	\$ 34,990
90th Percentile Wage	\$ 73,810	\$118,880	\$ 45,070
Mean Wage	\$ 48,010	\$ 77,130	\$ 29,120
Total Employment - 2535	3,750	690	-3,060
Employment Base - 2006	3,893	695	-3,198
Projected Employment - 2544	3,745	614	-3,131
Projected Job Growth - 2006-2544	-3.8 %	-11.7 %	-7.9 %
Projected Annual Openings - 2006-2544	65	24	-41
Special			

Special Occupations:

## National Job Posting Trends

Trend for First-Line Supervisors/Managers of Production and Operating Workers and Industrial Production Managers



## Programs

### Related Programs

Business Administration and Management, General

Business Administration and Management, General. A program that generally prepares individuals to plan, organize, direct, and control the functions and processes of a firm or organization. Includes instruction in management theory, human resources management and behavior, accounting and other quantitative methods, purchasing and logistics, organization and production, marketing, and business decision-making.

Institution	Address	City	URL
Central Maine Community College	1250 Turner St	Auburn	<a href="http://www.cmcc.edu">www.cmcc.edu</a>
Central Maine Community College	1250 Turner St	Auburn	<a href="http://www.cmcc.edu">www.cmcc.edu</a>
University of Maine at Augusta	46 University Dr	Augusta	<a href="http://www.uma.maine.edu/">www.uma.maine.edu/</a>
University of Maine at Augusta	46 University Dr	Augusta	<a href="http://www.uma.maine.edu/">www.uma.maine.edu/</a>
Eastern Maine Community College	354 Hogan Rd	Bangor	<a href="http://www.emcc.edu">www.emcc.edu</a>
Husson College	One College Circle	Bangor	<a href="http://www.husson.edu">www.husson.edu</a>
Husson College	One College Circle	Bangor	<a href="http://www.husson.edu">www.husson.edu</a>
Husson College	One College Circle	Bangor	<a href="http://www.husson.edu">www.husson.edu</a>
Beal College	99 Farm Road	Bangor	<a href="http://bealcollege.edu">bealcollege.edu</a>
University of New England	11 Hills Beach Rd	Biddeford	<a href="http://WWW.UNE.EDU">WWW.UNE.EDU</a>
Wasington County Community College	One College Drive	Calais	<a href="http://www.wccc.me.edu">www.wccc.me.edu</a>
University of Maine at Machias	9 O'Brien Ave	Machias	<a href="http://www.umm.maine.edu">www.umm.maine.edu</a>
University of Maine		Orono	<a href="http://www.umaine.edu/">www.umaine.edu/</a>
University of Maine		Orono	<a href="http://www.umaine.edu/">www.umaine.edu/</a>
University of Maine		Orono	<a href="http://www.umaine.edu/">www.umaine.edu/</a>



Andover College	901 Washington Ave	Portland	<a href="http://WWW.ANDOVERCOLLEGE.edu">WWW.ANDOVERCOLLEGE.edu</a>
University of Southern Maine	96 Falmouth St	Portland	<a href="http://www.usm.maine.edu">www.usm.maine.edu</a>
University of Southern Maine	96 Falmouth St	Portland	<a href="http://www.usm.maine.edu">www.usm.maine.edu</a>
University of Southern Maine	96 Falmouth St	Portland	<a href="http://www.usm.maine.edu">www.usm.maine.edu</a>
University of Southern Maine	96 Falmouth St	Portland	<a href="http://www.usm.maine.edu">www.usm.maine.edu</a>
Northern Maine Community College	33 Edgemont Dr	Presque Isle	<a href="http://www.nmcc.edu">www.nmcc.edu</a>
Southern Maine Community College	2 Fort Road	South Portland	<a href="http://www.smccME.edu">www.smccME.edu</a>
Southern Maine Community College	2 Fort Road	South Portland	<a href="http://www.smccME.edu">www.smccME.edu</a>
Saint Josephs College	278 Whites Bridge Rd	Standish	<a href="http://www.sjcme.edu">www.sjcme.edu</a>
Saint Josephs College	278 Whites Bridge Rd	Standish	<a href="http://www.sjcme.edu">www.sjcme.edu</a>
Saint Josephs College	278 Whites Bridge Rd	Standish	<a href="http://www.sjcme.edu">www.sjcme.edu</a>
Thomas College	180 W River Rd	Waterville	<a href="http://www.thomas.edu">www.thomas.edu</a>
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Thomas College	180 W River Rd	Waterville	<a href="http://www.thomas.edu">www.thomas.edu</a>
York County Community College	112 College Drive	Wells	<a href="http://www.yccc.edu">www.yccc.edu</a>

## Business/Commerce, General

Business/Commerce, General. A program that focuses on the general study of business, including the processes of interchanging goods and services (buying, selling and producing), business organization, and accounting as used in profit-making and nonprofit public and private institutions and agencies. The programs may prepare individuals to apply business principles and techniques in various occupational settings.

Institution	Address	City	URL
Beal College	99 Farm Road	Bangor	<a href="http://bealcollege.edu">bealcollege.edu</a>
University of Maine at Farmington	224 Main St	Farmington	<a href="http://www.umf.maine.edu">www.umf.maine.edu</a>
University of Maine at Fort Kent	23 University Drive	Fort Kent	<a href="http://www.umfk.maine.edu">www.umfk.maine.edu</a>
University of Maine at Presque Isle	181 Main St	Presque Isle	<a href="http://www.umpi.maine.edu">www.umpi.maine.edu</a>
University of Maine at Presque Isle	181 Main St	Presque Isle	<a href="http://www.umpi.maine.edu">www.umpi.maine.edu</a>
Thomas College	180 W River Rd	Waterville	<a href="http://www.thomas.edu">www.thomas.edu</a>

## Operations Management and Supervision

Operations Management and Supervision. A program that prepares individuals to manage and direct the physical and/or technical functions of a firm or organization, particularly those relating to development, production, and manufacturing. Includes instruction in principles of general management, manufacturing and production systems, plant management, equipment maintenance management, production control, industrial labor relations and skilled trades supervision, strategic manufacturing policy, systems analysis, productivity analysis and cost control, and materials planning.



No information on schools for the program

**Maine Statewide Promotion Opportunities for First-Line Supervisors/Managers of Production and Operating Workers**

O*NET Code	Title	Grand TORQ	Job Zone	Employment	Median Wage	Difference	Growth	Annual Job Openings	Special
51-1011.00	First-Line Supervisors/Managers of Production and Operating Workers	100	3	3,750	\$45,510.00	\$0.00	-4%	65	
11-3051.00	Industrial Production Managers	90	4	690	\$72,560.00	\$27,050.00	-12%	24	
11-3071.02	Storage and Distribution Managers	89	3	710	\$62,270.00	\$16,760.00	5%	25	★
17-3026.00	Industrial Engineering Technicians	88	3	370	\$51,700.00	\$6,190.00	6%	9	★
11-9131.00	Postmasters and Mail Superintendents	87	3	420	\$55,200.00	\$9,690.00	-5%	10	
11-3061.00	Purchasing Managers	83	4	330	\$72,560.00	\$27,050.00	2%	11	
11-3071.01	Transportation Managers	83	3	710	\$62,270.00	\$16,760.00	5%	25	★
47-1011.00	First-Line Supervisors/Managers of Construction Trades and Extraction Workers	83	3	3,190	\$46,630.00	\$1,120.00	3%	77	★
11-3042.00	Training and Development Managers	82	4	140	\$66,670.00	\$21,160.00	7%	4	
41-1012.00	First-Line Supervisors/Managers of Non-Retail Sales Workers	82	4	930	\$55,220.00	\$9,710.00	-1%	19	
11-3011.00	Administrative Services Managers	82	4	1,090	\$56,630.00	\$11,120.00	5%	34	
11-9011.01	Nursery and Greenhouse Managers	82	4	30	\$60,610.00	\$15,100.00	20%	15	
49-1011.00	First-Line Supervisors/Managers of Mechanics, Installers, and Repairers	82	4	2,490	\$46,810.00	\$1,300.00	0%	60	★
15-1061.00	Database Administrators	81	4	300	\$60,260.00	\$14,750.00	20%	11	
11-1021.00	General and Operations Managers	81	4	8,490	\$77,050.00	\$31,540.00	-5%	209	

Special Occupations:

**Top Industries for Industrial Production Managers**

Industry	NAICS	% of Industry	Employment	Projected Employment	% Change
Plastics product manufacturing	326100	4.29%	6,750	7,155	6.00%
Management of companies and enterprises	551100	3.66%	5,764	6,644	15.28%
Motor vehicle parts manufacturing	336300	3.37%	5,300	4,220	-20.39%
Printing and related support activities	323100	3.31%	5,207	4,126	-20.77%
Aerospace product and parts manufacturing	336400	3.05%	4,798	4,887	1.84%
Semiconductor and other electronic component manufacturing	334400	3.05%	4,802	4,197	-12.59%
Navigational, measuring, electromedical, and control instruments manufacturing	334500	2.76%	4,338	4,153	-4.26%
Architectural and structural metals manufacturing	332300	2.69%	4,230	4,518	6.80%
Pharmaceutical and medicine manufacturing	325400	2.47%	3,879	4,888	26.03%
Converted paper product manufacturing	322200	2.19%	3,451	2,896	-16.08%
Self-employed workers, primary job	000601	2.01%	3,162	3,369	6.54%
Other general purpose machinery manufacturing	333900	1.92%	3,019	2,725	-9.73%
Machine shops	332710	1.86%	2,924	2,419	-17.28%
Medical equipment and supplies manufacturing	339100	1.85%	2,908	2,974	2.29%
Other fabricated metal product manufacturing	332900	1.69%	2,656	2,354	-11.39%

**Top Industries for First-Line Supervisors/Managers of Production and Operating Workers**

Industry	NAICS	% of Industry	Employment	Projected Employment	% Change
Plastics product manufacturing	326100	4.03%	28,154	29,844	6.00%
Printing and related support activities	323100	3.61%	25,224	19,985	-20.77%
Motor vehicle parts manufacturing	336300	3.08%	21,518	17,131	-20.39%
Architectural and structural metals manufacturing	332300	2.52%	17,595	18,792	6.80%
Self-employed workers, primary job	000601	2.40%	16,779	17,876	6.54%
Grocery stores	445100	2.37%	16,559	18,067	9.11%
Animal slaughtering and processing	311600	2.24%	15,642	17,851	14.13%
Local government, excluding education and hospitals	939300	2.07%	14,471	16,257	12.34%
Machine shops	332710	1.99%	13,948	11,538	-17.28%
Converted paper product manufacturing	322200	1.89%	13,212	11,088	-16.08%
Semiconductor and other electronic component manufacturing	334400	1.88%	13,126	11,473	-12.59%
Drycleaning and laundry services	812300	1.75%	12,216	12,217	0.01%

Other wood product manufacturing	321900	1.64%	11,463	10,802	-5.77%
Other fabricated metal product manufacturing	332900	1.57%	10,950	9,702	-11.39%
Other general purpose machinery manufacturing	333900	1.41%	9,879	8,918	-9.73%



# TORQ Analysis of First-Line Supervisors/Managers of Production and Operating Workers to Inspectors, Testers, Sorters, Samplers, and Weighers

ANALYSIS INPUT					
Transfer	Title	O*NET	Filters		
From Title:	First-Line Supervisors/Managers of Production and Operating Workers	51-1011.00	Abilities:	Importance Level: 50	Weight: 1
To Title:	Inspectors, Testers, Sorters, Samplers, and Weighers	51-9061.00	Skills:	Importance Level: 69	Weight: 1
Labor Market Area:	Maine Statewide		Knowledge:	Importance Level: 69	Weight: 1

TORQ RESULTS							
Grand TORQ:					90		
Ability TORQ		Skills TORQ		Knowledge TORQ			
Level	95	Level	82	Level	93		
Gaps To Narrow if Possible			Upgrade These Skills		Knowledge to Add		
Ability	Level	Gap	Impt	Skill	Level	Gap	Impt
Category Flexibility	46	4	56	No Skills Upgrade Required!		No Knowledge Upgrades Required!	
Near Vision	50	2	59				

LEVEL and IMPT (IMPORTANCE) refer to the Target Inspectors, Testers, Sorters, Samplers, and Weighers. GAP refers to level difference between First-Line Supervisors/Managers of Production and Operating Workers and Inspectors, Testers, Sorters, Samplers, and Weighers.

ASK ANALYSIS			
Ability Level Comparison - Abilities with importance scores over 50			
Description	First-Line Supervisors/Managers of Production and Operating Workers	Inspectors, Testers, Sorters, Samplers, and Weighers	Importance
Oral Comprehension	55	53	68
Oral Expression	57	51	68
Problem Sensitivity	48	41	59
Near Vision	48	50	59
Written Comprehension	53	50	56
Deductive Reasoning	53	44	56
Category Flexibility	42	46	56
Speech Clarity	48	37	56
Inductive Reasoning	51	44	53
Flexibility of Closure	44	41	53
Speech Recognition	46	35	53



Information Ordering	50	42	50
Selective Attention	50	42	50
Arm-Hand Steadiness	37	37	50
Skill Level Comparison - Abilities with importance scores over 69			
Description	First-Line Supervisors/Managers of Production and Operating Workers	Inspectors, Testers, Sorters, Samplers, and Weighers	Importance
Knowledge Level Comparison - Knowledge with importance scores over 69			
Description	First-Line Supervisors/Managers of Production and Operating Workers	Inspectors, Testers, Sorters, Samplers, and Weighers	Importance

Experience & Education Comparison					
Related Work Experience Comparison			Required Education Level Comparison		
Description	First-Line Supervisors/Managers of Production and Operating Workers	Inspectors, Testers, Sorters, Samplers, and Weighers	Description	First-Line Supervisors/Managers of Production and Operating Workers	Inspectors, Testers, Sorters, Samplers, and Weighers
10+ years	2%	3%			
8-10 years	5%	0%	Doctoral	0%	0%
6-8 years	12%	0%	Professional Degree	0%	0%
4-6 years	11%	12%	Post-Masters Cert	0%	0%
2-4 years	33%	1%	Master's Degree	0%	0%
1-2 years	21%	14%	Post-Bachelor Cert	1%	0%
6-12 months	3%	23%	Bachelors	13%	0%
3-6 months	2%	3%	AA or Equiv	17%	3%
1-3 months	3%	6%	Some College	17%	5%
0-1 month	0%	10%	Post-Secondary Certificate	20%	22%
None	4%	24%	High School Diploma or GED	26%	61%
			No HSD or GED	3%	7%
First-Line Supervisors/Managers of Production and Operating Workers			Inspectors, Testers, Sorters, Samplers, and Weighers		
<b>Most Common Educational/Training Requirement:</b>					
Work experience in a related occupation			Moderate-term on-the-job training		
<b>Job Zone Comparison</b>					
3 - Job Zone Three: Medium Preparation Needed			2 - Job Zone Two: Some Preparation Needed		
Previous work-related skill, knowledge, or experience is required for these occupations. For example, an electrician must have completed three or four years of apprenticeship or several years of vocational training, and often must have passed a licensing exam, in order to perform the job.			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.		
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.			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 usually need one or two years of training involving both on-the-job experience and informal training with experienced workers.			Employees in these occupations need anywhere from a few months to one year of working with experienced employees.		

## Tasks



## First-Line Supervisors/Managers of Production and Operating Workers

## Core Tasks

## Generalized Work Activities:

- Communicating with Supervisors, Peers, or Subordinates - Providing information to supervisors, co-workers, and subordinates by telephone, in written form, e-mail, or in person.
- Making Decisions and Solving Problems - Analyzing information and evaluating results to choose the best solution and solve problems.
- Coordinating the Work and Activities of Others- Getting members of a group to work together to accomplish tasks.
- Guiding, Directing, and Motivating Subordinates - Providing guidance and direction to subordinates, including setting performance standards and monitoring performance.
- Getting Information - Observing, receiving, and otherwise obtaining information from all relevant sources.

## Specific Tasks

## Occupation Specific Tasks:

- Calculate labor and equipment requirements and production specifications, using standard formulas.
- Confer with management or subordinates to resolve worker problems, complaints, or grievances.
- Confer with other supervisors to coordinate operations and activities within or between departments.
- Demonstrate equipment operations and work and safety procedures to new employees, or assign employees to experienced workers for training.
- Determine standards, budgets, production goals, and rates, based on company policies, equipment and labor availability, and workloads.
- Direct and coordinate the activities of employees engaged in the production or processing of goods, such as inspectors, machine setters, and fabricators.
- Enforce safety and sanitation regulations.
- Inspect materials, products, or equipment to detect defects or malfunctions.
- Interpret specifications, blueprints, job orders, and company policies and procedures for workers.
- Maintain operations data such as time, production, and cost records, and prepare management reports of production results.
- Observe work, and monitor gauges, dials, and other indicators to ensure that operators conform to production or processing standards.
- Plan and develop new products and

## Inspectors, Testers, Sorters, Samplers, and Weighers

## Core Tasks

## Generalized Work Activities:

- 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.
- Monitor Processes, Materials, or Surroundings - Monitoring and reviewing information from materials, events, or the environment, to detect or assess problems.
- Inspecting Equipment, Structures, or Material - Inspecting equipment, structures, or materials to identify the cause of errors or other problems or defects.
- Communicating with Supervisors, Peers, or Subordinates - Providing information to supervisors, co-workers, and subordinates by telephone, in written form, e-mail, or in person.

## Specific Tasks

## Occupation Specific Tasks:

- Adjust, clean, or repair products or processing equipment to correct defects found during inspections.
- Administer tests to engineers and operators to assess whether they are qualified to use equipment.
- Analyze and interpret blueprints, data, manuals, and other materials to determine specifications, inspection and testing procedures, adjustment and certification methods, formulas, and measuring instruments required.
- Analyze test data and make computations as necessary to determine test results.
- Check arriving materials to ensure that they match purchase orders and submit discrepancy reports when problems are found.
- Clean, maintain, repair, and calibrate measuring instruments and test equipment such as dial indicators, fixed gauges, and height gauges.
- Collect or select samples for testing or for use as models.
- Compare colors, shapes, textures, or grades of products or materials with color charts, templates, or samples to verify conformance to standards.
- Compute defect percentages or averages, using formulas and calculators, and prepare reports of inspection or test findings.
- Compute usable amounts of items in shipments and determine prices, based on quantities and grade assessments.
- Disassemble defective parts and components, such as inaccurate or worn



Plan and develop new products and production processes.

- Plan and establish work schedules, assignments, and production sequences to meet production goals.
- Read and analyze charts, work orders, production schedules, and other records and reports, in order to determine production requirements and to evaluate current production estimates and outputs.
- Recommend or implement measures to motivate employees and to improve production methods, equipment performance, product quality, or efficiency.
- Recommend personnel actions such as hirings and promotions.
- Requisition materials, supplies, equipment parts, or repair services.
- Set up and adjust machines and equipment.

#### Detailed Tasks

##### Detailed Work Activities:

- adjust production equipment/machinery setup
- analyze operational or management reports or records
- assign work to staff or employees
- communicate technical information
- compute production, construction, or installation specifications
- conduct or attend staff meetings
- confer with other departmental heads to coordinate activities
- consult with managerial or supervisory personnel
- coordinate production materials, activities or processes
- demonstrate or explain assembly or use of equipment
- determine factors affecting production processes
- develop maintenance schedules
- direct and coordinate activities of workers or staff
- establish employee performance standards
- estimate materials or labor requirements
- examine products or work to verify conformance to specifications
- explain rules, policies or regulations
- explain work orders, specifications, or work techniques to workers
- maintain file of job openings
- maintain inventory of office equipment or furniture
- maintain job descriptions
- maintain production or work records
- maintain records, reports, or files
- manage inventories or supplies
- modify work procedures or processes to meet deadlines

gauges and measuring instruments, using hand tools.

- Discard or reject products, materials, and equipment not meeting specifications.
- Discuss inspection results with those responsible for products, and recommend necessary corrective actions.
- Fabricate, install, position, or connect components, parts, finished products, or instruments for testing or operational purposes.
- Grade, classify, and sort products according to sizes, weights, colors, or other specifications.
- Inspect, test, or measure materials, products, installations, and work for conformance to specifications.
- Interpret legal requirements, provide safety information, and recommend compliance procedures to contractors, craft workers, engineers, and property owners.
- Make minor adjustments to equipment, such as turning setscrews to calibrate instruments to required tolerances.
- Mark items with details such as grade and acceptance or rejection status.
- Measure dimensions of products to verify conformance to specifications, using measuring instruments such as rulers, calipers, gauges, or micrometers.
- Notify supervisors and other personnel of production problems, and assist in identifying and correcting these problems.
- Observe and monitor production operations and equipment to ensure conformance to specifications and make or order necessary process or assembly adjustments.
- Position products, components, or parts for testing, or direct other workers to position them.
- Read dials and meters to verify that equipment is functioning at specified levels.
- Record inspection or test data, such as weights, temperatures, grades, or moisture content, and quantities inspected or graded.
- Remove defects, such as chips and burrs, and lap corroded or pitted surfaces.
- Set controls, start and monitor machines that automatically measure, sort, or inspect products.
- Stack and arrange tested products for further processing, shipping, or packaging and transport products to other work stations as necessary.
- Supervise testing or drilling activities.
- Weigh materials, products, containers, or samples to verify packaging weights and ingredient quantities, or to determine sorting.
- Write test and inspection reports describing results, recommendations, and needed repairs.

#### Detailed Tasks



meet deadlines

- monitor production machinery/equipment operation to detect problems
- monitor worker performance
- motivate workers to achieve work goals
- orient new employees
- oversee work progress to verify safety or conformance to standards
- prepare or maintain employee records
- prepare reports
- read blueprints
- read technical drawings
- read work order, instructions, formulas, or processing charts
- recommend improvements to work methods or procedures
- requisition stock, materials, supplies or equipment
- resolve or assist workers to resolve work problems
- resolve personnel problems or grievances
- schedule activities, classes, or events
- schedule employee work hours
- set up production equipment or machinery
- understand second language
- understand technical operating, service or repair manuals
- use oral or written communication techniques

#### Technology - Examples

##### Data base user interface and query software

- Database software
- Oracle software

##### Electronic mail software

- Email software
- IBM Lotus Notes
- Microsoft Outlook

##### Enterprise resource planning ERP software

- Bowen & Groves MI ERP
- Capterra Enterprise Resource Planning
- Encompix ERP
- Epicor Vantage ERP
- Epicor Vista ERP
- Giraffe Production Systems software
- Intacct ERP software
- Made2Manage software

#### Detailed Work Activities:

- adjust production equipment/machinery setup
- attach or mark identification onto products or containers
- collect samples for testing
- communicate technical information
- compare findings with specifications to ensure conformance to standards
- compute product or materials test results
- conduct performance testing
- confer with vendors
- determine specifications
- determine specifications or testing procedures
- direct and coordinate activities of workers or staff
- distinguish colors
- evaluate material specifications
- examine products or work to verify conformance to specifications
- fabricate, assemble, or disassemble manufactured products by hand
- follow manufacturing methods or techniques
- follow statistical process control procedures
- grade, classify, or sort products according to specifications
- inspect manufactured products or materials
- install/connect electrical equipment to power circuit
- load, unload, or stack containers, materials, or products
- maintain consistent production quality
- maintain inspection tools or equipment
- maintain records, reports, or files
- maintain safe work environment
- mark items for acceptance or rejection, according to conformance to specifications
- measure, weigh, or count products or materials
- modify electrical or electronic equipment or products
- monitor production machinery/equipment operation to detect problems
- monitor repairs or maintenance to enforce standards
- move materials or goods between work areas
- operate industrial or nondestructive testing equipment
- operate packaging or banding machine or equipment
- operate pneumatic test equipment
- operate precision test equipment
- package goods for shipment or storage
- perform safety inspections in industrial, manufacturing or repair setting
- prepare reports



- Microsoft Axapta
- NetSuite NetERP
- Resource planning software
- Retain Resource Planning
- SAP Business One
- SAP software
- SYSPRO software
- Technology Group International Enterprise 21 ERP

Human resources software

- GHG electronic employee management suite eEMS software

Internet browser software

- Netscape software

Inventory management software

- Inventory management software

Materials requirements planning logistics and supply chain software

- Integrated materials management systems
- Materials management software
- QA Software QMS Materials Management

Office suite software

- Microsoft Office

Presentation software

- Microsoft PowerPoint

Project management software

- Microsoft Total Quality Control Management
- Total quality management TQM software

Spreadsheet software

- Microsoft Excel
- Spreadsheet software

Time accounting software

- Kronos Workforce Timekeeper
- Timekeeping software
- Work Technology WorkTech Time

Word processing software

- Microsoft Word
- Word processing software

- prepare safety reports
- prepare technical reports or related documentation
- read blueprints
- read production layouts
- read specifications
- read technical drawings
- read work order, instructions, formulas, or processing charts
- recognize characteristics of alloys
- recognize characteristics of metals
- recognize characteristics of pulps
- recognize wood species characteristics
- record test results, test procedures, or inspection data
- sort manufacturing materials or products
- test manufactured products or materials
- understand engineering data or reports
- understand measuring devices
- understand technical operating, service or repair manuals
- use computers to enter, access or retrieve data
- use electrical or electronic test devices or equipment
- use hand or power tools
- use hazardous materials information
- use interpersonal communication techniques
- use knowledge of investigation techniques
- use knowledge of metric system
- use long or short term production planning techniques
- use oral or written communication techniques
- use precision measuring tools or equipment
- use quality assurance techniques
- use research methodology procedures within manufacturing or commerce
- use spreadsheet software
- use technical information in manufacturing or industrial activities
- use x-ray or magnetic inspection techniques

Technology - Examples

Analytical or scientific software

- Data analysis software
- Design of experiments DOE software
- Minitab software
- Tolerance analysis software

Computer aided manufacturing CAM software

- Computer-aided inspection software

Industrial control software



Tools - Examples

- Desktop computers
- Personal protective clothing
- Laser printers
- Notebook computers
- Personal computers
- Respirators
- Safety glasses
- Protective shoes
- Laser scanners
- Operator terminals

Industrial control software

- Coordinate measuring machine software
- CyberMetrics GAGETrak Calibration Management Software
- Statistical process control SPC data collection devices
- Wilcox Associates PC-DMIS Inspection Planner

Label making software

- Inspection marking systems

Optical character reader OCR or scanning software

- Label inspection systems

Spreadsheet software

- Microsoft Excel

Word processing software

- Microsoft Word

Tools - Examples

- Accelerometers
- Ammeters
- Industrial bench scales
- Beta gauges
- Measuring microscopes
- Digital resistance meters
- Calipers
- Continuity testers
- Optical comparators
- Compression testers
- Conductivity meters
- Coordinate measuring machines CMM
- Creep and stress relaxation testers
- Depth gauges
- Ductility testers
- Eddy current flaw detectors
- Frequency meters
- Fatigue testers
- Force transducers



- Forklifts
- Frequency counters
- Functional gauges
- Hardness testers
- Height gauges
- Hipot testers
- Hydraulic pumps
- Impact hammers
- Impact toughness testers
- Return loss calibrator RLC passive component testers
- Backplane testers
- Holographic interferometers
- Laser shearography flaw detectors
- Bubble leak testers
- Pulse generators
- Hydraulic lifts
- Penetrant flaw detectors
- Magnetic particle flaw detectors
- Metallurgical microscopes
- Micrometers
- Moisture meters
- Digital multimeters
- Bit error rate BER testers
- Sampling oscilloscopes
- Personal computers
- Plotters
- Direct current DC power testers
- Gloss meters
- Environmental chambers
- Digital thermometers
- Pi tapes
- Shear testers



- Shock testers
- Linear or mixed signal equipment
- Function generators
- Sorting machines
- Color spectrometers
- Strain gauges
- Tensile testers
- Laser thickness gauges
- Thread gauges
- Overhead cranes
- Ultrasonic flaw detectors
- Vibration and shaker systems
- Viscometers
- Digital voltmeters DVM
- Radiographic flaw detectors

### Labor Market Comparison

Maine Department of Labor.

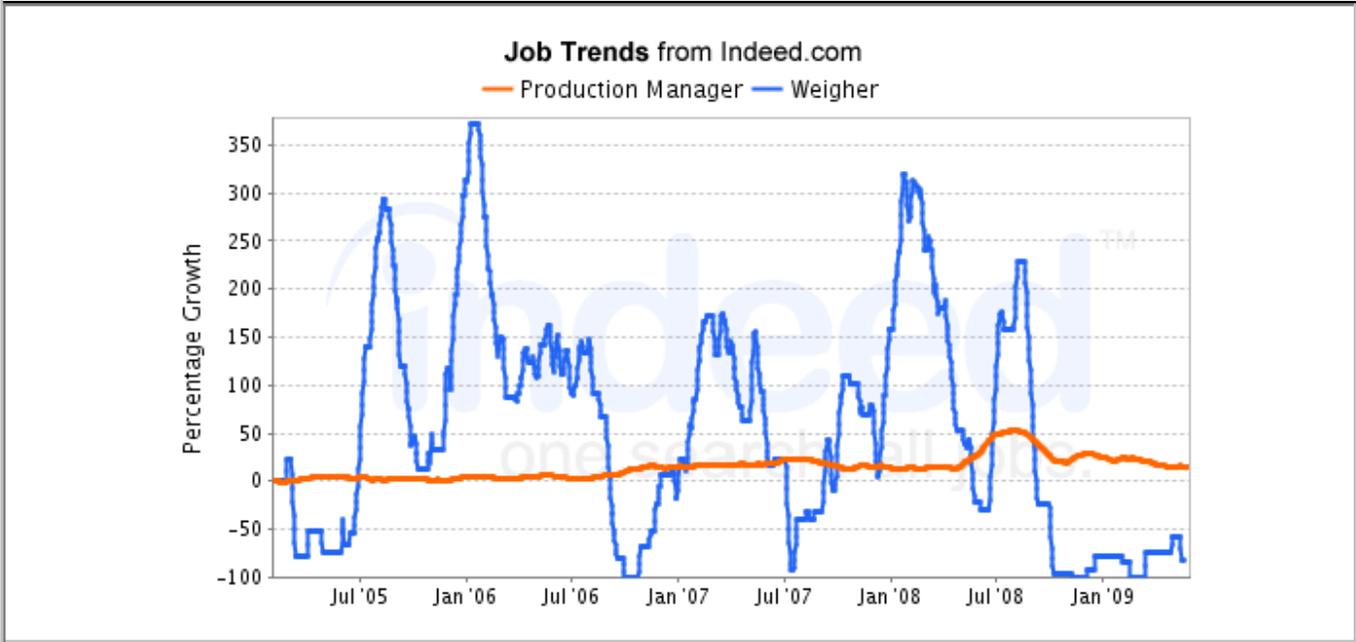
Description	First-Line Supervisors/Managers of Production and Operating Workers	Inspectors, Testers, Sorters, Samplers, and Weighers	Difference
Median Wage	\$ 45,510	\$ 29,700	\$( 15,810)
10th Percentile Wage	\$ 28,000	\$ 19,620	\$( 8,380)
25th Percentile Wage	N/A	N/A	N/A
75th Percentile Wage	\$ 58,890	\$ 40,300	\$( 18,590)
90th Percentile Wage	\$ 73,810	\$ 48,960	\$( 24,850)
Mean Wage	\$ 48,010	\$ 31,870	\$( 16,140)
Total Employment - 2535	3,750	1,700	-2,050
Employment Base - 2006	3,893	1,720	-2,173
Projected Employment - 2544	3,745	1,473	-2,272
Projected Job Growth - 2006-2544	-3.8 %	-14.4 %	-10.6 %
Projected Annual Openings - 2006-2544	65	26	-39



Special			
Special Occupations:			

### National Job Posting Trends

Trend for First-Line Supervisors/Managers of Production and Operating Workers and Inspectors, Testers, Sorters, Samplers, and Weighers



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

### Programs

#### Related Programs

Electromechanical Tech./Technician

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	<a href="http://www.cmcc.edu">www.cmcc.edu</a>
Central Maine Community College	1250 Turner St	Auburn	<a href="http://www.cmcc.edu">www.cmcc.edu</a>

Industrial Production Technol./Technicians, Other

Industrial Production Technologies/Technicians, Other. Any instructional program in industrial production technologies not listed above.

No information on schools for the program

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 information on schools for the program



**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	<a href="http://www.cmcc.edu">www.cmcc.edu</a>
Central Maine Community College	1250 Turner St	Auburn	<a href="http://www.cmcc.edu">www.cmcc.edu</a>
Eastern Maine Community College	354 Hogan Rd	Bangor	<a href="http://www.emcc.edu">www.emcc.edu</a>
Eastern Maine Community College	354 Hogan Rd	Bangor	<a href="http://www.emcc.edu">www.emcc.edu</a>
Kennebec Valley Community College	92 Western Ave	Fairfield	<a href="http://www.kvcc.me.edu">www.kvcc.me.edu</a>
Kennebec Valley Community College	92 Western Ave	Fairfield	<a href="http://www.kvcc.me.edu">www.kvcc.me.edu</a>
Northern Maine Community College	33 Edgemont Dr	Presque Isle	<a href="http://www.nmcc.edu">www.nmcc.edu</a>
Southern Maine Community College	2 Fort Road	South Portland	<a href="http://www.smccME.edu">www.smccME.edu</a>

**Precision Metal Workers, Other**

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

No information on schools for the program

**Quality Control Tech./Technician**

Quality Control Technology/Technician. A program that prepares individuals to apply basic engineering principles and technical skills in support of engineers and other professionals engaged in maintaining consistent manufacturing and construction standards. Includes instruction in quality control systems management principles, technical standards applicable to specific engineering and manufacturing projects, testing procedures, inspection procedures, related instrumentation and equipment operation and maintenance, and report preparation.

No information on schools for the program

**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	<a href="http://www.nmcc.edu">www.nmcc.edu</a>

**Maine Statewide Promotion Opportunities for First-Line Supervisors/Managers of Production and Operating Workers**

O*NET Code	Title	Grand TORQ	Job Zone	Employment	Median Wage	Difference	Growth	Annual Job Openings	Special
51-1011.00	First-Line Supervisors/Managers of Production and Operating Workers	100	3	3,750	\$45,510.00	\$0.00	-4%	65	
11-3051.00	Industrial Production Managers	90	4	690	\$72,560.00	\$27,050.00	-12%	24	



11-3071.02	Storage and Distribution Managers	89	3	710	\$62,270.00	\$16,760.00	5%	25	★
17-3026.00	Industrial Engineering Technicians	88	3	370	\$51,700.00	\$6,190.00	6%	9	★
11-9131.00	Postmasters and Mail Superintendents	87	3	420	\$55,200.00	\$9,690.00	-5%	10	
11-3061.00	Purchasing Managers	83	4	330	\$72,560.00	\$27,050.00	2%	11	
11-3071.01	Transportation Managers	83	3	710	\$62,270.00	\$16,760.00	5%	25	★
47-1011.00	First-Line Supervisors/Managers of Construction Trades and Extraction Workers	83	3	3,190	\$46,630.00	\$1,120.00	3%	77	★
11-3042.00	Training and Development Managers	82	4	140	\$66,670.00	\$21,160.00	7%	4	
41-1012.00	First-Line Supervisors/Managers of Non-Retail Sales Workers	82	4	930	\$55,220.00	\$9,710.00	-1%	19	
11-9011.01	Nursery and Greenhouse Managers	82	4	30	\$60,610.00	\$15,100.00	20%	15	
49-1011.00	First-Line Supervisors/Managers of Mechanics, Installers, and Repairers	82	4	2,490	\$46,810.00	\$1,300.00	0%	60	★
11-3011.00	Administrative Services Managers	82	4	1,090	\$56,630.00	\$11,120.00	5%	34	
11-1021.00	General and Operations Managers	81	4	8,490	\$77,050.00	\$31,540.00	-5%	209	
17-2112.00	Industrial Engineers	81	4	580	\$68,350.00	\$22,840.00	11%	22	

Special Occupations:

Top Industries for Inspectors, Testers, Sorters, Samplers, and Weighers					
Industry	NAICS	% of Industry	Employment	Projected Employment	% Change
Employment services	561300	7.50%	36,864	43,994	19.34%
Motor vehicle parts manufacturing	336300	4.66%	22,903	17,193	-24.93%
Plastics product manufacturing	326100	4.23%	20,797	20,787	-0.05%
Semiconductor and other electronic component manufacturing	334400	3.70%	18,159	14,967	-17.58%
Aerospace product and parts manufacturing	336400	3.32%	16,315	15,667	-3.97%
Navigational, measuring, electromedical, and control instruments manufacturing	334500	2.17%	10,680	9,641	-9.72%



Medical equipment and supplies manufacturing	339100	1.87%	9,177	8,852	-3.55%
Pharmaceutical and medicine manufacturing	325400	1.80%	8,824	10,486	18.84%
Animal slaughtering and processing	311600	1.79%	8,815	9,486	7.62%
Other fabricated metal product manufacturing	332900	1.78%	8,731	7,295	-16.45%
Rubber product manufacturing	326200	1.70%	8,331	5,547	-33.41%
Testing laboratories	541380	1.48%	7,249	8,416	16.10%
Self-employed workers, primary job	000601	1.48%	7,279	7,313	0.46%
Foundries	331500	1.45%	7,125	4,872	-31.63%
Printing and related support activities	323100	1.40%	6,856	5,122	-25.29%

### Top Industries for First-Line Supervisors/Managers of Production and Operating Workers

Industry	NAICS	% of Industry	Employment	Projected Employment	% Change
Plastics product manufacturing	326100	4.03%	28,154	29,844	6.00%
Printing and related support activities	323100	3.61%	25,224	19,985	-20.77%
Motor vehicle parts manufacturing	336300	3.08%	21,518	17,131	-20.39%
Architectural and structural metals manufacturing	332300	2.52%	17,595	18,792	6.80%
Self-employed workers, primary job	000601	2.40%	16,779	17,876	6.54%
Grocery stores	445100	2.37%	16,559	18,067	9.11%
Animal slaughtering and processing	311600	2.24%	15,642	17,851	14.13%
Local government, excluding education and hospitals	939300	2.07%	14,471	16,257	12.34%
Machine shops	332710	1.99%	13,948	11,538	-17.28%
Converted paper product manufacturing	322200	1.89%	13,212	11,088	-16.08%
Semiconductor and other electronic component manufacturing	334400	1.88%	13,126	11,473	-12.59%
Drycleaning and laundry services	812300	1.75%	12,216	12,217	0.01%
Other wood product manufacturing	321900	1.64%	11,463	10,802	-5.77%
Other fabricated metal product manufacturing	332900	1.57%	10,950	9,702	-11.39%
Other general purpose machinery manufacturing	333900	1.41%	9,879	8,918	-9.73%



# TORQ Analysis of First-Line Supervisors/Managers of Production and Operating Workers to First-Line Supervisors/Managers of Helpers, Laborers, and Material Movers, Hand

ANALYSIS INPUT					
Transfer	Title	O*NET	Filters		
From Title:	First-Line Supervisors/Managers of Production and Operating Workers	51-1011.00	Abilities:	Importance Level: 50	Weight: 1
To Title:	First-Line Supervisors/Managers of Helpers, Laborers, and Material Movers, Hand	53-1021.00	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			92	Level			91	Level			83
Gaps To Narrow if Possible				Upgrade These Skills				Knowledge to Add			
Ability	Level	Gap	Impt	Skill	Level	Gap	Impt	Knowledge	Level	Gap	Impt
Problem Sensitivity	51	3	72	Mathematics	69	11	77	No Knowledge Upgrades Required!			
Category Flexibility	46	4	53	Critical Thinking	66	6	74				
Information Ordering	53	3	62	Social Perceptiveness	66	5	69				
Written Expression	55	2	59	Monitoring	75	3	84				
				Persuasion	63	3	74				
				Management of Personnel Resources	71	3	69				
<p>LEVEL and IMPT (IMPORTANCE) refer to the Target First-Line Supervisors/Managers of Helpers, Laborers, and Material Movers, Hand. GAP refers to level difference between First-Line Supervisors/Managers of Production and Operating Workers and First-Line Supervisors/Managers of Helpers, Laborers, and Material Movers, Hand.</p>											

ASK ANALYSIS			
Ability Level Comparison - Abilities with importance scores over 50			
Description	First-Line Supervisors/Managers of Production and Operating Workers	First-Line Supervisors/Managers of Helpers, Laborers, and Material Movers, Hand	Importance
Oral Expression	57	55	78
Oral Comprehension	55	55	75
Problem Sensitivity	48	51	72
Speech Clarity	48	48	72
Speech Recognition	46	46	68
Deductive Reasoning	53	50	65



Inductive Reasoning	51	46	62
Information Ordering	50	53	62
Near Vision	48	48	62
Written Comprehension	53	51	59
Written Expression	53	55	59
Category Flexibility	42	46	53
Fluency of Ideas	48	44	50

Skill Level Comparison - Abilities with importance scores over 69

Description	First-Line Supervisors/Managers of Production and Operating Workers	First-Line Supervisors/Managers of Helpers, Laborers, and Material Movers, Hand	Importance
Monitoring	72	75	84
Mathematics	58	69	77
Critical Thinking	60	66	74
Persuasion	60	63	74
Social Perceptiveness	61	66	69
Management of Personnel Resources	68	71	69

Knowledge Level Comparison - Knowledge with importance scores over 69

Description	First-Line Supervisors/Managers of Production and Operating Workers	First-Line Supervisors/Managers of Helpers, Laborers, and Material Movers, Hand	Importance
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Experience & Education Comparison

Related Work Experience Comparison			Required Education Level Comparison		
Description	First-Line Supervisors/Managers of Production and Operating Workers	First-Line Supervisors/Managers of Helpers, Laborers, and Material Movers, Hand	Description	First-Line Supervisors/Managers of Production and Operating Workers	First-Line Supervisors/Managers of Helpers, Laborers, and Material Movers, Hand
10+ years	2%	1%	Doctoral	0%	0%
8-10 years	5%	0%	Professional Degree	0%	0%
6-8 years	12%	5%	Post-Masters Cert	0%	0%
4-6 years	11%	15%	Master's Degree	0%	8%
2-4 years	33%	42%	Post-Bachelor Cert	1%	0%
1-2 years	21%	7%	Bachelors	13%	31%
6-12 months	3%	5%	AA or Equiv	17%	5%
3-6 months	2%	1%	Some College	17%	2%
1-3 months	3%	3%	Post-Secondary Certificate	20%	4%
0-1 month	0%	0%	High School Diploma or GED	26%	47%
None	4%	17%	No HSD or GED	3%	0%

First-Line Supervisors/Managers of Production and Operating Workers

First-Line Supervisors/Managers of Helpers, Laborers, and Material Movers, Hand

Most Common Educational/Training Requirement:

Work experience in a related occupation

Work experience in a related occupation

Job Zone Comparison



<p><b>3 - Job Zone Three: Medium Preparation Needed</b></p> <p>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.</p> <p>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.</p> <p>Employees in these occupations usually need one or two years of training involving both on-the-job experience and informal training with experienced workers.</p>	<p><b>3 - Job Zone Three: Medium Preparation Needed</b></p> <p>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.</p> <p>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.</p> <p>Employees in these occupations usually need one or two years of training involving both on-the-job experience and informal training with experienced workers.</p>
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**Tasks**

First-Line Supervisors/Managers of Production and Operating Workers	First-Line Supervisors/Managers of Helpers, Laborers, and Material Movers, Hand
Core Tasks	Core Tasks
<p>Generalized Work Activities:</p> <ul style="list-style-type: none"> <li>• Communicating with Supervisors, Peers, or Subordinates - Providing information to supervisors, co-workers, and subordinates by telephone, in written form, e-mail, or in person.</li> <li>• Making Decisions and Solving Problems - Analyzing information and evaluating results to choose the best solution and solve problems.</li> <li>• Coordinating the Work and Activities of Others- Getting members of a group to work together to accomplish tasks.</li> <li>• Guiding, Directing, and Motivating Subordinates - Providing guidance and direction to subordinates, including setting performance standards and monitoring performance.</li> <li>• Getting Information - Observing, receiving, and otherwise obtaining information from all relevant sources.</li> </ul>	<p>Generalized Work Activities:</p> <ul style="list-style-type: none"> <li>• Communicating with Supervisors, Peers, or Subordinates - Providing information to supervisors, co-workers, and subordinates by telephone, in written form, e-mail, or in person.</li> <li>• Making Decisions and Solving Problems - Analyzing information and evaluating results to choose the best solution and solve problems.</li> <li>• Getting Information - Observing, receiving, and otherwise obtaining information from all relevant sources.</li> <li>• Organizing, Planning, and Prioritizing Work - Developing specific goals and plans to prioritize, organize, and accomplish your work.</li> <li>• Developing and Building Teams - Encouraging and building mutual trust, respect, and cooperation among team members.</li> <li>• Establishing and Maintaining Interpersonal Relationships - Developing constructive and cooperative working relationships with others, and maintaining them over time.</li> <li>• Identifying Objects, Actions, and Events - Identifying information by categorizing, estimating, recognizing differences or similarities, and detecting changes in circumstances or events.</li> </ul>
Specific Tasks	Specific Tasks
<p>Occupation Specific Tasks:</p> <ul style="list-style-type: none"> <li>• Calculate labor and equipment requirements and production specifications, using standard formulas.</li> <li>• Confer with management or subordinates to resolve worker problems, complaints, or grievances.</li> <li>• Confer with other supervisors to coordinate operations and activities within or between departments.</li> <li>• Demonstrate equipment operations and work and safety procedures to new employees, or assign employees to experienced workers for training.</li> <li>• Determine standards, budgets, production goals, and rates, based on company policies, equipment and labor availability, and workloads.</li> <li>• Direct and coordinate the activities of employees engaged in the production or processing of goods, such as inspectors, machine setters, and fabricators.</li> </ul>	<p>Occupation Specific Tasks:</p> <ul style="list-style-type: none"> <li>• Assess training needs of staff; then arrange for or provide appropriate instruction.</li> <li>• Check specifications of materials loaded or unloaded against information contained in work orders.</li> <li>• Collaborate with workers and managers to solve work-related problems.</li> <li>• Conduct staff meetings to relay general information or to address specific topics such as safety.</li> <li>• Counsel employees in work-related activities, personal growth, and career development.</li> </ul>



- Enforce safety and sanitation regulations.
- Inspect materials, products, or equipment to detect defects or malfunctions.
- Interpret specifications, blueprints, job orders, and company policies and procedures for workers.
- Maintain operations data such as time, production, and cost records, and prepare management reports of production results.
- Observe work, and monitor gauges, dials, and other indicators to ensure that operators conform to production or processing standards.
- Plan and develop new products and production processes.
- Plan and establish work schedules, assignments, and production sequences to meet production goals.
- Read and analyze charts, work orders, production schedules, and other records and reports, in order to determine production requirements and to evaluate current production estimates and outputs.
- Recommend or implement measures to motivate employees and to improve production methods, equipment performance, product quality, or efficiency.
- Recommend personnel actions such as hirings and promotions.
- Requisition materials, supplies, equipment parts, or repair services.
- Set up and adjust machines and equipment.

Detailed Tasks

Detailed Work Activities:

- adjust production equipment/machinery setup
- analyze operational or management reports or records
- assign work to staff or employees
- communicate technical information
- compute production, construction, or installation specifications
- conduct or attend staff meetings
- confer with other departmental heads to coordinate activities
- consult with managerial or supervisory personnel
- coordinate production materials, activities or processes
- demonstrate or explain assembly or use of equipment
- determine factors affecting production processes
- develop maintenance schedules
- direct and coordinate activities of workers or staff
- establish employee performance standards
- estimate materials or labor requirements
- examine products or work to verify

- Estimate material, time, and staffing requirements for a given project, based on work orders, job specifications, and experience.
- Evaluate employee performance, and prepare performance appraisals.
- Examine freight to determine loading sequences.
- Inform designated employees or departments of items loaded, and problems encountered.
- Inspect equipment for wear and for conformance to specifications.
- Inspect job sites to determine the extent of maintenance or repairs needed.
- Inventory supplies, and requisition or purchase additional items as necessary.
- Participate in the hiring process by reviewing credentials, conducting interviews, and/or making hiring decisions or recommendations.
- Perform the same work duties as those whom they supervise, and/or perform more difficult or skilled tasks or assist in their performance.
- Plan work schedules and assign duties to maintain adequate staffing levels, to ensure that activities are performed effectively, and to respond to fluctuating workloads.
- Prepare and maintain work records and reports that include information such as employee time and wages, daily receipts, and inspection results.
- Provide assistance in balancing books, tracking, monitoring, and projecting a unit's budget needs, and in developing unit policies and procedures.
- Quote prices to customers.
- Recommend or initiate personnel actions such as promotions, transfers, and disciplinary measures.
- Resolve personnel problems, complaints, and formal grievances when possible, or refer them to higher-level supervisors for resolution.
- Review work throughout the work process and at completion, in order to ensure that it has been performed properly.
- Schedule times of shipment and modes of transportation for materials.
- Transmit and explain work orders to laborers.

Detailed Tasks

Detailed Work Activities:

- assign work to staff or employees
- communicate technical information
- conduct or attend staff meetings
- conduct training for personnel
- demonstrate or explain assembly or use of equipment
- determine loaded cargo complies with regulations or specifications



- conformance to specifications
- explain rules, policies or regulations
- explain work orders, specifications, or work techniques to workers
- maintain file of job openings
- maintain inventory of office equipment or furniture
- maintain job descriptions
- maintain production or work records
- maintain records, reports, or files
- manage inventories or supplies
- modify work procedures or processes to meet deadlines
- monitor production machinery/equipment operation to detect problems
- monitor worker performance
- motivate workers to achieve work goals
- orient new employees
- oversee work progress to verify safety or conformance to standards
- prepare or maintain employee records
- prepare reports
- read blueprints
- read technical drawings
- read work order, instructions, formulas, or processing charts
- recommend improvements to work methods or procedures
- requisition stock, materials, supplies or equipment
- resolve or assist workers to resolve work problems
- resolve personnel problems or grievances
- schedule activities, classes, or events
- schedule employee work hours
- set up production equipment or machinery
- understand second language
- understand technical operating, service or repair manuals
- use oral or written communication techniques

Technology - Examples

Data base user interface and query software

- Database software
- Oracle software

Electronic mail software

- Email software
- IBM Lotus Notes
- Microsoft Outlook

Enterprise resource planning ERP software

- Bowen & Groves MI ERP

- direct and coordinate activities of workers or staff
- establish employee performance standards
- inspect machinery or equipment to determine adjustments or repairs needed
- inspect material moving equipment
- inventory stock to ensure adequate supplies
- maintain file of job openings
- maintain inventory of office equipment or furniture
- maintain job descriptions
- maintain production or work records
- maintain records, reports, or files
- modify work procedures or processes to meet deadlines
- monitor worker performance
- orient new employees
- oversee work progress to verify safety or conformance to standards
- prepare or maintain employee records
- prepare reports
- read blueprints
- read technical drawings
- requisition stock, materials, supplies or equipment
- resolve customer or public complaints
- review schedules to obtain cargo loading information
- schedule activities, classes, or events
- schedule employee work hours
- understand second language
- understand technical operating, service or repair manuals
- use oral or written communication techniques
- verify cargo against shipping papers

Technology - Examples

Electronic mail software

- Microsoft Outlook

Enterprise resource planning ERP software

- Sage Accpac ERP

Human resources software

- Employee scheduling software

Inventory management software

- Inventory control software
- Warehouse management software

Office suite software

- Microsoft Office

Spreadsheet software

- Microsoft Excel



- Capterra Enterprise Resource Planning
- Encompix ERP
- Epicor Vantage ERP
- Epicor Vista ERP
- Giraffe Production Systems software
- Intacct ERP software
- Made2Manage software
- Microsoft Axapta
- NetSuite NetERP
- Resource planning software
- Retain Resource Planning
- SAP Business One
- SAP software
- SYSPRO software
- Technology Group International Enterprise 21 ERP

#### Human resources software

- GHG electronic employee management suite eEMS software

#### Internet browser software

- Netscape software

#### Inventory management software

- Inventory management software

#### Materials requirements planning logistics and supply chain software

- Integrated materials management systems
- Materials management software
- QA Software QMS Materials Management

#### Office suite software

- Microsoft Office

#### Presentation software

- Microsoft PowerPoint

#### Project management software

- Microsoft Total Quality Control Management
- Total quality management TQM software

#### Spreadsheet software

- Microsoft Excel

#### Time accounting software

- Time and attendance software

#### Word processing software

- Microsoft Word

#### Tools - Examples

- Barcode scanners
- Tape guns
- Desktop computers
- Dollies
- Forklifts
- Glue guns
- Claw hammers
- Handtrucks
- Power hoists
- Hydraulic jacks
- Hoisting hooks
- Personal computers
- Hand planes
- Power saws
- Hand saws
- Scaffolding
- Material-hoisting slings
- Utility knives
- Hydraulic winches
- Overhead cranes
- Banding machines



<ul style="list-style-type: none"> <li>• Spreadsheet software</li> </ul>
Time accounting software
<ul style="list-style-type: none"> <li>• Kronos Workforce Timekeeper</li> </ul>
<ul style="list-style-type: none"> <li>• Timekeeping software</li> </ul>
<ul style="list-style-type: none"> <li>• Work Technology WorkTech Time</li> </ul>
Word processing software
<ul style="list-style-type: none"> <li>• Microsoft Word</li> </ul>
<ul style="list-style-type: none"> <li>• Word processing software</li> </ul>
<b>Tools - Examples</b>
<ul style="list-style-type: none"> <li>• Desktop computers</li> </ul>
<ul style="list-style-type: none"> <li>• Personal protective clothing</li> </ul>
<ul style="list-style-type: none"> <li>• Laser printers</li> </ul>
<ul style="list-style-type: none"> <li>• Notebook computers</li> </ul>
<ul style="list-style-type: none"> <li>• Personal computers</li> </ul>
<ul style="list-style-type: none"> <li>• Respirators</li> </ul>
<ul style="list-style-type: none"> <li>• Safety glasses</li> </ul>
<ul style="list-style-type: none"> <li>• Protective shoes</li> </ul>
<ul style="list-style-type: none"> <li>• Laser scanners</li> </ul>
<ul style="list-style-type: none"> <li>• Operator terminals</li> </ul>

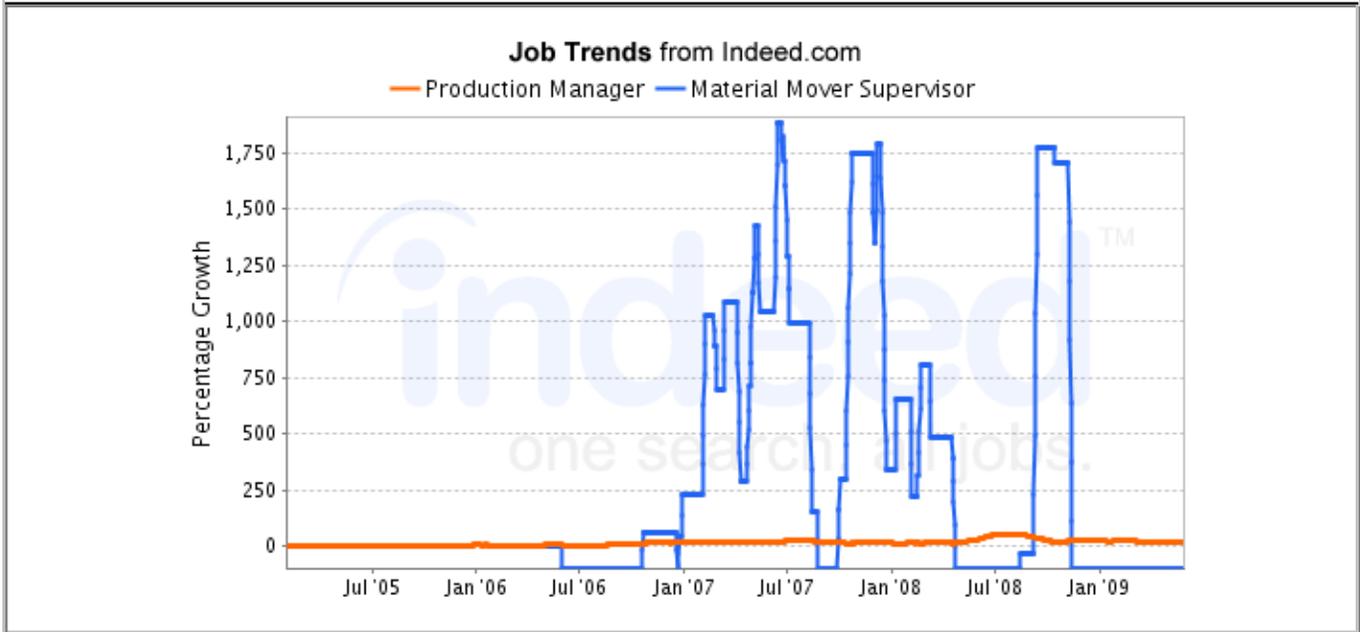
<b>Labor Market Comparison</b>			
Maine Department of Labor.			
Description	First-Line Supervisors/Managers of Production and Operating Workers	First-Line Supervisors/Managers of Helpers, Laborers, and Material Movers, Hand	Difference
Median Wage	\$ 45,510	\$ 34,540	\$(10,970)
10th Percentile Wage	\$ 28,000	\$ 20,140	\$(7,860)
25th Percentile Wage	N/A	N/A	N/A
75th Percentile Wage	\$ 58,890	\$ 43,730	\$(15,160)
90th Percentile Wage	\$ 73,810	\$ 52,080	\$(21,730)
Mean Wage	\$ 48,010	\$ 35,450	\$(12,560)
Total Employment - 2535	3,750	1,160	-2,590
Employment Base - 2006	3,893	1,153	-2,740



Projected Employment - 2544	3,745	1,278	-2,467
Projected Job Growth - 2006-2544	-3.8 %	10.8 %	14.6 %
Projected Annual Openings - 2006-2544	65	37	-28
Special		★	
Special Occupations:			

### National Job Posting Trends

Trend for First-Line Supervisors/Managers of Production and Operating Workers and First-Line Supervisors/Managers of Helpers, Laborers, and Material Movers, Hand



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

### Programs

#### Related Programs

Logistics and Materials Management

Logistics and Materials Management. A program that prepares individuals to manage and coordinate all logistical functions in an enterprise, ranging from acquisitions to receiving and handling, through internal allocation of resources to operations units, to the handling and delivery of output. Includes instruction in acquisitions and purchasing, inventory control, storage and handling, just-in-time manufacturing, logistics planning, shipping and delivery management, transportation, quality control, resource estimation and allocation, and budgeting.

No information on schools for the program

### Maine Statewide Promotion Opportunities for First-Line Supervisors/Managers of Production and

O*NET Code	Title	Grand TORQ	Job Zone	Employment	Median Wage	Difference	Growth	Annual Job Openings	Special
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51-1011.00	First-Line Supervisors/Managers of Production and Operating Workers	100	3	3,750	\$45,510.00	\$0.00	-4%	65	
11-3051.00	Industrial Production Managers	90	4	690	\$72,560.00	\$27,050.00	-12%	24	
11-3071.02	Storage and Distribution Managers	89	3	710	\$62,270.00	\$16,760.00	5%	25	★
17-3026.00	Industrial Engineering Technicians	88	3	370	\$51,700.00	\$6,190.00	6%	9	★
11-9131.00	Postmasters and Mail Superintendents	87	3	420	\$55,200.00	\$9,690.00	-5%	10	
11-3061.00	Purchasing Managers	83	4	330	\$72,560.00	\$27,050.00	2%	11	
11-3071.01	Transportation Managers	83	3	710	\$62,270.00	\$16,760.00	5%	25	★
47-1011.00	First-Line Supervisors/Managers of Construction Trades and Extraction Workers	83	3	3,190	\$46,630.00	\$1,120.00	3%	77	★
11-3042.00	Training and Development Managers	82	4	140	\$66,670.00	\$21,160.00	7%	4	
41-1012.00	First-Line Supervisors/Managers of Non-Retail Sales Workers	82	4	930	\$55,220.00	\$9,710.00	-1%	19	
11-9011.01	Nursery and Greenhouse Managers	82	4	30	\$60,610.00	\$15,100.00	20%	15	
49-1011.00	First-Line Supervisors/Managers of Mechanics, Installers, and Repairers	82	4	2,490	\$46,810.00	\$1,300.00	0%	60	★
11-3011.00	Administrative Services Managers	82	4	1,090	\$56,630.00	\$11,120.00	5%	34	
11-1021.00	General and Operations Managers	81	4	8,490	\$77,050.00	\$31,540.00	-5%	209	
17-2112.00	Industrial Engineers	81	4	580	\$68,350.00	\$22,840.00	11%	22	

Special Occupations:

**Top Industries for First-Line Supervisors/Managers of Helpers, Laborers, and Material Movers,**

Industry	NAICS	% of Industry	Employment	Projected Employment	% Change
Warehousing and storage	493100	9.37%	17,045	22,766	33.57%
Couriers	492100	6.22%	11,319	12,163	7.46%
Other automotive repair and maintenance	811190	5.49%	9,982	15,899	59.27%



General freight trucking	484100	3.87%	7,038	7,960	13.11%
Grocery and related product wholesalers	424400	3.60%	6,553	7,166	9.35%
Grocery stores	445100	2.17%	3,951	4,310	9.11%
Building material and supplies dealers	444100	2.08%	3,784	4,836	27.79%
Miscellaneous durable goods merchant wholesalers	423900	1.90%	3,466	3,979	14.80%
Miscellaneous nondurable goods merchant wholesalers	424900	1.59%	2,894	3,146	8.72%
Local government, excluding education and hospitals	939300	1.53%	2,782	3,125	12.34%
Lumber and other construction materials merchant wholesalers	423300	1.52%	2,771	3,183	14.86%
Specialized freight trucking	484200	1.51%	2,742	3,088	12.64%
Wholesale electronic markets and agents and brokers	425100	1.44%	2,628	2,983	13.48%
Plastics product manufacturing	326100	1.41%	2,567	2,721	6.00%
Employment services	561300	1.27%	2,316	2,931	26.56%

### Top Industries for First-Line Supervisors/Managers of Production and Operating Workers

Industry	NAICS	% of Industry	Employment	Projected Employment	% Change
Plastics product manufacturing	326100	4.03%	28,154	29,844	6.00%
Printing and related support activities	323100	3.61%	25,224	19,985	-20.77%
Motor vehicle parts manufacturing	336300	3.08%	21,518	17,131	-20.39%
Architectural and structural metals manufacturing	332300	2.52%	17,595	18,792	6.80%
Self-employed workers, primary job	000601	2.40%	16,779	17,876	6.54%
Grocery stores	445100	2.37%	16,559	18,067	9.11%
Animal slaughtering and processing	311600	2.24%	15,642	17,851	14.13%
Local government, excluding education and hospitals	939300	2.07%	14,471	16,257	12.34%
Machine shops	332710	1.99%	13,948	11,538	-17.28%
Converted paper product manufacturing	322200	1.89%	13,212	11,088	-16.08%
Semiconductor and other electronic component manufacturing	334400	1.88%	13,126	11,473	-12.59%
Drycleaning and laundry services	812300	1.75%	12,216	12,217	0.01%
Other wood product manufacturing	321900	1.64%	11,463	10,802	-5.77%
Other fabricated metal product manufacturing	332900	1.57%	10,950	9,702	-11.39%
Other general purpose machinery manufacturing	333900	1.41%	9,879	8,918	-9.73%



# TORQ Analysis of First-Line Supervisors/Managers of Production and Operating Workers to Mail Clerks and Mail Machine Operators, Except Postal Service

ANALYSIS INPUT					
Transfer	Title	O*NET	Filters		
From Title:	First-Line Supervisors/Managers of Production and Operating Workers	51-1011.00	Abilities:	Importance Level: 50	Weight: 1
To Title:	Mail Clerks and Mail Machine Operators, Except Postal Service	43-9051.00	Skills:	Importance Level: 69	Weight: 1
Labor Market Area:	Maine Statewide		Knowledge:	Importance Level: 69	Weight: 1

TORQ RESULTS											
Grand TORQ:				<b>89</b>							
Ability TORQ		Skills TORQ		Knowledge TORQ							
Level	90	Level	87	Level	89						
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	41	2	50	No Skills Upgrade Required!				No Knowledge Upgrades Required!			

LEVEL and IMPT (IMPORTANCE) refer to the Target Mail Clerks and Mail Machine Operators, Except Postal Service. GAP refers to level difference between First-Line Supervisors/Managers of Production and Operating Workers and Mail Clerks and Mail Machine Operators, Except Postal Service.

ASK ANALYSIS			
Ability Level Comparison - Abilities with importance scores over 50			
Description	First-Line Supervisors/Managers of Production and Operating Workers	Mail Clerks and Mail Machine Operators, Except Postal Service	Importance
Near Vision	48	41	59
Category Flexibility	42	41	53
Selective Attention	50	39	53
Oral Comprehension	55	44	50
Problem Sensitivity	48	37	50
Information Ordering	50	37	50
Finger Dexterity	39	41	50
Speech Recognition	46	37	50
Skill Level Comparison - Abilities with importance scores over 69			
Description	First-Line Supervisors/Managers of Production and Operating Workers	Mail Clerks and Mail Machine Operators, Except Postal Service	Importance



Knowledge Level Comparison - Knowledge with importance scores over 69

Description	First-Line Supervisors/Managers of Production and Operating Workers	Mail Clerks and Mail Machine Operators, Except Postal Service	Importance
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**Experience & Education Comparison**

Related Work Experience Comparison			Required Education Level Comparison		
Description	First-Line Supervisors/Managers of Production and Operating Workers	Mail Clerks and Mail Machine Operators, Except Postal Service	Description	First-Line Supervisors/Managers of Production and Operating Workers	Mail Clerks and Mail Machine Operators, Except Postal Service
10+ years	2%	0%	Doctoral	0%	0%
8-10 years	5%	0%	Professional Degree	0%	0%
6-8 years	12%	0%	Post-Masters Cert	0%	0%
4-6 years	11%	3%	Master's Degree	0%	0%
2-4 years	33%	1%	Post-Bachelor Cert	1%	0%
1-2 years	21%	3%	Bachelors	13%	0%
6-12 months	3%	10%	AA or Equiv	17%	0%
3-6 months	2%	4%	Some College	17%	6%
1-3 months	3%	7%	Post-Secondary Certificate	20%	1%
0-1 month	0%	5%	High School Diploma or GED	26%	37%
None	4%	63%	No HSD or GED	3%	54%

First-Line Supervisors/Managers of Production and Operating Workers

Mail Clerks and Mail Machine Operators, Except Postal Service

Most Common Educational/Training Requirement:

Work experience in a related occupation

Short-term on-the-job training

Job Zone Comparison

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

**1 - Job Zone One: Little or No Preparation Needed**

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

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.

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

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

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

**Tasks**

First-Line Supervisors/Managers of Production and Operating Workers

Mail Clerks and Mail Machine Operators, Except Postal Service

Core Tasks

Core Tasks

Generalized Work Activities:

Generalized Work Activities:

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

- Handling and Moving Objects - Using hands and arms in handling, installing, positioning, and moving materials, and manipulating things.
- Controlling Machines and Processes - Using



- Making Decisions and Solving Problems - Analyzing information and evaluating results to choose the best solution and solve problems.
- Coordinating the Work and Activities of Others- Getting members of a group to work together to accomplish tasks.
- Guiding, Directing, and Motivating Subordinates - Providing guidance and direction to subordinates, including setting performance standards and monitoring performance.
- Getting Information - Observing, receiving, and otherwise obtaining information from all relevant sources.

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 Specific Tasks
 

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## Occupation Specific Tasks:

- Calculate labor and equipment requirements and production specifications, using standard formulas.
- Confer with management or subordinates to resolve worker problems, complaints, or grievances.
- Confer with other supervisors to coordinate operations and activities within or between departments.
- Demonstrate equipment operations and work and safety procedures to new employees, or assign employees to experienced workers for training.
- Determine standards, budgets, production goals, and rates, based on company policies, equipment and labor availability, and workloads.
- Direct and coordinate the activities of employees engaged in the production or processing of goods, such as inspectors, machine setters, and fabricators.
- Enforce safety and sanitation regulations.
- Inspect materials, products, or equipment to detect defects or malfunctions.
- Interpret specifications, blueprints, job orders, and company policies and procedures for workers.
- Maintain operations data such as time, production, and cost records, and prepare management reports of production results.
- Observe work, and monitor gauges, dials, and other indicators to ensure that operators conform to production or processing standards.
- Plan and develop new products and production processes.
- Plan and establish work schedules, assignments, and production sequences to meet production goals.
- Read and analyze charts, work orders, production schedules, and other records and reports, in order to determine production requirements and to evaluate current production estimates and outputs.
- Recommend or implement measures to

either control mechanisms or direct physical activity to operate machines or processes (not including computers or vehicles).

- Performing General Physical Activities - Performing physical activities that require considerable use of your arms and legs and moving your whole body, such as climbing, lifting, balancing, walking, stooping, and handling of materials.
- Getting Information - Observing, receiving, and otherwise obtaining information from all relevant sources.
- Evaluating Information to Determine Compliance with Standards - Using relevant information and individual judgment to determine whether events or processes comply with laws, regulations, or standards.

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 Specific Tasks
 

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## Occupation Specific Tasks:

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



motivate employees and to improve production methods, equipment performance, product quality, or efficiency.

- Recommend personnel actions such as hirings and promotions.
- Requisition materials, supplies, equipment parts, or repair services.
- Set up and adjust machines and equipment.

#### Detailed Tasks

##### Detailed Work Activities:

- adjust production equipment/machinery setup
- analyze operational or management reports or records
- assign work to staff or employees
- communicate technical information
- compute production, construction, or installation specifications
- conduct or attend staff meetings
- confer with other departmental heads to coordinate activities
- consult with managerial or supervisory personnel
- coordinate production materials, activities or processes
- demonstrate or explain assembly or use of equipment
- determine factors affecting production processes
- develop maintenance schedules
- direct and coordinate activities of workers or staff
- establish employee performance standards
- estimate materials or labor requirements
- examine products or work to verify conformance to specifications
- explain rules, policies or regulations
- explain work orders, specifications, or work techniques to workers
- maintain file of job openings
- maintain inventory of office equipment or furniture
- maintain job descriptions
- maintain production or work records
- maintain records, reports, or files
- manage inventories or supplies
- modify work procedures or processes to meet deadlines
- monitor production machinery/equipment operation to detect problems
- monitor worker performance
- motivate workers to achieve work goals
- orient new employees
- oversee work progress to verify safety or conformance to standards
- prepare or maintain employee records
- prepare reports

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

#### Detailed Tasks

##### Detailed Work Activities:

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



- read blueprints
- read technical drawings
- read work order, instructions, formulas, or processing charts
- recommend improvements to work methods or procedures
- requisition stock, materials, supplies or equipment
- resolve or assist workers to resolve work problems
- resolve personnel problems or grievances
- schedule activities, classes, or events
- schedule employee work hours
- set up production equipment or machinery
- understand second language
- understand technical operating, service or repair manuals
- use oral or written communication techniques

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

Technology - Examples

- Data base user interface and query software
- Database software
  - Oracle software
- Electronic mail software
- Email software
  - IBM Lotus Notes
  - Microsoft Outlook
- Enterprise resource planning ERP software
- Bowen & Groves MI ERP
  - Capterra Enterprise Resource Planning
  - Encompix ERP
  - Epicor Vantage ERP
  - Epicor Vista ERP
  - Giraffe Production Systems software
  - Intacct ERP software
  - Made2Manage software
  - Microsoft Axapta
  - NetSuite NetERP
  - Resource planning software
  - Retain Resource Planning
  - SAP Business One
  - SAP software

Technology - Examples



- SYSPRO software

- Technology Group International Enterprise 21 ERP

#### Human resources software

- GHG electronic employee management suite  
eEMS software

#### Internet browser software

- Netscape software

#### Inventory management software

- Inventory management software

#### Materials requirements planning logistics and supply chain software

- Integrated materials management systems
- Materials management software
- QA Software QMS Materials Management

#### Office suite software

- Microsoft Office

#### Presentation software

- Microsoft PowerPoint

#### Project management software

- Microsoft Total Quality Control Management
- Total quality management TQM software

#### Spreadsheet software

- Microsoft Excel
- Spreadsheet software

#### Time accounting software

- Kronos Workforce Timekeeper
- Timekeeping software
- Work Technology WorkTech Time

#### Word processing software

- Microsoft Word
- Word processing software

#### Tools - Examples

- Desktop computers
- Personal protective clothing
- Laser printers
- Notebook computers
- Personal computers



- Respirators
- Safety glasses
- Protective shoes
- Laser scanners
- Operator terminals

### Labor Market Comparison

Maine Department of Labor.

Description	First-Line Supervisors/Managers of Production and Operating Workers	Mail Clerks and Mail Machine Operators, Except Postal Service	Difference
Median Wage	\$ 45,510	\$ 23,250	\$(22,260)
10th Percentile Wage	\$ 28,000	\$ 15,120	\$(12,880)
25th Percentile Wage	N/A	N/A	N/A
75th Percentile Wage	\$ 58,890	\$ 28,470	\$(30,420)
90th Percentile Wage	\$ 73,810	\$ 33,170	\$(40,640)
Mean Wage	\$ 48,010	\$ 23,730	\$(24,280)
Total Employment - 2535	3,750	490	-3,260
Employment Base - 2006	3,893	485	-3,408
Projected Employment - 2544	3,745	395	-3,350
Projected Job Growth - 2006-2544	-3.8 %	-18.5 %	-14.7 %
Projected Annual Openings - 2006-2544	65	13	-52
Special			

Special Occupations:

### National Job Posting Trends

Trend for First-Line Supervisors/Managers of Production and Operating Workers and Mail Clerks and Mail Machine Operators, Except Postal Service



Programs			
Related Programs			
General Office/Clerical and Typing Services			
General Office Occupations and Clerical Services. A program that prepares individuals to provide basic administrative support under the supervision of office managers, administrative assistants, secretaries, and other office personnel. Includes instruction in typing, keyboarding, filing, general business correspondence, office equipment operation, and communications skills.			
Institution	Address	City	URL
Northern Maine Community College	33 Edgemont Dr	Presque Isle	<a href="http://www.nmcc.edu">www.nmcc.edu</a>

### Maine Statewide Promotion Opportunities for First-Line Supervisors/Managers of Production and Operating Workers

O*NET Code	Title	Grand TORQ	Job Zone	Employment	Median Wage	Difference	Growth	Annual Job Openings	Special
51-1011.00	First-Line Supervisors/Managers of Production and Operating Workers	100	3	3,750	\$45,510.00	\$0.00	-4%	65	
11-3051.00	Industrial Production Managers	90	4	690	\$72,560.00	\$27,050.00	-12%	24	
11-3071.02	Storage and Distribution Managers	89	3	710	\$62,270.00	\$16,760.00	5%	25	★
17-3026.00	Industrial Engineering Technicians	88	3	370	\$51,700.00	\$6,190.00	6%	9	★



11-9131.00	Postmasters and Mail Superintendents	87	3	420	\$55,200.00	\$9,690.00	-5%	10	
11-3061.00	Purchasing Managers	83	4	330	\$72,560.00	\$27,050.00	2%	11	
11-3071.01	Transportation Managers	83	3	710	\$62,270.00	\$16,760.00	5%	25	★
47-1011.00	First-Line Supervisors/Managers of Construction Trades and Extraction Workers	83	3	3,190	\$46,630.00	\$1,120.00	3%	77	★
11-3042.00	Training and Development Managers	82	4	140	\$66,670.00	\$21,160.00	7%	4	
41-1012.00	First-Line Supervisors/Managers of Non-Retail Sales Workers	82	4	930	\$55,220.00	\$9,710.00	-1%	19	
11-3011.00	Administrative Services Managers	82	4	1,090	\$56,630.00	\$11,120.00	5%	34	
11-9011.01	Nursery and Greenhouse Managers	82	4	30	\$60,610.00	\$15,100.00	20%	15	
49-1011.00	First-Line Supervisors/Managers of Mechanics, Installers, and Repairers	82	4	2,490	\$46,810.00	\$1,300.00	0%	60	★
15-1061.00	Database Administrators	81	4	300	\$60,260.00	\$14,750.00	20%	11	
11-1021.00	General and Operations Managers	81	4	8,490	\$77,050.00	\$31,540.00	-5%	209	

Special Occupations:

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

Industry	NAICS	% of Industry	Employment	Projected Employment	% Change
Advertising and related services	541800	13.09%	19,902	20,577	3.39%
Employment services	561300	6.47%	9,834	9,148	-6.98%
Newspaper publishers	511110	5.47%	8,311	5,233	-37.03%
Federal government, excluding postal service	919999	4.85%	7,382	5,130	-30.52%
Management of companies and enterprises	551100	3.77%	5,728	4,853	-15.27%
Religious organizations	813100	3.71%	5,649	4,983	-11.79%
Data processing, hosting, and related services	518200	3.58%	5,446	5,411	-0.64%
Colleges, universities, and professional schools, public and private	611300	3.16%	4,809	3,954	-17.77%
Printing and related support activities	323100	2.83%	4,298	2,503	-41.76%
Couriers	492100	2.30%	3,494	2,760	-21.02%



Direct insurance (except life, health, and medical) carriers	524120	2.24%	3,403	2,615	-23.18%
Depository credit intermediation	522100	2.16%	3,284	2,461	-25.06%
Electronic shopping and mail-order houses	454100	1.84%	2,798	2,572	-8.06%
Legal services	541100	1.82%	2,760	2,228	-19.27%
Insurance agencies and brokerages	524210	1.42%	2,165	1,800	-16.86%

### Top Industries for First-Line Supervisors/Managers of Production and Operating Workers

Industry	NAICS	% of Industry	Employment	Projected Employment	% Change
Plastics product manufacturing	326100	4.03%	28,154	29,844	6.00%
Printing and related support activities	323100	3.61%	25,224	19,985	-20.77%
Motor vehicle parts manufacturing	336300	3.08%	21,518	17,131	-20.39%
Architectural and structural metals manufacturing	332300	2.52%	17,595	18,792	6.80%
Self-employed workers, primary job	000601	2.40%	16,779	17,876	6.54%
Grocery stores	445100	2.37%	16,559	18,067	9.11%
Animal slaughtering and processing	311600	2.24%	15,642	17,851	14.13%
Local government, excluding education and hospitals	939300	2.07%	14,471	16,257	12.34%
Machine shops	332710	1.99%	13,948	11,538	-17.28%
Converted paper product manufacturing	322200	1.89%	13,212	11,088	-16.08%
Semiconductor and other electronic component manufacturing	334400	1.88%	13,126	11,473	-12.59%
Drycleaning and laundry services	812300	1.75%	12,216	12,217	0.01%
Other wood product manufacturing	321900	1.64%	11,463	10,802	-5.77%
Other fabricated metal product manufacturing	332900	1.57%	10,950	9,702	-11.39%
Other general purpose machinery manufacturing	333900	1.41%	9,879	8,918	-9.73%



# TORQ Analysis of First-Line Supervisors/Managers of Production and Operating Workers to Storage and Distribution Managers

ANALYSIS INPUT					
Transfer	Title	O*NET	Filters		
From Title:	First-Line Supervisors/Managers of Production and Operating Workers	51-1011.00	Abilities:	Importance Level: 50	Weight: 1
To Title:	Storage and Distribution Managers	11-3071.02	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				95	Level				91	Level			81
Gaps To Narrow if Possible				Upgrade These Skills				Knowledge to Add					
Ability	Level	Gap	Impt	Skill	Level	Gap	Impt	Knowledge	Level	Gap	Impt		
Category Flexibility	51	9	59	Speaking	78	3	80	English Language	57	12	74		
Speech Recognition	51	5	75	Management of Financial Resources	39	3	80	Personnel and Human Resources	62	7	71		
Near Vision	53	5	65										
Speech Clarity	51	3	75										
Problem Sensitivity	51	3	72										
Oral Comprehension	57	2	75										
Written Comprehension	55	2	62										
LEVEL and IMPT (IMPORTANCE) refer to the Target Storage and Distribution Managers. GAP refers to level difference between First-Line Supervisors/Managers of Production and Operating Workers and Storage and Distribution Managers.													

ASK ANALYSIS			
Ability Level Comparison - Abilities with importance scores over 50			
Description	First-Line Supervisors/Managers of Production and Operating Workers	Storage and Distribution Managers	Importance
Oral Comprehension	55	57	75
Oral Expression	57	57	75
Speech Recognition	46	51	75
Speech Clarity	48	51	75
Problem Sensitivity	48	51	72
Deductive Reasoning	53	50	65



Inductive Reasoning	51	46	65
Near Vision	48	53	65
Written Comprehension	53	55	62
Information Ordering	50	48	59
Category Flexibility	42	51	59
Written Expression	53	50	56
Fluency of Ideas	48	46	53
Selective Attention	50	44	53
Originality	50	42	50

Skill Level Comparison - Abilities with importance scores over 69

Description	First-Line Supervisors/Managers of Production and Operating Workers	Storage and Distribution Managers	Importance
Speaking	75	78	80
Management of Financial Resources	36	39	80

Knowledge Level Comparison - Knowledge with importance scores over 69

Description	First-Line Supervisors/Managers of Production and Operating Workers	Storage and Distribution Managers	Importance
English Language	45	57	74
Personnel and Human Resources	55	62	71

### Experience & Education Comparison

Related Work Experience Comparison			Required Education Level Comparison		
Description	First-Line Supervisors/Managers of Production and Operating Workers	Storage and Distribution Managers	Description	First-Line Supervisors/Managers of Production and Operating Workers	Storage and Distribution Managers
10+ years	2%	7%	Doctoral	0%	0%
8-10 years	5%	19%	Professional Degree	0%	0%
6-8 years	12%	2%	Post-Masters Cert	0%	0%
4-6 years	11%	8%	Master's Degree	0%	0%
2-4 years	33%	58%	Post-Bachelor Cert	1%	0%
1-2 years	21%	0%	Bachelors	13%	38%
6-12 months	3%	2%	AA or Equiv	17%	3%
3-6 months	2%	0%	Some College	17%	13%
1-3 months	3%	0%	Post-Secondary Certificate	20%	0%
0-1 month	0%	0%	High School Diploma or GED	26%	43%
None	4%	0%	No HSD or GED	3%	0%

First-Line Supervisors/Managers of Production and Operating Workers

Storage and Distribution Managers

Most Common Educational/Training Requirement:

Work experience in a related occupation

Work experience in a related occupation

Job Zone Comparison

3 - Job Zone Three: Medium Preparation Needed

3 - Job Zone Three: Medium Preparation Needed



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

## Tasks

First-Line Supervisors/Managers of Production and Operating Workers	Storage and Distribution Managers
<p style="text-align: center; border-bottom: 1px solid black; margin-bottom: 5px;">Core Tasks</p> <p>Generalized Work Activities:</p> <ul style="list-style-type: none"> <li>Communicating with Supervisors, Peers, or Subordinates - Providing information to supervisors, co-workers, and subordinates by telephone, in written form, e-mail, or in person.</li> <li>Making Decisions and Solving Problems - Analyzing information and evaluating results to choose the best solution and solve problems.</li> <li>Coordinating the Work and Activities of Others- Getting members of a group to work together to accomplish tasks.</li> <li>Guiding, Directing, and Motivating Subordinates - Providing guidance and direction to subordinates, including setting performance standards and monitoring performance.</li> <li>Getting Information - Observing, receiving, and otherwise obtaining information from all relevant sources.</li> </ul>	<p style="text-align: center; border-bottom: 1px solid black; margin-bottom: 5px;">Core Tasks</p> <p>Generalized Work Activities:</p> <ul style="list-style-type: none"> <li>Communicating with Supervisors, Peers, or Subordinates - Providing information to supervisors, co-workers, and subordinates by telephone, in written form, e-mail, or in person.</li> <li>Making Decisions and Solving Problems - Analyzing information and evaluating results to choose the best solution and solve problems.</li> <li>Getting Information - Observing, receiving, and otherwise obtaining information from all relevant sources.</li> <li>Interacting With Computers - Using computers and computer systems (including hardware and software) to program, write software, set up functions, enter data, or process information.</li> <li>Organizing, Planning, and Prioritizing Work - Developing specific goals and plans to prioritize, organize, and accomplish your work.</li> </ul>
<p style="text-align: center; border-bottom: 1px solid black; margin-bottom: 5px;">Specific Tasks</p> <p>Occupation Specific Tasks:</p> <ul style="list-style-type: none"> <li>Calculate labor and equipment requirements and production specifications, using standard formulas.</li> <li>Confer with management or subordinates to resolve worker problems, complaints, or grievances.</li> <li>Confer with other supervisors to coordinate operations and activities within or between departments.</li> <li>Demonstrate equipment operations and work and safety procedures to new employees, or assign employees to experienced workers for training.</li> <li>Determine standards, budgets, production goals, and rates, based on company policies, equipment and labor availability, and workloads.</li> <li>Direct and coordinate the activities of employees engaged in the production or processing of goods, such as inspectors, machine setters, and fabricators.</li> <li>Enforce safety and sanitation regulations.</li> </ul>	<p style="text-align: center; border-bottom: 1px solid black; margin-bottom: 5px;">Specific Tasks</p> <p>Occupation Specific Tasks:</p> <ul style="list-style-type: none"> <li>Advise sales and billing departments of transportation charges for customers' accounts.</li> <li>Arrange for necessary shipping documentation, and contact customs officials to effect release of shipments.</li> <li>Arrange for storage facilities when required.</li> <li>Confer with department heads to coordinate warehouse activities, such as production, sales, records control, and purchasing.</li> <li>Develop and document standard and emergency operating procedures for receiving, handling, storing, shipping, or salvaging products or materials.</li> <li>Develop and implement plans for facility modification or expansion, such as equipment purchase or changes in space allocation or structural design.</li> <li>Evaluate freight costs and the inventory costs associated with transit times to ensure that costs are appropriate.</li> </ul>



- Enforce safety and sanitation regulations.
- Inspect materials, products, or equipment to detect defects or malfunctions.
- Interpret specifications, blueprints, job orders, and company policies and procedures for workers.
- Maintain operations data such as time, production, and cost records, and prepare management reports of production results.
- Observe work, and monitor gauges, dials, and other indicators to ensure that operators conform to production or processing standards.
- Plan and develop new products and production processes.
- Plan and establish work schedules, assignments, and production sequences to meet production goals.
- Read and analyze charts, work orders, production schedules, and other records and reports, in order to determine production requirements and to evaluate current production estimates and outputs.
- Recommend or implement measures to motivate employees and to improve production methods, equipment performance, product quality, or efficiency.
- Recommend personnel actions such as hirings and promotions.
- Requisition materials, supplies, equipment parts, or repair services.
- Set up and adjust machines and equipment.

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#### Detailed Tasks

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#### Detailed Work Activities:

- adjust production equipment/machinery setup
- analyze operational or management reports or records
- assign work to staff or employees
- communicate technical information
- compute production, construction, or installation specifications
- conduct or attend staff meetings
- confer with other departmental heads to coordinate activities
- consult with managerial or supervisory personnel
- coordinate production materials, activities or processes
- demonstrate or explain assembly or use of equipment
- determine factors affecting production processes
- develop maintenance schedules
- direct and coordinate activities of workers or staff
- establish employee performance standards
- estimate materials or labor requirements
- examine products or work to verify conformance to specifications

- Evaluate locations for new warehouses and distribution networks to determine their potential usefulness.
- Examine invoices and shipping manifests for conformity to tariff and customs regulations.
- Examine products or materials to estimate quantities or weight and type of container required for storage or transport.
- Inspect physical conditions of warehouses, vehicle fleets and equipment, and order testing, maintenance, repair, or replacement as necessary.
- Interview, select, and train warehouse and supervisory personnel.
- Issue shipping instructions and provide routing information to ensure that delivery times and locations are coordinated.
- Negotiate with carriers, warehouse operators and insurance company representatives for services and preferential rates.
- Participate in setting transportation and service rates.
- Plan, develop, and implement warehouse safety and security programs and activities.
- Prepare and manage departmental budgets.
- Prepare or direct preparation of correspondence, reports, and operations, maintenance, and safety manuals.
- Respond to customers' or shippers' questions and complaints regarding storage and distribution services.
- Review invoices, work orders, consumption reports, and demand forecasts to estimate peak delivery periods and to issue work assignments.
- Schedule and monitor air or surface pickup, delivery, or distribution of products or materials.
- Supervise the activities of workers engaged in receiving, storing, testing, and shipping products or materials.
- Track and trace goods while they are en route to their destinations, expediting orders when necessary.

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#### Detailed Tasks

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#### Detailed Work Activities:

- adhere to safety procedures
- analyze operational or management reports or records
- analyze organizational operating practices or procedures
- answer customer or public inquiries
- arrange delivery schedules
- assign work to staff or employees
- call on customers to solicit new business
- communicate technical information
- conduct or attend staff meetings
- confer with other departmental heads to coordinate activities



- explain rules, policies or regulations
- explain work orders, specifications, or work techniques to workers
- maintain file of job openings
- maintain inventory of office equipment or furniture
- maintain job descriptions
- maintain production or work records
- maintain records, reports, or files
- manage inventories or supplies
- modify work procedures or processes to meet deadlines
- monitor production machinery/equipment operation to detect problems
- monitor worker performance
- motivate workers to achieve work goals
- orient new employees
- oversee work progress to verify safety or conformance to standards
- prepare or maintain employee records
- prepare reports
- read blueprints
- read technical drawings
- read work order, instructions, formulas, or processing charts
- recommend improvements to work methods or procedures
- requisition stock, materials, supplies or equipment
- resolve or assist workers to resolve work problems
- resolve personnel problems or grievances
- schedule activities, classes, or events
- schedule employee work hours
- set up production equipment or machinery
- understand second language
- understand technical operating, service or repair manuals
- use oral or written communication techniques

Technology - Examples

Data base user interface and query software

- Database software
- Oracle software

Electronic mail software

- Email software
- IBM Lotus Notes
- Microsoft Outlook

Enterprise resource planning ERP software

- Bowen & Groves MI ERP

Centers Enterprise Resource Planning

- develop maintenance schedules
- develop policies, procedures, methods, or standards
- develop safety regulations
- direct and coordinate activities of workers or staff
- ensure compliance with government regulations
- evaluate information from employment interviews
- evaluate performance of employees or contract personnel
- examine documents for completeness, accuracy, or conformance to standards
- hire, discharge, transfer, or promote workers
- inspect products or systems for regulatory compliance
- inspect property to determine damages
- interview job applicants
- investigate customer complaints
- maintain safe work environment
- measure, weigh, or count products or materials
- monitor facilities or equipment
- negotiate business contracts
- orient new employees
- oversee execution of organizational or program policies
- prepare reports
- provide customer service
- purchase property management or maintenance equipment or supplies
- resolve customer or public complaints
- schedule air or surface pickup, delivery, or distribution of product
- schedule facility or property maintenance
- schedule work to meet deadlines
- use conflict resolution techniques
- use negotiation techniques
- use oral or written communication techniques
- use weighing or measuring devices in transportation
- write administrative procedures services manual
- write business correspondence

Technology - Examples

Analytical or scientific software

- Integrated Decision Support Netwise Enterprise
- Integrated Decision Support Netwise Frontline
- QUALCOMM QTRACS
- QUALCOMM ViaWeb

Compliance software



- Capterra Enterprise Resource Planning
- Encompix ERP
- Epicor Vantage ERP
- Epicor Vista ERP
- Giraffe Production Systems software
- Intacct ERP software
- Made2Manage software
- Microsoft Axapta
- NetSuite NetERP
- Resource planning software
- Retain Resource Planning
- SAP Business One
- SAP software
- SYSPRO software
- Technology Group International Enterprise 21 ERP

## Human resources software

- GHG electronic employee management suite eEMS software

## Internet browser software

- Netscape software

## Inventory management software

- Inventory management software

## Materials requirements planning logistics and supply chain software

- Integrated materials management systems
- Materials management software
- QA Software QMS Materials Management

## Office suite software

- Microsoft Office

## Presentation software

- Microsoft PowerPoint

## Project management software

- Microsoft Total Quality Control Management
- Total quality management TQM software

## Spreadsheet software

- Microsoft Excel
- Spreadsheet software

- Scanlon Associates LogPak

## Data base user interface and query software

- Microsoft Access

## Electronic mail software

- Microsoft Outlook

## Enterprise resource planning ERP software

- Enterprise resource planning ERP software

## Graphics or photo imaging software

- Graphics software

## Inventory management software

- Aljex Inventory
- DSA Foxware Warehouse Management
- International Business Systems software
- Logility Voyager WarehousePRO
- MRA Technologies MRATrack Warehouse Management System
- Sentai Pinpoint

## Label making software

- ABOL Manifest Systems

## Materials requirements planning logistics and supply chain software

- Cadre Technologies Cadence Warehouse Management System
- Catalyst International CatalystConnect
- IBM i2 Transportation Manager
- Integrated Decision Support Corporation Netwise Supply Chain
- Integrated Decision Support Corporation Swap Advice
- IntelliTrack Warehouse Management System
- Radio Beacon WMS
- RedPrairie DLx Warehouse
- SSA Global Warehouse Management System WMS
- Supply chain event management software
- TECSYS EliteSeries
- TECSYS PointForce Enterprise

## Office suite software

- Microsoft Office

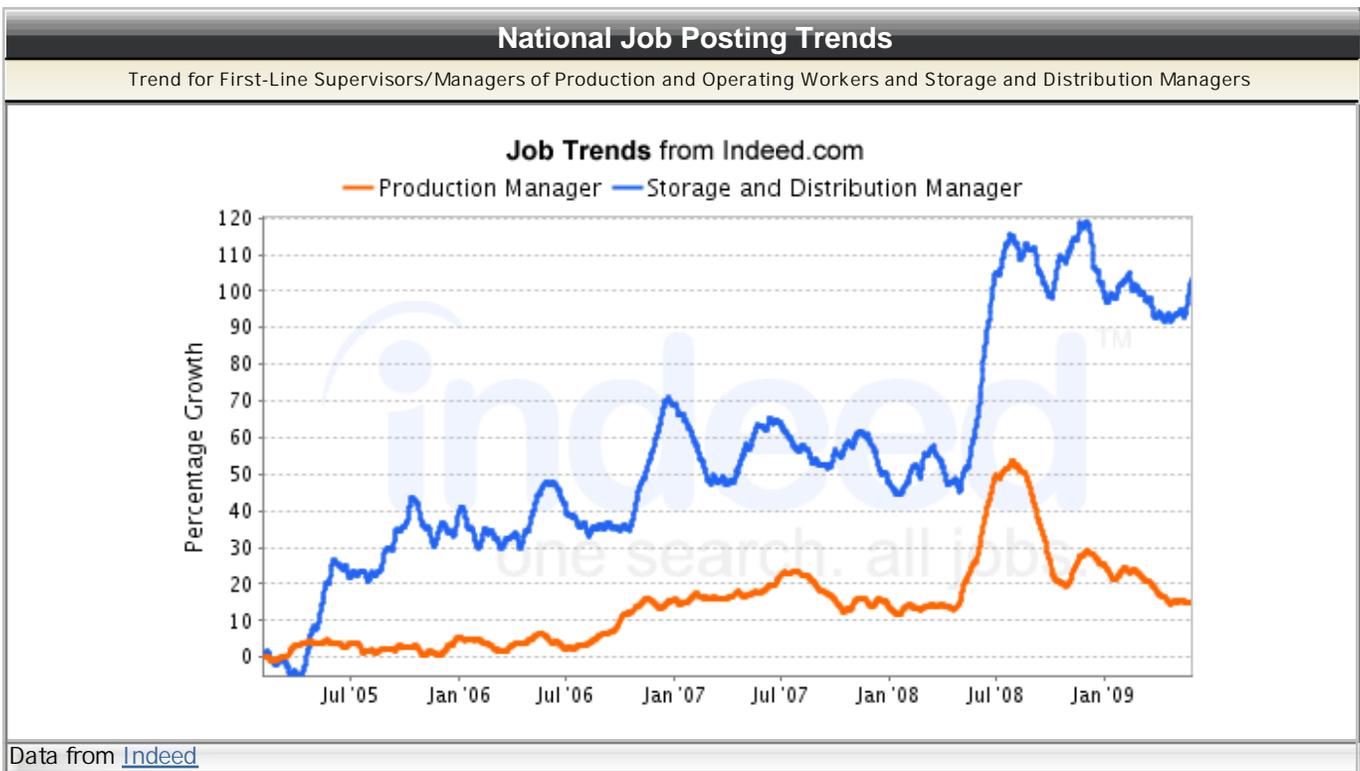


<p>Time accounting software</p> <ul style="list-style-type: none"> <li>• Kronos Workforce Timekeeper</li> <li>• Timekeeping software</li> <li>• Work Technology WorkTech Time</li> </ul> <p>Word processing software</p> <ul style="list-style-type: none"> <li>• Microsoft Word</li> <li>• Word processing software</li> </ul> <hr/> <p>Tools - Examples</p> <hr/> <ul style="list-style-type: none"> <li>• Desktop computers</li> <li>• Personal protective clothing</li> <li>• Laser printers</li> <li>• Notebook computers</li> <li>• Personal computers</li> <li>• Respirators</li> <li>• Safety glasses</li> <li>• Protective shoes</li> <li>• Laser scanners</li> <li>• Operator terminals</li> </ul>	<p>Presentation software</p> <ul style="list-style-type: none"> <li>• Microsoft PowerPoint</li> </ul> <p>Project management software</p> <ul style="list-style-type: none"> <li>• HighJump Software Warehouse Advantage</li> <li>• Infosite Technologies DM Warehousing</li> <li>• Sentai WarehouseTrac</li> </ul> <p>Spreadsheet software</p> <ul style="list-style-type: none"> <li>• Spreadsheet software</li> </ul> <p>Time accounting software</p> <ul style="list-style-type: none"> <li>• WorkForce Software EmpCenter Time and Attendance</li> </ul> <p>Word processing software</p> <ul style="list-style-type: none"> <li>• Word processing software</li> </ul> <hr/> <p>Tools - Examples</p> <hr/> <ul style="list-style-type: none"> <li>• Barcoding labels</li> <li>• Barcoding scanners</li> <li>• Desktop computers</li> <li>• Digital cameras</li> <li>• Forklifts</li> <li>• Wireless communication and satellite positioning tools</li> <li>• Cell phones</li> <li>• Laptop computers</li> <li>• Personal computers</li> <li>• Personal digital assistants PDA</li> <li>• Radio frequency handheld terminals</li> <li>• Radio frequency identification RFID devices</li> <li>• Global positioning systems GPS</li> </ul>
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Labor Market Comparison			
Maine Department of Labor.			
Description	First-Line Supervisors/Managers of Production and Operating Workers	Storage and Distribution Managers	Difference
Median Wage	\$ 45,510	\$ 62,270	\$ 16,760
10th Percentile Wage	\$ 28,000	\$ 40,840	\$ 12,840
25th Percentile Wage	N/A	N/A	N/A



75th Percentile Wage	\$ 58,890	\$ 82,310	\$ 23,420
90th Percentile Wage	\$ 73,810	\$102,600	\$ 28,790
Mean Wage	\$ 48,010	\$ 68,620	\$ 20,610
Total Employment - 2535	3,750	710	-3,040
Employment Base - 2006	3,893	701	-3,192
Projected Employment - 2544	3,745	736	-3,009
Projected Job Growth - 2006-2544	-3.8 %	5.0 %	8.8 %
Projected Annual Openings - 2006-2544	65	25	-40
Special		★	
Special Occupations:			



### Programs

#### Related Programs

Aeronautics/Aviation/Aerospace Science and Technology, General

Aeronautics/Aviation/Aerospace Science and Technology, General. A program that focuses on the general study of aviation and the aviation industry, including in-flight and ground support operations. Includes instruction in the technical, business, and general aspects of air transportation systems.

No information on schools for the program



## Aviation Management

Aviation/Airway Management and Operations. A program that prepares individuals to apply technical knowledge and skills to the management of aviation industry operations and services. Includes instruction in airport operations, ground traffic direction, ground support and flightline operations, passenger and cargo operations, flight safety and security operations, aviation industry regulation, and related business aspects of managing aviation enterprises.

No information on schools for the program

## Business Administration and Management, General

Business Administration and Management, General. A program that generally prepares individuals to plan, organize, direct, and control the functions and processes of a firm or organization. Includes instruction in management theory, human resources management and behavior, accounting and other quantitative methods, purchasing and logistics, organization and production, marketing, and business decision-making.

Institution	Address	City	URL
Central Maine Community College	1250 Turner St	Auburn	<a href="http://www.cmcc.edu">www.cmcc.edu</a>
Central Maine Community College	1250 Turner St	Auburn	<a href="http://www.cmcc.edu">www.cmcc.edu</a>
University of Maine at Augusta	46 University Dr	Augusta	<a href="http://www.uma.maine.edu/">www.uma.maine.edu/</a>
University of Maine at Augusta	46 University Dr	Augusta	<a href="http://www.uma.maine.edu/">www.uma.maine.edu/</a>
Eastern Maine Community College	354 Hogan Rd	Bangor	<a href="http://www.emcc.edu">www.emcc.edu</a>
Husson College	One College Circle	Bangor	<a href="http://www.husson.edu">www.husson.edu</a>
Husson College	One College Circle	Bangor	<a href="http://www.husson.edu">www.husson.edu</a>
Husson College	One College Circle	Bangor	<a href="http://www.husson.edu">www.husson.edu</a>
Beal College	99 Farm Road	Bangor	<a href="http://bealcollege.edu">bealcollege.edu</a>
University of New England	11 Hills Beach Rd	Biddeford	<a href="http://WWW.UNE.EDU">WWW.UNE.EDU</a>
Washington County Community College	One College Drive	Calais	<a href="http://www.wccc.me.edu">www.wccc.me.edu</a>
University of Maine at Machias	9 O'Brien Ave	Machias	<a href="http://www.umm.maine.edu">www.umm.maine.edu</a>
University of Maine		Orono	<a href="http://www.umaine.edu/">www.umaine.edu/</a>
University of Maine		Orono	<a href="http://www.umaine.edu/">www.umaine.edu/</a>
University of Maine		Orono	<a href="http://www.umaine.edu/">www.umaine.edu/</a>
Andover College	901 Washington Ave	Portland	<a href="http://WWW.ANDOVERCOLLEGE.edu">WWW.ANDOVERCOLLEGE.edu</a>
University of Southern Maine	96 Falmouth St	Portland	<a href="http://www.usm.maine.edu">www.usm.maine.edu</a>
University of Southern Maine	96 Falmouth St	Portland	<a href="http://www.usm.maine.edu">www.usm.maine.edu</a>
University of Southern Maine	96 Falmouth St	Portland	<a href="http://www.usm.maine.edu">www.usm.maine.edu</a>
University of Southern Maine	96 Falmouth St	Portland	<a href="http://www.usm.maine.edu">www.usm.maine.edu</a>
Northern Maine Community College	33 Edgemont Dr	Presque Isle	<a href="http://www.nmcc.edu">www.nmcc.edu</a>
Southern Maine Community College	2 Fort Road	South Portland	<a href="http://www.smccME.edu">www.smccME.edu</a>
Southern Maine Community College	2 Fort Road	South Portland	<a href="http://www.smccME.edu">www.smccME.edu</a>
Saint Josephs College	278 Whites Bridge Rd	Standish	<a href="http://www.sjcme.edu">www.sjcme.edu</a>



Saint Josephs College	278 Whites Bridge Rd	Standish	<a href="http://www.sjcme.edu">www.sjcme.edu</a>
Saint Josephs College	278 Whites Bridge Rd	Standish	<a href="http://www.sjcme.edu">www.sjcme.edu</a>
Thomas College	180 W River Rd	Waterville	<a href="http://www.thomas.edu">www.thomas.edu</a>
Thomas College	180 W River Rd	Waterville	<a href="http://www.thomas.edu">www.thomas.edu</a>
Thomas College	180 W River Rd	Waterville	<a href="http://www.thomas.edu">www.thomas.edu</a>
York County Community College	112 College Drive	Wells	<a href="http://www.yccc.edu">www.yccc.edu</a>

## Business/Commerce, General

Business/Commerce, General. A program that focuses on the general study of business, including the processes of interchanging goods and services (buying, selling and producing), business organization, and accounting as used in profit-making and nonprofit public and private institutions and agencies. The programs may prepare individuals to apply business principles and techniques in various occupational settings.

Institution	Address	City	URL
Beal College	99 Farm Road	Bangor	<a href="http://bealcollege.edu">bealcollege.edu</a>
University of Maine at Farmington	224 Main St	Farmington	<a href="http://www.umf.maine.edu">www.umf.maine.edu</a>
University of Maine at Fort Kent	23 University Drive	Fort Kent	<a href="http://www.umfk.maine.edu">www.umfk.maine.edu</a>
University of Maine at Presque Isle	181 Main St	Presque Isle	<a href="http://www.umpi.maine.edu">www.umpi.maine.edu</a>
University of Maine at Presque Isle	181 Main St	Presque Isle	<a href="http://www.umpi.maine.edu">www.umpi.maine.edu</a>
Thomas College	180 W River Rd	Waterville	<a href="http://www.thomas.edu">www.thomas.edu</a>

## Logistics and Materials Management

Logistics and Materials Management. A program that prepares individuals to manage and coordinate all logistical functions in an enterprise, ranging from acquisitions to receiving and handling, through internal allocation of resources to operations units, to the handling and delivery of output. Includes instruction in acquisitions and purchasing, inventory control, storage and handling, just-in-time manufacturing, logistics planning, shipping and delivery management, transportation, quality control, resource estimation and allocation, and budgeting.

No information on schools for the program

## Public Administration

Public Administration. A program that prepares individuals to serve as managers in the executive arm of local, state, and federal government; and that focuses on the systematic study of executive organization and management. Includes instruction in the roles, development, and principles of public administration; the management of public policy; executive-legislative relations; public budgetary processes and financial management; administrative law, public personnel management; professional ethics; and research methods.

Institution	Address	City	URL
University of Maine at Augusta	46 University Dr	Augusta	<a href="http://www.uma.maine.edu/">www.uma.maine.edu/</a>
University of Maine at Augusta	46 University Dr	Augusta	<a href="http://www.uma.maine.edu/">www.uma.maine.edu/</a>
University of Maine at Fort Kent	23 University Drive	Fort Kent	<a href="http://www.umfk.maine.edu">www.umfk.maine.edu</a>
University of Maine		Orono	<a href="http://www.umaine.edu/">www.umaine.edu/</a>
University of Maine		Orono	<a href="http://www.umaine.edu/">www.umaine.edu/</a>
University of Maine		Orono	<a href="http://www.umaine.edu/">www.umaine.edu/</a>



University of Maine		Orono	<a href="http://www.umaine.edu/">www.umaine.edu/</a>
Public Administration and Services, Other			
Public Administration and Social Service Professions, Other. Any instructional program in public administration and services not listed above.			
Institution	Address	City	URL
University of Southern Maine	96 Falmouth St	Portland	<a href="http://www.usm.maine.edu">www.usm.maine.edu</a>

### Maine Statewide Promotion Opportunities for First-Line Supervisors/Managers of Production and Operating Workers

O*NET Code	Title	Grand TORQ	Job Zone	Employment	Median Wage	Difference	Growth	Annual Job Openings	Special
51-1011.00	First-Line Supervisors/Managers of Production and Operating Workers	100	3	3,750	\$45,510.00	\$0.00	-4%	65	
11-3051.00	Industrial Production Managers	90	4	690	\$72,560.00	\$27,050.00	-12%	24	
11-3071.02	Storage and Distribution Managers	89	3	710	\$62,270.00	\$16,760.00	5%	25	★
17-3026.00	Industrial Engineering Technicians	88	3	370	\$51,700.00	\$6,190.00	6%	9	★
11-9131.00	Postmasters and Mail Superintendents	87	3	420	\$55,200.00	\$9,690.00	-5%	10	
11-3061.00	Purchasing Managers	83	4	330	\$72,560.00	\$27,050.00	2%	11	
11-3071.01	Transportation Managers	83	3	710	\$62,270.00	\$16,760.00	5%	25	★
47-1011.00	First-Line Supervisors/Managers of Construction Trades and Extraction Workers	83	3	3,190	\$46,630.00	\$1,120.00	3%	77	★
11-3042.00	Training and Development Managers	82	4	140	\$66,670.00	\$21,160.00	7%	4	
41-1012.00	First-Line Supervisors/Managers of Non-Retail Sales Workers	82	4	930	\$55,220.00	\$9,710.00	-1%	19	
11-3011.00	Administrative Services Managers	82	4	1,090	\$56,630.00	\$11,120.00	5%	34	
11-9011.01	Nursery and Greenhouse Managers	82	4	30	\$60,610.00	\$15,100.00	20%	15	



49-1011.00	First-Line Supervisors/Managers of Mechanics, Installers, and Repairers	82	4	2,490	\$46,810.00	\$1,300.00	0%	60	★
15-1061.00	Database Administrators	81	4	300	\$60,260.00	\$14,750.00	20%	11	
11-1021.00	General and Operations Managers	81	4	8,490	\$77,050.00	\$31,540.00	-5%	209	

Special Occupations:

### Top Industries for Storage and Distribution Managers

Industry	NAICS	% of Industry	Employment	Projected Employment	% Change
Federal government, excluding postal service	919999	8.18%	7,687	7,267	-5.47%
General freight trucking	484100	7.31%	6,875	7,777	13.11%
Warehousing and storage	493100	5.90%	5,551	7,414	33.57%
Management of companies and enterprises	551100	5.66%	5,322	6,135	15.28%
Local government, excluding education and hospitals	939300	4.83%	4,542	5,102	12.34%
Couriers	492100	4.11%	3,862	4,150	7.46%
Grocery and related product wholesalers	424400	3.41%	3,203	3,503	9.35%
Freight transportation arrangement	488500	3.38%	3,180	4,031	26.76%
Specialized freight trucking	484200	2.57%	2,418	2,724	12.64%
Self-employed workers, primary job	000601	2.55%	2,400	2,557	6.54%
Rail transportation	482100	1.86%	1,751	1,507	-13.94%
Scheduled air transportation	481100	1.65%	1,553	1,715	10.41%
State government, excluding education and hospitals	929200	1.52%	1,429	1,402	-1.87%
Professional and commercial equipment and supplies merchant wholesalers	423400	1.13%	1,063	1,239	16.57%
Wholesale electronic markets and agents and brokers	425100	1.12%	1,055	1,197	13.48%

### Top Industries for First-Line Supervisors/Managers of Production and Operating Workers

Industry	NAICS	% of Industry	Employment	Projected Employment	% Change
Plastics product manufacturing	326100	4.03%	28,154	29,844	6.00%
Printing and related support activities	323100	3.61%	25,224	19,985	-20.77%
Motor vehicle parts manufacturing	336300	3.08%	21,518	17,131	-20.39%
Architectural and structural metals manufacturing	332300	2.52%	17,595	18,792	6.80%
Self-employed workers, primary job	000601	2.40%	16,779	17,876	6.54%



Grocery stores	445100	2.37%	16,559	18,067	9.11%
Animal slaughtering and processing	311600	2.24%	15,642	17,851	14.13%
Local government, excluding education and hospitals	939300	2.07%	14,471	16,257	12.34%
Machine shops	332710	1.99%	13,948	11,538	-17.28%
Converted paper product manufacturing	322200	1.89%	13,212	11,088	-16.08%
Semiconductor and other electronic component manufacturing	334400	1.88%	13,126	11,473	-12.59%
Drycleaning and laundry services	812300	1.75%	12,216	12,217	0.01%
Other wood product manufacturing	321900	1.64%	11,463	10,802	-5.77%
Other fabricated metal product manufacturing	332900	1.57%	10,950	9,702	-11.39%
Other general purpose machinery manufacturing	333900	1.41%	9,879	8,918	-9.73%

## 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)