



# TORO Analysis of First-Line Supervisors/Managers of Mechanics, Installers, and Repairers to Industrial Production Managers

## INPUT SECTION:

Transfer	Title	O* NET	Filters		
From Title:	First-Line Supervisors/Managers of Mechanics, Installers, and Repairers	49-1011.00	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

## OUTPUT SECTION:

Grand TORQ:

**86**

Ability TORQ		Skills TORQ		Knowledge TORQ	
Level	96	Level	77	Level	85

Gaps To Narrow if Possible				Upgrade These Skills				Knowledge to Add			
Ability	Level	Gap	Impt	Skill	Level	Gap	Impt	Knowledge	Level	Gap	Impt
Written Expression	59	8	59	Monitoring	76	10	74	Production and Processing	79	29	84
Mathematical Reasoning	53	7	56	Active Listening	68	6	83	Administration and Management	61	1	77
Deductive Reasoning	64	4	72	Coordination	76	4	74				
Information Ordering	59	4	65	Judgment and Decision Making	68	3	81				
Oral Comprehension	62	2	78	Critical Thinking	66	2	79				
Problem Sensitivity	62	2	75	Complex Problem Solving	65	1	73				
Inductive Reasoning	59	2	75								
Perceptual Speed	48	2	59								
Originality	55	2	56								

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

## ASK ANALYSIS

Ability Level Comparison - Abilities with importance scores over 50

Description	First-Line Supervisors/Managers of Mechanics, Installers, and Repairers	Industrial Production Managers	Importance



Oral Comprehension	60	62	78
Oral Expression	66	64	78
Written Comprehension	60	60	75
Problem Sensitivity	60	62	75
Inductive Reasoning	57	59	75
Deductive Reasoning	60	64	72
Speech Clarity	53	46	68
Information Ordering	55	59	65
Near Vision	55	55	65
Speech Recognition	53	50	65
Written Expression	51	59	59
Category Flexibility	53	53	59
Perceptual Speed	46	48	59
Originality	53	55	56
Mathematical Reasoning	46	53	56
Visualization	59	57	50
Selective Attention	51	41	50
Far Vision	48	42	50

Skill Level Comparison - Abilities with importance scores over 69

Description	First-Line Supervisors/Managers of Mechanics, Installers, and Repairers	Industrial Production Managers	Importance
Active Listening	62	68	83
Judgment and Decision Making	65	68	81
Reading Comprehension	67	67	79
Critical Thinking	64	66	79
Monitoring	66	76	74
Coordination	72	76	74
Management of Personnel Resources	70	61	74
Complex Problem Solving	64	65	73
Time Management	69	69	73
Speaking	63	63	71



Instructing			
Knowledge Level Comparison - Knowledge with importance scores over 69			
Description	First-Line Supervisors/Managers of Mechanics, Installers, and Repairers	Industrial Production Managers	Importance
Production and Processing	50	79	84
Administration and Management	60	61	77

Experience & Education Comparison					
Related Work Experience Comparison			Required Education Level Comparison		
Description	First-Line Supervisors/Managers of Mechanics, Installers, and Repairers	Industrial Production Managers	Description	First-Line Supervisors/Managers of Mechanics, Installers, and Repairers	Industrial Production Managers
10+ years	22%	0%	Doctoral	0%	0%
8-10 years	8%	0%	Professional Degree	0%	0%
6-8 years	7%	28%	Post-Masters Cert	0%	0%
4-6 years	17%	18%	Master's Degree	7%	1%
2-4 years	19%	42%	Post-Bachelor Cert	0%	4%
1-2 years	16%	0%	Bachelors	11%	18%
6-12 months	6%	7%	AA or Equiv	29%	16%
3-6 months	0%	0%	Some College	5%	12%
1-3 months	0%	0%	Post-Secondary Certificate	33%	26%
0-1 month	0%	0%	High School Diploma or GED	10%	20%
None	1%	1%	No HSD or GED	0%	0%
First-Line Supervisors/Managers of Mechanics, Installers, and Repairers			Industrial Production Managers		
Most Common Educational/Training Requirement:					
Work experience in a related occupation			Work experience in a related occupation		
Job Zone Comparison					
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.			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 Mechanics, Installers, and Repairers	Industrial Production Managers
Core Tasks	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.
- 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.
- Making Decisions and Solving Problems - Analyzing information and evaluating results to choose the best solution and solve problems.
- Inspecting Equipment, Structures, or Material - Inspecting equipment, structures, or materials to identify the cause of errors or other problems or defects.

## Specific Tasks

## Occupation Specific Tasks:

- Compile operational and personnel records, such as time and production records, inventory data, repair and maintenance statistics, and test results.
- Compute estimates and actual costs of factors such as materials, labor, and outside contractors.
- Conduct or arrange for worker training in safety, repair, and maintenance techniques, operational procedures, or equipment use.
- Confer with personnel, such as management, engineering, quality control, customer, and union workers' representatives, to coordinate work activities, resolve employee grievances, and identify and review resource needs.
- Counsel employees about work-related issues and assist employees to correct job-skill deficiencies.
- Design equipment configurations to meet personnel needs.
- Determine schedules, sequences, and assignments for work activities, based on work priority, quantity of equipment and skill of personnel.
- Develop and implement electronic maintenance programs and computer information management systems.
- Develop, implement, and evaluate maintenance policies and procedures.
- Examine objects, systems, or facilities, and analyze information to determine needed installations, services, or repairs.
- Inspect, test, and measure completed work, using devices such as hand tools and gauges to verify conformance to standards and repair requirements.

## Generalized Work Activities:

- 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 - 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,



- Interpret specifications, blueprints, and job orders to construct templates and lay out reference points for workers.
- Investigate accidents and injuries, and prepare reports of findings.
- Meet with vendors and suppliers to discuss products used in repair work.
- Monitor employees' work levels and review work performance.
- Monitor tool inventories and the condition and maintenance of shops in order to ensure adequate working conditions.
- Participate in budget preparation and administration, coordinating purchasing and documentation, and monitoring departmental expenditures.
- Patrol and monitor work areas and examine tools and equipment in order to detect unsafe conditions or violations of procedures or safety rules.
- Perform skilled repair and maintenance operations, using equipment such as hand and power tools, hydraulic presses and shears, and welding equipment.
- Recommend or initiate personnel actions, such as hires, promotions, transfers, discharges, and disciplinary measures.
- Requisition materials and supplies, such as tools, equipment, and replacement parts.

#### Detailed Tasks

##### Detailed Work Activities:

- assign work to staff or employees
- conduct or attend staff meetings
- conduct training for personnel
- confer with customer representatives
- confer with engineering, technical or manufacturing personnel
- consult with managerial or supervisory personnel
- coordinate equipment or personnel in mechanical repair setting
- demonstrate or explain assembly or use of equipment
- determine installation, service, or repair needed
- develop budgets
- develop maintenance schedules
- develop policies, procedures, methods, or standards
- develop staffing plan
- diagnose mechanical problems in machinery or equipment
- direct and coordinate activities of workers or staff
- discipline staff for infractions of rules or regulations
- establish employee performance standards

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
- 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



- estimate cost for repair services
- estimate materials or labor requirements
- evaluate performance of employees or contract personnel
- examine products or work to verify conformance to specifications
- hire, discharge, transfer, or promote workers
- inspect facilities to determine repair or replacement needs
- inspect machinery or equipment to determine adjustments or repairs needed
- modify work procedures or processes to meet deadlines
- monitor operations to verify conformance to standards
- monitor worker performance
- orient new employees
- oversee work progress to verify safety or conformance to standards
- perform safety inspections in manufacturing or industrial setting
- prepare or maintain employee records
- prepare reports
- read blueprints
- read schematics
- read specifications
- read technical drawings
- read work order, instructions, formulas, or processing charts
- recommend improvements to work methods or procedures
- recommend personnel actions, such as promotions, transfers, and dismissals
- recommend purchase or repair of furnishings or equipment
- requisition stock, materials, supplies or equipment
- resolve or assist workers to resolve work problems
- understand service or repair manuals
- understand technical operating, service or repair manuals

Technology - Examples

Accounting software

- Cost accounting software

Calendar and scheduling software

- Scheduling software

Data base user interface and query software

- Database software

- Microsoft Access

- Vehicle management software

- 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
- 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



Electronic mail software
• Email software
• Microsoft Outlook
Enterprise resource planning ERP software
• Infor SyteLine ERP
• SAP software
• WorkTech MAXIMO
Facilities management software
• Computerized maintenance management system CMMS software
• Maintenance management software
Industrial control software
• Programmable logic controller PLC software
Internet browser software
• Internet browser software
• Microsoft Internet Explorer
Inventory management software
• Automated inventory software
• Inventory management software
Office suite software
• Microsoft Office
Project management software
• Recordkeeping software
Spreadsheet software
• Microsoft Excel
• Spreadsheet software
Time accounting software
• Payroll software
Word processing software
• Microsoft Word
• Word processing software
<b>Tools - Examples</b>
• Desktop computers
• Laser printers
• Mainframe computers
• Programmable logic controllers PLC
• Personal computers

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
• 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
<b>Tools - Examples</b>
• Desktop computers
• Notebook computers
• Personal computers
• Personal digital assistants PDA
• Scanners
• Tablet computers



- Two way radios

### Labor Market Comparison

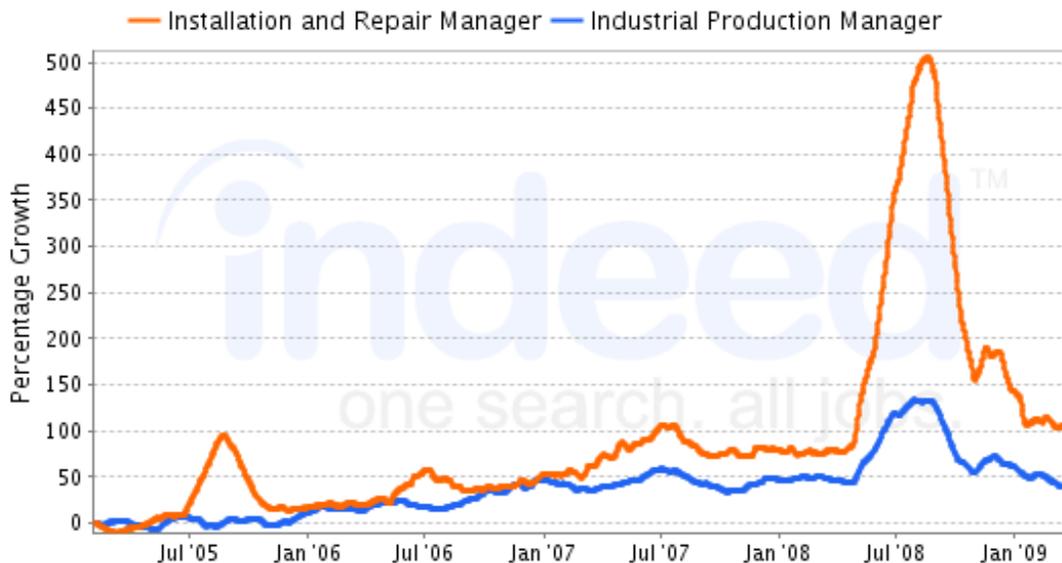
Description	First-Line Supervisors/Managers of Mechanics, Installers, and Repairers	Industrial Production Managers	Difference
Median Wage	\$ 46,810	\$ 72,560	\$ 25,750
10th Percentile Wage	\$ 29,560	\$ 44,130	\$ 14,570
25th Percentile Wage	N/A	N/A	N/A
75th Percentile Wage	\$ 59,530	\$ 93,880	\$ 34,350
90th Percentile Wage	\$ 74,550	\$118,880	\$ 44,330
Mean Wage	\$ 49,310	\$ 77,130	\$ 27,820
Total Employment - 2007	2,490	690	-1,800
Employment Base - 2006	2,530	695	-1,835
Projected Employment - 2016	2,535	614	-1,921
Projected Job Growth - 2006-2016	0.2 %	-11.7 %	-11.9 %
Projected Annual Openings - 2006-2016	60	24	-36

### National Job Posting Trends

Trend for First-Line Supervisors/Managers of Mechanics, Installers, and Repairers

Trend for Industrial Production Managers

#### Job Trends from Indeed.com



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

**Recommended Programs****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>

**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>

**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 schools available for the program

**Maine Statewide Promotion Opportunities for First-Line Supervisors/Managers of Mechanics, Installers, and Repairers**

O*NET Code	Title	Grand TORQ	Job Zone	Employment	Median Wage	Difference	Growth	Annual Job Openings
49-1011.00	First-Line Supervisors/Managers of Mechanics, Installers, and Repairers	100	4	2,490	\$46,810.00	\$0.00	0%	60
11-9021.00	Construction Managers	87	3	970	\$72,320.00	\$25,510.00	4%	35
11-3051.00	Industrial Production Managers	86	4	690	\$72,560.00	\$25,750.00	-12%	24
17-3026.00	Industrial Engineering Technicians	84	3	370	\$51,700.00	\$4,890.00	6%	9
11-3071.02	Storage and Distribution Managers	84	3	710	\$62,270.00	\$15,460.00	5%	25
49-2095.00	Electrical and Electronics Repairers, Powerhouse, Substation, and Relay	83	5	20	\$60,790.00	\$13,980.00	5%	1



49-9051.00	Electrical Power-Line Installers and Repairers	83	3	280	\$47,750.00	\$940.00	9%	12
49-9012.00	Control and Valve Installers and Repairers, Except Mechanical Door	83	3	170	\$47,860.00	\$1,050.00	-9%	3
27-1021.00	Commercial and Industrial Designers	82	4	140	\$49,170.00	\$2,360.00	5%	5
47-4021.00	Elevator Installers and Repairers	82	4	0	\$50,960.00	\$4,150.00	0%	0
51-8013.00	Power Plant Operators	81	3	480	\$50,240.00	\$3,430.00	10%	21
51-8012.00	Power Distributors and Dispatchers	81	4	0	\$47,720.00	\$910.00	0%	0
11-3071.01	Transportation Managers	81	3	710	\$62,270.00	\$15,460.00	5%	25
11-9011.01	Nursery and Greenhouse Managers	81	4	30	\$60,610.00	\$13,800.00	20%	15
49-2094.00	Electrical and Electronics Repairers, Commercial and Industrial Equipment	81	3	440	\$49,450.00	\$2,640.00	-19%	15

### Top Industries for Industrial Production Managers

Industry	NAICS	% in 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 Mechanics, Installers, and Repairers

Industry	NAICS	% in Industry	Employment	Projected Employment	% Change
Automobile dealers	441100	6.95%	32,287	36,627	13.44%
Automotive mechanical and electrical repair and maintenance	811110	5.50%	25,547	30,332	18.73%
Local government, excluding education and hospitals	939300	5.31%	24,681	27,727	12.34%
Plumbing, heating, and air-conditioning contractors	238220	3.15%	14,658	16,552	12.93%
Automotive parts, accessories, and tire stores	441300	2.86%	13,294	12,969	-2.44%
Automotive body, paint, interior, and glass repair	811120	2.85%	13,264	15,487	16.76%
Electric power generation, transmission and distribution	221100	2.79%	12,970	11,929	-8.03%
Federal government, excluding postal service	919999	2.45%	11,388	10,766	-5.47%
Wired telecommunications carriers	517100	2.42%	11,241	8,825	-21.49%
Lessors of real estate	531100	2.27%	10,546	11,619	10.18%
Electrical contractors	238210	1.83%	8,518	8,931	4.86%
State government, excluding education and hospitals	929200	1.66%	7,712	7,568	-1.87%
Commercial and industrial machinery and equipment (except automotive and electronic) repair and maintenance	811300	1.46%	6,774	7,168	5.82%
Elementary and secondary schools, public and private	611100	1.43%	6,655	7,013	5.38%
Activities related to real estate	531300	1.41%	6,543	8,339	27.44%