Scan of Manufacturing and Production Demand in the Muskegon Region

August 2017
Analysis Overview

Job prospects in Manufacturing and Production are a common topic of public debate, but most of the rhetoric glosses over the nuanced nature of opportunities and challenges in the field. To investigate the true nature of demand for Manufacturing and Production jobs in the Muskegon region, Burning Glass analyzed key roles and job market dynamics across the Manufacturing and Production landscape. This analysis aims to quantify the demand for Manufacturing and Production roles in Muskegon, pinpoint key opportunities and challenges facing the field, and inform Muskegon Community College's training and initiatives that support Muskegon’s Manufacturing and Production workforce.

Methodology

To conduct this analysis, Burning Glass drew from its detailed database of online employer demand, which includes over half a billion current and historical job postings across the US, UK, Canada, Australia and New Zealand. Burning Glass collects postings from over 45,000 online job sites to develop a comprehensive, real-time portrait of labor market demand. Burning Glass also leveraged its database of tens of millions of resumes to identify common transition opportunities between Manufacturing and Production roles. Our software extracts top line information about each job such as title, employer and industry, and then “reads” each job description or resume to identify actual job titles, skills, and qualifications that employers are seeking and job seekers possess. We then eliminate duplicate postings or resumes and place them in a database for further analysis.

Data from the Bureau of Labor Statistics were also leveraged to inform an analysis of the currently employed workforce in Muskegon.
Key Findings

• In 2016, there were **22,941 employed manufacturing and production workers** in Muskegon. Muskegon’s largest production jobs are concentrated in **machining, quality assurance, and general production** roles.

• **Muskegon’s manufacturing and production job demand is outpacing the national average.** Over the past two years there were 6,555 manufacturing and production job openings in Muskegon, and demand for these roles was **128% more concentrated in Muskegon than the nation overall.**

• Over the next 10 years, manufacturing and production employment is **projected increase steadily in the region, growing 10%.** Muskegon’s fastest-growing production jobs focus on **CNC, HVAC and industrial repair, and machining.**

• The **average salary for manufacturing and production jobs is $45,582.** Most of the highest-paying roles are related to logistics or supervisory roles.

• **Welders are the hardest-to-fill positions,** remaining open 46 days on average – 12 days longer than the regional average of 34 days. **Production supervisors take considerably longer than average to fill,** with openings remaining open 40 days, on average.

• **Quality assurance, machining, and welding skills** are all among the top competencies required across manufacturing and production roles in Muskegon. Key certifications relate to **transportation, quality assurance, and HVAC.**
Current Manufacturing and Production Workforce Profile
Muskegon’s Manufacturing and Production Workforce by the Numbers

- In 2016, there were 22,941 employed manufacturing and production workers in Muskegon.
- Over the next 10 years, manufacturing and production jobs are projected to grow 10%
- The average salary for manufacturing and production jobs is $45,582.
Where are the Production jobs today?...

Largest Production Occupations

Employed Workers: 2016

- Machinist: 2,436
- Quality Inspector / Technician: 1,911
- Press / Press Brake Operator: 1,790
- Production Supervisor: 1,474
- Industrial Mechanic: 1,338
- Tool and Die Maker: 1,307
- CNC Operator: 1,115
- Welder / Solderer: 981
- Quality Control Systems Managers: 776
- Electronic / Electrical Assembler: 765

Muskegon's largest production jobs are concentrated in Machining, QA, and General Production roles.

...And where will they be tomorrow?

Muskegon's fastest-growing production jobs focus on CNC, HVAC and industrial repair, and machining.

CNC Operator: 34%
CNC Programmer: 33%
Industrial Mechanic: 32%
HVAC Mechanic / Installer: 23%
Machinist: 21%

Muskegon's fastest-declining production jobs specialized in outmoded or easily automated technologies.

Grinder / Sharpener: -11%
Press (Brake) Operator: -11%
Pre-Press Technician: -13%
Printer / Copier / Scanner: -13%
Heat Treating Technician: -14%


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Logistics and Supervisory roles pay best…

Highest-Paying Production and Manufacturing Roles in Muskegon

- Quality Control Systems Managers: $101,564
- Maintenance / Service Supervisor: $64,639
- Logistics / Supply Chain Analyst: $60,028
- Logistician / Supply Chain Specialist: $60,028
- Production Plant Manager: $59,169
- Average for All Production Jobs: $45,582

…While food production and lower-skilled roles pay well below average

Lowest-Paying Production and Manufacturing Roles in Muskegon

- Meat and Seafood Processor / Packager: $27,750
- Molding / Casting Worker: $26,400
- Laundry Worker: $25,531
- Baker: $23,994
- Production Worker: $23,802
- Average for All Production Jobs: $45,582
Environmental Scan of Employer Demand for Manufacturing and Production Roles
Muskegon’s Manufacturing and Production Job Demand by the Numbers

• In the past two years, there were 6,555 manufacturing and production job openings in Muskegon.

• Manufacturing and production job demand is 128% more concentrated in Muskegon than the nation overall.

• The average advertised salary for manufacturing and production jobs is $32,405.

• On average, manufacturing and production job listings remain open 34 days – 3 days shorter than the national average.

• 16% of manufacturing and production job openings require at least a bachelor’s degree.
What Manufacturing and Production Jobs Do Employers Demand in Muskegon?

Most-Demanded Production and Manufacturing Roles in Muskegon

<table>
<thead>
<tr>
<th>Role</th>
<th>Total Online Openings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production Worker</td>
<td>1,220</td>
</tr>
<tr>
<td>Manufacturing Machine Operator</td>
<td>807</td>
</tr>
<tr>
<td>Quality Inspector / Technician</td>
<td>430</td>
</tr>
<tr>
<td>Production Supervisor</td>
<td>424</td>
</tr>
<tr>
<td>Welder / Solderer</td>
<td>290</td>
</tr>
<tr>
<td>Machinist</td>
<td>270</td>
</tr>
<tr>
<td>Maintenance / Service Supervisor</td>
<td>198</td>
</tr>
<tr>
<td>General / Electrical Engineering Technician</td>
<td>192</td>
</tr>
<tr>
<td>CNC Operator</td>
<td>173</td>
</tr>
<tr>
<td>Repair / Service Technician</td>
<td>171</td>
</tr>
</tbody>
</table>

Demand is largest in roles related to general production, machining, QA, and maintenance and repair.

Most-Concentrated Production and Manufacturing Roles in Muskegon

<table>
<thead>
<tr>
<th>Role</th>
<th>Per Capita Concentration Relative to National Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tool and Die Maker</td>
<td>1207% More Openings per capital than the national average</td>
</tr>
<tr>
<td>Molding / Casting Worker</td>
<td>739%</td>
</tr>
<tr>
<td>Grinder / Sharpener</td>
<td>715%</td>
</tr>
<tr>
<td>Finisher / Polisher / Buffer</td>
<td>662%</td>
</tr>
<tr>
<td>Engineering Technologist</td>
<td>504%</td>
</tr>
</tbody>
</table>

Demand for tool and die, molding, and grinding and sharpening roles is much more heavily concentrated in Muskegon than nationally.
What are the In-Demand Skills and Certifications for Production Roles?

- Quality assurance, machining, and welding skills are all among the top competencies required across manufacturing and production roles in Muskegon. Key certifications relate to transportation, quality assurance, and HVAC.

<table>
<thead>
<tr>
<th>Key Skills in Manufacturing and Production Roles</th>
</tr>
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<tbody>
<tr>
<td>Computer Numerical Control (CNC)</td>
</tr>
<tr>
<td>Machining and Machine Operation</td>
</tr>
<tr>
<td>Welding</td>
</tr>
<tr>
<td>Quality Assurance and Control</td>
</tr>
<tr>
<td>Calipers</td>
</tr>
<tr>
<td>Supervisory Skills</td>
</tr>
<tr>
<td>Packaging</td>
</tr>
<tr>
<td>Microsoft Excel</td>
</tr>
<tr>
<td>Lean Manufacturing</td>
</tr>
<tr>
<td>Micrometers</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Key Certifications in Manufacturing and Production Roles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forklift Operator Certification</td>
</tr>
<tr>
<td>American Society For Quality Certification</td>
</tr>
<tr>
<td>Commercial Driver’s License</td>
</tr>
<tr>
<td>Certified Quality Engineer</td>
</tr>
<tr>
<td>Automotive Service Excellence Certification</td>
</tr>
<tr>
<td>Quality Management Certification</td>
</tr>
<tr>
<td>HVAC Technician Certification</td>
</tr>
<tr>
<td>Electrician Certification</td>
</tr>
<tr>
<td>Six Sigma Certification</td>
</tr>
<tr>
<td>Certified Quality Technician</td>
</tr>
</tbody>
</table>
What Manufacturing and Production Jobs are Hardest to Fill in Muskegon?

- Welder is the hardest-to-fill manufacturing and production occupation in Muskegon, remaining open 46 days on average – 12 days longer than the regional average.

- Openings for production supervisors and general production workers also remain open longer than the regional average, staying open for 40 days and 37 days, respectively.
Where Are the Jobs? Top Employers and Locations

- Holland is the largest market for Manufacturing and Production jobs in the Muskegon region, followed by Muskegon and Zeeland.

- Key employers range from furniture manufacturers and food producers to multinational industrial manufacturers.

### Top Cities for Manufacturing and Production Jobs in Muskegon

<table>
<thead>
<tr>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>Holland</td>
</tr>
<tr>
<td>Muskegon</td>
</tr>
<tr>
<td>Zeeland</td>
</tr>
<tr>
<td>Grand Haven</td>
</tr>
<tr>
<td>Spring Lake</td>
</tr>
<tr>
<td>Whitehall</td>
</tr>
<tr>
<td>Hudsonville</td>
</tr>
<tr>
<td>Shelby</td>
</tr>
<tr>
<td>Allendale</td>
</tr>
<tr>
<td>Coopersville</td>
</tr>
</tbody>
</table>

### Top Manufacturing and Production Employers in Muskegon

<table>
<thead>
<tr>
<th>Employer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Herman Miller</td>
</tr>
<tr>
<td>Port City Corporation</td>
</tr>
<tr>
<td>Alcoa</td>
</tr>
<tr>
<td>Meijer</td>
</tr>
<tr>
<td>SpartanNash</td>
</tr>
<tr>
<td>Haworth Incorporated</td>
</tr>
<tr>
<td>Tyson Foods Incorporated</td>
</tr>
<tr>
<td>Johnson Controls Incorporated</td>
</tr>
<tr>
<td>Hillshire Brands</td>
</tr>
<tr>
<td>Illinois Tool Works</td>
</tr>
</tbody>
</table>
Manufacturing and Production Career Pathways
Manufacturing and Production Career Pathways

Machining
- Test Technician
  - Quality Inspector
  - Non-Destructive Testing Specialist
- Quality Control Manager

Installation, Maintenance and Repair
- Repair Technician
  - Quality Inspector
  - Non-Destructive Testing Specialist
- HVAC Mechanic/Installer
- Maintenance Supervisor

QA and Testing
- Test Technician
  - Quality Inspector
  - Non-Destructive Testing Specialist
- Quality Control Manager

Muskegon Demand
- Average Advertised Salary
  - Low: $339,000
  - Medium: $402,000
  - High: $465,000
Machining Career Pathway

Machine Operator
- Basic Machine Operation
- Manufacturing Floor Maintenance, Inspection and Cleaning

CNC Operator
- Welding Techniques e.g. MIG, TIG, GMAW, SMAW
- Metallurgy
- X-Rays

Machinist
- Basic CNC
- Grinders
- Drill Presses
- Milling Cutters
- Coordinate Measuring Machines
- Lathes
- Gauges
- Inspection Instruments
- Geometric Dimensioning and Tolerancing (GD&T)

CNC Programmer
- G & M Code
- CAM Tools
- Process Control & Improvement
- Multi-axis Machining
- CAD Software
  - e.g. CATIA, Siemens NX, AutoCAD

Production Supervisor
- Lean Manufacturing
- Six Sigma
- Good Manufacturing Practices (GMP)
- Performance Management
- Operations Management

Certifications to Add
- Forklift Operator Certification
- Machine Operator Certificate
- Forklift Operator Certification
- CNC Machining Certificate
- Machinist Certification
- CNC Machining Certificate
- CNC Programming
- CNC Machinist Certificate
- Six Sigma Certification
- SIX SIGMA GREEN BELT
- SIX SIGMA BLACK BELT
- Project Management Certification (e.g., PMP)
Installation, Maintenance, and Repair Career Pathway

**Repair Technician**
- Repair
- Inspection
- HVAC
- Plumbing
- Schematic Diagrams
- Power Tools
- Machinery
- Test Equipment

**Aircraft Mechanic**
- Repair
- Inspection
- Test Equipment
- Power Tools
- Schematic Diagrams
- Micrometers

**HVAC Mechanic / Installer**
- HVAC
- Ventilation
- Boilers
- Cooling Towers
- Energy Management

**Maintenance Supervisor**
- Supervisory Skills
- Scheduling
- Budgeting
- Planning

**Distinguishing Skills**

**Certifications to Add**
- Automotive Service Excellence (ASE) Certification
- Environmental Protection Agency Certification
- Airframe and Powerplant (A and P) Certification
- Aircraft Mechanic Certification
- Federal Aviation Administration (FAA) Certification
- HVAC Technician Certification (e.g., EPA 608)
- Refrigeration Technician Certification (e.g., CFC Type 2)

**Muskegon Demand**
- Low
- Medium
- High

**Average Advertised Salary**
- Low
- Medium
- High
Quality Assurance and Testing Career Pathway

Quality Inspector
- Inspection
- Quality Assurance and Control
- Welding

Non-Destructive Testing Specialist
- Nondestructive Testing (NDT)
- Quality Assurance and Control
- Welding

Quality Control Manager
- Supervisory Skills
- Planning
- Project Management
- Six Sigma
- Good Manufacturing Practices (GMP)
- ISO 9001 Standards

Test Technician
- Repair
- Programmable Logic Controller (PLC) Programming
- Schematic Diagrams
- Machinery
- Inspection
- Test Equipment

Distinguishing Skills
- American Society For Quality (ASQ) Certification
- Certified Quality Technician
- Inspection Certification

Certifications to Add
- Six Sigma Certification
- Certified Quality Engineer
- Quality Management Certification (e.g., CMQ)
- SIX SIGMA BLACK BELT
- SIX SIGMA GREEN BELT
For More Information, Contact:

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