Scan of Manufacturing and Production Demand in the Westmoreland 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 Westmoreland 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 Westmoreland, pinpoint key opportunities and challenges facing the field, and inform Westmoreland Community College’s training and initiatives that support Westmoreland’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 Westmoreland.
Key Findings

• In 2016, there were **59,406 employed manufacturing and production workers** in Westmoreland. Westmoreland’s largest production jobs are concentrated in roles related to **maintenance, QA, and machining**.

• Over the past two years, there were **15,337 manufacturing and production job openings** in Westmoreland; however, demand for these roles was **22% less concentrated** in Westmoreland than the nation overall.

• Over the next 10 years, manufacturing and production employment is **projected increase slightly in the region, growing 2%**. Westmoreland’s fastest-growing production jobs focus on **CNC, maintenance, and general production**.

• The **average salary for manufacturing and production jobs is $49,572**. Most of the highest-paying roles are related to logistics or supervisory roles.

• **Manufacturing and Production jobs are particularly hard to fill in Westmoreland**. On average, manufacturing and production job listings remain open 42 days – 5 days longer than the national average. Some roles, such as mechanical drafters and machinists, remain open for 60 days or longer.

• **QA, machining, and supervisory skills** are all among the top competencies required across manufacturing and production roles in Westmoreland. Key certifications relate to **HVAC and refrigeration, as well as Six Sigma**.
Current Manufacturing and Production Workforce Profile
Westmoreland’s Manufacturing and Production Workforce by the Numbers

• In 2016, there were 59,406 employed manufacturing and production workers in Westmoreland.

• Over the next 10 years, manufacturing and production jobs in the region are projected to grow 2%.

• The average salary for manufacturing and production jobs is $49,572
Where are the Production jobs today?...

Westmoreland’s largest production jobs are concentrated in maintenance, QA, and machining.

...And where will they be tomorrow?

Westmoreland’s fastest-growing production jobs focus on CNC, maintenance, and general production.

Most of Westmoreland’s fastest-declining production jobs specialize in declining or automatable technologies.
Logistics and Supervisory roles pay best…

Highest-Paying Production and Manufacturing Roles in Westmoreland

<table>
<thead>
<tr>
<th>Role</th>
<th>Average Annual Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality Control Systems Managers</td>
<td>$108,670</td>
</tr>
<tr>
<td>Logistics / Supply Chain Analyst</td>
<td>$74,540</td>
</tr>
<tr>
<td>Logistician / Supply Chain Specialist</td>
<td>$74,540</td>
</tr>
<tr>
<td>Power Distributor / Plant Operator</td>
<td>$70,060</td>
</tr>
<tr>
<td>Maintenance / Service Supervisor</td>
<td>$68,640</td>
</tr>
<tr>
<td>Average for All Production Jobs</td>
<td>$49,572</td>
</tr>
</tbody>
</table>

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

Lowest-Paying Production and Manufacturing Roles in Westmoreland

<table>
<thead>
<tr>
<th>Role</th>
<th>Average Annual Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meat and Seafood Processor / Packager</td>
<td>$26,530</td>
</tr>
<tr>
<td>Furniture Finisher</td>
<td>$26,180</td>
</tr>
<tr>
<td>Sewing Machine Operator</td>
<td>$25,940</td>
</tr>
<tr>
<td>Baker</td>
<td>$24,380</td>
</tr>
<tr>
<td>Laundry Worker</td>
<td>$23,090</td>
</tr>
<tr>
<td>Average for All Production Jobs</td>
<td>$49,572</td>
</tr>
</tbody>
</table>
Environmental Scan of Employer Demand for Manufacturing and Production Roles
Westmoreland’s Manufacturing and Production Job Demand by the Numbers

• In the past two years, there were 15,337 manufacturing and production job openings in Westmoreland.

• Manufacturing and production job demand is 22% less concentrated in Westmoreland than the nation overall.

• The average advertised salary for manufacturing and production jobs is $38,266.

• On average, manufacturing and production job listings remain open 42 days – 5 days longer than the national average.

• 27% of manufacturing and production job openings require at least a bachelor’s degree.
What Manufacturing and Production Jobs Do Employers Demand in Westmoreland?

### Most-Demanded Production and Manufacturing Roles in Westmoreland

<table>
<thead>
<tr>
<th>Role</th>
<th>Total Online Postings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production Worker</td>
<td>2,820</td>
</tr>
<tr>
<td>Repair / Service Technician</td>
<td>1,122</td>
</tr>
<tr>
<td>Manufacturing Machine Operator</td>
<td>993</td>
</tr>
<tr>
<td>Maintenance / Service Supervisor</td>
<td>867</td>
</tr>
<tr>
<td>Quality Inspector / Technician</td>
<td>845</td>
</tr>
<tr>
<td>Production Supervisor</td>
<td>661</td>
</tr>
<tr>
<td>Machinist</td>
<td>602</td>
</tr>
<tr>
<td>General / Electrical Engineering Technician</td>
<td>587</td>
</tr>
<tr>
<td>Mechanical / Electrical Drafter</td>
<td>523</td>
</tr>
<tr>
<td>Quality Control Managers</td>
<td>472</td>
</tr>
</tbody>
</table>

### Most-Concentrated Production and Manufacturing Roles in Westmoreland

- **Grinder / Sharpener**: 84% more openings per capita than the national average.
- **Printer / Copier / Scanner Operator**: 56% concentration.
- **Electronic / Electrical Assembler**: 46% concentration.
- **Machinist**: 36% concentration.
- **Mechanical / Electrical Drafter**: 27% concentration.

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

Demand for grinders and printer operators is much more heavily concentrated in Westmoreland than nationally. However, these are also among the roles projected to decline the fastest.
What are the In-Demand Skills and Certifications for Production Roles?

- QA, machining, and supervisory skills are all among the top competencies required across manufacturing and production roles in Westmoreland. Key certifications relate to HVAC and refrigeration, as well as Six Sigma.

### Key Skills in Manufacturing and Production Roles

- Quality Assurance and Control
- Microsoft Office (e.g. Excel)
- Customer Service
- Machining and Machine Operation
- Supervisory Skills
- Hand Tools
- Computer Numerical Control (CNC)
- Wiring
- Budgeting
- Welding

### Key Certifications in Manufacturing and Production Roles

- Automotive Service Excellence Certification
- Environmental Protection Agency Certification
- Six Sigma Certification
- HVAC Technician Certification
- American Production And Inventory Control Society Certification
- Forklift Operator Certification
- Refrigeration Technician Certification
- SIX SIGMA BLACK BELT
- Professional Engineer
- Soldering Certification
What Manufacturing and Production Jobs are Hardest to Fill in Westmoreland?

- Skilled production roles – such as mechanical drafters and machinists – are among the hardest-to-fill manufacturing in production roles in Westmoreland, remaining open considerably longer than the regional average of 42 days.
- Supervisory roles are also among the hardest-to-fill manufacturing and production roles in Westmoreland. For example, quality control systems managers and production supervisors remain open for 53 days and 48 days, respectively, on average.

![Average Opening Duration](image)
Where Are the Jobs? Top Employers and Locations

- Pittsburgh is the largest market for Manufacturing and Production jobs in Westmoreland, followed by Canonsburg.
- Key employers range from pharmaceutical manufacturers and universities to food producers and industrial conglomerates.

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

<table>
<thead>
<tr>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pittsburgh</td>
</tr>
<tr>
<td>Canonsburg</td>
</tr>
<tr>
<td>Cranberry Township</td>
</tr>
<tr>
<td>Greensburg</td>
</tr>
<tr>
<td>Coraopolis</td>
</tr>
<tr>
<td>New Kensington</td>
</tr>
<tr>
<td>Washington</td>
</tr>
<tr>
<td>West Mifflin</td>
</tr>
<tr>
<td>Butler</td>
</tr>
<tr>
<td>Monroeville</td>
</tr>
</tbody>
</table>

### Top Manufacturing and Production Employers in Westmoreland

<table>
<thead>
<tr>
<th>Employer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bayer Corporation</td>
</tr>
<tr>
<td>H.J. Heinz Company</td>
</tr>
<tr>
<td>University of Pittsburgh Medical Center</td>
</tr>
<tr>
<td>University Of Pittsburgh</td>
</tr>
<tr>
<td>Haemonetics Corporation</td>
</tr>
<tr>
<td>Westinghouse Electric Corporation</td>
</tr>
<tr>
<td>PPG Industries</td>
</tr>
<tr>
<td>84 Lumber</td>
</tr>
<tr>
<td>Cintas</td>
</tr>
<tr>
<td>Siemens</td>
</tr>
</tbody>
</table>
Manufacturing and Production Career Pathways
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Westmoreland Demand

<table>
<thead>
<tr>
<th>Low</th>
<th>Medium</th>
<th>High</th>
</tr>
</thead>
</table>

Average Advertised Salary

<table>
<thead>
<tr>
<th>Low</th>
<th>Medium</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>$$$</td>
<td>$$$</td>
<td>$$$</td>
</tr>
</tbody>
</table>
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
- CNC Machining Certificate

Distinguishing Skills
- OSHA
- ANSI

- Basic Machine Operation
- Advanced Machine Operation
- CNC Programming
- Project Management

Westmoreland Demand
- Low
- Medium
- High

Average Advertised Salary
- Low
- Medium
- High

- Forklift Operator Certification
- Machine Operator Certificate
- 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

Distinguishing Skills
- Repair
- Inspection
- HVAC
- Plumbing
- Schematic Diagrams
- Power Tools
- Machinery
- Test Equipment

Certifications to Add
- Automotive Service Excellence (ASE) Certification
- Environmental Protection Agency Certification

Certifications to Add
- Airframe and Powerplant (A and P) Certification
- Aircraft Mechanic Certification
- Federal Aviation Administration (FAA) Certification

Certifications to Add
- HVAC Technician Certification (e.g., EPA 608)
- Refrigeration Technician Certification (e.g., CFC Type 2)

Aircraft / AP 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

Westmoreland Demand
- Low
- Medium
- High

Average Advertised Salary
- Low
- Medium
- High
QA and Testing Career Pathway

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

Quality Inspector
- Inspection
- Quality Assurance and Control
- Product Testing

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

Distinguishing Skills
- Repair
- Programmable Logic Controller (PLC) Programming
- Schematic Diagrams
- Machinery
- Inspection
- Test Equipment
- Quality Assurance and Control
- Product Testing
- Nondestructive Testing (NDT)
- Welding
- Supervisory Skills
- Planning
- Project Management
- Six Sigma
- Good Manufacturing Practices (GMP)
- ISO 9001 Standards

Certifications to Add
- American Society For Quality (ASQ) Certification
- Certified Quality Technician
- Inspection Certification
- Inspection Certification
- Hazardous Materials Certification
- Inspection Certification
- Hazardous Materials Certification
- Six Sigma Certification
- Certified Quality Engineer
- Quality Management Certification (e.g., CMQ)
- Six Sigma Certification
- Certified Quality Engineer
- Quality Management Certification (e.g., CMQ)
- SIX SIGMA BLACK BELT
- SIX SIGMA GREEN BELT

Westmoreland Demand
- Low
- Medium
- High

Average Advertised Salary
- Low
- Medium
- High
For More Information, Contact:

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