

# THE SKILLS GAP IN PROCESS TECHNOLOGY

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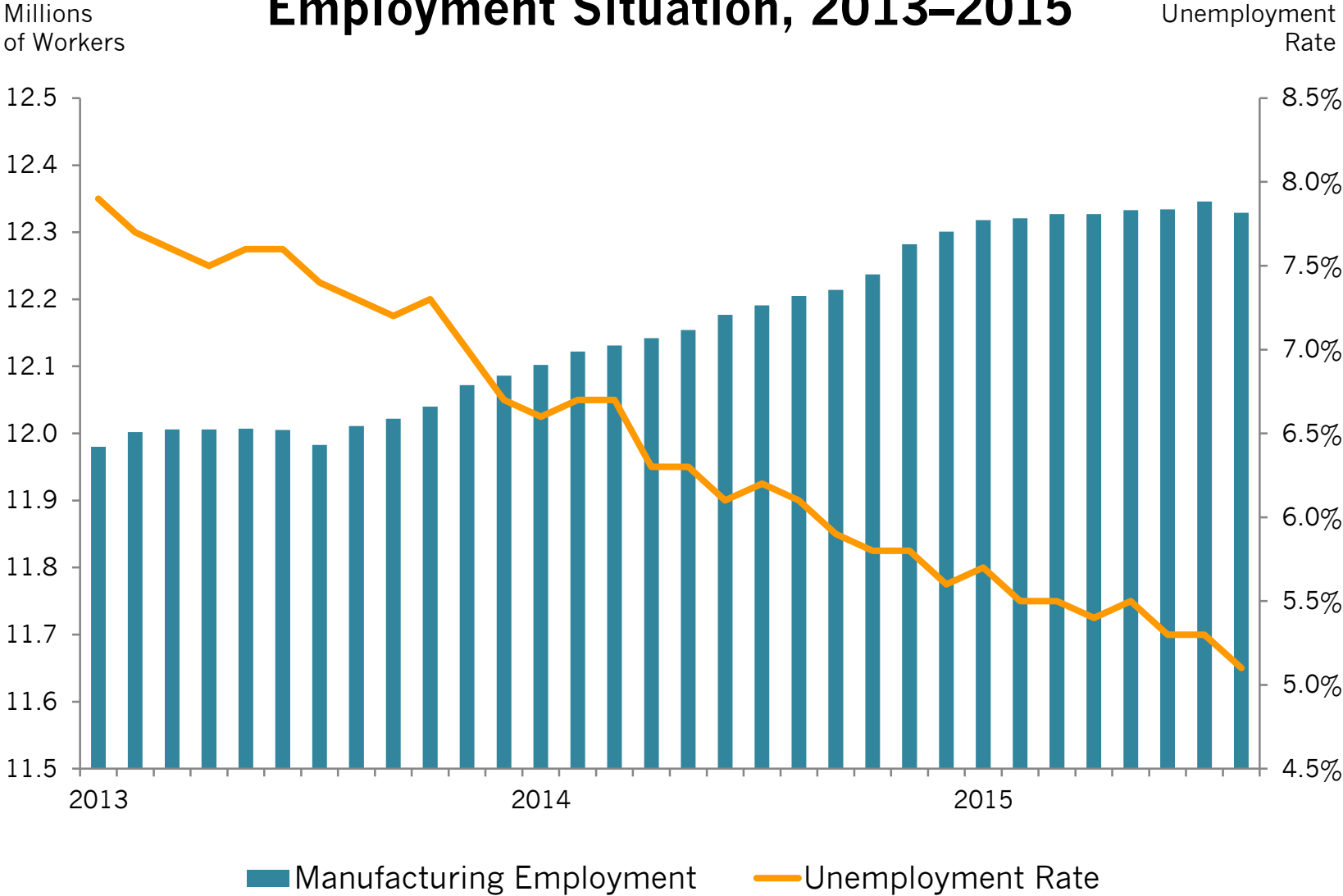
The Manufacturing Institute





# The Manufacturers' 501(c)3

# Employment Situation, 2013–2015



Source: Bureau of Labor Statistics

# Manufacturing Does Matter

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**90%** of Americans believe manufacturing is **very important to economic prosperity**

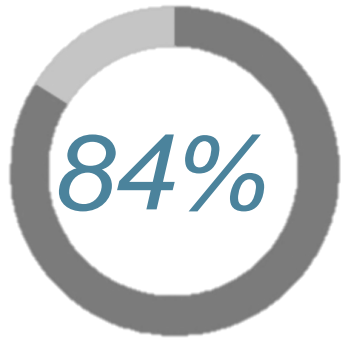
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**If given an opportunity to create 1,000 new jobs in their community, manufacturing tops the list**

- 1 Manufacturing Facility**
2. Technology development center
3. Energy production facility
4. Healthcare facility
5. Retail center
6. Communications hub
7. Financial institution

# Filling Jobs Is Difficult...

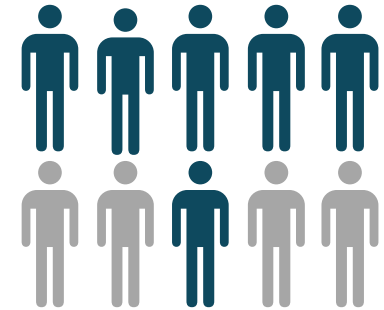
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of executives surveyed agree there is a **talent shortage in U.S. manufacturing**

*SIX out of TEN*

**open skilled production positions**  
are unfilled due to talent shortage



*even when*

**80%** of manufacturers are **willing to pay more than the market rates**

# ...And It's Going to Get More Difficult

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**2.7M** baby boomer retirements

**+ 700K** manufacturing jobs expected from economic expansion

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**3.4M** manufacturing jobs are likely to be needed by 2025

**– 1.4M** jobs are likely to be filled

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**2M** jobs unfilled due to the skills gap

# Process Technology in the Memphis Region

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# Process Technician Position(s)

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Process Technicians manage vital business processes

- Duties vary by industry sector and company
- Job titles vary
- Lack of good data





# In Our Region

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2015-2025 Process Control Tech Occupation Projected % Change Per County				
Region	2015 Jobs	2025 Jobs	Change	% Change
Crittenden County, AR	152	177	25	16.4%
Benton County, MS	<10	<10	Insf. Data	Insf. Data
DeSoto County, MS	374	383	9	2.4%
Marshall County, MS	54	51	(3)	(5.6%)
Tate County, MS	25	22	(3)	(12.0%)
Tunica County, MS	10	14	4	40.0%
Fayette County, TN	96	122	26	27.1%
Shelby County, TN	2,751	2,885	134	4.9%
Tipton County, TN	58	62	4	6.9%
<b>Totals</b>	<b>3,527</b>	<b>3,723</b>	<b>196</b>	<b>5.6%</b>

What the numbers aren't including:

- Impact of retirements (majority in 45-54 age bracket)
- Skill upgrades at all levels

# In Our Region

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## Regional earnings

25th Percentile	50 <sup>th</sup> Percentile	75 <sup>th</sup> Percentile
\$27,300	\$34,200	\$42,600

# Key Steps

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- Define occupations
- Identify competencies
- Influence curriculum and credentials
- Build pathways

# Key Occupations

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- Chemical Plant and System Operators (Operator, Chemical Operator, Process Technician, Process Operator, Operations Technician, Process Development Technician)
- Petroleum Pump System Operators, Refinery Operators, and Gaugers
- Biofuels Processing Technicians
- Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders
- Manufacturing Production Technician, Engineering Technician
- Industrial Engineering Technician, Quality Control Engineering Technician
- Inspectors, Testers, Sorters, Samplers, and Weighers

# Process Technology Pathways

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