

# Manufacturing Myths – Debunked!

- THE TRUTHS ABOUT THE INDUSTRY TODAY -

## Myth #1

U.S. manufacturing is in decline.



## Truth

Employment, shipments, and exports are on the rise.



**Manufacturing is 11% of the U.S. GDP**

when narrowly defined by government statistics including only the value-added of manufacturing facilities



**Manufacturing is 1/3 of the U.S. economy**

when you include facilities **AND** everything they involve:

- Upstream raw materials
- Logistics
- Energy consumed by factories
- Downstream wholesale and retail distribution
- Corporate offices and R&D centers



U.S. is 2<sup>nd</sup> largest manufacturer in the world, responsible for 17% of world manufacturing activity.

**Longest continuous post-war expansion of manufacturing employment** took place between 2010 and 2019 (prior to pandemic), with modest but consistent gains.



**Manufacturers' sales increased by 29%** over the decade 2009 – 2019, and **manufactured exports grew by 51%** during the same period.



## HOW THE MEP NATIONAL NETWORK HELPS

The MEP National Network™, of which KMS is a partner of, contributes to the growth of U.S. manufacturing.



**\$13 Billion**



**105,000 Jobs**

In **FY 2020** alone, the Network helped to generate **\$13 billion** in new and retained sales and create or retain more than **105,000 jobs**.



**\$127 Billion**



**1.1M Jobs**

Since its inception in 1988, the MEP National Network has helped generate over **\$127 billion** in new and retained sales and create or retain over **1.1 million jobs**.

## Myth #2

Manufacturing is a poor career choice.



## Truth

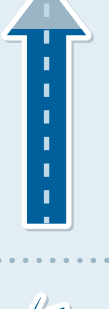
Manufacturing is actually an excellent choice.



## MANUFACTURING JOBS PROVIDE:

**12M**

Employment for over 12 million people, as the 5th largest employment sector in the U.S.



**Path to upward mobility**, since more than 81% of jobs require no work experience for an entry-level position.



Manufacturing employs about 9% of the total workforce in the U.S. but almost 36% of all the engineers in the country.

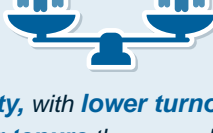


**More in benefits; earning 32% more in benefits per hour** than employees in service industries.



**7% more in salary** than in service industries.

**Salary Premiums** paid to recruit qualified talent (as skilled machinists retire).



**Stability**, with lower turnover and higher tenure than overall private sector non-manufacturing jobs.

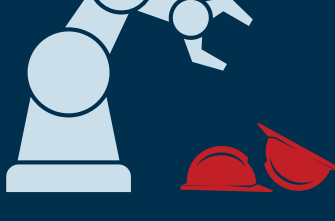
## HOW KANSAS MANUFACTURING SOLUTIONS HELPS



An event that showcases both modern manufacturing and the careers available, **Manufacturing Day** occurs the first Friday of every October and has attracted up to 325,000+ attendees annually across the 50 states and Puerto Rico. To facilitate industry growth in Kansas, **KMS coordinates and promotes events** for this occasion.

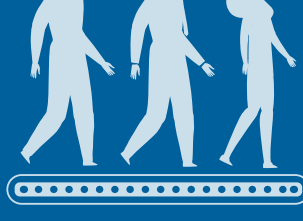
## Myth #3

Automation will eliminate jobs.



## Truth

Jobs are changing, and new skills will be needed along with traditional expertise.



## AUTOMATION AND JOBS



**"The evidence suggests structural unemployment will not increase due to automation."** (Information Technology & Innovation Foundation)



**"These disparate findings suggest that the main impact of automation in the near future may be to cause a major reallocation of jobs."** (VoxEU.org/CEPR)



Automation helps the U.S. compete internationally, and the more successful it is, the more jobs will result.

**Jobs Displaced by Automation:**

**75M**

Net Gain

**Job Growth in New Roles:** (driven by new technology and automation)

**133M**

One projection from 2018\* says that by 2022, 133 million new jobs (worldwide) will be created, more than offsetting the 75 million displaced.

\*Pre-Covid projection of global non-agricultural employment based on World Economic Forum survey

## AUTOMATION AND HUMAN SKILLS



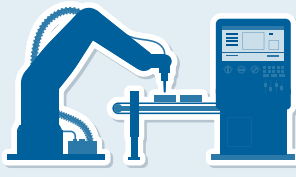
**"Many manufacturers today are turning toward automation to supplement the low-skilled jobs they cannot fill and instead focus their existing workers on jobs that are either higher skilled or require uniquely human skills."** (Deloitte and The Manufacturing Institute)



**"Nearly 70% of manufacturers said they are creating or expanding training programs for their workforce."** (Manufacturing Institute)

## Automation is changing the way manufacturing works:

### Reduced Labor — Tasks being automated



- + Routine
- + Repetitive
- + Predictable

### Increased Labor — Tasks that require humans



- + Problem Solving
- + Adaptability
- + Creative Thinking

### Jobs are increasing in:



- + Data analytics
- + AI and machine learning specialists
- + Software and application development

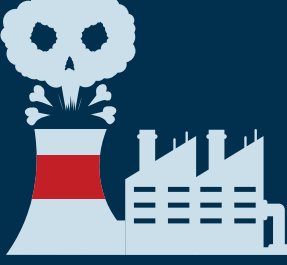
## HOW KANSAS MANUFACTURING SOLUTIONS HELPS



Kansas Manufacturing Solutions helped Mid Star Lab, a manufacturer of custom foot orthotics, **increase production and sales while creating jobs** by utilizing Lean principles.

## Myth #4

Manufacturing is harmful to the environment.



## Truth

In manufacturing, sustainability = profitability.



## THE ADOPTION OF LEAN MANUFACTURING MEANS:

### Higher efficiency



### Cutting down on:



**Raw Material Consumption**



**Energy Usage**



**Waste**



**Pollution**

## SUSTAINABILITY ALLOWS FOR:

### Sustained success over time



### Contributing positively to:



**Workforce**  
Keeping the workplace healthier



**Society**  
Reducing energy consumption



**Environment**  
Keeping air and water cleaner

### Cost savings:



Intelligent lighting systems can save over 40% of energy



Energy management systems to optimize usage can save 30% of energy consumption.

## HOW KMS HELPS



Kansas Manufacturing Solutions helped Leander, LLC optimize the layout of their new plant, **reducing waste and costs, while maximizing the efficiency of their production processes** at the same time.