

# Advanced Manufacturing

**A**dvanced manufacturing companies face complex workforce challenges in an increasingly competitive global marketplace. Registered Apprenticeship is employers' proven solution for recruiting, training, and retaining world-class manufacturing talent in good, quality jobs. In 2021, there were 23,899 registered apprentices in advanced manufacturing occupations, increasing 73% over the last eight years.<sup>1</sup>

## THE NEED FOR REGISTERED APPRENTICESHIP IN ADVANCED MANUFACTURING

The advanced manufacturing industry is critical to our country's economic competitiveness. The challenge? Significant talent shortages are slowing manufacturers' efforts to expand, innovate, and excel. Among these challenges:

- ▶ An aging workforce of highly skilled and experienced workers
- ▶ Attracting talent to emerging manufacturing jobs
- ▶ Investing in talent that can keep pace with the latest technology advances
- ▶ Implementing workforce training models that effectively develop talent

These workforce challenges undermine companies' productivity and profitability. The good news? There is a proven solution to meet employers' talent challenges: **Registered Apprenticeship** is a proven and industry-driven training model that can provide a critical talent pipeline for manufacturers.

In 2021, there were

**23,899**

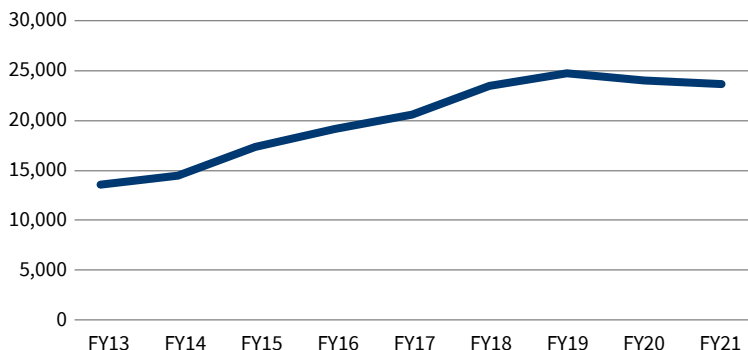
**Apprentices**

in advanced manufacturing occupations

## SNAPSHOT: EXAMPLES OF ADVANCED MANUFACTURING RELATED APPRENTICEABLE OCCUPATIONS

- ▶ Aerospace Engineer
- ▶ CNC Machine Operator
- ▶ Mechanical Engineering Technician
- ▶ Mechatronics Technician
- ▶ Precision Machinist
- ▶ Tool and Die Maker
- ▶ Industrial Manufacturing Technician
- ▶ Maintenance Mechanic
- ▶ Robotics Technician
- ▶ Quality Technician

Active Advanced Manufacturing Apprentices, Fiscal Years 2013–2021



## REGISTERED APPRENTICESHIP: THE TOP TALENT DEVELOPMENT SOLUTION FOR EMPLOYERS

Thousands of manufacturers across the U.S. and among our global competitors use the Registered Apprenticeship training model to recruit, train, and retain workers with the right skills. Registered Apprenticeship has been the most effective training model for enhancing companies' performance and competitiveness.

### WHAT IS REGISTERED APPRENTICESHIP?

Registered Apprenticeship is an industry-driven, high-quality career pathway where employers can develop and prepare their future workforce, and individuals can obtain paid work experience, receive progressive wage increases, classroom instruction, and a portable, nationally-recognized credential. Registered Apprenticeships are industry-vetted and approved and validated by the U.S. Department of Labor or a State Apprenticeship Agency.

*"Through customized training, our apprentices build their skill sets working directly with our equipment, enabling them to become very efficient in supporting the Mack Trucks manufacturing facility as they progress through and complete the program."*—**Thomas Gombos, Maintenance Manager, Mack Trucks Lehigh Valley Operations**



### HOW CAN REGISTERED APPRENTICESHIP HELP COMPANIES?

Advanced manufacturing employers realize several benefits from implementing Registered Apprenticeship programs. Through Registered Apprenticeship, employers will:

- ▶ Customize training to meet the company's needs
- ▶ Recruit and develop a diverse and highly-skilled workforce
- ▶ Improve productivity, profitability, and the company's bottom line
- ▶ Reduce turnover, improve loyalty, and retain top talent
- ▶ Demonstrate investment in the community
- ▶ Create effective and efficient training practices
- ▶ Upskill the company's current workforce
- ▶ Provide pathways for career advancement

Partner with the Office of Apprenticeship, a [U.S. Department of Labor Industry Intermediary](#) or State Apprenticeship Agency and access a nationwide network of expertise, customer service, and support. Our apprenticeship team creates business solutions and helps businesses achieve workforce results quickly.

<sup>1</sup> The numbers represent apprentices associated with the NAICS Codes 31-33

## Explore Registered Apprenticeship Today!

Want to learn more? Visit the U.S. Department of Labor's one-stop source for all things apprenticeship: [www.apprenticeship.gov](http://www.apprenticeship.gov) or email us at [apprenticeship@dol.gov](mailto:apprenticeship@dol.gov).

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