

BUFFALO

MANUFACTURING WORKS

Operated by **EWI**.

Manufacturing is

evolving...

New processes are becoming more mainstream

92%

Over the next 3-5 years **92% of mid-market manufacturers expect to implement advanced manufacturing techniques**¹

Advanced manufacturing tools have the ability to **reduce production costs by**

20%–40%²

By 2025, advanced robots will **boost productivity up to**

30%³

In annual maintenance, repair, and operations savings, it is estimated that additive manufacturing can **provide the aerospace industry up to**

\$3.4 billion⁴

Tried and true processes like machining are being modernized for extended capabilities

Increased feeds and speeds

Extended tool life

Improved surface finish

Reduce burr and chip formation

And materials are **evolving rapidly**

The future of manufacturing depends on a number of technological breakthroughs in robotics, sensors and high-performance computing, to name a few. But nothing will impact how things are made, and what they are capable of, more than the materials manufacturers use to make those things.

—Scientific American⁵

Innovation is a must for companies looking to compete

Buffalo Manufacturing Works helps innovation-driven organizations excel by partnering with their internal manufacturing, engineering and R&D teams to deliver better products, grow, and compete—offering assistance in **four core areas**:

1. Flexible Manufacturing

Developing, testing, and simulating automation, controls and machine vision for agile, collaborative solutions

2. Materials & Testing

Materials processing, characterization and testing for advanced applications

3. Additive Manufacturing

Design innovation, process optimization and improved quality for emerging additive manufacturing technologies

4. Machining & Finishing

Increasing capability and improving speed and quality through innovative machining & finishing technologies

Our **capabilities** include:



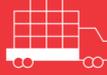
Fundamental Research—addressing critical challenges through cutting-edge university research

Applied Research & Development—innovation solutions through customized applied research and development



Process Excellence—boosting efficiency and increasing revenue with improved workflow and output

Export Assistance—growing your business through international trade



Workforce Development—access to resources needed to upskill your workforce

Our **partners**:



Partnering with **Buffalo Manufacturing Works** gives you unparalleled access to a range of resources. We'll help you gain a competitive advantage by providing the tools you need to grow, improve your bottom line, and compete. **Together, we can build a nationally recognized hub of advanced manufacturing innovation.**

World class technical capabilities that help companies manufacture products faster, better and more cost-effectively

Sources:
¹ <http://documents.nim.org/comm/Advanced-Manufacturing-Techniques-Report.pdf>
² https://www.bcsperspectives.com/content/articles/lean_and_manufacturing_production_why_advanced_manufacturing_boost_productivity/
³ <https://www.bcg.com/media/PressReleaseDetails.aspx?id=1cm:12:181684>
⁴ http://www.pwc.com/us/en/industrial-products/assets/3d-printing-next_manufacturing-pwc.pdf
⁵ <http://www.scientificamerican.com/slideshow/9-materials-that-will-change-manufacturing/>