

# Four benefits of manufacturing automation

U.S. manufacturing accounts for \$2.17 trillion in annual economic activity and more than 98% of U.S. manufacturers qualify as small businesses. Manufacturers must leverage every advantage to remain effective as they face global competition. Manufacturing automation has been an essential part of this.

Automation empowers small American businesses to stand toe-to-toe with entrenched rivals around the globe.

But how does automation facilitate that? Start by focusing on these four benefits.

## 1. Automation means higher productivity

End-to-end factory automation can increase production compared to plants that use only a few automation systems. Equipment can often be kept running for longer periods of time with comparatively little impact on the maintenance outlook.

## 2. Automation means lower overall costs

Through automation, the complex process of fabricating a product can be simplified to its most basic components. Automation systems can be upgraded until they are as efficient as possible: generating little waste heat, using the minimum power and focusing on controlled and precise movements. All this makes manufacturing cheaper, which cuts cost and raises profits.

## 3. Automation means workplace safety

Even the most sophisticated robotic system is useless without human insight to guide it. When automation is deployed in a factory, it can mean team members no longer have to worry about the most dangerous and dirty tasks, as life-threatening processes are often the first to be delegated to robots. That reduces

accidents and helps workers maintain their health over time.

## 4. Automation means high-level focus

Tedious manual labor simply can be left to the machines and allows manufacturing personnel to focus on the best way to improve efficiency on the floor, expand their products' capabilities, and many other engaging tasks.

There's a good reason why manufacturing automation is being adopted from coast to coast: it benefits everyone. Today we're in the midst of a new automation boom that promises to fundamentally transform how manufacturing is done.

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## Bell joins Editorial Advisory Board

**Doug Bell** joined the *Control Engineering* editorial advisory board on March 28 to provide input to editorial staff on editorial content, relevancy, automation market, and audience; to serve as a first-level sounding board for new initiatives and ideas; and to participate in events and contribute editorially.



Bell worked as a control electrician for Crown & Cork Seal for 17 years in Milwaukee, Wis. and then took a corporate job installing controls on production lines, putting up plants, troubleshooting controls and performing every facet of control work. After working for Eaton Cutler-Hammer, he started InterConnecting Automation Inc., which focuses on training people in the AutomationDirect line of automation products. Bell lives in Milwaukee, Wis. [www.controleng.com/EAB](http://www.controleng.com/EAB)

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