

Robotics Loom Larger For Small Businesses

By John F. Neal



Automation is increasingly strengthening small business and providing a much needed competitive edge. At one time, the concept of “robotics and automation” was received with skepticism by small manufacturers. Typical reactions concluded that robotics and automation were “too expensive” or that “robots” were only used by larger companies” or that “a robot couldn’t handle the particular application of a smaller company.” Some small manufacturers simply lacked the trust in the capabilities of a robot, or feared that their employees would start an uprising for fear that a robot would take their jobs.

However, smaller companies are now finding the wisdom in adopting robots. Pressures for increased productivity, gaining a competitive edge, and the fear of being left behind by outsourcing are changing the way that small businesses view robotics and

automation. By using robots, the “little guys” are seeing their businesses strengthened in terms of increased productivity, lower operating costs and healthier bottom lines.

As an example, The Brannock Device Company (Liverpool, NY) has manufactured the foot-measuring device found in most shoe stores since 1927. The Brannock Device has endured the test of time and remained a staple of shoe retailers everywhere. But the growth of low-cost, “knock-off” devices from China and other locations were making it more difficult for The Brannock Device Company to compete. To maintain an edge, the company’s president, Sal Leonardi, had the vision to implement robotics and automation over seven years ago. With only eleven employees, he took on the challenge to increase productivity, retain quality, and strengthen business.

The result? According to Leonardi, “robots have become a valuable tool in our

arsenal to compete. If we were to stay in business, we had to do something radically different. The manufacturing process of the die-cast metal foot-measuring device is very repetitive and quite simple. So, we talked to an integrator and decided on a FANUC robot with a 12-kg payload. We designed the vacuum gripper and the table ourselves making it even easier for our own folks to handle repairs if something should go wrong. We have only been down once in seven years and that was a ‘human error’ problem having to do with battery back-up.”

ABOVE: Penny Rosso, Owner/President of Pen Steel, Inc., stands before a robotic cell with its robot poised to weld a latch assembly used in the trailer industry. Pen Steel designed a jig fixture to weld nine parts at each side station (a total of eighteen parts) compared to a total of only four using previous methods.