Precision COBOTICS
Your Partner in Accessible Automation™

148 W. Airport Road
Lititz, PA 17543
www.precisioncobotics.com

Robotics WorX Program: A plan to increase manufacturing capacity and solve the workforce challenge in PA

Tremendous funding and mindshare are being dedicated to addressing the challenges of careers in STEM, workforce development, and youth engagement in manufacturing.

These challenges have only intensified following the global COVID-19 pandemic and heightened conflicts worldwide. As a result, there has been an increased demand for domestically manufactured products in the United States.

Unfortunately, this request to increase capacity comes when our technical workforce is at a record low. Moreover, this greatly stifles manufacturer's ability to produce products to grow local economies and secure domestic supplies.

To solve this workforce shortage problem, many have begun implementing automation to secure the supply chain and grow an employment base while creating higher-paying positions where humans work with robots, not like them. By deploying automation, companies can produce products more efficiently, boosting revenue and capacity.

Concurrent with this, the K-12 education system has worked to emphasize STEM in the classroom. However, many of these programs are built around non-industrial platforms that teach STEM skills but do not help students understand how these skills apply to real-world settings or relate to exciting and profitable careers.

The convergence of new and accessible automation technologies and a new STEM-capable workforce is a tremendous opportunity for economic growth in the manufacturing industry. Sponsored by a seed grant from Lancaster STEM and the Lancaster County Workforce Development Board, Precision Cobotics, Inc. and Millersville University have created the *Robotics WorX* (*Workforce Development and Career Exploration in Robotics Engineering*) program to capitalize on this opportunity.

The Robotics WorX program aims to take real-world manufacturing problems and provide them to college and high school students to solve in the *Precision Cobotics Solutions Lab* at Millersville University. Students in this program will intern with Precision Cobotics, Inc. for 6-15 hours/week and work in teams of 3-5 students. Additionally, the program offers single "3-hour" sessions where students can work for a day in the lab alongside interns supporting their work to test and solve real-world application challenges.

By engaging our future workforce with real-world STEM challenges, they are prepared to make an impact AND allow manufacturers to enable increased manufacturing capacity in the US.