



COBOTS ADDRESS HIRING CHALLENGES

The labor shortage has become a popular topic of conversation in the pandemic era; but it's not a new phenomenon. In industrial settings, one existed well before the COVID-19 pandemic.

Baby boomers make up a large portion of the manufacturing workforce. Now, they're retiring, leaving gaps in the skilled workforce that aren't easy to fill. Combine that with a pandemic, and you're facing an even bigger hurdle.

All sectors are struggling to find not just qualified workers, but ones wanting to work. The longtime skills gap that affected manufacturing and other related industries has only been exacerbated in the past two years, leaving employers scrambling to fill positions and keep production moving on schedule.

Welding shops are among those facing one of the biggest challenges in finding, skilled reliable workers. As some shop owners are learning, automation can provide an efficient, quality solution to hiring and production struggles.

Others, however, view robotic solutions as something daunting and impossible, citing cost, the learning curve and the need for shop mobility as barriers to adoption. This particularly holds true for high-mix job shops that need to remain nimble and efficient. These concerns are valid when it comes to traditional automation. However, new mobile robotic welding systems featuring collaborative robots (cobots) are changing these mindsets.

COBOTS ADDRESS HIRING CHALLENGES

What are Cobots?

Unlike traditional robotic cells, cobots are designed to work alongside human beings without the need for traditional, protective fencing. Small, lightweight and easy to assemble, cobots are safer than traditional robots and mobile. They can be used throughout a shop for various parts lines, as opposed to larger, static, traditional automated cell that are programmed for one specific function.

This affordable solution for manufacturing automation opens up new opportunities for optimizing welding processes, filling employment gaps and increasing overall production efficiency, even in smaller shops where space is at a premium.

Easy to Learn-You don't need to be a welder or a programmer to use a Cooper Cobot.

When it comes to a learning curve, manufacturers do not need to worry; cobot welding technology is easy to program and intuitive to use. It's designed for an operator with any level of robotics experience and allows for teaching at the torch. Workers can quickly learn how to run a cobot welding unit using tablet-based teaching pendants.

The tablet pendants feature icon-based, timeline programming. Users simply swipe icons in or out of the timeline to adjust programming. They also can tap the icons to modify them. Less-experienced, touchscreen-savvy workers will have no problem adapting to this interface, while more seasoned welders will be able to pick it up easily thanks to how user friendly and familiar it is.

Lead-through teaching at the torch allows users to fluidly guide the cobot arm to the correct location by hand, using a torch-mounted enabling device. The torch handle manipulates the finishing push and weld angles when in the joint.

Push buttons designed directly into the torch reduce cumbersome programming and record points directly into the timeline, allowing operators to quickly create welding programs without line by line code. Record approach points with one button and weld start/end ones with the other. The buttons illuminate to indicate that points have been recorded.

EMPLOYMENT EXPECTATIONS FOR WELDING



DOORS OPENING

30,000 new welders must enter the workforce each year to keep up with demand and offset retirements.

372K

Approximately 372,000 welding jobs will be needed over the next 10 years.



of current working welders are **OVER** forty-five years of age.

Data provided by National Association of Manufacturers and American Welding Society

COBOTS ADDRESS HIRING CHALLENGES

Flexible Work Zones

Once a mobile cobot system is programmed, and workers understand how to run it, they'll also appreciate its design from a work-flow aspect.

Flexible cobot systems feature modular tooling tables and components that allow you to easily move them around the space, bringing the cobot to every part. The lightweight design and intrinsic safety allows for multiple mounting options, while a small footprint means less of a capital investment and also less floor space, making it ideal for shops of all sizes to explore the possibility of automation.

Conclusion

For more information on Cooper cobots visit our website lincolnelectric.com/cobot or call +1-888-935-3878.



CUSTOMER ASSISTANCE POLICY The Lincoln Electric Company is manufacturing and selling high quality welding equipment, consumables, and cutting equipment. Our challenge is to meet the needs of our customers and to exceed their expectations. On occasion, purchasers may ask Lincoln Electric for information or advice about their use of our products. Our employees respond to inquiries to the best of their ability based on information provided to them by the customers and the knowledge they may have concerning the application. Our employees, however, are not in a position to verify the information provided or to evaluate the engineering requirements for the particular weldment. Accordingly, Lincoln Electric does not warrant or guarantee or assume any liability with respect to such information or advice. Moreover, the provision of such information or advice does not create, expand, or alter any warranty on our products. Any express or implied warranty that might arise from the information or advice, including any implied warranty of merchantability or any warranty of fitness for any customers' particular purpose is specifically disclaimed.

Lincoln Electric is a responsive manufacturer, but the selection and use of specific products sold by Lincoln Electric is solely within the control of, and remains the sole responsibility of the customer. Many variables beyond the control of Lincoln Electric affect the results obtained in applying these types of fabrication methods and service requirements.

Subject to Change – This information is accurate to the best of our knowledge at the time of printing. Please refer to www.lincolnelectric.com for any updated information.

All trademarks and registered trademarks are the property of their respective owners.

