

5 myths about collaborative robots

Universal Robots is a leading pioneer in the field of collaborative industrial robots called cobots. Since the company sold its first commercial model in 2008, it has grown exponentially year over year and has to date sold more than 25,000 robot arms around the world. This growth is also reflected by the increased adoption of collaborative robots across almost all industries as both large corporations as well as small and medium enterprises discover the benefits of this technology.

However, the increase of cobots has also given rise to a series of misconceptions about them based on a lack of understand the real benefits and implications behind their use in various industries. Below are some of the most common misconceptions of cobots.

Myth #1: Cobots are dangerous

In contrast to traditional industrial robots, cobots are by their basic concept as collaborative tools, designed to operate safely alongside human workers without the need for protective fencing (subject to risk assessment). In Universal Robots' case the cobot has 7 fixed safety functions (in accordance with ISO 13849) and 8 adjustable safety limits (ISO 15066) built in which means it will not pose a health or safety risk to people working by their side.

Myth #2: Robots replace jobs

Only 10% of jobs are fully automatable, the majority still require the dexterity, and the ability to solve problems and make creative decisions that only humans can provide. Robots not only create jobs, by increasing productivity, but also create better jobs, by relieving human workers from tedious, dangerous or repetitive tasks and allowing them to take on new roles and acquire new skills. Furthermore, the robotics industry itself is predicted to generate 2 million new jobs globally over the next 3 years.

Myth #3: Cobots are difficult to install and maintain

Weighing as little as 11kgs, cobots are compact, lightweight, easy to install and require minimal maintenance. With an average set up period of half a day, they can be quickly deployed without the need to change the production layout, and redeployed between tasks where changeover times can be reduced by as much as 50%.

Myth #4: Automation with robots is only for complex, large-scale production

Cobots are designed to be simple, precise and easy to install in almost any kind of process. They are ideal for small to medium sized companies for whom traditional industrial robots have always been too bulky and expensive to even consider. They allow the automation of uncomplicated yet repetitive or strenuous tasks such as pick and place, screw driving, packaging and palletizing, gluing and welding etc.

Myth #5: Cobots are expensive

Cobots are cheaper than traditional industrial robots and do not need expensive specialist technicians or major infrastructural changes to install, making them highly cost-effective. They can be redeployed to carry out different production tasks and operate around the clock, reducing production costs by up to 20% and offering a ROI in less than a year.