

Beyond the Cobot Buzz:

The Right Robot for Each Job

As you research your automation options, it's hard to ignore the cobot buzz. Since collaborative robots burst on the scene nearly a decade ago, they've made automation accessible and affordable for many organizations for whom traditional robotics were out of reach. And that's generated a lot of excitement.

But automating appropriately means evaluating your specific situation to make the best choice. The industry is changing rapidly and new robotic capabilities are blurring the lines between collaborative and industrial robots. At the same time, standards organizations are hurrying to create guidelines to keep workers safe as they interact with robots in a wide range of applications and environments.

This cheat sheet will help you go beyond the buzz to compare collaborative robots and traditional industrial robots, and dispel some commonly held misconceptions.



If you need...	...consider a traditional industrial robot	...consider a collaborative robot ("cobot")
High-volume, high-speed production	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Similar throughput as a human worker	<input type="checkbox"/>	<input checked="" type="checkbox"/>
High payload or very long reach, especially at high speed	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Ability to program and set robot up in-house	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Ability to easily redeploy robot to different processes/tasks	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Extremely high accuracy, including at high speed	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Minimal changes to existing production layout	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Human workers to enter the robot cell to complete their tasks	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Integration options with other machines and robots	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Low initial cost and payback in under a year	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Ability to run processes with few or no employees	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Automation of processes or products that won't change over time	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>



The Truth Behind 5 Cobot Myths



1

Cobots are not industrial robots

Cobots were designed to be lightweight and easy to use, but today's cobots are also powerful industrial tools that can be integrated with existing machinery and other robots through PLCs and sophisticated programming software.

2

Cobots are the only robots that can work collaboratively with humans

Almost any robot can claim to be collaborative with the appropriate safety mechanisms in place (per the ISO/TS 15066 standard). But cobots are the only robots that were designed specifically to work alongside humans, and that also provide the versatility, user-friendliness, small footprint, and affordability that help define collaborative robotics.

3

Cobots are always safe to use next to human workers

Every automated application where humans are present requires a risk assessment—and that includes cobots. Based on the assessment, a collaborative application may still require safety mechanisms such as light curtains, safety mats, or reduced robot speed. But cobots are designed to be used within a collaborative workspace and have built-in safety mechanisms to support this use. The vast majority of Universal Robots cobots are used without safety cages.

4

Implementing cobots means I won't need human workers

The need for completely worker-free, "lights-out" automation is rare, especially for small and mid-sized manufacturers. With cobots, manufacturers can reduce the number of human workers required for repetitive or injury-prone tasks and redeploy them into higher-value jobs.

5

Cobots operate faster than human workers.

Because cobots are intended to work safely alongside humans, they're designed to perform tasks at about the same speed as human workers, with about the same throughput. Unlike humans, however, cobots can perform the same task consistently without stopping or slowing down over time, which typically increases productivity and quality.



Ready to Get Started?

Once you've explored all your robotic options, see how easy it is to get started with cobots from Universal Robots, the company that pioneered the technology and continues to lead the market around the world.

Download our ebook "Get Started with Cobots in 10 Easy Steps."



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