UNIVERSAL ROBOTS
Robotics as it should be
Simple • Flexible • Affordable

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18 months | AVERAGE PAYBACK PERIOD

Robotics Is Finally Within Your Reach

Universal Robots offers significant productivity and safety advantages, even for small operations. You get the fastest return in the industry for your automation investment.

Easy Programming
Patented technology lets operators with no programming experience quickly set up and operate our robots with intuitive, 3D visualization. Simply move the robot arm to desired waypoints or touch the arrow keys on the easy-to-use touchscreen tablet.

Fastest Payback in the Industry
Universal Robots gives you all the advantages of advanced robotic automation, with none of the traditional added costs associated with robot programming, set-up, and dedicated, shielded work cells. Finally, robotic automation is affordable for small and medium sized enterprises.

Collaborative & Safe
Now you can replace human operators in dirty, dangerous, and dull jobs to reduce repetitive strain and accidental injuries. Eighty percent of the thousands of UR robots worldwide operate with no safety guarding (after risk assessment), right beside human operators. The safety system of our robots is approved and certified by TÜV (The German Technical Inspection Association).

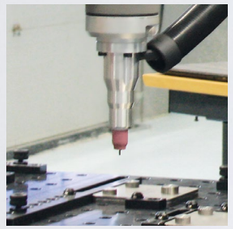
Fast Set-Up
Universal Robots has revolutionized robot set-up, reducing typical robotic deployment measured in weeks to a matter of hours. The average set-up time reported by our customers is only half a day. The out-of-box experience for an untrained operator to unpack the robot, mount it, and program the first simple task is typically less than an hour.

Flexible Re-Deployment
Don't be limited by dedicated robotics. Universal Robots are lightweight, space-saving, and easy to re-deploy to multiple applications without changing your production layout. Moving the robot to new processes is fast and easy, giving you the agility to automate almost any manual task, including those with small batches or fast change-overs. The robot is able to re-use programs for recurrent tasks.

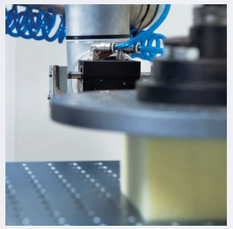
What Can You Automate?

If you've always thought robotic automation was beyond your reach, it's time to look again. Our collaborative robots fit into any size production environment. Get a competitive edge by using our flexible, user-friendly robots for small-batch, mixed-product assembly and materials handling. With an average payback period of only 195 days, what could you automate?

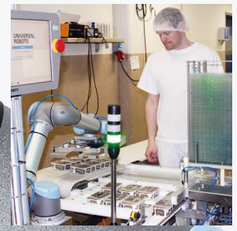
Welding



Materials Testing



Packaging & Palletizing

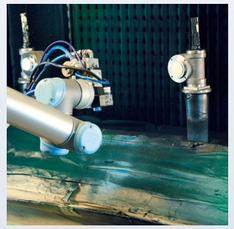


Machine Tending

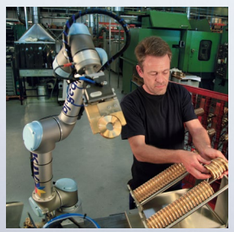
Assembly

Food Handling

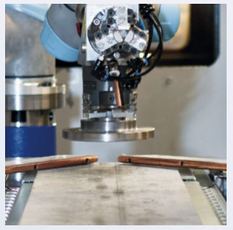
Painting



Pick & Place



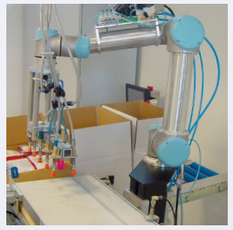
Polishing



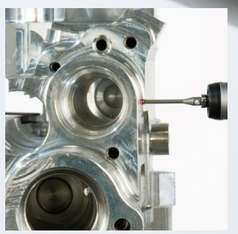
Gluing

Photo: BMW Group

Medical Processing



Quality Inspection



6-axis robot arm	UR5	UR10
Weight	18.4 kg / 40.6 lbs	28.9 kg/63.7 lbs
Payload	5 kg / 11 lbs	10 kg / 22 lbs
Reach	850 mm / 33.5 in	1300 mm / 51.2 in
Footprint	149 mm / 5.9 in	190 mm / 7.5 in

Meet Your New Robot Colleague

Force Control for Adaptive Safety

If the robots come into contact with a person, our patented technology limits the forces at contact. The robots can also be programmed to operate in reduced mode when a human enters the robot's work area and resume full speed when the person leaves.

"Before, you had to put your hands close to the brake press. There's always a risk of an accident happening. But with the Universal Robots, there is no chance of anyone getting injured."

Richard Clive, machine operator at Canadian shelving system manufacturer Etalex, says the UR10 has made the workplace "100% safer".

Precision Handling for Complex Applications

UR robot arms are quick and dexterous, operating at 1 m/s. (39.4 in/sec) with the ability to move each of the six joints 180° per second. The UR robot's repeatability is +/- 0.1 mm (.004 in) for quick-precision handling. True Absolute Encoders acquire absolute position immediately upon power-up, enabling automatic startup and easier integration into other machinery.

"We opted for the UR5 robot due to its unique features including the robot's ability to stay in the same position even when it is switched off. This is particularly important when using robots for testing the trajectory of hand movements in interventions requiring precision, accuracy, and safety."

Grzegorz Karpiel Ph.D. at AGH University of Science and Technology in Poland where the UR5 introduces stem cells into the body much more precisely than possible with the human hand.

Portability for Agile Production

Taking a robot out of its safety cage allows unmatched automation flexibility. Our lightweight robot arms are easily picked up and redeployed for other production tasks.

"Safety, mobility, and flexibility are crucial for us. We don't need to fence it in like a normal robot. And we can easily move it to different jobs, without the need for a programmer spending three days coding, plus three mechanics and a crane to move the robot."

Bo Detlefsen, factory manager at Danish glass manufacturer Gern Glas.

Dependability for Optimized Production

Minimum rated life for UR robots is 35,000 hours running with full payload and maximum speed. Replacing a joint can be done in less than one hour. Robot arms can withstand significant environmental impact and changes in temperature.

"Our facility operates 24/6. Finding the right skilled labor is becoming more and more challenging in Singapore and the cost of labor has also been steadily rising. We have to automate repetitive tasks in order to keep costs low."

William Kuek, operations manager with Sky Engineering in Singapore that now has the luxury of having one man tending two CNC machines at a time after deploying a UR robot.

We Put Robotics Within Reach

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