



PRODUCTS+  
APPLICATIONS



START  
PRODUCTION  
FASTER

LEAN   
ROBOTICS

# PLUG + PLAY COMPONENTS

HAND-E



2F-85



2F-140



3F



EPICK



AIRPICK



WRIST CAMERA



FORCE TORQUE SENSOR



## SOFTWARE



## APPLICATION KIT

SURFACE FINISHING KIT



INSIGHTS



# APPLICATION SOLUTIONS

Robot not included

## PALLETIZING SOLUTION

The Robotiq Palletizing Solution redefines ease of use for automated palletizing platforms. Create your program in minutes—directly on the teach pendant—to automatically generate all robot movements and trajectories.

Elevate your workforce with easy-to-use robot solutions that do the work for you.



## SCREWDRIVING SOLUTION

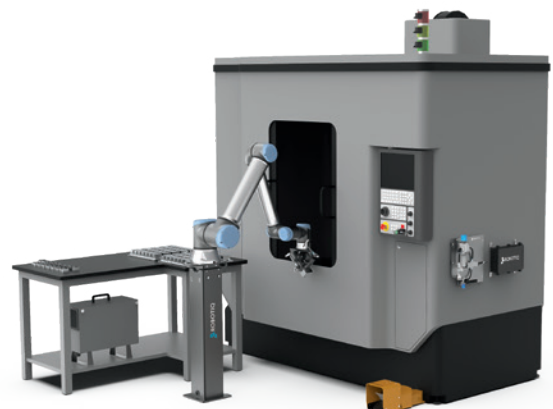
The Robotiq Screwdriving Solution gets the work done right in simple small-screw assemblies.

Thanks to the 5-minute changeovers it enables, manufacturers can produce multiple products per assembly line.

## MACHINE TENDING SOLUTION

Getting robots up and running is complex and can leave you feeling overwhelmed. With the Machine Tending Solution, we deliver peace of mind that your machines will always be running with accessible automation.

Increase your machine's capacity and reduce downtime with an easy-to-use Robotiq solution that does the work for you.



# WHO WE ARE

Manufacturers struggle to put robots to work in their factories because it's still too costly and too complicated. Robotiq's tools and know-how simplify collaborative robot applications, so factories can start production faster. Robotiq works with a global network of connected robot experts supporting their local manufacturers.

# OUR MISSION

Free human hands from repetitive tasks

# AT A GLANCE

12,000+ Hands Freed



300+ Channel partners globally



# LEAN ROBOTICS

Save time with a **step-by-step methodology** that helps you go from a manual task to a robotic one.

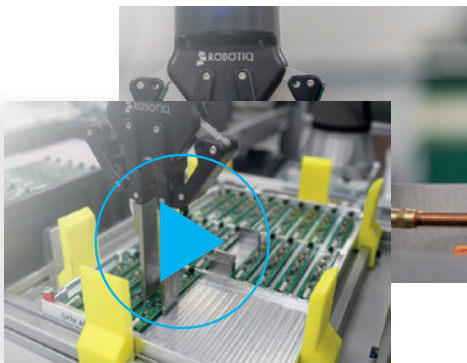


# RESOURCES



Empower yourself with Robotiq products and cobot applications, using the only elearning platform integrating Lean Robotics concepts.

[elearning.robotiq.com](http://elearning.robotiq.com)



## Case Studies

There's nothing like real life examples to see the difference Robotiq Plug + Play Components make. Watch how companies, big and small, are deploying robots in their factories and how they improved their business with Robotiq.

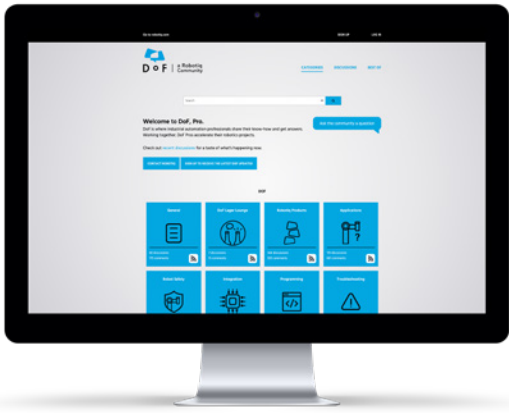
[robotiq.com/resource-center/case-studies](http://robotiq.com/resource-center/case-studies)

## eBooks

We love writing about different aspects of robotics and automation. In fact, we've written dozens of eBooks, all available for **free** in our resource center.

[robotiq.com/resource-center/ebooks](http://robotiq.com/resource-center/ebooks)





### Get technical insights from cobot experts

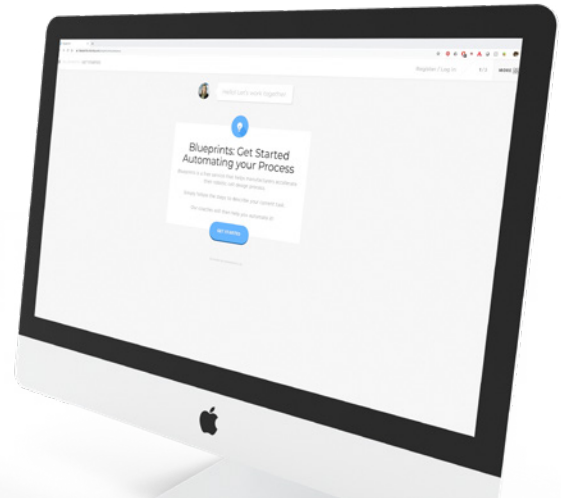
DoF is where industrial automation professionals share their know-how and get answers. Working together, DoF Pros accelerate their robotics projects.

[dof.robotiq.com](http://dof.robotiq.com)

## Ready to automate?

Blueprints is a **free service** that helps manufacturers accelerate their robotic cell process.

1. Access [blueprints.robotiq.com](http://blueprints.robotiq.com) to describe and document your current task.
2. Our integration coaches will help you automate it.





# THE ROBOTIQ

- › **Factory proven** hardware
- › The most **user-friendly software** for cobots
- › **Product synergy** between each component
- › **10 years of experience** in cobot applications
- › **99% satisfaction rate** in proof-of-concept and support services

**48H**

**LEADTIME**

# DIFFERENCE



# APPLICATION SOLUTIONS



# PALLETIZING SOLUTION

Automation should simplify your life. Not make it more complicated.

**AX Series**   **PE Series**



## IT'S ALL CONNECTED

No need to design or program the connection between the robot controller and hardware; we've done it.

All the elements included in the box are connected, so you don't have to spend any time on this.

## HIGH PERFORMANCE

Earn an ROI faster than with other cobot solutions, because of the high performance cycle time.

What makes it perform so well? The Robotiq software generates optimized cobot motions based on the pallet layout. It also synchronizes motion control of the cobot and 7th axis for the AX Series. Plus, seamless movements mean a longer life cycle for your cobot.

## FITS EASILY WITHIN YOUR EXISTING FLOOR PLAN

The Robotiq Palletizing Solution fits easily within your existing floor plan, given its small footprint. No need to reorganize your floor layout around a central robot.

## SAFETY FIRST

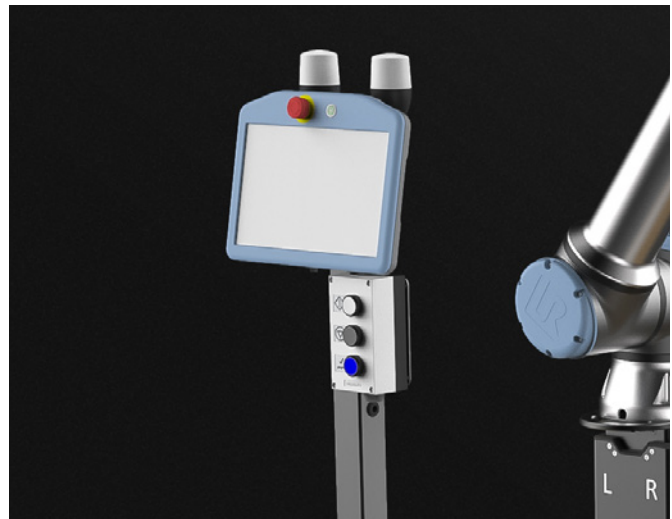
Because safety is crucial, we've built an environment for safe integration. We also support third-party safeguard devices.



AX Series fully integrated vertical axis



PE Series manually adjustable pedestal



PE Series teach pendant stand and operator box


# WHAT'S THE DIFFERENCE?



Max pallet height:  
2750 mm  
108 in.

**AX Series**

Fully integrated vertical axis.  
Teach pendant support.



Max pallet height:  
1500 mm  
60 in.

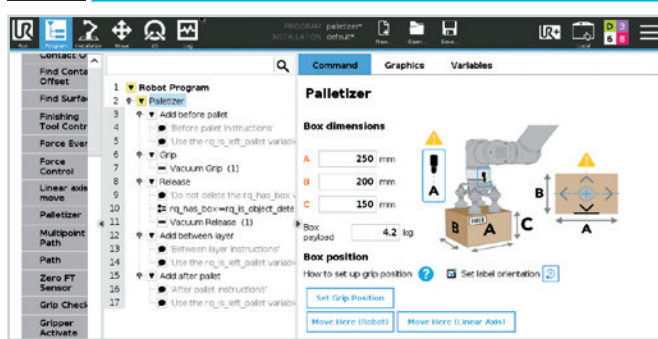
**PE Series**

Manually adjustable pedestal.  
Teach pendant stand.  
Operator box.

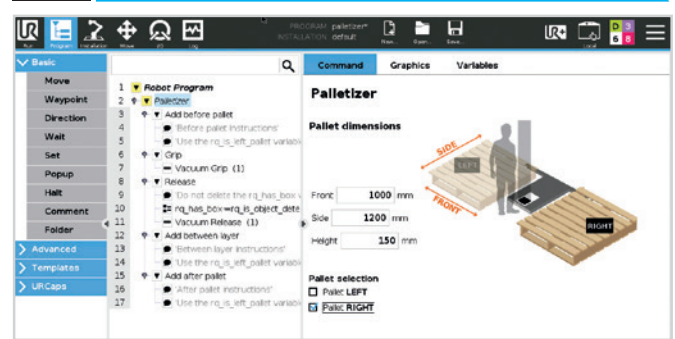
# SET UP YOUR APPLICATION IN 3 EASY STEPS

All you need to do is create the pallet pattern to automatically generate and optimize all trajectories and robot movements.

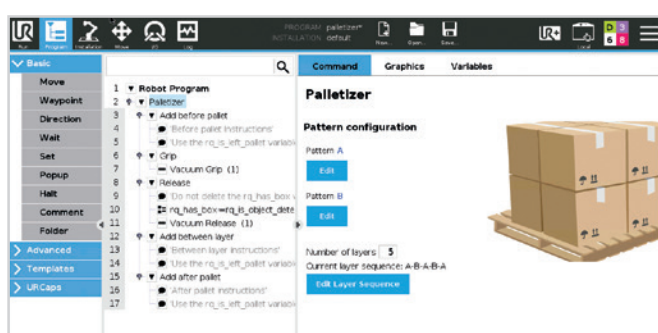
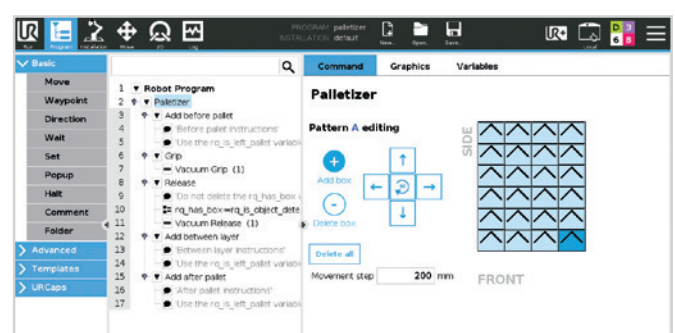
## 1 ENTER BOX DIMENSIONS & WEIGHT



## 2 ENTER PALLET DIMENSIONS



## 3 SET PALLET PATTERN

# CONFIGURATOR

**Still not sure our solution is for you?  
Easily validate product fit for your application.**

Plus, find out whether the AX Series or PE Series is a better fit for you.

### All you need:

1. Box dimensions, weight and orientation
2. Pallet dimensions
3. Pallet pattern

Validate KPIs and solution fit right from the start with your own data!



## SPECIFICATIONS

Box	AX Series	PE Series	Pallet	AX Series	PE Series
Max payload with EOAT	Up to 16 kg Up to 35 lb		Pallet dimensions – width	from 300 to 1219 mm from 12 to 48 in.	
Max box throughput	Up to 13 cycles/min*		Pallet dimensions – depth	from 300 to 1219 mm from 12 to 48 in.	
Min box dimensions	50 x 50 x 50 mm 2 x 2 x 2 in.		Pallet height (empty)	min 50 mm min 2 in.	
			Pallet height (filled)	max 2750 mm max 108 in.	max 1500 mm max 60 in.
			Number of box patterns	Two max	

\*Depending on box weight, dimensions, and surface, as well as pallet dimensions and layout.

## SKUs

<p><b>SOL-PAL-UR-1500</b></p>	<p>ROBOTIQ PALLETIZING SOL AX-SERIES</p>	<p><b>ROBOTIQ PALLETIZING SOLUTION AX-SERIES</b>  <b>*NO GRIPPER INCLUDED IN THIS SKU*</b></p> <ul style="list-style-type: none"> <li>1 x 7th axis base including: <ul style="list-style-type: none"> <li>1 x Mechanically welded assembly</li> <li>1 x Vertical axis 1500mm</li> <li>1 x Motor</li> <li>1 x Control Motion Box (PLC, Drive, safety relay)</li> <li>4 x Pallet sensors</li> <li>2 x Beacon Lights for status</li> <li>1 x Cable management system</li> </ul> </li> <li>1 x Box detection sensor</li> <li>1 x Material Handling Copilot software dongle license</li> </ul> <p>Used for robots:</p> <ul style="list-style-type: none"> <li>UR10 CB-Series and e-Series</li> </ul>
<p><b>SOL-PAL-UR-PDSTL</b></p>	<p>ROBOTIQ PALLETIZING SOL PE-SERIES</p>	<p><b>ROBOTIQ PALLETIZING SOLUTION PEDESTAL PE-SERIES</b>  <b>*NO GRIPPER INCLUDED IN THIS SKU*</b></p> <ul style="list-style-type: none"> <li>1 x pedestal base including: <ul style="list-style-type: none"> <li>1 x Mechanically welded assembly</li> <li>1 x Control Box (PLC)</li> <li>4 x Pallet sensors</li> <li>2 x Status Lights with 10m cable</li> <li>1 x Teach pendant holder with operator buttons</li> <li>1 x Cable management system</li> </ul> </li> <li>1 x Box detection sensor</li> <li>1 x Material Handling Copilot software dongle license</li> </ul> <p>Used for robots:</p> <ul style="list-style-type: none"> <li>UR10, UR10e and UR16e</li> </ul>
<p><b>SOL-PAL-UR-VAC-1500</b></p>	<p>ROBOTIQ PALLETIZING SOL 1.5 M / AIRPICK</p>	<p><b>ROBOTIQ PALLETIZING SOLUTION 1.5 M WITH AIRPICK VACUUM GRIPPER</b></p> <ul style="list-style-type: none"> <li>1 x 7th axis base including: <ul style="list-style-type: none"> <li>1 x Mechanically welded assembly</li> <li>1 x Vertical axis 1500mm</li> <li>1 x Motor</li> <li>1 x Control Motion Box (PLC, Drive, safety relay)</li> <li>4 x Pallet sensors</li> <li>2 x Beacon Lights for status</li> <li>1 x Cable management system</li> </ul> </li> <li>1 x Box detection sensor</li> <li>1 x Extra reach bracket</li> <li>1 x Vacuum Gripper kit (Airpick, suction cups, brackets for 2 or 4 cups)</li> <li>1 x Air tube 8mm</li> <li>1 x Gripper coupling kit</li> <li>1 x Material Handling Copilot software dongle license</li> </ul> <p>Used for robots:</p> <ul style="list-style-type: none"> <li>UR10 CB-Series and e-Series</li> </ul>

**SOL-PAL-UR-VAC-PDSTL**

ROBOTIQ PALLETIZING SOL  
PDSTL / AIRPICK

**ROBOTIQ PALLETIZING SOLUTION  
PEDESTAL WITH AIRPICK VACUUM GRIPPER**

- 1 x pedestal base including:
  - 1 x Mechanically welded assembly
  - 1 x Control Box (PLC)
  - 4 x Pallet sensors
  - 2 x Status Lights with 10m cable
  - 1 x Teach pendant holder with operator buttons
  - 1 x Cable management system
- 1 x Box detection sensor
- 1 x Extra reach bracket
- 1 x Vacuum Gripper kit  
(Airpick, suction cups, brackets for 2 or 4 cups)
- 1 x Air tube 8mm
- 1 x Gripper coupling kit
- 1 x Material Handling Copilot software dongle license

Used for robots:

- UR10, UR10e and UR16e

**PAL-UR-VAC-1500-DEMO**

DEMO ROBOTIQ PALLETIZING  
SOLUTION 1.5M

**DEMO OF ROBOTIQ PALLETIZING SOLUTION  
1.5 M WITH AIRPICK VACUUM GRIPPER AX-SERIES**

- 1 x 7th axis base including:
  - 1 x Mechanically welded assembly
  - 1 x Vertical axis 1500mm
  - 1 x Motor
  - 1 x Control Motion Box  
(PLC, Drive, safety relay)
  - 4 x Pallet sensors
  - 2 x Beacon Lights for status
  - 1 x Cable management system
- 1 x Box detection sensor
- 1 x Extra reach bracket
- 1 x Vacuum Gripper kit  
(Airpick, suction cups, brackets for 2 or 4 cups)
- 1 x Air tube 8mm
- 1 x Gripper coupling kit
- 1 x Material Handling Copilot software dongle license

Used for robots:

- UR10 CB-Series and e-Series

**PAL-UR-VAC-PDSTL-DEMO**

DEMO ROBOTIQ PALLETIZING  
SOLUTION PDSTL

**DEMO OF ROBOTIQ PALLETIZING SOLUTION  
PEDESTAL WITH AIRPICK VACUUM GRIPPER  
PE-SERIES**

- 1 x pedestal base including:
  - 1 x Mechanically welded assembly
  - 1 x Control Box (PLC)
  - 4 x Pallet sensors
  - 2 x Status Lights with 10m cable
  - 1 x Teach pendant holder with operator buttons
  - 1 x Cable management system
- 1 x Box detection sensor
- 1 x Extra reach bracket
- 1 x Vacuum Gripper kit  
(Airpick, suction cups, brackets for 2 or 4 cups)
- 1 x Air tube 8mm
- 1 x Gripper coupling kit
- 1 x Material Handling Copilot software dongle license

Used for robots:

- UR10, UR10e and UR16e

# ROBOTIQ SCREWDRIVING SOLUTION

## Elevate your workforce

- Consistent screwdriving around the clock.
- 5-min production changeovers.
- Complete solution designed for flexible automation of your screwdriving tasks.



## Fewer injuries and a happier workforce

When you automate a screwdriving task, you keep employees from harm and can redirect them to value-added tasks. Elevate your workforce with a simple and easy-to-use automation solution.

# CONSISTENT SCREWDRIVING AROUND THE CLOCK

- Free workers for higher-value tasks
- Reduce repetitive strain injuries
- Improve product quality
- Solve labor shortages



## A single fastening solution to handle production changeovers **in small-screw assembly**

Deploy and master your robotic screwdriving application by adding Robotiq Screwdriving Solution to a UR cobot. So intuitive, no robotics experience is required.

Get a simple, cost-effective automation solution, and say hello to consistent screwdriving around the clock.

## Designed for **flexible automation**

- Buy "off the shelf"
- Automate easily, without massive investment
- Intuitive to deploy and duplicate
- 5-min production changeovers

### **Screwdriving Fit Tool**

<https://links.robotiq.com/screwdrivingfittool>

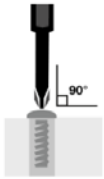


# PROGRAM YOUR APPLICATION IN 2 EASY STEPS

1

## PICK SCREW COMMAND

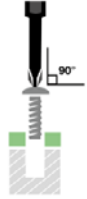
Command	Graphics	Variables
<b>Pick Screw</b>		
Select the digital inputs of the Screw Feeder.		
Feeder status	digital_in[1]	<input checked="" type="checkbox"/>
Screw ready	digital_in[0]	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> Retry on failure		
Slightly insert the screwdriving bit in the screw drive and tap on Set pick position.		
<input type="button" value="Set pick position"/> <input type="button" value="Move to pick pos"/>		
The approach position is preset with a 10 mm offset.		
<input type="button" value="Move to approach"/>		
Tap the Test button to cycle through the Pick Screw program.		
<input type="button" value="Test"/>		



2

## DRIVE SCREW COMMAND

Command	Graphics	Variables
<b>Drive Screw</b>		
Stop condition	Torque (metr...)	1.0 Nm
Tool speed		500 RPM
Force applied on screw		10.0 N
<input type="button" value="Teach"/> <input type="button" value="Test"/>		
<input checked="" type="checkbox"/> Advanced settings:		
Angle before ramp down		0 deg
<input type="checkbox"/> Left-Hand Threads		
Error Conditions		
<input type="checkbox"/> Retry on failure		
<input type="checkbox"/> Distance tolerance (±)		5.0 mm
<input checked="" type="checkbox"/> Timeout		10.0 s



**Control the screwdriver** directly from the UR Toolbar to use, test or set it.

**Seamlessly integrate** the force sensing, vacuum, cobot, screwdriver, and screw feeder.

**Automatically apply error-proofing functions** to improve productivity and quality.

## SCREWDRIVER

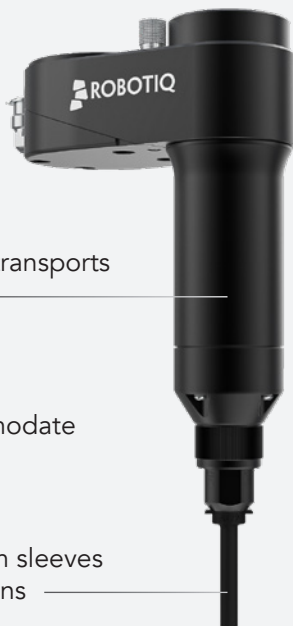
No external controller

Compact and lightweight

Robust vacuum system transports screws of any material

Off-the-shelf compliant vacuum sleeves accommodate your part tolerances

3.5-inch bits and vacuum sleeves for hard-to-reach locations



## SCREW FEEDER

No additional parts needed to adapt to various screw sizes

300-cc screw chamber volume

Dual sensor indicates **screw ready** and **screw cleared from workspace**

Mounting bracket included

Robust industrial exterior finish



Intuitive adjustment with real-time confirmation

## SPECIFICATIONS

Screwdriver SD-100	Min	Typical	Max
Torque range	0.5 Nm 4.5 in-lb	-	4 Nm 35 in-lb
Torque precision	-	±10% <sup>1</sup>	-
Screw diameter	M2.5 #3	-	M5 #10
Speed	1 RPM	-	500 RPM
Air consumption	-	65 L/min	-
Weight	1.5 kg 3.3 lb		
Dimensions	272 mm x 143.5 mm x 75 mm 10 3/4 x 5 5/8 x 3 in		
Warranty	2M cycles or 1 year under normal operation		
ESD-safe	Yes		

1. Value at initial factory calibration. Torque precision typically increases when calibrated in operating conditions, depending on joint materials.

Screw Feeder SF-300	Min	Max
Screw diameter	M2.5 #3	M5 #10
Screw length	6 mm <sup>1</sup> 1/4 in	25 mm 1 in
Screw head height	-	5 mm 3/16 in
Typical feed rate	-	3 s per screw
Screw chamber volume	300 cc	
Dimensions (W x D x H)	157 mm x 286 mm x 171 mm 6 3/16 x 11 1/4 x 6 3/4 in	
Power supply	120/220V AC to 24V DC	
Weight	5.2 kg 11.4 lb	
Warranty	2M cycles or 1 year under normal operation	
ESD-safe	Yes	

1. For socket head screws, the minimum screw length is 10mm. Please validate with your Robotiq representative for shorter screws.

## OVERVIEW

Feature	What is it?	Advantage
<b>Error-proofing</b>	<p>Pre-programmed error-detection and recovery functions:</p> <ul style="list-style-type: none"> <li>• Screw presence detection.</li> <li>• Torque and screw position control.</li> <li>• OK/Not OK confirmation.</li> </ul>	<ul style="list-style-type: none"> <li>• Ensures correct torque is applied.</li> <li>• Prevents screw transport failures.</li> <li>• Prevents fastening failures.</li> <li>• Saves programming time.</li> </ul>
<b>Vacuum transportation system</b>	<p>Integrated vacuum system that allows for reliable screw transport while ensuring maximal slender reach.</p>	<ul style="list-style-type: none"> <li>• Allows the robot to validate screw presence at all times.</li> <li>• Allows the system to transport screws of any material.</li> <li>• Requires no customization.</li> <li>• Enables maximal reach into tight spaces.</li> </ul>
<b>One-SKU solution</b>	<p>With one SKU, you get the screwdriver, screw feeder, screwdriver bits and vacuum sleeves, screwdriving URCap, and the latest force-sensing technology.</p>	<ul style="list-style-type: none"> <li>• Simplifies ordering.</li> <li>• Simplifies tracking.</li> </ul>
<b>Dual sensors in screw feeder</b>	<p>Dual sensor indicates both screw ready and screw cleared from workspace.</p>	<ul style="list-style-type: none"> <li>• Prevent pick command from activating if a screw is not ready.</li> <li>• Avoid collisions.</li> <li>• Coordinate robot and screw feeder movements.</li> </ul>
<b>Automated communication between every components</b>	<p>Getting separate components (screw feeder, screwdriver, robot, and more) to communicate has never been easier.</p>	<ul style="list-style-type: none"> <li>• Simple programming to help you master your processes.</li> <li>• Decrease deployment time.</li> </ul>
<b>Designed to reach tight spaces</b>	<p>We've designed a compact and lightweight screwdriver with flexible vacuum sleeves for optimum screwdriving.</p>	<ul style="list-style-type: none"> <li>• Allows screwdriving in chamber holes.</li> <li>• Allows screwdriving in tight spaces.</li> </ul>
<b>Open program tree</b>	<p>Robotiq Screwdriving URCap integrates the force sensing and force control functions to automatically program a pick and a screw, but the program tree is open for you to develop any advanced programming sequence.</p>	<ul style="list-style-type: none"> <li>• Adapt the solution to fit your unique application.</li> </ul>

# SERVICES

At Robotiq, we strive to free more human hands from repetitive tasks. To do so, we offer tools and services to empower you to deploy your project on your own and master your processes.

## SCREWDRIVING PROOF OF CONCEPT

Our team of coaches is here to help you prove that our solution can work for your application, as well as avoid technical issues and simplify your introduction to the robot world.

### Examples services:

- Demonstrate application fit
- Validate cycle time
- Demonstrate repeatability

## REMOTE AND ONSITE TRAININGS FOR ROBOTIQ SCREWDRIVING SOLUTION

Our training aims to fast-track your introduction to the ever-growing collaborative robot industry.

- Intro to cobots
- Solution installation
- Solution operation
- Troubleshooting and maintenance
- Calibration
- Force Copilot for Assembly



<p><b>SOL-SDS-CB-D1F3-IH</b></p>	<p>Screwdriving Sol. CB-Series Imp. Hex</p>	<p>Robotiq Screwdriving Solution for CB-Series Robots with Imperial Hex Socket Bit Starting Kit</p> <p>Complete Solution that Includes:</p> <ul style="list-style-type: none"> <li>• SD-100 Screwdriver Basic Kit</li> <li>• SF-300 Screw Feeder Basic Kit</li> <li>• FT 300-S Force Torque Sensor Kit</li> <li>• Imperial Hex Socket Screwdriving Bit Starting Kit (5/64, 7/64, 3/32 in.)</li> </ul>
<p><b>SOL-SDS-CB-D1F3-MH</b></p>	<p>Screwdriving Sol. CB-Series Met. Hex</p>	<p>Robotiq Screwdriving Solution for CB-Series Robots with Metric Hex Socket Screwdriving Bit Starting Kit</p> <p>Complete Solution that Includes:</p> <ul style="list-style-type: none"> <li>• SD-100 Screwdriver Basic Kit</li> <li>• SF-300 Screw Feeder Basic Kit</li> <li>• FT 300-S Force Torque Sensor Kit</li> <li>• Metric Hex Socket Screwdriving Bit Starting Kit (2, 2.5, 3 mm)</li> </ul>
<p><b>SOL-SDS-CB-D1F3-P</b></p>	<p>Screwdriving Sol. CB-Series Phillips</p>	<p>Robotiq Screwdriving Solution for CB-Series Robots with Phillips Screwdriving Bit Starting Kit</p> <p>Complete Solution that Includes:</p> <ul style="list-style-type: none"> <li>• SD-100 Screwdriver Basic Kit</li> <li>• SF-300 Screw Feeder Basic Kit</li> <li>• FT 300-S Force Torque Sensor Kit</li> <li>• Phillips Screwdriving Bit Starting Kit (PH1 &amp; PH2)</li> </ul>
<p><b>SOL-SDS-CB-D1F3-T</b></p>	<p>Screwdriving Sol. CB-Series Torx®</p>	<p>Robotiq Screwdriving Solution for CB-Series Robots with Torx® Screwdriving Bit Starting Kit</p> <p>Complete Solution that Includes:</p> <ul style="list-style-type: none"> <li>• SD-100 Screwdriver Basic Kit</li> <li>• SF-300 Screw Feeder Basic Kit</li> <li>• FT 300-S Force Torque Sensor Kit</li> <li>• Torx® Screwdriving Bit Starting Kit (T8, T10, T15, T20)</li> </ul>
<p><b>SOL-SDS-ES-D1F3-IH</b></p>	<p>Screwdriving Sol. e-Series Imp. Hex</p>	<p>Robotiq Screwdriving Solution for e-Series Robots with Imperial Hex Socket Bit Starting Kit</p> <p>Complete Solution that Includes:</p> <ul style="list-style-type: none"> <li>• SD-100 Screwdriver Basic Kit</li> <li>• SF-300 Screw Feeder Basic Kit</li> <li>• Force Copilot Software</li> <li>• Imperial Hex Socket Screwdriving Bit Starting Kit (5/64, 7/64, 3/32 in.)</li> </ul>
<p><b>SOL-SDS-ES-D1F3-MH</b></p>	<p>Screwdriving Sol. e-Series Metric HS</p>	<p>Robotiq Screwdriving Solution for e-Series Robots with Metric Hex Socket Screwdriving Bit Starting Kit</p> <p>Complete Solution that Includes:</p> <ul style="list-style-type: none"> <li>• SD-100 Screwdriver Basic Kit</li> <li>• SF-300 Screw Feeder Basic Kit</li> <li>• Force Copilot</li> <li>• Metric Hex Socket Screwdriving Bit Starting Kit (2, 2.5, 3 mm)</li> </ul>

## SKUs

<p><b>SOL-SDS-ES-D1F3-P</b></p>	<p>Screwdriving Sol. e-Series Phillips</p>	<p>Robotiq Screwdriving Solution for e-Series Robots with Phillips Screwdriving Bit Starting Kit</p> <p>Complete Solution that Includes:</p> <ul style="list-style-type: none"> <li>• SD-100 Screwdriver Basic Kit</li> <li>• SF-300 Screw Feeder Basic Kit</li> <li>• Force Copilot Software</li> <li>• Phillips Screwdriving Bit Starting Kit (PH1 &amp; PH2)</li> </ul>
<p><b>SOL-SDS-ES-D1F3-T</b></p>	<p>Screwdriving Sol. e-Series Torx®</p>	<p>Robotiq Screwdriving Solution for e-Series Robots with Torx® Screwdriving Bit Starting Kit</p> <p>Complete Solution that Includes:</p> <ul style="list-style-type: none"> <li>• SD-100 Screwdriver Basic Kit</li> <li>• SF-300 Screw Feeder Basic Kit</li> <li>• Force Copilot Software</li> <li>• Torx® Screwdriving Bit Starting Kit (T8, T10, T15, T20)</li> </ul>
<p><b>SOL-SDS-SD100</b></p>	<p>SD-100 Screwdriver Basic Kit</p>	<p>SD-100 Screwdriver Basic Kit</p> <p>Including:</p> <ul style="list-style-type: none"> <li>• SD-100 Screwdriver</li> <li>• Cables, Hose and Mechanical Coupling</li> <li>• Complete Vacuum Sleeve Kit</li> </ul> <p>Note:</p> <ul style="list-style-type: none"> <li>• Force Copilot Software (NOT included in this kit) is required to operate</li> <li>• No Screw Feeder Included (See our Complete Screwdriving Solutions)</li> <li>• No Screwdriver Bit Included</li> <li>• No Vacuum Regulator Included</li> </ul>
<p><b>SOL-SDS-SF300</b></p>	<p>SF-300 Screw Feeder Basic Kit</p>	<p>SF-300 Screw Feeder Basic Kit</p> <p>Including:</p> <ul style="list-style-type: none"> <li>• SF-300 Screw Feeder</li> <li>• Power Supply, Cables and Fixing Brackets</li> </ul> <p>Note:</p> <ul style="list-style-type: none"> <li>• No Screwdriver Included (See Our Complete Screwdriving Solutions)</li> </ul>

**DEMO**

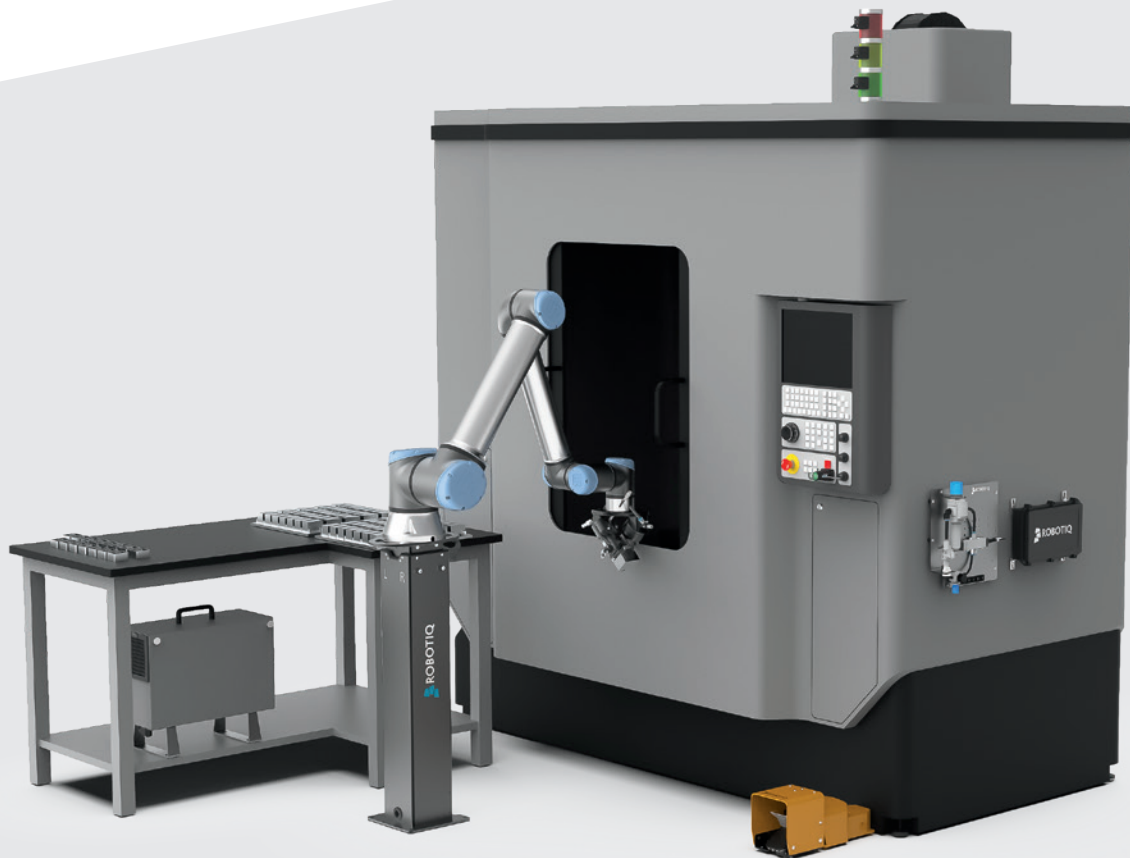
<p><b>SOL-SDS-ES-D1F3-DEMO</b></p>	<p>Robotiq Screwdriving Solution - Demo Kit</p>	<p>Demo Kit: Robotiq Screwdriving Solution for e-Series Robots</p> <p>Complete Solution that Includes:</p> <ul style="list-style-type: none"><li>• SD-100 Screwdriver Basic Kit</li><li>• SF-300 Screw Feeder Basic Kit</li><li>• Force Copilot Software</li><li>• Demo Parts and Screws</li><li>• Phillips Screwdriving Bit Starting Kit (PH1 &amp; PH2)</li><li>• Torx® Screwdriving Bit Starting Kit (T8, T10, T15, T20)</li><li>• Metric Hex Socket Screwdriving Bit Starting Kit (2, 2.5, 3 mm)</li><li>• Imperial Hex Socket Screwdriving Bit Starting Kit (5/64, 7/64, 3/32 in.)</li></ul> <p>Note: not suitable for CB-Series Robots (FT 300-S Force Torque Sensor Demo Kit must be purchased separately)</p>
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# MACHINE TENDING *SOLUTION*

Automation should simplify your life. Not make it more complicated.



# Keep chips flying

Getting robots up and running is complex and can leave you feeling overwhelmed. With the Machine Tending Solution, we deliver peace of mind that your machines will always keep running through accessible automation.



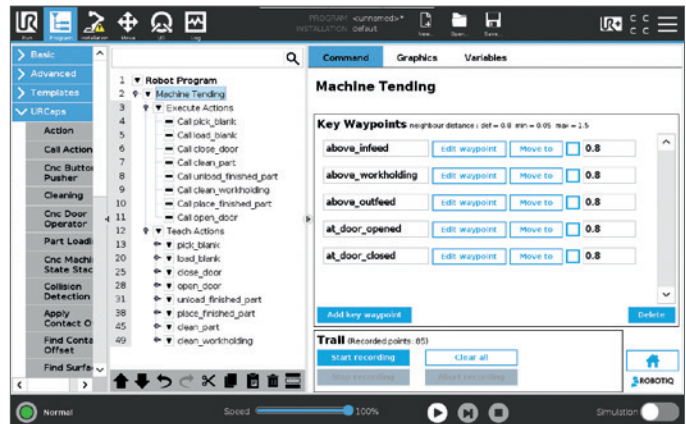
**Increase your machine's capacity and reduce downtime** with an easy to use Robotiq solution that does the work for you.

Create programs 75% faster than with traditional programming, thanks to guidance on setting key waypoints and simple action menus.



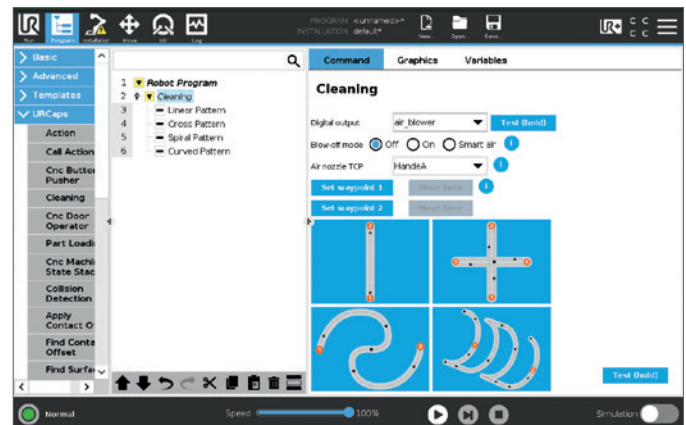
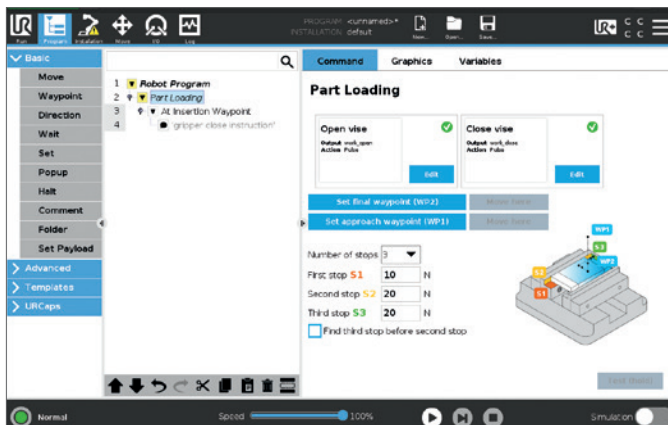
## 1 SET KEY WAYPOINTS

Once they're set, they become reference points for your operations.



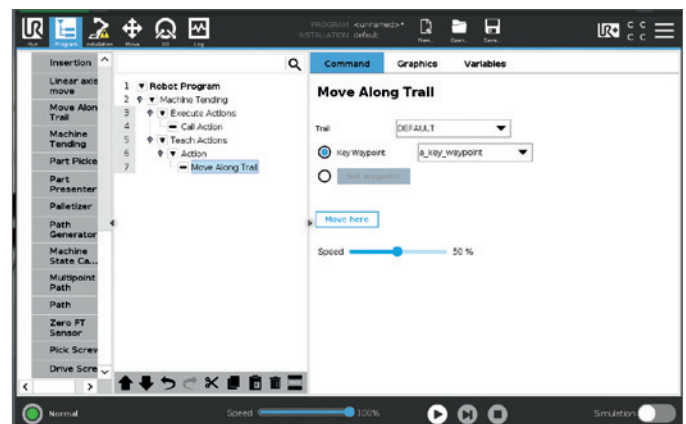
## 2 REFINE OPERATIONS

Use our action menus and adapt the solution to your needs.



## 3 CREATE YOUR SMART MOVES

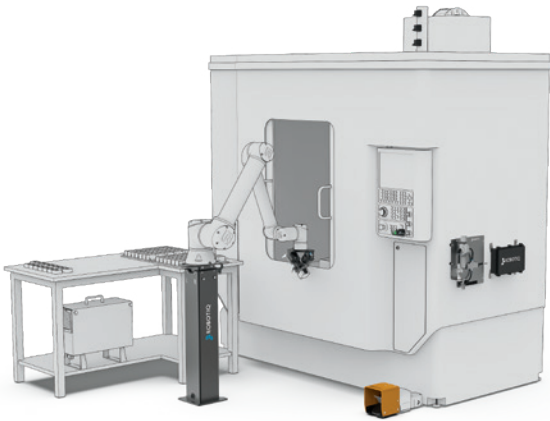
Machine Tending Copilot creates optimized movements between your key waypoints, finding the best path through the pre-defined flyzone and automatically avoiding collisions within the workcell.



## IT COULDN'T BE EASIER!

Instead of hard-wiring the machine like with traditional automation, our communication modules are non-invasive and do not require installation by certified technicians

The solution can be deployed in 2–3 hours.



	Single gripper	Double gripper
System core	<ul style="list-style-type: none"> <li>Machine Tending Copilot software</li> <li>Robotiq MT controller</li> <li>Pneumatic panel</li> <li>Button Activator</li> <li>Air nozzle kit</li> </ul>	
Gripper	<ul style="list-style-type: none"> <li>Hand-E adaptive gripper</li> <li>MT fingertips starting kit</li> </ul>	<ul style="list-style-type: none"> <li>2x Hand-E adaptive grippers</li> <li>2x MT fingertips starting kit</li> <li>Dual bracket + New compact dual Hand-E bracket</li> </ul>
Machine interface		<ul style="list-style-type: none"> <li>Stacklight detector</li> <li>Footswitch activator (if lathe)</li> </ul>
Add-ons		<ul style="list-style-type: none"> <li>Robotiq Wrist Camera</li> <li>Robotiq adjustable pedestal</li> </ul>



Press buttons on the HMI



Monitor machine status



Control workholding

### Robotiq Wrist Camera (Optional)



Ideal for faster blank programming and picking parts in an unstructured environment.

- CAD file import teaching (.dxf)
- Automatic part teaching (user defined arbitrary shape)
- Parametric part teaching (circle, ring, square, rectangle)
- Edge editing, object color and clearance validation
- Automatic and manual camera parameters: exposure, focus, LED lighting, white balance

## SKUs

<b>SOL-MT-ES-DUAL-HND</b>	Machine Tending Solution-Dual Hand-E	<ul style="list-style-type: none"> <li>• 1 x Machine Tending Copilot for UR E-Series</li> <li>• 1 x Button Activator</li> <li>• 1 x Air Nozzle Kit</li> <li>• 2 x Machine Tending Fingertips starting kit</li> <li>• 1 x Robotiq Machine Tending Controller</li> <li>• 1 x Pneumatic Panel</li> <li>• 1 x Dual Hand-E Gripper kit</li> <li>• 1 x Compact dual Hand-E bracket</li> <li>• 1 x Installation Hardware</li> <li>• 1 x Quick Start Guide</li> </ul> Compatible with UR Eseries
<b>SOL-MT-ES-SINGLE-HND</b>	Machine Tending Solution-Single Hand-E	<ul style="list-style-type: none"> <li>• 1 x Machine Tending Copilot for UR E-Series</li> <li>• 1 x Button Activator</li> <li>• 1 x Air Nozzle Kit</li> <li>• 1 x Machine Tending Fingertips starting kit</li> <li>• 1 x Robotiq Machine Tending Controller</li> <li>• 1 x Pneumatic Panel</li> <li>• 1 x Hand-E Gripper</li> <li>• 1 x Installation Hardware</li> <li>• 1 x Quick Start Guide</li> </ul> Compatible with UR Eseries

## MACHINE INTERFACE

<b>SOL-MT-FOOT-ACT</b>	Footswitch activator	<ul style="list-style-type: none"> <li>• 1 x Footswitch Actuator</li> <li>• 1 x 5m Pneumatic Tubing</li> <li>• 1 x Pneumatic Valve kit</li> <li>• 1 x Installation Hardware</li> </ul> Requires a kit of the MACHINE TENDING SOLUTION family
<b>SOL-MT-STK-LGHT</b>	Stack light detector	<ul style="list-style-type: none"> <li>• 3 x Photo Sensors</li> <li>• 3 x 2.5m Extension Cable</li> <li>• 1 x Installation Hardware</li> </ul> Requires a kit of the MACHINE TENDING SOLUTION family

## ADD-ONS

<b>RWC5-UR-KIT</b>	Wrist Camera Kit for UR	<ul style="list-style-type: none"> <li>• 1 x Robotiq Wrist Camera unit</li> <li>• 1 x Universal Robot pattern tool plate</li> <li>• 1 x USB Stick</li> <li>• 1 x USB Software Licence Dongle</li> <li>• 1 x 4 ports USB hub</li> <li>• 1 x Calibration Board</li> <li>• 1 x Colored background</li> <li>• 1 x Wrist Camera Tags (5)</li> </ul>
<b>SOL-MT-BUT-ACT-KIT</b>	Button activator kit	<ul style="list-style-type: none"> <li>• 1 x Button Activator</li> <li>• 1 x 5m Pneumatic Tubing</li> <li>• 1 x Pneumatic Components</li> </ul> <p>Note: This kit is intended as a 2<sup>nd</sup> button activator when required</p>
<b>SOL-ROBOT-ADJ-PED</b>	Robotiq adjustable pedestal	<ul style="list-style-type: none"> <li>• 1 x Adjustable Pedestal</li> <li>• 1 x Installation Hardware</li> </ul> <p>Compatible with UR5, UR5e, UR10, UR10e, UR16e</p>
<b>SOL-ROBOT-CBL-MNGT-UR5</b> <b>SOL-ROBOT-CBL-MNGT-UR10</b> <b>SOL-ROBOT-CBL-MNGT-UR16</b>	Cable management sleeve kit for universal robots	<ul style="list-style-type: none"> <li>• 2 x Flexible Wrap-Around Robotic Cable Management.</li> </ul> <p>Compatible with UR5, UR5e, UR10, UR10e, UR16e</p>

## DEMO

<b>SOL-MT-DEMO-KIT</b>	Machine Tending Solution Demo Kit	<ul style="list-style-type: none"> <li>• 1 x Demo Copilot for UR E-Series</li> <li>• 1 x Button Activator</li> <li>• 1 x Footswitch Activator</li> <li>• 1 x Air Nozzle Kit</li> <li>• 1 x Stack Light Detector</li> <li>• 2 x Machine Tending Fingertips starter kit</li> <li>• 1 x Robotiq Machine Tending Controller</li> <li>• 1 x Pneumatic Panel</li> <li>• 1 x Compact Dual Hand-E Bracket</li> <li>• 1 x Dual Adapter Plate</li> <li>• 1 x M8 Splitter Dual Coupling UR e-Series</li> </ul>
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# PLUG + PLAY COMPONENTS

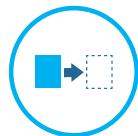
# HAND-E

ADAPTATIVE GRIPPER



## THE GRIPPER FOR COLLABORATIVE ROBOTS

- Plug + Play and easy to program
- Ideal for precision assembly tasks
- Ergonomic shape for hand-guiding
- Built for industrial applications and harsh environments
- Automatic part detection, position feedback, and part validation



Pick & Place



Assembly



Machine Tending



Quality Testing

## SPECIFICATIONS

Stroke (adjustable)	50 mm	2 in
Grip force (adjustable)	20 to 185 N	4.5 to 41 lbf
Form-fit grip payload	5 kg	11 lbs
Friction grip payload*	4,7 kg	8.8 lbs
Gripper weight	1 kg	2 lbs
Position resolution (fingertip)	0.2 mm	
Closing speed (adjustable)	20 to 150 mm/s	0.8 to 5.9 in/s
Communication protocol	Modbus RTU (RS-485)	
Ingress protection (IP) rating	IP67	

\* Calculated for the use of silicon covered fingertips to grip a steel object, at a low robot acceleration.

\*\* All specifications provided for reference only. See user manual at [support.robotiq.com](http://support.robotiq.com) for official specifications.



## SKUs

<b>HND-ES-UR-KIT</b>	Hand-E Gripper Kit for UR e-Series	<ul style="list-style-type: none"> <li>• 1 x Hand-E Basic Gripper Unit (with flat rubber overmolded fingertips)</li> <li>• 1 x Hand-E Fingertip Starting Kit</li> <li>• 1 x End-Effector Coupling Kit for e-Series (UR)</li> </ul>
<b>HND-GRP</b>	Hand-E Basic Gripper Unit	<ul style="list-style-type: none"> <li>• 1 x Hand-E Basic Gripper Unit (with flat rubber overmolded fingertips)</li> <li>• 1 x screw kit</li> </ul>
<b>HND-UR-KIT</b>	Hand-E Gripper Kit for UR	<ul style="list-style-type: none"> <li>• 1 x Hand-E Basic Gripper Unit (with flat rubber overmolded fingertips)</li> <li>• 1 x Hand-E Fingertip Starting Kit</li> <li>• 1 x End-Effector Coupling Kit</li> <li>• 1 x 10 m Robotiq device cable</li> <li>• 1 x USB to RS485 adapter</li> </ul>
<b>HND-UR-KIT-W</b>	Hand-E Wrist Connect Kit for UR CB	<ul style="list-style-type: none"> <li>• 1 x Hand-E Basic Gripper Unit (with flat rubber overmolded fingertips)</li> <li>• 1 x Hand-E Fingertip Starting Kit</li> <li>• 1 x I/O Coupling Kit including:</li> <li>• 1 x I/O Coupling</li> <li>• 1 x Micro-USB to USB cable</li> </ul>

## DEMO

<b>HND-DEMO-KIT</b>	Hand-E Gripper Demo Kit for UR	<ul style="list-style-type: none"> <li>• 1 x Hand-E Basic Gripper Unit</li> <li>• 1 x Hand-E Fingertip Starting Kit</li> <li>• 1 x End-Effector Coupling Kit</li> <li>• 1 x 10 m Robotiq device cable</li> <li>• 1 x USB to RS485 adapter</li> <li>• 1 x End-Effector Coupling Kit for UR e-Series</li> <li>• 1 x I/O Coupling Kit for CB series</li> </ul>
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## COMBOS

<b>CUR-DUAL-HND</b>	Two (2) Hand-E Gripper Combo for UR	<ul style="list-style-type: none"> <li>• 2 x Hand-E Basic Gripper Unit (with flat rubber overmolded fingertips)</li> <li>• 2 x Hand-E Fingertip starter kit</li> <li>• 2 x End-Effector Coupling Kit</li> <li>• 1 x 10 m Robotiq device cable</li> <li>• 1 x USB to RS485 adapter</li> <li>• 1 x Dual Adapter Plate</li> <li>• 1 x M12 Splitter male to 2 female</li> </ul>
<b>CUR-ES-DUAL-HND</b>	Combo of Two Hand-e for UR e-series	<ul style="list-style-type: none"> <li>• 2 x Hand-E Basic Gripper Unit (with flat rubber overmolded fingertips)</li> <li>• 2 x Hand-E Fingertip starter kit</li> <li>• 2 x End-Effector Coupling Kit for e-Series</li> <li>• 1 x Dual Adapter Plate</li> <li>• 1 x M8 Splitter - Dual Coupling UR e-Series</li> </ul>
<b>CUR-HND-RWC5</b>	Hand-E & Wrist Camera Combo for UR	<ul style="list-style-type: none"> <li>• 1 x Hand-E Gripper Basic Unit (with flat rubber overmolded fingertips)</li> <li>• 1 x Hand-E Fingertip Starting Kit</li> <li>• 1 x Wrist Camera kit for UR</li> </ul>
<b>CUR-HND-RWC5-FTS-S</b>	Hand-E, Camera and FT300-S Combo for UR	<ul style="list-style-type: none"> <li>• 1 x Hand-E Basic Gripper Unit (with flat rubber overmolded fingertips)</li> <li>• 1 x Wrist Camera kit for UR</li> <li>• 1 x FT300-S Sensor kit for UR</li> </ul>
<b>CUR-READY</b>	Hand-E Eserie force copilot insight	<ul style="list-style-type: none"> <li>• 1 x Hand-E Basic Gripper Unit</li> <li>• 1 x Hand-E Fingertip Starting Kit</li> <li>• 1 x Gripper Coupling Kit for e-Series (UR)</li> <li>• 1 x Screw kit</li> <li>• 1 x Force Copilot dongle key</li> <li>• 1 x Yearly subscription to Insights (to be sent by email)</li> </ul> <p>Used for robots:</p> <ul style="list-style-type: none"> <li>• Eserie cobot from Universal Robot</li> </ul>
<b>HND-FTS-S-UR-KIT</b>	Hand-E and FT 300 Sensor Kit for UR	<ul style="list-style-type: none"> <li>• 1 x Hand-E Gripper Kit for UR CB</li> <li>• 1 x FT300 S Sensor kit for UR</li> </ul>

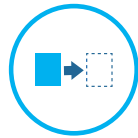
# 2F ADAPTATIVE GRIPPERS



**2F-85**



**2F-140**



Pick & Place



Assembly



Machine Tending



Quality Testing

## SPECIFICATIONS

	2F-85	2F-140
Stroke (adjustable)	85 mm	140 mm
Grip force (adjustable)	20 to 235 N	10 to 125 N
Form-fit grip payload	5 kg	2.5 kg
Friction grip payload	5 kg	2.5 kg
Gripper weight	0.9 kg	1 kg
Position resolution (fingertip)	0.4 mm	0.6 mm
Closing speed (adjustable)	20 to 150 mm/s	30 to 250 mm/s
Communication protocol	Modbus RTU (RS-485), RS-485, RS-232	
Ingress protection (IP) rating	IP40	IP40

\* All specifications provided for reference only. See user manual at [support.robotiq.com](http://support.robotiq.com) for official specifications.

## SKUs

## 2F ADAPTATIVE GRIPPERS

<b>AGC-ES-UR-KIT-140</b>	2F-140 Gripper Kit for UR e-Series	<ul style="list-style-type: none"> <li>• 1 x 2F-140 Basic Gripper Unit (with flat rubber overmolded fingertips)</li> <li>• 1 x End-Effector Coupling Kit for e-Series</li> </ul>
<b>AGC-ES-UR-KIT-85</b>	2F-85 Gripper Kit for UR e-Series	<ul style="list-style-type: none"> <li>• 1 x 2F-85 Basic Gripper Unit (with flat rubber overmolded fingertips)</li> <li>• 1 x End-Effector Coupling Kit for e-Series</li> </ul>
<b>AGC-GRP-2F140</b>	2F-140 Basic Gripper Unit	<ul style="list-style-type: none"> <li>• 1 x 2F-140 Basic Gripper Unit</li> <li>• 1 x Parallel mechanism locking pins</li> <li>• 1 x Screw kit</li> </ul>
<b>AGC-GRP-2F85</b>	2F-85 Basic Gripper Unit	<ul style="list-style-type: none"> <li>• 1 x 2F-85 Basic Gripper Unit (with flat rubber overmolded fingertips)</li> <li>• 1 x Parallel mechanism locking pins</li> <li>• 1 x Screw kit</li> </ul>
<b>AGC-UR-KIT-002</b>	2F-85 Gripper kit for UR	<ul style="list-style-type: none"> <li>• 1 x 2F-85 Basic Gripper Unit (with flat rubber overmolded fingertips)</li> <li>• 1 x End-Effector Coupling Kit</li> <li>• 1 x 10 m Robotiq device cable</li> <li>• 1 x USB to RS485 adapter</li> </ul>
<b>AGC-UR-KIT-140</b>	2F-140 Gripper kit for UR	<ul style="list-style-type: none"> <li>• 1 x 2F-140 Basic Gripper Unit</li> <li>• 1 x End Effector Coupling for Bolt Pattern ISO 9409-1-50-4-M6 (with 1 m Pigtail Cable)</li> <li>• 1 x 10 m Robotiq Device Cable</li> <li>• 1 x USB to RS485 Adapter</li> <li>• 1 x Parallel mechanism locking pins</li> <li>• 1 x Screw Kit for Fixing End Effector Coupling on UR Robots</li> </ul>
<b>AGC-UR-KIT-140-W</b>	2F-140 Wrist Connect Kit for UR CB	<ul style="list-style-type: none"> <li>• 1 x Gripper 2F-140</li> <li>• 1 x I/O Coupling Kit including: <ul style="list-style-type: none"> <li>• 1 x I/O Coupling</li> <li>• 1 x Micro-USB to USB cable</li> </ul> </li> </ul>
<b>AGC-UR-KIT-85-W</b>	2F-85 Wrist Connect Kit for UR CB	<ul style="list-style-type: none"> <li>• 1 x 2F-85 Basic Gripper Unit (with flat rubber overmolded fingertips)</li> <li>• 1 x I/O Coupling Kit including: <ul style="list-style-type: none"> <li>• 1 x I/O Coupling</li> <li>• 1 x Micro-USB to USB cable</li> </ul> </li> </ul>

## DEMO

<b>AGC-DEMO-KIT-002</b>	2F-85 demo kit for Distributors	<ul style="list-style-type: none"> <li>• 1 x 2F-85 Basic Gripper Unit (with flat rubber overmolded fingertips)</li> <li>• 1 x End-Effector Coupling Kit</li> <li>• 1 x End-Effector Coupling Kit for UR e-Series</li> <li>• 1 x 10 m Robotiq device cable</li> <li>• 1 x USB to RS485 adapter</li> <li>• 1 x I/O Coupling Kit for UR CB series</li> <li>• 1 x 2F-85 Gripper collaborative protector kit</li> </ul>
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### COMBOS

<b>AGC-FTS-S-UR-KIT-002</b>	2F-85 Gripper and FT 300-S Sensor UR kit	<ul style="list-style-type: none"> <li>• 1 x Gripper 2F-85 UR CB Kit</li> <li>• 1 x FT300-S Sensor kit for UR</li> <li>• 1 x 4 ports USB hub</li> </ul>
<b>AGC-FTS-S-UR-KIT-140</b>	2F140 & FT 300-S Sensor kit for UR	<ul style="list-style-type: none"> <li>• 1 x 2F-140 Gripper UR CB Kit</li> <li>• 1 x FT300-S Sensor kit for UR</li> <li>• 1 x 4 ports USB hub</li> </ul>
<b>CUR-AGC-085-RWC5</b>	Combo of 2F85 and Wrist Camera for UR	<ul style="list-style-type: none"> <li>• 1 x 2F-85 Gripper Basic Unit (with flat rubber overmolded fingertips)</li> <li>• 1 x Wrist Camera kit for UR</li> </ul>
<b>CUR-AGC-085-RWC5-FTS-S</b>	Combo of 2F85, Camera & FT300-S for UR	<ul style="list-style-type: none"> <li>• 1 x 2F-85 Basic Gripper Unit (with flat rubber overmolded fingertips)</li> <li>• 1 x Wrist Camera kit for UR</li> <li>• 1 x FT300-S Sensor kit for UR</li> </ul>
<b>CUR-AGC-140-RWC5</b>	Combo of 2F140 and Wrist Camera for UR	<ul style="list-style-type: none"> <li>• 1 x 2F-140 Gripper Basic Unit (with flat rubber overmolded fingertips)</li> <li>• 1 x Wrist Camera kit for UR</li> </ul>
<b>CUR-AGC-140-RWC5-FTS-S</b>	Combo of 2F140, Camera & FT300-S for UR	<ul style="list-style-type: none"> <li>• 1 x 2F-140 Basic Gripper Unit (with flat rubber overmolded fingertips)</li> <li>• 1 x Wrist Camera kit for UR</li> <li>• 1 x FT300-S Sensor kit for UR</li> </ul>
<b>CUR-DUAL-AGC-085</b>	Combo of Two 2F-85 for Universal Robots	<ul style="list-style-type: none"> <li>• 2 x 2F-85 Basic Gripper Unit (with flat rubber overmolded fingertips)</li> <li>• 2 x End-Effector Coupling Kit</li> <li>• 1 x 10 m Robotiq device cable</li> <li>• 1 x USB to RS485 adapter</li> <li>• 1 x Dual Adapter Plate</li> <li>• 1 x M12 Splitter male to 2 female</li> </ul>
<b>CUR-DUAL-AGC-140</b>	Combo of Two 2F-140 for Universal Robots	<ul style="list-style-type: none"> <li>• 2 x 2F-140 Basic Gripper Unit (with flat rubber overmolded fingertips)</li> <li>• 2 x End-Effector Coupling Kit</li> <li>• 1 x 10 m Robotiq device cable</li> <li>• 1 x USB to RS485 adapter</li> <li>• 1 x Dual Adapter Plate</li> <li>• 1 x M12 Splitter male to 2 female</li> </ul>
<b>CUR-ES-DUAL-AGC-085</b>	Combo of Two 2F-85 for UR e-series	<ul style="list-style-type: none"> <li>• 2 x 2F-85 Basic Gripper Unit (with flat rubber overmolded fingertips)</li> <li>• 2 x End-Effector Coupling Kit for e-Series</li> <li>• 1 x Dual Adapter Plate</li> <li>• 1 x M8 Splitter - Dual Coupling UR e-Series</li> </ul>
<b>CUR-ES-DUAL-AGC-140</b>	Combo of Two 2F-140 for UR e-series	<ul style="list-style-type: none"> <li>• 2 x 2F-140 Basic Gripper Unit (with flat rubber overmolded fingertips)</li> <li>• 2 x End-Effector Coupling Kit for e-Series</li> <li>• 1 x Dual Adapter Plate</li> <li>• 1 x M8 Splitter - Dual Coupling UR e-Series</li> </ul>

# 3-FINGER ROBOT GRIPPERS



## PROVEN DESIGN

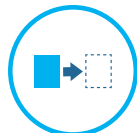
- Rugged and reliable
- Fully metallic
- High payload

## TAKE FULL CONTROL

Adjust the gripper's position, speed, and force until it grasps your object perfectly

## EXTREMELY WIDE STROKE

Open up to 155 mm with the encompassing grip mode



Pick & Place



Assembly



Machine Tending



Quality Testing

## SPECIFICATIONS

Stroke (programmable)	155 mm
Grip force (programmable)	30 to 70 N
Form-fit grip payload	10 kg
Friction grip payload	2.5 kg
Finger position repeatability (fingertip grip)	0.05 mm
Closing speed (programmable)	22 to 110 mm/s
Gripper weight	2.3 kg
Primary communication protocol	Modbus RTU (RS-485)
Secondary communication protocol options	Modbus TCP, EtherNet/IP, PROFINET, EtherCAT, DeviceNet, CANopen

\* All specifications are provided for reference only. See User Manual at [support.robotiq.com](http://support.robotiq.com) for official specifications.

## SKUs

<b>AGS-UR-KIT</b>	3-Finger Adaptive Gripper kit for UR	<ul style="list-style-type: none"><li>• 1 x 3-Finger Adaptive Gripper with Modbus TCP option<ul style="list-style-type: none"><li>• 1 x 10 m high flex Supply Cable</li><li>• 1 x 10m Communication Cable</li><li>• 1 x USB Cable</li><li>• 1 x Grease syringe</li></ul></li><li>• 1 x 3-Finger Coupling S-101</li><li>• 1 x 3-Finger Wrist Adapter Plate S-157</li></ul>
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## DEMO

<b>AGS-DEMO-KIT</b>	Demo kit for distributors (3F)	<ul style="list-style-type: none"><li>• 1 x 3-Finger Adaptive Gripper with Modbus TCP option</li><li>• 1 x Power supply 24V/2.7A</li><li>• 1 x 3-Finger demo kit carrying case</li></ul>
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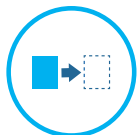
## COMBO

<b>AGS-FTS-S-UR-KIT</b>	3F Gripper and FT300-S Sensor kit for UR	<ul style="list-style-type: none"><li>• 1 x 3F Gripper UR KIT</li><li>• 1 x FTS300 Sensor kit for UR</li></ul>
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# VACUUM GRIPPERS



## SMOOTH HANDLING FOR YOUR APPLICATIONS



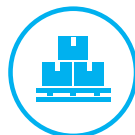
Pick & Place



Assembly



Machine Tending



Palletizing



Packaging

## SPECIFICATIONS

	EPick	AirPick
Energy source	Electricity	Compressed air
Gripper weight	710 g	481 g
Maximum Vacuum level	80%	85%
Maximum Vacuum flow	12 L/min	52,7 L/min
Air consumption	-	135,9 L/min
Minimum Feed pressure	-	3 bar
Maximum Feed pressure	-	7 bar
Connection, compressed air	-	8 mm OD Tube
Operating ambient temperature	5 to 40 °C	0 to 50 °C
Humidity	20-80% non condensing	20-80% non condensing



# FULLY CUSTOMIZABLE EASY TO INTEGRATE EASY TO USE

**UP AND RUNNING  
IN 30 MINUTES**

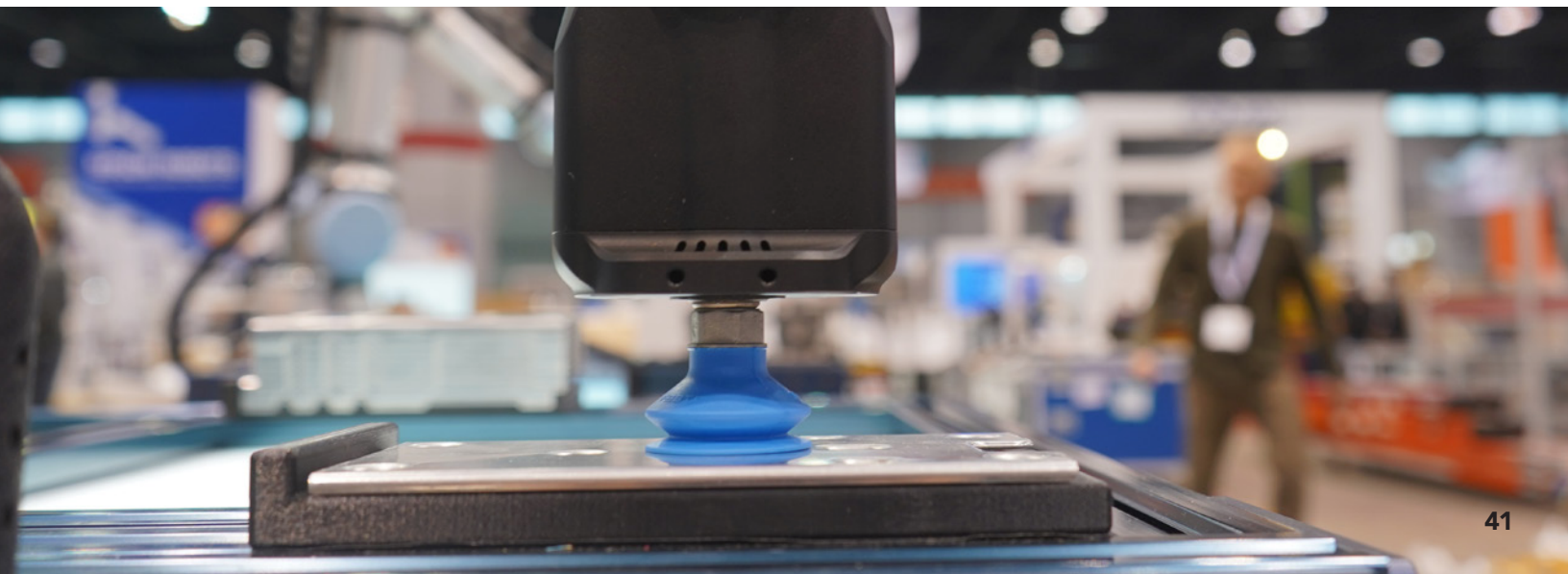
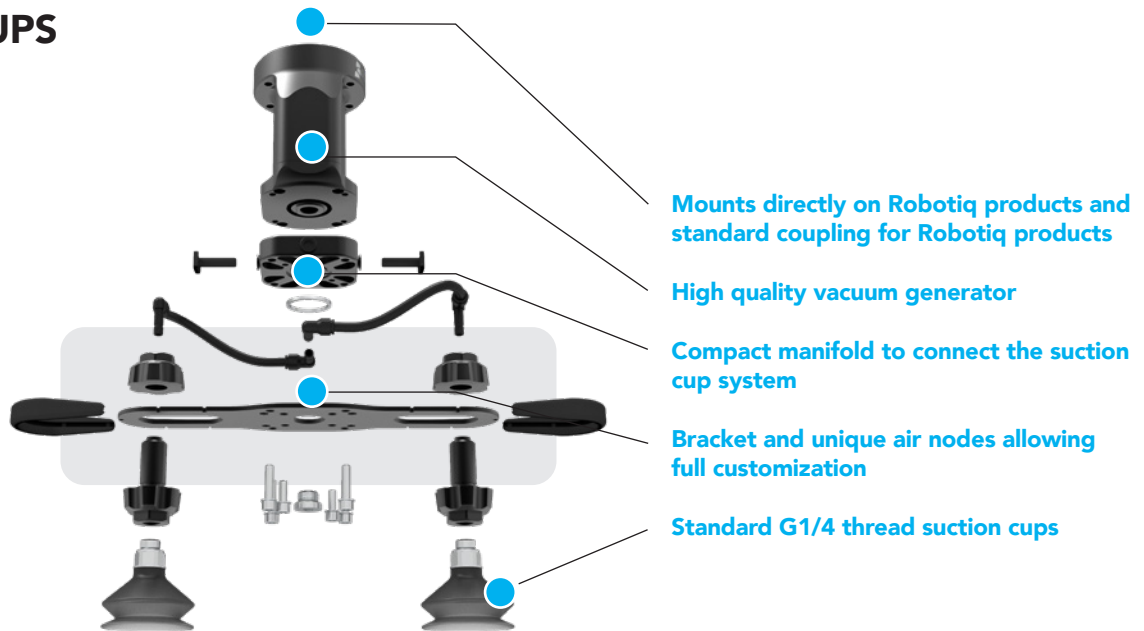
## **AIR PICK**

- Powerful vacuum flow
- Low noise
- Compact design for cobots

## **E PICK**

- No air supply
- Perfect for non porous material
- Easy to handle

## **SUCTION CUPS SYSTEM**



## SKUs

<b>VAC-CB-UR-AIRPICK-KIT1</b>	AirPick Kit for CB-Series UR / 1 Cup	<ul style="list-style-type: none"> <li>• 1 x Pneumatic vacuum generator (with one (1) vacuum cup 1.5 bellows, 40 mm diameter)</li> <li>• 1 x Tubing 8mm - 8m</li> <li>• 1 x Vacuum cup (1.5 bellows, 55 mm diameter)</li> <li>• 1 x End-Effector Coupling Kit</li> <li>• 1 x 10 m Robotiq device cable</li> <li>• 1 x USB to RS485 adapter</li> </ul>
<b>VAC-CB-UR-AIRPICK-KIT1-W</b>	AirPick Wrist Connect Kit UR CB / 1 cup	<ul style="list-style-type: none"> <li>• 1 x Pneumatic vacuum generator (with one (1) vacuum cup 1.5 bellows, 40 mm diameter)</li> <li>• 1 x I/O Coupling Kit including: <ul style="list-style-type: none"> <li>• 1 x I/O Coupling</li> <li>• 1 x Micro-USB to USB cable</li> </ul> </li> <li>• 1 x Vacuum cup (1.5 bellows, 55 mm diameter)</li> <li>• 1 x Tubing 8mm - 8m</li> </ul>
<b>VAC-CB-UR-AIRPICK-KIT2</b>	AirPick Kit for CB-Series UR / 2 Cups	<ul style="list-style-type: none"> <li>• 1 x Pneumatic vacuum generator (with one (1) vacuum cup 1.5 bellows, 40 mm diameter)</li> <li>• 1 x Kit 2 Suction Cups System - two (2) cups (with two (2) of each: vacuum cups of 40mm and 55mm)</li> <li>• 1 x Tubing 8mm - 8m</li> <li>• 1 x End-Effector Coupling Kit</li> <li>• 1 x 10 m Robotiq device cable</li> <li>• 1 x USB to RS485 adapter</li> </ul>
<b>VAC-CB-UR-AIRPICK-KIT2-W</b>	AirPick Wrist Connect Kit UR CB / 2 cups	<ul style="list-style-type: none"> <li>• 1 x Pneumatic vacuum generator (with one (1) vacuum cup 1.5 bellows, 40 mm diameter)</li> <li>• 1 x I/O Coupling Kit including: <ul style="list-style-type: none"> <li>• 1 x I/O Coupling</li> <li>• 1 x Micro-USB to USB cable</li> </ul> </li> <li>• 1 x Kit 2 Suction Cups System - two (2) cups (with two (2) of each: vacuum cups of 40mm and 55mm)</li> <li>• 1 x Tubing 8mm - 8m</li> </ul>
<b>VAC-CB-UR-AIRPICK-KIT4</b>	AirPick Kit for CB-Series UR / 4 Cups	<ul style="list-style-type: none"> <li>• 1 x Pneumatic vacuum generator (with one (1) vacuum cup 1.5 bellows, 40 mm diameter)</li> <li>• 1 x Kit 4 Suction Cups System- four (4) cups (with four (4) of each: vacuum cups of 40mm and 55mm)</li> <li>• 1 x Tubing 8mm - 8m</li> <li>• 1 x End-Effector Coupling Kit</li> <li>• 1 x 10 m Robotiq device cable</li> <li>• 1 x USB to RS485 adapter</li> </ul>
<b>VAC-CB-UR-AIRPICK-KIT4-W</b>	AirPick Wrist Connect Kit UR CB / 4 cups	<ul style="list-style-type: none"> <li>• 1 x Pneumatic vacuum generator (with one (1) vacuum cup 1.5 bellows, 40 mm diameter)</li> <li>• 1 x I/O Coupling Kit including: <ul style="list-style-type: none"> <li>• 1 x I/O Coupling</li> <li>• 1 x Micro-USB to USB cable</li> </ul> </li> <li>• 1 x Kit 4 Suction Cups System- four (4) cups (with four (4) of each: vacuum cups of 40mm and 55mm)</li> <li>• 1 x Tubing 8mm - 8m</li> </ul>
<b>VAC-ES-UR-AIRPICK-KIT1</b>	AirPick Kit for e-Series UR / 1 Cup	<ul style="list-style-type: none"> <li>• 1 x Pneumatic vacuum generator (with one (1) vacuum cup 1.5 bellows, 40 mm diameter)</li> <li>• 1 x Tubing 8mm - 8m</li> <li>• 1 x Vacuum cup (1.5 bellows, 55 mm diameter)</li> <li>• 1 x End-Effector Coupling Kit for e-Series (no protector)</li> </ul>

## SKUs

<b>VAC-ES-UR-AIRPICK-KIT2</b>	AirPick Kit for e-Series UR / 2 Cups	<ul style="list-style-type: none"> <li>• 1 x Pneumatic vacuum generator (with one (1) vacuum cup 1.5 bellows, 40 mm diameter)</li> <li>• 1 x Kit 2 Suction Cups System - two (2) cups (with two (2) of each: vacuum cups of 40mm and 55mm)</li> <li>• 1 x Tubing 8mm - 8m</li> <li>• 1 x End-Effector Coupling Kit for e-Series (no protector)</li> </ul>
<b>VAC-ES-UR-AIRPICK-KIT4</b>	AirPick Kit for e-Series UR / 4 Cups	<ul style="list-style-type: none"> <li>• 1 x Pneumatic vacuum generator (with one (1) vacuum cup 1.5 bellows, 40 mm diameter)</li> <li>• 1 x Kit 4 Suction Cups System- four (4) cups (with four (4) of each: vacuum cups of 40mm and 55mm)</li> <li>• 1 x Tubing 8mm - 8m</li> <li>• 1 x End-Effector Coupling Kit for e-Series (no protector)</li> </ul>
<b>VAC-GRP-AIRPICK</b>	AIRPICK Basic Gripper Unit	<ul style="list-style-type: none"> <li>• 1 x Pneumatic vacuum generator</li> <li>• 1 x Screw kit</li> <li>• 1 x Vacuum cup (1.5 bellows, 40 mm diameter)</li> </ul>

## DEMO

<b>VAC-UR-KIT-AIRPICK-DEMO</b>	AirPick Demo Kit for Partners on UR	<ul style="list-style-type: none"> <li>• 1 x Pneumatic vacuum generator (with one (1) vacuum cup 1.5 bellows, 40 mm diameter)</li> <li>• 1 x Kit 4 Suction Cups System- four (4) cups (with four (4) of each: vacuum cups of 40mm and 55mm)</li> <li>• 1 x Vacuum Suction Cup plate for two (2) cups</li> <li>• 1 x Tubing 8mm - 8m</li> <li>• 1 x End-Effector Coupling Kit</li> <li>• 1 x 10 m Robotiq device cable</li> <li>• 1 x USB to RS485 adapter</li> <li>• 1 x End-Effector Coupling Kit for e-Series (no protector)</li> <li>• 1 x I/O Coupling Kit for CB series</li> </ul>
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## SKUs

<b>VAC-CB-UR-EPICK-KIT1</b>	EPick Kit for CB-Series for UR / 1 cup	<ul style="list-style-type: none"> <li>• 1 x Electrical vacuum generator (with one (1) vacuum cup 1.5 bellows, 40 mm diameter)</li> <li>• 1 x Vacuum cup (1.5 bellows, 55 mm diameter)</li> <li>• 1 x End-Effector Coupling Kit</li> <li>• 1 x 10 m Robotiq device cable</li> <li>• 1 x USB to RS485 adapter</li> </ul>
<b>VAC-CB-UR-EPICK-KIT1-W</b>	EPick Wrist Connect Kit UR CB / 1 cup	<ul style="list-style-type: none"> <li>• 1 x Electrical vacuum generator (with one (1) vacuum cup 1.5 bellows, 40 mm diameter)</li> <li>• 1 x I/O Coupling Kit including: <ul style="list-style-type: none"> <li>• 1 x I/O Coupling</li> <li>• 1 x Micro-USB to USB cable</li> </ul> </li> <li>• 1 x Vacuum cup (1.5 bellows, 55 mm diameter)</li> </ul>
<b>VAC-CB-UR-EPICK-KIT2</b>	EPick Kit for CB-Series for UR / 2 cups	<ul style="list-style-type: none"> <li>• 1 x Electrical vacuum generator (with one (1) vacuum cup 1.5 bellows, 40 mm diameter)</li> <li>• 1 x Kit 2 Suction Cups System - two (2) cups (with two (2) of each: vacuum cups of 40mm and 55mm)</li> <li>• 1 x End-Effector Coupling Kit</li> <li>• 1 x 10 m Robotiq device cable</li> <li>• 1 x USB to RS485 adapter</li> </ul>
<b>VAC-CB-UR-EPICK-KIT2-W</b>	EPick Wrist Connect Kit UR CB / 2 cups	<ul style="list-style-type: none"> <li>• 1 x Electrical vacuum generator (with one (1) vacuum cup 1.5 bellows, 40 mm diameter)</li> <li>• 1 x I/O Coupling Kit including: <ul style="list-style-type: none"> <li>• 1 x I/O Coupling</li> <li>• 1 x Micro-USB to USB cable</li> </ul> </li> <li>• 1 x Kit 2 Suction Cups System - two (2) cups (with two (2) of each: vacuum cups of 40mm and 55mm)</li> </ul>
<b>VAC-CB-UR-EPICK-KIT4</b>	EPick Kit for UR CB-Series/ 4 cups	<ul style="list-style-type: none"> <li>• 1 x Electrical vacuum generator (with one (1) vacuum cup 1.5 bellows, 40 mm diameter)</li> <li>• 1 x Kit 4 Suction Cups System- four (4) cups (with four (4) of each: vacuum cups of 40mm and 55mm)</li> <li>• 1 x End-Effector Coupling Kit</li> <li>• 1 x 10 m Robotiq device cable</li> <li>• 1 x USB to RS485 adapter</li> </ul>
<b>VAC-CB-UR-EPICK-KIT4-W</b>	EPick Wrist Connect Kit UR CB / 4 cups	<ul style="list-style-type: none"> <li>• 1 x Electrical vacuum generator (with one (1) vacuum cup 1.5 bellows, 40 mm diameter)</li> <li>• 1 x I/O Coupling Kit including: <ul style="list-style-type: none"> <li>• 1 x I/O Coupling</li> <li>• 1 x Micro-USB to USB cable</li> </ul> </li> <li>• 1 x Suction system for four (4) cups</li> </ul>
<b>VAC-ES-UR-EPICK-KIT1</b>	EPick Kit for e-Series for UR / 1 cup	<ul style="list-style-type: none"> <li>• 1 x Electrical vacuum generator (with one (1) vacuum cup 1.5 bellows, 40 mm diameter)</li> <li>• 1 x Vacuum cup (1.5 bellows, 55 mm diameter)</li> <li>• 1 x End-Effector Coupling Kit for e-Series</li> </ul>
<b>VAC-ES-UR-EPICK-KIT2</b>	EPick Kit for e-Series for UR / 2 cups	<ul style="list-style-type: none"> <li>• 1 x Electrical vacuum generator (with one (1) vacuum cup 1.5 bellows, 40 mm diameter)</li> <li>• 1 x Kit 2 Suction Cups System - two (2) cups (with two (2) of each: vacuum cups of 40mm and 55mm)</li> <li>• 1 x End-Effector Coupling Kit for e-Series</li> </ul>

## SKUs

<b>VAC-ES-UR-EPICK-KIT4</b>	EPick Kit for UR e-Series / 4 cups	<ul style="list-style-type: none"> <li>• 1 x Electrical vacuum generator (with one (1) vacuum cup 1.5 bellows, 40 mm diameter)</li> <li>• 1 x Kit 4 Suction Cups System- four (4) cups (with four (4) of each: vacuum cups of 40mm and 55mm)</li> <li>• 1 x End-Effector Coupling Kit for e-Series</li> </ul>
<b>VAC-GRP-EPICK</b>	EPICK Basic Gripper Unit	<ul style="list-style-type: none"> <li>• 1 x Electrical vacuum generator</li> <li>• 1 x Screw kit</li> <li>• 1 x Vacuum cup (1.5 bellows, 40 mm diameter)</li> </ul>

## DEMO

<b>VAC-UR-KIT-EPICK-DEMO</b>	EPick Demo Kit - UR (E and CB Series)	<ul style="list-style-type: none"> <li>• 1 x Electric vacuum generator (with one (1) vacuum cup 1.5 bellows, 40 mm diameter)</li> <li>• 1 x Kit 4 Suction Cups System- four (4) cups (with four (4) of each: vacuum cups of 40mm and 55mm)</li> <li>• 1 x Vacuum Suction Cup plate for two (2) cups</li> <li>• 1 x End-Effector Coupling Kit</li> <li>• 1 x 10 m Robotiq device cable</li> <li>• 1 x USB to RS485 adapter</li> <li>• 1 x End-Effector Coupling Kit for e-Series (UR)</li> <li>• 1 x I/O Coupling Kit for CB series</li> </ul>
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## COMBO

<b>CUR-READY-VACUUM</b>	EPick 1cup Force Copilot Insights 1year	<ul style="list-style-type: none"> <li>• 1 x Electrical vacuum generator</li> <li>• 1 x End effector coupling kit for e-Series</li> <li>• 1 x Vacuum cup (1.5 bellows, 55 mm diameter)</li> <li>• 1 x Quickstart guide</li> <li>• 1 x Force Copilot dongle key</li> <li>• 1 x Yearly subscription to Insights (to be sent by email)</li> <li>• 1 x Lean Robotiq book</li> </ul> <p>Used for robots:</p> <ul style="list-style-type: none"> <li>• e-Series cobot from Universal Robot</li> </ul>
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# FT 300-S

FORCE TORQUE SENSOR

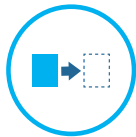


## THE PIONEER OF COBOT FORCE TORQUE SENSORS

- Plug + Play for quick and easy integration
- Fully metallic hardware suited for industrial needs
- Wear-free sensing technology means no calibration needed, no production downtime
- High resolution and no loss of precision over time
- **Force Copilot** programming software included



Insertion



Pick & Place



Assembly



Quality Testing



Machine Tending



Finishing

## SPECIFICATIONS

	FX	FY	FZ	MX	MY	MZ
Measuring range		± 300 N			± 30 Nm	
Overload capacity		500%			500%	
Signal noise		0.1 N			0.005 Nm	0.003 Nm
Recommended threshold for contact detection		1 N			0.02 Nm	0.01 Nm
Tool deflection at maximum measurable load		0.01 mm			0.17 deg	0.09 deg
External noise sensitivity					Immune	
Data output rate (data stream mode)				100 Hz		
Weight				440 g		
Communication protocol				Modbus RTU / Data stream (RS-485)		
IP Rating				IP65		

\* All specifications are provided for reference only. See User Manual at [support.robotiq.com](http://support.robotiq.com) for official specifications.

**SKUs**

<b>FTS-300-S-KIT-001</b>	FT 300-S Sensor Standard Kit	<ul style="list-style-type: none"> <li>• 1 x FT 300-S sensor without mechanical coupling</li> <li>• 1 x Power and communication cable</li> <li>• 1 x RS-485 to USB converter</li> </ul>
<b>FTS-300-S-SEN-001</b>	FT-300 S Basic Sensor Unit	<ul style="list-style-type: none"> <li>• 1 x FT 300 S sensor alone (no coupling, no cables)</li> <li>• 1 x Screw kit</li> </ul>
<b>FTS-300-S-UR-KIT</b>	FT 300-S Sensor kit for UR	<ul style="list-style-type: none"> <li>• 1 x FT 300-S Basic Sensor Unit</li> <li>• 1 x Mechanical coupling for UR</li> <li>• 1 x 10m High-Flex Cable</li> <li>• 1 x USB to RS485 Adapter</li> </ul>

**DEMO**

<b>FTS-300-S-DEMO-KIT</b>	FT 300-S Demo kit	<ul style="list-style-type: none"> <li>• 1 x FT 300-S Basic Sensor Unit</li> <li>• 1 x Mechanical coupling for UR</li> <li>• 1 x 10m High-Flex Cable</li> <li>• 1 x USB to RS485 Adapter</li> </ul>
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**COMBOS**

<b>AGC-FTS-S-UR-KIT-002</b>	2F-85 Gripper and FT 300-S Sensor UR kit	<ul style="list-style-type: none"> <li>• 1 x Gripper 2F-85 UR CB Kit</li> <li>• 1 x FT300-S Sensor kit for UR</li> <li>• 1 x 4 ports USB hub</li> </ul>
<b>AGC-FTS-S-UR-KIT-140</b>	2F140 & FT 300-S Sensor kit for UR	<ul style="list-style-type: none"> <li>• 1 x 2F-140 Gripper UR CB Kit</li> <li>• 1 x FT300-S Sensor kit for UR</li> <li>• 1 x 4 ports USB hub</li> </ul>
<b>AGS-FTS-S-UR-KIT</b>	3F Gripper and FT300-S Sensor kit for UR	<ul style="list-style-type: none"> <li>• 1 x 3F Gripper UR KIT</li> <li>• 1 x FTS300 Sensor kit for UR</li> </ul>
<b>CUR-AGC-085-RWC5-FTS-S</b>	Combo of 2F85, Camera & FT300-S for UR	<ul style="list-style-type: none"> <li>• 1 x 2F-85 Basic Gripper Unit (with flat rubber overmolded fingertips)</li> <li>• 1 x Wrist Camera kit for UR</li> <li>• 1 x FT300-S Sensor kit for UR</li> </ul>
<b>CUR-AGC-140-RWC5-FTS-S</b>	Combo of 2F140, Camera & FT300-S for UR	<ul style="list-style-type: none"> <li>• 1 x 2F-140 Basic Gripper Unit (with flat rubber overmolded fingertips)</li> <li>• 1 x Wrist Camera kit for UR</li> <li>• 1 x FT300-S Sensor kit for UR</li> </ul>
<b>HND-FTS-S-UR-KIT</b>	Hand-E and FT 300 Sensor Kit for UR	<ul style="list-style-type: none"> <li>• 1 x Hand-E Gripper Kit for UR CB</li> <li>• 1 x FT300 S Sensor kit for UR</li> </ul>

# WRIST CAMERA

VISION MADE FOR UNIVERSAL ROBOTS

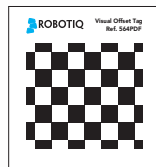
## EASY TO USE

- Teach, edit, and run via the teach pendant
- Accelerate changeovers with Visual Offset
- Operate with any expertise level

CAD IMPORT



VISUAL OFFSET



CODE READING

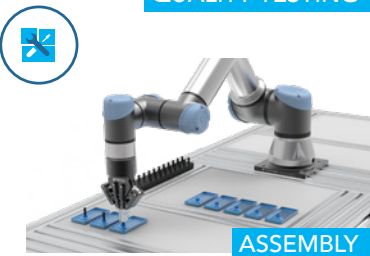
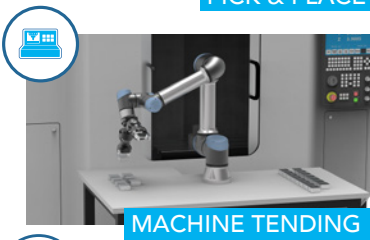
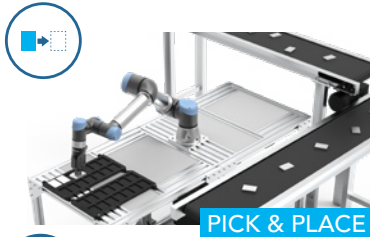




# FAST & REPEATABLE PART DETECTION



## APPLICATIONS



## FEATURES

- CAD Import**
- One-click workplane**
- Auto-pick**
- Parametric part teaching**
- Gripper clearance check**
- Visual offset**

## BENEFITS

- ▶ Teach a model using your own CAD file
- ▶ Create additional workplanes for your pick and place application with only one click
- ▶ Automatically creates the picking action with a centered position
- ▶ Ideal for faster blank programming
- ▶ Robust program minimizes production downtime
- ▶ Use the Robotiq tag to offset the robot program and accelerate changeovers

- 1D and 2D barcode reading**
- Image saving**

- ▶ Perform real time quality control
- ▶ Trace parts in a product assembly  
Program picture parameters for a personalized visual traceability

- Shape programming wizard**
- Assembly management**

- ▶ Program complex parts in minutes
- ▶ Simultaneously manage different parts for flexible assembly sequences  
Enables robot to work in structured or unstructured environments

## SPECIFICATIONS

Sensor & Optics	5 MP color sensor, electrically adjustable focus, 70 mm to infinity
Integrated Lighting	Two units (diffused white LED)
Programmable Parameters	<ul style="list-style-type: none"> <li>• CAD file import teaching (.dxf)</li> <li>• Automatic part teaching (user defined arbitrary shape)</li> <li>• Parametric part teaching (circle, ring, square, rectangle)</li> <li>• Edge editing, object color and clearance validation</li> <li>• Automatic and manual camera parameters: exposure, focus, LED lighting, white balance</li> </ul>
Electrical	Direct communication with UR controller (via USB), and power supply from controller (24 V)
Weight	160 g
Operating Temperature	0°C to 50°C
Camera Internal Image Buffer	DRAM memory

\* All specifications are provided for reference only. See User Manual at [support.robotiq.com](http://support.robotiq.com) for official specifications.

**SKUs**

<b>RWC5-CAM-001</b>	Replacement Wrist Camera	<ul style="list-style-type: none"> <li>• 1 x Robotiq Wrist Camera with 5m High Flex cable</li> <li>• 1x Screw kit</li> </ul>
<b>RWC5-UR-KIT</b>	Wrist Camera Kit for UR	<ul style="list-style-type: none"> <li>• 1 x Robotiq Wrist Camera unit</li> <li>• 1 x Universal Robot pattern tool plate</li> <li>• 1x USB stick</li> <li>• 1 x USB Software Licence Dongle</li> <li>• 1 x 4 ports USB hub</li> <li>• 1 x Calibration Board</li> <li>• 1 x Colored background</li> <li>• 1 x Wrist Camera Tags (5)</li> </ul>

**DEMO**

<b>RWC5-DEMO-KIT</b>	Wrist Camera Demo Kit for UR	<ul style="list-style-type: none"> <li>• 1 x Robotiq Wrist Camera unit</li> <li>• 1 x Universal Robot pattern tool plate</li> <li>• 1 x USB Software Licence Dongle</li> <li>• 1 x 4 ports USB hub</li> <li>• 1 x Calibration Board</li> <li>• 1 x Colored background</li> <li>• 1 x Wrist Camera Tags (5)</li> </ul>
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**COMBOS**

<b>CUR-AGC-085-RWC5</b>	Combo of 2F85 and Wrist Camera for UR	<ul style="list-style-type: none"> <li>• 1 x 2F-85 Gripper Basic Unit (with flat rubber overmolded fingertips)</li> <li>• 1 x Wrist Camera kit for UR</li> </ul>
<b>CUR-AGC-085-RWC5-FTS-S</b>	Combo of 2F85, Camera & FT300-S for UR	<ul style="list-style-type: none"> <li>• 1 x 2F-85 Basic Gripper Unit (with flat rubber overmolded fingertips)</li> <li>• 1 x Wrist Camera kit for UR</li> <li>• 1 x FT300-S Sensor kit for UR</li> </ul>
<b>CUR-AGC-140-RWC5</b>	Combo of 2F140 and Wrist Camera for UR	<ul style="list-style-type: none"> <li>• 1 x 2F-140 Gripper Basic Unit (with flat rubber overmolded fingertips)</li> <li>• 1 x Wrist Camera kit for UR</li> </ul>
<b>CUR-AGC-140-RWC5-FTS-S</b>	Combo of 2F140, Camera & FT300-S for UR	<ul style="list-style-type: none"> <li>• 1 x 2F-140 Basic Gripper Unit (with flat rubber overmolded fingertips)</li> <li>• 1 x Wrist Camera kit for UR</li> <li>• 1 x FT300-S Sensor kit for UR</li> </ul>
<b>CUR-HND-RWC5</b>	Hand-E & Wrist Camera Combo for UR	<ul style="list-style-type: none"> <li>• 1 x Hand-E Gripper Basic Unit (with flat rubber overmolded fingertips)</li> <li>• 1 x Hand-E Fingertip Starting Kit</li> <li>• 1 x Wrist Camera kit for UR</li> </ul>
<b>CUR-HND-RWC5-FTS-S</b>	Hand-E, Camera and FT300-S Combo for UR	<ul style="list-style-type: none"> <li>• 1 x Hand-E Basic Gripper Unit (with flat rubber overmolded fingertips)</li> <li>• 1 x Wrist Camera kit for UR</li> <li>• 1 x FT300-S Sensor kit for UR</li> </ul>

# APPLICATION KITS

# SANDING KIT



## AUTOMATE ONE OF THE TOUGHEST, DIRTIEST JOBS

- Save hours of programming
- Increase quality and productivity
- Reduce worker injuries
- The only complete sanding solution for Universal Robots

## WHAT'S INCLUDED

- Finishing Colilot
- Orbital tool
- Bracket
- Sanding Media
- Quick Start Guide
- Air control Accessories



# SUPPORTED MATERIALS



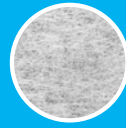
WOOD



PLASTIC



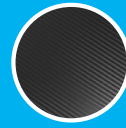
METAL



FIBERGLASS



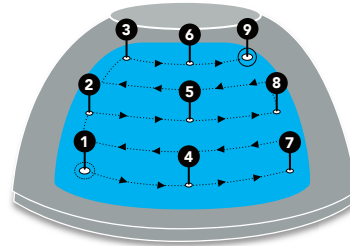
SOLID SURFACE



CARBON FIBER

## GENERATE A FINISHING PATH IN MINUTE

Program complex finishing trajectories by teaching less than 10 waypoints, even on complex, spherical surfaces. Apply constant force at each cycle.



## PRO TIPS

Robotiq is a pioneer in force control for collaborative robots. Our sanding [e-learning platform](https://elearning.robotiq.com) includes our best lessons learned in the past 10 years. Use it to save hours of programming: [elearning.robotiq.com](https://elearning.robotiq.com).

## VALIDATE PART LOCATION

The contact offset node uses reference points on the part to validate its position. If there's a slight change, the robot program automatically adapts all related parameters.



## SPECIFICATIONS

Random orbital sander	
Maximum air supply	6.2 bar (90 PSI)
Air flow (full speed)	450 L/min (16 SCFM)
Pad diameter	5"
Media	Hook and loop; 5 holes
Orbit diameter	3/16"
Maximum speed	12,000 RPM
Air supply inlet	1/4" NPT thread
Dust exhaust	Central vacuum ready; 1" (25 mm) diameter.

Robotiq bracket	
Weight	0.42 kg
Added height	9 mm
Compatible sanders	Dynabrade 56854B, 56819B, 56830B, 56863B, 56844B, 57404B, 57814B
Control valve	
Air supply inlet/outlet	1/4" NPT thread
Sanding media kit	
Grits	60, 80, 120, 320, 400

## SKUs

<b>SAND-ES-UR-KIT</b>	Sanding Kit for UR e-Series	<ul style="list-style-type: none"> <li>• 1 x Air random orbital sander with Mounting kit onto UR robot</li> <li>• 1 x Finishing Copilot kit for UR e-Series</li> <li>• 1 x Air control accessories</li> </ul>
<b>SAND-FTS-S-CB-UR-KIT</b>	Sanding Kit & FT 300-S for UR CB-Series	<ul style="list-style-type: none"> <li>• 1 x Air random orbital sander with Mounting kit onto UR robot</li> <li>• 1 x FT 300 S Sensor kit for UR</li> <li>• 1 x Air control accessories.</li> </ul>

## DEMO

<b>SAND-ES-UR-KIT-DEMO</b>	Sanding Kit Demo for UR e-Series	<ul style="list-style-type: none"> <li>• 1 x Dynabrade sander and mounting</li> <li>• 1 x Finishing Copilot software dongle license</li> <li>• 1 x Air control accessories</li> </ul>
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# SURFACE FINISHING **KIT**



## **AUTOMATE ONE OF THE TOUGHEST, DIRTIEST JOBS**

- Save hours of programming
- Increase quality and productivity
- Connect with the world's leading finishing tools

## **WHAT'S INCLUDED**

- Finishing Copilot dongle license
- Mirka mechanical bracket
- Dynabrade mechanical bracket
- Valve accessories kit
- Robot program template



# SUPPORTED MATERIALS



WOOD



PLASTIC



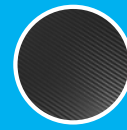
METAL



FIBERGLASS



SOLID SURFACE



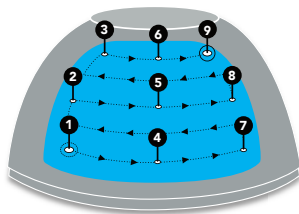
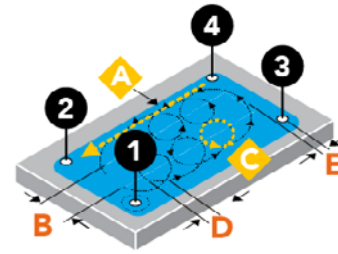
CARBON FIBER

## EASY TO INTEGRATE, EASY TO USE

Finishing applications for collaborative robots require many hardware and software components to communicate together. Integration can take months... but not anymore! The surface finishing kit is the only hardware and software all-in-one solution for cobots.

## PROGRAM IN MINUTES

Teach a finishing path on a flat surface out of only 4 waypoints and let the program adjust to different part sizes. Add custom weaving movements specific to your process in no time.



## GENERATE COMPLEX PATHS

Program complex finishing trajectories by teaching fewer than 10 waypoints. Finishing Copilot generates a complete path and applies consistent force at each cycle, whether it's on a curved (6 waypoints), or spherical (9 waypoints) surface.

## VALIDATE PART LOCATION

The contact offset node uses reference points on the part to validate its position. If there's a slight change, the robot program automatically adapts all related parameters.



## SPECIFICATIONS

### Pneumatic specifications

Valve maximum operating pressure	8.3 Bars
Valve input port	1/4 NPT

### Electrical Specifications

Air supply inlet/outlet	24 V
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### Mirka bracket

External envelope without sander	[77 89 37] mm
Added height	7 mm
Product weight without sander	0.221 kg

### Dynabrade bracket

External envelope without sander	[100 119 31] mm
Added height	9 mm
Product weight without sander	0.420 kg



## SKUs

<b>MIRKA-SCREW-KIT</b>	Mirka screw kit	<ul style="list-style-type: none"> <li>• Screw kit to fix Mirka sander on UR robot</li> </ul>
<b>SAND-APL-ROS-002</b>	Mounting bracket kit for Mirka sander	<ul style="list-style-type: none"> <li>• 1 x Mechanical Bracket</li> <li>• 1 x Mirka Screw Kit</li> </ul>
<b>SURF-ES-UR-KIT</b>	Surface Finishing kit for UR e-Series	<ul style="list-style-type: none"> <li>• 1 x Finishing Copilot software dongle license</li> <li>• 1 x Mounting kit for Dynabrade and Mirka Orbital Sanders</li> <li>• 1 x Air control accessories</li> </ul> <p>***Refer to User Manual for sanders compatibilities</p>
<b>SURF-FTS-S-CB-UR-KIT</b>	Surface Finishing kit for UR CB-Series	<p>Surface Finishing kit &amp; FT 300-S for UR CB Series</p> <p>Included:</p> <ul style="list-style-type: none"> <li>• 1 x FT 300 S Sensor kit for UR</li> <li>• 1 x Mounting kit for Dynabrade and Mirka Orbital Sanders</li> <li>• 1 x Air control accessories</li> </ul> <p>***Refer to User Manual for sanders compatibilities</p>

**SOFTWARE**

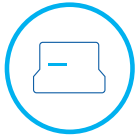
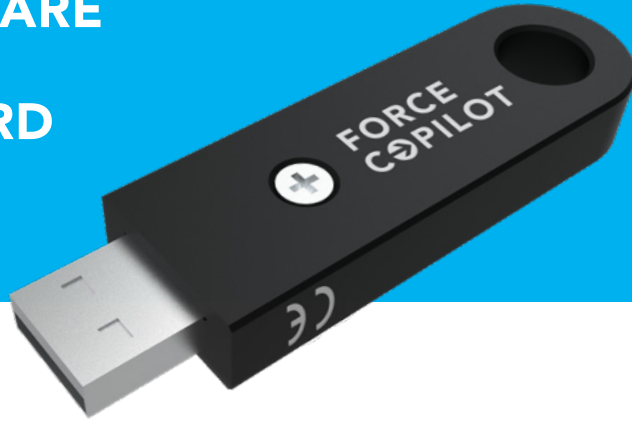
# FORCE COPILOT

FORCE CONTROL  
MADE EASY

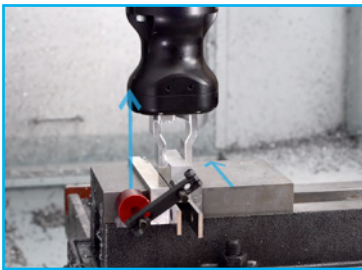


UR e-Series

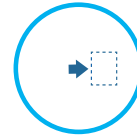
# INTUITIVE SOFTWARE FOR FT 300 AND E-SERIES ONBOARD FORCE TORQUE SENSOR



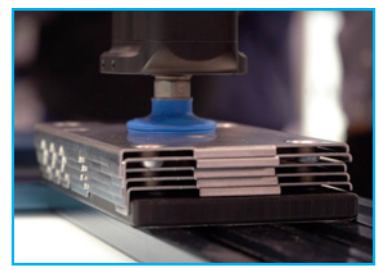
Machine Tending



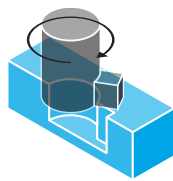
Assembly



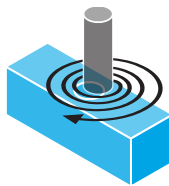
Pick and Place



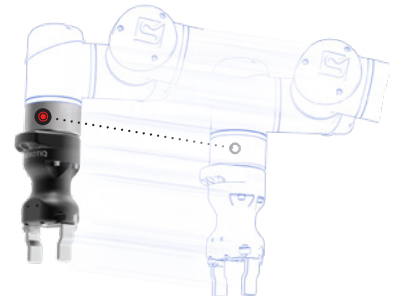
PRECISELY DETECT  
CONTACTS



INDEX PARTS

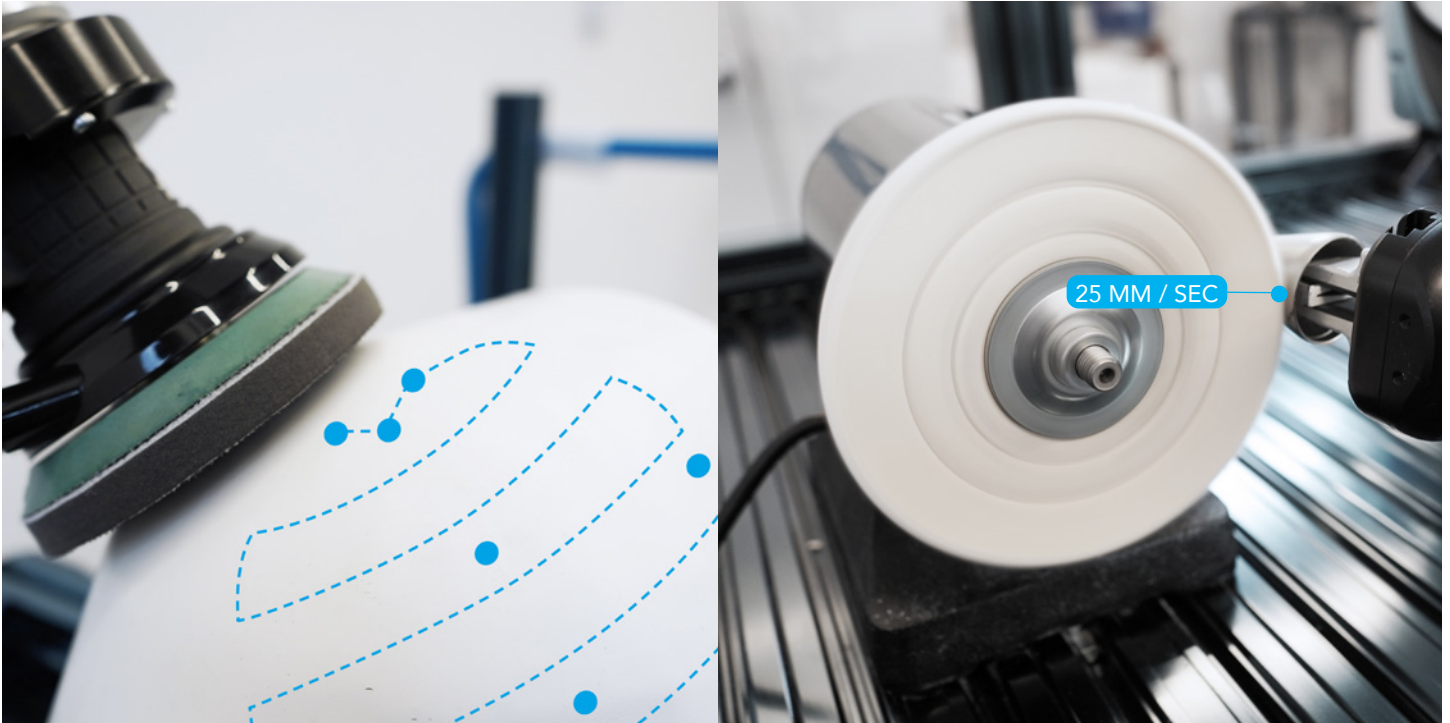


ALIGN WITH HOLE



FOLLOW TRAJECTORIES

# FINISHING COPILOT



## A SOFTWARE MADE FOR FINISHING APPLICATIONS

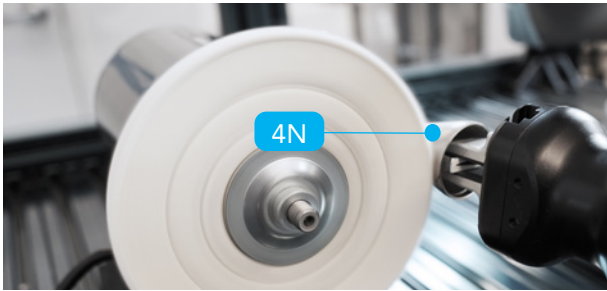
- Save hours of programming
- Generate finishing trajectories in minutes
- Compensate for external tool wear
- Set an external tool center point
- Operate with any level of expertise

## OTHER FEATURES

- Find a surface
- Perform various insertions
- Hand-guide your robot
- Follow complex trajectories
- Edit point-to-point trajectories
- Apply constant force and define the stiffness for each axis
- Reset sensor values to zero



## PART TO PROCESS

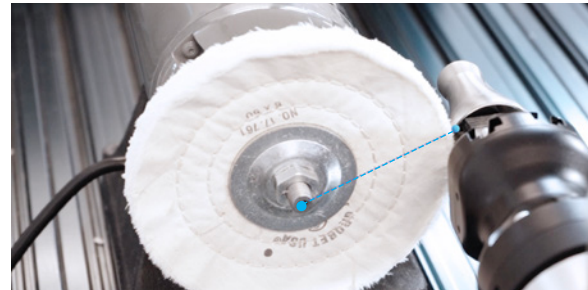


### SET EXTERNAL TOOL CENTER POINT

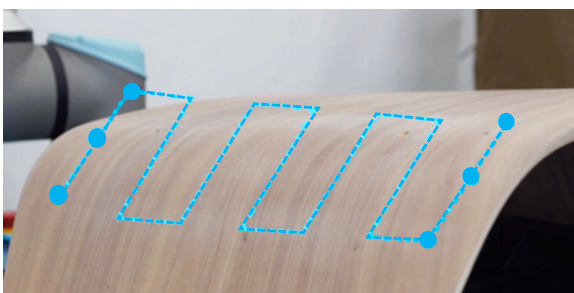
Finishing Copilot lets you program an external TCP. This tells the robot that the finishing tool is external to the robot, unlike in most collaborative robot applications. The finishing task is then processed with the robot bringing the part to the external TCP.

### COMPENSATE FOR TOOL WEAR

The contact offset node uses a point on the external tool as a reference to measure wear. Contact offset validates the tool's exact position anytime you wish. If there's a slight change, the robot program automatically adapts all related parameters.



## PROCESS TO PART



### GENERATE A FINISHING PATH IN MINUTES

Program complex finishing trajectories by teaching fewer than 10 waypoints. Whether it's on a flat (4 waypoints), curved (6 waypoints), or spherical (9 waypoints) surface, Finishing Copilot generates a complete path and applies consistent force at each cycle.

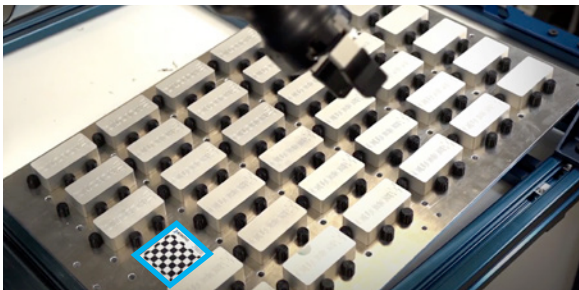
### VALIDATE PART POSITION

The contact offset node uses reference points on the part to validate its position. If there's a slight change, the robot program automatically adapts all related parameters.

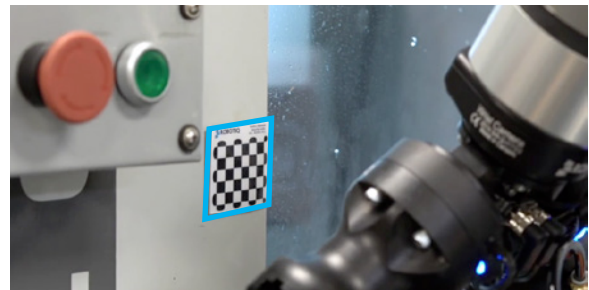


# MACHINE TENDING COPILOT

A SOFTWARE MADE FOR MACHINE TENDING  
Compatible with only UR+ end of arm tooling



Locate your tray between cycles to ensure repeatable part picking.



Move your robot from a machine to another without having to reprogram it.



Validate your vise's exact position at any moment with a simple contact. The robot will automatically adapt all relevant parameters.



Find the exact surface on your fixture to execute repeatable part positioning.

## OTHER FEATURES

- Hand-guide your robot
- Follow complex trajectories
- Edit point-to-point trajectories
- Apply constant force and define the stiffness for each axis
- Reset sensor values to zero



**SKUs**

<b>CP-FORCE-ES-UR-KIT</b>	Force Copilot kit for UR e-Series	<ul style="list-style-type: none"> <li>• 1 x Force Copilot License Dongle</li> <li>• 1 x Teach Pendant Stylus</li> <li>• 1 x UR Wrist Axis Sticker</li> </ul>
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**DEMO**

<b>CP-FORCE-ES-UR-DEMO-KIT</b>	Copilot Demo kit for UR e-Series	<ul style="list-style-type: none"> <li>• 1 x Full Copilot Software Suites License Dongle</li> <li>• 1 x Teach Pendant Stylus</li> <li>• 1 x UR Wrist axis sticker</li> </ul>
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**SKUs**

<b>CP-FIN-ES-UR-KIT</b>	Finishing Copilot kit for UR e-Series	<ul style="list-style-type: none"> <li>• 1 x Finishing Copilot License Dongle</li> <li>• 1 x Tech Pendant Stylus</li> <li>• 1 x UR Wrist Axis Sticker</li> </ul>
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**SKUs**

<b>CP-MT-ES-UR-KIT</b>	Machine Tending Copilot for UR E-Series	<ul style="list-style-type: none"> <li>• 1 x Machine Tending Copilot License Dongle</li> <li>• 1 x Teach Pendant Stylus</li> <li>• 1 x UR Wrist Axis Sticker</li> </ul>
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# INSIGHTS



## REMOTE ACCESS

- Manage your robot from anywhere
- Get support from robotics expert

## OPTIMIZE PERFORMANCE

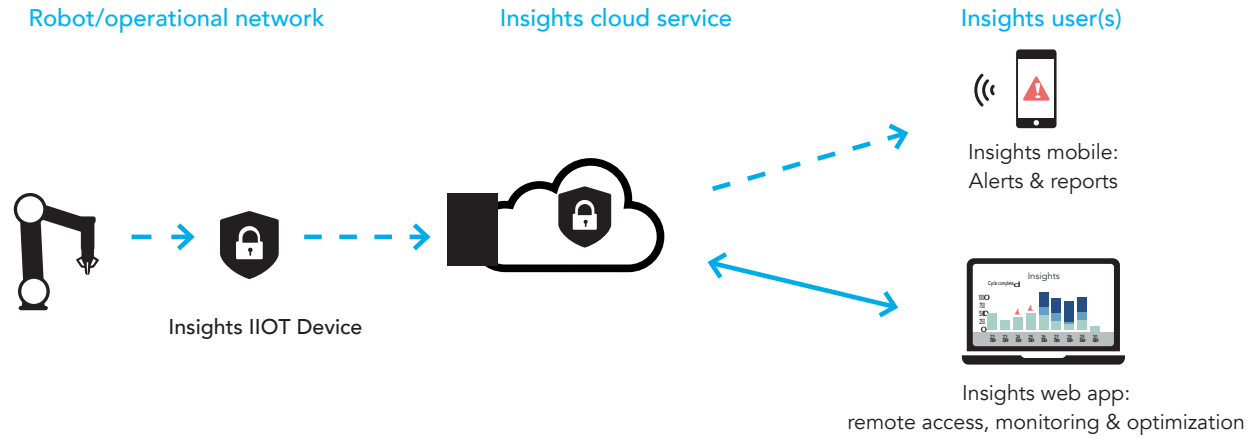
- Track progress
- Analyze trends
- Download events log

## MONITOR PRODUCTION

- Get a real-time robot overview
- Define and track KPIs
- Receive daily reports

# TAKE PRODUCTION TO THE NEXT LEVEL

## HOW IT WORKS



As easy as 1-2-3!

1. Install the **Insights URcap** on your robot.
2. Connect your robot securely to the cloud using the **Insights IIOT Device**.
3. Pair your robot with your **Insights Cloud Service** account.

Manage your robot from anywhere on [insights.robotiq.com](https://insights.robotiq.com)

## INSIGHTS REQUIRES

- UR3, UR5 or UR10 (with CB3.1 controller)
- Internet connection

## PURCHASE OPTIONS

	Insights License <sup>1</sup>	Insights Starter Kit
Real-Time Robot Overview	✓	✓
Email Reports Scheduler	✓	✓
Robot SMS Alerts	✓	✓
Production Performance Timeline & KPIs	✓	✓
Robot Digital I/Os	✓	✓
Downloadable Events Log	✓	✓
Remote Access	✓	✓
Backup and Robot Log Files	✓	✓
Preconfigured 4G LTE/Wi-Fi Router & antennas		✓
Prepaid international SIM card <sup>2</sup>		✓
Logitech C920 webcam		✓
Connection cables & accessories		✓

<sup>1</sup> 1-year term.

<sup>2</sup> Equivalent to a 1-month period.

Contact your local Robotiq distributor for pricing.

Subscription plans may change without prior notice.

<p><b>INS-CXN-AME</b></p>	<p>Insights Connection Kit Americas</p>	<ul style="list-style-type: none"> <li>• Preconfigured 4G LTE/ Wi-Fi Router &amp; antennas (Americas)</li> <li>• USA power supply &amp; 24V power stripped cables</li> <li>• Prepaid international SIM card</li> <li>• Logitech C920 Camera</li> <li>• Accessories: Ethernet cable, USB key, USB splitter, USB extension cable</li> </ul>
<p><b>INS-CXN-EUR</b></p>	<p>Insights Connection Kit Europe &amp; Asia</p>	<ul style="list-style-type: none"> <li>• Preconfigured 4G LTE/ Wi-Fi Router &amp; antennas (Europe &amp; Asia)</li> <li>• USA power supply &amp; 24V power stripped cables</li> <li>• Prepaid international SIM card</li> <li>• Logitech C920 Camera</li> <li>• Accessories: Ethernet cable, USB key, USB splitter, USB extension cable</li> </ul>
<p><b>INS-STK-AME-001</b></p>	<p>Insights Starter Kit Americas</p>	<p>Insights 1-year advanced subscription plan:</p> <ul style="list-style-type: none"> <li>• Remote Access</li> <li>• Real-time dashboard</li> <li>• Real-time robot alerts</li> <li>• Performance reports</li> <li>• Production Monitoring (KPI)</li> <li>• Diagnostics Tools</li> <li>• All software updates</li> </ul> <p>Insights connection kit Preconfigured 4G LTE/ Wi-Fi Router &amp; antennas (Americas)</p> <ul style="list-style-type: none"> <li>• USA power supply &amp; 24V power stripped cables</li> <li>• Prepaid international SIM card</li> <li>• Logitech C920 Camera</li> <li>• Accessories: Ethernet cable, USB key, USB splitter, USB extension cable</li> </ul>
<p><b>INS-STK-EUR-001</b></p>	<p>Insights Starter Kit Europe &amp; Asia</p>	<p>Insights Starter Kit Europe &amp; Asia Included: Insights 1-year advanced subscription plan</p> <ul style="list-style-type: none"> <li>• Remote Access</li> <li>• Real-time dashboard</li> <li>• Real-time robot alerts</li> <li>• Performance reports</li> <li>• Production Monitoring (KPI)</li> <li>• Diagnostics Tools</li> <li>• All software updates</li> </ul> <p>Note: Subscription plans may change without prior notice</p> <p>Insights connection kit</p> <ul style="list-style-type: none"> <li>• Preconfigured 4G LTE/ Wi-Fi Router &amp; antennas (Europe &amp; Asia)</li> <li>• USA power supply &amp; 24V power stripped cables</li> <li>• Prepaid international SIM card</li> <li>• Logitech C920 Camera</li> <li>• Accessories: Ethernet cable, USB key, USB splitter, USB extension cable</li> </ul>
<p><b>INS-SUB-ADV-001</b></p>	<p>Insights One-Year Advanced Subscription</p>	<ul style="list-style-type: none"> <li>• Real-time robot overview</li> <li>• Email reports scheduler</li> <li>• Robot SMS alerts</li> <li>• Robot Remote Access</li> <li>• Production performance timeline &amp; KPIs</li> <li>• Robot Digital I/Os</li> <li>• Downloadable Events Log</li> <li>• All software updates</li> </ul>
<p><b>INS-SUB-RENEW-001</b></p>	<p>Insights Renewal / Monthly Adjustment</p>	<ul style="list-style-type: none"> <li>• Remote Access</li> <li>• Real-time dashboard</li> <li>• Real-time robot alerts</li> <li>• Performance reports</li> <li>• Production Monitoring (KPI)</li> <li>• Diagnostics tools</li> <li>• All software updates</li> </ul> <p>Note: Subscription plans may change without prior notice</p>

<p><b>INS-STK-AME-DEMO</b></p>	<p>Insights Partner Demo kit - Americas</p>	<p>Insights unlimited partner subscription plan</p> <ul style="list-style-type: none"> <li>• Remote Access</li> <li>• Real-time dashboard</li> <li>• Real-time robot alerts</li> <li>• Performance reports</li> <li>• Production Monitoring (KPI)</li> <li>• Diagnostics Tools</li> <li>• All software updates</li> </ul> <p>Note: Subscription plans may change without prior notice</p> <p>Insights connection kit</p> <ul style="list-style-type: none"> <li>• Preconfigured 4G LTE/ Wi-Fi Router &amp; antennas (Americas)</li> <li>• USA power supply &amp; 24V power stripped cables</li> <li>• Prepaid international SIM card</li> <li>• Logitech C920 Camera</li> <li>• Accessories: Ethernet cable, USB key, USB splitter, USB extension cable</li> </ul>
<p><b>INS-STK-EUR-DEMO</b></p>	<p>Insights Partner Demo kit - Europe&amp;Asia</p>	<p>Insights Partner Demo kit Europe &amp; Asia</p> <p>Included:</p> <ul style="list-style-type: none"> <li>• Insights unlimited partner subscription plan</li> <li>• Remote Access</li> <li>• Real-time dashboard</li> <li>• Real-time robot alerts</li> <li>• Performance reports</li> <li>• Production Monitoring (KPI)</li> <li>• Diagnostics Tools</li> <li>• All software updates</li> </ul> <p>Note: Subscription plans may change without prior notice</p> <p>Insights connection kit</p> <ul style="list-style-type: none"> <li>• Preconfigured 4G LTE/ Wi-Fi Router &amp; antennas (Europe &amp; Asia)</li> <li>• USA power supply &amp; 24V power stripped cables</li> <li>• Prepaid international SIM card</li> <li>• Logitech C920 Camera</li> <li>• Accessories: Ethernet cable, USB key, USB splitter, USB extension cable</li> </ul>

# START PRODUCTION FASTER

## IN THE WORLD



### CONTACT US

#### AMERICAS

##### Sales

1-418-380-2788 ext. 2  
iss@robotiq.com

##### Support

1-418-380-2788 ext. 3  
support@robotiq.com

966, chemin Olivier, Suite 500,  
Lévis, QC, G7A 2N1, Canada

#### EUROPE

##### Lyon, France

+33 4 81 13 27 10

13 avenue des Tulipiers  
69500 Bron  
France

## LET'S KEEP IN TOUCH

For any questions concerning robotic and automated handling or if you want to learn more about the advantages of using flexible electric handling tools, contact us.

Join us on social media:





# OUR TEAM BEHIND THE PRODUCTS

*We work hard, have fun and love what we do!*

*The team at Robotiq is what makes the products stand out.*

*We believe in what we do, and we're constantly seeking to **do more and better!***



**START  
PRODUCTION  
FASTER**