

Q-Span[®] Workstation Kit

Application Kit for UR3e cobots from Universal Robots

Automate digital caliper measurements,
data logging and part handling

Improve precision, yield and quality
in small-part measurement

Increase production capacity
faster than headcount

Boost employee engagement
and job satisfaction - while reducing
risk of repetitive stress injuries

Install quickly
with minimal changes to existing
facilities and process flow

Fast part changeover
for agile automation

ROI in less than 10 months



DIY QC automation with rapid return on investment

The Q-Span[®] Workstation Kit for UR3e collaborative robots is a flexible, do-it-yourself (DIY) automation solution for QC measurement tasks. It delivers fast return on investment in high-mix, small-batch manufacturing.

Pick, measure, sort and place with **one** easy-to-use system

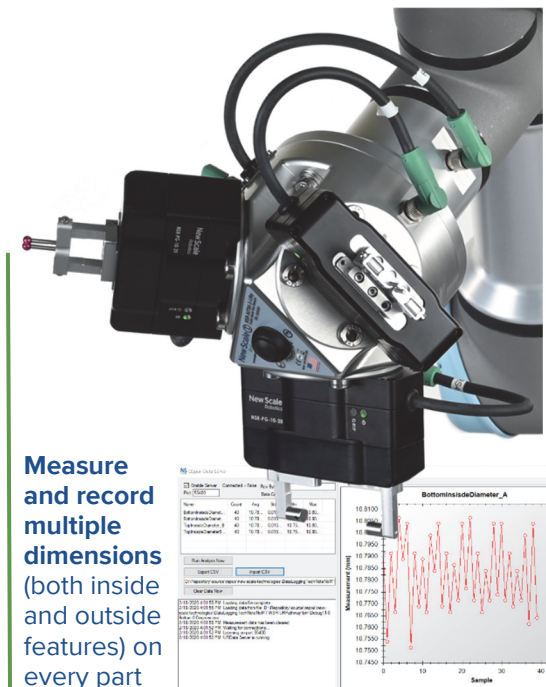
Automatically **pick** small parts, use the robotic caliper to **measure** multiple features on each, and decide where to **place** the parts based on any measured dimension (for example pass, fail, or sort into bins by ranges).

You can also **record** all measured data to your PC for statistical analysis.

With a Q-Span Workstation Kit, your QC team can improve small-part measurement consistency and repeatability. They can eliminate data entry errors and spend time on higher-value tasks.

Complete measurement automation system

A Q-Span Workstation Kit includes three gripper/caliper tools, an example part, trays and fixtures, the NSR Devices URCaps software, and robot programs that demonstrate **pick-measure-record-and-place** for the example part. Install the kit on your own UR e-Series cobot, or purchase a UR3e cobot from us. Use this application kit as a starting point for automating measurement of your own specific parts.

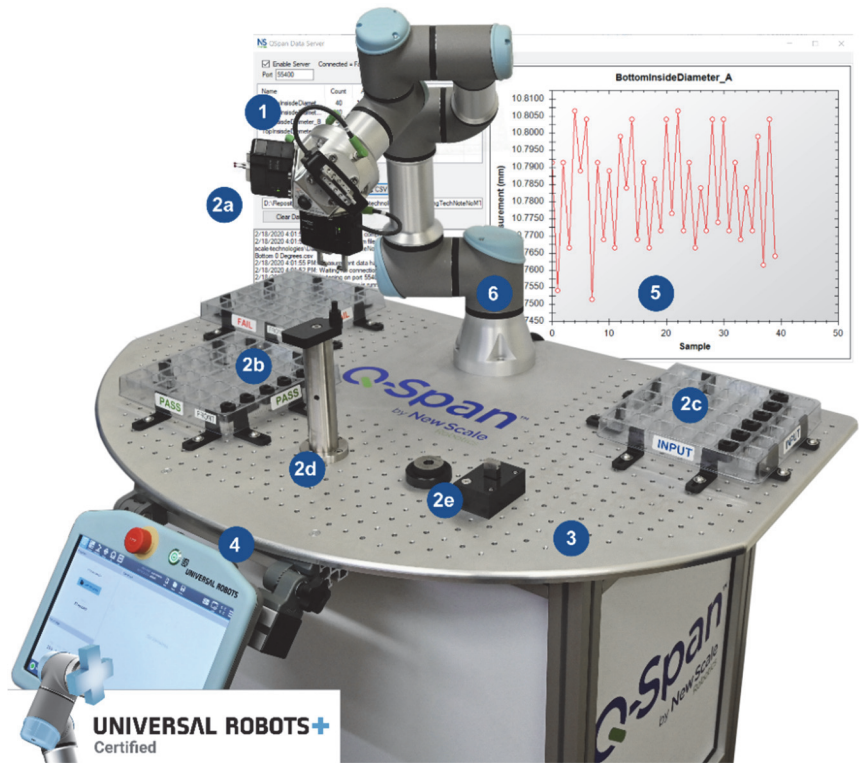


Measure and record multiple dimensions (both inside and outside features) on every part

What's in a Q-Span® Workstation Kit?

- 1 Three NSR-PG gripper/calipers and one NSR-MTM Multi-Tool Mount
- 2 Example part accessory set
 - a) Standard metrology fingertips set
 - b) Example part(s)
 - c) Trays for the example parts: parts-in, parts-passed, parts-rejected
 - d) Measurement fixture for example part
 - e) Zero-reference fixtures including gauge blocks (NIST-traceable artifacts)
- 3 Mobile workstation table
- 4 NSR Devices URCap Application. Create programs to grasp, move and measure parts. Programs for the example parts are included, and serve as a model for you to easily build your own programs.
- 5 Q-Span Data Server PC Application. Automatically log all measured data to your PC and export for SPC. Data cable is included.
- 6 UR3e e-Series collaborative robot. Use one you already own, or purchase from us. We're a UR Certified System Integrator.
- 7 Documentation and videos for installation and operation.

Example robot programs demonstrate how to move and measure the example parts in the kit. Use them as starting point for your own programs and parts.



Specifications with NSR PG gripper/caliper

Measurement Capabilities		
Resolution	2.5 µm	0.0001 inch
Repeatability	+/- 5 µm	+/- 0.0002 inch
Accuracy, full scale	+/- 20 µm	+/- 0.0008 inch
Part Characteristics		
Max recommended mass (weight)	100 grams	3.5 ounces
Max dimension to pick/measure	100 mm	3.94 inches
UR Robot Compatibility		e-Series UR3e
Agency Approvals		CE

Fast setup, fast change-over

Once you have configured a workstation for your first part, you can easily expand its use. The NSR Devices URCaps software and UR teach pendant make it simple for non-specialists to build processes for other parts. You may need part-specific fingertips, trays, fixtures and robot programs. Once you have built the processes, change over between them takes only a few minutes.

Automate existing manual gaging tools

Incorporate your existing gages and non-contact metrology tools into a Q-Span Workstation. You can automate part loading and unloading, and often combine data from all gages into one output using the Q-Span software.

Contact us today for a free assessment of your first part.



Call +1 585 924 4450
 Email NSRsales@newscalerobotics.com
www.newscalerobotics.com

