Q-Span™

by New Scale Robotics

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 measurements of small parts

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

UNIVERSAL ROBOTS+
Certified

Flexible QC automation, rapid return on investment

The Q-Span™ Workstation Kit for UR3e collaborative robots is a flexible automation solution for QC measurement tasks. It delivers fast return on investment in high-mix, small-batch manufacturing environments.

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

Automatically **pick** small parts, **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 dimension 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, eliminate data entry errors, and spend time on higher-value tasks.
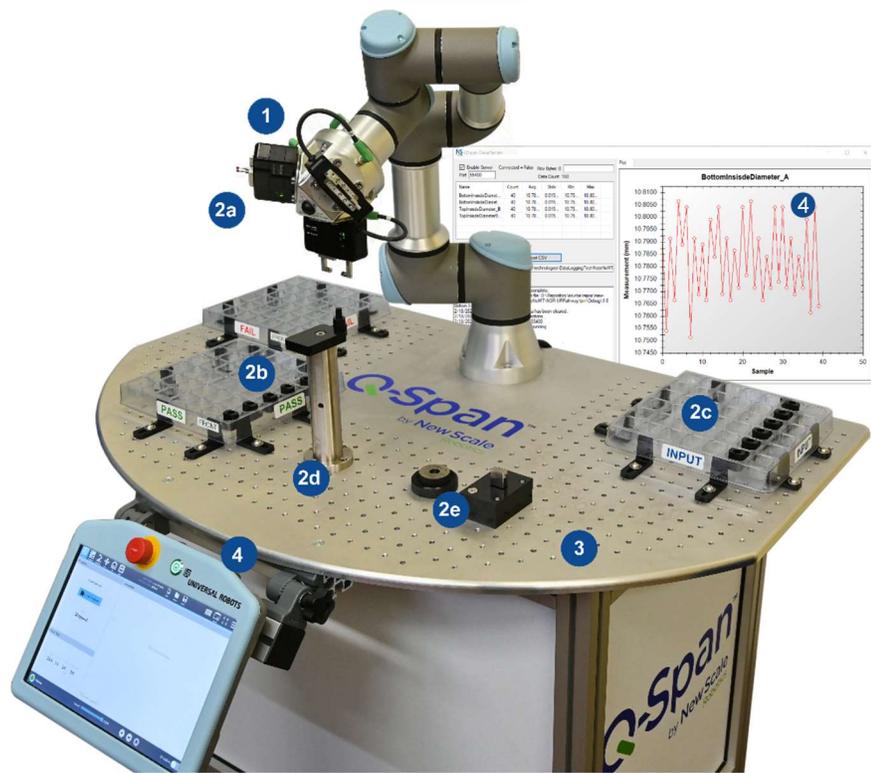
Complete measurement automation system

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. Use this application kit, along with your UR3e robot, 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

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

What's in a Q-Span™ Workstation Kit?

1 Three NSR-PG gripper/calipers, one NSR-MTM Multi-Tool Mount and the *NSR Devices* URCap

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 block (NIST traceable artifact)

3 Workstation table

4 Easy-to-use software to grasp and move parts, measure dimensions, make decisions and log data. *The kit includes sample robot programs for the example part, along with a cable and software for logging data to your PC.*

5 Documentation and videos for installation and operation

The Q-Span Workstation Kit is ready for user installation with a six-axis UR3e e-Series collaborative robot from Universal Robots *(purchased separately)*.

> *NSR Devices* **URCaps software and example robot programs included.** Use the examples as a starting point to build processes for your own parts.

Specifications

Measurement Capabilities		
Resolution	2.5 μm	0.0001 inch
Repeatability	5 μm	0.0002 inch
Accuracy	15 μm	0.0006 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 Q-Span Workstation Kit for your first part, you can easily expand its use to additional parts.

Each part may require part-specific fingertips, trays, fixtures and robot programs. The *NSR Devices* URCaps software and UR teach pendant make it simple to build pick-measure-record-and-place processes for each new part.

After you have developed a process for each part, change over between different parts takes only a few minutes.

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

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