Q-Span™ Workstation Solution

A complete, ready-to-use solution for automating 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
- Rapid return on investment (ROI) of less than 10 months

Flexible automation solution for QC measurement tasks

Q-Span™ Workstations deliver flexible automation for QC measurements of small parts. They offer fast ROI in high-mix, small-batch manufacturing.

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 automatically record all measured data to a PC for statistical analysis.

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

Complete measurement automation system

A Q-Span Workstation Solution includes all the hardware and software you need to start automating QC measurements of your first part. Delivery includes installation with a Universal Robot (purchased separately), training, and a demonstration of the system inspecting your own first part.

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

Call +1 585 924 4450  Email NSRsales@newscalerobotics.com  www.newscalerobotics.com
What’s in a Q-Span™ Workstation Solution?

1. Up to three gripper/calipers
2. Accessories configured for your specific part and the measurements you want to make:
   a) Metrology fingertips
   b) Trays for parts-in and parts-out
   c) Measurement fixture and zero-reference fixture including gauge block (NIST-traceable artifact)
3. Workstation table
4. PC and easy-to-use scripting software to grasp and move parts, measure dimensions, make decisions and log data. New Scale provides completed scripts for your first part.
5. One six-axis e-Series robot arm from Universal Robots (purchased separately from UR and shipped to New Scale for installation).
6. Delivery, installation, demonstration of your first part inspection, and training.

NSR Devices URCaps software and scripts for your first part are included. Automatically build processes for fast and easy set-up of your system for additional parts.

Specifications

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<thead>
<tr>
<th>Measurement Capabilities</th>
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<tbody>
<tr>
<td>Resolution</td>
<td>2.5 µm</td>
<td>0.0001 inch</td>
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<tr>
<td>Repeatability</td>
<td>5 µm</td>
<td>0.0002 inch</td>
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<tr>
<td>Accuracy</td>
<td>15 µm</td>
<td>0.0006 inch</td>
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<table>
<thead>
<tr>
<th>Part Characteristics</th>
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<tbody>
<tr>
<td>Max recommended mass (weight)</td>
<td>100 grams</td>
<td>3.5 ounces</td>
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<tr>
<td>Max dimension to pick/measure</td>
<td>100 mm</td>
<td>3.94 inches</td>
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<tr>
<th>UURobot Compatibility</th>
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<tr>
<td>e-Series UR3e, UR5e, UR10e</td>
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| Agency Approvals                          | Pending: CE, RoHS |

Fast setup, fast change-over

Once we have proven the Q-Span System on your first part, you can easily expand its use to additional parts.

Each part requires part-specific fingertips, trays, fixtures and scripts. Design your own, or purchase this service from New Scale Robotics. The Q-Span System scripting software (NSR Devices) and UR teach pendant make it simple to build pick-measure-record-and-place processes for each part.

Once this is done, you can change over your Q-Span Workstation to measure different parts in minutes.

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