

Application Story

Check bicycle components

The Challenge

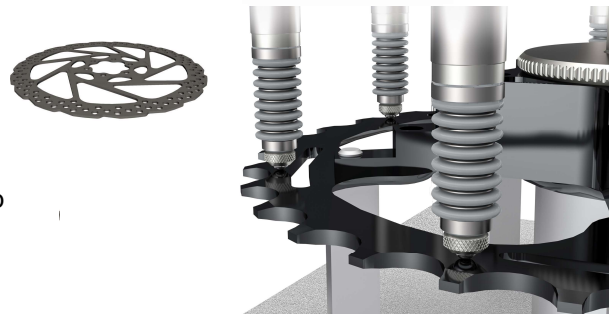
High end bicycle manufacturers have complex challenges. They must manufacture components that have tight tolerances and extreme performance standards to justify a high selling price. Even worse, critical dimensions might be small, awkward, and difficult to measure with standard contact sensors.



The Solution

Solartron Metrology offers specialized probes that are short, skinny, and built to check the awkward shapes a bicycle might have:

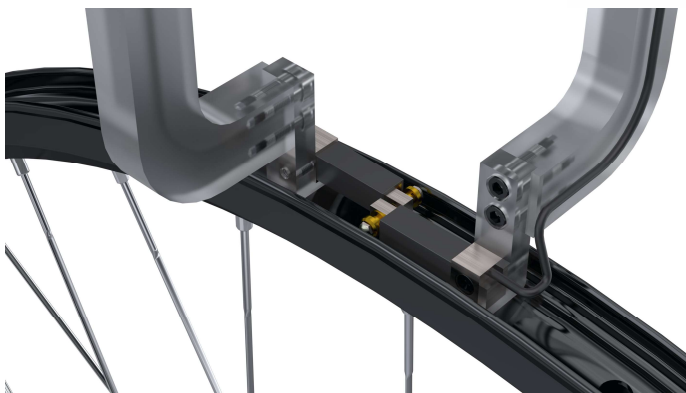
- **High Resolution:** Solartron LVDTs offer resolution up to 0.01 micron, which is excellent for checking flatness and height build.
- **Short:** Solartron offers DZ and Digital Short probes that are up to 50% shorter than comparable LVDT's. These are great for tight spaces.
- **Skinny:** Solartron offers both 6mm diameter and 3mm diameter probes for areas where several points need to be measured.
- **Specialized Mini Probes:** Solartron Mini Probes and Mini Single Leaf Flexures can fit into bores and tight gaps that other sensors cannot.
- **Customization:** Elements such as special length cables or tips can be added.
- **Digital Option:** In addition, Solartron's Digital Orbit® network offers a calibrated sensor, and enables multiple, synchronized readings into a PC or PLC



Gauging probes checking flatness of a gear



Checking distance between gears



DUSM probes checking gap in wheel



6mm probes and mini probes checking end of bicycle fork

Orbit® – The Total Measurement System from Solartron Metrology

The Solartron Orbit® Digital Measurement System, provides a limitless set of measuring system solutions, with numerous different interfaces to computers and PLC's.

