

Application Story

Dynamic

Thickness gauging of commercial products using Feather Touch Probes



Precision. Quality. Reliability

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The Product

Feather Touch Probes are designed specifically for applications where low tip forces are critical. Air is vented through the shroud at the front of the probe during actuation, which in turn cleans the bearing.



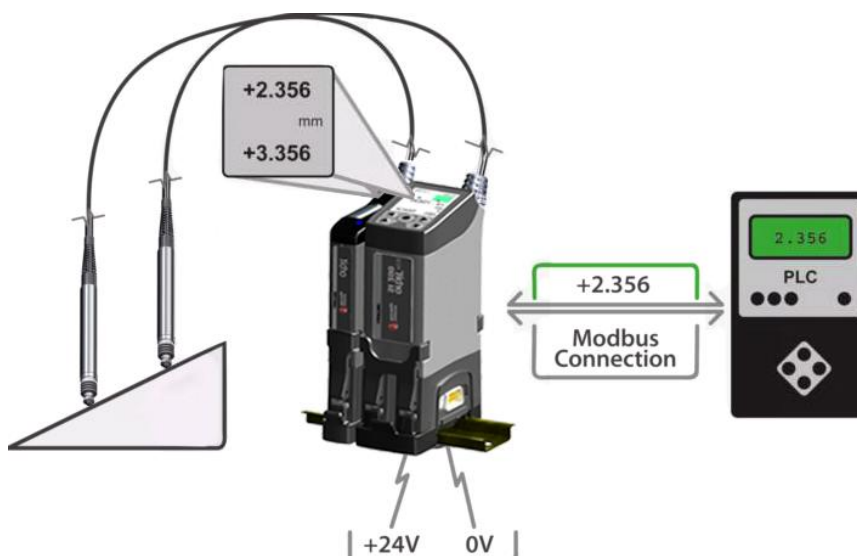
Range:	2 to 20 mm
Accuracy:	Up to 0.05% of reading
Resolution:	Up to 0.01 μm
Repeatability:	Up to 0.15 μm

The Challenge

With costs soaring and people becoming more environmentally aware, it is important for manufacturers of commercial products to try to reduce the amount of materials used where possible. In order to reduce financial and environmental costs one solution is to reduce the thickness of the materials used, enabling high quality products to be produced at a smaller cost. For this, probes need to accurately measure the thickness to ensure functionality is not compromised. This calls for a tightly monitored and controlled manufacturing process whereby the dimensions are not deviated from.

The Solution

Using Solartron Metrology's probes, the thickness of materials are able to be measured to provide the optimum thickness without compromising quality. Metrology systems can be conceived and adjusted to each manufacturing application to enable gauging of both interior and exterior elements, flatness and perpendicularity of products, as well as the location and orientation of mounting surfaces and points. Furthermore, to prevent thinner areas of materials, such as steel, deforming Feather Touch probes can be used to provide a tip force of less than 0.7N. This solution is ideal for manufacturing processes where CMM's would be too slow to measure a high volume of parts.



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Solartron pursues a policy of continuous development. Specifications in this document may therefore be changed without notice.

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