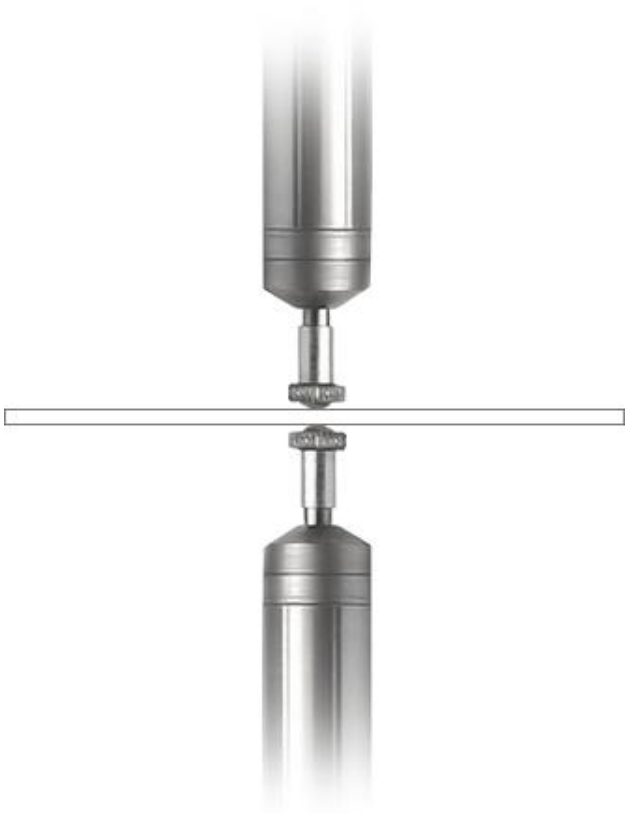
AMETEK®
ULTRA PRECISION TECHNOLOGIES

Solartron Metrology
Precision Driven

Application Story **Electronics**

Measurement of Thin Glass – 1 mm



Precision. Quality. Reliability

www.solartronmetrology.com • sales.solartronmetrology@ametek.com

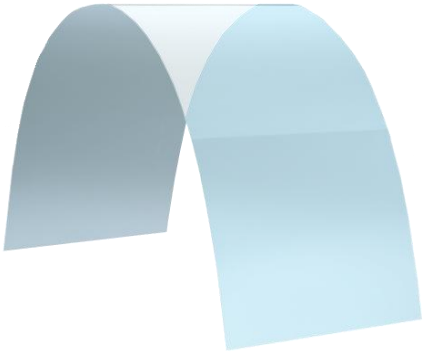
AMETEK®
ULTRA PRECISION TECHNOLOGIES

Solartron Metrology
Precision Driven

The Product

The Ultra Feather Touch probe is a sensor with the industry's lightest tip force: 0.03 – 0.06 N (3-6 grams). Available in spring and pneumatic versions, it is a viable alternative to a non-contact sensor. With various tips available in ruby and nylon, the UFT is already being used to check rubber, semi-conductor wafers and other delicate materials.

Range: 10 mm – Accuracy: Up to 0.06% of reading. – Resolution: Up to 0.1 µm – Repeatability: Up to 0.015µm



The Challenge

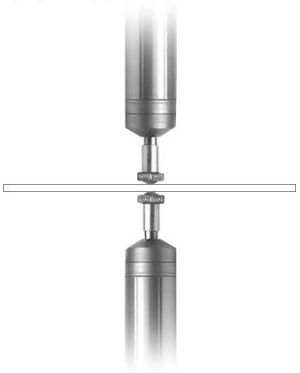
Due to the explosion in touch screens for smartphones, computers and other displays, glass technology is rapidly evolving, with a higher demand for thinner, stronger materials that could be flat or curved.

The delicate nature of these products demands a quick, accurate measurement solution that won't damage or affect the integrity of the glass surface.

The Solution

With its ultra low tip force, the Ultra Feather Touch probe provides excellent accuracy and repeatability for measuring a thin piece of glass. In this application , two Ultra feather touch probes with nylon tips are deployed to check the thickness of 1 mm thick glass, with no damage to the surface.

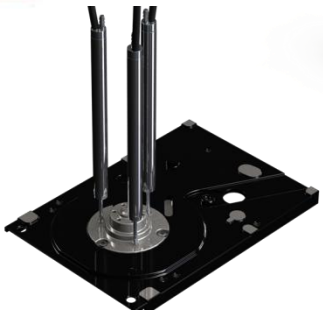
More contact points can also be added to measure the flatness and generate the profile of the glass surface. Compared to non contact sensors, these probes offer considerable cost savings, with a much easier setup. Also, as part of the Orbit® measurement system , these probes can be networked to a PLC or PC.



Other Applications for Ultra Feather Touch Probe

UFT checking semi-conductor wafer

UFT checking a cell phone screen



UFT checking Hard Disk Drive casing

United Kingdom - Head Office
Solartron Metrology
Steyning Way
Bognor Regis
West Sussex
PO22 9ST
Tel: +44 (0) 1243 833333
Fax: +44 (0) 1243 833322
Sales.solartronmetrology@ametek.com

France
Solartron Metrology
Rond-point de l'Espine des Champs
Buroplus - Bat. D
Elancourt 78990
Tel: +33 (0)1 30 68 89 50
Fax: +33 (0)1 30 68 89 59
france.solartronmetrology@ametek.com

Germany
Ametek GmbH
Solartron Metrology Division
Rudolf-Diesel-Strasse 16
40670 Meerbusch
Tel: +49 (0) 2159 9136 500
Fax: +49 (0) 2159 9136 505
vertrieb.solartron@ametek.de

Brazil
Ametek do Brasil, Ltda
Rod. Eng Ermenio de Oliveira Penteado, Km 57, SP75
Bairro Tombadouro
13337-300, Indaiatuba, SP, Brazil
Tel: +55 19 2107 4126

India
Ametek Instruments India Private Limited
1st Floor, Left Wing
Prestige Featherlite Tech Park
Plot #148, EPIP II Phase
Whitefield, Bengaluru 560 066
Karnataka, India
Tel: +91 80 6782 3200
Fax: +91 80 6782 3232

USA
Solartron Metrology
USA Central Sales Office
915 N.New Hope Road, Suite C
Gastonia, NC 28054
Tel: +1 800 873 5838
Fax: +1 704 868 8466
usasales.solartronmetrology@ametek.com

China
AMETEK Commercial Enterprise (Shanghai) Co. Ltd
No. 155 Puhui Road
Ju Ting Economic Development Zone
Shanghai 200131, China
Tel: +86 21 5763 2509
Fax: +86 21 5866 0969 Ext. 261/262
china.solartronmetrology@ametek.com

Solartron Metrology
Precision Driven

Offices worldwide
Agent and distributor details available at
www.solartronmetrology.com

bsi. UKAS MANAGEMENT SYSTEMS 003
Q09540

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

AMETEK®
ULTRA PRECISION TECHNOLOGIES

Precision. Quality. Reliability

www.solartronmetrology.com • sales.solartronmetrology@ametek.com