

## Application Story

*Automotive*

# Alignment of camshaft bearings using a Digital Miniature Probe fixture

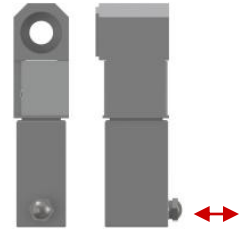


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## The Product

Solartron's Digital Miniature Probe is a robust miniature flexure with all the attributes of the larger flexure gauging products. Measuring just 6.25 x 7.5 x 25 mm, it is particularly useful in all aspects of bore gauging and other applications in tight spaces, where high accuracy and durability are required.



Range: 0.5 or 1 mm  
Accuracy: 0.2% of reading  
Resolution: 0.1  $\mu$ m  
Repeatability: Up to 0.1  $\mu$ m

## The Challenge

In automotive engine plants, camshaft bearings must be precisely manufactured and aligned, so that an engine runs smoothly and production stays constant. The bearings themselves can be difficult to gauge, as passing any bore gauge through them can induce wear and tear on the gauge.



## The Solution

Because they are quick, accurate, and cost effective, the Solartron Miniature Probe is frequently utilized in these types of bearing checks. It is small enough to be mounted to a bore gauge, and its double flexure design provides the ruggedness for the repeated up and down from being threaded through the mounts. Also, since the probes come pre-calibrated, they only need to be mounted and mastered before use, ensuring an easy setup on the factory floor.



The Digital Miniature Probe is built to withstand rotation and side-loads, so the bore gauge can be rotated within the bearings to ensure the camshaft is at its proper roundness. Custom tips can also be created, for easier pass-through.



#### 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

#### 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  
Tel: +86 21 5763 2509  
Fax: +86 21 5866 0969 Ext. 261/262  
china.solartronmetrology@ametek.com



# Solartron Metrology

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Offices worldwide  
Agent and distributor details  
available at  
[www.solartronmetrology.com](http://www.solartronmetrology.com)



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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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