

Application Story

*Test & Measurement*

## Concrete material testing using Digital Probes



Precision. Quality. Reliability

[www.solartronmetrology.com](http://www.solartronmetrology.com) • [sales.solartronmetrology@ametek.com](mailto:sales.solartronmetrology@ametek.com)

## The Product

The standard DP range of Digital Spring Push Probes has justifiably become the work horse of the gauging industry. Very high resolution, excellent linearity and high data speed come as standard. Long life precision bearings, and an IP65 rating ensure that probes maintain their performance for millions of cycles.

**Range: 2 to 20 mm - Accuracy: Up to 0.05% of reading – Resolution: Up to 0.01  $\mu$ m – Repeatability: Up to 0.15  $\mu$ m**



## The Challenge

Testing fixtures supplied for building materials, such as the manufacture of concrete, are important to ensure of the correct properties of the material and to understand its capabilities.

Companies needing to measure the bending of hardened concrete face a problem of finding probes which are resilient enough to withstand the strain of the application.

## The Solution

The concrete testing fixture consists of a drain into which the liquid concrete is filled. A Solartron DP 5 S positioned at one end of the drain will measure any extension or bending of the concrete once it hardens.

The drain is capable of heating the concrete to simulate floor heating. Through an Ethernet interface the user can access a built-in webserver and visualize measured data in a Java applet or download the collected readings.





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