

Application Story

Dynamic

Dynamic flatness measuring using Displacement S Series



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The Product

The S Series of LVDT displacement transducers is the culmination of many years' experience gained from Solartron Metrology's highly successful Mach One range plus careful note of market feedback. The stainless steel body with improved sealing options of IP65 or IP67, coupled with new polymer guides with rigid carriers, ensure that the transducers keep working accurately and reliably, especially in wet or corrosive conditions.

Antenna: Class 1, 2 or 3 Bluetooth[®] - Reading Range: Up to 15 meters – Resolution: <0.1 μm – Power: Detachable, rechargeable battery pack.



The Challenge

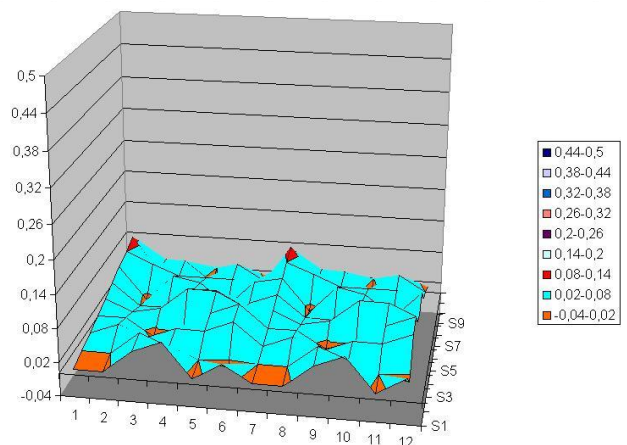
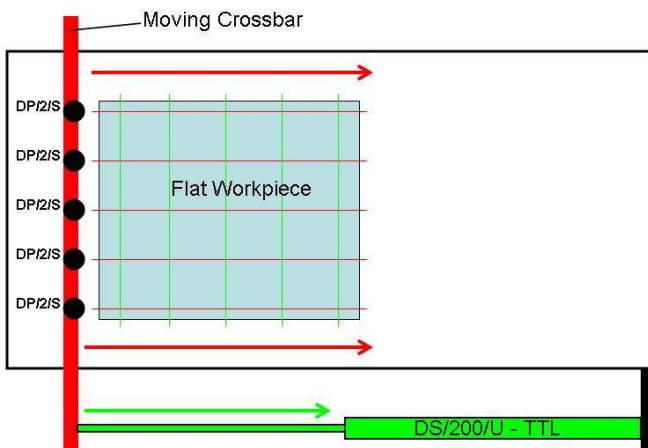
Manufacturing companies undertaking the measurement of flatness of surface need to take precise readings for the smallest degree of change, whilst needing to have a concise output for easy readability.

The Solution

The Orbit[®] 3 Network is able to take synchronised readings of several digital probes, using the Orbit[®] Dynamic-Mode which runs at high speed. A displacement sensor, such as the S Series, can be used alongside an output module, such as a TTL, for synchronisation.

The displacement sensor measures the path of a motor-driver linear guided crossbar. There are several digital probes fixed onto the crossbar, on moveable mounting brackets.

A flat work-piece, fixed on the table, can be measured with the crossbar. With a simple Excel programme on a PC, the values can be read and stored, which can then be visualised in a virtual 3D model.



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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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