

In-process measurement on a machine tool – an update

DMAC part of the Engineering Measurement Awareness Network

Renishaw plc - Wotton-under-Edge

16 September 2008

Programme

- 10:00 Registration and coffee
- 10:25 **Introduction**, *Malcolm Gull, AWE (DMAC machine tool co-ordinator)*
- 10:30 **5Align – calibrating 5-axis machine tools to improve component accuracy**, *Marc Saunders, Renishaw*
How probing can be used to check and compensate for the alignment and position of rotary axes, improving the precision of 5-axis machining.
- 11:00 **ISO/CD 230-10 - Test code for machine tools: Determination of the measuring performance of probing systems of a NC machine tool**, *Malcolm Gull, AWE*
This will present the new draft ISO standard that specifies test procedures to evaluate the measuring performance of contact probing systems integrated with a NC machine tool.
- 11:30 **Tea & Coffee**
- 11:45 **Uncertainties in point coordinates and part conformance assessment**, *Alistair Forbes, NPL*
Coordinate measuring systems (CMSs) are replacing hard gauges in part conformance assessment and statistical quality control. The digital representation of a part through point coordinates brings many potential advantages but issues such as measurement uncertainty, measurement strategy and form errors have to be understood and managed.
- 12:15 **Quality through Manufacture**, *Gavin Bell, Hexagon Metrology*
Showing through working examples, how metrology software can be used to influence and control manufacture starting from the design stage, through manufacture and assembly.
- 12:45 **Lunch**
- 13:30 **New Approach to Manufacturing Attracts Royal Interest**, *Guy Brown, GSPS*
Martin Aerospace, a Rolls-Royce subcontractor, has employed high-accuracy Renishaw probes and a GSPS CNC Reporter™ process monitoring package to reduce machining lead times and improve consistency.
- 14:00 **On Machine Gauging within the US Weapons Complex**, *Bryant Morgan, Sandia National Laboratories*
An overview of what's happening "across the pond" - what Sandia and Los Alamos National Laboratories are doing today and planning for the future.
- 14:30 **Open forum discussion and tea & coffee**
- 15:00 **Demonstrations** (Close at 16.00)

Faxback Registration Form
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Name of Delegate 2:	
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