

Presentation to SC21 Task Group

**Product Verification and Measurement:
*Supporting UK Manufacturers to improve
productivity and innovation***

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11th July 2017

Session Overview

1. Introduction

“Why take a structured approach to measurement in manufacturing operations?”

2. C+G Improvement Modules

Manufacturing Measurement and Inspection: *“Added Value Product Verification”*

3. Case Studies

Your Feedback!



Applying Measurement for world-class manufacturing performance

Effective Measurement Operations

Generating robust, **consistent**, accurate, reliable measurement data.

De-Risk Current Operations, Ensuring Compliance



Efficiency of Measurement Operations

Cost Reduction, Lead time improvements



Data driven performance improvement

Achieving Growth & Sustained Competitiveness

From improved Productivity

C+G Manufacturing Operations Improvement Modules: Measurement & Inspection

1. Managing the Cost of Quality
2. Calibration Management
3. Measurement System Analysis
4. Building in Quality – APQP, Documentation
5. Standard measurement methods
6. First principles
7. Product verification and Certification
8. First Article Inspection (and last)



Increased profit by eliminating waste and releasing resources

- PV Health Check led to two projects
- Reduced non-conformance by increasing understanding of machine capability; reduced cost of calibration
- Resulted in cost benefit of at least £50k pa



Customer Satisfaction, Company Growth

- Set to double turnover over five years, improved confidence and knowledge, downtime reduced by 8%, variation eliminated in number of areas.
- Acknowledged key role of NPL from delivery of CMM, MSA and artefact measurement support to identify cause for customer rejection of parts.

"We learnt a valuable lesson in the use of metrology"



Demonstrating compliance

- Supported Aeromet to prepare for NADCAP M&I Certification
- Is the first UK company to achieve the new accreditation



Stone Foundries

Growing customer confidence

- Increased the company's confidence in casting modelling process data
- As a result, the company secured a multi-million £ contract by being able to demonstrate its capability to a potential new customer



Your Feedback Please...

1. Do you recognise these opportunities to improve capabilities?
2. Are there any topics we have missed that you think we should include?
3. What advice do you have that would help companies engage with these modules?

Thank You!





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Business, Energy
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FUNDED BY BEIS

The National Physical Laboratory is operated by NPL Management Ltd, a wholly-owned company of the Department for Business, Energy and Industrial Strategy (BEIS).