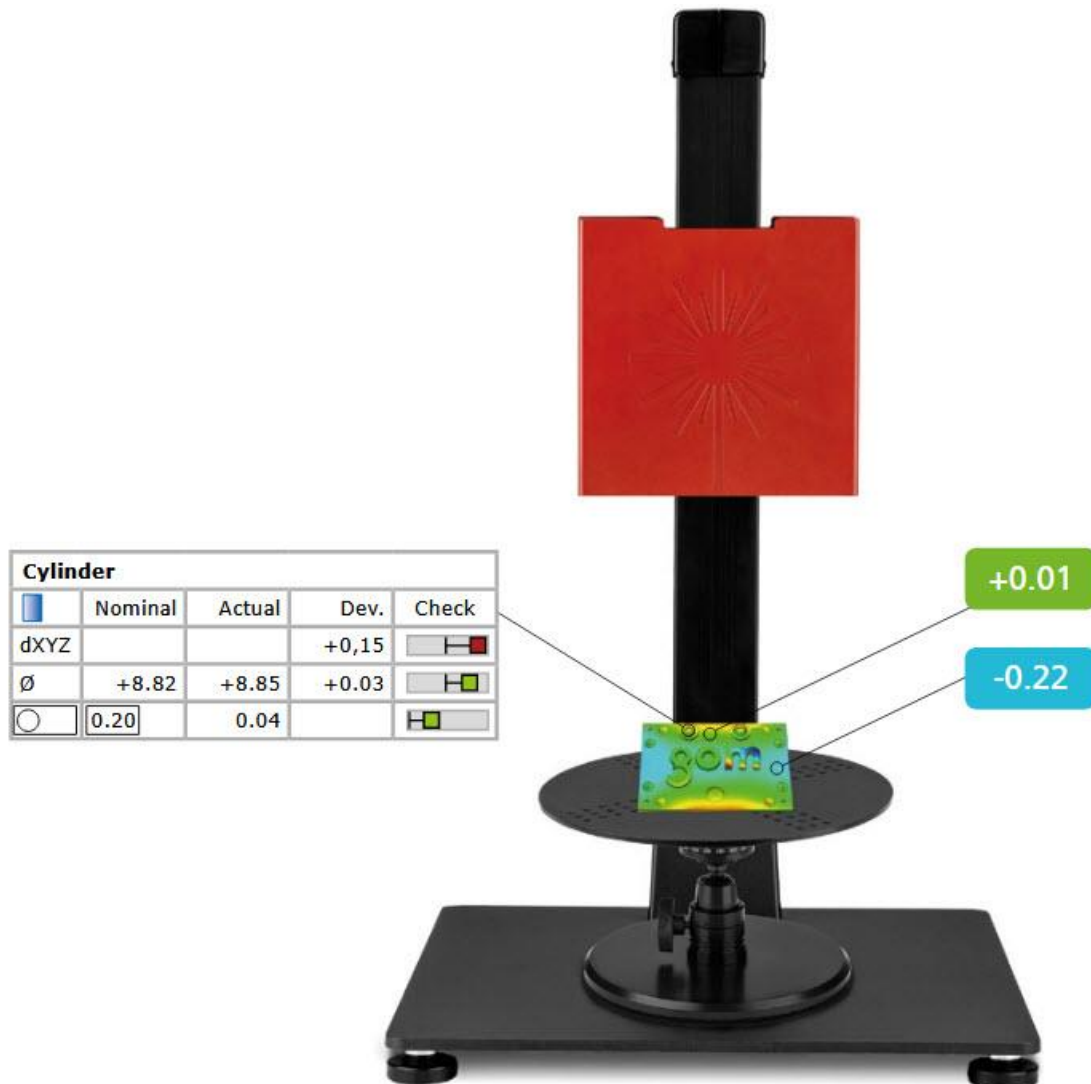




## Manufacturing Metrology Team – Instrument Data Sheet

### GOM ATOS Core Essential Line system



#### Purpose

- Fringe projection 3D form measurement

#### Working principle

- The GOM ATOS Core Essential Line is a narrow-band blue LED structured light system for the measurement of 3D surface form/dimension. The system hardware consists of stereo cameras and a digital projector unit.



## Advantages

- Quick, flexible set-up for a range of materials and application types
- Compact, mobile design
- Narrow-band blue LED technology delivers precise measurements regardless of light conditions

## Limitations

- Limited to macro form measurement
- Difficult to measure untreated highly reflective surfaces

## Related research focus

- Post-process measurement feedback for AM artefacts
- Additional applications involving materials including:
  - Ti6Al4V (AM grade)
  - Nylon 12 (AM grade)
  - Anodised aluminium
  - Asphalt
  - Human bone
  - Human skin

Instrument specification	
Measuring Area	300 mm × 230 mm
Working Distance	440 mm
Point Spacing	0.12 mm
Sensor Dimensions	361 mm × 205 mm × 64 mm
Weight	2.9 kg
Acceptance Test	VDI2634 part 3

**For contract measurement enquiries, please contact:**

**MMT@nottingham.ac.uk**