

Subcontract Measurement Services

EuroPac 3D utilises all of our 30 years knowledge base of coordinate measuring machines to offer probably the most comprehensive measurement service bureau in the UK.

From our base in Cheshire we are able to offer the following measurement services:

CMM MEASUREMENT SERVICES



Using traditional coordinate measuring machines to inspect part components either to paper drawings or full 3D CAD models. CAD formats readable include CATIA V4/V5 (including PMI), IGES, STEP, Solidworks, Parasolid, Pro E and UG.

PORTABLE ARM MEASUREMENT SERVICES



Specialising in Cimcore portable measuring arms - probably the most accurate system on the market, EuroPac 3D can offer a full inspection service which is fully portable enabling full flexibility of measurement. We can come to site and measure your components.

LASER SCANNING FOR REVERSE ENGINEERING



EuroPac 3D has one of the largest selections of digitising equipment in the country. From small to large volume high resolution, our technicians have the luxury to choose the best technology available to solve your scanning needs.

Data collection starts with a high density point cloud which is then converted into a triangular mesh surface (STL). Typically this file can be used for rapid proto-typing or CFD analysis.

For further downstream applications the data can then be transformed into a fully usable rapid NURBS surface. It is also possible to interrogate the scan data and produce fully parametric solid models which are transferable into native CAD systems. This means that the data received is fully editable in the downstream CAD system, not an unusable dumb solid.

NDI OPTOTRAK MEASUREMENT SERVICES



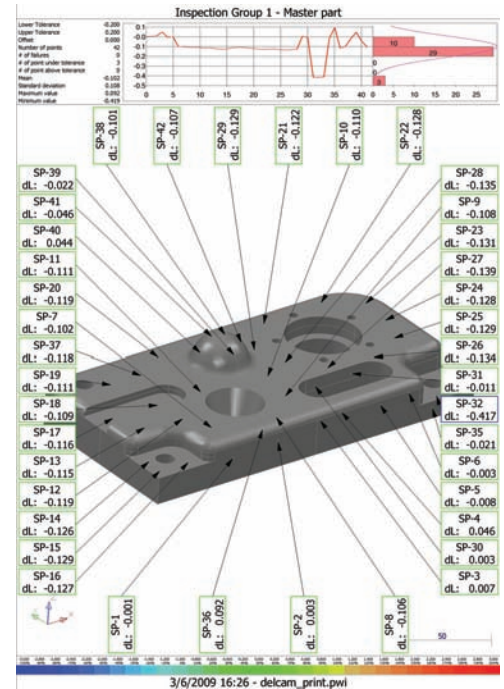
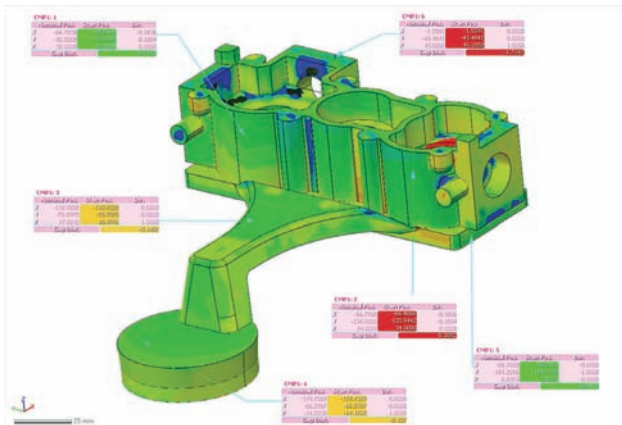
The NDI Optotrak allows full flexibility for on-site shop floor measurement. The Optotrak is a wireless probing and scanning system used for large volume inspection in the aerospace, fabrication and automotive industries.

Unique dynamic referencing also enables parts to be measured even if there is vibration or part movement, negating the need to transport parts to a stable environment away from manufacturing.

Laser Scanning for Inspection

With data point collection rates of 458,000 points per second EuroPac 3D has the capability to rapidly capture component curvature and geometry much quicker than conventional measurement techniques.

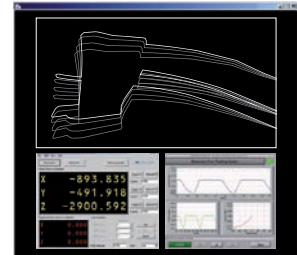
This volume of data also allows 100% complete inspection of parts instead of individual discrete points. Colour mapping gives a complete instant picture of where a part has been manufactured out of tolerance, while other key characteristics and GD&T measurements can be extracted from the data.



DYNAMIC MOTION MEASUREMENT (DMM)

The NDI Optotrak system utilises a unique technological advantage of dynamic photogrammetry. This means that targets can be placed on any object and the relative movement of each target can be monitored. Applications include:

- Part positioning and alignment
- Vibration analysis
- Part deformation
- Part dynamics
- Guided assembly
- Door and closure testing



SOFTWARE TRAINING

EuroPac 3D has a vast knowledge of scanning and measurement software and runs regular training courses on:

- Polyworks
- Rapidform
- PowerInspect
- DOCS Tube Inspection
- Geomagic
- Aberlink



Measuring the future in 3D

SUBCONTRACT MEASUREMENT SERVICES

www.europac3d.com