



TOPO®: WORLD-CLASS SURFACE ERROR VISUALIZATION AND PROJECTION



Use LPT's laser tracker systems to increase your manufacturing cycles and quality compliance with complete, and accurate surface error visualization and projection in near-real time on your production line.

Visualize Cost Savings. LPT combines state-of-the-art laser and scanning optics to capture 3D surface geometry measurements in the form of 3D point clouds with an unprecedented combination of speed, completeness and accuracy. Once LPT's system captures your product's surface geometry, it compares it your model of an optimal surface in LPT's TOPO® software.

Project Higher Profits. LPT saves hours of valuable manufacturing and technician time. LPT's laser tracker system projects a laser image detailing the deviations from CAD design directly onto the actual 3D surface in topographical format for on-the-spot modification. This eliminates time-consuming repetitions of physical comparisons between production parts and surfaces with reference templates, which may require removing production products to remote facilities.

- Reduce Manufacturing Cycle Time
- Reduce Costly Quality Deviations
- Generate a More Valuable Output
- Efficient and Safe
- Easy to Learn

Pricing & Availability

LPT's TOPO systems are available for installation in your facilities. For more information or pricing, please contact our offices, or visit our website at www.lptcorp.com

Laser Projection Technologies

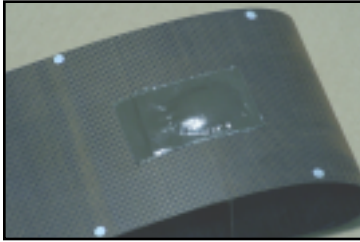
8 Delta Drive, Londonderry NH, USA 03053

Telephone: 603.421.0209

Toll Free: 888.478.9553

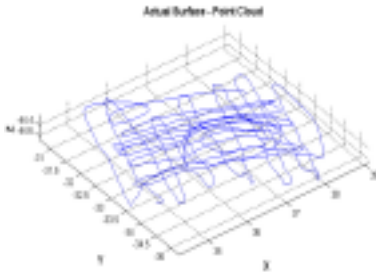
Fax: 603.421.0072

SURFACE MAPPING USING TOPO



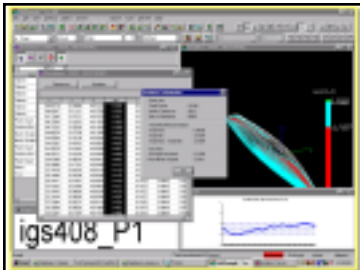
An anomaly was added to the surface of an airfoil in the form of a lump of material.

The airfoil part with lump anomaly was scanned with LPT's laser tracker.



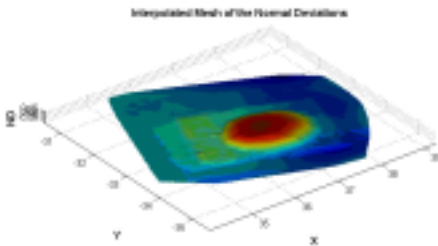
A complete map of the surface illustrates the sections of the part that will require modification

Deviation point cloud data file (x, y, z, dN) was transferred to the LPT TOPO computer

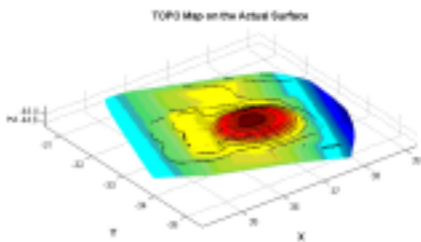


Tracker's Data Processing Software computed normal deviations between the nominal model and the actual surface with lump anomaly.

PROCESSING DATA BY THE TOPO SOFTWARE

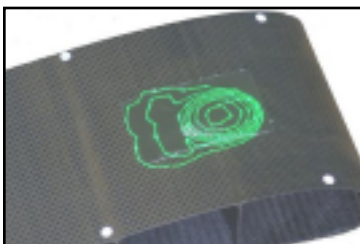


Step 1 – Interpolating Surface Normal Deviations



Step 2 – Computing Topographical Projection Contours

Step 3 – Modeling Projection and Generating Layerized Plies for Laser



Then LPT's Laser Tracker Projects the TOPO Deviation onto your part surface for modification.



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