

NDI DYNAMIC MOTION MEASUREMENT



1

Dynamic Referencing

This unique feature uses small targets that are attached to key points of interest on the component. The Optotrak can track up to 512 targets with rates up to 4600 measurements per second. The targets transmit wirelessly and beamlessly.

2

The NDI Optotrak Tracker

The Tracker receives real-time photogrammetry data from the targets positioned on the part and relays the information to your computer system.

3

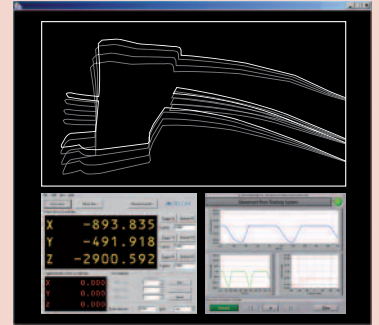
Part Movement Tracking

Movement of a part in a typical wind tunnel environment or with artificially applied stress conditions is captured in scanned image and data formats for pinpoint accuracy. Targets and Tracker can be repositioned at any time.

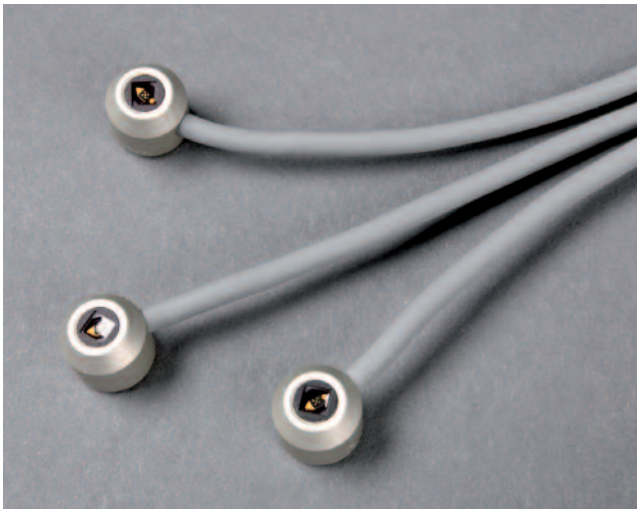




The position of up to 512 targets can be recorded while the component is in a static condition. Once an external force is applied such as wind, the real-time displacement of targets are recorded and part deformation/position can be accurately logged.



THE OPTOTRAK FROM EUROPAC 3D IS A WIRELESS AND BEAMLESS MEASURING DEVICE WHICH CAN TRACK TARGETS PLACED ON AN OBJECT. AS THE OBJECT MOVES, THESE TARGETS CAN BE VERY ACCURATELY TRACKED AS POINTS IN 3D SPACE. TARGETS (BELOW) ARE AVAILABLE IN DIFFERENT SETUPS DEPENDING ON THE SIZE OF THE PART AND THE VOLUME OF DATA TO BE COLLECTED.



DYNAMIC TRACKING

- Part positioning/alignment
- Vibration analysis
- Part deformation
- Part dynamics
- Structural testing
- Guided assembly
- Door and closure testing
- Real-time 3D/6D feedback

DYNAMIC MEASUREMENT CAPABILITY

- Target resolution (at 2.5m) up to 2 μ m
- Targets (3D) up to 512
- Rigid bodies (6DOF) up to 170
- Sampling speed (targets/sec.) up to 4500