



An AOA Xinetics optical metrology instrument for measuring optical components.



Boxes being counted, measured, and checked for their position, orientation and mail type by the AOA Xinetics measurement system.

Customized Optical Measurement Solutions

Diverse, Non-Contact, High-Speed and Large-Format

Your Measurement Partner

Northrop Grumman's AOA Xinetics designs and manufactures custom measurement systems for specialized applications. If a precision measurement is needed, a system can be customized for you, regardless of the type of surface being measured.

AOA Xinetics can measure items ranging from small optical components to 60' x 60' steel plates, as well as static objects, films, webs, and moving pallets. We specialize in solving problems that are not addressed adequately by off-the-shelf products. AOA Xinetics provides solutions for:

- *Polymer film in-process measurement*
- *Dimension pallets up to 8' x 8' x 8'*
- *Windshield curvature measurement*
- *Turbulent optical wavefronts*
- *Small optics to $\lambda/400$*
- *Room-sized objects*
- *Paper web inspection*
- *Segmented mirror alignment*

Case Study: Material Handling

A company asked AOA Xinetics to develop an optical system to classify package types and to detect whether they had been properly separated for automated handling. AOA Xinetics developed a 3D measurement system and assessed density, surface roughness, and other cues to reliably classify the packages at up to 500 ft./min.

AOA Xinetics Measurement Capabilities

- **Fast.** Up to 30,000 simultaneous point measurements; with data processed within seconds of the measurement.
- **Accurate.** Capable of $\pm 0.002''$ accuracy over a 10-foot span.
- **Vibration-insensitive.**

Since all the measurements can be taken in a single snapshot, neither the piece being measured nor the AOA Xinetics device needs to be stationary during the measurement.

- **Large, Flexible Grid.** Measure objects up to 60' x 60' in a single shot. For some applications, the operator can specify a measurement array of arbitrary placement and color.
- **Deviation-sensitive.** Measurement pattern can be tailored so that variations can be measured from a desired shape for quality assurance.

For more information, please contact:

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