4D Technology Corporation is an innovator in the design and manufacture of metrology products for optics fabrication, astronomy, aerospace and other challenging applications. 4D is a privately held corporation built on a strong foundation: unique, patented technologies; a proven team with sustained innovation and success; an intimate knowledge of customer applications; and a rapidly growing base of satisfied customers worldwide.

**Products**

4D specializes in high resolution optical instruments for measuring optical wavefront, polarization, and the surface shape of optics and precision machined components. 4D products have expanded the applications and environments served by high-speed, high-resolution laser interferometers. Dynamic Interferometry®, the technology behind many 4D products, ensures excellent performance for measurements in the most difficult environments, without vibration isolation.

4D interferometers share 4Sight advanced wavefront analysis software, with dozens of analysis tools and displays, painless data exchange, easy operation and a short learning curve.

**Technology**

4D's core, patented technologies set us far apart from our competition. Built around proprietary phase sensors, 4D interferometers acquire high-resolution phase data in as little as 1µs, making them insensitive to vibration and environmental noise. Dynamic Interferometry technology enables measurement of optical-grade surfaces in challenging environments, as well as high-resolution measurement of moving surfaces.

**People**

4D's engineers and scientists hold numerous patents and are responsible for many of the most significant advances in interferometry over the last 14 years. 4D is also committed to quality, service and support: our focus on manufacturing and testing, backed by our experienced support network, ensures worry-free operation for the life of our products.

**History**

4D Technology Corporation was founded in January of 2002 and soon after acquired 4D Vision Technology to commercialize vibration-insensitive interferometry. Since then 4D has grown to over 40 employees, with an installed base of hundreds of systems worldwide and a constantly growing portfolio of products and capabilities to respond to customer needs.

**Innovation**

The world's leading aerospace and optical manufacturers trust their challenging metrology requirements to 4D Technology. New advancements are further expanding 4D's applications in industrial metrology and inspection, biotechnology, advanced sensing and other fields.
Products

4D Technology's laser interferometry systems excel at metrology of optical components and systems, as well as precision surfaces for aerospace, astronomy, semiconductors, displays and volume manufacturing. Dynamic Interferometry enables measurement in demanding environments, for production floor quality control, inspection of moving parts and metrology in thermal vacuum chambers. Wavelengths range from DUV through IR, with apertures from 7 to 800 mm.

PhaseCam® dynamic Twyman-Green interferometers provide high resolution measurements in as little as 1µs—5000 times faster than temporal phase-shifting interferometers. Compact and lightweight, PhaseCam systems make reconfiguring test setups simple and allow for in situ measurement and on-machine polishing metrology.

AccuFiz® compact Fizeau interferometers offer an unmatched combination of performance, quality and value for surface shape and wavefront quality measurements. Unparalleled accuracy at mid-spatial frequencies lets the AccuFiz measure polishing artifacts that other interferometers simply miss.

NanoCam HD dynamic profilers measure surface roughness on small to very large coated and uncoated optics. Impressive portability and vibration insensitivity enable texture measurement at production stations, directly on large optics, on gantries or robots, or in polishing equipment.

PolarCam Snapshot Micropolarizer Cameras simultaneously capture multiple polarized images to boost data content without image blur, for applications in image enhancement, remote sensing, birefringence mapping, industrial monitoring and autonomous vehicle vision.

The 4D InSpec Surface Gauge is the first handheld, precision instrument for non-contact surface defect measurement. Portable, affordable and easy to use, the 4D Inspec puts high resolution measurement where it's needed: on the factory floor, in machine shops and in field service applications.

Custom Solutions from 4D let you tap the creativity and expertise of our team to overcome difficult environments, complex setups and one-of-a-kind measurement problems.

4Sight Software sets the standard for easy data acquisition and analysis, with an open data file format, extensive displays, filtering, masking, analyses and remote operation.

4Sight Upgrades provide a cost-effective solution to refurbish and enhance older temporal phase-shifting interferometer systems, returning them to like-new functionality.

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