Nanopositioning Rotary Stages Offer 0.01 Arc-second Resolution

Aerotech’s ANT95-R and ANT130-R direct-drive rotary stages are part of Aerotech’s nano Motion Technology product line. They offer unprecedented in-position stability (0.005 arc sec) and incremental motion (0.01 arc sec) using unique direct-drive technology, and are ideal for demanding high-throughput manufacturing applications such as disk-drive and MEMS manufacture and test, fiber-optic device alignment, as well as for super-high-precision laboratory R&D applications.

The ANT95-R and ANT130-R rotary stages incorporate Aerotech's unique direct-drive for extremely smooth motion, and both are available in 20°, 180°, or 360° continuous travel. Maximum speed is 200 rpm and maximum acceleration is 400 rad/s2. Axial load capacity is 2 kg for the ANT95-R and 3 kg for the ANT130-R. These rotary stages also offer an 11 mm clear aperture that can be used for product feed-through, laser beam delivery, cable clearance, or application-specific requirements. Error motion specifications are outstanding.

Multi-Axis Capabilities
The ANT95-R and ANT130-R series are designed for compatibility and easy integration with Aerotech’s ANT linear stages. Together these stages provide the accuracy, stability, and performance required for current and future nanomanufacturing and inspection applications. Their low profile reduces the effective working height, minimizing “stack-up” related errors when used as part of a multi-axis system.

Durability
The ANT95-R and ANT130-R were designed to operate in a 24/7 manufacturing

environment while providing laboratory-grade accuracy. Unlike other extremely precise rotary devices, they require no periodic maintenance, and our direct-drive ensures years of trouble-free operation.

For further information, please contact Steve McLane at 412-967-6854 (direct), or via e-mail at smclane@aerotech.com [1].

The ANT95-R series data sheet is available at:
http://www.aerotech.com/products/NANO/ant95r.html [2]

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Links:
[1] mailto:smclane@aerotech.com
[2] http://www.aerotech.com/products/NANO/ant95r.html