Benefits

- Rotation speeds from 1 - 100,000 RPM
- Contamination and maintenance free
- Infinite orientation of the spindle axis
- Low wobble or cross-scan error
- Low jitter or in-scan rotational error

Air Bearing Scanners

For over 30 years, General Dynamics has been providing high-performance laser scanning devices for a variety of imaging applications. From automated optical inspection to high-resolution film recorders, our laser scanning devices are critical components of some of the most precise instruments. General Dynamics designs and manufactures both aerodynamic and aero-static rotary air bearing scanners to meet your specific application needs.

By generating its own air bearing cushion as the spindle lifts off during rotation, the aerodynamic laser scanner provides advantages for applications where an air supply is not available. Our aerodynamic laser scanners provide high rotational speeds, high mechanical cross-scan accuracy and low jitter when used in conjunction with General Dynamics’ spindle controllers.

General Dynamics’ aero-static air bearing scanners provide optimal performance at all speeds. Suspended by pressurized air, the aero-static bearing is completely cushioned prior to dynamic rotation, enabling the device to deliver consistent performance from low to high speeds. The aero-static bearing provides extremely high stiffness for additional load carrying capacity and low repeatable spindle run-out errors.
Air Bearing Scanners

FEATURES

Aerodynamic and aero-static design options
Rugged design and sealed housing
Choice of optical deflectors including monogons, polygons, cubes and prisms
Brushless DC and AC hysteresis synchronous motors
Closed-loop control electronics
Speed and position optical encoders

APPLICATIONS

Computer-to-plate image setters
Health imaging film plotters
Automated optical inspection systems
Continuous web inspection devices
Semiconductor microlithography equipment
Laser projection and display systems

Manufacturer reserves the right to change specifications to reflect latest changes in technology and improvements at any time without notice. Export is subject to U.S. Government regulations.

General Dynamics
Global Imaging Technologies
2909 Waterview Dr
Rochester Hills, MI 48309
+1 248.293.2900
www.gd-imaging.com