IDEAL AEROSMITH
Setting the Future in Motion

1570 Series Multi-Axis Precision Positioning and Rate Table Systems

Model 1572 with Thermal Chamber and Model 1573

FEATURES

- Position Accuracy: ±30 arc sec
- Direct-drive, DC brushless servo system
- Local and remote operation
- User-friendly Ideal Aerosmith Table Language (ATL)
- Front panel display of status and data
- Rack-mountable control chassis
- Precision-ground anodized aluminum tabletop
- 18 to 32 inch diameter tabletop options
- Fail-safe brakes
- Trapezoidal velocity profiles with programmable velocity and acceleration
- Sinusoidal motion profiles with programmable amplitude and frequency
- Position Profile and Velocity Profile Modes for simulating complex motion profiles
- Analog velocity / position input
- Analog velocity output
- High speed position latching
- AERO 822 or 832 Digital Controller
- Available with a slipring package for unlimited rotation or a wire wrap design for a limited rotation system

DESCRIPTION

The 1570 Series Automatic Positioning and Rate Table Systems are designed to provide precise position, rate and acceleration motion for the development and/or production testing of inertial packages and their components.

The 1570 Series test tables are servo-controlled systems that feature direct-drive DC brushless motors, precision optical encoders and a microprocessor that provides accurate and reliable motion control. The table can be operated from the AERO Controller front panel for local control or through a computer interface for remote control. This test table system is designed for ease of operation and is programmed with the Ideal Aerosmith Table Language (ATL) for remote operation. The 1570 Series Table Systems come standard with two remote computer interfaces, IEEE-488 and RS-232.

OPTIONS

- Various slipring packages or wire wrap configurations
- Integral Thermal Chambers
- Vacuum Chamber System
- High speed inner axis (1000 deg/sec max rate)
- Enhanced analog velocity output update rate (8 KHz – standard is 1 KHz)
- Rack-mount cabinet for controller
- *For special requirements, please contact Ideal Aerosmith regarding system customization.*

For much more detailed information, contact Ideal Aerosmith to request a Specification Document.

Performance Specifications		
	Model 1572 Two-Axis	**Model 1573 Three-Axis**
Rotational Freedom options for all axes	1) Unlimited rotation (slipring) 2) ±370 deg (wire wrap) 3) ±540 deg (wire wrap)	1) Unlimited rotation (slipring) 2) ±370 deg (wire wrap) 3) ±540 deg (wire wrap)
Rate		
• Maximum, deg/sec	Inner Axis: ±350 or 1000 Outer Axis: ±350	Inner Axis: ±350 or 1000 Middle Axis: ±350 Outer Axis: ±350
• Minimum, deg/sec	0.00078	0.00078
• Resolution (over entire range), deg/sec	0.00078	0.00078
• Accuracy (measured over 360 deg), % ± Resolution	0.005	0.005
Positioning		
• Accuracy, arc sec	± 30	± 30
• Resolution, deg	0.00039	0.00039
• Repeatability, arc sec	± 5	± 5
Axis Wobble, arc sec	±10	±10
Orthogonality between consecutive axes	±10	±10

Physical Specifications for 1570 Series	
Tabletop	Standard tabletop sizes are 18, 24, or 32 inches (457, 610 or 813 mm) for 1572 Series, and 18, or 24 inches (457 or 610 mm) for 1573 Series. Test load mounting provisions are 1/4-20 threaded holes on a two-inch (50 mm) grid pattern. Custom tabletop and interface patterns available upon request.
Tabletop Connectors	One or two 35 pin or 66 pin MS style connectors (varies with slipring/wire wrap package)
Number of User Lines	Standard slipring packages are 34, 68 or 132 lines. Custom packages are available. Wire wrap packages can be defined by customer.
Test Load Capacity	150 Lb (68 Kg) Centered. Note: The accuracy performance specifications shown are based on a centered, 150 lb maximum payload. The system is rated for much larger loads, but some performance specifications may be affected.
Integral Thermal Chamber	Integral Thermal Chamber options are available. Contact Ideal for more information regarding options.
Leveling: Range and Resolution	± 1 degree (Continuous)
Controller	Request data sheet for AERO 8x2 controller for more information
• Type & Configuration	AERO 822 Two-Axis Digital Controller or AERO 832 Three-Axis Digital Controller configured in a 19 inch Rack Mountable Chassis
• Communication Interfaces	IEEE-488 and RS-232 ports available to user

For special requirements or custom specifications, contact Ideal Aerosmith.
Specifications subject to change without notice
Please call for pricing