

**Model 1501T  
SINGLE-AXIS MANUAL POSITIONING TABLE**



**FEATURES**

- Manually operated horizontal tilt axis
- Position Accuracy:  $\pm 10$  Arc-Sec
- Position Repeatability:  $\pm 5$  Arc-Sec
- Precision-ground anodized aluminum tabletop
- 35 line user signal

**DESCRIPTION**

The Model 1501T is a single-axis manual tilt table. Designed for testing an IMU (Inertial Measurement Unit), this system supports the IMU on the upper mounting surface and additional electronics on the lower mounting surface. The lower mounting surface helps to counterbalance the IMU and minimizes the counterweights required. The system provides optical access to the IMU mirror at the specified heights.

**OPTIONS**

- A variety of user cable configurations
- Various connectors for user signals
- Various tabletop sizes
- Temperature Chambers for environmental testing
- *For special requirements, accuracies or custom specifications, please contact Ideal Aerosmith, Inc.*

## Model 1501T Specifications

Overall Table Dimensions	67L x 24D x 47.2H inches (1702L x 610D x 1199H mm)
Approximate Table Weight	750 Lbs.
Upper Surface Mounting Characteristics:	
<ul style="list-style-type: none"> <li>• Load Capacity</li> <li>• Dimensions *</li> <li>• Test Load Moment Capacity – Maximum</li> <li>• Surface Flatness</li> <li>• Material</li> <li>• Optical Access to Test Load</li> <li>• Surface Finish</li> <li>• Tilt Axis to mounting surface</li> <li>• Height – floor to mounting surface</li> </ul>	300 Lbs. 24L x 24D inches 225 Ft-Lbs.  .005 inch TIR Aluminum Four (4) lines of sight. Two parallel to tilt axis, two orthogonal to tilt axis 18.42 inches above and below tilt axis. 32 RMS Co-linear 35.33 inches
Lower Surface Mounting Characteristics:	
<ul style="list-style-type: none"> <li>• Load Capacity</li> <li>• Dimensions *</li> <li>• Test Load Moment Capacity – Maximum</li> <li>• Material</li> <li>• Tilt Axis to mounting surface</li> <li>• Height – floor to mounting surface</li> </ul>	50 Lbs. 16L x 12D inches 15 Ft-Lbs.  Aluminum 7.67 inches (below the axis) 27.66 inches
Swing Radius (through base)	28 inches
Tilt Axis Rotational Limits	-20° to 200° or 20° to -200° (Limited by user cable)
Tilt Axis Manual Positioning Capability	2 Cardinal Positions ( 0° and 180°)
Accuracy:	
<ul style="list-style-type: none"> <li>• Positioning Accuracy</li> <li>• Repeatability</li> </ul>	± 10 Arc-Sec ± 5 Arc-Sec
Coning Angle	± 10 Arc-Sec Maximum
Calibration:	Provisions are provided on the upper surface and axis end for the mounting of an opto-mechanical precision indexing instrument (optical polygon) to calibrate and verify the position accuracy of the tilt axis.
Leveling:	
<ul style="list-style-type: none"> <li>• Range</li> <li>• Resolution</li> </ul>	±1 Degree Continuous
Axis Balancing:	
<ul style="list-style-type: none"> <li>• Method</li> <li>• Range</li> <li>• Resolution</li> </ul>	Sliding Counterweights 0-150 Lbs. Continuous
Azimuth Adjustment:	
<ul style="list-style-type: none"> <li>• Range</li> <li>• Resolution</li> </ul>	± 1.5 Degrees Continuous
Operating Environment:	
<ul style="list-style-type: none"> <li>• Temperature</li> <li>• Relative Humidity</li> </ul>	50° F to 95° F 5% to 85%
Bearings	Precision Ball Bearings
Color:	Mounting Surfaces: Black Anodized Base: Machine Blue Paint
* Test load mounting provisions are tapped holes. Contact Ideal for size and hole pattern.	

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

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