



Three-Axis Manual Non-Magnetic Positioning Table

Model 1503-TS-NM-A

The Ideal Aerosmith Trip Guardian [™]1503-TS-NM-A Series test table is a three-axis, nonmagnetic manual positioning table. This table can be used for the calibration of downhole directional instruments including magnetometers, gyroscopes, and accelerometers. The tables are constructed of aluminum, brass, and phenolic and have three orthogonal axes to enable the instrument to be placed in various orientations.

The 1503-TS-NM-A Series is similar to the 1503-TS-SPL version except the work surface is cylindrical and handles payloads up to 4 inches in diameter and 54 inches in length. Each of the three axes may be positioned manually by rotating the axis to the desired position and locking the axis clamp at a coarse axis position. A fine adjust



Model 1503-TS-NM-A and Controller

mechanism, along with the inductosyn and display instrumentation, is then used to set the desired axis position. Like the 1503-TS-SPL, a thermal chamber is provided so the device under test can be subjected to elevated temperature while being rotated.

AVAILABLE OPTIONS:

- Air Amplifier Kit for faster cooling of UUT and chamber
- 210°C High Temperature Option
- Custom fixtures for mounting UUT
- Customized turn-key solutions
- Professional Installation

MODEL 1503-TS-NM-A

MECHANICAL SPECIFICATIONS

Mounting Surface, inches (mm):	4 (102) diameter x 54 (1,372) long		
Table Test Load Capacity, lbs (kg):	40 (18 kg) Centered		
Overall Table Dimensions, inches (mm),	29 W x 70 D x 78 H (737 W x 1,778 D x 1,981 H)		
approximate:		,	,
Table weight, lbs (kg), approximate:	275 (125)		
Axis Orthogonality, arc sec	±30		
	Inner Axis	Middle Axis	Outer Axis
Angular Freedom, deg:	±185	±185	-5 to +365
Fine Adjustment Range, deg:	±0.5	±0.5	±0.5
Adjustment Resolution, deg:	±0.001	±0.001	±0.001
Position Accuracy, arc sec	±30	±30	±30
Repeatability, arc sec	±15	±15	±15
Axis Positioning Mechanism:	Manual operation with coarse and fine adjustment		
Operating Temperature, °F (°C)	32 to 120°F (0 to 49°C)		
Relative Humidity:	Up to 90% non-condensing		
Color:	Machine Blue Paint		

THERMAL SPECIFICATIONS

Oven Interior Dimensions, inches (mm):	4 (102) diameter x 54 (1,372) long
Temperature Range:	Ambient to 175°C (350°F) or 210°C (410°F)
Thermal Stability:	± 2°C (± 3.6°F)
Temperature Controller:	Watlow F4 Microprocessor-based Programmer/Controller
Computer Interface:	IEEE-488
Heating Capacity	2000 watts
Power Requirement:	230 VAC, ±10%, 50/60Hz, 15A, Single Phase

Specifications are subject to change without notice Please call for pricing information For special requirements or custom specifications, please contact Ideal Aerosmith, Inc. Revision – B