

Three-Axis Manual Non-Magnetic Positioning Table

Model 1503-TS-SPL



The Ideal Aerosmith Model 1503-TS-SPL test table is a three-axis non-magnetic manual positioning table. This table can be used for the calibration of downhole directional instruments including magnetometers, gyroscopes, and accelerometers.

The table is constructed of aluminum, brass, and phenolic. The table has three orthogonal axes to enable the instrument to be placed in various orientations. The outer axis (azimuth) can be positioned every 90° using the shot pin. The middle axis (inclination) has an engraved dial and a brake so the axis can be held in any position. The work surface is attached directly to the middle axis. The work surface provides a flat surface for mounting V-Blocks to allow cylindrical packages to be rotated about their own axes. Ovens also attach to the work surface to provide the capability to perform the testing over a large temperature range. The usable work space inside the ovens is 6W x 72D x 6H inches (152W x 1829D x 152H mm).

Temperature heating is accomplished using silicone strip heaters. The work space is covered by two ovens. Each oven has its own thermocouple and is controlled separately to minimize temperature gradients. The temperature controller is a dual-zone controller and can be configured to have separate set points or a single set point for the two zones.

MODEL 1503-TS-SPL

MECHANICAL SPECIFICATIONS

Mounting Surface:	Standard: 6 inch diameter x 72 inches (152 x 1829 mm) (without V-blocks). 3 inch diameter X 74 inch long (with V-blocks) Optional: 108 inch mounting surface option available. Contact Ideal Test load mounting provisions are sliding phenolic V-blocks.
Table Test Load Capacity:	50 Lb. (22.7 kg) Centered
Overall Table Dimensions:	30W x 81.3D x 58.5H inches (762W x 2065D x 1740H mm)
Middle Axis Swing Radius:	43.6 inches (965 mm)
Outer Axis Swing Radius:	37 inches (940 mm)
Height of Mounting Surface:	48.5 inches from floor (1232 mm)
Bearings:	Bronze Bushings
Middle Axis Lock (Inclination):	Mechanical Disk Brake
Outer Axis Lock (Azimuth):	Shotpins at 0°, 90°, 180°, 270°
Axis Rotational Limits:	Unlimited for Inner, Middle, and Outer Axis (May be limited by wires for heating and user)
Operating Environment:	10° C to 35° C (50° to 95° F)
Relative Humidity:	Up to 85%
Approximate Table Weight:	550 lbs. (250 kg)
Color:	Machine Blue Paint

THERMAL SPECIFICATIONS

Oven Interior Dimensions:	6W x 72D x 6H inches (152W x 1829D x 152H mm)
Construction:	Insulated, aluminum skin 3-sided cover split into two halves
Operating Temperature Range:	Ambient to 200° C (392° F)
Thermal Stability:	± 2° C (± 3.6° F)
Temperature Controller:	Watlow F4 Microprocessor based Programmer/Controller
Heating Capacity:	1.8 kW Total
Power Requirement Options:	115 VAC, 50/60Hz 15A 230 VAC, 50/60Hz, 7.5A

OPTIONS

- * Various Mounting Kits available. Contact Ideal for more information.
- * IEEE/GPIB Modbus available
- * Optional 45° shot-pin location on outer axis available upon request

Specifications are subject to change without notice

Please call for pricing information

For special requirements or custom specifications, please contact Ideal Aerosmith, Inc.

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