

ST-020-3M

Three-axis non-magnetic rotary table

This three-axis non-magnetic rotary stage comprises azimuth, pitch and roll axes, and is capable of unlimited rotation of $\pm 360^\circ$ on each axis. It is used to simulate the attitude and test the position of test specimens in a near-zero magnetic field environment.



Product Features

- Three-axis $\pm 360^\circ$ unrestricted rotation
- Load capacity 20 kg, work surface diameter 350 mm
- Residual magnetism ≤ 25 nT (static)
- Angular position accuracy $\pm 36''$
- Tilt rotation error $\pm 20''$
- Features a special synchronised gear ratio

Suitable scenarios

Suitable for the aviation, aerospace and inertial navigation industries, this equipment is used for the calibration and testing of magnetically sensitive devices (such as magnetometers, magnetic compasses and non-magnetic gyroscopes) in a magnetically shielded environment.

Technical Specifications

Parameter categories	Parameter items	Parameter values
Accuracy Performance	Angular position accuracy	$\pm 36''$
	Angular position repeatability	$\leq \pm 10''$
	Tilt-rotation error	$\pm 20''$
	Positioning accuracy of two-axis interpolation	$\pm 90''$
Dynamic Performance	Range of motion of each axis	$\pm 360^\circ$ Unlimited
Range of Motion	Load capacity	20 kg
	Table diameter	$\Phi 350$ mm
	Table flatness and runout	≤ 0.03 mm
	Maximum dimensions of the workpiece	$\leq 230 \times 230 \times 550$ mm
Mechanical Specifications	Static residual magnetism	≤ 25 nT
	Dynamic residual magnetism (during normal operation)	≤ 150 nT
Environmental Protection	Operating temperature	0°C to 40°C
Power and Communication	Power supply requirements	220 V $\pm 10\%$, 50 Hz
	Control interfaces	Ethernet/RS422