IDEAL AEROSMITH

Datasheet

MANUAL TILT & TURN TABLE
(1310 Series)

The 1310 series Manual Tilt & Turn Tables are designed for precision calibration of gyroscopic instruments or any devices requiring a tilt input in one or two axes. The table provides a portable, stable, and precise positioning platform with lasting durability.

- *Small and lightweight for easy bench mounting and manual operation*
- *Two degrees of freedom for tilting and rotating test instruments*
- *Spring loaded detents provide accurate table top rotary indexing*
- *Flat, precision ground table top mounting surface*
- *Anodized aluminum construction for durable corrosion resistance*
- *Sensitive bubble levels are included for accurate table leveling*
- *Knurled mounting screws are available for easy instrument package mounting*

The table consists of two axes of motion, one for tilting and the other for rotating the table. It can be tilted in either direction from 0° to 80°, or 0° to 90°, depending upon the model. Rotating the handle in the desired direction will change the tilt six degrees per revolution.

The vernier on the tilt axis is readable to one minute of arc with the vernier adjustable to ± 5°. There are engraved marks at 0.5° increments on the tilt axis.

The table top rotates continuously through 360° in a clockwise or counter-clockwise direction. Engraved marks are provided at 45° increments on the table top; engraved marks at 1° increments are optional. A spring-loaded steel ball engages detents in the bottom of the table top, locking it into position for quick setup. The detents are located every 45°. Tables with optional engraved marks every 1° have detents every 15°. The tension is adjustable for the positioning detents on the table top.

The table includes two one-minute sensitive levels on the table base for a more accurately leveled table surface. A level platform is achieved by adjusting the leveling screws, which are mounted through the base plate. The leveling feet can compensate for as much as 5° of tilt.

The top surface of the table has six tapped holes for attaching the instrument package to be tested. Simply center the instrument package on the table top and secure it. Knurled mounting screws (1/4 - 20) may be purchased separately.

Specifications for 1310 Series	
Table top diameter	8 in. (203 mm)
Weight: ± 80° ± 90°	21 lbs. (9.5 Kg) 22.5 lbs. (10.2 Kg)
Leveling range	± 2.5°
Width	14.7 in. (373 mm)
Depth	10.6 in. (269 mm)
Height: ± 80° tilt range ± 90° tilt range	10.1 in (257 mm) 11.8 in. (300 mm)
Load capacity	30 lbs. (13.6 Kg)
Table tilt range	Standard: ± 80° -90 Model: ±90°
Tilt axis accuracy	±3 arc minutes
Engraved increment on tilt axis	0.5°
Tilt scale vernier resolution	1 arc minute
Azimuth rotation range	± 360°
Azimuth axis accuracy (detents & engraving)	±6 arc minutes
Engraved increment on azimuth axis	Standard: 45° -1 Model: 1°
Turn indexing detents increment	Standard: 45° -1 Model: 15°
Leveling sensitivity	1 arc minute
Type of finish	Black anodizing per MIL-A-8625 Type II Class 2

Buyers Guide

Model Number	Part Number	Description	
Model 1310-L	227545-2	Tilt range: ±80º	Engraved increment on azimuth axis: 45º
Model 1310-L-90	227545-7	Tilt range: ±90º	Engraved increment on azimuth axis: 45º
Model 1310-L-1	227545-5	Tilt range: ±80º	Engraved increment on azimuth axis: 1º
Model 1310-L-1-90	227545-8	Tilt range: ±90º	Engraved increment on azimuth axis: 1º

Accessories and Options

Part Number	Description
227427	Set of 3 knurled mounting screws
-1	Engraved turn scale increment on table top (with detents every 15°)
-90	Table tilt range: ±90°
Various mounting brackets are available. Please refer to the Mounting Bracket & Adapter Plate data sheet.	

For special requirements or custom specifications, contact Ideal Aerosmith, Inc.
All prices and specifications are subject to change without notice
All prices in U. S. Dollars
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