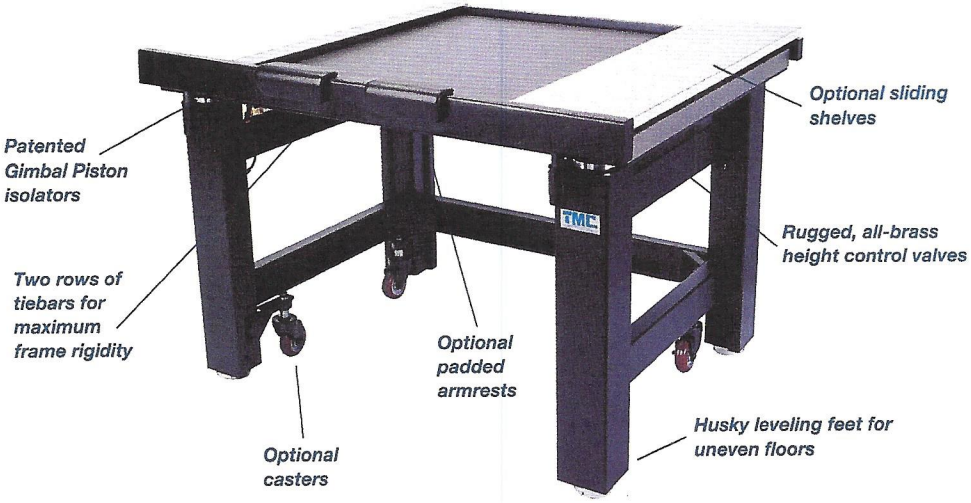
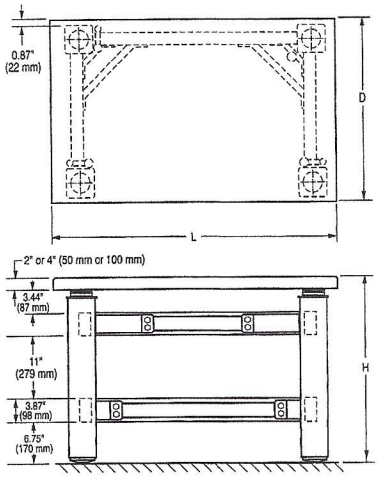
63-500 SERIES

High-Performance Lab Tables





TMC 63-500 Series high-performance lab tables provide an excellent vibration-free working surface for loads up to 350 lbs (160 kg). Now with modular construction, these tables are recommended for use in such diverse applications as: electrophysiology, cell injection, ultramicrotomy, photomicroscopy, scanning tunnel microscopy and confocal laser scanning microscopy.

Features Include:

Gimbal Piston Isolators. Our Patented Gimbal Piston isolator has been proven by independent tests to consistently outperform the competition. It achieves both horizontal and vertical isolation down to very low input levels.

Thin-Wall Rolling Diaphragms. An integral part of the Gimbal Piston, the thin-wall, dacron-reinforced, rolling diaphragm air seals are only 0.020 in. (0.5 mm) thick, and extremely flexible. They do not stiffen the spring as thicker rubber diaphragms do.

All-Brass Height Control Valves. All systems are equipped with rugged all-brass height control valves. Virtually unbreakable, they are finger adjustable with no need for tools. The Standard Model maintains height to ± 0.050 in. (±1 mm); the Precision Model, to ±0.005 in. (±0.1 mm).

Internal Piston Travel Restraint. Unique in the industry, TMC provides husky, tamper-proof, built-in piston travel restraints. The restraints are completely independent of the table valves, and have been ram-tested at forces above those produced by the pistons operating at full pressure. They cannot be decoupled accidentally and do not interfere with setting up and using the table, but simply protect against overtravel, without the use of external bars that create hazardous pinch points. Heavy loads, including the top plate, can be safely removed from a table in full operation.

Tiebar Gussets. Exclusive TMC tiebar gussets increase table frame rigidity. They compensate for the elimination of the front tiebar in order to provide kneewell space.

Rugged Built-in Leveling Feet. Table legs include built-in fine-thread 3 in. (75 mm) diameter screw jack levelers with 1/2 in. (13 mm) travel, provision for external adjustment and a handy adjustment wrench. The base is a solid, slightly domed shape to assure solid, wobble-free contact with sloping or irregular floors.

Superior Table Tops. Our standard laminated tops provide an attractive stainless steel ferromagnetic working surface with highly damped, high stiffness construction at low cost. For applications requiring the ultimate stiffness and damping, or mounting holes, specify our patented CleanTop II honeycomb top.

Which Top Is Best for You?

Stainless Steel Laminate.
This, our least expensive 63-500 top, is recommended for applications that require a strong magnetic attachment and will not involve repeated exposure of the top to corrosive liquids.

GENERAL SPECIFICATIONS

Isolator natural frequency:

High Input Specifications	
Vertical natural frequency	1.0 Hz
Horizontal natural frequency	1.2 Hz
Low Input Specifications	
Vertical natural frequency	1.5-1.9 Hz
Horizontal natural frequency	1.7-2.2 Hz

Isolation efficiency @ 5 Hz:
Vertical: 60–95%
Horizontal: 30–80%

Isolation efficiency @ 10 Hz:
Vertical: 80–97%
Horizontal: 60–94%

Gross load capacity:
1,400 lbs (640 kg)

Net load capacity:
350 lbs (160 kg)

Finish: Medium texture black powder coat frame; stainless steel top.

Facilities required:
80 psi nitrogen or air

However, stains from such liquids can be removed with an industrial strength stainless steel cleaner.

Plastic Laminate on Stainless Steel. Without sacrificing structural performance, this top is an easy-to-clean alternative to stainless steel. A plastic laminate is added to the top surface, which reduces ferromagnetic attachment strength.

CleanTop II. The CleanTop II features TMC's patented spill-proof, drilled and tapped mounting hole array. Tops are 4 in. (100 mm) thick and have 1/4–20 holes on 1 in. spacing or M6 holes on 25 mm spacing. The small cell-size steel honeycomb design provides even stiffer and better damping than our stainless steel laminate. Guaranteed flat to ±0.005 in. (±0.13 mm). For more information, see page 38.

Accessories

The many accessories available with 63-500 lab tables are specified separately and listed in the Table Ordering Chart below. (See following example.)

How to Order

Example: To order a 30 in. x 48 in. (750 mm x 1200 mm) table with a 2 in. (50 mm) thick stainless steel laminate top, front and rear support bars, two 10 in. (250 mm) wide shelves, and armrest pads, the following numbers are specified:

1 each	63-541	table
1 each	81-301-02	front support bar
1 each	81-302-02	rear support bar
2 each	81-312-02	10" (250 mm) shelf
2 each	81-303-01	armrest pad
Note: You must specify quantity.		

3

Table Ordering Chart

TABLE MODEL	25" x 36" 625x900 mm	30" x 30" 750x750 mm	30" x 36" 750x900 mm	30" x 48" 750x1200 mm	30" x 60" 750x1500 mm	36" x 48" 900x1200 mm	36" x 60" 900x1500 mm
Isolator frame only (no top)	63-510	63-520	63-530	63-540	63-540	63-560	63-560
Isolator with 2" stainless steel laminate	63-511	63-521	63-531	63-541	63-551	63-561	63-571
Isolator with 2" stainless steel and plastic laminate	63-512	63-522	63-532	63-542	63-552	63-562	63-572
Isolator with 4" CleanTop II, 1/4-20 on 1" spacing	–	–	63-533	63-543	63-553	63-563	63-573
Isolator with 100 mm CleanTop II, M6 on 25 mm	–	–	63-534	63-544	63-554	63-564	63-574
ACCESSORY MODEL							
Full perimeter enclosure, 2" (50 mm) tops	81-321-01	81-321-02	81-321-03	81-321-04	–	81-321-06	–
Full perimeter enclosure, 4" (100 mm) tops	–	–	81-322-03	81-322-04	–	81-322-06	–
Faraday Cage (full-size) with bi-fold doors	–	–	81-323-03	81-323-04	–	81-323-06	–
Hanging shelf for Faraday Cage (full-size)	–	–	81-326-03	81-326-04	–	81-326-04	–
Type II Faraday Cage with roll-up doors	–	–	81-330-03	81-330-04	–	81-330-06	–
Hanging shelf for Type II Faraday Cage	–	–	81-331-03	81-331-03	–	81-331-03	–
Raised rear shelf	81-324-01	81-324-02	81-324-01	81-324-04	–	81-324-04	–
Subshelf	81-325-01	81-325-02	81-325-03	81-325-04	81-325-04	81-325-04	81-325-04
Sliding shelf for perimeter enclosure	–	81-327-04	81-327-04	81-327-04	–	81-327-06	–
Acrylic enclosure	–	–	81-328-03	81-328-04	–	81-328-06	–
Front support bar	81-301-01	81-301-00	81-301-01	81-301-02	81-301-03	81-301-02	81-301-03
Rear support bar	81-302-01	81-302-00	81-302-01	81-302-02	81-302-03	81-302-02	81-302-03
Sliding shelf, 6" (150 mm) wide	81-311-01	81-311-02	81-311-02	81-311-02	81-311-02	81-311-03	81-311-03
Sliding shelf, 10" (250 mm) wide	81-312-01	81-312-02	81-312-02	81-312-02	81-312-02	81-312-03	81-312-03
Sliding shelf, 14" (350 mm) wide	81-313-01	81-313-02	81-313-02	81-313-02	81-313-02	81-313-03	81-313-03
Sliding shelf, 20" (500 mm) wide	81-314-01	81-314-02	81-314-02	81-314-02	81-314-02	81-314-03	81-314-03
Armrest pads (front support bar)	81-303-01 for all tables (order 2)						
Armrest pads (perimeter enclosure)	81-303-02 for all tables (order 2)						
Articulated Armrest	81-304-01 for all tables						
Articulated Armrest adapter, front bar	81-305-01 for all tables						
Articulated Armrest adapter, perimeter enclosure	81-306-01 for all tables						
Casters, set of 4	83-014-01 for all tables						