## **Optomechanics**

## ▼ CHAPTERS

**Breadboards** 

#### **Mechanics**

**Optomechanic Devices** 

Kits

**Lab Supplies** 

**▼** SECTIONS

**Breadboards** 

**Breadboard Supports** 

**Breadboard Accessories** 

**Science** Desk

**ScienceDesk Accessories** 

**Optical Tables** 

**Table Supports** 

**Optical Table** Accessories

# Standard Series of Nonmagnetic Optical Tables

Thorlabs' Nonmagnetic Standard Series of optical tables are a cost-effective choice for general-purpose applications. These tables utilize similar construction techniques and the same high-quality materials as the Performance and Ultra Series. The Standard Series has a single,

high-density aluminum core and provides broadband damping, leading to a dynamic rigidity and stiffness that outperforms other cost-competitive tabletops.

The Standard Series tabletops are ideally suited for less demanding general photonics applications, such as general spectroscopy and multimode fiber optic setups. They are also good for micropositioning and non-interferometric applications.

- Nonmagnetic 304L Stainless Steel Top and Bottom Plates
- Athermalized Design for Excellent Thermal Stability
- Minimal Deflection Under Load
- High-Density Aluminum Honeycomb Core
- Excellent Surface Flatness, Achieved by Using Thermally Matched Material
- Flatness: ±0.004" (±0.1 mm) Over any 11.0 ft<sup>2</sup> (1 m<sup>2</sup>) Area
- Double-Plated, Single Honeycomb Core

The NTM11109 Optical Table is shown with the NTS503 self-leveling isolation system, (see page 66). For our full line of Nonmagnetic vibration-isolation systems, see pages 65-66.

# US Patent 5402734 316L Stainless Steel Available Upon Request

Typical Compliance Curve for Standard Series Table - Measured at Table Corner

# **Nonmagnetic Standard Series**

**Cross Section of Tabletop** 

Nonmagnetic 304L Stainless Steel Top and Bottom Skin Material Prevents Bowing with Temperature Change Aluminum Side Walls Hot Press Bonded (Entire Table Bonded Under High Pressure and Temperature Providing Greater Rigidity Aluminum Honeycomb Provides a High Strengthto-Weight Ratio) and Stiffness)

# Specifications

- **Table Thickness:** 8.3" (210 mm)
- Flatness: ±0.004" (±0.1 mm) Over any 11.0 ft2 (1 m2) Area
- Construction: Double-Plated, Aluminum Honeycomb Core
- Top and Bottom Plates
  - Matched Materials for Athermalized Design
  - Nonmagnetic 304L Stainless Steel, 5 mm Thick
- Core: High-Density Plated Aluminum Honeycomb

- Mounting Hole Pattern
  - Metric: M6 x 1.0 on 25 mm Centers
  - Imperial: 1/4"-20 on 1" Centers

#### ■ Edge to First Hole Center

- Metric: 50 mm on All Sides
- Imperial Models (3.3' Wide): 2.0" on Ends and 2.68" on Sides
- Imperial Models (4.1' Wide): 2.0" on Ends and 2.6" on Sides
- Imperial Models (4.9' Width: 2.0" on Ends and 2.52" on Sides

- Maximum Screw Length: 5/8" (16 mm)
- **Dynamic Deflection Coefficient** (Max):  $<1.3 \times 10^{-3*}$
- Relative Tabletop Motion (Max): <0.27 nm (10.5 x 10<sup>-9</sup> in)\*
- **Deflection Under Load:** 250 lbs (113 kg): <1.65 µm (6.5 x 10<sup>-5</sup> in)\*

\*Measured on a 4.1' x 8' x 8.3" table with isolator transmissibility T<0.01 above 10 Hz. environmental vibrations PSD <10<sup>-9</sup>g<sup>2</sup>/ Hz.

## Imperial Nanmagnetic Optical Tables, 1/4" 20 Maunting Holes

| imperial Noni | Call for Lead Time |            |            |             |                        |                 |
|---------------|--------------------|------------|------------|-------------|------------------------|-----------------|
| ITEM#*        | \$                 | £          | €          | RMB         | DIMENSIONS (L x W x H) | WEIGHT          |
| NTM11109      | \$ 6,664.00        | £ 4,620.00 | € 5.917,00 | ¥ 56,271.00 | 8' x 4.1' x 8.3"       | 1069 lbs/486 kg |
| NTM11114      | \$ 8,888.00        | £ 6,162.00 | € 7.891,00 | ¥ 75,051.00 | 10' x 4.9' x 8.3"      | 1508 lbs/685 kg |

\*Please contact your local sales office for a quotation including shipping

### Metric Nonmagnetic Optical Tables, M6 x 1.0 Mounting Holes

**Call for Lead Time** 

|          |             |            |            | 3           |                            |                 |
|----------|-------------|------------|------------|-------------|----------------------------|-----------------|
| ITEM#*   | \$          | £          | €          | RMB         | DIMENSIONS (L x W x H)     | WEIGHT          |
| NTM51509 | \$ 6,664.00 | £ 4,620.00 | € 5.917,00 | ¥ 56,271.00 | 2500 mm x 1250 mm x 210 mm | 1035 lbs/470 kg |
| NTM51514 | \$ 8,888.00 | £ 6,162.00 | € 7.891,00 | ¥ 75,051.00 | 3000 mm x 1500 mm x 210 mm | 1460 lbs/664 kg |

\*Please contact your local sales office for a quotation including shipping