

# Honeycomb Table Tops

**1HT**



- Sandwich structure with steel honeycomb core
- 5 mm ferromagnetic stainless steel top skin with a pattern of M6 holes spaced by 25 mm
- Surface flatness  $\pm 0.1$  mm over any 1m<sup>2</sup> area
- Laser Port (optional – see the next page)

**Honeycomb Table Tops 1HT** provide the base on which precision optical and laser work is performed. The table tops have a **honeycomb core** inside.

The table tops meet high requirements for rigidity, flatness, vibration isolation and damping. We work constantly to improve the design, weight and cost-effectiveness of the table tops.

Standard Honeycomb Tabletop **1HT** consists of a **5 mm** thick cold-rolled stainless ferromagnetic steel top skin, and **3-5 mm** thick bottom skin, both bound under high

pressure to a **honeycomb core**, using a special epoxy resin. **Thickness** of the skins depends on the dimensions of the table top.

The top skin has a pattern (grid) of **M6** holes spaced by **25 mm** with  $\pm 0.1$  mm accuracy. It allows to make very quick experimental setups, and, at the same time, ensures a high level of precision and reproducibility. The surface of the **top skin** is ground to **flatness** of  $\pm 0.1$  mm over any 1 m<sup>2</sup> area over the entire surface. The **bottom skin** is coated in a firm decorative coating.

Our standard **honeycomb core** is made of **0.25 mm** corrosion-resistant plated sheet steel. A special composition of epoxy resin guarantees adhesion, rigidity, stability and damping corresponding to highest requirements.

The side-walls of the table top are made of a special acoustically hollow plastic which damps acoustic vibrations. The side-walls are covered in a decorative black leather substitute.

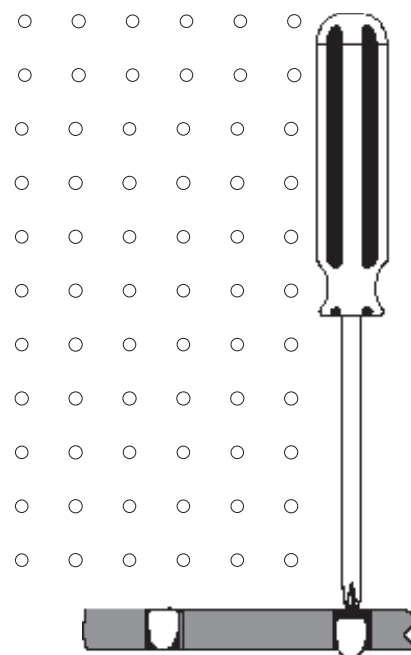
Upon request a **Laser Port** can be embedded in the table top allowing a laser beam to be let through the table (see the next page).

The Honeycomb Table Tops **1HT** have been mechanically and acoustically tested by qualified specialists.



## The Concept of Closed Top Honeycomb Tables

Real Closed Top – no way for liquids or tiny particles to get in. Only the holes you do use are open. Make “new” holes by yourself, by pushing in the plug with the help of a screwdriver, a hex key or another thin hard tool. If you need to re-seal the no longer used holes, let us know and we will provide polyethylene plugs that fit snugly into the M6 holes. To clean the Standa “closed” tabletop, simply wipe the surface using a damp cloth (with cleaning agent if necessary). No need to clean each individual hole!



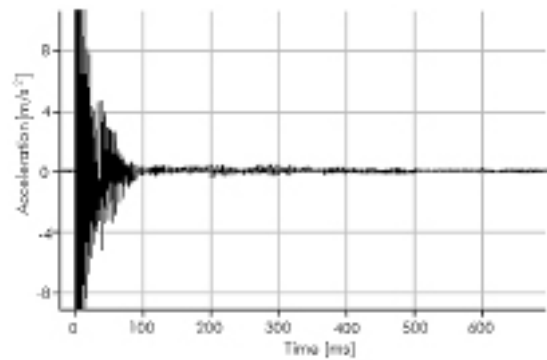
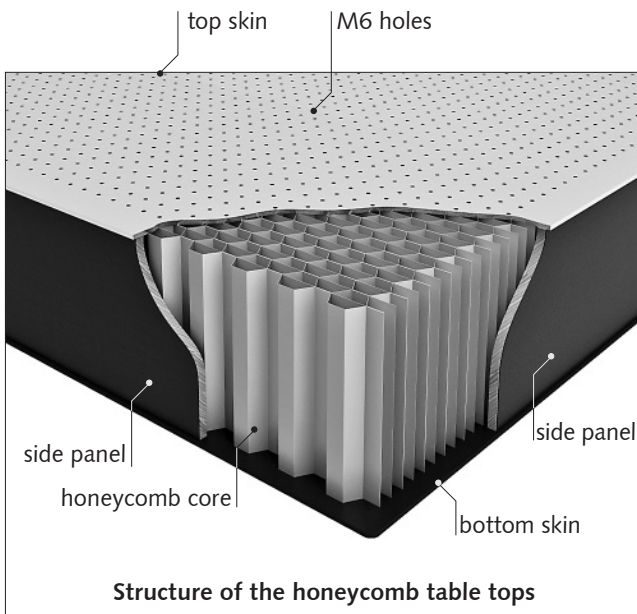
- 1 Optical Tables
- 2 Brackets & Rails
- 3 Base Mounts & Accessories
- 4 Optical Mounts
- 5 Optical Positioners
- 6 Base Positioners
- 7 Translation & Rotation Stages
- 8 Motorised Positioners & Controllers
- 9 Fine Adjustment Screws
- 10 Opto-Mechanics & Sets
- 11 Light Test & Measurement Instruments
- 12 Lasers & Laser Accessories

# Honeycomb Table Tops

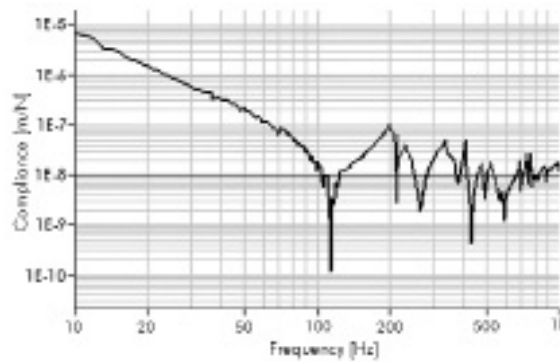
1HT



- top skin 5 mm thick ferromagnetic stainless steel
- honeycomb core of 0.25 mm thick steel has a density of 125 – 250 kg/m<sup>3</sup> depending on the cell size and its structure
- top skin has a pattern of M6 holes spaced by 25 mm
- flatness ±0.1 mm/m<sup>2</sup>
- Young's modulus 21x10<sup>5</sup> kg/cm<sup>2</sup>
- shear modulus 8.2x10<sup>5</sup> kg/cm<sup>2</sup>
- deflection under load 1.5 μm/m
- resonant frequency approx. 200 Hz
- transient excitation delay time 50 ms



Acceleration curve for 1HT12-24-20 Table Top



Compliance curve for 1HT12-24-20 Table Top

*Our company produces table tops according to customer's specifications.*

**Non-Ferromagnetic Table Tops are available for special orders**

Example for ordering:  
1HT10-20-20-NM – non-ferromagnetic table top.

**Laser Ports** are designed to lead a laser beam or cables through a Table Top. The standard location of a port is chosen for use with the **Laser Shelves 1LS52**.

To specify a Laser Port in your order please append letter "H" to the code for a Honeycomb Table Top e.g. 1HT10-20-20H.



www.standa.it

e-mail: sales@standa.it



Fax: +370-5-2651483

Phone: +370-5-2651474



**standa**



- Optical Tables 1
- Brackets & Rails 2
- Base Mounts & Accessories 3
- Optical Mounts 4
- Optical Positioners 5
- Base Positioners 6
- Translation & Rotation Stages 7
- Motorised Positioners & Controllers 8
- Fine Adjustment Screws 9
- Opto-Mechanics & Sets 10
- Light Test & Measurement Instruments 11
- Lasers & Accessories 12

## Honeycomb Table Top 1HT Ordering Chart

1HT

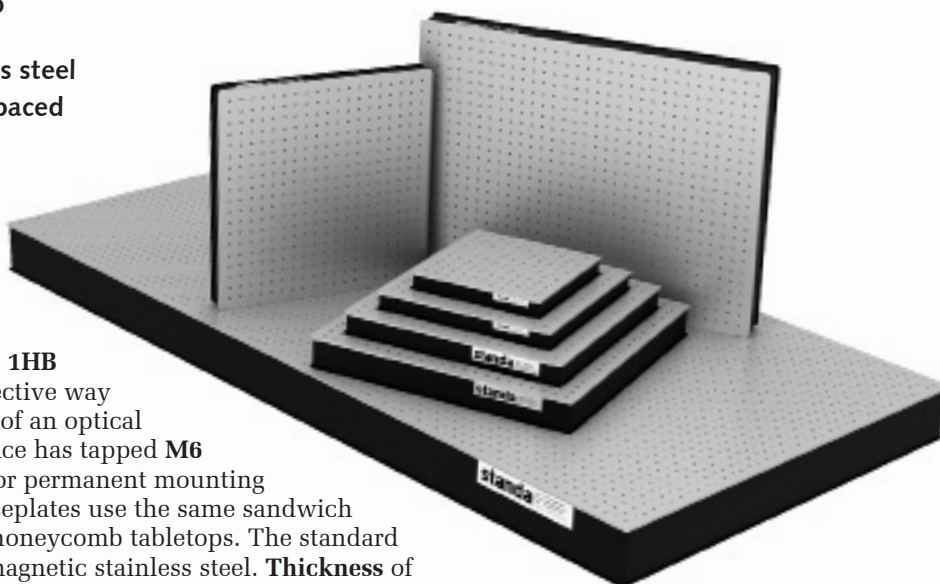
Size, mm	Thickness, mm		
	200	300	400
600×2400	1HT06-24-20		
800×1000	1HT08-10-20		
800×1200	1HT08-12-20		
800×1500	1HT08-15-20		
800×1800	1HT08-18-20		
800×2000	1HT08-20-20		
800×2400	1HT08-24-20		
900×1000	1HT09-10-20		
900×1200	1HT09-12-20		
900×1400	1HT09-14-20		
900×1500	1HT09-15-20		
900×1600	1HT09-16-20		
900×1800	1HT09-18-20	1HT09-18-30	
900×2400	1HT09-24-20	1HT09-24-30	
1000×1000	1HT10-10-20		
1000×1200	1HT10-12-20		
1000×1500	1HT10-15-20	1HT10-15-30	
1000×1800	1HT10-18-20	1HT10-18-30	
1000×2000	1HT10-20-20	1HT10-20-30	
1000×2400	1HT10-24-20	1HT10-24-30	
1000×3000	1HT10-30-20	1HT10-30-30	
1000×3500	1HT10-35-20	1HT10-35-30	
1200×1200	1HT12-12-20	1HT12-12-30	
1200×1500	1HT12-15-20	1HT12-15-30	
1200×1800	1HT12-18-20	1HT12-18-30	
1200×2400	1HT12-24-20	1HT12-24-30	1HT12-24-40
1200×3000	1HT12-30-20	1HT12-30-30	1HT12-30-40
1200×3500	1HT12-35-20	1HT12-35-30	1HT12-35-40
1200×4000	1HT12-40-20	1HT12-40-30	1HT12-40-40
1500×1500	1HT15-15-20	1HT15-15-30	1HT15-15-40
1500×1800	1HT15-18-20	1HT15-18-30	1HT15-18-40
1500×2000	1HT15-20-20	1HT15-20-30	1HT15-20-40
1500×2400	1HT15-24-20	1HT15-24-30	1HT15-24-40
1500×2500	1HT15-25-20	1HT15-25-30	1HT15-25-40
1500×3000	1HT15-30-20	1HT15-30-30	1HT15-30-40
1500×3500	1HT15-35-20	1HT15-35-30	1HT15-35-40
1500×4000	1HT15-40-20	1HT15-40-30	

Custom sizes available on request

## Honeycomb Breadboards

1HB

- Core – 265 kg/m<sup>3</sup> 0.25 mm thick steel honeycomb
- Top skin – 5 mm thick ferromagnetic stainless steel
- Pattern of M6 holes spaced by 25 mm
- Flatness ±0.1 mm/m<sup>2</sup>



### Honeycomb Breadboards 1HB

provide a particularly effective way to expand the useful area of an optical table. The mounting surface has tapped M6 holes on 25 mm centers for permanent mounting of components. These baseplates use the same sandwich structure as our full size honeycomb tabletops. The standard top skin is made of ferromagnetic stainless steel. **Thickness** of the skin is 5 mm.

e-mail: sales@standa.it

www.standa.it

Phone: +370-5-2651474

Fax: +370-5-2651483