

1HT - Honeycomb Optical Table Tops



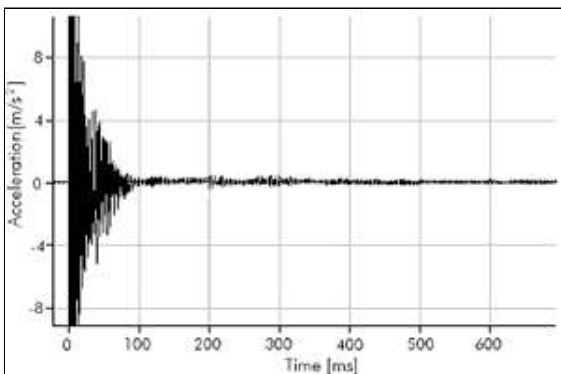
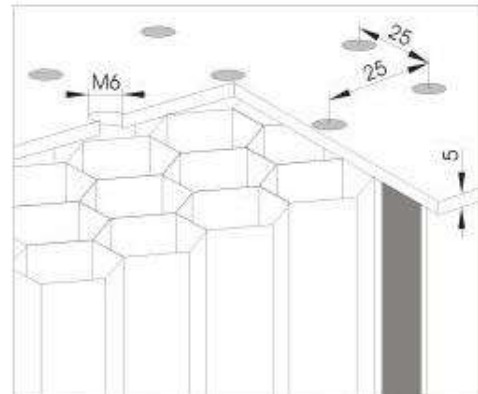
Honeycomb Optical Table Tops

- Top skin 5 mm thick ferromagnetic stainless steel
- Honeycomb core of 0.25 mm thick steel has a density of 125 – 250 kg/m³ depending on the cell size and its structure
- Top skin has a pattern of M6 holes spaced by 25 mm
- Sealed mounting holes by default
- Flatness ± 0.1 mm/m²
- Custom dimensions and laser ports

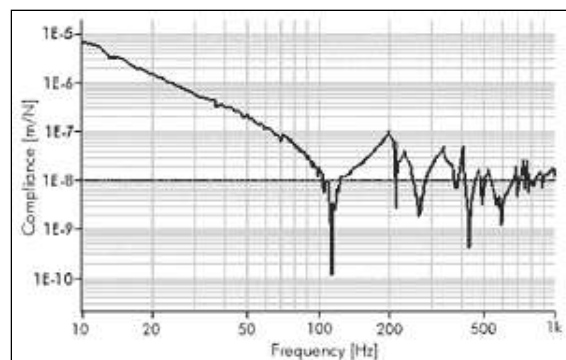


Honeycomb Table Tops 1HT provide the base on which precision optical and laser work is performed. The table tops have a honeycomb core inside. The table tops meet high requirements for rigidity, flatness, vibration isolation and damping. We work constantly to improve the design, weight and cost effectiveness of the table tops. Standard **Honeycomb Tabletop 1HT** consists of a **5 mm** thick cold-rolled stainless ferromagnetic steel top skin, and **3-6 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 ± 0.1 mm** accuracy. It allows to make very quick

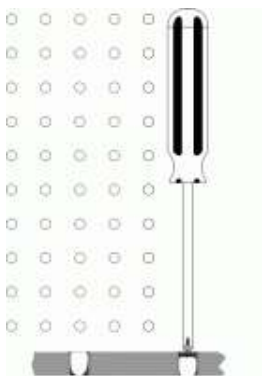
experimental setups, and, at the same time, ensures a high level of precision and reproducibility. The surface of the top skin is ground to **flatness of ± 0.1 mm** over any **1 m²** area over the entire surface. The bottom skin is coated in a firm decorative coating. Our standard honeycomb core is made 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 sidewalls of the table top are made of a special acoustically hollow plastic which damps acoustic vibrations. The sidewalls 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. The Honeycomb Table Tops 1HT have been mechanically and acoustically tested by qualified specialists.



Acceleration curve for 1HT12-24-20 Table Top



Compliance curve for 1HT12-24-20 Table Top



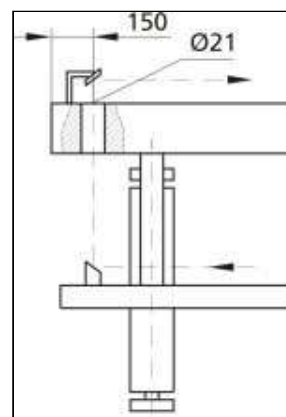
Real Closed Top - no way for liquids or tiny particles to get in. Only the holes you do use are open. Make "new" holes by yourself, by pushing in the plug with the help of a screwdriver, a hex key or another thin hard tool. If you need to re-seal the no longer used holes, let us know and we will provide 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!



Laser Shelf



Laser port and 10LBS



Scheme of the Laser Port

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**.

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

Non-Ferromagnetic Table Tops are available to special orders. Example: 1HT10-12-20-NM

If imperial tapped holes pattern is required, choose the model from the table below and mention that requirement in your request.

Specifications

Top skin 5mm thick
ferromagnetic steel

Pattern M6 holes
spaced by 25mm
(sealed by default)

Honeycomb core

Material 0.25 mm thick steel

Density 125 - 250 kg/m³
(depending on the
mesh size and
its structure)

Flatness ±0.1 mm/m²

Young's modulus 21x10⁵ kg/cm²

Shear modulus 8.2x10⁵ kg/cm²

Deflection under load 4 µm
(100 kg centrally
loaded)

Resonant frequency 200 Hz (approx.)

**Transient excitation
delay time** 50 ms

Ordering Information

Model	Size (WxL), Thickness,	
	mm	mm
1HT06-24-20	Qty.	200
1HT08-10-20	800x1000	200
1HT08-12-20	800x1200	200
1HT08-15-20	800x1500	200
1HT08-16-20	800x1600	200
1HT08-18-20	800x1800	200
1HT08-20-20	800x2000	200
1HT08-24-20	800x2400	200
1HT09-10-20	900X1000	200
1HT09-12-20	900x1200	200
1HT09-14-20	900x1400	200
1HT09-15-20	900x1500	200
1HT09-16-20	900x1600	200
1HT09-18-20	900x1800	200
1HT09-18-30	900x1800	300
1HT09-24-20	900x2400	200
1HT09-24-30	900x2400	300
1HT10-10-20	1000x1000	200
1HT10-12-20	1000x1200	200
1HT10-15-20	1000x1500	200
1HT10-15-30	1000x1500	300
1HT10-18-20	1000x1800	200
1HT10-18-30	1000x1800	300
1HT10-20-20	1000x2000	200
1HT10-20-30	1000x2000	300
1HT10-24-20	1000x2400	200
1HT10-24-30	1000x2400	300
1HT10-25-20	1000x2500	200
1HT10-25-30	1000x2500	300
1HT10-30-20	1000x3000	200

1HT10-30-30	1000x3000	300	
1HT10-35-20	1000x3500	200	
1HT10-35-30	1000x3500	300	
1HT12-12-20	1200x1200	200	
1HT12-12-30	1200x1200	300	
1HT12-15-20	1200x1500	200	
1HT12-15-30	1200x1500	300	
1HT12-18-20	1200x1800	200	
1HT12-18-30	1200x1800	300	
1HT12-20-20	1200x2000	200	
1HT12-20-30	1200x2000	300	
1HT12-24-20	1200x2400	200	
1HT12-24-30	1200x2400	300	
1HT12-24-40	1200x2400	400	
1HT12-25-20	1200x2500	200	
1HT12-25-20-OH	1200x2500	200	
1HT12-25-30	1200x2500	300	
1HT12-30-20	1200x3000	200	
1HT12-30-20-OH	1200x3000	200	
1HT12-30-30	1200x3000	300	
1HT12-30-40	1200x3000	400	
1HT12-35-20	1200x3500	200	
1HT12-35-30	1200x3500	300	
1HT12-35-40	1200x3500	400	
1HT12-40-20	1200x4000	200	
1HT12-40-30	1200x4000	300	
1HT12-40-40	1200x4000	400	
1HT15-15-20	1500x1500	200	
1HT15-15-30	1500x1500	300	
1HT15-15-40	1500x1500	400	
1HT15-18-20	1500x1800	200	
1HT15-18-30	1500x1800	300	
1HT15-18-40	1500x1800	400	
1HT15-20-20	1500x2000	200	
1HT15-20-30	1500x2000	300	
1HT15-20-40	1500x2000	400	
1HT15-24-20	1500x2400	200	
1HT15-24-30	1500x2400	300	
1HT15-24-40	1500x2400	400	
1HT15-25-20	1500x2500	200	
1HT15-25-30	1500x2500	300	
1HT15-25-40	1500x2500	400	
1HT15-30-20	1500x3000	200	
1HT15-30-30	1500x3000	300	
1HT15-30-40	1500x3000	400	
1HT15-35-20	1500x3500	200	
1HT15-35-30	1500x3500	300	
1HT15-35-40	1500x3500	400	
1HT15-40-20	1500x4000	200	
1HT15-40-30	1500x4000	300	
1HT15-40-40	1500x4000	400	
1HT15-50-30	1500x5000	300	
Optical Table	Custom	Custom	request