

## LTH Insulated Tables

with Air-Spring Insulators and Automatic Level Controller



### ● LTH-Insulated Tables

Plate: Granite

#### Product Description

Adjustable feet, torsion proofed, welded steel frame, membrane air-spring insulators BiAir® (vertical natural frequency approx. 2.3 Hz) between frame and plate, mechanical-pneumatic level control (level accuracy of  $\pm 1/100$  mm or  $\pm 1/10$  mm).  
Plate in granite (LTH).

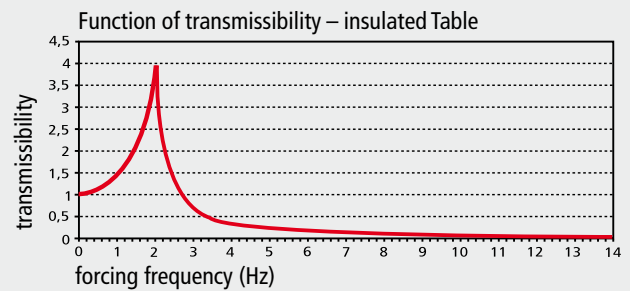
#### Range of Application

Vibration sensitive measuring and testing machines, laser, scales, optical and electrical as well as medical equipment.

The new insulated table LTH is used for all applications where vibrations or load changes may disturb the experiment or machine.

#### Technical

BILZ insulated table LTH is a vibration insulated workplace. Vibration of the surrounding area is insulated by high efficient membrane air springs. The level controller (mechanical-pneumatic valves) will maintain a level accuracy of  $\pm 1/100$  mm or  $\pm 1/10$  mm automatically even while the loading may change. An air regulator with water trap and air filter is included. As standard the insulated table is available in 3 different sizes. We are always pleased to fulfill custom made sizes and colours. The work surface of the table can be delivered in granite (LTH).



#### Standard Sizes

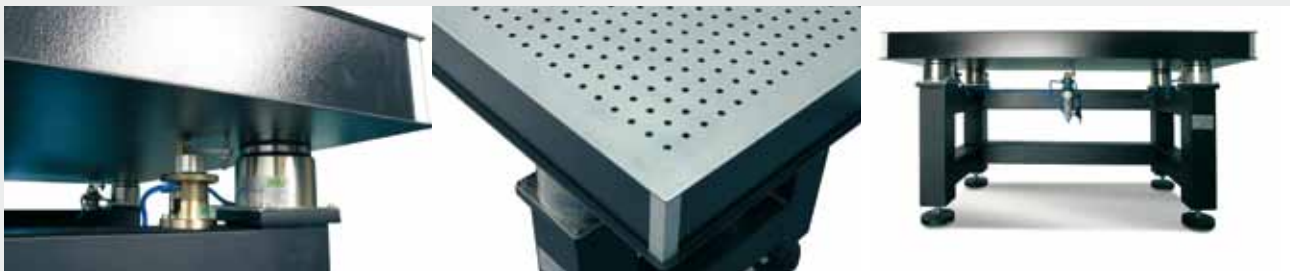
sizes	LTH 60-50	LTH 100-63	LTH 90-75	LTH 100-80	LTH 100-100	LTH 150-100	LTH 200-100
width	600 mm	1000 mm	900 mm	1000 mm	1000 mm	1500 mm	2000 mm
depth	500 mm	630 mm	750 mm	800 mm	1000 mm	1000 mm	1000 mm
thickness	100 mm	100 mm	100 mm	140 mm	160 mm	190 mm	220 mm
hard stone							
height	760 mm	760 mm	760 mm	760 mm	760 mm	760 mm	760 mm
max. loading capacity	2500 N	3200 N	3200 N	7000 N	7500 N	18000 N	28000 N

Other dimensions can be supplied upon request!



Research workstation with optical equipment

## ● LTH Insulated Tables



Basic set-up of an optical table model LTO

BILZ workstations are characterized by high-end quality and functionality.

### Product description:

Adjustable feet. – torsion proofed, welded steel frame.

- Membrane air-spring insulators BiAir® between frame and plate. Other insulators on demand.
- mechanical-pneumatic positioner/controller (level accuracy of  $\pm 1/100$  mm or  $\pm 1/10$  mm)

### Range of application

- set-up of optical laser systems, – interferometer
- special microscopy

### Optical Table Top

**HD steel honeycomb core** with high natural damping, cover plate **without** thread insert.

**HDT steel honeycomb core** with high natural damping, cover plate **with** thread insert.

### Description of construction

**Cover plate:** stainless steel 3 mm / magnetic or magnetic / bloomed

**Base plate:** steel plate 3 mm

**Thread insert:** M6 (HDT)

**Core:** (HD/T) steel honeycomb core with a 0.5 mm galvanized steel plate, precision formed / bonded with special resin

**Thread inserts:** floating bedded thread inserts M6 / no connection to the table core through closed sleeves / adjustment of turnbuckles about 5 mm during simultaneous addition about  $\pm 3$  degrees are possible / Max. depth of thread 30mm

Optical workstations provide optimal damping and rigidity at a low weight.

The damping properties of the **BILZ LTO honeycomb lattice boards** have been optimized. High amplitudes at resonance, typically in high frequencies ranges, will be almost completely eliminated the HD-series table by the high internal damping coefficient.

### Standard Sizes LTO

sizes	LTO 60-50	LTO 90-60	LTO 120-60	LTO 150-90	LTO 200-100	LTO 240-120	LTO 300-150
width	600 mm	900 mm	1200 mm	1500 mm	2000 mm	2400 mm	3000 mm
depth	500 mm	600 mm	600 mm	900 mm	1000 mm	1200 mm	1500 mm
thickness	100 mm	100 mm	100 mm	100 mm	200 mm	200 mm	300 mm
hard stone							
height	760 mm	760 mm	760 mm	760 mm	760 mm	760 mm	760 mm
max. loading capacity	1500 N	2000 N	3000 N	5000 N	5000 N	7500 N	7500 N

Other dimensions can be supplied upon request!

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### ○ LTH-S Tables / Special models

#### Special dimensions:

It's possible to supply special dimensions, higher loads, stainless steel solutions or a high-end solution with the BiLZ AIS system available upon request.

#### Range of application

Vibration insulation of optical and opto-electronic working stations and small, high precision table top measuring instruments, e.g. roundness testers, gear measuring machines, surface measuring machines, etc.

#### General system properties

Vertical natural frequency: approx. 1.5 Hz

Horizontal natural frequency: approx. 2.5 Hz

- adjustable feet, caster wheels
- Torsion proofed, welded steel frame with integrated BiAir® air-spring in the table-leg
- mechanical pneumatic level control (level accuracy of  $\pm 0.01$  mm) and a pneumatic service unit



Zeiss roundness measuring machine



Special Model in stainless steel