

Optical Table

AT-OT-Z

Features

- Working Surface: ferromagnetic stainless steel
- Core Construction : honeycomb structure
- Table Thickness: 50/100/150/200/300mm
- Mounting Hole Grid : 25mm×25mm
- Mounting holes: M6
- Hole accuracy: $\pm 0.03\text{mm}$
- Hole spacing accuracy: $\pm 0.05\text{mm}$
- Surface flatness: $0.02\sim 0.05\text{mm/m}$
- Roughness: $<0.6\ \mu\text{m}$
- Resonant frequency: $<1.2\sim 2\text{Hz}$ (Relevant to actual usage)
- Amplitude: $<1.2\ \mu\text{m}$
- Supports Load: 300kg/m^2
- Weight (breadboarded thick):
50mm thickness: 110kg/m^2 ;
100mm thickness: 120kg/m^2 ;
150mm thickness: 130kg/m^2 ;
200mm thickness: 140kg/m^2 ;
300mm thickness: 165kg/m^2 ;

Application

- Lab supplies;
- optomechanical components;
- optomechanical devices;
- Optical applications;

Description

The AT-OT-Z series of Pneumatic Vibration Isolation Optical Table adopts a welded frame, a Half-diaphragm air spring. The support leg uses cylinder, and the Pneumatic servomechanism uses AirTAC air control valves, which automatically adjust the level, have large load-bearing capacity, excellent vibration isolation performance, and the Resonant frequency is less than $1.2\sim 2\text{Hz}$.

The Breadboard is made of high-quality ferromagnetic stainless steel, which has good corrosion resistance. The conventional thickness is 6mm. The standard thickness of the breadboard is designed as: 50/100/150/200/300mm, with excellent hard-to-weight ratio and rigidity. The tabletop adopts precision grinding finish, and the flatness of the tabletop within $0.02\sim 0.05\text{mm/m}$. The tabletop is evenly distributed with standard 25mm M6 threaded holes.

The support legs structure ensures high stability of the tables. The height adjustment mechanism is divided into two parts: below the frame (under each support leg), which can solve the distortion and deformation of the frame caused by uneven ground. There are three unique height adjustment mechanisms on the top of the frame, which can adjust the height and table level. This series of products is suitable for use in environments with high vibration isolation requirements and automatic balancing. thicker optical tables will be stiffer , Pneumatic Vibration Isolation Optical Table can also be custom ordered.



Parameter

Model	Size (mm)	Thickness (mm)	Table Feet Area (mm)	Notes
AT-OTZ10-08	1000×800×800	50/100	120×120	4 legs
AT-OTZ12-08	1200×800×800	50/100	120×120	4 legs
AT-OTZ12-09	1200×900×800	50/100	120×120	4 legs
AT-OTZ15-09	1500×900×800	100/200	120×120	4 legs
AT-OTZ15-10	1500×1000×800	100/200	120×120	4 legs
AT-OTZ18-09	1800×900×800	100/200	120×120	4 legs
AT-OTZ18-12	1800×1200×800	100/200	120×120	4 legs
AT-OTZ20-10	2000×1000×800	150/200	160×160	4 legs
AT-OTZ20-12	2000×1200×800	150/200	160×160	4 legs
AT-OTZ24-12	2200×1200×800	150/200	160×160	4 legs
AT-OTZ24-15	2400×1500×800	150/200	160×160	4 legs
AT-OTZ30-12	3000×1200×800	200/300	160×160	6 legs
AT-OTZ30-15	3000×1500×800	200/300	160×160	6 legs
AT-OTZ35-12	3500×1200×800	300	160×160	6 legs
AT-OTZ35-15	3500×1500×800	300	160×160	6 legs

The table are the regular sizes in the company's inventory. Other table size, thickness, and hole position designs can be customized according to customer requirements.