

MOT-F Series

High Density Honeycomb Core Optical Breadboard

PRODUCT FEATURES:

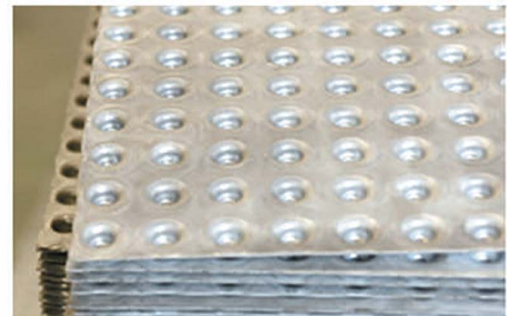
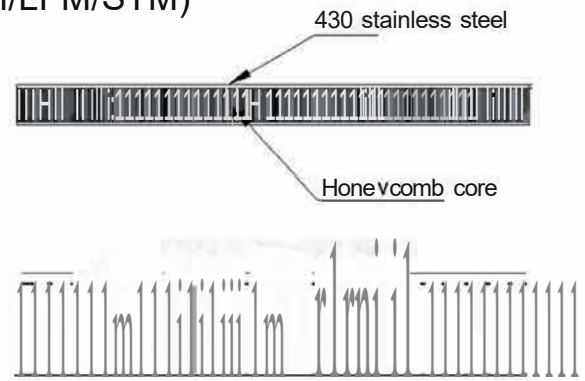
- Broad-band vibration damping top to eliminate surface synchronized vibrations
- Honeycomb core structure
- Clean top with sealed cups
- High density with lower self weight and high rigidity
- Long lasting service life without surface deflections due to residual stress
- Easy installation and simple to use without persistent maintenance



APPLICATIONS:

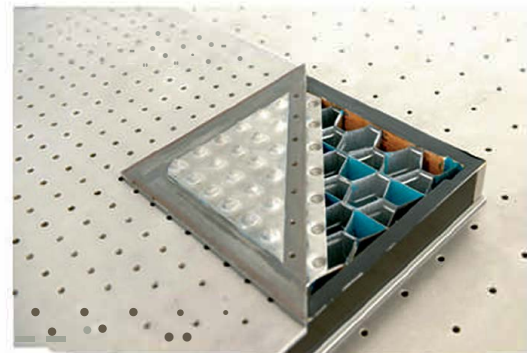
- Scanning tunneling microscopy (AFM/LFM/STM)
- Interferometry
- Electron microscopy

High density honeycomb core optical breadboard is widely applied in the scientific fields of optical experiments, medical researches, high precision devices manufacturing and testing as well as aviation labs etc. Its features of high rigidity and low self weight, providing a solid mounting platform for the experiments hence ensure the accuracy of the experiment applications. The breadboard is designed with a structure of top and bottom skins, honeycomb cores and sealed cups.



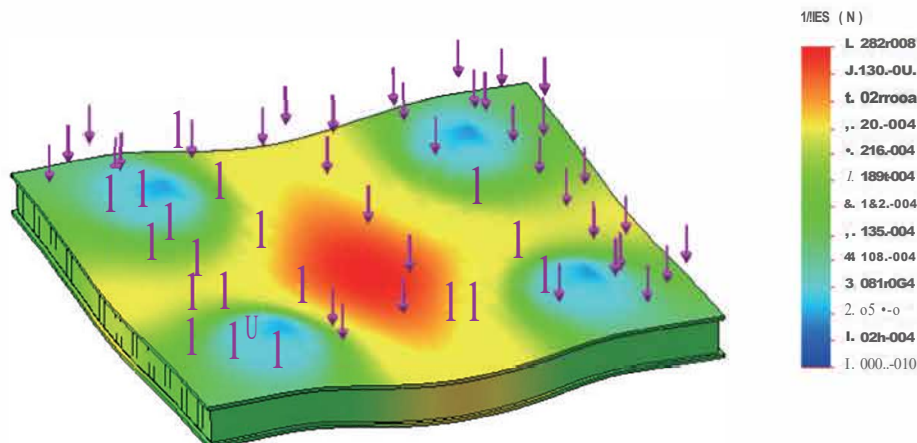


It is user friendly for the mounting of experiment devices. The top skin of the breadboard is made of highly conductive stainless steel(430), which prevents the breadboard from getting rusty. The sealed cups are made of stretching aluminum and they can effectively prevent the synchronized vibrations inside the breadboard, which may affect the accuracy of the experiments. Another advantage of the sealed cups is to prevent the dusts, liquids or other tiny accessories that may contaminate the breadboard dropping inside to the core of the breadboard. The overall honeycomb core design reduces the self weight of the breadboard while maximizes its rigidity.



RIGIDITY ANALYSIS:

With an MOT-F optical breadboard of dimension 600x600x50mm under the condition of 100kg load .



TECHNICAL SPECIFICATIONS:

Breadboard thickness	25mm, 50mm-300mm (e.g 50mm, 80mm, 100mm, 150mm ...)
Surface plate	430 stainless steel, thickness: 5mm
Single Honeycomb Dimension	Min: $6.25 \times 10^{-4} \text{m}^2$, Max: $1.25 \times 10^{-3} \text{m}^2$
Damping Type	Broad-band
Honeycomb Core Density	250kg/m^3
Mounting Holes Type	Metric M6 tapped @25mmx25mm grid, boarder edge: 37.5mm also customizable
Surface Flatness	5.01 mm/m ²
Surface Roughness	51.6µm, matt surface finish

Model	Dimension(mm)	Thickness	Hole Grid	Hole Type	Board to Edge
MOT-F06-045	600x450	50	25x25	M6	37.5x37.5
MOT-F06-06	600x600	50	25x25	M6	37.5x37.5
MOT-F09-06	900x600	80	25x25	M6	37.5x37.5
MOT-F075-075	750x750	80	25x25	M6	37.5x37.5
MOT-F10-08	1000x800	100	25x25	M6	37.5x37.5
MOT-F09-09	900x900	80	25x25	M6	37.5x37.5
MOT-F12-09	1200x900	100	25x25	M6	37.5x37.5
MOT-F15-10	1500x1000	150	25x25	M6	37.5x37.5
MOT-F18-10	1800x1000	150	25x25	M6	37.5x37.5
MOT-F20-10	2000x1000	150	25x25	M6	37.5x37.5
MOT-F12-12	1200x1200	100	25x25	M6	37.5x37.5
MOT-F15-12	1500x1200	150	25x25	M6	37.5x37.5
MOT-F18-12	1800x1200	200	25x25	M6	37.5x37.5
MOT-F20-12	2000x1200	200	25x25	M6	37.5x37.5
MOT-F24-12	2400x1200	200	25x25	M6	37.5x37.5
MOT-F30-12	3000x1200	250	25x25	M6	37.5x37.5
MOT-F35-12	3500x1200	250	25x25	M6	37.5x37.5

Customized dimensions are available upon request.