

## 1HB - Honeycomb Optical Breadboards



### Honeycomb Optical Breadboard

- 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
- Sealed mounting holes by default
- Flatness  $\pm 0.1 \text{ mm/m}^2$

**Honeycomb Optical 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 table tops. The standard top skin is made of ferromagnetic steel. Thickness of the **skin is 5 mm**, depending on the dimensions of the table top.

Honeycomb Breadboards up to 0,5m<sup>2</sup> have a grid of nine M6 tapped mounting holes in each corner of the bottom side. Larger Breadboards can have this grid by request. The 1HB can be mounted at the bottom side of a table or elevated above its surface using the Silent Rods **2SR**.

These **Breadboards are not intended as a substitute for optical tables**. Their size-to-thickness ratio produces relatively low end-to-end rigidity, although their **local rigidity** over distances of less than about **30 to 60 cm** is excellent. When attached solidly to a dynamically rigid optical table, performance of resulting working surface becomes comparable to that of the table itself.



Our company produces Honeycomb Breadboards according to customers specifications.

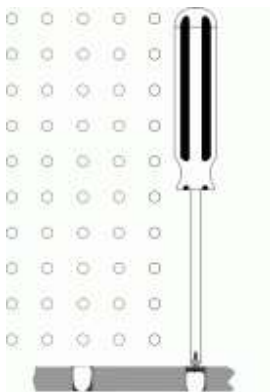


A breadboard may be mounted on a table by silent rods **2SR32** or **3MP25**



As a sample you could see the smallest standard Honeycomb Breadboard **1HB03-03-04**

Custom sizes available  
on request



**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!

Get to know more about types of breadboards in 1 minute video.  
Standa optical breadboard selection guide:

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

request.

## Specifications

|                       |                                                 |
|-----------------------|-------------------------------------------------|
| <b>Flatness</b>       | $\pm 0.1 \text{ mm/m}^2$                        |
| <b>Top skin</b>       |                                                 |
| Thickness             | 5 mm                                            |
| Material              | ferromagnetic stainless steel                   |
| Pattern               | M6 holes spaced by 25 mm<br>(sealed by default) |
| <b>Honeycomb Core</b> |                                                 |
| Density               | $265 \text{ kg/m}^3$                            |
| Material              | 0.25 mm thick steel                             |

## Ordering Information

| Model                  | Size (WxL), Thickness,<br>mm mm |    |
|------------------------|---------------------------------|----|
| <b>1HB03-03-025</b>    | <b>Qty.</b>                     | 25 |
| <b>1HB03-03-04</b>     | 300x300                         | 40 |
| <b>1HB03-03-05</b>     | 300x300                         | 50 |
| <b>1HB03-045-05</b>    | 300x450                         | 50 |
| <b>1HB03-06-025</b>    | 300x600                         | 25 |
| <b>1HB03-06-04</b>     | 300x600                         | 40 |
| <b>1HB03-06-05</b>     | 300x600                         | 50 |
| <b>1HB03-09-025</b>    | 300x900                         | 25 |
| <b>1HB03-09-04</b>     | 300x900                         | 40 |
| <b>1HB03-09-05</b>     | 300x900                         | 50 |
| <b>1HB03-09-05-OH</b>  | 300x900                         | 50 |
| <b>1HB03-12-04</b>     | 300x1200                        | 40 |
| <b>1HB03-12-05</b>     | 300x1200                        | 50 |
| <b>1HB03-18-04</b>     | 300x1800                        | 40 |
| <b>1HB03-18-05</b>     | 300x1800                        | 50 |
| <b>1HB04-12-025</b>    | 400x1200                        | 25 |
| <b>1HB04-12-04</b>     | 400x1200                        | 40 |
| <b>1HB04-12-05</b>     | 400x1200                        | 50 |
| <b>1HB044-044-04</b>   | 440x440                         | 40 |
| <b>1HB045-045-05</b>   | 450x450                         | 50 |
| <b>1HB045-07-07</b>    | 450x700                         | 70 |
| <b>1HB045-10-05</b>    | 450x1000                        | 50 |
| <b>1HB045-10-07</b>    | 450x1000                        | 70 |
| <b>1HB045-12-05</b>    | 450x1200                        | 50 |
| <b>1HB045-12-05-OH</b> | 450x1200                        | 50 |
| <b>1HB045-15-07</b>    | 450x1500                        | 70 |
| <b>1HB05-05-04</b>     | 500x500                         | 40 |
| <b>1HB05-05-04-OH</b>  | 500x500                         | 40 |
| <b>1HB05-05-05</b>     | 500x500                         | 50 |
| <b>1HB05-05-07</b>     | 500x500                         | 70 |
| <b>1HB05-06-04</b>     | 500x600                         | 40 |
| <b>1HB05-075-04</b>    | 500x750                         | 40 |
| <b>1HB05-075-05</b>    | 500x750                         | 50 |
| <b>1HB05-075-07</b>    | 500x750                         | 70 |
| <b>1HB05-10-04</b>     | 500x1000                        | 40 |
| <b>1HB05-10-05</b>     | 500x1000                        | 50 |
| <b>1HB05-10-07</b>     | 500x1000                        | 70 |
| <b>1HB05-14-05</b>     | 500x1400                        | 50 |
| <b>1HB055-09-05</b>    | 550x900                         | 50 |
| <b>1HB06-06-04</b>     | 600x600                         | 40 |
| <b>1HB06-06-05</b>     | 600x600                         | 50 |
| <b>1HB06-06-07</b>     | 600x600                         | 70 |
| <b>1HB06-08-04</b>     | 600x800                         | 40 |
| <b>1HB06-08-05</b>     | 600x800                         | 50 |
| <b>1HB06-08-07</b>     | 600x800                         | 70 |
| <b>1HB06-09-04</b>     | 600X900                         | 40 |
| <b>1HB06-09-05</b>     | 600X900                         | 50 |
| <b>1HB06-09-06</b>     | 600x900                         | 60 |

|                 |          |     |
|-----------------|----------|-----|
| 1HB06-09-07     | 600X900  | 70  |
| 1HB06-09-12     | 600X900  | 120 |
| 1HB06-10-05-OH  | 600x1000 | 50  |
| 1HB06-10-07     | 600x1000 | 70  |
| 1HB06-10-12     | 600x1000 | 120 |
| 1HB06-11.5-05   | 600x1150 | 50  |
| 1HB06-12-04     | 600X1200 | 40  |
| 1HB06-12-04-OH  | 600X1200 | 40  |
| 1HB06-12-05     | 600X1200 | 50  |
| 1HB06-12-05-OH  | 600X1200 | 50  |
| 1HB06-12-07     | 600X1200 | 70  |
| 1HB06-12-12     | 600X1200 | 120 |
| 1HB06-15-05     | 600x1500 | 50  |
| 1HB06-15-05-OH  | 600x1500 | 50  |
| 1HB06-15-07     | 600X1500 | 70  |
| 1HB06-15-12     | 600X1500 | 120 |
| 1HB06-18-07     | 600X1800 | 70  |
| 1HB06-18-07-OH  | 600X1800 | 70  |
| 1HB06-18-12     | 600X1800 | 120 |
| 1HB06-24-07     | 600x2400 | 70  |
| 1HB06-24-12     | 600x2400 | 120 |
| 1HB07-16-05     | 700x1600 | 50  |
| 1HB075-075-04   | 750x750  | 40  |
| 1HB075-075-07   | 750x750  | 70  |
| 1HB075-09-05    | 750x900  | 50  |
| 1HB075-09-06    | 750x900  | 60  |
| 1HB075-09-07    | 750x900  | 70  |
| 1HB075-09-12    | 750x900  | 120 |
| 1HB075-10-05    | 750x1000 | 50  |
| 1HB075-10-05-OH | 750x1000 | 50  |
| 1HB075-12-04    | 750x1200 | 40  |
| 1HB075-12-05    | 750x1200 | 50  |
| 1HB075-12-05-OH | 750x1200 | 50  |
| 1HB075-12-07    | 750x1200 | 70  |
| 1HB075-15-05-OH | 750x1500 | 50  |
| 1HB075-18-05-OH | 750x1800 | 50  |
| 1HB08-08-04     | 800x800  | 40  |
| 1HB08-08-05     | 800x800  | 50  |
| 1HB08-08-07     | 800x800  | 70  |
| 1HB08-08-12     | 800x800  | 120 |
| 1HB08-10-05     | 800x1000 | 50  |
| 1HB08-10-07     | 800x1000 | 70  |
| 1HB08-10-12     | 800x1000 | 120 |
| 1HB08-12-05     | 800x1200 | 50  |
| 1HB08-12-07     | 800x1200 | 70  |
| 1HB08-12-12     | 800x1200 | 120 |
| 1HB08-15-07     | 800x1500 | 70  |
| 1HB08-15-11     | 800x1500 | 110 |
| 1HB08-15-12     | 800x1500 | 120 |
| 1HB08-18-07     | 800x1800 | 70  |
| 1HB08-18-11     | 800x1800 | 110 |
| 1HB08-18-12     | 800x1800 | 120 |
| 1HB08-20-07     | 800x2000 | 70  |
| 1HB08-20-12     | 800x2000 | 120 |

|                    |           |        |         |
|--------------------|-----------|--------|---------|
| 1HB08-24-07        | 800x2400  | 70     |         |
| 1HB09-10-05        | 900x1000  | 50     |         |
| 1HB09-10-07        | 900x1000  | 70     |         |
| 1HB09-10-12        | 900x1000  | 120    |         |
| 1HB09-12-05        | 900x1200  | 50     |         |
| 1HB09-12-07        | 900x1200  | 70     |         |
| 1HB09-12-12        | 900x1200  | 120    |         |
| 1HB09-14-07        | 900x1400  | 70     |         |
| 1HB09-14-12        | 900x1400  | 120    |         |
| 1HB09-15-05        | 900x1500  | 50     |         |
| 1HB09-15-07        | 900x1500  | 70     |         |
| 1HB09-15-11        | 900x1500  | 110    |         |
| 1HB09-15-12        | 900x1500  | 120    |         |
| 1HB09-16-07        | 900x1600  | 70     |         |
| 1HB09-16-12        | 900x1600  | 120    |         |
| 1HB09-18-07        | 900x1800  | 70     |         |
| 1HB09-18-12        | 900x1800  | 120    |         |
| 1HB09-18-12-OH     | 900x1800  | 120    |         |
| 1HB09-24-07        | 900x2400  | 70     |         |
| 1HB09-24-12        | 900x2400  | 120    |         |
| 1HB10-10-05        | 1000x1000 | 50     |         |
| 1HB10-10-07        | 1000x1000 | 70     |         |
| 1HB10-10-12        | 1000x1000 | 120    |         |
| 1HB10-12-05        | 1000x1200 | 50     |         |
| 1HB10-12-07        | 1000x1200 | 70     |         |
| 1HB10-12-11        | 1000x1200 | 110    |         |
| 1HB10-12-12        | 1000x1200 | 120    |         |
| 1HB10-15-07        | 1000x1500 | 70     |         |
| 1HB10-15-11        | 1000x1500 | 110    |         |
| 1HB10-15-12        | 1000x1500 | 120    |         |
| 1HB10-18-07        | 1000x1800 | 70     |         |
| 1HB10-18-11        | 1000x1800 | 110    |         |
| 1HB10-18-12        | 1000x1800 | 120    |         |
| 1HB10-20-07        | 1000x2000 | 70     |         |
| 1HB10-20-11        | 1000x2000 | 110    |         |
| 1HB10-20-12        | 1000x2000 | 120    |         |
| 1HB10-24-12        | 1000x2400 | 120    |         |
| 1HB11-14-05        | 1100x1400 | 50     |         |
| 1HB12-12-07        | 1200x1200 | 70     |         |
| 1HB12-12-12        | 1200x1200 | 120    |         |
| 1HB12-15-11        | 1200x1500 | 110    |         |
| 1HB12-15-12        | 1200x1500 | 120    |         |
| 1HB12-18-12        | 1200x1800 | 120    |         |
| 1HB12-20-12        | 1200x2000 | 120    |         |
| 1HB12-24-11        | 1200x2400 | 110    |         |
| 1HB15-15-07        | 1500x1500 | 70     |         |
| 1HB15-15-12        | 1500x1500 | 120    |         |
| 1HB15-18-12        | 1500x1800 | 120    |         |
| 1HB15-20-12        | 1500x2000 | 120    |         |
| Optical Breadboard | custom    | custom | request |