Almax·easyLab
science under pressure

Products



Diacell® Horizon with easyGlue

Diacell® Horizon with easyGlue

Horizon is a laser alignment tool designed to assist in gluing Boehler-Almax design diamond anvils on their dedicated support plates. Used in conjunction with our Diacell easyGlue gluing jig, an accurate alignment anvil-seat prior to gluing is achieved.

- Using an integrated low power laser (1mW) it enables to optically align the plane of the diamond anvil culet to the bottom of the Boehler-Almax seat.
- A parallelism of 10' can be achieved between the plane of the diamond anvil culet and the base of the WC seat by using the Diacell Horizon.
- The Diacell easyGlue is an universal jig for mounting anvils to seats of DACs using epoxy resins. It can also be used independently to glue Standard, Diacell or Modified Brilliant cut anvils and flat seats.
- A video guide showing the Diacell Horizon in use with the Diacell easyGlue may be found on Almax easyLab's YouTube channel.

RELATED PRODUCTS:

- Boehler-Almax Design Diamond Anvils
- Diacell® Design Diamond Anvils
- Standard/ Modified Brilliant cut anvils
- Tungsten Carbide Flat Seats
- Tungsten Carbide Conical Seats
- Beryllium Flat Seats

RELATED ACCESSORIES:

- Room temperature Epoxies
- High Temperature Cements
- Low Temperature Epoxies

Technical Specifications:

	Horizon	easyGlue
Material	Anodised Aluminium	Stainless Steel
Dimensions	165x107x75 mm (width x depth x height)	60x40 mm (diameter x height)
Weight	357 g	233 g
Laser Power	1mW (Class II)	N/A
Power	USB C (115V / 230V)	N/A
Temperature use	N/A	Up to 200 C°
Compatibility	easyGlue	Up to 22 /12 mm (seat diameter/height)

Specifications subject to change without prior notice.
easyLab and Diacell are registered trademarks of Almax easyLab

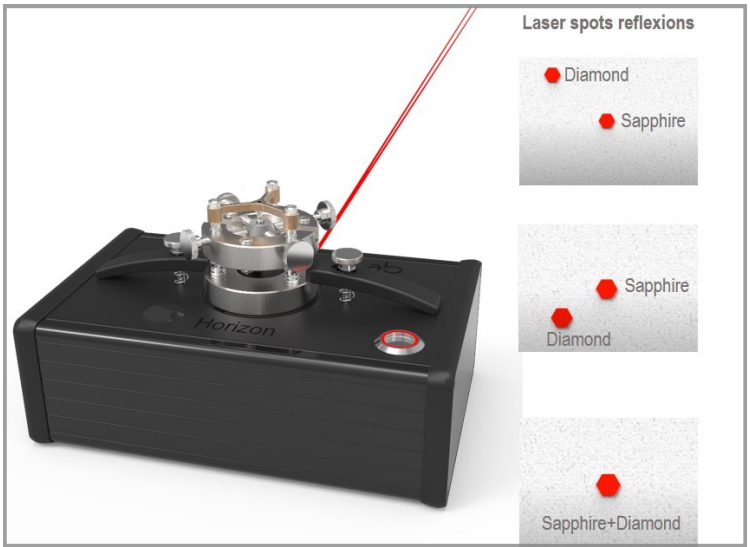
www.almax-easyLab.com

Almax easyLab bv
Wagenmakerijstraat 5
8600 Diksmuide
Belgium
Ph: +32 51 55 56 37

Almax easyLab Inc
Harvard Square -1, Mifflin Place
Cambridge, MA 02138
United States of America
Ph: + 1 617 701 7245

An accurate optical method to align Boehler-Almax anvils

- The main challenge in using the Boehler-Almax diamonds is to ensure that the culet is parallel to the bottom of the supporting seat. By using the Horizon bundle with the easyGlue, the parallelism can be adjusted accordingly before gluing.
- By reflecting the laser from both a reference sapphire window and the table of the diamond, the angle between the two surfaces can be monitored and adjusted. For the surfaces to became parallel, one needs to align the laser spot's reflexion from both the reference sapphire located underneath the WC seat and the anvil table (see picture below).
- This method enables a very accurate alignment of the diamond anvils on to their supporting seats with an accuracy of 10'.



By pushing on the diamond pavilion, the laser reflection from the diamond is aligned with the reflection from the sapphire window

Diacell easyGlue characteristics

- The Diacell easyGlue can be used for both flat and conical seats and anvils.
- When used for flat seats (Be or WC), a moderate force is applied via spring loaded guiding pins on the top of the diamond anvil pressing it against the seat. In this way the surface between the anvils and the seats is sealed and the glue doesn't flow under the anvils table. The epoxy can then be applied under the microscope by using the large lateral access ports.



easyGlue

- Large, easy to use thumb screw enable the precise lateral positioning of the diamond anvil compared to the centre of the seat.
- In the case of Boehler-Almax seats (conical), a force of 10kgf is applied on the top of the diamond anvils to maintain the anvil well located in the seat during the epoxying process. The parallelism between the base of the seats and the anvil culet needs to be checked/adjusted before applying the epoxy by using the Horizon alignment tool (or similar available).