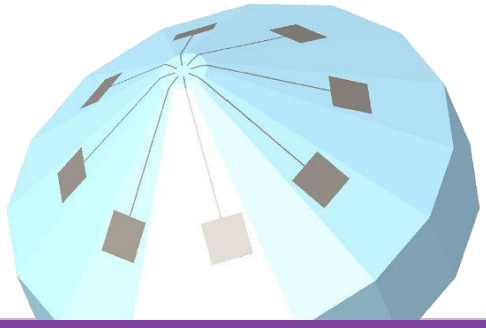
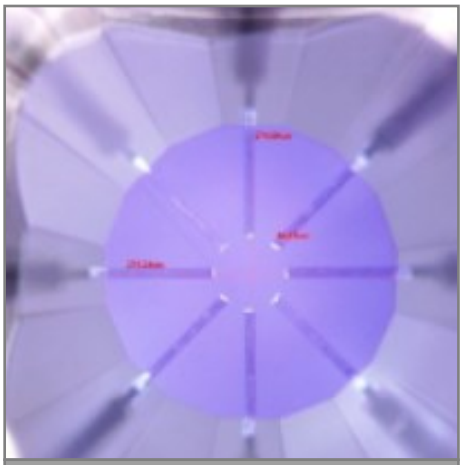


Almax·easyLab
science under pressure

Products



Intelligent Diamond Anvils

RELATED PRODUCTS:

- Diacell® CryoDAC-PPMS
- Diacell® ChicagoDAC
- Patterned Diamond Anvils

RELATED ACCESSORIES:

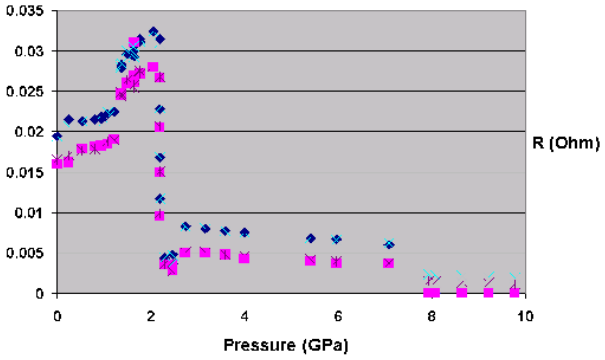
- Ruby Powder
- WC Seats

Intelligent Diamond Anvils

Diamond anvils with embedded tungsten metal probes (in collaboration with the University of Alabama (Birmingham, USA);

- The Almax easyLab intelligent anvils are ideal for transport and other electrical measurements in a diamond anvil cell;
- As the 8 tungsten metal probes (*) are overgrown with a CVD diamond layer, no gasket insulation is required and the probes do not break under high pressure (as it often the case when using wires);
- Electrical contact between the sample and the conductive patterns on the diamond anvil can be made in a variety of ways, such as with silver epoxy, silver paint and even soft solder.
- There is one configuration readily available;
- C = 0.25mm approx., Cb = 0.35mm approx. at 12° with probe inter-distance of 65μm approx., width of probes of 10μm;
- Almax easyLab intelligent diamond anvils are reusable even after many pressure runs.

(*) Micro-fabrication of the i-diamonds anvils is very challenging. As transport measurements require only 4 probes, Almax easyLab guarantees that at least 4 of the 8 probes will work.



300 K measurements of a bismuth sample showing yield of the electrical connections and demonstrating the structural transition at 2 GPa measured in a 4 wires configuration.

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

© Almax easyLab 2025
All rights reserved

Ref: ML19_01_Rev 2