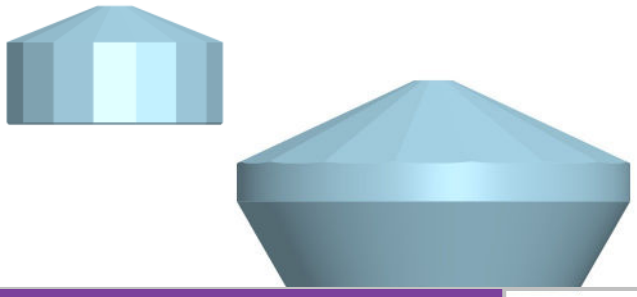
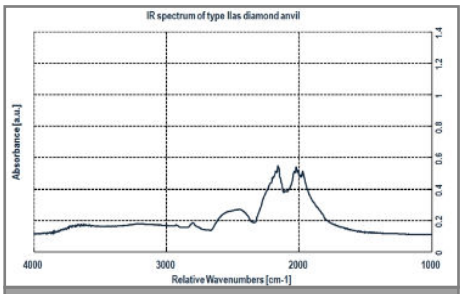


Almax·easyLab
science under pressure

Products



Type IIas Diamond Anvils

Type IIas Diamond Anvils

The Almax easyLab Type IIas diamond anvils are made from lab-grown diamonds. They are carefully selected and polished for the most demanding high pressure experiments.

These Type IIas diamonds combine:

- Ultra-Low Birefringence;
- Raman Ultra-Low Fluorescence (better than natural Type Ia diamonds selected for Raman Ultra-Low Fluorescence);
- Nitrogen content below 1 ppm.

Making these diamond anvils suitable for the following techniques:

- Very high pressure experiments;
- Raman spectroscopy and related vibrational techniques;
- IR spectroscopy;
- Fluorescence, PL, X-Ray, Electrical, Magnetic and Mössbauer.

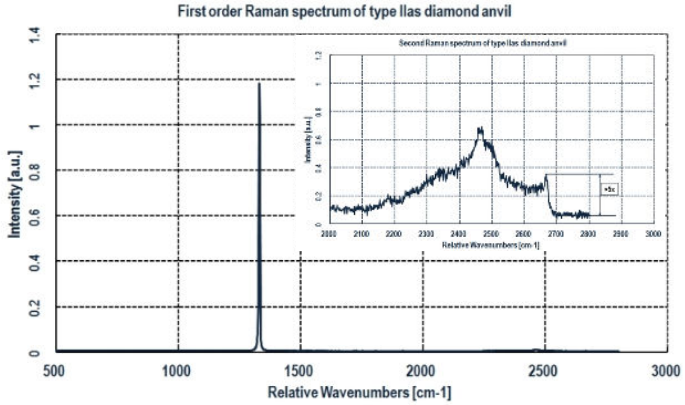
Affordable, proven and widely used in the high pressure community, they provide a very versatile option for the various experimental requirements.

RELATED PRODUCTS:

- Type Ia RULF & Type IIac
- Diacell® DACs
- PlateDAC
- Horizon LAT and easyGlue
- Ring Force Fitting Jig

RELATED ACCESSORIES:

- WC Seats
- Anvil Rings
- Mounting and Gluing



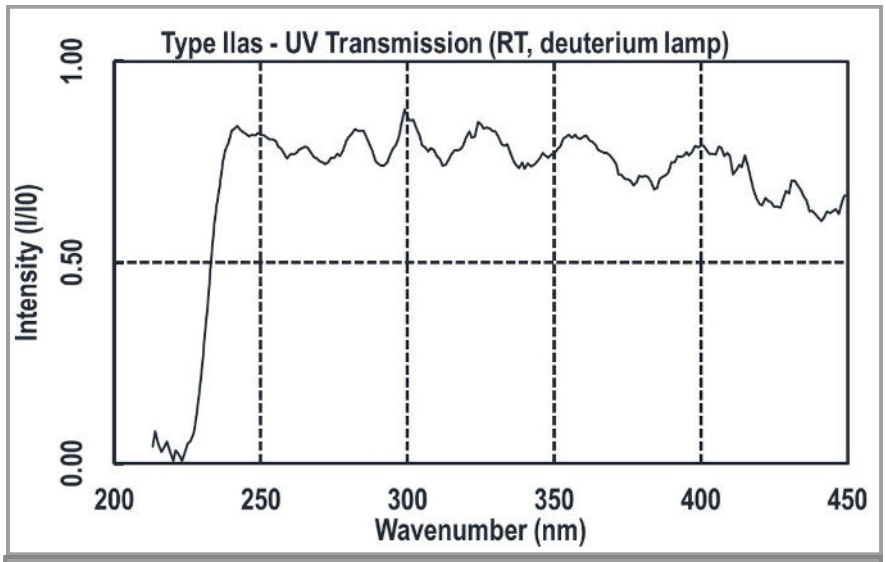
Specifications subject to change without prior notice.
easyLab and Diacell are registered trademarks of Almax easyLab

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

UV Transmission in type IIas diamonds



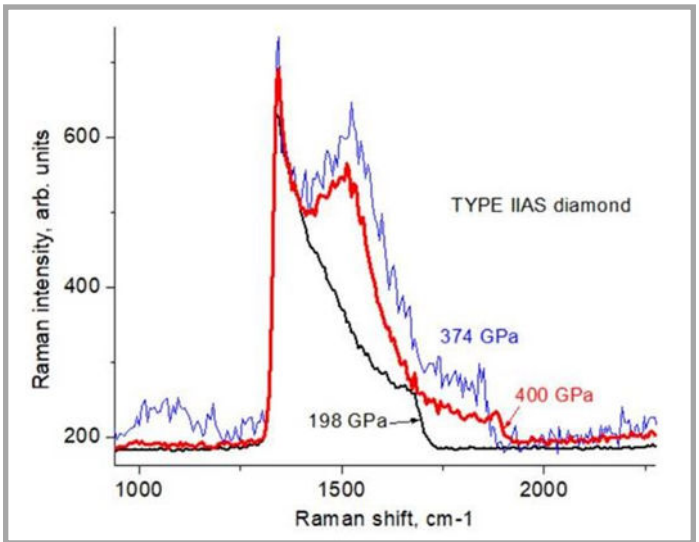
Courtesy of Dr. Fernando Rodriguez Gonzalez — Cantabria University

Shift of the Raman edge of type IIas diamonds

Graph showing the shift of the Raman edge at different pressures up to 400 GPa.

Type IIas diamond anvils with pavillion angle of 40°.

Culet of 0.02 mm, bevels up to 0.12 mm at 8.5°, double bevels up to 0.32 mm at 10.5°.



Courtesy of Dr. Mikhail Eremets — Max Planck Institut for Chemistry (Mainz)

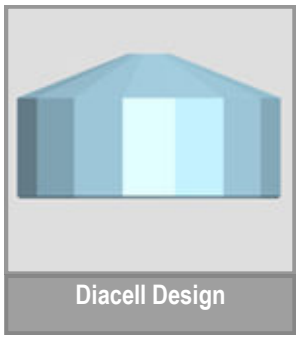
Publications

Loubeyre, P., Occelli, F. & Dumas, P. Synchrotron infrared spectroscopic evidence of the probable transition to metal hydrogen. Nature ***577,*** *631–635 (2020). https://doi.org/10.1038/s41586-019-1927-3 .*

Observation of first order phase transition to metal hydrogen near 425 GPa with the use of type IIas diamond anvils (with toroidal culets).

Available designs

Boehler-Almax Design



Diacell Design

Standard Design