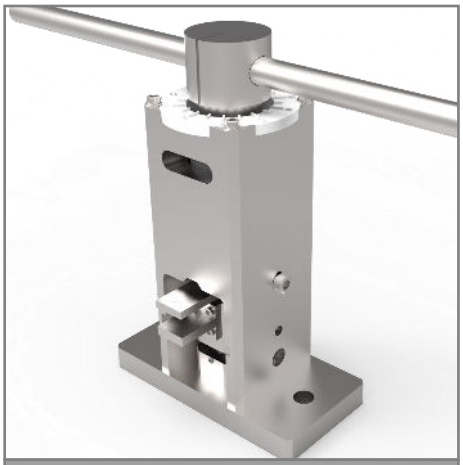


Almax·easyLab
science under pressure

Products



Diacell® Gasket Indenter

Diacell® Gasket Indenter

The Diacell® Gasket Indenter was designed to help users to prepare their gaskets prior to the loading into a conventional Diamond Anvil Cell.

- By mimicking a conventional piston-cylinder diamond anvil cell, the Gasket Indenter enables the indentation of gaskets without risking the precious diamond anvils (when fitted with WC dies).
- A screw driven mini-press is included for applying up to 9,800 N
- WC anvils with culets ranging from 0.30 to 0.90 mm are available.
- An optional kit allowing to mount diamond anvils inside the mini-cell is available upon request.

RELATED PRODUCTS:

- Diacell® Diamond anvil cell

RELATED ACCESSORIES:

- Gasket Blanks
- WC dies

Technical Specifications:

Material	Stainless Steel AISI 303
Press type	Screw driven
Force range	Max 9800 N
Dies material	Tungsten carbide (diamond anvil option)
Dies culet size	0.30 to 0.90 mm
Dies design compatibility	Diacell or Boehler-Almax
Gasket size	5 or 10 mm diameter
Gasket holder	For 5 and 10 mm diameter gaskets

Specifications subject to change without prior notice.
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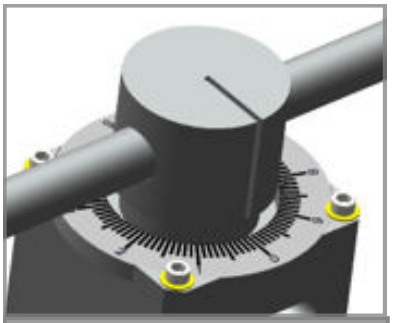
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Gasket Indenter: General description

- The Gasket Indenter is a very useful tool used to prepare gaskets for high pressure experiment with DACs.
- It is an assembly of a piston-cylinder mini cell and a screw drive mini press.
- The piston-cylinder mini cell is acting exactly as the diamond anvil cell. The lateral alignment of the dies is adjusted using available screws. The parallelism of the die tips is assured by a very precise machining of the components.
- Both 5 mm or 10 mm diameter gaskets can be used, 2 different holders are supplied.

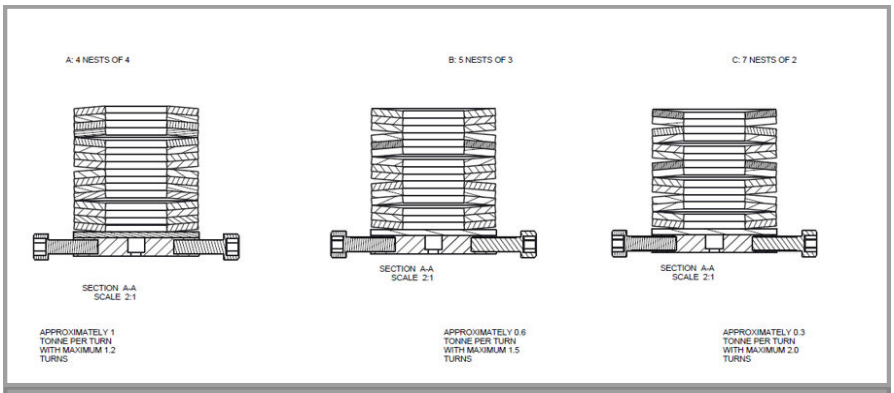


Gasket indenter: Press and mini cell



Mini press : Scale view

- The force is applied using the screw drive mini press. The force is controlled by using 16 spring washers. The configuration of these spring washers defines the force full range. Moreover, by changing the springs configuration, the force full range can also be changed. 3 different configurations are available as explained in the table and figure below.
- A scale is available for the force calibration. This is recommended for each new culet size of the die, change of gasket type or change of springs configuration arrangement.



Spring washers configuration

Configuration A
4 nests of 4
9800 N
Configuration B
5 nests of 3
6000 N
Configuration C
7 nests of 4
3000 N

- There is also a gasket indenter version using diamond anvils instead of WC dies. When using the same anvil design inside the gasket indenter, it has the advantage to provide a pre-indentation of the gasket exactly the same as if it was done directly inside the DAC.
- A picture of the mini cell fitted with Diacell design anvil is showed on the right side of the page.



Mini cell fitted with diamond anvils