

Mini-Pellet Press

A cost effective hydraulic press solution for FTIR pellet preparation.



Product features

- Hydraulic operation enables all users to make high quality KBr pellets
- Integrated pressure gauge ensures consistent pellet quality
- Fast and simple process to get from sample to IR results
- Simple operation requires minimal training
- Small and lightweight
- Low cost of ownership

The Specac Mini-Pellet Press is an innovative low cost solution for the pressing of 7 mm KBr pellets. Designed for use on a laboratory bench top, this dedicated KBr pellet press enables the user to create consistently high quality KBr pellets for transmission FTIR analysis. Incorporating full hydraulic operation, the Mini-Pellet Press enables the user to apply the required load for sample preparation through the simple rotation of a load knob. An integrated pressure gauge enables the user to apply a reproducible load resulting in high quality KBr pellets suitable for quantitative studies. With a rugged and

durable design and an innovative sealed hydraulic unit, the press is intended for daily laboratory use with maintenance-free operation.

The dedicated 7 mm diameter Pellet Die Assembly is shaped to securely locate onto the lower piston of the press and includes a pellet ring in which the sample pellet is held after pressing. Once the KBr pellet is pressed this pellet ring is simply placed onto the special sample compartment mount, locating the sample directly into the IR beam for analysis.

The press is designed to be used on a laboratory bench top, but is small in

size and light enough in weight to allow it to be moved to different points of use or stored when not required.

The Specac Mini-Pellet Press is also available as part of a Basic Solid Pack. This is equipped with a range of sample preparation components necessary for FTIR solid sample analysis by transmission, including: the Mini-Pellet Press, a 7 mm Pellet Die Assembly, 7 mm Disc Holder for a standard 3" by 2" mount, a pair of spare Pellet Ring Holders, a Pestle and Mortar, and KBr Powder (50g).

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How to Press a KBr Pellet

Pellet preparation involves the use of a 7mm Pellet Die Assembly. **1)** The sample material is blended with KBr (or other halide salt) powder and loaded into a pellet ring holder and anvil die assembly. **2)** This assembly is then placed over the Mini-Pellet Press piston, the top lead screw is lowered, and a load applied. **3)** After compressing the sample into a transparent pellet, the pellet ring holder can then be placed on a 3" by 2" slide-mounted disc holder **4)** directly in the spectrometer for analysis or, if necessary, the formed pellet can be removed from the ring holder and stored for later analysis.



Illustrations, descriptions and specifications in this data sheet were correct at the time of going to press. However, Specac's policy is one of continuous product development and we reserve the right to change descriptions and specifications at any time. For the latest details please contact your local Specac office or representative.

Specifications

Maximum Load	2 Tons
Pellet Die Diameter	7 mm
Maximum space between pressing faces	50mm
Minimum space between pressing faces	12mm
Piston Stroke	0.5mm
Die Assembly Material	hardened 440C stainless steel
Upper pressing area (top lead screw diameter)	17.0mm
Lower pressing area (piston diameter)	21.6mm
Dimension (ex. lead screws) LxHxW	110x200x155mm
Dimension (inc. lead screws) LxHxW	110x265x215mm
Weight	4.2Kg

Ordering information

Mini-Pellet Press Kit

Part No.	Description
GS01150	Basic Solid Pack

Mini-Pellet Press Parts

Part No.	Description
GS03940	Mini-Pellet Press
GS03950	7mm Pellet Die Assembly
GS03960	7mm Disc Holder for 3" by 2" Mount

Mini-Pellet Press Spares and Consumables

Part No.	Description
GS03951	Pair of Spare Ring Holders
GS03600	Pestle and Mortar
GS03610	KBr Powder (50g)

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