

Sample Prep

Atlas™ Evacuatable Pellet Dies

For the production of high quality sample pellets from 5mm to 40mm diameter

Specac offers wide range of high-quality Evacuatable Pellet Dies suitable for producing discs and briquettes from powdered samples. These are well suited for the preparation of KBr pellets used in FT-IR spectroscopic analysis and XRF pellets for X-Ray Fluorescence atomic spectroscopic analysis, but can also be used for a broad range of other applications. These Pellet Dies are compatible with all the Specac Atlas™ Presses.

As standard the Specac Pellet Die's produce circular pellets in sizes from 5mm to 40mm diameter, but other shapes and sizes are available upon request. All the parts of the die are manufactured from hardened stainless steel, for optimum quality and durability, and highly polished surfaces for contact with the sample.

The Evacuatable Pellet Die is made up of an evacuatable base, body, plunger, pair of internal pellet pressing surfaces, extractor ring and O ring kit. Removal of any moisture, if required, is done using the evacuation port.



Ordering Information

GS03060	5mm Evacuatable Pellet Die	(Max Load 2 Tons)
GS03100	10mm Evacuatable Pellet Die	(Max Load 5 Tons)
GS03000	13mm Evacuatable Pellet Die	(Max Load 10 Tons)
GS03165	20mm Evacuatable Pellet Die	(Max Load 25 Tons)
GS03300	32mm Evacuatable Pellet Die	(Max Load 50 Tons)
GS03290	40mm Evacuatable Pellet Die	(Max Load 80 Tons)

These dies are made from 440C hardened stainless steel and all of the dies are equipped with nitrile o-ring seals and an evacuation port for removal of moisture if desired during the pressing process.

Key Features

- Hardened Stainless Steel
- Highly polished pellets
- Evacuatable for sample pellet clarity and quality
- Vacuum pump kit for moisture free pressing (Optional)

Die Spares

Diameter	Set of Pellets	Plunger	Body	Base	Extractor Ring	O Ring Kit
5mm	GS03061	GS03063	GS03064	GS03050	GS03069	GS03062
10mm	GS03101	GS03103	GS03104	GS03050	GS03025	GS03102
13mm	GS03010	GS03030	GS03040	GS03050	GS03025	GS03020
20mm	GS03166	GS03168	GS03169	GS03191	GS03521	GS03167
32mm	GS03310	GS03330	GS03340	GS03230	GS03521	GS03320
40mm	GS03291	GS03293	GS03294	GS03295	GS03297	GS03292

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Evacuatable Pellet Dies Options

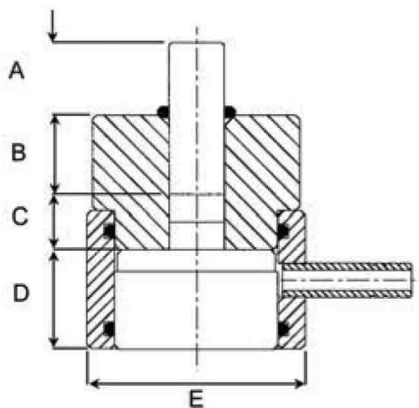
Size (dia)	Die	Pellet Holder
5mm	GS03060	GS03400
10mm	GS03100	GS03404
13mm	GS03000	GS03410
20mm	GS03165	GS03193*
32mm	GS03300	GS03520*
40mm	GS03290	GS03298*

* These pellet holders are sample retaining rings only and do not have a rectangular mounting plate.

Spares and Consumables

GS03600	Agate Pestle and Mortar (Mortar Bowl dia. 4cm)
GS03610	KBr Powder (50g)
GS03460	Paper rings for 13mm die (100) (11mm diameter aperture)
GS03470	Micro frames for 13mm die (100) (11mm x 2mm aperture)
GS03475	Ultra Micro frames for 13mm die (100) (4 x 1mm aperture)
GS03640	Vacuum Pump Kit

Specifications



A+B = Plunger Height
 C = Stainless Steel Pellet Height
 D = Base Height
 E = Diameter
 A+B+C+D = Total Height of Die

Die Size	5mm	10mm	13mm	20mm	32mm	40mm
P/N	GS03060	GS03100	GS03000	GS03165	GS03300	GS03290
A	13.7	16.0	16.0	21.4	21.4	21.4
B	38.8	19.1	19.1	35.8	35.8	35.8
C	12.7	12.7	12.7	19.1	19.1	19.1
D	22.2	22.7	22.2	27.8	27.8	27.8
E	50.8	50.8	50.8	68.3	68.3	68.3

Sample Prep

Atlas™ Lightweight Dies

Specifically designed to work with the range of Atlas™ presses up to max 25 tons

The Atlas™ Lightweight Evacuatable Pellet Dies have been specifically designed to work with the range of Atlas™ automatic presses up to a maximum load rating of 25 tons. The dies are also compatible for use with Specac's 15 and 25 ton manual hydraulic presses.

The dies are made out of 440C stainless steel and offered to prepare pellet discs of 32mm (GS25410) or 40mm (GS25411) diameter size.

They are well suited for the preparation of solid pellets for study by X-Ray Fluorescence spectroscopy.

When many samples are to be prepared for study, the physical effort required to load and remove an Atlas™ Lightweight Evacuatable Pellet Die into a press is greatly reduced, as the dies themselves are physically smaller and lighter in weight by comparison to conventional 32mm and 40mm diameter pellet dies. The 32mm die (GS25410) is approximately 1.8Kg and the 40mm die (GS25411) is approximately 1.9Kg in weight. By comparison the 40mm pellet die (GS03290) is close to 5.0Kg in weight.

To aid the weight reduction there are no individual internal pressing pellets as with conventional dies and so a sample is compressed between the plunger and the base piece of the die assembly. For this reason the plunger itself has a highly polished surface that makes contact with the sample. The highly polished face helps in producing an even surface to the sample pellet and in release of the sample from the die components.

The Atlas™ Lightweight Evacuatable Pellet Dies have an evacuation port and can be operated using a partial vacuum for the compression of samples into pellets that may be moisture sensitive.

Illustrations, descriptions and specifications in this datasheet 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.



Ordering Information

GS25410	Atlas™ 32mm Lightweight Evacuatable Pellet Die
GS25411	Atlas™ 40mm Lightweight Evacuatable Pellet Die
GS25412	32mm Lightweight Die Body
GS25413	32mm Lightweight Die Plunger
GS25414	32mm Lightweight Die Base
GS25415	32mm Lightweight Die O-Ring Kit
GS25416	40mm Lightweight Die Body
GS25417	40mm Lightweight Die Plunger
GS25418	40mm Lightweight Die Base
GS25419	40mm Lightweight Die O-Ring Kit

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