

Atlas™ Evacuatable Pellet Dies

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



Product features

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

Evacuatable Pellet Dies will fit into any of the Specac presses. However, it is usual that a larger diameter size of evacuatable pellet die requires a higher load to be applied by a press for compaction of the sample. The dies themselves are rated to a particular tonnage load maximum and so when certain combinations of a die size are used in a particular press, care must be observed that the maximum tonnage load for the die is not exceeded.

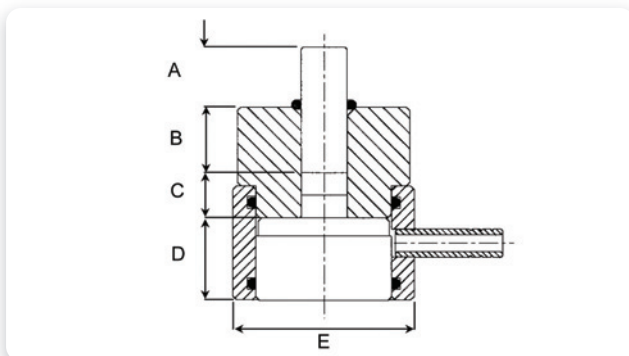
Pellet range

Part No.	Description	
GS03060	5mm evacuatable pellet die	(Max load 2.0 Tons)
GS03100	10mm evacuatable pellet die	(Max load 5.0 Tons)
GS03000	13mm evacuatable pellet die	(Max load 10.0 Tons)
GS03165	20mm evacuatable pellet die	(Max load 25.0 Tons)
GS03300	32mm evacuatable pellet die	(Max load 50.0 Tons)
GS03290	40mm evacuatable pellet die	(Max load 85.0 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.

Ordering information on next page...

Ordering information



$A+B$ = Plunger Height
 C = Stainless Steel Pellet Height
 (only 1 pellet in 3mm die).
 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	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	95.3

Evacuatable Pellet Dies Complete 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 (11mm diameter aperture) (100)
GS03470	Micro frames for 13mm die (11mm x 2mm aperture) (100)
GS03475	Ultra Micro frames for 13mm die (4 x 1mm aperture) (100)
GS03640	Vacuum Pump Kit - Includes: Vacuum Pump (1x10 ⁻¹ mbar), gauge & connector tube.

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

Atlas™ Lightweight Dies

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



Ordering info.

Part No.	Description
GS25410	Atlas™ 32mm Lightweight Evacuatable Pellet Die
GS25411	Atlas™ 40mm Lightweight Evacuatable Pellet Die
GS25412	Atlas™ 32mm Evacuatable Pellet Die Body
GS25413	Atlas™ 32mm Evacuatable Pellet Die Plunger
GS25414	Atlas™ 32mm Evacuatable Pellet Die Base
GS25415	Atlas™ 32mm Evacuatable Pellet Die O-Ring Kit
GS25416	Atlas™ 40mm Evacuatable Pellet Die Body
GS25417	Atlas™ 40mm Evacuatable Pellet Die Plunger
GS25418	Atlas™ 40mm Evacuatable Pellet Die Base
GS25419	Atlas™ 40mm Evacuatable Pellet Die O-Ring Kit

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 of 440C stainless steel and offered to prepare pellet discs of 32mm (P/N GS25410) or 40mm (P/N 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 P/N GS25410 is approximately 1.8Kgs and the 40mm die P/N GS25411 is approximately 1.9kgs in weight. By comparison the 40mm pellet die P/N GS03290 is close to 5.0kgs in weight.

To aid in 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.

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51 - 07/11