

## Evacuable Pellet Dies

Production of high quality sample pellets from 5mm to 40mm diameter



### Key Features

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

### Evacuable Pellet Dies

Evacuable Pellet Dies will fit into any of the Specac presses. However, it is usual that a larger diameter size of evacuable 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.

The range of Evacuable Pellet Dies supplied as standard are:-

<b>GS03060</b>	5mm evacuable pellet die (Max load 2.0 Tons)
<b>GS03100</b>	10mm evacuable pellet die (Max load 5.0 Tons)
<b>GS03000</b>	13mm evacuable pellet die (Max load 10.0 Tons)
<b>GS03165</b>	20mm evacuable pellet die (Max load 25.0 Tons)
<b>GS03300</b>	32mm evacuable pellet die (Max load 50.0 Tons)
<b>GS03290</b>	40mm evacuable pellet die (Max load 85.0 Tons)

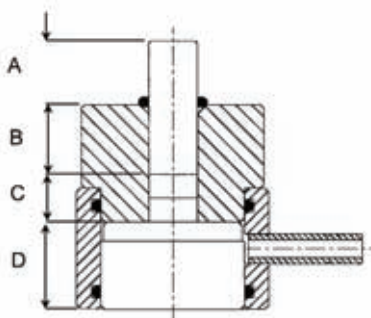
These dies are made from 440c hardened stainless steel and all of the dies are equipped with nitrile o-ring seals and an evacuation port for removal of moisture if desired during the pressing process



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## Evacuable Pellet Dies Ordering Information

### Specifications



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

### Evacuable Pellet Dies Complete Options

Pellet Holder	Die	Size (dia)
<b>GS3400</b>	<b>GS3060</b>	5mm
<b>GS3404</b>	<b>GS3100</b>	10mm
<b>GS3410</b>	<b>GS3000</b>	13mm
<b>GS3193*</b>	<b>GS3165</b>	20mm
<b>GS3520*</b>	<b>GS3300</b>	32mm
<b>GS3298*</b>	<b>GS3290</b>	40mm

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

### Spares and Consumables

<b>GS3600</b>	Agate Pestle and Mortar (Mortar Bowl dia. 4cm)
<b>GS3610</b>	KBr powder (50g)
<b>GS3460</b>	Paper rings for 13mm die (11mm diameter aperture) (100)
<b>GS3470</b>	Micro frames for 13mm die (11mm x 2mm aperture) (100)
<b>GS3475</b>	Ultra Micro frames for 13mm die (4 x 1mm aperture) (100)

### 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



### Ordering Information

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

### Atlas Lightweight Dies

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.

## Specadie

Produces KBr pellets without using a press



### Key Features

- No press or pellet holder required
- Rapid sample preparation
- Evacuatable for sample clarity and quality

### Applications

- Halide pellets for IR analysis

### Specadie

The Specadie accessory allows for the production of a solid KBr pellet for analysis by Infra Red spectroscopy without the need of a separate press and die.

The Specadie consists of a die body and two bolts that each have a highly polished pressing face. In operation a ground KBr powder is placed in the die body and compressed between the two bolts that are tightened together. A KBr pellet of 8.5mm diameter is formed. The bolts are then removed and the compressed KBr powder is retained inside the die body. The die body in turn acts as the pellet holder and is placed into a spectrometer via the Specadie holder 3" x 2" mount plate P/N **GS03560**

## Ordering Information

### Specadie

**GS03550** Specadie with bolts and seals only

### Specadie Kit

**GS03700** Includes: Specadie  
Specadie Holder  
Bench mounted wrench (spanner)  
Open ended wrench (spanner)  
Spare set of bolts  
Spare set of seals  
Bottle of KBr powder (50g)

### Spares and consumables

**GS03560** Circular Specadie holder  
**GS03570** Set of bolts  
**GS03590** Set of two open ended wrenches (spanners), 9/16" (14.3mm) and 1/2" (12.7mm) AF  
**GS03595** Bench mounted wrench (spanner)  
**GS03580** Set of seals  
**GS03610** KBr powder (50g)



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