

# **Data**Sheet

## **DC-2 Diamond Compression Cell**

A universal diamond compression cell specially designed for FTIR microscopes and the Specac Microfocus Beam Condenser



The DC-2 is a unique diamond compression cell comprising of two type IIa diamonds, each metal bonded into a Hastelloy plate.

The unique high temperature diamond-to-metal bonding technology gives maximum strength and durability, minimising the thickness of the diamond, which in turn achieves the highest optical throughput for this type of micro transmission cell.

The screw down compression system provides non-rotating uniform pressure across the sample area enabling samples to be compressed to an ideal thickness for transmission measurements.

Sample preparation is minimal and with no tools required, sample loading is both quick and simple.

#### **Features**

- Flat type IIa diamond windows
- High temperature diamondto-metal bonding into tungsten carbide
- Large clear aperture 1.5 mm
- Hastelloy body construction
- Universal use with FTIR microscopes and Microfocus Beam Condenser
- High working pressure, high throughput

#### **Applications**

- Compression to optimum transmission thickness of polymers, rubbers and minerals
- Microanalysis of brittle, elastic, semi-rigid fibers, particles and fragments

 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.

#### Microfocus Beam Condenser

A rugged, high performance 4 x beam condenser specially designed for use with the DC-2 Diamond Compression Cell



In combination with the DC-2 Diamond Compression Cell, this system can be used for the analysis of virtually all solid samples by transmission.

The beam condenser uses lens focusing requiring minimal adjustment for maximum ease-ofuse. The compact design ensures minimum pathlength through the accessory.

The Microfocus Beam Condenser is baseplate mounted for optimal support and stability using the standard Specac Benchmark baseplates which make it compatible with all FTIR spectrometers.

### **Ordering Information**

GS02550 DC-2 Diamond Compression Cell

GS02560 Microfocus Beam Condenser with

ZnSe lenses

When ordering please specify Spectrometer make and model

GS02561 Microfocus Beam Condenser

with KRS-5 lenses

Please specify Spectrometer make and model

Spares and consumables

GS02508 Sample forceps

GS02509 Stainless steel sample needle

GS02510 Sample preparation knife with blades (10)

and blade remover

#### Complete Kits

GS02551 Microfocus Beam Condenser and DC-2

Diamond Compression Cell Kit

Kit Includes, DC-2 Diamond Compression Cell, Microfocus Beam Condenser with ZnSe lenses, Forceps, Stainless steel sample needle, Sample preparation knife,

Blades (10), Blade remover (2),

Please specify Spectrometer make and model

GS02552 DC-2 Diamond Compression Cell kit - as

per 02551 but with KRS-5 lenses.

**Options** 

GS02570 KRS-5 lens kit for use with Microfocus

Beam Condenser

GS02571 ZnSe lens kit for use with Microfocus

Beam Condenser

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