

# DC-3 Diamond Compression Cell

A Universal Diamond Compression Cell specially designed for FT-IR microscopes and the Specac Microfocus Beam Condenser



## DC-3 Diamond Compression Cell

The DC-3 diamond compression cell enables samples to be compressed to an ideal thickness for transmission experiments. It uses two type IIIa diamond windows, each mounted into a Hastelloy plate. The clear aperture of 1.5 mm diameter provides excellent signal throughput when positioned at the beam focus of an FT-IR spectrophotometer using an MCT detector. For optimum performance with a DTGS detector, the Microfocus Beam Condenser P/N GS02560 (with ZnSe lenses) or P/N GS02561 (with KRS-5 lenses) is recommended to be used with the DC-3 in order to obtain high quality spectra.

The DC-3, because of its small size and shape can also be used with Infrared Microscopes, where the large aperture allows for more than one sample to be loaded and compressed at one time. Each individual sample could then be selectively moved into the light beam from the IR microscope, saving on the time needed to mount and prepare each sample between analyses.

## ordering information

**GS02555 DC-3 Diamond Compression Cell**

### Options

**GS02556\*** Diasqueeze Plus Kit with ZnSe lenses

**GS02557\*** Diasqueeze Plus Kit with KRS-5 lenses  
Includes: DC-3 Diamond Compression Cell  
Microfocus Beam Condenser Forceps  
Stainless steel sample needle  
Sample preparation knife Blades (10)  
Blade remover (2)

## Key features

- > Type IIIa flat diamond windows
- > Large clear aperture 1.5mm
- > Hastelloy body construction  
(3" x 2" x 9/16", 76.2 x 50.8 x 14.3mm)
- > Universal use with FT-IR 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 fibres, particles and fragments

**GS02560\*** Microfocus Beam Condenser-ZnSe Lenses

**GS02561\*** Microfocus Beam Condenser-KRS-5 Lenses

**GS02570** KRS-5 lens kit for use with  
Microfocus Beam Condenser

**GS02571** ZnSe lens kit for use with  
Microfocus Beam Condenser

## Spares and consumables

**GS02508** Sample forceps

**GS02509** Stainless steel sample needle

**GS02510** Sample preparation knife with blades (10)  
and blade remover

**\*Please specify spectrometer make and model.**