Spectroscopy and Microscopy Accessories

Contents

C. Diamond EX-Press 4

D. Microscope Slides 5

D.1 Diamond Windows 5

D2. LC-IR Holder 6

E. Micro TouchPick Pen 6

F. EZ-Pick III 7

G. Mini Plane Sampling Knife 8

H. EZ-Slicer 9

I. KBr Table Press and Sample Holders 10

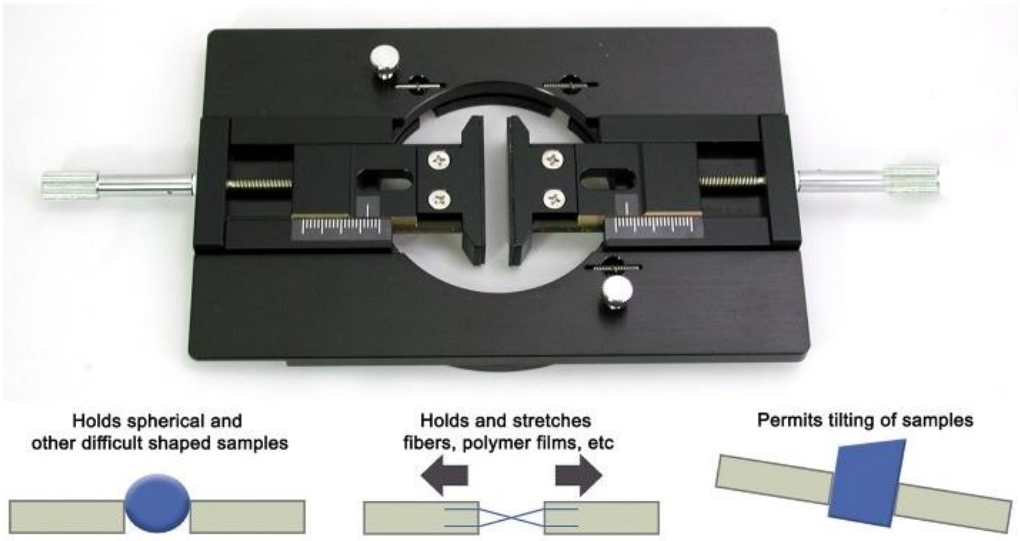
J. Quick Holder 11

K. KBr Cuttings 11

L. EZ-Clip 12

M. EZ-Clamp Holder 12

A. Micro Vice Sample Holder for Microscopes



Easily adjust & hold all kind of samples with the Micro Vice for analysis with FTIR- and Raman microscopes, stereoscopes & microscopes.

The Micro Vice sample holder provides a unique solution for placing and holding your samples in the desired position under your microscope.

Individually shaped samples, such as minerals, tablets and pills, but also multilayer films, fibers, hair samples can be easily positioned and analyzed in the required position under your microscope.

- Holds round & unevenly shaped samples.
- Holds & stretches fibers, multi-layer films, hairs by user defined increments.
- Permits tilting of oblique samples.
- Facilitates positioning of samples for examination with Microscopes, Stereoscopes, FTIR- and Raman Microscopes
- Various models available - Fit on most microscope stages.

A typical sample process and an application video can be found in Universal MicroVice Sample Holder for Microscopes (www.auroraprosci.com)

Order information:

Description	P/N
Standard Micro Vice Holder for Thermo Autostage Centaurus, IN10 series, InspectIR, NicPlan, IR-Plan, Continuum, Shimadzu Autostage AIM8800, Nikon TE300, TE200	STJ-0116-A
Micro Vice Holder for Witec alpha 300 R	STJ-0116-A-66
Micro Vice Holder for Bruker Hyperion, IRScope, Lumos, Senterra w/Autostage, Horiba LabRam, Maerzhaeuser Stage	STJ-0116-A-BR
Micro Vice Holder for Leica Inverse Microscope DMi8	STJ-0116-A-LIN
Micro Vice Holder for Prior H101, H230, Perkin Elmer Spotlight w/	STJ-0116-A-NI
Micro Vice Holder for Prior H101Flat fits on Prior models H101P2F, H101E2F, H101P1F, H101E1F	STJ-0116-A-PFL
Micro Vice-mini-Holder	STJ-0116-M
Micro Vice Holder for Perkin Elmer Spotlight 200i	STJ-0116-M-PE
Micro Vice-multi Holder	STJ-0116-NS
Micro Vice Holder for Shimadzu AIM-9000	STJ-0116-NS-SHIM
MicroVice Holder for Jasco IRT-series	STJ-0116-NS-JA

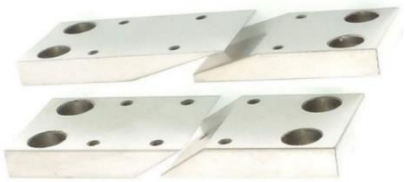
B. Micro Vice SliceIR

Cutting & analyzing films, paper, multilayers can be sometimes challenging. The sample holder **MicroVice with the SliceIR clamps** helps you to hold even the thinnest films with ease. As shown in below image, you can firmly hold your films in either a 30° or 15° angle and then easily slice off cross sections with a razor blade. Holding the sample in 15°/30° will provide you a two/four times larger cutting surface optimized for the further analysis with the FTIR- or Raman microscopes.

Additionally, you can exchange the SliceIR clamps of the sample holder with:

- Two clamping plates to hold taut films, fibers, yarns, etc. and stretch them.
- Two standard clamps to hold round and unevenly shaped samples such as tablets, minerals, etc. under compression in the desired position.

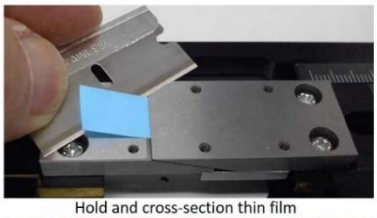
- All fixed samples can be tilted up to a certain angle for correcting oblique sample orientation.
- Fits on the stages of all FTIR and Raman microscopes



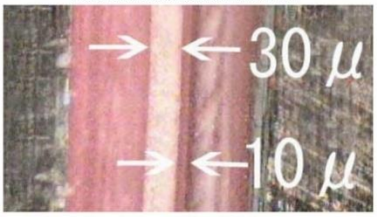
SliceIR Clamp with 15° or 30°



SliceIR adaptor on micro-vice sample holder



Hold and cross-section thin film

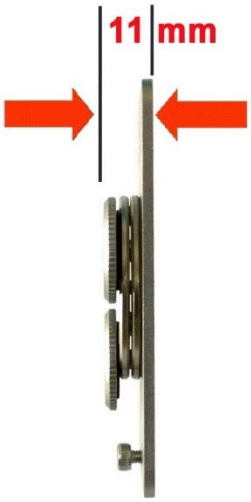


Film cutting surface with a 15° clamp

C. Diamond EX-Press

The Diamond compression cell provides an easy solution to **flatten and thin materials to an ideal thickness for transmission analysis** with FTIR spectrometers and microscopes. The sample is simply compressed between the diamond windows by turning thumb screws until the sample is thin enough for the beam of the spectro-photometer to penetrate. The diamond windows in this cell are Type IIA synthetic for excellent transmission from the UV through Far-IR spectral regions. The hardness of diamond enables maximum pressure to be applied to all types of crystalline, fiber, or amorphous materials. Typical samples include fibers, paint chips, rubbers, and plastic materials including laminates. A clear aperture model of 1.6 or 2.0 is available. The total cell thickness of 9.5 mm provides smallest working distance for use with microscopes.



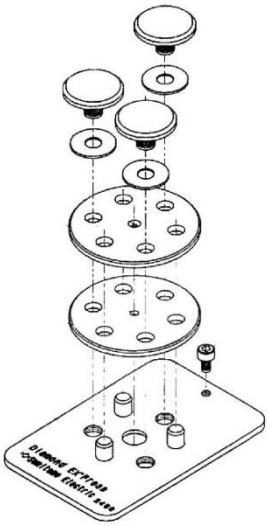


Key Features

- Compressing and positioning of micro samples
- 1.6 mm or 2.0 mm large clear aperture versions ease sample placement
- Compatible with spectral regions from UV to Far IR
- Universal use with FTIR-Spectrometers & FTIR – Microscopes
- Standard 2"x3" back plate fits all spectrometers

- Easy thumb wheel mechanism for application of pressure

Typical Applications



- Compressing and holding samples for transmission analysis with FTIR spectrometer or microscope analysis
- Enhance the cross-section surface for multi-layer structure analysis
- Minerals, paint chips, rubbers, plastics, polymers and pharmaceuticals analysis

D. Microscope Slides

D.1 Diamond Windows



The Diamond Windows are an ideal tool for your microscope measurements and cover wide spectral range from UV to FTIR.

Highest Quality Synthetic Diamonds Type II a:

- Excellent optical and mechanical properties
- No diamond impurities interfere with sample measurements
- Best throughput
- No solvent washing necessary
- Two sizes available: 2.5 mm and 3.5 mm

D2. LC-IR Holder



This LC-IR Sample Holder offers you perfect conditions for micro-reflection spectroscopy of multiple samples on the same slide.

- Ideal for reflection-absorption measurements and grazing angle measurements
- Standard sized 1" x 3" golden plate with 14 sample wells
- 7 x 4.0 mm diameter wells
- 7 x 2.5 mm diameter wells

E. Micro TouchPick Pen





The Micro TouchPick Pen is the world's first tool for securely handling and picking up smallest samples without damaging them.

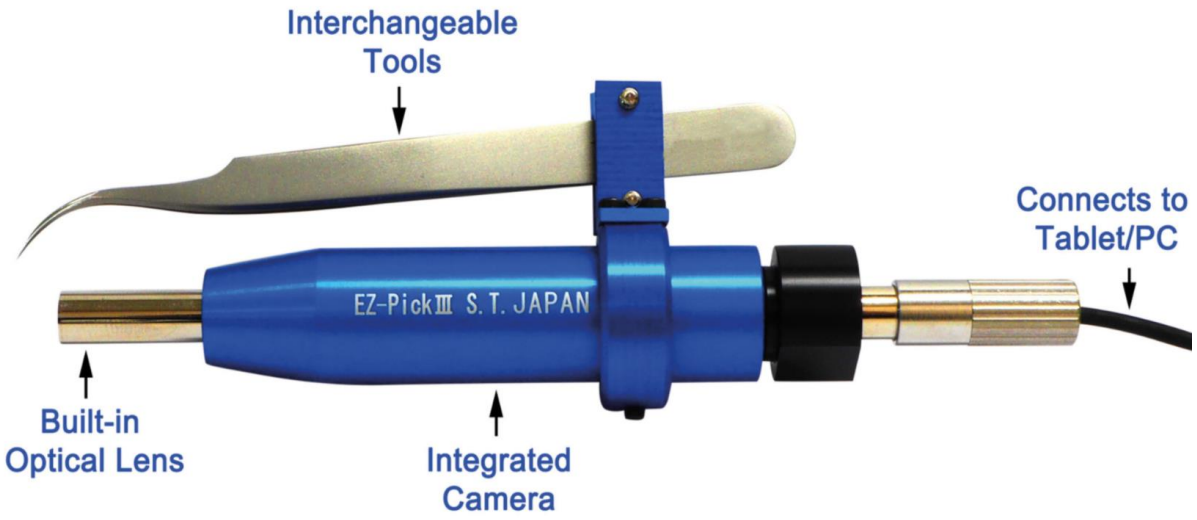
This tool is especially helpful for handling small samples, such as thin films and samples difficult to pick up with tweezers. The unique technique makes the Micro TouchPick pen effective in capturing smaller–sized, fragile particles and samples of all sorts, including biological, archaeological and mineralogical samples.

Accurate sample retrieving and positioning.

- Ideal for fragile & statically charged samples
- Easy to use for everybody with reduced risk of sample damage
- Two different sized adhesive tips (0.62 mm and 0.17 mm)
- Ergonomic pen design with excellent tip visibility
- Enduring adhesive strengths for long-term usability

F. EZ-Pick III

Easily manipulate & dissect your samples or extract smallest particles for further examination



while monitoring your action on your connected PC or Android tablet.

This new SamplePrep Stylus is an excellent solution for anyone who is engaged in specimen manipulation and handling of delicate components, fibers or any other microscopic tasks calling for precision work.

The EZ-Pick III has the form of a pen with a mounting device to attach sampling probes like needles, tweezers or knives at the front end. The head of the stylus includes a specially designed optical focusing

lens which focuses on the tip of the sample probe and that can change magnification.

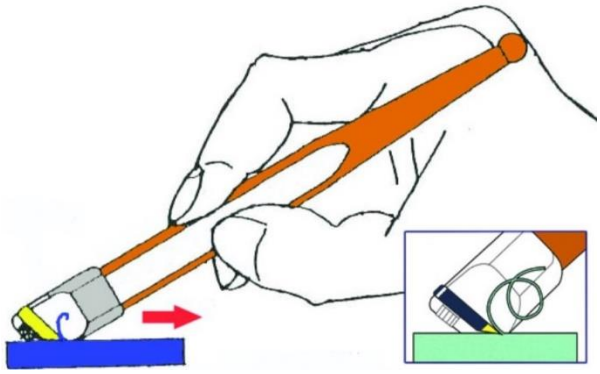
Your sample prep operations are captured by an ultra mini high performance CCD camera and are transferred to your computer or Android tablet for optimal visualization.

According to your specific application you can attach the appropriate type of sample probe onto the body of the stylus.

- Ergonomic Stylus design
- Exchangeable sample prep probes
- Ultra mini high performance CCD
- Connects to your PC or Android tablet
- Easy to use at any location & easy on-site sample taking and manipulating

G. Mini Plane Sampling Knife





The patented Mini Plane Sampling Knife is designed to easily section hard & soft, non-embedded biological & industrial materials into thin samples for micro analysis.

With the Mini Plane you can shave thin layers off the surface of industrial and biological materials. The cut layers will always have a consistent and uniform thickness optimized for measurement.

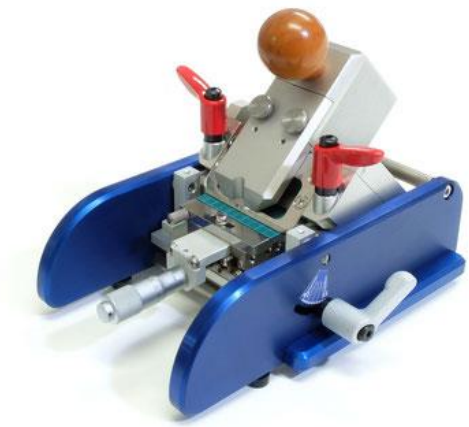
The Mini Plane with the **Carbide Steel Blade** is best for peeling off thin sections from most polymers, tissue samples and coated materials.

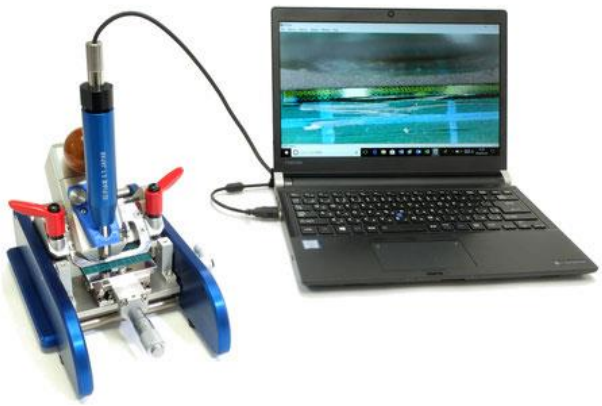
The **Single-Crystal Diamond Blade** version is ideal for cutting hard polymers, inorganic materials and coatings from metallic surfaces.

- Adjustable blade depth & cutting angle
- Excellent control & reproducibility of sample thickness

- Precise depth control
- Reduced mechanical damage to specimen
- Allows you to produce sections of various thickness with the same knife
- Easy to clean

H. EZ-Slicer





This is a unique tabletop cutter for quick & precise routine cutting of thin samples such as films, papers, fibers, etc.

The EZ-Slicer is a compact precision cutting device with which you can easily and accurately cut sections of thin materials such as packaging materials, films, laminates, paper, fibers, etc.

- Consistent and controlled cuts of soft and hard materials
- Perfect control of section thickness down to 20-30 µm
- Adjustable cutting angle between 45° - 90° degree
- Simple & safe handling
- Ergonomically designed – Due to its lightweight but solid design you can carry the cutter around in the lab and use it wherever it is needed.

I. KBr Table Press and Sample Holders

Compact designed Table Press for KBr-Pellets.



This efficient, little KBr Table Press is a valuable addition in any IR Laboratory, which regularly makes KBr pellets.

The smooth action of the handle permits pellets to be pressed effortlessly with one hand and minimal pressure.

Clear KBr pellets with a diameter of 1, 3 and 7mm can easily be pressed.

- Compact design - Sturdy, compact and easy-to-use
- Uniform and highly reproducible pellets
- Selection of die sets available (1, 3 and 7 mm)
- Components contacting the die set are stainless steel
- Easy to clean and maintain

Use it with KBR Cuttings and the Quick Holder

J. Quick Holder

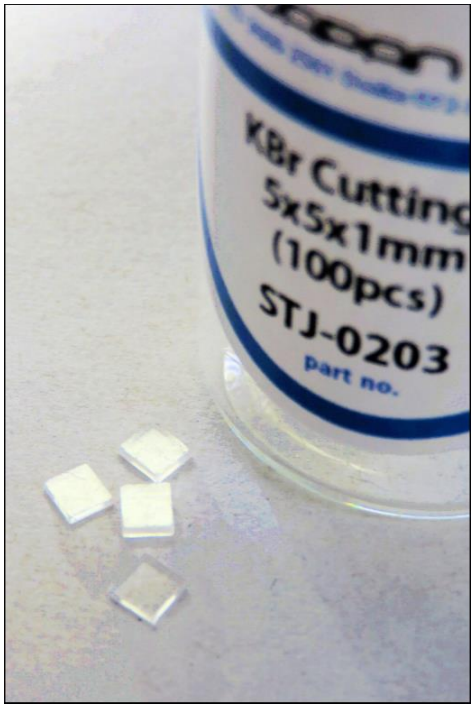


Sample holder designed to hold collars for 1, 3, 7, and 13mm Kbr pellets.

- Easy positioning of the sample collar on a removable mount with a half-moon cut-out
- Magnetic back plate holds the sample in place
- An opening at the top end of the holder is used for 13 mm pellets
- Standard sized back plate fits all spectrometers

Combines perfectly with our Kbr-Table press!

K. KBr Cuttings



Instead of grinding KBr Powder to fine powder and mixing it with the sample you can now use our new KBR Cuttings.

Simply set your sample between two of these little KBr Plates and press them with the KBr-Press - Voilà!

- Sizes available: 5x5x1mm & 3x3x0.75 mm

L. EZ-Clip

Basic and easy-to-use sample holders to effortlessly hold windows, pellets and films in place for measurement.



- Spring loaded clip holds samples firmly in place
- EZ-Clip 25mm is best for holding windows & films
- EZ-Clip 13mm is best for holding pellets
- Standard sized back plate fits all spectrometers

M. EZ-Clamp Holder

Multi-functional sample holder for pellets, fibers, films and filters for Transmission & ATR-FTIR measurements.

The EZ-Clamp Holder combines two aperture sizes (13 mm and 25 mm) and an additional insert for clamping taut films and filters in one holder.

- Use it for ATR-FTIR measurements with your FTIR microscope
- Use it for transmission measurements with your FTIR spectrometer
- Standard sized back plate fits all spectrometer

