

Catalogue for Scientific Examination of Materials and Analysis of Non-Metal Materials

MICROTOMY



Year 2026

We are specialized on industrial sample processing.

Microtomy

Consumables
Rotationsmicrotomes
Large and Hard-cut microtomes
Systemic solutions



Service

Sample processing
Sample evaluation
On-site training
Online consulting

Please pay attention to our jubilee offers!

We introduce ourselves Company

As a specialist for applications of non-metal materials, we offer a wide range of service for all questions of sample preparation – microscopy – digital image recording and image processing.

After 14 years as a well-known manufacturer in these themes, the company MicroKern was found in 2001. We look back on over 35 years of experience.

Side by side with reputable manufacturer, scientists and partners we are your first contact for these applications. With this orientation on defined applications and customer segments, we guarantee high competences and current knowledge.

We offer consumable materials, add-ons and technical solutions, which we optimise in price and efficiency. We develop our systems for you with our partners and produce components and add-ons on our own. **Products from our own development.** Especially for microtomy and thin section techniques we work together with our customers on the issues of the day.

In 2003 our Training Centre was established. Our aim was it, to offer our customers small groups, experienced speakers and mentors in application-oriented trainings. Equipped with the latest devices, microscopes, digital systems and image processing programs, we are proud to welcomed over 590 participants.

Not self-evident, but we offer our trainings for our customers even on-site. Meanwhile we trained already successfully more than 120 companies. These special trainings are tailored to the need of people, their applications and equipment. They are a useful addition and are becoming more and more popular!

In 2016 our laboratory was established. We process your samples, help by finding solutions with embedding, microtomy, thin section technique and microscopic analysis. My qualified team is looking forward to your challenge.

We are looking forward to a future cooperation!



Martin Kern

M.Sc. Geology and Economy

Founder of the Company

- ✓ 2001 established MicroKern
- ✓ Founders 'Award by Berlin-Neukölln (2003)
- ✓ 2003 established Microscopy Centre Berlin
- ✓ 2016 established Laboratory of Application

Author of the books

- ✓ Observation and Measurement Microscopy in Materials Science (2007) – English and German
- ✓ Geologie im Gelände (1988 und 1999) – *only* in German
- ✓ Mikroskopische Technik für die industrielle Anwendung (2003) – *only* in German
- ✓ Die Top 40 Fragen rund um die Mikroskopie (2014) – *only* in German
- ✓ Präparation und Mikroskopie für nichtmetallische Werkstoffe und Verbunde (2019) – *only* in German
- ✓ Mitautor wissenschaftlicher Veröffentlichungen – *only* in German

Since 2009 lecturer at **Lette Vereins-Berlin, dep. Metallographic and Materials Technology**, with the focus on materials technology, materials of non-metals and microscopy.

Official partner of BHT-University (Berlin) and Lette Verein-Berlin.



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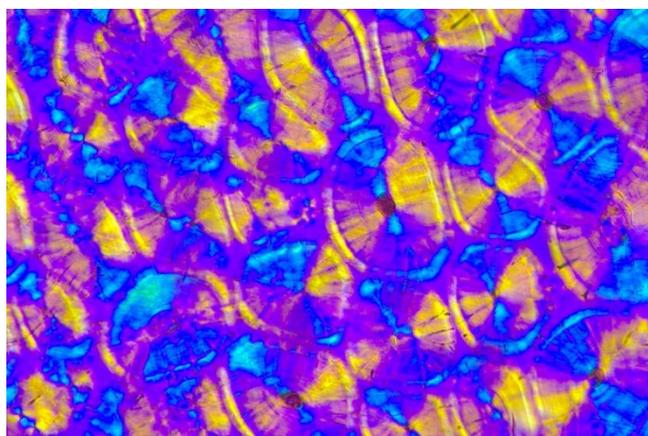
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Target preparation



3D print application layers



Coconut thin section



Sample press

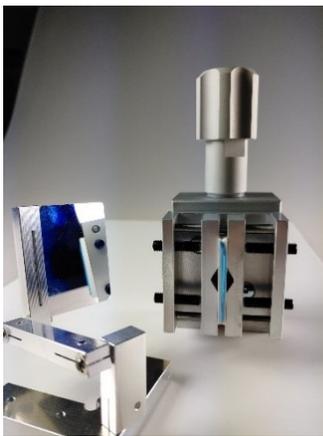
Microtomy News

Target preparation

Die Mikrotomie-Präparation hat sich im industriellen Einsatz bewährt. Die Positionierung der Proben ist jedoch schwierig und zeitaufwendig, da der freie Blick nur auf die Oberfläche möglich ist. Um jedoch z.B. Lunker, Einschlüsse, Oberflächenstrukturen oder Stippen präzise im Querschnitt zu treffen, muss die Probe ständig von der Seite betrachtet werden.

Wir bieten Ihnen zur Lösung dieses Problems zwei verschiedene Systeme an. Eine einfaches visuelles Spiegelsystem sowie eine makroskopische digitale Lösung.

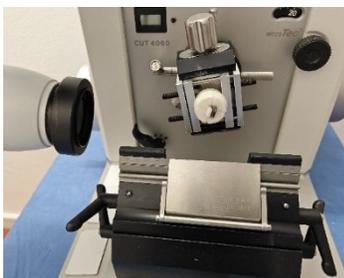
We are happy to introduce our third variation:



Mirror device



Digital macroscopy



Optical side view



Optical view on top



Optical vertical view

More information on page 13

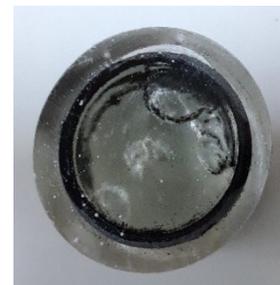
Embedding Media and Devices for Microtomy

KULZER Innovations

The following parameters must be taken into account for microtomy embedding:

- ✓ Glass clear (for transmitted light microscopy)
- ✓ Low curing temperature (avoid thermal damage)
- ✓ Low viscosity (infiltration of porous materials)
- ✓ Good edge closure
- ✓ Fast processing
- ✓ Can be cut with a steel or carbide blade

We have compiled the right media for you.



Bad embedding, air bubbles

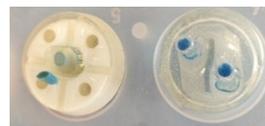
Hydroxyethylmethacrylat (HEMA) Embedding Media, Cuttable		
Article No.	Description	Price
64709003	TECHNOVIT 7100 for embedding not direct cuttable objects, three components (500ml liquid resin, 6x 0,5g activator, 40ml hardener)	125,00 €
66101062	Technovit 7100 hardener 6x 0,5g Activator, 40ml hardener	12,00 €

+

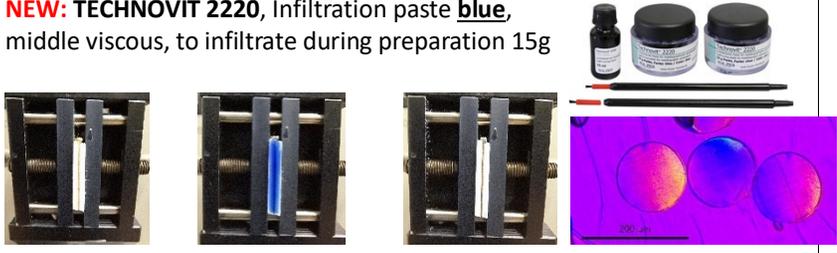
Light Curing Embedding Media, glass clear, fast processing

Light-curing embedding media have undeniable advantages - speed and low costs, but also the possibility of sample fixation and orientation. However, they also show their weaknesses - gap formation, 'dark' uncured areas and temperature development. Kulzer Technik takes the next step for the universal application of these media - for microtomy and thin section technology.

KULZER Light-curing Embedding Media, glass clear, fast processing		
Article No.	Description	Price
64708496	TECHNOVIT 2000LC Embedding medium, low viscosity, short curing time, curing temperature up to 50°C controllable, glass bottle with dosing unit, 1000ml	136,00 €
66005103	TECHNOVIT 2000 Fixing paste , viscous, to stabilize and orientate larger samples, syringe with 1x4g suitable even for base embedding	45,00 €



NEW: KULZER Light curing embedding media, glass clear, fast embedding

Article No.	Description	Price
66020779 <i>Video in preparation</i>	NEW: TECHNOVIT 2210 Liquid , Fixing paste, Middle viscous, to stabilize and orientate small and filigree samples, syringe 2 x 1ml 	45,00 €
6620780 <i>Video in preparation</i>	NEW: TECHNOVIT 2220 , Infiltration paste blue , middle viscous, to infiltrate during preparation 15g 	82,00 €
66043721	NEW: TECHNOVIT 2220 , Infiltration paste clear , middle viscous, to infiltrate during preparation, 15g	76,00 €

Blue light device for hardening

Article No.	Description	Price
66043553	TECHNOVIT Blue LED Mobile for fast single fixing and embedding (torch) 	125,00 €
I5900	Simple Box for blue light embedding media Impact resistant abs-housing, mirrored interior, 4 x 9 Watt Blue-fluorescent tube Attention: only tubes for incident light, Mirror for transmitted light. Curing therefore takes slightly longer. (ca. 6-8 Minuten). 	92,00 €
K66060914	Kulzer Blue light device for TECHNOVIT 2000LC , With max. 6 lamps à 9 Watt, for top and bottom lighting. Max. 9 samples cured simultaneously. Drawer for safe insertion of the samples. 	789,00 €

2-Component Medium for base embedding

Article No.	Description	Price
64708806	TECHNOVIT 3040 fast curing plastic for base embedding, 2 components, 1000g powder 	82,00 €
66022678	TECHNOVIT 3040 fast curing plastic for base Embedding, 2 components, 500ml liquid, yellow 	41,00 €

Embedding Moulds for Microtomy

To minimise cutting forces, protect knives and achieve optimum results, the embedding moulds are specially shaped. We have additional moulds in our own development range.



**Made in Germany
for Micro Kern**

More moulds on request.

Embedding moulds, package 5x4 pieces (Attention: adapter 702218310 necessary)		
Article No.	Description	Price
MK9910	Plastic mould for embedding of sample (4x21mm), for foils, max. 4ml (MK)	26,00 €
MK9920	Plastic mould for embedding of sample (8x16mm) with prism, max. 4ml (MK)	26,00 €

Embedding moulds, package 3x9 pieces (Attention: adapter 702218310 necessary)		
Article No.	Description	Price
MK702218311L	Plastic mould for embedding of sample (6x8 mm), for foils	35,00 €
MK702218312L	Plastic mould for embedding of sample (2x15 mm), for foils	32,00 €
MK702218313L	Plastic mould for embedding of sample (13x19 mm), for foils	33,00 €

Adapter 25mm Ø package 25 pieces		
Article No.	Description	Price
702218310	Adapter, round for all named embedding moulds (MK) 	81,00 €

Prism inlay for microtom clamp, clamping of round specimen		
Article No.	Description	Price
F150017	Prism inlay for round adapter up to Ø 25mm for all Microtomes with vice 	149,00 €

Clamping Devices for Microtomy

In collaboration with our customers, we have developed a foil clamp that enables flat samples to be clamped directly. We have also developed a solution for cryogenics. We recently added a universal sample holder to our program. In addition, we offer sample holder for stabilisation.

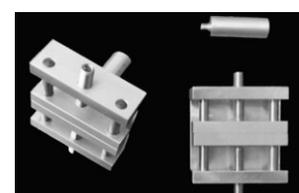
Made in Germany for MicroKern and proven worldwide!



Foil clamp MAX



Foil clamp Standard

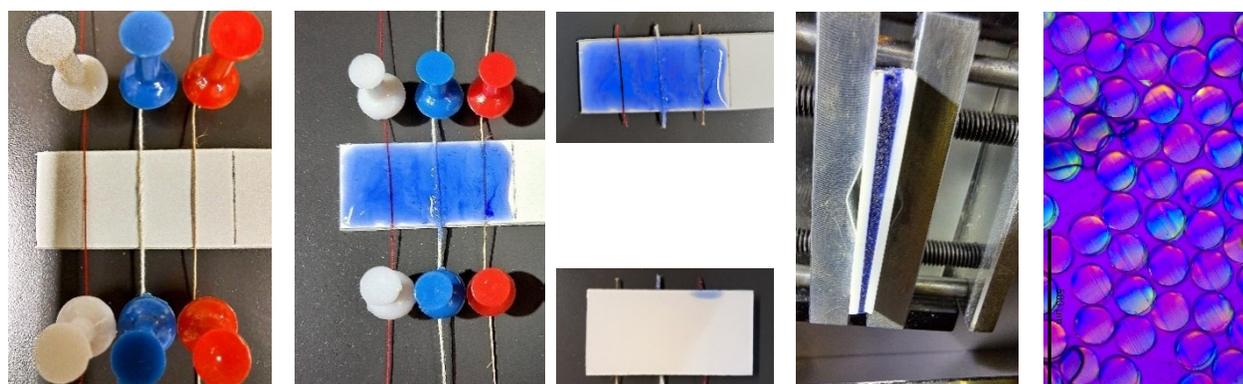


Foil clamp cryo

Foil clamp, 1 piece		
Article No.	Description	Price
8000021 	MAX Foil clamp (50x50x20mm) for fixing of larger, flat samples, up to max. 35x25mm, suitable for all microtomes. Clamp with clamping jaws for round specimens (with milled groove), guide rails and four fixing screws, shim (2.0 mm), clamping foot , (35x17x1,5mm) (MK)	350,00 €
8000019  	Foil Clamp Standard (39x39x15mm) for fixing of flat samples up to 20x10mm, suitable for all microtomes and microscopes. Clamp with clamping jaws, guide rails and central hole, guide slot for inserting the film, spacer disc (5mm) for microtome clamp, shim (1.5mm), (10x20x1,5mm) (MK) Our internationally success product!	299,00 €
MK99976_Kryo_2	Cryo Foil clamp (39x39x15mm) with pin 9x20mm (Slee) and bayonet (Leica) for flat specimens of all kinds. Particularly low design. Suitable for sandwich holders (20x10mm). Spacer disc (5mm) for microtome clamp, 10 sandwich holders (10x20x1.5mm) (MK)	315,00 €

Sandwich holder, package 50 pieces		
Article No.	Description	Price
MK99998 	White plastic plates (PS) for supporting foils, for direct adaptation to the microtome, ca. 35x17x1,5mm , for foil clamp MAX (MK)	61,00 €
MK99997   	White plastic plates (PS) for supporting foils, for direct adaption to the microtome, ca. 20x10x1,5mm for foil clamp Standard (MK) Used in many laboratories!	59,00 €
MK99997_02	Clear plastic plates (PC) for supporting foils, for direct adaption to the microtome, ca. 20x10x2mm . ATTENTION: only for carbide knives (MK)	63,00 €
MK99997_03	NEW: White plastic plates (PS) for supporting foils, For direct adaption to the microtome for foil clamp MAX ca. 35x17x1,5mm and foil clamp standard ca. 20x10x1,5mm Surface grinded for fibre embedding (MK) Please order separately!	20,00 €

Embedding examples of fibre material



Cutting Tools for Microtomy

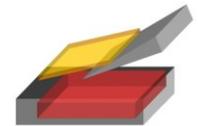
We offer the right knife for different materials. Please also pay attention to the correct setting of the blade angle. This will give you best results and protect the blade.



Freiwinkel zu flach eingestellt ($<3^\circ$). Das Messer schiebt über die Probe. Kein Schnitt möglich.



Freiwinkel zu steil eingestellt ($>15^\circ$). Das Messer beschädigt die Probe und das Messer.



Freiwinkel optimal eingestellt ($3-10^\circ$). Das Messer spant die Probe.

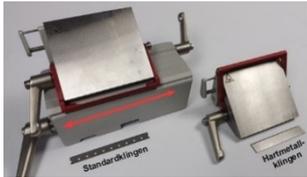
We recommend to change to disposable blades for your microtome.
We would consult you in this theme.

Knives 16cm, 1 Stück		
Article No.	Description	Price
21604813	16 cm knife cut D carbide for hard plastic specimen We offer resharpening service. We give advice for carbide disposable knives, if you would like to switch!	1.780,00 €
14021325287	Knife box for knives 16cm, high quality, wood 	71,00 €

Microtomy disposable knives, 1 package with 50 pieces		
Article No.	Description	Price
28407004	Disposable knives for soft plastics and embedding 1x cleaning rod 60mm 	120,00 €

We developed new carbide disposable knives together with our partner.

microTec[®]

Disposable knives (carbide), 1 piece		
Article No.	Description	Price
F220360	carbide knife for hard plastic specimen and embeddings, 65x11,3x1,1mm. Special knife holder type TC (Tungsten Carbide) necessary! 1x cleaning rod 60mm 	299,00 €

Cleaning rods for microtomy knives, package 5 pieces		
Article No.	Description	Price
D70970	Styrofoam rods for cleaning of carbide and disposable knives. Cleans gently impurities of the knives 120x7,5x6mm 	6,00 €

Adhesive foil for Microtomy

In the meantime, the removal of the incision with the help of an adhesive film is carried out routinely. After long trials, we have found the best film for you.

For 20 years a successful product worldwide!

- ✓ Glass clear, without contaminations
- ✓ Uniform adhesive layer with high adhesive strength, tear-resistant
- ✓ Polarisation-free for microscopy

Exclusive for MicroKern

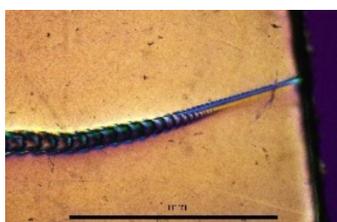


Foil clamp plus plastic plate plus adhesive foil – guarantee for optimized cuts!

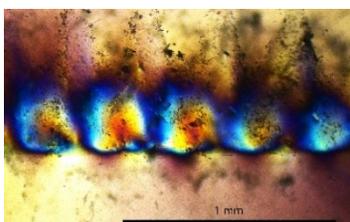
Adhesive foil, sheet ca 21x14,8cm		
Article No.	Description	Price
MK99990_10B	Adhesive foil, package 10 sheets	29,00 €
MK99990_20B	Adhesive foil, package 20 sheets	44,00 €
MK99990_50B	Adhesive foil, package 50 sheets	101,00 €

Tools for cutting reduction

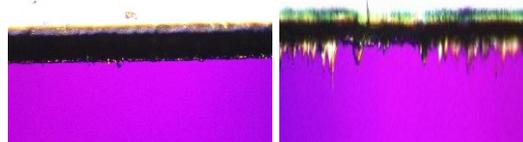
Having the right tools to prepare the specimens, remove the sections directly and place them on the slide is a prerequisite for avoiding preparation artefacts. Therefore, we use surgical items.



Scratch by needle



Impression by tweezers



Good and bad scissors cutting

Tools for cutting, 1 piece		
Article No.	Description	Price
2331212	Surgical scissors, pointed, for microtomy, for cutting of foils	29,00 €
2321240	Tweezers with particularly fine shovel (3,5mm) for non-destructive section removal, especially of flat specimens	55,00 €
2321220	Tweezers with particularly fine straight tip for non-destructive section removal, especially of small specimens	44,00 €

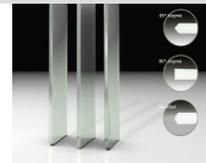
Cutting removal tools

Cutting removal tools, 1 piece		
Article No.	Description	Price
MK99988	Set of brushes, contents 7 high quality brushes (Gr.1 - Gr.16), for cleaning preparation and remove cut	25,50 €
2335528	Disposable scalpels with stainless steel blade Type 23, plastic grip, single packed, package of 10 pieces	34,00 €
40011000	CFC-free cooling spray for sectioning very soft samples, tin 200ml, residue-free, long cooling performance, data sheet available	27,00 €

Glass slides and cover glasses for microtomy

The quality of the products is important. In co-operation with the traditional company W.Knittel Glasbearbeitungs GmbH, as a manufacturer of various standard and speciality slides, we use high-quality, very uniform floating glass.

Produced in Germany



Glass slides 76x26mm, 1 package with 50 slides		
Article No.	Description	Price
MK3110005KN	76x26mm suitable for every microscope object guide, polished edges 90°, with matt edge on both sides for labelling	10,00 €

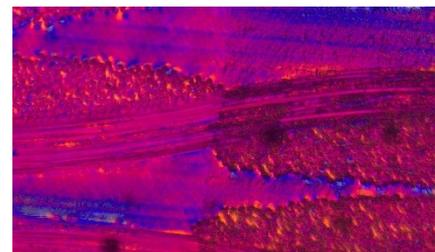
Cover glasses 0,17mm thickness, 1 package with 100 glasses		
Article No.	Description	Price
MK2424Y100KN	Cover glass 24x24mm	8,10 €
MK2440Y100KN	Cover glass 24x40mm	9,90€



More sizes on request.

High performance cover glasses 0,17 +/- 0,005mm thickness, package 100 glasses

High performance cover glass: Suitable best for objectives with high numeric aperture and hence high resolving assets. The precise compliance with the thickness decisively influences the imaging quality. Strength No. 1.5H (0,17 +/- 0,005 mm), refractive index 1,5255 +/- 0,0015, made of borosilicate glass of hydraulic class 1



Article No.	Description	Price
VD72424Y1A01	cover glass 24x24mm	31,00 €
VD72440Y1A01	cover glass 24x40mm	42,00 €

More sizes on request.

Cover media for microtomy

Clear mounting media should be used for mounting and covering clear embedding media. Special media are available which are optimised in terms of viscosity, shrinkage refractive index and curing time.



Adhesive and covering media		
Article No.	Description	Price
1090160100	Cover media, xylol-free, low-viscose, bottle 100ml	81,00 €
70936261	Cover media, xylol, low-viscose, bottle 100ml	75,00 €
1069650100	Cedar oil, bottle 100ml	96,00€
1016910025	Canada balm, bottle 25ml	129,00 €

Glass slide pen, 1 piece		
Article No.	Description	Price
8110110	Diamond pen, for labelling of glass slides without matt edge	155,00 €
8110065	Pen, black, waterproof	8,00 €

Thin cut and thin grinding press

We develop new products for you. For glueing and covering your samples with media, we developed a glass slide press, which will make your working life easier in terms of quality and time.

Produced in Germany for MicroKern



Cut and grinding press		
Article No.	Description	Price
80000032 	Thin section-press for fixing your thin section cuts on glass slides and covered with cover glasses. Special pressure transducers for simultaneous processing of four samples. For traditional embedding media and adhesives.	699,00 €

Sample storage

For secure storage of your glass slides with labelling and numbering inserts.



Box for glass slides, carton 1 piece		
Article No.	Description	Price
630-2775	Box for 100 glass slides (76x26mm)	43,00 €
630-2774	Box for 50 glass slides (76x26mm)	32,00 €
630-2773	Box for 25 glass slides (76x26mm)	28,00 €

Cleaning

Cleaning		
Article No.	Description	Price
MK99985	Compressed air spray for non-contact removal of dirt and cutting residues, can 200ml	26,00 €
MSR001	Cleaning Set incl. bellows, dust brush, optics cleaning solution (30 ml), microfibre cloth (18 x 18 cm), 10 damp cleaning cloths	53,00 €
MSR003	Damp cleaning cloths (30 pcs.)	10,00 €
MSR004	Microfibre cloth (37x37cm)	23,00 €

Target preparation

Preparation for microtomy in industrial application has proven worth it. Positioning of specimen is difficult and time-consuming hence free sight is only possible on the surface, e.g. lunker inclusions, surface structures or ribs to hit precisely in cross section, the specimen has to be watched from aside. We have the solution for this problem.

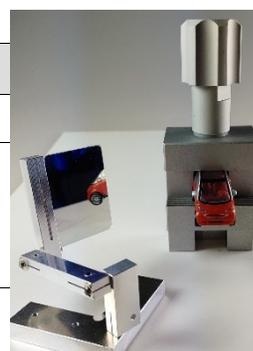
Optical side view set up by laptop or tablet		
Article No.	Description	Price
Ziel_002	Set with optic, stand for all microtomes, lighting and measurement device. <u>For adaption on PC/Laptop.</u>	1.295,00€



As an inexpensive alternative, we offer a side viewing mirror system. The 50 x 50 mm mirror can be aligned using a 3-axis holder. With an arm length of approx. 13 cm, the mirror can be positioned without interfering with your work. Built-in magnets allow the holder to be attached to the knife holder or the microtome base plate, for example.

Made in Germany for MicroKern

Optical side viewing unit mirror system		
Article No.	Description	Price
80000028 	Complete system: Holder with 3-axis arm (13 cm x/y/z range), mirror (50 x 50 mm) and magnetic foil for individual adjustment to any microtome	478,00 €



Target preparation for the use of microtomy technique

Article No.	Description	Price
Ziel_003	Individual system solutions	on request

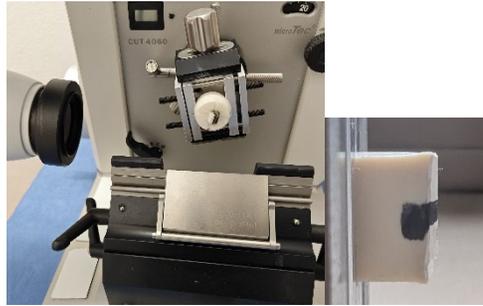
NEW

Thin section technology is the only method that allows sample removal in micrometer steps. However, visual control of the cutting depth is difficult. Typically, the sample is viewed at an angle. Accurate control over the achieved cutting area is therefore hardly possible.

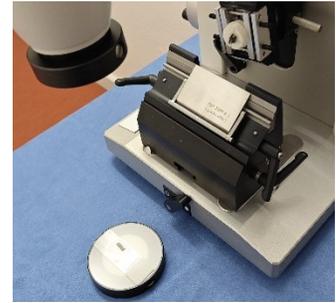
We offer a supplementary microscopic device for your microtome that allows you to inspect, control, and, if desired, document or measure all levels.



Microscopic inspection of the cut surface for surface quality.



Target preparation through lateral positioning of the microscope.



Use the microscope for your analysis and measurement as well!

Our concept



Our partner for professional illumination



Schott EasyLED: 48xLED ring light, with segmentable adjustable dimensions: 66/114/29mm, standard



Schott VisiLED Slim: 48xLED ring light, with segmentable adjustable dimensions: 66/82/36mm, small execution

We developed this system solution together with our application partner MicroTec GmbH. We are glad to work with you to address individual solutions.



Our microtomes for applications

With our partner SLEE medical GmbH in Mainz we have exactly the microtome for your applications. Even our consumables are tailored to them.



Made in Germany



Specification	CUT4062 Manuel System	CUT5062 Half motoric System	CUT6062 Full motoric System
Cutting thickness range	0.5µm bis 60µm	0.5µm bis 100µm	0.5µm bis 100µm
Cutting thickness steps	0.5 - 2µm in 0.5µm-steps 2 - 10µm in 1.0µm-steps 10 - 60µm in 2.0µm-steps	0.5 - 2µm in 0.5µm-steps 2 - 20µm in 1.0µm-steps 20 - 50µm in 2.0µm-steps 50 - 100µm in 5.0µm-steps	0.5 - 2µm in 0.5µm-steps 2 - 20µm in 1.0µm-steps 20 - 50µm in 2.0µm-steps 50 - 100µm in 5.0µm-steps
Trim settings	10µm, 20µm, 30µm, 40µm	0,5 – 300µm stepless	0,5 – 300µm stepless
Horiz. Object feed	28mm		
Vert. Object feed	60mm	72mm	72mm
Cutting speed			3 – 400mm/s
Object feed	manual	Motoric [75/150/300/600], 3.000 µm/s	Motoric [75/150/300/600], 3.000 µm/s
Sample retraction	Automatic, fixed	0 – 200µm, continuously	0 – 200µm, continuously
Sample orientation (y)	8°		
Sample orientation (x)	8°		
Sample orientation (z)	360°		
Object bracket	50x50 (optional)	50x50 (optional)	50x50 (optional)
Optional accessories: carbide knife holder, mobile control unit, magnifying glass with integrated lighting			

Our devices will be installed and customers briefed. *

*Please ask for your offer.

Our microtomes for all applications

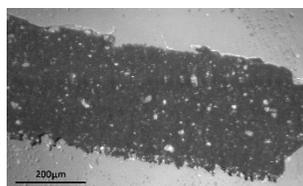
With our partner SLEE medical GmbH in Mainz we have exactly the microtome for your applications.



Cryogenics is becoming increasingly important in the preparation of soft materials (e.g. TPE, stretch films, adhesive layers). We have equipment for this.

Made in Germany

Specification	MNT Cryomicrotome
	Full-motoric system
Cutting thickness range	0.5µm bis 60µm
Cutting thickness steps	0.5 - 2µm in 0.5µm-steps 2 - 20µm in 1.0µm-steps 20 - 50µm in 2.0µm-steps 50 - 100µm in 5.0µm-steps
Trimm adjustment	0,5 – 750µm, variable
Horiz. Object feed	28mm
Vert. Object feed	58mm
Cutting speed	20 - 300 mm/s
Object feed	motoric [600], 3.000 µm/s
Sample retraction	0 – 200µm, variable
Sample orientation (x/y/z)	8° / 8° / 360°
Chamber temperature	Up to -35°C, adjustable
Object cooling, optional	Up to -45°C, adjustable



Elastomer cover film with mineral inclusions

Cooling device for adaption to SLEE rotary microtomes

- ✓ Adaption to standard object bracket
- ✓ Cooling up to -45°C (open system)
- ✓ Temperature control
- ✓ Manuel defrost function



Our devices will be installed and customers briefed! *

*Please ask for your offer

Large-scale and Heavy-duty Microtome

Innovative large-scale and heavy-duty microtomes are used for all requirements that cannot be met by rotary microtomes.

- ✓ Do very large samples need to be cut due to the necessary embedding??
- ✓ Do you need very thick cuts (>100µm)?
- ✓ Are your materials very hard, e.g. mineral-reinforced plastics or metal components in composite materials?
- ✓ Do you require customized sample holders, for example, to process chemically or thermally sensitive samples directly without embedding? Or do you simply want to be prepared for anything because you never know what to expect when analysing damage?

microTec®

Then there is no way around these products –
Made in Germany – from construction to production!

Our partner

Specification	microTec Microtom-XL	microTec Microtom-L	microTec Microtom-M
Cutting thickness range	1 – 1.000µm		
Cutting speed	1 – 125mm/sec.		
Retraction speed	1 – 125mm/sec.		
Knife retraction	100 – 2.000µm		
Maximum sample size*	260 x 200 x 70mm	180 x 160 x 70mm	120 x 120 x 60mm
Declination/inclination angle	90° – 135° / 0° – 25°		

* Specification based on clamping surface. Higher sample structures possible. Limited by total vertical stroke.



Application examples



Large-scale microtome M with vertical or horizontal operation



A knife held at an angle allows a pulling cut.



Customised sample holders using the example of a knee joint



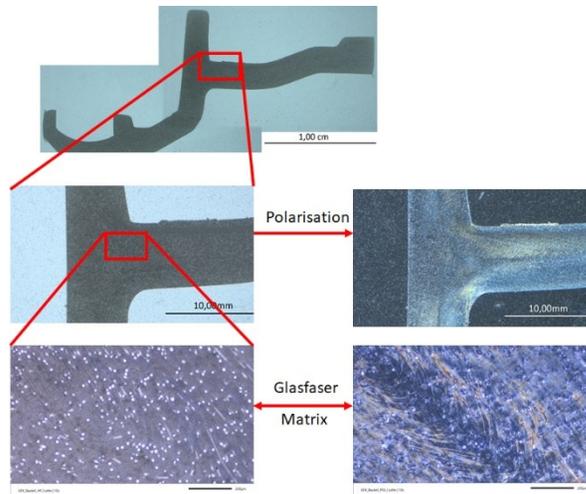
Disposable blade holder

Large-scale and Heavy-duty Microtome

Application example: CFRP component automotive

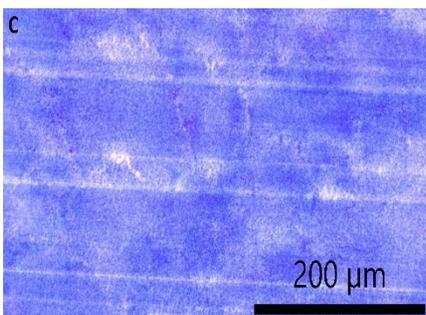
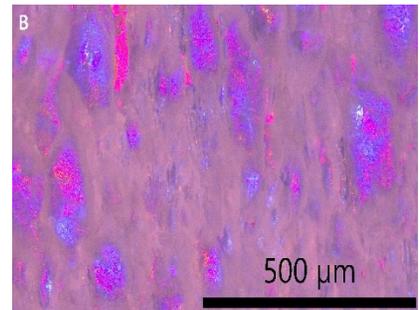
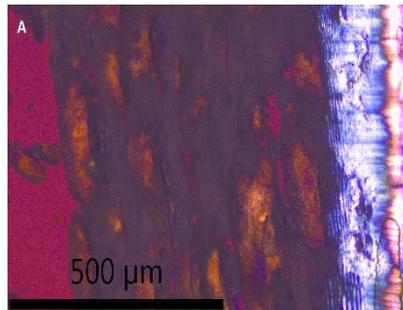


S Cut removal using a special foil



From macro to micro examinations on a single sample!
Other preparation methods require only very small subsamples due to the limited sample size. The component geometry (position) is often lost in the process. In this example, flow paths, weld seams and fibre orientations can be examined from the overview down to the microstructures.

Application example: Plastic component, medical technology



S This makes microscopy fun! Using transmitted light microscopy (polarisation), the edge areas (A), reinforcement zones (B) and core areas (C) can be examined quickly and reliably on a single section.

Note: We offer glass slides for large cuts with a maximum size of 150x100x1,5mm. We would be glad to advise you!

Have a look on our video to these themes!

**Microtomy
System solutions**

Example for our complete systems

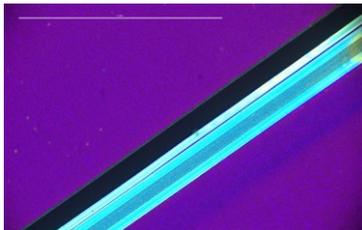
For your applications we offer optimal complete systems

- ✓ Microtomes with suitable extras and consumables
- ✓ Microscopes, that match to your applications in terms of performance and features
- ✓ Photo-systems, that are of suitable quality and allow for evaluations, e.g. measurements

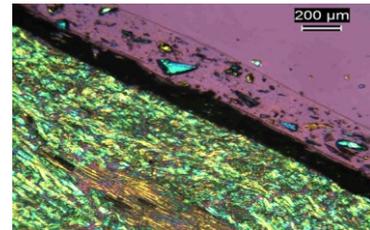
Equipment for testing paints and coatings

Half motoric rotary microtome SLEE CUT5062

Multi layer film in transmitted light
Polarisation contrast



Laminate in transmitted light
Polarisation contrast



Reflected and transmitted light microscopes

OPTIKA B-510METR



MEIJI MT4300LED



ZEISS Axiolab DL/AL



Digital Photography

Jenoptik Gryphax Avior



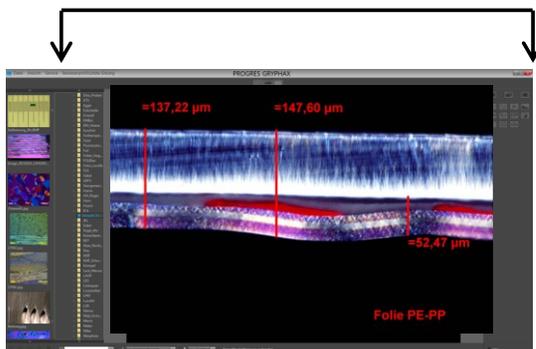
Jenoptik Gryphax Arktur



Zeiss Axiocam 208 color



Interactive image processing



With image measurement, panoramic image and z-stacking function

Our devices will be installed and customers briefed! *

*Please ask for your offer

Example for our complete systems

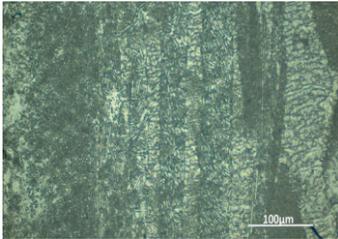
For your applications we offer optimal complete systems

- ✓ Microtomes with suitable extras and consumables
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- ✓ Photo-systems, that are of suitable quality and allow for evaluations, e.g. measurements

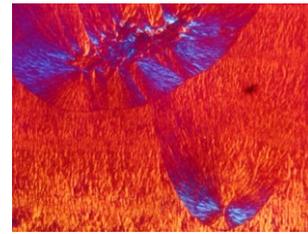
Universal equipment for injection moulded parts, embeddings and composite materials

Full motoric rotary microtome SLEE CUT6062

GfK component (PAGF30) in transmitted light, bright field



Polypropylen in transmitted light
Polarisation contrast



Reflected and transmitted light microscopes

OPTIKA B-510METR



MEIJI MT5300LED



ZEISS Axiolab 5 AL/DL



Digital Photography

Jenoptik Gryphax Avior



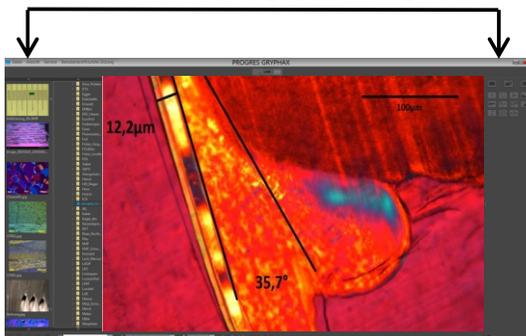
Jenoptik Gryphax Arktur



Zeiss Axiocam 208 color



Interactive image processing



With image measurement, panoramic image and z-stacking function

Our devices will be installed and customers briefed! *

Literature

To all our themes in our catalogue we offer literature as well.

Martin Kern, Dr. Jörg Trempler Observation and Measurement Microscope in Material Science

This book is structured in six important main topics according to light-microscopic examination evaluation methods for materials:

The sections mentioned are presented in detail with exceptional images. Thanks to the numerous prepared and very detailed work instructions, even users who are not familiar with light microscopy can quickly familiarise themselves with the problems of material microscopy without making any lasting mistakes. To this end, numerous data sheets on preparation procedures, light microscopy techniques and measuring microscopy methods are provided. Practitioners will find the overviews of possible sources of error in microscopy and the tips for correcting them particularly useful.



Brünne Verlag, Berlin, 2007

ISBN 978-3-9809848-6-7

Price: 55,98€ net

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already trained on-site!*

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Our partner laboratory

Prof. Dr.-Ing Jörg Hornig-Klamroth
 Berliner Hochschule für Technik Berlin
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 Luxemburger Straße 10
 13353 Berlin

Seminar preparation

VORB_EX OPTIONAL	Preparation day on-site: We check your equipment and application, plan the desired content and coordinate the process with you. Customized preferences, f.e. shift work or provision of additional equipment will be taken account.
VORB_INT MANDATORY	Preparation day internal: We check your equipment and application, plan the desired content and coordinate the process with you on phone or video. Herefore we developed a questionnaire.
STS_EQU OPTIONAL	Supply: Would you like to test on certain devices or accessories? Or should each person use an own device during the seminar to increase training?
STS_PROB OPTIONAL	Samples: We offer sample preparations, f.e. to optimize preparation recipes or prepare meaningful preparation for microscopy.

We would be pleased to provide you with a detailed quotation.

Sample Preparation – our laboratory

We would be glad to assist you with sample processing in our laboratory. Are you reaching your capacity limits, do you need a second opinion to confirm your results, or would you like to introduce alternative 'recipes'?

We are at your service. Together with our partners!

We would be pleased to provide you with a detailed quotation.

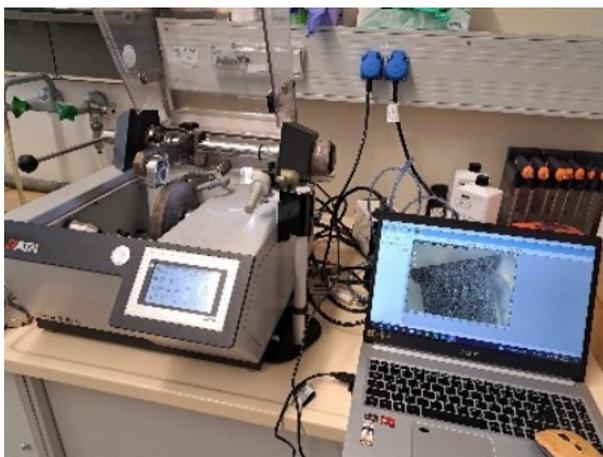
Our partner



**NEW: Large- and heavy-duty
microtomes, sample size up
to 120 x 120 x 60mm!**



microTec®

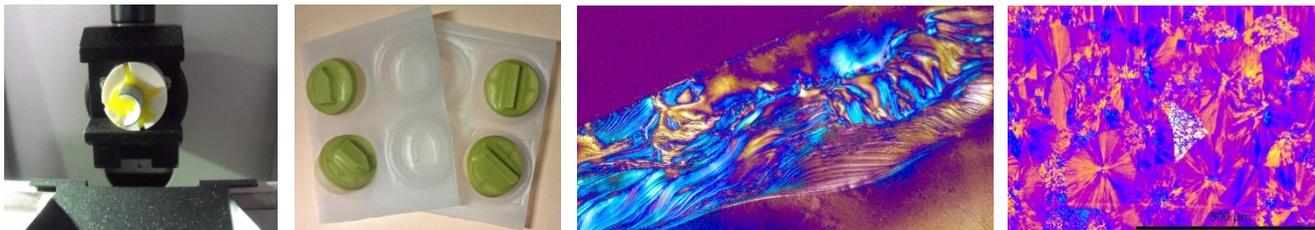


**NEW: Cutting- and thin-
section system with
target preparation!**

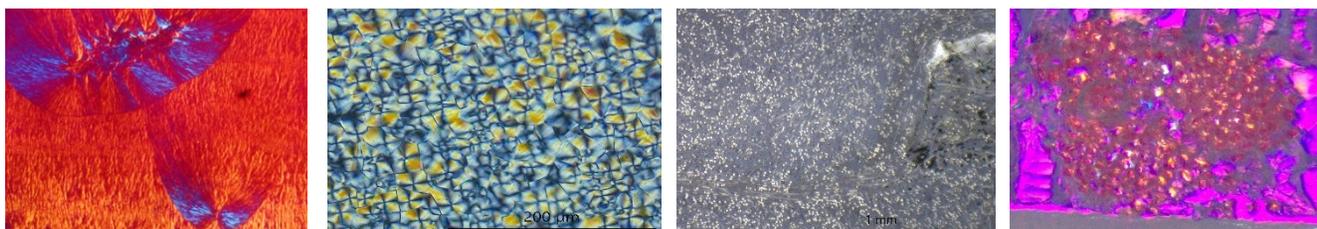


Sample Processing - Services

Sample preparation for microtomy		
Article Number	Description	Description
PBV	SampleProcessingPreparing	Sample sawing, trimming resp. customize, orientate pr stabilize form
PBSE	SampleProcessingBaseEmbedding	Base embedding into synthetic resin, for adaption on microtome
PBVE	SampleProcessingFullEmbedding	Full embedding (infiltration) with synthetic resin, resp. with vacuum support



Preparation Microtomy		
Article Number	Description	Description
PBKRYO	SampleProcessingCryo	Processing cryostat (temperature -5°C to -40°C)
PBMSM	SampleProcessingMicrotome CuttingKnife	Cutting sample on microtome and drawing on glass slide. Knife (disposable blade, steel) rotation or sled microtome
PBMSMTC	SampleProcessingMicrotome CuttingKnife TC	Cutting sample on microtome and drawing on glass slide. Knife (tungsten carbide) rotation or sled microtome
PBMSD	SampleProcessingMicrotome Cutting Diamond	Cutting sample on microtome and drawing on glass slide. Knife (Diamond) rotation or sled microtome.
PBMSMG	SampleProcessingMicrotome CuttingKnife LargeCut	Cutting sample on microtome and drawing on glass slide. Knife (disposable blade, steel) large-cut microtome
PBMSMGTC	SampleProcessingMicrotome CuttingKnife Large-Cut TC	Cutting sample on microtome and drawing on glass slide. Knife (disposable blade, steel, carbide) large-cut microtome



Sample Post-Processing for Microtome		
Article Number	Description	Description
PBE	SampleProcessingCover	Sample cut on glass slide in cover media to preserve as permanent preparation, labelling
PBAE	SampleProcessing Etching or Colouring	Sample etching, colouring

Sample Processing - Services

Microscopic Examination and Documentation		
Article Number	Description	Description
MIK	M icroscope	Sample examine microscopic, screening
MIKV	M icroscope M easuring	According to specification measuring and processing of image structures, calibrate (interactive)
MIKA	M icroscope A nalysing	According to specification of image structures, calibrate
MIKD	M icroscope D ocumenting	According to specification image capture with digital camera, saving of the pictures and data files on USB stick
BER	R eport	Report, preparation and microscopy, measurement results, artefacts

Schedule orders on request.

We work with equipment and accessories of the following companies:

Microtomy: Slee medical GmbH, microTec Laborgeräte GmbH

Microscopy: Mikroskop Center GmbH (Zeiss, Leica), Optika S.r.l., Meiji Techno Co. LTD

Digital Photography: Jenoptik Optical Systems GmbH, Mikroskop Center GmbH (Zeiss)

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