

Leica Products & Consumables

TAAB is proud to offer the following range of Leica Microsystems products and consumables which offer state-of-the-art solutions to modern research applications

Leica Products for TEM

Leica EM KMR3 Glass Knifemaker

This new design EM KMR3 glass knifemaker from Leica has simpler operation and more consistent results from all thicknesses of glass than previous models. The knives are triangular after Latta and Hartman. With the breaking mechanism now above the glass, easier manipulation of the glass and a new design scoring wheel and cartridge, the "Balanced Break" technique can be utilised using a slower break providing better knives with less distortion. New adjusters with self-locking screws allow the glass to be positioned so that two knives with similar sized counterpieces can be made. Previously, glass knives would have a final angle of 55-60° but with the EM KMR3 they are much nearer to 45° and much more suitable for cryosectioning.

Glass of thicknesses 6, 6.4, 8 and 10mm can be routinely broken making the knifemaker suitable for ultramicrotomy or histology.

K111 Leica EM KMR2 glass knifemaker



Leica Multiplate (Hotplate)

A compact ultramicrotomy hotplate with three decks at 95°C, 80°C, and 60°C.

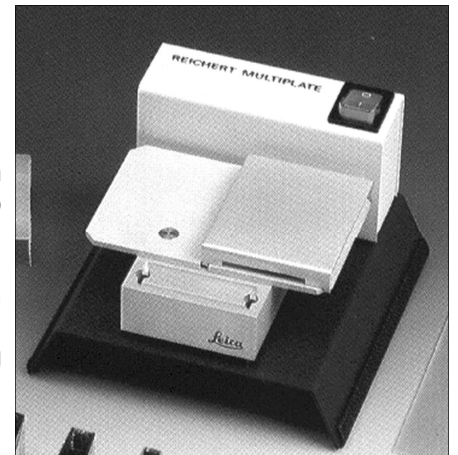
Attaching Trufs

The wax melting deck is at 95°C to provide wax for attaching Trufs. By placing Trufs on this deck the wax is distributed evenly on the edges so they attach easily and securely to the knives.

Drying and heating

The drying deck has a temperature of 80°C, ideal for drying and attaching semi-thin sections to slides. The deck is large enough to dry 6 slides at a time. By mounting a raised plate over half of the drying deck a heating deck of 60°C is produced for staining sections.

H065 Multiplate 220/240V 50 Hz



Leica EMTP Automated Tissue Processing for TEM & LM

The innovative Leica EM TP is the first tissue processor designed for EM and LM resin processing that features a heating/cooling system with pre-heat and pre-cool capabilities to maintain a constant processing temperature. It includes an easy-to-operate membrane control panel. The sample carousel holds 24 EM or 12 LM vials and utilises various specialised baskets and capsules. An exhaust system supports safer use of toxic substances.

Safety

Automatic processing of tissue minimises contact with hazardous reagents, provides reproducible results, increases time savings and improves user safety in the laboratory. The closed processing chamber with fume extraction system reduces chemical exposure for the user. Up to 168 EM samples per run ensures high throughput, which results in increased efficiency and time savings in the laboratory.

High Throughput

Up to 168 EM samples per run ensures high throughput, which results in increased efficiency and time savings in the laboratory.

T565 Leica EMTP Automatic tissue processor 230 V 50Hz





Leica EM AMW Automatic Microwave Tissue Processor for TEM

With a simple user interface, it is possible to rapidly process, embed, and polymerise specimens into resin with the Leica EM AMW's unique, highly automated system. The patented combination of microwave chamber and automatic reagent changer minimises user effort and significantly reduces processing time.

The EM AMW's mono-mode microwave chamber focuses energy on a specific area, which results in a uniform field pattern without hot and cold spots. This field surrounds the sample during processing eliminating damage due to temperature and pressure differences within the specimen. Reagent temperature measurement is software-controlled using non-contact infrared sensors giving accurate and reproducible results.

This results in a more efficient work-flow with up to 20 samples per run thereby introducing considerable cost savings over manual processing.

T566 Leica EM AMW Microwave tissue processor



The Leica EM TRIM2
is designed with
safety in mind



Leica EM TRIM2 Specimen Block Trimmer for TEM, SEM, LM

The Leica EM TRIM2 is a high speed milling system with integrated stereomicroscope and LED ring illuminator for trimming of biological and industrial samples prior to ultramicrotomy. The Leica TRIM2 features a 1µm feed control for the milling cutter, perpendicular viewing of the embedded sample to determine position for accurate milling, and a superior extraction system with Hepa filter.

The Milling Head is located under a protective cover and the instrument will not operate unless the cover is closed providing a silent and safer environment for the user during milling.

T567 Leica EM TRIM2



Leica AC20 Ultrathin Section Stainer

The Leica EM AC20 automatic contrasting system for ultrathin sections ensures minimum user contact with reagents and reduced reagent consumption staining up to 20 grids per run. Use of a peristaltic pump and non-contact valves allow the reagents to travel directly through tubing to the grid chamber, resulting in fast, high-quality double staining and easy maintenance.

Safer more Efficient Working

Minimum user contact with reagents provides safer working conditions in the laboratory.

60 runs per one set of Ultrastains and short washing cycles result in faster, more efficient laboratory operation with associated cost savings.

S534 Leica AC20 section stainer
S534/1 Ultrastain 1 (4 x 200ml 0.5% uranyl acetate)



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Leica Products for SEM (& TEM) Preparation

Leica EM CED030 Carbon Thread Evaporator

A **compact bench-top** single and multiple carbon thread evaporator producing conductive carbon films on specimens for X-ray microanalysis (EDX, WDX) and carbon reinforcement films on collodion or formvar coated specimen support grids for TEM. Uses flash or pulsation evaporation under low vacuum conditions. Carbon thread produces cohesive films that will cover very fissured surfaces.

The carbon thread is thoroughly degassed under a shutter protecting the specimen from damaging splatters. Precise parameter selection plus the use of a crystal quartz film thickness monitor allows the film thickness to be exactly determined.

C506 CED030 carbon thread evaporator



Leica EM ACE200 Sputter Coater

The Leica EM ACE200 is a high quality desk-top coater designed to produce homogeneous coatings of conductive metal or carbon as required for electron microscopy.

This fully automated instrument can be configured either as a **sputter coater** or a **carbon thread evaporation coater**. Or, if preferred, the Leica EM ACE200 can combine both methods with interchangeable heads on the one instrument.

Additional options include:

- › Quartz crystal measurement – for reproducible layers
- › Planetary rotation – for even distribution of coating material on fissured samples
- › Glow discharge – to make TEM grids hydrophilic
- › Exchangeable shielding – for easy cleaning

Please ask for details and quotation



Leica EM ACE600 Sputter Coater

The Leica EM ACE600 is a versatile high vacuum table-top film deposition system, designed to produce very thin, fine-grained and conductive metal and carbon coatings for the highest resolution analysis, as required for FE-SEM and TEM applications.

This fully automated coater includes an integrated oil free pumping system, quartz crystal film thickness measurement and three axis motorized stage (rotation, optional tilt and height).

The Leica EM ACE600 can be **configured for the following methods**:

- › Sputtering
- › Carbon thread evaporation
- › Carbon rod evaporation (with an option for thermal resistance evaporation)
- › e-beam evaporation
- › Glow discharge
- › Leica EM VCT adaptation for cryo-coating, freeze-fracture, double-replica, freeze-drying and environmental transfer with the VCT Shuttle.

Please ask for details and quotation





EM CPD300

Leica EM CPD300 Automated Critical Point Dryer

The drying of biological specimens such as pollen, tissue, plants, insects, as well as industrial samples, for example MEMS (Micro Electro Mechanical Systems) for SEM analysis can be prepared in the Leica EM CPD300 Critical Point Dryer, fully automatically.

To ensure a low CO₂ consumption and a very short process time a new filler concept was developed. Special attention has been turned to safety by implementing software controlled cut-off functions and integrating a waste separator for safe and easy disposal of exchange fluid thus avoiding direct contact with the user. The drying of biological specimens in the Leica EM CPD300 Critical Point Dryer is fully automatic. A wide selection of specimen holders is available to suit every sample.

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Vibrating Blade Microtomes



VT1000 S

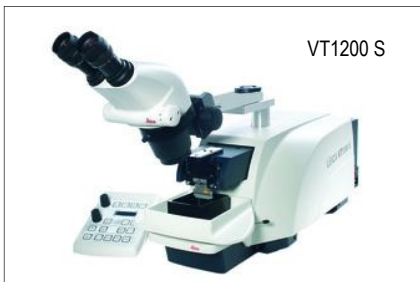
The **Leica VT1000 S** vibrating blade microtome is the instrument of choice for high-quality sectioning requirements in neurophysiology, neuropathology experimental pathology), Botany (roots and plants) and Industry (foams). Whether sectioning fixed tissue for specific neuropathology tests or sectioning unfixed native tissue e.g. for patch clamping the Leica VT1000 S consistently provides high-quality sectioning results.

The user can adjust the vibration frequency, the speed of knife advance plus the VT1000 S features a high-speed knife return stroke of 5 mm/sec as well as a freely programmable sectioning window which ensures extremely quick sectioning of even the smallest specimens. An adjustable specimen retraction feature protects the specimen from damage during the return stroke of the knife.



VT1200

The **Leica VT1200** semi automatic vibrating blade microtome is designed for sectioning fixed or unfixed specimens in Neuropathology (fresh brain slicing) and Neurophysiology (patch-clamping). The instrument is recommended for users who wish to manually select the desired section thickness prior to cutting each section. The vertical deflection can be measured by using the optional measurement device "Vibrocheck".



VT1200 S

The **Leica VT1200 S** is fully automated and designed to meet the highest sectioning demands for cutting fresh and fixed tissue in Neuroscience. To achieve sections of the highest quality that retain viable cells on the section surface, the vertical deflection of the blade can be measured by Leica's Vibrocheck™ measurement device and minimised with the innovative blade holder. Minimal vertical deflection protects delicate specimens during sectioning and results in more viable cells on the section surface. Blade holder for double edged razor, injector or sapphire blades supports safer blade handling. A second blade holder helps to avoid contamination of specimens. Magnetic specimen holders support easy specimen handling and built in software remembers the cutting parameters of up to 8 users.

V108 Leica VT1000 S vibrating blade microtome

V109 Leica VT1200 vibrating blade microtome

V110 Leica VT1200 S vibrating blade microtome

B294 100 S/S injector blades in safety holder for above instruments

B294/RF 100 S/S blade refill for B294 (return to TAAB for re-loading)

Low Temperature Disinfectant Spray



Cryofect is a disinfectant spray used in low temperature conditions, such as in cryostats. It is effective against bacteria, fungi and viruses such as HBV, polio or bird flu. Easy to use, Cryofect minimises the risks involved in dealing with potentially infectious materials. It can be used at cryochamber temperatures down to -20 °C. Apply the disinfectant spray evenly on the contaminated surfaces, allow a reaction time of 15 minutes and simply wipe off.

C320 Cryofect disinfectant spray 350ml

Cryo Embedding Compound FSC 22



FSC 22® is a water soluble embedding compound for frozen sectioning. The compound bonds and encapsulates tissue specimens to the object holder for cryosectioning. It provides excellent sectioning consistency with minimal curling of sections at a working temperature of -20°C. FSC 22 is available in clear or in light blue for better visualisation of small specimens.

- F320** Frozen section compound FSC 22 clear (118ml)
F320/1 Frozen section compound FSC 22 clear case of 9 (118ml)
F320/B Frozen section compound FSC 22 blue (118ml)
F320/B1 Frozen section compound FSC 22 blue case of 9 (118ml)

Microtome Knives and Accessories

All knives are now plain backed (not drilled & tapped for Shandon Knife Sharpener)
 Each B, C or D knife comes with its own box.

Knife profile B (plane, slightly concave for celloidin sections)

- LL07831** Knife 25cm long profile **B**

Knives profile C (plane on both sides for paraffin and frozen sections)

- LL07531** Knife 16cm long profile **C**
LL07545 Knife 22cm long profile **C**
LL07532 Knife 25cm long profile **C**
LL07128 Knife 30cm long profile **C**
LL04206 Knife 16cm long *tungsten carbide tipped*

Knives profile D (chisel/tool edge for hard specimens and frozen sections)

- LL07139** Knife 30cm long profile **D**
LL04813 Knife 16cm long *tungsten carbide tipped* profile **D**

Disposable blades (dispensers of 50)

- | | | | |
|----------------|--------------------------|----------------|---------------------------------------|
| LL13583 | Leica blades low profile | LL12881 | Leica blades high profile |
| LL31308 | Feather blades S22 | LL31309 | Feather blades S35 |
| LL31310 | Feather blades R35 | LL31506 | Feather blades N35 |
| LL31507 | Feather blades N35H | LL31508 | Feather blades C35
(for cryostats) |

Holders for disposable blades

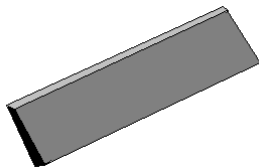
- LL09426** Disposable blade holder 160mm for rotary microtomes
LL09425 Disposable blade holder 240mm for sledge and sliding microtomes
LL25171 Magnetic blade holder for cryostat holders CN & CS

Technovit Histoblade (replaces Histoknife) disposable blades and holders

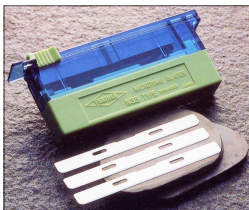
A completely new range of extra rigid blades with a 30° profile (was 40°) for plastic sectioning. Same dimensions as previous blade so existing holders can be used. Have much improved edge characteristics for better sectioning .

- T553** Technovit Histoblades pack of 50
T398 Histoblade holder 17cm (for rotary microtomes)
T399 Histoblade holder 22cm (for sledge microtomes)

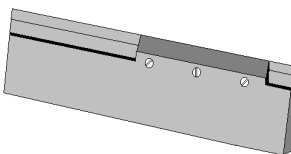
For knife holder for "Ralph" knives see K058/25 page 12.16



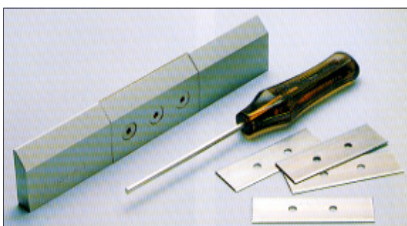
Microtome knife



Feather disposable blades



Disposable blade holder



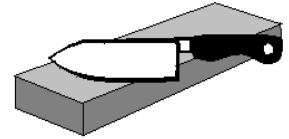
Technovit knives and holder

Leica Products & Consumables

Knife Resharpener

Tool steel, profiles A, B, C, D, Minot

LL90602	12cm length	LL90604	16cm length
LL90605	18cm length	LL90607	22cm length
LL90609	25cm length	LL90610	30cm length



Tungsten carbide knives for rotary & sliding microtomes Resharpener

LL90683	12cm TC profile C	LL90611	16cm TC profile D
LL90612	12cm TC profile D	LL90689	22cm TC profile D

Knives for Jung K Resharpener

LL90613	Type K tool steel	90682	Type HK 1 tungsten carbide
LL90614	Type HK 2 & 3	90690	Type KD 4mm-6mm
LL90615	Type KFH		

Steel knives for holders A & C (Leica SM 2500/Leica SM 2400/Polycut)

Resharpener

LL90686	12cm tool steel
LL90687	16cm tool steel
LL90688	22cm tool steel

Tungsten carbide knives for knife holder C (Leica SM 2500/SM 2400/Polycut)

Resharpener

LL90683	12cm TC profile C
LL90684	16cm TC profile C
LL90689	22cm TC profile D

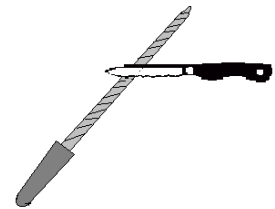
Tungsten carbide knives for knife holders A & C (Leica SM 2500/SM 2400/Polycut) Resharpener

Resharpener

LL90612	12cm TC profile D
LL90611	16cm TC profile D

Knives for Leica CM 3600 and PMV 450 MP Resharpener

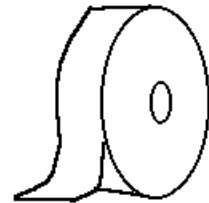
LL90691	Knife 16cm 20° or 35° tool steel
LL90692	Knife 16cm 20° or 35° tungsten carbide



Knife Resharpener

Sectioning Tape Whole Body Autoradiography

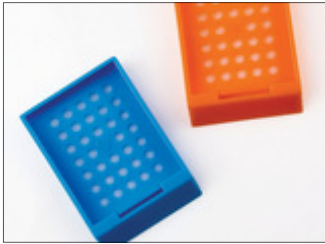
T410	Low temperature sectioning tape type 610 50mm x 50m
T411	Low temperature sectioning tape type 610 75mm x 50m
T546	Low temperature sectioning tape type 610 100mm x 50m



Cassettes & Base Moulds

Standard Cassettes

Standard Processing Cassettes are precision moulded using solvent-resistant plastic. Features include a three-sided textured writing surface and easy flow-through vents. Standard Cassettes are compatible with most metal lids and base moulds. Available in many colours in quantities of 1000.



Cat no.	Description	Colour	Qty
C323/W	Standard processing cassettes	White	1000
C323/B	Standard processing cassettes	Blue	1000
C323/Y	Standard processing cassettes	Yellow	1000
C323/G	Standard processing cassettes	Green	1000
C323/P	Standard processing cassettes	Pink	1000
C323/T	Standard processing cassettes	Tan	1000
C323/PE	Standard processing cassettes	Peach	1000
C323/GR	Standard processing cassettes	Grey	1000
C323/L	Standard processing cassettes	Lavender	1000
C323/R	Standard processing cassettes	Red	1000
C323/PU	Standard processing cassettes	Purple	1000
C323/A	Standard processing cassettes	Aqua	1000
C323/O	Standard processing cassettes	Orange	1000
C323/M	Metal Lids	S/S	25



Super Cassette Quick Release Chuck C213

Offers the advantage of the standard Quick Release Chuck but takes the larger Super Cassettes for paraffin sectioning. Designed to fit all **sledge** microtomes with minor adjustments, this chuck gives rapid and stable clamping of the cassette along the long axis or across the block with just as rapid removal.



Large Super Cassettes 75 x 52 x 17mm

These cassettes are 75mm x 52mm x 17mm deep will allow the processing* and embedding of large sections of brain, breast tissue, prostate, eyes, intact joints, whole animal organs, multiple tissue cases or any specimen larger than normal. Rigidly constructed to support the larger block this cassette is *produced with its own lid*. Super Cassettes are of particular use to research and toxicology laboratories. Available in seven colours. **Super Base Moulds** and the **Super Cassette Chuck** are required for use with this product. Suitable only for **sledge** and **large area** microtomes

Catalogue No.	Description	Quantity
C310/W	Super Cassette <i>White</i>	Case of 100
C310/B	Super Cassette <i>Blue</i>	Case of 100
C310/Y	Super Cassette <i>Yellow</i>	Case of 100
C310/G	Super Cassette <i>Green</i>	Case of 100
C310/P	Super Cassette <i>Pink</i>	Case of 100
C310/O	Super Cassette <i>Orange</i>	Case of 100
C310/GY	Super Cassette <i>Grey</i>	Case of 100
C310/R	Super Cassette <i>Red</i>	Case of 100

Super Cassette Moulds

Designed for use with Super Cassettes to enable embedding of larger pieces of tissue. Made of stainless steel these reusable base moulds fit the Super Cassette and allow easy block removal after cooling.

C312/10	Super Cassette Mould 66 x 54 x 15 (10)
C312/2	Super Cassette Mould 66 x 54 x 15 (2)

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Multi-Cassettes with Lids Attached

These processing and embedding cassettes are fitted with a plastic lid attached by a unique hinge enabling quick attachment and removal. They are precision moulded from a solvent and acid resistant plastic, an advantage for decalcification of specimens. The three-sided textured writing surface and flat front provide an advantage when writing and make the cassette particularly suitable for use with cassette printing machines. Moulded with parallel vents for enhanced fluid and wax transfer, this cassette has thickened walls for stability. The "stay-shut" latch closure and rounded thumb tab enables easy lid removal. Readily available in eight colours and with lids attached or packed separately. Size 76 x 52mm. An additional six colours are available on request (minimum quantities apply).



Catalogue No.	Description	Quantity
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C309/W	Multi-Cassette <i>White</i>	Case of 100
C309/B	Multi-Cassette <i>Blue</i>	Case of 100
C309/Y	Multi-Cassette <i>Yellow</i>	Case of 100
C309/G	Multi-Cassette <i>Green</i>	Case of 100
C309/P	Multi-Cassette <i>Pink</i>	Case of 100
C309/O	Multi-Cassette <i>Orange</i>	Case of 100
C309/GY	Multi-Cassette <i>Grey</i>	Case of 100
C309/R	Multi-Cassette <i>Red</i>	Case of 100

Metal Base Moulds



Metal Base Moulds enable tissue to be positioned and embedded in wax when using routine or biopsy cassettes. These re-usable base moulds are made from **stainless steel** and the internal rounded corners allow for easy removal of the formed wax block. They can be used on all standard size cassettes.

Cat. No. Size mm Qty

M424	7 x 7 x 6	10
M425	15 x 15 x 6	10
M426	24 x 24 x 6	10
M427	30 x 24 x 6	10
M428	37 x 24 x 6	10

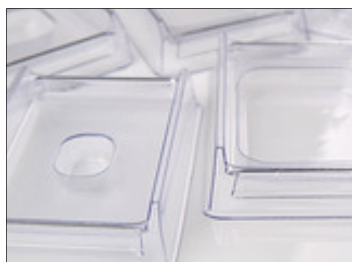
ParaFree Metal Base Moulds

ParaFree **Stainless Steel** Base Moulds offer higher walls than other base moulds on the market, eliminating excess paraffin build-up around the block. The unique design produces paraffin blocks that require 80% less block scraping before sectioning. The precise corners of the mould help to facilitate immediate ribboning.



Cat. No. Size mm Qty

M429	7 x 7 x 4	12
M430	15 x 15 x 4	12
M431	24 x 24 x 4	12
M432	30 x 24 x 4	12
M433	37 x 24 x 4	12



Clear Disposable Base Moulds

Disposable Base Moulds have been designed to be compatible with any currently available cassette. The orientation of the specimen is made easier due to the transparency of the mould, whilst its rounded corners allow for easy block removal and paraffin ribbon continuity. Built up side walls reduce risk of paraffin seepage during

Cat. No. Size mm Qty Cat. No. Size mm Qty

M434	8 x 10 x 5	400	M434/1	8 x 10 x 5	1600
M435	15 x 15 x 5	400	M435/1	15 x 15 x 5	1600
M436	24 x 24 x 5	400	M436/1	24 x 24 x 5	1600
M437	30 x 24 x 5	400	M437/1	30 x 24 x 5	1600
M438	37 x 24 x 5	400	M438/1	37 x 24 x 5	1600