



**slee** solutions  
for  
pathology

MICROTOME  
**CUT 5062**

SEMI-AUTOMATIC  
ROTARY MICROTOME

DESIGN &  
MANUFACTURING  
MADE IN GERMANY

# CUT 5062 Semi-automatic precision microtome

The Slee semi-automatic precision microtome **CUT 5062** is designed for all applications in routine, research or industry. Years of experience and customer input have contributed to create one of the best semi-automatic microtomes available. The **CUT 5062** combines highest precision with user friendliness as well as best comfort. Like all Slee microtomes, the **CUT 5062** comes with a complete set of standard components which can be individually adapted to customer's needs, ready to be used out of the box.



## Highlights

- Ergonomic design
- Spacious, integrated section waste tray
- Wide range of accessories
- Intuitive control panel
- Hand wheel lock in any position
- Blade holder levers changeable (for left-handed users)
- 2 operation modes (standard and rocking mode)
- Motorized trimming up to 750  $\mu\text{m}$ , programmable
- Motorized advance / return of specimen (2 speeds)
- Display of section counter, section sum and remaining travel
- Tip function for precise specimen approach
- 2 specimen feed memory positions
- Variable retraction
- External control panel (optional)
- Second hand wheel brake (optional)

**Item No.****CUT 5062 100 - 240 V, 50/60 Hz**

10070001

## Standard components

**Specimen orientation****Universal cassette clamp**, orientable

(alternatively: standard specimen clamp, orientable)

**Disposable blade holder**

(alternatively: standard knife holder)

**Section waste tray****Disposable blades**, low profile (1 box, 50 pcs.)**Dust cover****Mains cable****Manual**

## Specifications

**Section thickness  
range**

0.5 - 100 µm

**Section thickness  
settings**

0.5 - 2 µm in 0.5-µm-steps

2 - 20 µm in 1-µm-steps

20 - 50 µm in 2-µm-steps

50 - 100 µm in 5-µm-steps

**Trim thickness settings**

0.5 - 750 µm

0.5 - 2 µm in 0.5-µm-steps

2 - 20 µm in 1-µm-steps

20 - 50 µm in 2-µm-steps

50 - 150 µm in 5-µm-steps

150 - 750 µm in 10-µm-steps

**Horizontal advance**

28 mm

**Feed speed SLOW**

75 / 150 / 300 / 600 µm/s

**Feed speed**

normal 3,000 µm/s

**Vertical stroke**

72 mm

**Specimen retraction**

0 - 200 µm, selectable

**Specimen orientation**

± 8°

**Electrical parameters**

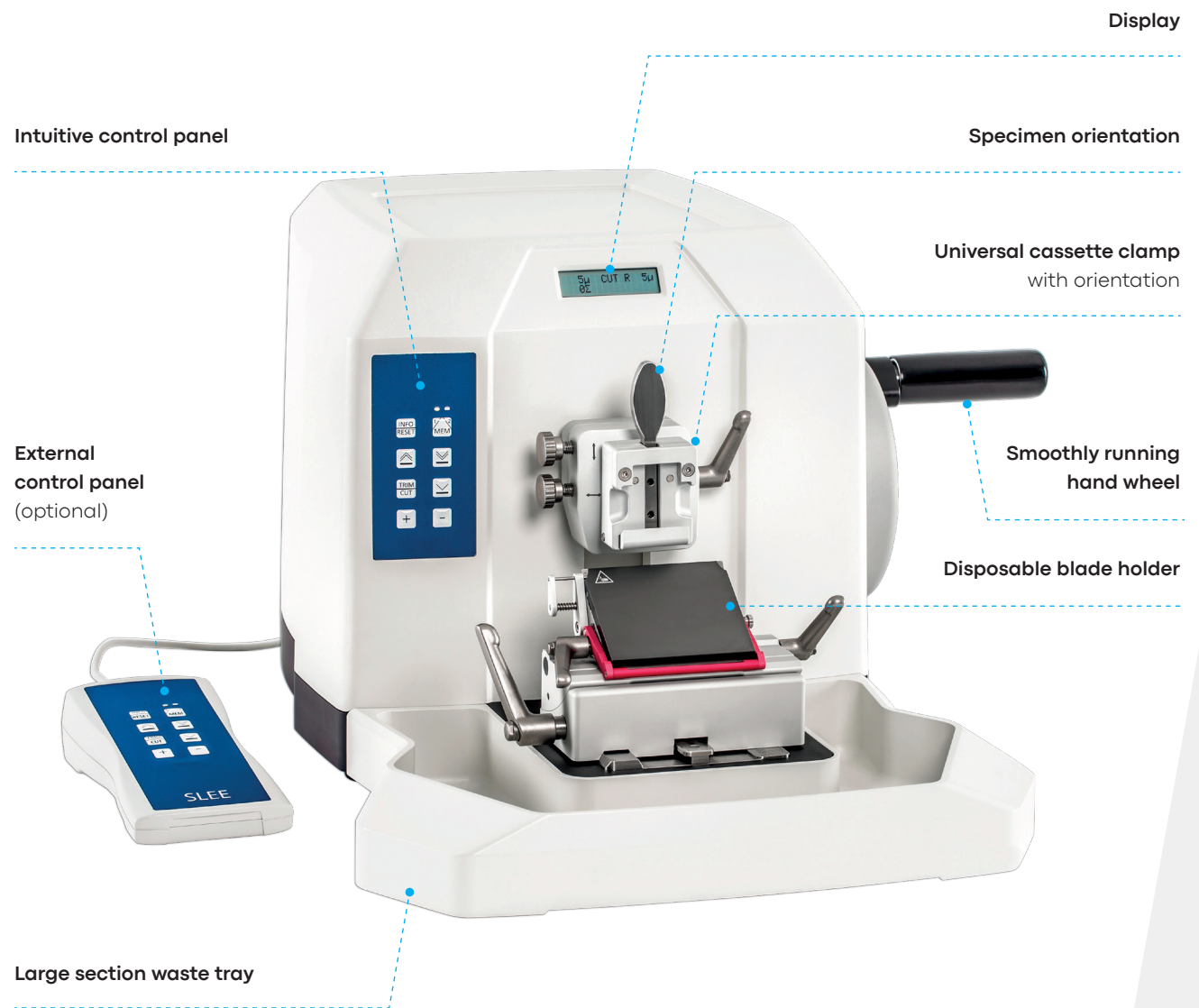
100 - 240 V, 50/60 Hz

**Dimensions (W x D x H)**

520 x 600 x 325 mm

**Weight**

33 kg





Optional accessories	Item No.
Aquatec system	10090056
MTR bench top quick freezing unit	10110000
Magnifier with illumination (dimmable)	10090060
External control panel CUT 5062	10090050
TC65 disposable blade holder (for tungsten carbide blades)	10090041
Tungsten carbide blade (1 pcs.)	28406000
Disposable blades (cf. consumables)	
Glass knife holder (for triangle glass knives)	10090014
Segment arc incl. universal sample holder (for glass knife holder application)	10090015

## Intuitive use

Having a variety of features sometimes ends up in difficult usage, but not with the CUT 5062: The device can be easily controlled via the intuitive control panel.



Optional accessories	Item No.
Super Mega cassette clamp, orientable	10090027
Super Mega cassette clamp, fixed	10090021
Standard specimen clamp, orientable	10090006
Standard specimen clamp, fixed	10090007
Foil clamp (use in standard specimen clamp)	10090025
Standard knife holder	10090008
Knife holder basis unit	10090011
Prism (set)	10090017
Round specimen holders (different diameters)	on demand
More on request	

## All in sight

All settings can be easily seen and monitored in the LCD display being in height of the eyes of the user at the front side of the CUT 5062.



# Beyond standard application

The high precision microtomes of the **CUT** series are the basis for almost all applications where high-quality sectioning is requested. Together with add-on equipment such as the **MTR** bench top quick-freezing unit or the **Aquatec** system the **CUT** microtomes are ready for any kind of high performance cutting in the field of medical and industrial applications.

## Precise orientation



The specimen orientation on the x and y axis enables fast alignment of the specimens in the desired position.

## Flexible



Full flexibility due to the disposable blade holder or standard knife holder and the multiple clamps for any kind of specimen. The clamping levers and blade ejector are changeable (from left to right).

## Easy to clean



The design of the CUT microtomes supports the simplest and easiest cleaning possible.

## Section waste tray



The large waste tray fits perfectly to the base plate of the microtome and collects the waste during sectioning. Disposal of cutting waste is easy and fast.



### Perfect fit

The best microtome is nothing without the perfect blade. We offer premium quality high and low profile plasma blades as well as tungsten carbide blades and PTFE coated disposable blades.



### Best sight

To make even small biopsy samples visible, CUT microtomes can be equipped with a magnifier with dimmable illumination (optional).



### Safety

The easy to operate hand wheel can be locked in any position. This ensures user's safety as well as protection for the sample. The blade holder features a finger protection system for increased safety.



### Organized

All tools needed for sectioning can be placed on the special area on top of the microtome housing. This allows fast and fatigue-free working.



### Ergonomics

All CUT microtomes have been created with the user in mind - ergonomics are just as important as the quality of the section. Fits perfectly on ergotec series workstations.



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O P E R A T I N G  
M A N U A L

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M I C R O T O M E  
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## 1 INTENDED USE

The rotary microtome CUT 5062 is intended for cutting thin sections of soft paraffin-embedded and harder specimens for professional use in routine and research laboratories in the fields of biology, medicine and industry.

The system of specimen advance operates very reliable from 0.5 to 100 µm. The quality of cutting of this microtome is increased by the automatic retraction during the upstroke of the specimen, which avoids rubbing on the disposable blades or microtome knives. This stops rapid deterioration of the disposable blade or microtome knife.

## 2 SYMBOLS



	Dangers, warnings and cautions are marked by this symbol.
	This symbol indicates possible fire hazards.
	Special instructions regarding the operation of the device are marked by this symbol.
	Mechanical components that can lead to injuries during operation are marked with this symbol.

Slee rotary microtomes are provided with the following safety features:

	CUT 5062
Hand wheel stop	•
Finger protection guard for knife- or blade-holder	•

The institution which owns the unit and the persons working with the unit, servicing or repairing it have the responsibility for a hazard-free use.

## MAGNIFIER WITH LIGHTING (OPTIONAL)

	<p>Risk of glare and injury! Never look into the sun or any other bright light source with optical devices! Do not look directly into the light source.</p>
	<p>Fire hazard! Lenses in optical devices can cause considerable damage due to the "burning glass effect" if improperly handled or stored! Make sure that optical lenses are never left in the sun without a cover!</p> <p>Use the supplied cover!</p>

### 3.1 HAND WHEEL STOP

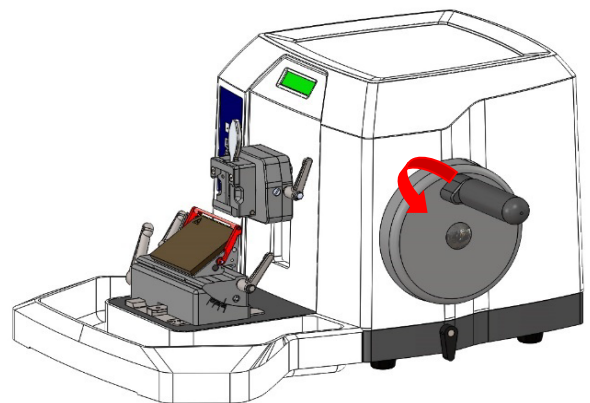
#### 3.1.1 HAND WHEEL STOP WITH BRAKE ON THE HANDLE

Always use the finger protection guard with the knife- / blade holder and put hand wheel in stop position

- before working with the knife or specimen,
- before changing the specimen,
- during break time.

The hand wheel can be stopped in any position. For this purpose, move stop towards the center. To do this, turn the locking lever 90° counterclockwise.

To release the handwheel lock again, turn the lever 90° clockwise.



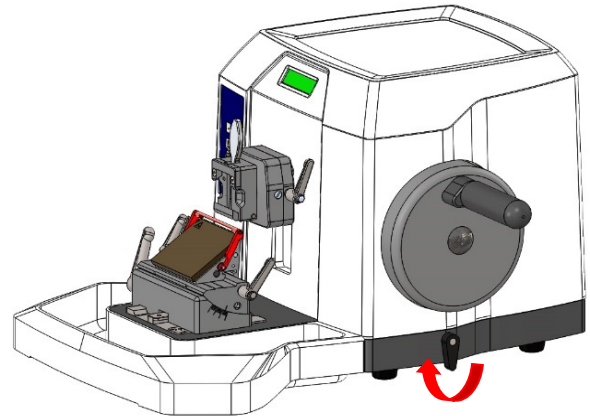


### 3.1.2 HANDWHEEL STOP WITH BRAKE ON THE BASE (OPTIONAL)

Always use the finger protection guard with the knife- / blade holder and put hand wheel in stop position

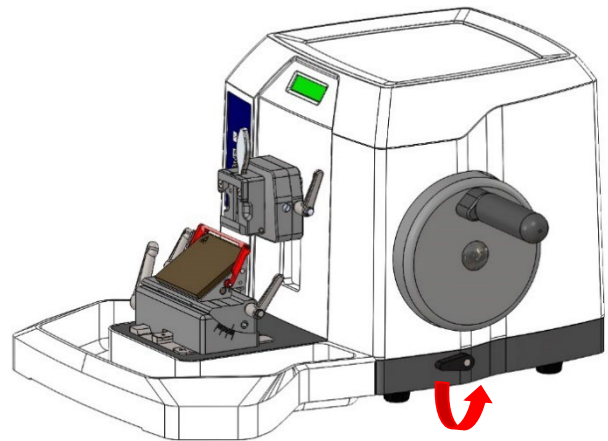
- before working with the knife or specimen,
- before changing the specimen,
- during break time.

The basic brake can be activated in every handwheel position. To close, turn the lever for 90° clockwise vertically (notch).



Basic brake open

To release the handwheel lock, turn the lever 90° counter-clockwise.

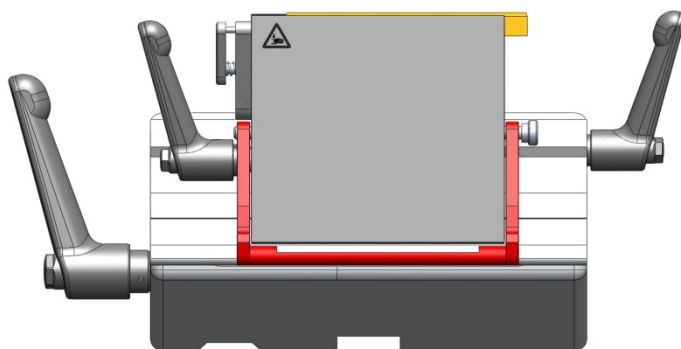


Basic brake closed

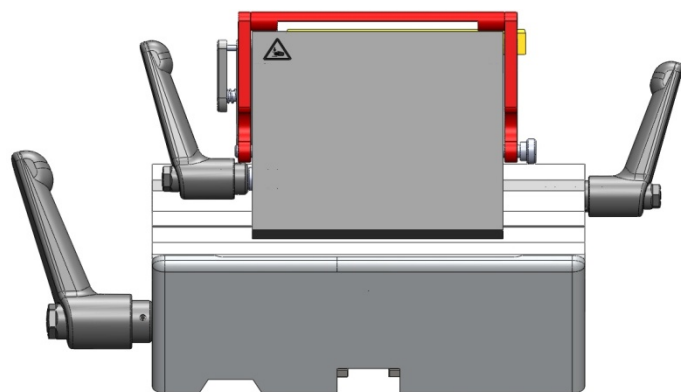
## 3.2 FINGER PROTECTION GUARD

Use the finger protection guard for the blade and knife holder as well as the handwheel stop always

- before you start any work with the knife or specimen,
- before changing the specimen,
- during work break.



Finger protection guard released



Finger protection guard activated



Please note that the finger protection guard may be engaged throughout processing (exchange of blade, lateral displacement, trimming, cutting), thereby increasing operation safety!



Do never move your fingers or hands above or behind the blade holder during operation of the microtome. For loading and unloading of the sample holders and exchange of disposable blades in the disposable blade holder, always activate the handwheel lock and activate the finger protection guard.

### 3.3 ELECTRICAL CONNECTIONS

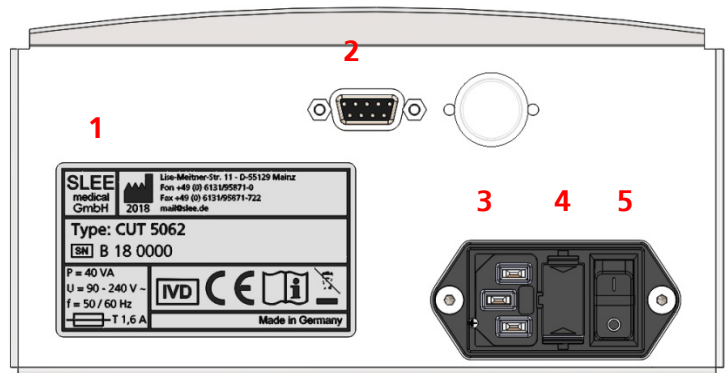


Before connecting any electrical units, the device must be switched off.

Electrical connections are attached at the backside of the microtome. Further on the name plate is located here (pos. 1).

Following connections are available depending on the microtome type:

- 2: External Control Panel
- 3: Mains cable
- 4: Fuse
- 5: ON- / OFF-Switch



- Before installing the device, check that the electrical connection values correspond to the specifications on the type plate and that a constant power supply is guaranteed. This should be examined during installation of the unit by a competent person.
- Do not use any extension cable.
- For maintenance and service always unplug the mains cable.
- Only use a specified fuse for the unit.
- Do not connect another unit to the same power circuit.

### 3.4 WORKING WITH KNIVES AND DISPOSABLE BLADES

Microtome knives and disposable blades have extremely sharp edges and this can lead to injuries. Please be extremely careful when handling microtome knives and disposable blades.



Do not place microtome knives or disposable blades at unsecured areas. Never position microtome knives or disposable blades with the sharp edge pointing upwards.

Store blades in a covered container. Use a container that has guides to hold the blades rigid.

Never try to catch a falling microtome knife.

Always insert the specimen first and then the microtome knife or disposable blade.

When applying the brake, ensure that it is tight. Most accidents occur when the brake slips and the operator's hand is drawn into the blade.

To avoid compression or knife marks, ensure that the blade is clean.

In case of multiple use of the knife or blade, use the finger guard.

To increase the usage time of knives and blades, avoid increased wear and tear by cleaning the cutting edge and blade holder regularly.

## 4 COMPONENTS

Slee rotary microtomes are provided with the following standard components:

	CUT 5062, #10070001
Specimen orientation	•
Universal cassette clamp, orientable, alternatively standard specimen clamp, orientable	•
3-component knife holder, can be used for low profile blades as well as high profile blades	•
Section waste tray	•
Disposable blades (low profile, 50 pcs.), optional with disposable blades (high profile, 50 pcs.) or microtome knife 16 cm C-profile	•
Dust cover	•
Allen key, for fixation of specimen orientation to microtome	•
Mains cable	•
Manual	•



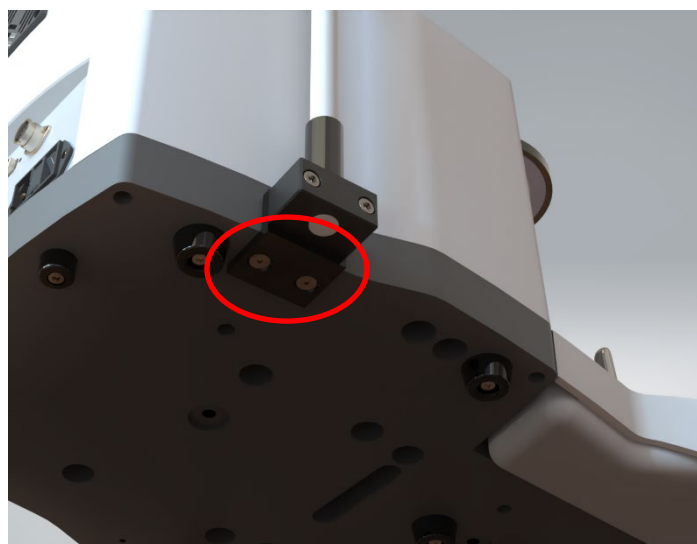
## 4.1 MAGNIFIER WITH ILLUMINATION, DIMMABLE (OPTIONAL)

### Mounting:

The ring magnifier with illumination can easily be attached to the side of the microtome's base plate.



2 M5x12 countersunk screws (supplied) are screwed into the base plate from below.



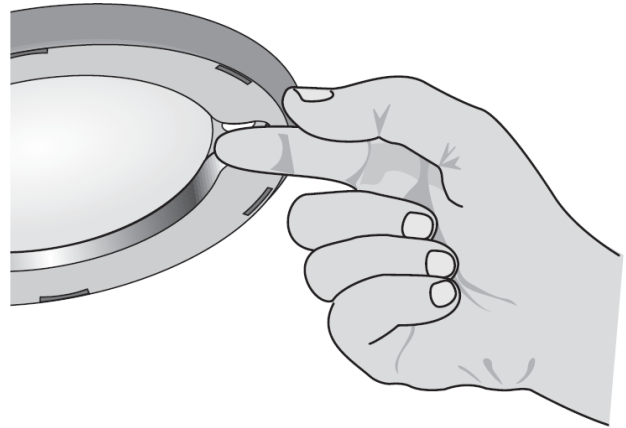
## Switching on / off:

The light can be switched on and off via the sensor switch on the light head.

Switching on: Touch the sensor for a brief moment -> the light will be switched on (switch-on value is the last dimming value).

Switching off: Touch the sensor again for a brief moment -> the light will be switched off.

Dimming: Touch the sensor until the desired brightness is obtained. To reverse the dimming direction, briefly interrupt touching the sensor.



## Note:

The illumination is equipped with overheating protection. In case the luminaire is switched off because of a risk of overheating, the luminaire must be cooled down, before being put back into operation.

### **Warning: Fire hazard!**

When not in use, cover the magnifier against solar radiation. To do this, use the bag included in the scope of delivery.



**Specifications magnifier with illumination:**

Protection class	II
Protection type	IP 20
Operating mode	Continuous operation
Technical safety check	EN 60 598-1
Light head	ca. Ø 122 x 13 mm
Magnifier	6.0 dpt. approx. Ø 72
Rated voltage	100 - 240 V AC
Frequency range	50/60 Hz
Power consumption	approx. 6 W

## 5 SPECIFICATIONS

Nominal supply voltage	100 - 240 V + / - 10 %
Nominal frequency	50/60 Hz
Power draw	40 VA
Protective class (1)	I
Power fuses	2 x T 1,6 A
Pollution degree (1)	2
Overvoltage installation category	II
Operating temperature range	+10 to +35 °C
Operating humidity	max. rel. 80 % non-condensing
Storage temperature range	+5 to +55 °C
Storage humidity	max. rel. 80 % non-condensing
Section thickness range	0,5 - 100 µm
Section thickness settings	0,5 - 2 µm in 0,5-µm steps 2 - 20 µm in 1-µm steps 20 - 50 µm in 2-µm steps 50 - 100 µm in 5-µm steps
Trimming thickness settings	0 - 750 µm 0,5 - 2 µm in 0,5-µm steps 2 - 20 µm in 1-µm steps 20 - 50 µm in 2-µm steps 50 - 150 µm in 5-µm steps 150 - 750 µm in 10-µm steps
Horizontal advance	28 mm (step motor)
Specimen feed speed SLOW	75 / 150 / 300 / 600 µm / s
Specimen feed speed	normally 3.000 µm / s
Specimen feed memory	2 positions programmable
Vertical specimen stroke	72 mm
Maximum specimen size	50 x 50 mm
Knife holder basis - north-south axis	35 mm
Specimen retraction on return stroke	0 - 200 µm, selectable
Specimen orientation, horizontal	8°
Specimen orientation, vertical	8°
Specimen orientation, z-axis	360°
Section counter	Strokes / Distance
Dimensions [width x depth x height]	520 mm x 600 mm x 325 mm incl. handwheel and waste tray
Weight without accessories	33 kg

(1) According to IEC 1010, EN 61010

## 6 UNPACKING AND INSTALLATION

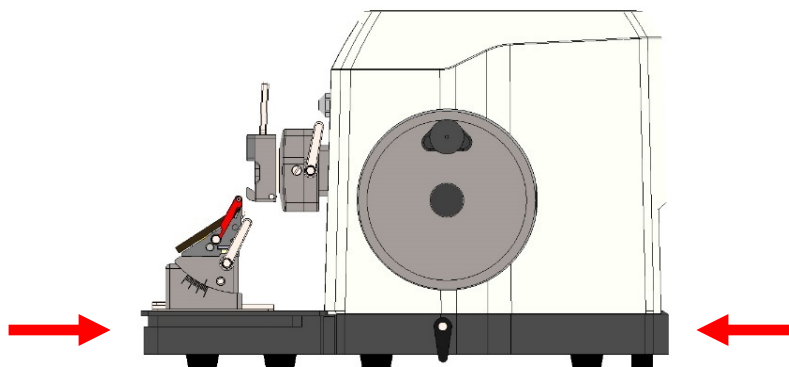
### 6.1 UNPACKING THE DEVICE

Remove the upper wooden cover.

Remove the upper supporting foams.

Lift the device out of the wooden transportation case.

Grasp the device underneath the base plate from the rear and front as shown in the figure below.



Do not transport the device by holding it on the hand wheel shaft, the object head, the cover or the tray.

Save the packaging material for later transport purposes, as the microtome should be transported in its original packaging to avoid transport damage.

Set up the microtome at its destination.

### 6.2 INSTALLATION

The unit should be positioned onto a plane, vibration-free surface.

Assure convenient and unobstructed access to the hand wheel.

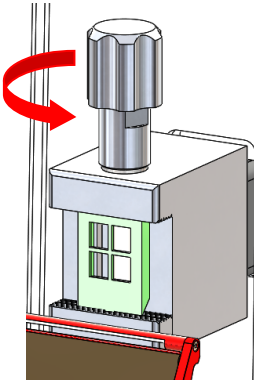
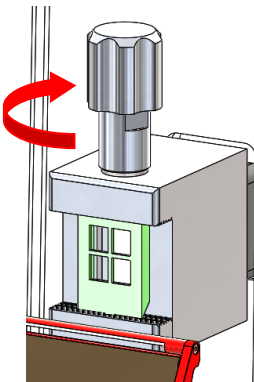
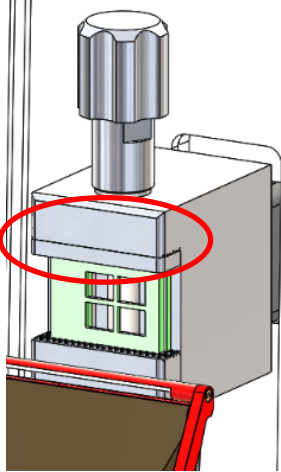
Before use remove the transport security underneath the specimen head.

Connect the external control panel [optional] with the outlet on the back of the device. Connect the device to the power supply.



## 7 OPERATION OF CUT 5062

### 7.1 INSERTION OF SPECIMEN IN STANDARD SPECIMEN CLAMP

<p>Turn the handwheel to the highest position and activate the handwheel lock (see chapter 3.1) and the finger guard.</p> <p>Loosen the standard specimen clamp by turning the fixing screw counterclockwise.</p> <p>Remove the old specimen or insert a new one.</p>	 <p>Loosening of object fixation and insertion of new object</p>
<p>Close the specimen clamp and fix the specimen by turning the clamping screw (see fig.) clockwise.</p> <p>Loosen the finger guard and the handwheel lock (see chapter 3.1) to cut the specimen.</p>	 <p>Closing of specimen clamp and fastening of object fixation</p>
<p>If the cassette is clamped horizontally (rotated 90°), it is recommended to use the supplied clamping block (item no. 34123507) to re-center the cassette. If the cassette is normally clamped vertically, this additional clamping block is not used.</p> <p>In order to bring the specimens closer to the middle section, the clamping block must be clamped to the upper cheek.</p>	 <p>Clamping block</p>

#### Additional note:

In case you process exceptionally hard specimens, the required clamping force may not be achieved by simply tightening the clamping screw. For these exceptional cases, an attachment for an open-end wrench SW17 is provided in the middle area of the clamping screw. We would like to point out that very high clamping forces can occur when using tools and this can lead to increased wear on the corresponding components.

## 7.2 INSERTION OF SPECIMEN IN UNIVERSAL CASSETTE CLAMP

Turn hand wheel to its highest position and activate the hand wheel lock.

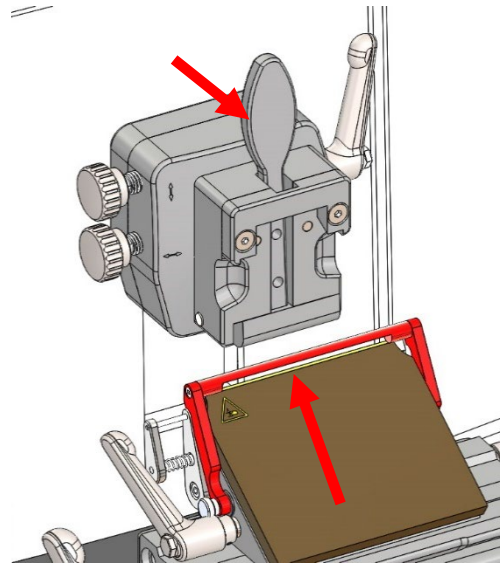
Activate finger protection guard.

Open cassette fixation by pulling the fixation lever.

Insert / remove cassette.

Object fixation will go back into fixation position automatically.

Release finger protection guard and hand wheel lock (see chapter 3.1) for cutting.



Opening of cassette fixation and insertion of new cassette

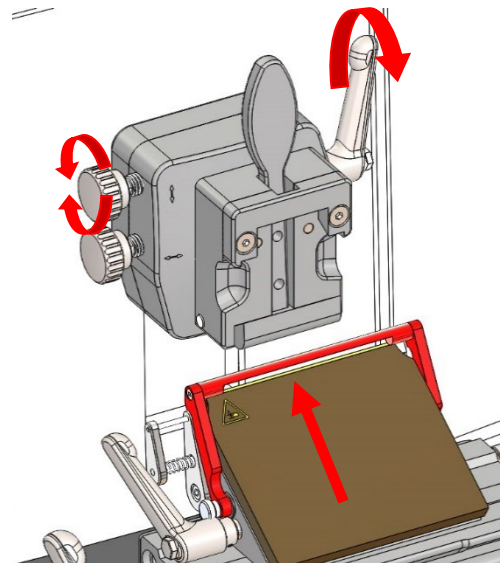
### 7.3 SPECIMEN ORIENTATION ADJUSTMENT

Turn hand wheel to its highest position and activate the hand wheel stop (see chapter 3.1).

For orientation of the specimen, open the fixing lever on the right side of the orientation.

For upward and downward orientation use the upper orientation wheel (see fig.).

For orientation to the left and right use the left orientation wheel (see fig.).

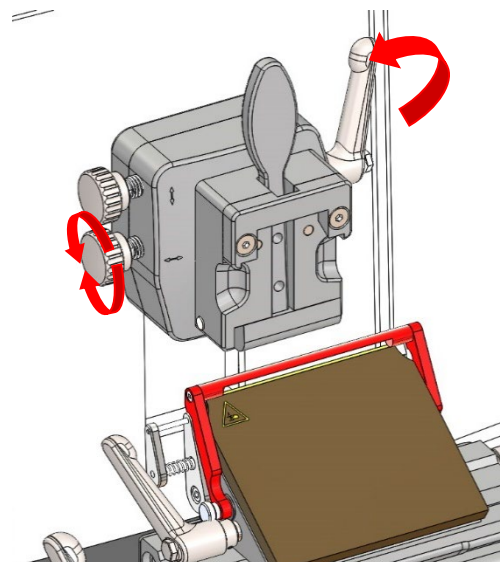


Opening of orientation fixation lever and orientation of specimen holder upwards and downwards

For orientation in the z-axis, turn the cassette clamp (see fig.).

Fix the specimen orientation by locking the clamping lever on the right side of the specimen holder.

Loosen the finger guard and the handwheel lock (see chapter 3.1) for cutting the specimen.

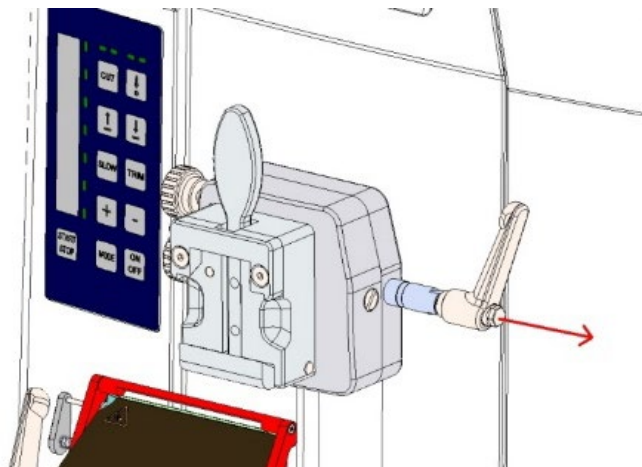


Change specimen orientation to right or left and sample orientation in z-axis

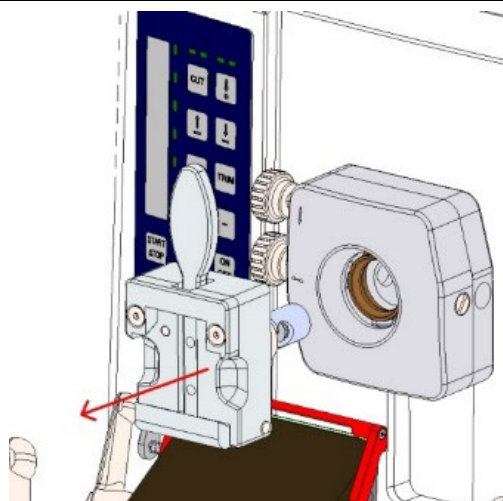
## 7.4 EXCHANGING THE CLAMP TYPE

For exchanging the universal cassette clamp with specimen orientation with the standard specimen clamp (fixed), please proceed as follows:

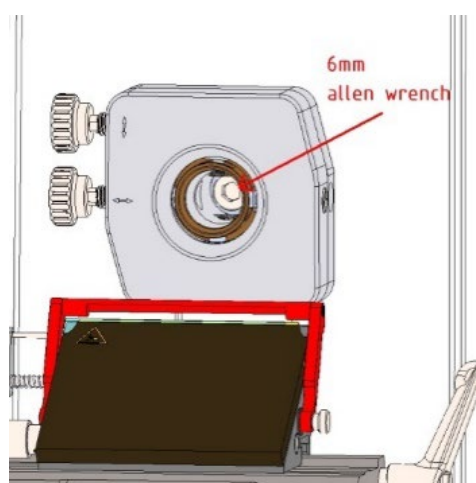
Move the universal cassette clamp to the upper position and fix the hand wheel by pressing the brake lever.



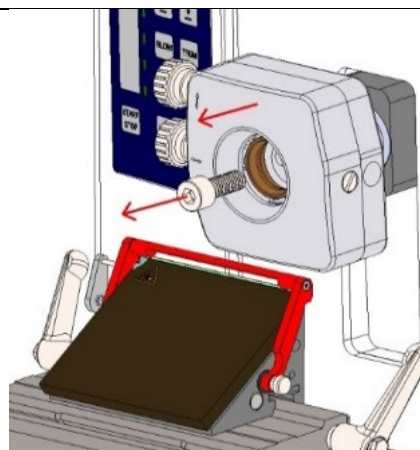
Pull out the right handle of the specimen orientation to release the universal cassette clamp out of the system.



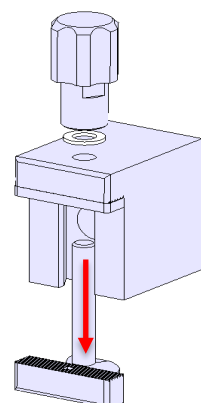
Use a 6 mm Allen wrench to remove the screw out of the center of the specimen orientation.



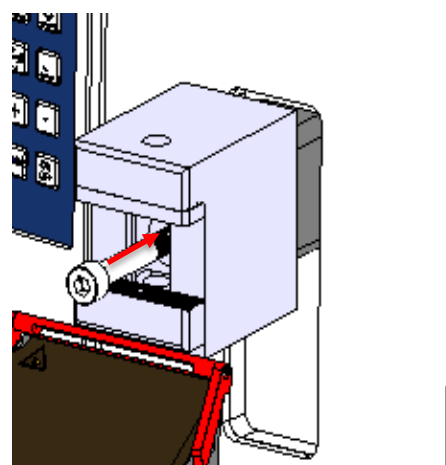
Disassemble the specimen orientation.



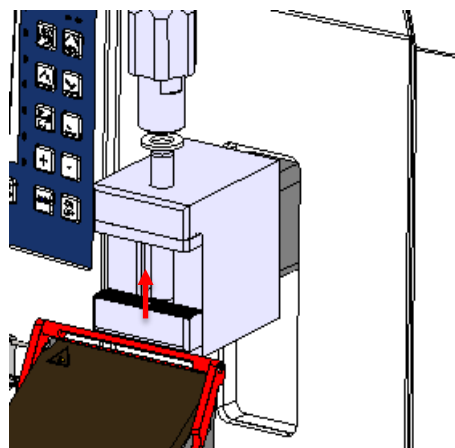
Disassemble the standard specimen clamp to get access to the center screw – M8 x 50 mm.



Install the basic part of the standard specimen clamp and fix it with the Allen screw.

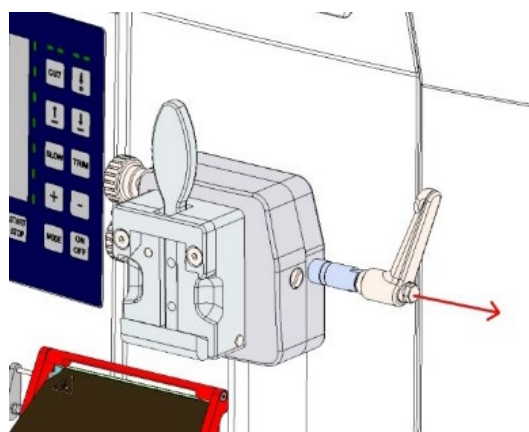


Install the spindle, the washer and the knob.

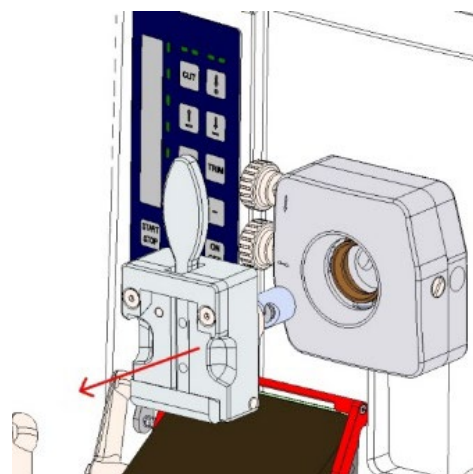


To replace the universal cassette clamp with specimen orientation with the standard specimen clamp with specimen orientation, please proceed as follows:

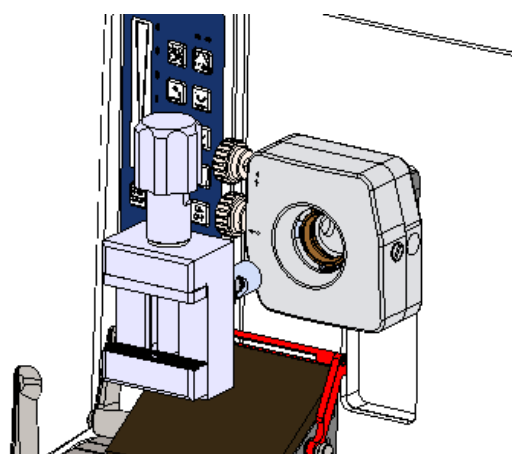
Move the universal cassette clamp to the upper position and fix the hand wheel by pressing the brake lever. Pull out the right handle of the specimen orientation to release the universal cassette clamp out of the system.



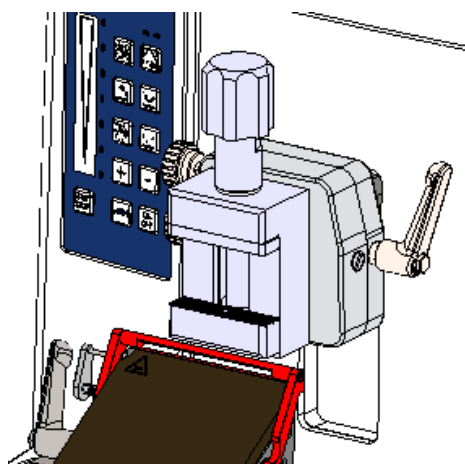
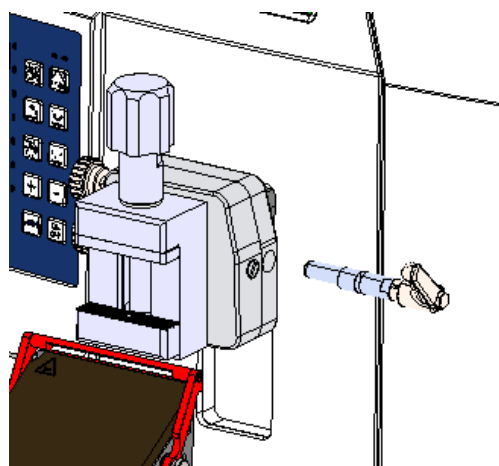
Remove the universal cassette clamp.



Replace the universal cassette clamp with the standard specimen clamp.



Install the right handle of the specimen orientation to fix the standard clamp.





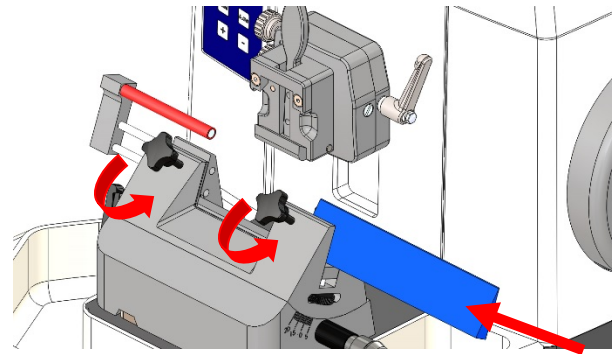
## 7.5 INSERTION AND ORIENTATION OF MICROTOME KNIVES

Turn the handwheel to the highest position and activate the handwheel lock (see chapter 3.1).

Remove finger protection guard on the right side of the knife holder.

Loosen the knife fixation by turning the two black screws counter clockwise (see fig.).

Remove the old knife or insert a new knife.



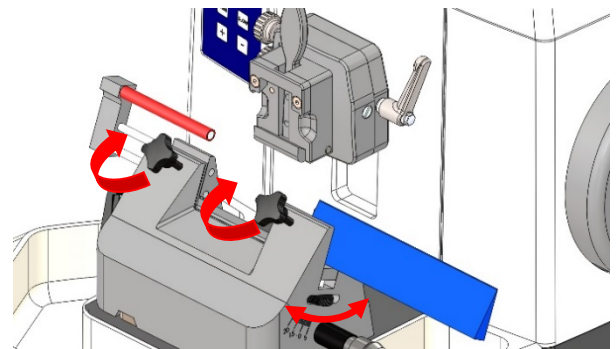
Loosening of knife fixation and insertion of new knife

Tighten the knife fixation by turning the two black screws clockwise (see fig.).

Adjust knife height by turning the wheels on the left and right side of the knife holder base.

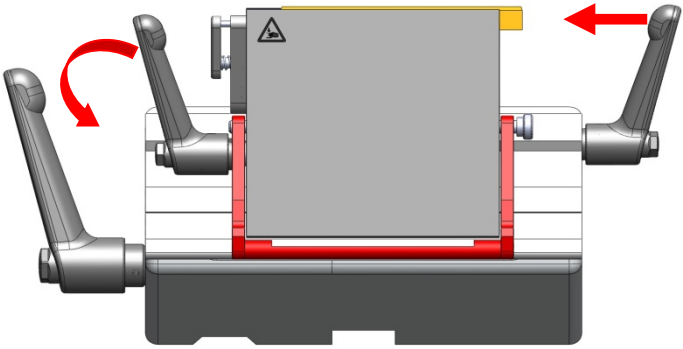
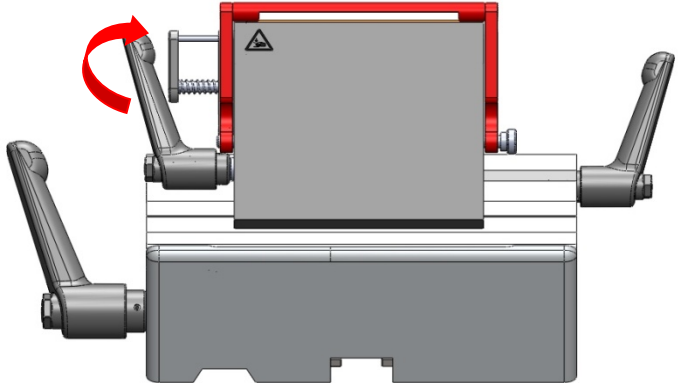
Install finger protection guard on the right side of the knife holder.

Release hand wheel lock (see chapter 3.1) for cutting the specimen.



Fixation and height adjustment of knife

## 7.6 INSERTION AND ORIENTATION OF DISPOSABLE BLADES

<p>Turn the handwheel to the highest position and activate the handwheel lock (see chapter 3.1).</p> <p>Release the finger guard.</p> <p>Release the blade clamping lever on the left side of the blade holder by turning it counterclockwise.</p> <p>Remove the old blade or insert a new blade (see fig.).</p>	 <p>Loosening of blade fixation and insertion of new blade</p>
<p>Fix the blade clamp by turning the lever on the left side of the blade holder clockwise.</p> <p>Release hand wheel lock (see chapter 3.1) for cutting the specimen.</p>	 <p>Fixation of blade</p>

## Horizontal orientation of the blade

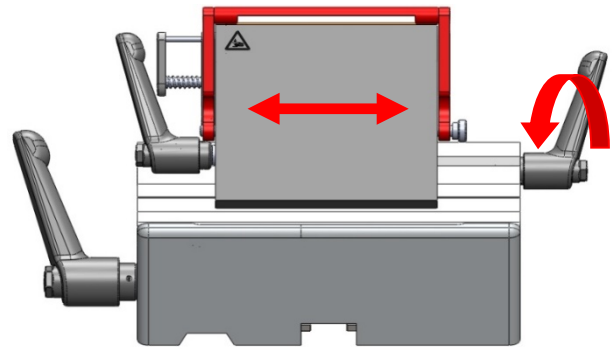
For adjustment of cutting area of the blade, the blade holder can be moved to the left or right.

To do so, release the lever on the lower right side of the swivel piece by turning it counterclockwise (see fig.).

Move the knife holder to the left or right.

Fix the new setting by turning the lever on the lower right side of the swivel piece clockwise.

Release hand wheel lock (see chapter 3.1) for cutting the specimen.



Loosening of blade holder fixation and horizontal orientation of blade holder

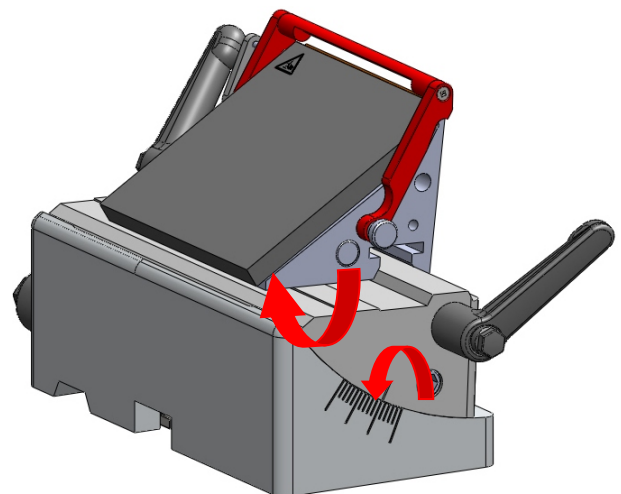
## Cutting angle

To change the cutting angle, loosen the hexagon head screw on the swivel piece by turning it counterclockwise (see fig.).

Set new angle for cutting by manually tilting the blade holder. A tilt towards the specimen holder increases the cutting angle (clockwise rotation), a tilt away from the specimen holder decreases the cutting angle (counterclockwise rotation, see fig.).

Tighten the blade holder fixation by turning the indicated hexagon screw with an Allen key (size 6) clockwise.

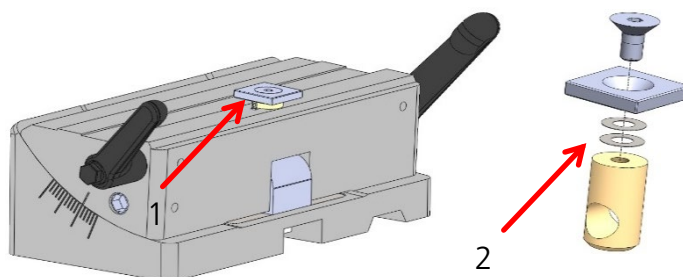
Release hand wheel lock (see chapter 3.1) for cutting the specimen.



Loosening of blade holder fixation and adjusting new cutting angle (Ex. increased cutting angle)

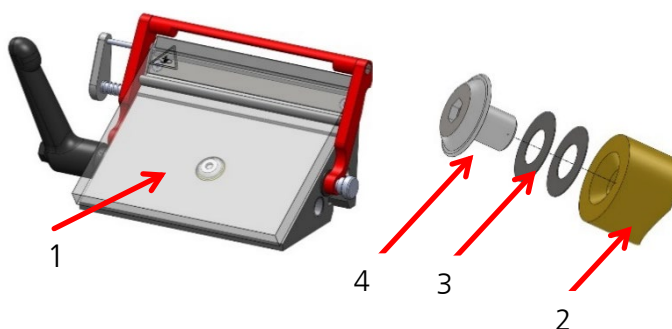
## Adjusting the sledge clamping

1. Remove the screw with Allen key size 2,5 (pos. 1).
2. Removing washers makes clamping tighter. Adding washers loosens clamping.
3. Tighten the screw (pos. 1) and test the clamping by assembling the blade holder.



## Adjusting the blade clamping

1. Remove away the blade clamping plate (pos. 1).
2. Take the brass plunger (pos. 2) and add / remove one of the supplied adjustment washers (pos. 3). Add washers = clamping tighter. Remove washers = loosens clamping.
3. Tighten the screw (pos. 4) and test the clamping by assembling the blade holder.

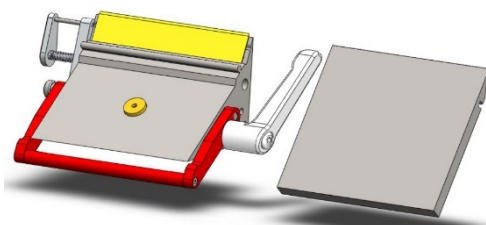
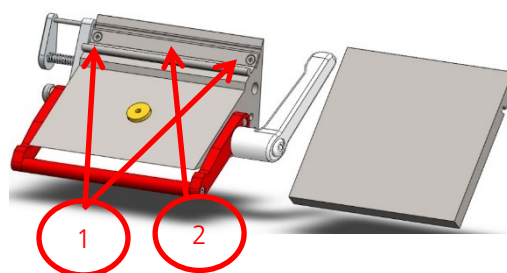
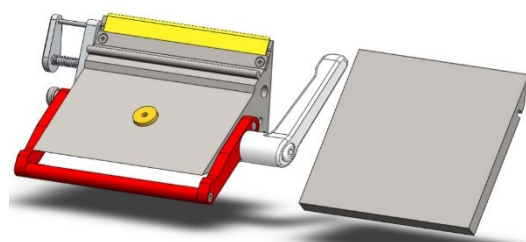


## Modification from low to high blades

Before any manipulation of the blade holder remove the blade!

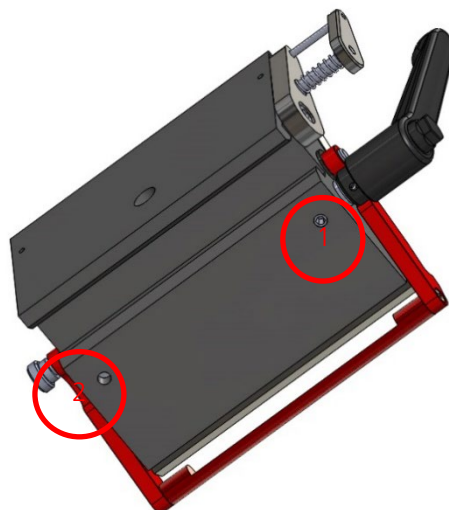
The first picture shows the low-profile configuration, underneath the low-profile configuration without the blade and the third picture shows the high-profile configuration.

To change from low profile to high profile configuration the two screws (pos. 1) have to be unscrewed with a PH0 screwdriver and the adapter strip (pos. 2) needs to be removed.



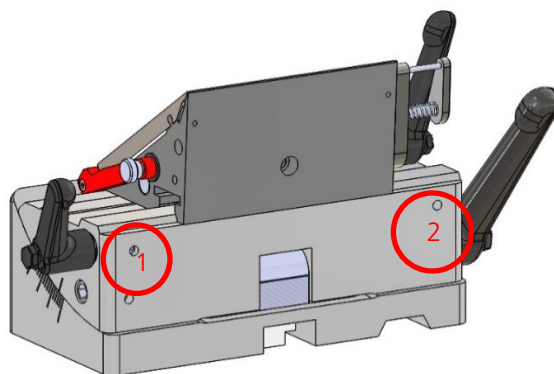
### Changing the lever to the other side - blade clamp

1. Loosen the screw (located on bottom side of lateral sledge) with Allen key (see fig., marked with red circle no. 1).
2. Take the lever out of the sledge and put it into the hole from the other side.
3. Tighten the screw at the other side (marked with red circle no. 2).



### Changing the lever to the other side – sledge clamp

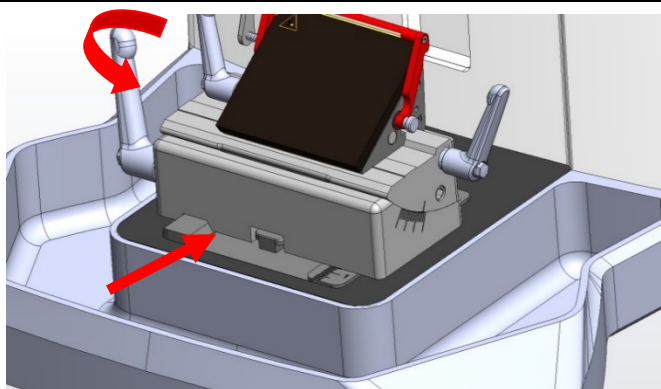
1. Loosen the screws (2x, located on bottom side of middle part) with Allen key (see fig., marked with red circle no. 1).
2. Take the lever out of the sledge and put it into the hole from the other side.
3. Tighten the screws at the other side (marked with red circle no. 2).



## 7.7 APPROACH TO SPECIMEN

Turn the handwheel to the highest position and activate the handwheel lock (see chapter 3.1).

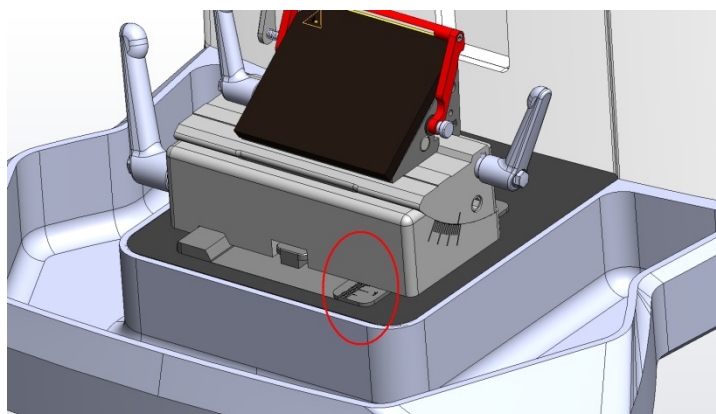
Loosen the knife or blade holder base by turning the left lever counter clockwise (see fig.).



Loosening of knife or blade holder base fixation and movement towards specimen

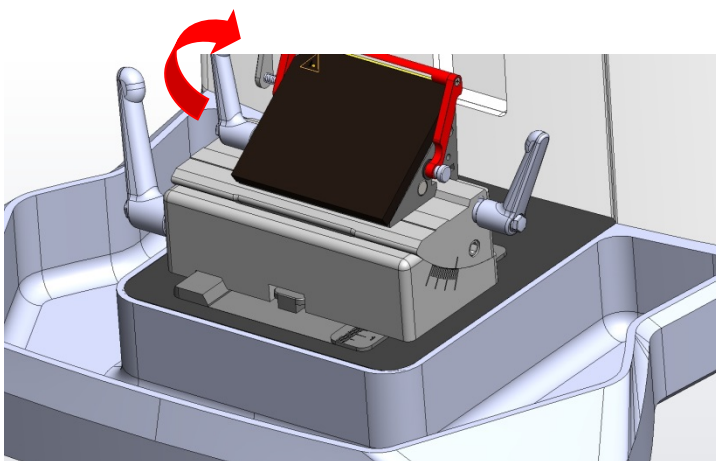
Move the blade holder base inside the guiding rail towards or away from the specimen (see fig.).

There is a scale on the right side of the microtome base plate. This enables faster and better positioning of the knife holder base if various combinations of standard specimens and specimen holders are used.



Fix the new setting by turning the lever on the left side of the knife holder base clockwise (see fig.).


Release hand wheel lock (see chapter 3.1) for cutting the specimen.





Fixation of knife holder base

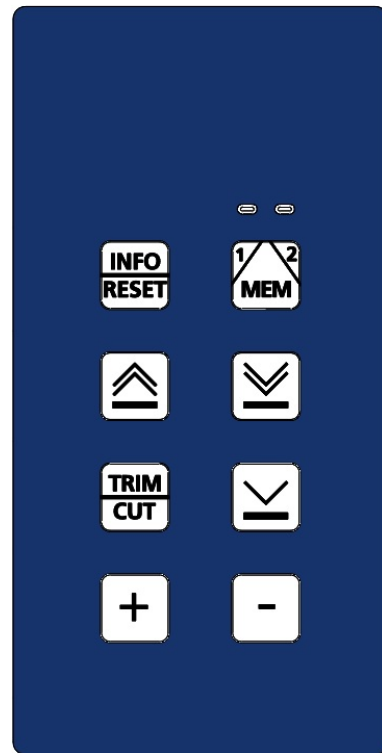
## 7.8 SPECIMEN FEED MEMORY

CUT 5062 is equipped with a specimen feed memory that stores two independent positions of the specimen. The LED on the upper right of the control panel will indicate which memory position is currently active.

To select the other memory position press  twice quickly.


Press  once to move to the designated memory position.

Press  for two seconds to store the current specimen position to the active memory.



## 7.9 MOTORISED COARSE ADVANCE

Press  to move the specimen towards the knife or blade.

Press  to move the specimen away from the knife or blade.

## 7.10 MOTORISED FINE ADVANCE

Press  to move the specimen slowly towards the knife or blade.

There are four speed settings available, which can be selected by holding the  key while switching on the device:


Mode 1: 75  $\mu\text{m}$  / s

Mode 2: 150  $\mu\text{m}$  / s

Mode 3: 300  $\mu\text{m}$  / s

Mode 4: 600  $\mu\text{m}$  / s

Select the desired mode using the keys  resp. .

Pressing  again will guide you to normal operating mode.



## 7.11 MANUAL CUTTING

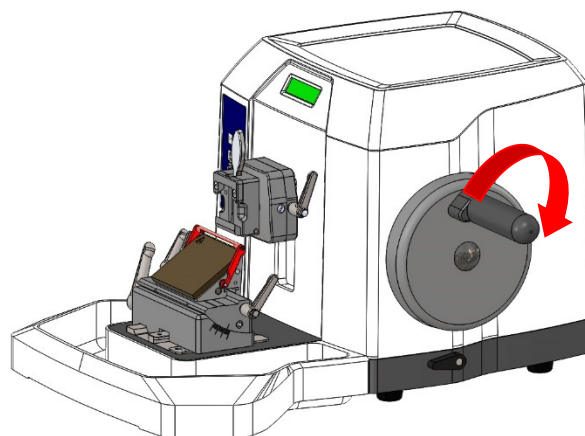
Release hand wheel stop (see chapter 3.1).

Remove the finger guard if necessary.

Turn the handwheel on the right side of the device evenly clockwise.


A counter clockwise movement of the hand wheel will also result in cutting and the specimen is gradually brought closer to the blade.


The cutting angle can be changed as required (see chapter 7.6).






Manual cutting of specimen with CUT 5062

For trimming of specimen, select the thickness as described in section 7.12 (THICKNESS ADJUSTMENT FOR TRIMMING).

If Trim latching mode is activated, trimming function is activated and deactivated by pressing  once. Activation of the trimming function is displayed as illustrated.

To activate trim latching mode, continuously press  while switching on the device.

If Trim latching mode is deactivated, trimming function is activated by continuously pressing . Activation of trimming function is displayed as illustrated (see fig. on the right). Turn the handwheel evenly clockwise.

To activate rocking mode press  and  simultaneously. For cutting in rocking mode, move the handwheel a short distance back and forth. The cutting window in rocking mode is minimum 30 mm.




30  $\mu$ m      TRIM      R 5  $\mu$ m  
0000 n


Display with activated trimming function

7  $\mu$ m      CUT      R 5  $\mu$ m  
0000 n



Display with deactivated trimming function (Cut mode)

## 7.12 ADJUSTMENT OF TRIMMING






<p>The display indicates the current setting for the trimming mode (e. g. 30 <math>\mu\text{m}</math> in this example).</p> <p>To change the trimming settings, press  continuously and press  or  to increase or decrease the value. To return to the cutting mode, please press the key again.</p>	<div data-bbox="1075 210 1481 338"> 30 <math>\mu\text{m}</math>      TRIM    R 5 <math>\mu</math>  0000 n </div>
--	--


	<p>Default setting for trimming thickness is 20 <math>\mu\text{m}</math>. For trimming a thickness range of 10 to 40 <math>\mu\text{m}</math> is recommended.</p>
---	---

## 7.13 ADJUSTMENT OF CUTTING



<p>The display indicates the current setting for the cutting thickness (e. g. 7 <math>\mu\text{m}</math> in this example).</p> <p>To change the cutting thickness, press  or  to increase or decrease the value.</p>	<div data-bbox="1075 909 1481 1037"> 7 <math>\mu\text{m}</math>      CUT    R 5 <math>\mu</math>  0000 n </div>
--	---

## 7.14 ADJUSTMENT OF RETRACTION DURING THE UPWARD MOVEMENT

<p>The display indicates the current setting for the retraction of the specimen upon upward movement (e. g. 5 <math>\mu\text{m}</math> in this example).</p> <p>To change the retraction setting, press  and  at the same time and  or , to increase or decrease the value. The retraction is usually preset to doubled cutting thickness and minimum of 1 <math>\mu\text{m}</math>. This preset can be abandoned by holding  while switching on the device.</p>	<div data-bbox="1075 1270 1481 1397"> 7 <math>\mu\text{m}</math>      CUT    R 5 <math>\mu</math>  0000 n </div>
--	--

	<p>Default setting for retraction is 5 <math>\mu\text{m}</math>.</p>
---	--

## 7.15 SECTION COUNTER / SECTION SUM / REMAINING TRAVEL INDICATION

The model CUT 5062 allows optional display of different parameters in the lower left display area. These are the number of the performed sections, the section sum or the remaining travel.	7 $\mu$ m      CUT      R 5 $\mu$ 0015 n
To change from counting strokes to cuts to the remaining travel or vice versa, simply press  once.	7 $\mu$ m      CUT      R 5 $\mu$ 0105 $\Sigma$
To reset the cutting counter, press  for 2 seconds.	7 $\mu$ m      CUT      R 5 $\mu$ 0000 n
The remaining travel is displayed on the lower left display area. Remaining travel > 1 mm displayed in mm:	7 $\mu$ m      CUT      R 5 $\mu$ R15.1
Remaining travel < 1 mm displayed in $\mu$ m (number flashes):	7 $\mu$ m      CUT      R 5 $\mu$ R.456
When the device is switched on, the object carriage automatically retracts (initialization) until it reaches the rear light barriers. When the rear-end position is reached, "REAR END POS." is displayed in line 2.	7 $\mu$ m      CUT      R 5 $\mu$ REAR END POS.
When the front-end position is reached, "FRONT END POS." is displayed in line 2.	7 $\mu$ m      CUT      R 5 $\mu$ FRONT END POS.

Info: If the remaining travel is < 1 mm, the displayed value starts to flash. If the number of the performed sections or the section sum was previously displayed, the display flashes alternately with the respective value.

## 7.16 DISPLAY CONTRAST SETTINGS

CUT 5062 has a digital display. For optimized readability the contrast of the display is adjustable to fit the surrounding circumstances.

Hold  while pressing  once and change the contrast setting with  or .

## 7.17 OVERVIEW KEY COMBINATIONS

### 7.17.1 Operation via keyboard(s)

Keyboard shortcuts at power-on (for configuration)	
TRIM/CUT	TRIM/CUT switchover latching / momentary
SLOW	Setting feed rate for SLOW
REV	Retraction limitation on / off
INFO/RESET+MEM	Set all settings to factory defaults

### 7.17.2 Key combinations during operation

INFO/RESET+MEM	Switching Rocking Mode on / off (for 5062)
TRIM/CUT+SLOW+PLUS	Display service cut counter
MODE+TRIM/CUT+PLUS/MINUS	Window size setting (only in WINDOW mode)
MODE+ON/OFF	Switch Preset / continuous
MODE+PLUS/MINUS	Change Preset count (only if PRESET active)
TRIM/CUT+REV+PLUS/MINUS	Set retraction
TRIM/CUT+FWD+PLUS/MINUS	Set contrast
TRIM/CUT+SLOW	Display version and serial number

### 7.17.3 Short keystrokes

INFO/RESET	Switching between section counter / section sum / remaining travel indication
MEM (1x)	Move to selected memory position (if position still unknown: backwards to stop)
MEM (2x)	Change between memory position 1 and 2 (see LEDs)
TRIM/CUT	TRIM / CUT switchover (if TRIM is momentary)
TRIM/CUT	TRIM is activated, as long as pressed (if latching)
SLOW from V3.15:	Feed by set CUT / TRIM distance
PLUS, MINUS	Change the current cutting value
START/STOP	Start and stop of the drive motor, stop takes place at OT (with CONT / WIND the slider LEDs are switched off after stop actuation, with STEP the drive runs as long as the key is pressed)
MODE	Change CONT / SING / WIND / STEP (motor) or normal / ROCK (manual)
ON/OFF	Switch motor operation / manual operation

## 7.17.4 Long keystrokes

INFO/RESET (2 s)	Reset cut counter
MEM (2 s)	Save current position in active position memory (confirmation: both position LEDs go off)
REV, FWD, SLOW	Direct movement of specimen holder (as long as key is pressed), while SLOW key is pressed fast "typing" can be done with FWD From V3.13: REV first slow, after 2 s fast From V3.15: SLOW only after 300 ms continuous (before jog mode)

## 7.17.5 Display

Line 1:	Cut thickness, CUT / TRIM, retraction (with WIND instead of retraction window size)
Line 2:	Cut counter / total, mode, speed. In line 2 also all error messages are displayed, these replace the normal line content
„--- SERVICE ---“	Service due (2 million strokes) - stops approx. 10 s after switching on
„-- H&V Error --“	Failure / error of both pairs of light barriers
„--- H Error ---“	Failure / error of horizontal light barriers
„--- V Error ---“	Failure / error of vertical light barriers
„- Motor Error -“	Error at motor / encoder (no pulses during control) (error is displayed for approx. 10 s, manual operation still possible)
„--- Overload ---“	Drive motor was switched off after overload (10 s display)
„- End Position -“	Specimen grips are in front end position

## 8 EXTERNAL CONTROL PANEL CUT 5062



Before connecting any electrical units, the device must be switched off.

### 8.1 EXTERNAL CONTROL PANEL CUT 5062

To provide a more comfortable usage of the microtome the optional external control panels can be used for CUT 5062. The control panel is equipped with a connection cable to the microtome with a length of 1.80 m so the placement of the control panel can be arranged individually. To connect the control element to the microtome please refer to 3.3 ELECTRICAL CONNECTION. The LED's will light up for approx. 2 seconds after the microtome has been switched on.

Symbols and functions are identical to the control panel located in the housing of the microtome shown and described in section 7.8 to 7.16.










## 8.2 FUNCTIONAL OVERVIEW OF USER INTERFACE

### Quick Guide – User Interface

#### CUT 5062



Button		Function
	<b>press once</b> = change display from counting strokes to cuts to the remaining travel	INFO / RESET
	<b>hold for 2 seconds</b> = reset the cutting counter to 0	INFO / RESET
	<b>press once</b> = move to selected memory position <b>press twice</b> = change between memory position 1 and 2 <b>hold for 2 seconds</b> = save current position	MEM
	<b>hold</b> = direct movement of specimen towards blade / knife	FWD
	<b>press once</b> = feed by set distance (jog mode) <b>hold</b> = after 300 ms continuous movement	SLOW
	<b>press once</b> = retraction (5 $\mu$ standard setting) <b>hold</b> = fast retraction after 2 s	REV
	<b>press once</b> = switch between TRIM / CUT mode	TRIM / CUT

**Please note:**

This is a Quick Guide to have the most important commands at hand. For detailed information on how to operate the microtome, please read the user manual.










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Quick\_Guide\_CUT\_5062\_2021-07-006.00\_EN

### Quick Guide – User Interface

#### CUT 5062



Button		Function
	<b>press once</b> = change the current cutting value - 0.5 - 100 $\mu$ m (CUT mode) - 0.5 - 300 $\mu$ m (TRIM mode)	PLUS / MINUS
		
<b>hold</b>	<b>press once</b>	<b>set retraction</b> from 0 - 200 $\mu$ m
		 
		TRIM / CUT + REV + PLUS / MINUS
<b>hold</b>	<b>press once</b>	<b>set contrast</b> (display)
		 
		TRIM / CUT + FWD + PLUS / MINUS

**Please note:**

This is a Quick Guide to have the most important commands at hand. For detailed information on how to operate the microtome, please read the user manual.


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## 9 CLEANING AND MAINTENANCE

### 9.1 CLEANING

The recommended frequency of cleaning the microtome depends on how intensely the device is used.

	<p>Wear protective clothing and disposable gloves according to Good Laboratory Practices.</p> <p>Please take note of the safety aspects of the device.</p> <p>To clean the microtome mild domestic cleaning agents can be used. Do not use aggressive cleaning agents or solvents such as acetone or xylene, as the plastic or metal components of the device can be affected or corrode.</p> <p>The hood should be cleaned with commercially available plastic cleaning agents. Do not use alcoholic or organic solvents to clean the hood.</p> <p>Never spray or use cleaning agents directly on the touch panels or the display.</p>
---	---

### 9.2 RECOMMENDED MAINTENANCE AND SERVICE SCHEDULE

Daily	Remove section waste from the waste tray. Please use supplied dust cover when device is not in use.
Weekly	Cleaning of blade holder.
Yearly	Annual inspection (performed by authorized Slee service technician) <ul style="list-style-type: none"><li>• Check of all functions</li><li>• Lubricating of movable parts</li><li>• Check of driving system</li><li>• Complete cleaning</li></ul>



## 10 SERVICE

Internal components may only be serviced by authorized technicians.

If technical service or spare parts are necessary, please contact your local SLEE medical GmbH distributor. Please have the following information available:

- complete contact details,
- type of device and serial number,
- location of device and name of user,
- purpose of service call,
- delivery date of the unit.

If it is necessary to return the device, it must be cleaned and disinfected before delivery. It must be returned in its original packing.

If the device or parts thereof are sent back in a dirty or non-disinfected condition, SLEE medical GmbH reserves the right to return the parts to the debit of the customer.

## 11 OPTIONAL ACCESSORIES

aquatec system	#10090056
MTR Bench top quick-freezing unit	#10110000
Magnifier with illumination	#10090060
External control panel CUT 5062	#10090050
Disposable blade holder TC65 (for tungsten carbide blades)	#10090041
Tungsten carbide blade (1 pc.)	#28406000
Glass knife holder (for triangle glass knives)	#10090014
Segment arc incl. universal sample holder (for glass knife holder application)	#10090015
Super Mega cassette clamp, orientable	#10090027
Super Mega cassette clamp, fixed	#10090021
Standard specimen clamp, fixed	#10090026
Foil clamp	#10090025
Prism (set)	#10090017
Round specimen holders (different diameters)	on demand
Disposable blades (low profile; 50 pcs.)	#28407000
Disposable blades (high profile; 50 pcs.)	#28408000
Disposable blades (low profile; 50 pcs.), Plasma LPH, for hard specimen	#28407004
Disposable blades (low profile; 50 pcs.), Plasma LPS, for soft specimen	#28407005
Disposable blades (high profile; 50 pcs.), Plasma HPS, for hard specimen	#28407006
Tungsten carbide blade (1 pcs.)	#28406000
Microtome knife profile: C or D, length: 10 to 40 cm	on demand
2nd handwheel lock	#10090024
More on request	

## 12 WARRANTY

SLEE medical GmbH guarantees that the product delivered has been subjected to a comprehensive quality control procedure, and that the product is faultless and complies with all technical specifications and / or agreed characteristics warranted.

SLEE medical GmbH guarantees that the device is manufactured under an ISO 9001:2015 and ISO 13485:2016 quality management system.

Unauthorized modification or repair by third party persons will void the warranty.

Only original SLEE medical GmbH spare parts must be used.

Guarantee claims can be put forward only if the device is used according to this manual and for the purpose described.

Mistakes and errors which occur because of improper use cannot be accepted.

## 13 DISPOSAL

The device or parts of the device must be disposed of according to existing local applicable regulations.

Notes



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[www.slee.de](http://www.slee.de)



YouTube



LinkedIn



Instagram

# Product specification

## CUT 5062 · Semi-automatic precision microtome

Item No.: 10070001



### Specifications

Nominal supply voltage	100 - 240 V AC +/- 10%
Nominal frequency	50/60 Hz
Power draw	20 VA
Protective class	(1) I
Power fuses	2 x T 1,6 A
Pollution degree	(1) 2
Overvoltage installation category	II
Maximum heat emission	20 J / s
Operating temperature range	+10 to +35 °C
Operating humidity	max. rel. 80 % non-condensing
Storage temperature range	+5 to +55 °C
Storage humidity	max. rel. 80 % non-condensing
Section thickness setting range	0.5 - 100 µm
Section thickness selection	0.5 - 2 µm in 0.5-µm steps
	2 - 20 µm in 1-µm steps
	20 - 50 µm in 2-µm steps
	50 - 100 µm in 5-µm steps

## Specifications

	0.5 - 750 µm
	0.5 - 2 µm in 0.5-µm steps
	2 - 20 µm in 1-µm steps
	20 - 50 µm in 2-µm steps
	50 - 150 µm in 5-µm steps
	150 - 750 µm in 10-µm steps
Trimming thickness	
Specimen feed	28 mm (step motor)
Specimen feed speed SLOW	75 / 150 / 300 / 600 µm / s
Specimen feed speed	3,000 µm / s
Specimen feed memory	2 positions programmable
Vertical specimen stroke	72 mm
Maximum specimen size	50 x 50 mm
Knife holder - north-south axis	24 mm
Specimen retraction	0 - 200 µm, selectable
Specimen orientation, horizontal	8°
Specimen orientation, vertical	8°
Specimen orientation, z-axis	360°
Information display	Number of sections / section-sum and remaining travel distance
Dimensions [W x D x H]	520 x 600 x 325 mm
Weight (w/o accessories)	33 kg

(1) According to IEC 1010, EN 61010

## Standard components

Specimen orientation
Universal cassette clamp, orientable (alternatively: standard specimen clamp, orientable)
Disposable blade holder (alternatively: standard knife holder)
Section waste tray
Disposable blades, low profile (1 box, 50 pcs.)
Dust cover
Mains cable
Manual

## Optional accessories

	Item No.
Aquatec system	10090056
MTR bench top quick freezing unit	10110000
Magnifier with illumination (dimnable)	10090060
External control panel CUT 5062	10090050
TC65 disposable blade holder (for tungsten carbide blades)	10090041
Tungsten carbide blade (1 pcs.)	28406000
Disposable blades (cf. consumables)	
Glass knife holder (for triangle glass knives)	10090014
Segment arc incl. universal sample holder (for glass knife holder application)	10090015
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Super Mega cassette clamp, fixed	10090021
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Prism (set)	10090017
Round specimen holders (different diameters)	on demand
More on request	

## Consumables

	Item No.
Disposable blades (plasma coated) Low profile plasma LPS for soft specimens, 50 pcs. / box	28407005
Disposable blades (plasma coated) Low profile plasma LPH for hard specimens, 50 pcs. / box	28407004
Disposable blades (plasma coated) High profile plasma HPS for soft specimens, 50 pcs. / box	28407007
Disposable blades (PTFE coated) Low profile suitable for all types of specimens, 50 pcs. / box	28407000
Disposable blades (PTFE coated) High profile suitable for all types of specimens, 50 pcs. / box	28408000

## Comments / additional information:

In case of further questions, please feel free to contact us at every time.

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# Certificate

Standard **ISO 9001:2015**

Certificate Registr. No. **01 100 67084**

Certificate Holder:



**SLEE Medical GmbH**

Am Neuberg 14  
55268 Nieder-Olm  
Germany

Scope:

Development, production and sales  
of medical laboratory equipment

Proof has been furnished by means of an audit that the  
requirements of ISO 9001:2015 are met.

Validity:

The certificate is valid from 2020-08-20 until 2023-08-19.  
First certification 2000

2022-01-25 (Change)

A handwritten signature in blue ink, likely belonging to a representative of TUV Rheinland Cert GmbH.

TÜV Rheinland Cert GmbH  
Am Grauen Stein · 51105 Köln

# Certificate



## Quality Management System EN ISO 13485:2016

Registration No.: SX 1178797-1

Organization: SLEE Medical GmbH  
Am Neuberg 14  
55268 Nieder-Olm  
Germany

Scope: Design and development, manufacture, distribution and service of medical laboratory equipment used in the field of histology

The Certification Body of TÜV Rheinland LGA Products GmbH certifies that the organization has established and applies a quality management system for medical devices. Proof has been furnished that the requirements specified in the abovementioned standard are fulfilled. The quality management system is subject to yearly surveillance.

Report No.: 3314495-90  
Effective date: 2022-01-21  
Expiry date: 2023-09-26  
Issue date: 2022-01-21



  
The seal of TÜV Rheinland LGA Products GmbH, featuring a stylized blue triangle with a horizontal line through it, and the text "TÜV Rheinland LGA Products GmbH".

Dipl.-Ing. Anja Fechner  
TÜV Rheinland LGA Products GmbH  
Tillystraße 2 · 90431 Nürnberg · Germany




**slee** solutions  
for  
pathology

PRODUCT CATALOG

DESIGN &  
MANUFACTURING  
MADE IN GERMANY





***We are committed to  
teamwork and support;  
we give our best  
to provide both to our clients  
day by day!”***

*Stefan Schock • Managing Director  
Slee – Solutions for pathology*

Providing the best histopathology solutions is our passion, our know-how and our craft.

We stand for top technology, high quality standards and consistent customer support. From the invention of the world's first cryostat back in the year 1954 by our company founder Kenneth Slee until today, we focus on improving the microscopic sample preparation process. The everyday needs of our global users are top priority to us.

Our headquarter with design center and product manufacturing is located in the Rhine-Main area for decades. A location in the center of Germany with highest expertise in science, research and high-tech manufacturing to get benefited from the German tradition in top quality and high-precision products.

Our company culture stands out for the sense of responsibility towards our clients, employees, suppliers and business partners. As a globally oriented company we love to fuse our expertise in the field with the various perspectives of our global customers, thus being one of the most reliable partners in histopathology labs, in more than 100 countries worldwide.

Stefan Schock  
Managing Director





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Some of the images in this catalog may show special equipment and / or accessories that are subject to a charge. The image may differ slightly in appearance from the product.

# ***Tissue processors***

*Slee tissue processors stand for gentle and safe specimen processing. The tissue processors from Slee are optimally adapted to the needs of a wide variety of laboratories.*







## **MTP**

Carousel tissue processor

## **MTM**

Vacuum tissue processor

# MTP

## Carousel tissue processor

The **MTP** carousel tissue processor guarantees gentle and highly reliable specimen processing in connection with state of the art control features. The specimen throughput can be doubled to 240 cassettes per run with a second transport basket. For faster and substantially improved processing of tissues, the device can optionally be equipped with vacuum units for all paraffin beakers. An integrated battery ensures highest process safety even in environments with frequent power failures.



MTP

### Highlights

- Easy loading and full process control by rotating table principle
- Integrated uninterruptible power supply
- Up to 240 cassettes per run (optional)
- System status monitor
- Password protection
- Intuitive control panel
- Delayed start function

## Item No.

MTP 100 – 230 V, 50/60 Hz

11000200

## Standard components

**Reagent beakers** (plastic [POM], white, 10 pcs.)

**Heated paraffin beakers** (aluminum, 2 pcs.)

**Transport basket** (stainless steel, 1 pcs.)

**Labelling set** for reagent beakers (1 pcs.)

**Transport basket lid** (1 pcs.)

**Mains cable**

**Manual**

## Specifications

**Reagent beakers** plastic [POM], white  
capacity 2,000 ml

**Heated paraffin beakers** aluminum, anodized,  
double walled  
capacity 2,000 ml

**Transport basket** stainless steel  
capacity up to 120 standard cassettes

**Programming** 20 programs,  
freely programmable

**Electrical parameters** 100 – 230 V, 50/60 Hz

**Dimensions** (W x D x H) 850 x 850 x 750 mm

**Weight** w/o accessories 80 kg

## Options

### Item No.

**Fume hood** for MTP / MSM (perspex)

11000220

**Vacuum unit** (paraffin)  
for 2 paraffin beakers

11000223

**Vacuum unit** (paraffin) for 3 paraffin be-  
akers (only in combination with 11000221)

11000224

**Vacuum unit** (reagent & paraffin)  
for 2 paraffin beakers

11000225

**Vacuum unit** (reagent & paraffin)  
for 3 paraffin beakers (only in combina-  
tion with 11000221)

11000226

**All reagent beakers** (aluminum)

11000222

**All reagent beakers** (glass)

11000227

**Remote alarm module** (GSM)

11000271

**TWIN basket** for MTP

11000221

**Exhaust fan system**  
incl. carbon filter

11000211

## Optional accessories

### Item No.

**Reagent beaker**  
(aluminum, 1 pcs.)

11000229

**Reagent beaker**  
(plastic [POM], white, 1 pcs.)

11000251

**Heated paraffin beaker** (aluminum)

11000252

**Transport basket** (stainless steel)  
incl. holder and lid

11000253

**Carbon filter** (spare)

11000254

**Organizer cartridge** (stainless steel, 1 pcs.)  
for 65 cassettes

11000255

# MTM I / II

## Vacuum tissue processor

*The Slee vacuum tissue processors **MTM I** and **MTM II** combine state of the art technology with comfortable handling and design. The tissue processor **MTM II** also offers a cost-efficient and user-friendly alternative for the fast biopsy processing.*

With the innovative EHE element (enhanced heat exchanger), the MTM II is the fastest and gentlest tissue processor without using often harmful microwaves.

The system can be operated with traditional reagents or with most of the xylene and ethyl alcohol substitutes available on the market.

A user-friendly reagent management system and an optimized cleaning cycle routine are the basis for higher cost efficiency and higher turn-over. Simplify the daily laboratory routine. Process safety is guaranteed with an intelligent remote alarm system that communicates via mobile or internet.

### Two functionalities – one device

#### Short processing time

45 minutes / run biopsies

#### High sample turnover

300 samples / run routine

### Highlights

- Safe tissue processing with prewarmed reagents
- Fully automatic reagent management system
- Automatic cleaning cycles
- Intuitive control via 15"-TFT-display
- Active carbon filter supported ventilation
- Remote alarm system (GSM, optional)

## Item No.

### MTM I 230 V, 50/60 Hz

Vacuum tissue processor

11000500

### MTM II 230 V, 50/60 Hz

Fast vacuum tissue processor

11000600

### MTM I 115 V, 60 Hz

Vacuum tissue processor

11000501

### MTM II 115 V, 60 Hz

Fast vacuum tissue processor

11000601



MTM I



MTM II





Intuitive control via 15"-TFT-display

Standard components	MTM I	MTM II
<b>EHE element</b> for preheated reagents		✓
<b>15"-TFT-display</b> with touchscreen	✓	✓
<b>2 cassette baskets</b> (stainless steel, 150 cassettes each)	✓	✓
<b>Reagent beaker</b> (10 pcs.)	✓	✓
<b>Paraffin beaker</b> (4 + 1 pcs.)	✓	✓
<b>Cleaning solution beaker</b> (2 pcs.)	✓	✓
<b>Mains cable</b>	✓	✓
<b>Manual</b>	✓	✓

Specifications	MTM I	MTM II
<b>Sample processing</b> chamber capacity	300 standard cassettes	
<b>Sample processing</b> chamber temperature	up to 65 °C	
<b>Reagent beaker</b>	10 (2.5 l each)	
<b>Paraffin beaker</b> (quantity and capacity)	4 + 1 (2.5 l each)	
<b>Electrical parameters</b>	1,000 W	1,500 W
	115 or 230 V, 50/60 Hz	
<b>Dimensions</b> (W x D x H)		
w/o monitor	720 x 700 x 1,080 mm	
with monitor	720 x 700 x 1,400 mm	
<b>Weight</b> (w/o accessories)	120 kg	135 kg

Optional accessories MTM I + II	Item No.
<b>Cassette basket</b>	39600061
<b>Holder for cassette basket</b>	39600062
<b>Reagent beaker</b> (2 necks)	39600030
<b>Refill pack active carbon</b>	39600268
<b>Uninterruptible power supply</b> (UPS) 230 V · 1,500 VA · 1,200 W (MTM I)	11000510
<b>Uninterruptible power supply</b> (UPS) 230 V · 2,200 VA · 1,760 W (MTM II)	11000504
<b>Remote alarm system</b> (GSM)	11000270

# Embedding centers

Slee offers two ergonomic embedding centers for an optimized workflow in smaller and routine laboratories. **MPS P I** is a compact paraffin embedding center for low to medium throughput, **MPS P II** is a modular system for high-throughput routine applications.







## **MPS P I**

Compact paraffin embedding center

## **MPS P II**

Modular paraffin embedding center for high throughput

# MPS P I Compact paraffin embedding center

The space saving **MPS P I** is a complete paraffin dispensing unit including a 3.8 liters paraffin container, a heated working area and a cooling spot. The ergonomically elevated heated working area is illuminated by an adjustable LED light and allows comfortable processing of specimens. All functions of the device are controlled by an intuitive control panel including programmable working hours. Two heated trays provide a pre-warming capacity of 120 cassettes and 250 embedding molds.

## Highlights

- Manual lever and foot switch for paraffin dispensing
- Spacious cooling spot
- Integrated magnifier, adjustable
- Armrest for optimized work ergonomics
- Spacious and heated paraffin collection tray
- 3.8 liters paraffin container
- Programmable operating times
- Easily adjustable forceps holders, magnetic
- LED illumination, adjustable
- Intuitive control panel
- Integrated heated wax trimmer
  - Efficiently removes excess paraffin from any embedding tissue cassette
  - Paraffin is easily melted away and drains into the removable tray below
  - Physical damages (e.g. due to conventional trimming tools such as knife or razor) are consequently avoided
  - Large scale design of the trimmer area enables simultaneous paraffin trimming of multiple blocks
- Two pre-warmed areas for up to 120 cassettes and 250 embedding molds
- Large variety of electrically heated forceps (optional)



## Item No.

MPS P I 230 V, 50/60 Hz 10190000

MPS P I 115 V, 60 Hz 10192000

## Standard components

Pre-warming and dispensing module

Foot switch for paraffin dispenser

Magnifier, adjustable

Paraffin collection tray

Forceps holder

Forceps (1 x blunt, 1 x pointed)

Cleaning spatula, black

Base molds 7 x 7 x 7 mm (stainless steel, 12 pcs.)

Base molds 24 x 24 x 7 mm (stainless steel, 12 pcs.)

Mains cable

Manual

## Specifications

Temperature range up to 80 °C programmable

Cooling spot 50 x 50 mm

Paraffin container  
(capacity) 3.8 l

Pre-warmed area for  
cassettes (W x D x H) up to 120 cassettes  
removable tray 125 x 205 x 40 mm

Pre-warmed area for  
base molds (W x D x H) up to 250 molds  
removable tray 125 x 205 x 40 mm

Electrical parameters 115 V, 60 Hz | 230 V, 50/60 Hz

Dimensions (W x D x H) 450 x 570 x 295 mm

Working area (W x D) 450 x 240 mm

Weight w/o accessories 22 kg

## Flexibel



Forceps can be freely placed in the holders with a capacity of three forceps each. Electrical forceps can be connected optionally.

## Everything within reach



Two heated trays, for either 120 standard cassettes and 250 embedding molds are easily accessible in the rear of the working area.

# MPS P II Modular paraffin embedding center

The modular paraffin embedding center **MPS P II** features ease of operation, spacious working area, large paraffin container capacity. All modules operate at the same working height and can be arranged accordingly to laboratory requirements. The flexible 3-module system consists of a dispensing element **MPS P**, a pre-warming module **MPS W** and a cooling plate **MPS C** or **MPS CX**.

## Highlights

- Manual lever and foot switch for paraffin dispensing
- Spacious cooling spot
- Magnifier, adjustable
- Arm rest for optimized working ergonomics
- Spacious and heated paraffin collection tray
- Paraffin container, volume 5.5 liters
- Programmable operating times
- Magnetic forceps holders, easily adjustable
- LED-illumination, adjustable
- Intuitive control panel
- Integrated heated wax trimmer:
  - Efficiently removes excess paraffin from any embedding tissue cassette
  - Paraffin is easily melted away and drains into the removable tray below
  - Physical damages (e.g. due to conventional trimming tools such as knife or razor) are consequently avoided
  - Large scale design of the trimmer area enables simultaneous paraffin trimming of multiple blocks
- Large variety of electrically heated forceps (optional)





## Item No.

MPS P II 230 V, 50/60 Hz

10185000

MPS P II 115 V, 60 Hz

10187000

## Standard components

Dispensing module MPS P

Pre-warming module MPS W

Cooling module MPS C for 120 cassettes

Foot switch for paraffin dispenser

Magnifier, adjustable

Paraffin collection tray

Forceps holder

Forceps (1 x blunt, 1 x pointed)

Cleaning spatula, black

Base molds 7 x 7 x 7 mm (stainless steel, 12 pcs.)

Base molds 24 x 24 x 7 mm (stainless steel, 12 pcs.)

Mains cable

Manual

# **MPS P**

## ***Dispensing module***



MPS P

## Item No.

MPS P 230 V, 50/60 Hz

10170000

MPS P 115 V, 60 Hz

10172000

## Optional accessories

### Item No.

#### Electrically heated forceps 0.5 - 4 mm

(straight, curved or angled)

on demand

#### Base molds (stainless steel, 12 pcs.)

7 x 7 x 7 mm

30030050

#### Base molds (stainless steel, 12 pcs.)

30 x 24 x 7 mm

30030051

#### Base molds (stainless steel, 12 pcs.)

15 x 15 x 7 mm

30030052

#### Base molds (stainless steel, 12 pcs.)

24 x 24 x 7 mm

30030053

#### Base molds (stainless steel, 12 pcs.)

37 x 24 x 7 mm

30030054

#### Base molds (stainless steel)

Further sizes

on demand

## Specifications

### Temperature range

up to 80 °C (paraffin container)  
up to 80 °C (working area)  
down to -5 °C (cooling spot)

### Paraffin capacity

5.5 l

### Cooling spot

50 x 50 mm

### Forceps holders

2 x 4 adjustable (magnetic)

### Illumination

3 LED spots, fixed  
3 LED spots, adjustable

### Magnifier

included, adjustable

### Paraffin flow

activation manually or via foot  
switch, adjustable flow rate

### Control

programming of temperature,  
working day, working time, time  
and date

### Electrical parameters

115 V, 60 Hz | 230 V, 50/60 Hz

### Dimensions (W x D x H)

450 x 600 x 290 mm

### Working area (W x D)

450 x 240 mm

### Weight

18 kg

## High throughput



Large working area with integrated cooling spot. The working area has a special drainage system and guides spare paraffin into the extractable collection tray. The surface remains clean. This makes working and cleaning much easier.

## Perfect workflow



The large-volume 5.5 l paraffin container allows a constant workflow. With perfectly adjusted light and easy to regulate flow, you will achieve excellent work results.

**MPS W**

## ***Pre-warming module***



MPS W



### Pre-warming for molds



To have enough molds ready, the MPS W has a mold warmer for up to 500 molds. Temperature freely selectable up to 80 °C.

### Pre-warming for cassettes



Take common baskets (like from the MTM tissue processor) and place them directly into the cassette area. The MPS W has a retractable lid for easy filling and operation.

### Easy to clean



The cassette tray can be taken out for cleaning. So, disposal of paraffin is easy.

### Item No.

MPS W 230 V, 50/60 Hz

10180000

MPS W 115 V, 60 Hz

10182000

## Specifications

### Heated cassette area

(W x D x H)	up to 320 cassettes
removable tray	255 x 265 x 55 mm

### Heated mold area

(W x D x H)	up to 500 molds
	260 x 220 x 70 mm

### Temperature range

up to 80 °C (working areas)

programming  
of temperature, working  
day, working time,  
time and date

### Control

### Electrical parameters

115 V, 60 Hz | 230 V, 50/60 Hz

### Dimensions (W x D x H)

300 x 600 x 290 mm

### Weight w/o accessories

15 kg

# **MPS C / CX**

## **Cooling module**



MPS C



MPS CX

	Item No.
MPS C 230 V, 50 Hz	10175000
MPS C 115 V, 60 Hz	10177000

## Specifications MPS C

Temperature range	down to -15 °C
Cassette capacity	up to 80 cassettes
Control	programming of temperature, working day, working time, time and date
Dimensions (W x D x H)	400 x 600 x 290 mm
Cooling area (W x D)	370 x 270 mm
Electrical parameters	115 V, 60 Hz   230 V, 50 Hz
Weight	26 kg

## Optional accessories

	Item No.
Transparent hood for cooling area MPS C	10175100

### Avoid ice



If you work in environments with high humidity ice formation on the cooling plate can occur. To avoid this, a transparent hood with sliding lid is optionally available.

	Item No.
MPS CX 230 V, 50 Hz	10175020
MPS CX 115 V, 60 Hz	10177020

## Specifications MPS CX

Temperature range	down to -15 °C
Cassette capacity	up to 120 cassettes
Control	programming of temperature, working day, working time, time and date
Dimensions (W x D x H)	600 x 600 x 290 mm
Cooling area (W x D)	570 x 270 mm
Electrical parameters	115 V, 60 Hz   230 V, 50 Hz
Weight	35 kg

## Optional accessories

	Item No.
Transparent hood for cooling area MPS CX	on demand

### Independent



With independent controls, the MPS C or CX can be placed according to individual lab requirements.



**SLEE**

medical



# Microtomes

*The high-precision, modularly assembled rotary microtomes range from a manual unit, type **CUT 4062**, to the semi-automatic type **CUT 5062** and to the fully automatic type **CUT 6062**. The range is completed by the manual sliding microtome type **Cuttec S**.*

*All microtomes are equipped with high-precision guideways with cage roller bearings and micrometer feed mechanism to ensure highest stability and precision. A huge variety of accessories offers the possibility and flexibility to customize your equipment and allows the use for any type of material or specimen in medical research, routine diagnostics or industrial applications.*

# Overview

## Rotary microtomes



CUT 4062

### CUT 4062

#### *Manual precision microtome*

##### **Disposable blade holder**

(alternatively: standard knife holder)

##### **Mechanical trimming function in 4 steps,**

10; 20; 30; 40  $\mu\text{m}$

##### **Manual feed with ergonomically located coarse feed wheel**

##### **Specimen orientation**

##### **Acoustic signal at end positions**

##### **Automatic specimen retraction**



CUT 5062

### Options

##### **Section counter, standard specimen clamp**

(up to 50 x 50 mm), **foil clamp, prism set**

### Specifications

**Cutting thickness** 0.5 - 60  $\mu\text{m}$

**Horizontal advance** 28 mm

**Vertical stroke** 60 mm

##### **Specimen orientation**

x/y axis 8°

z axis 360°

**560 x 550 x 325 mm** (W x D x H)

**33 kg**



CUT 6062



## CUT 5062

### *Semi-automatic precision microtome*

#### **Disposable blade holder**

(alternatively: standard knife holder)

#### **Motorized trimming function,**

0.5 - 750 µm

#### **Specimen orientation**

2 specimen feed memory positions via button

Automatic motorized specimen retraction

### Options

Section counter, standard specimen clamp

(up to 50 x 50 mm), foil clamp, prism set

### Specifications

Cutting thickness 0.5 - 100 µm

Horizontal advance 28 mm

Vertical stroke 72 mm

#### **Specimen orientation**

x/y axis 8°

z axis 360°

520 x 600 x 325 mm (W x D x H)

33 kg

## CUT 6062

### *Fully-automatic precision microtome*

#### **Disposable blade holder**

(alternatively: standard knife holder)

#### **Motorized trimming function,**

0.5 - 750 µm

#### **Motorized sectioning**

(section window / variably adjustable cutting speeds)

#### **Specimen orientation**

2 specimen feed memory positions via button

Automatic motorized specimen retraction

### Options

Section counter, standard specimen clamp

(up to 50 x 50 mm), foil clamp, prism set

### Specifications

Cutting thickness 0.5 - 100 µm

Horizontal advance 28 mm

Vertical stroke 72 mm

#### **Cutting speed variable**

up to 450 mm/s

#### **Specimen orientation**

x/y axis 8°

z axis 360°

520 x 600 x 325 mm (W x D x H)

34 kg

# CUT 4062 Manual precision microtome

The Slee precision microtome **CUT 4062** is designed for all applications in routine, research or industry. Years of experience and customer input have contributed to create one of the best manual microtomes available. The **CUT 4062** combines highest precision with user friendliness as well as best comfort. Like all Slee microtomes, the **CUT 4062** comes with a complete set of standard components which can be individually adapted to customer's needs, ready to be used out of the box.



## Highlights

- Ergonomic design
- Spacious, integrated section waste tray
- Wide range of accessories
- Hand wheel lock in any position
- Blade holder levers changeable (for left-handed users)
- Specimen retraction with upstroke
- Section counter (optional)
- Second hand wheel brake (optional)
- Coarse feed wheel reversible direction (on demand)



## Item No.

CUT 4062

10065000

## Standard components

### Specimen orientation

**Universal cassette clamp**, orientable  
(alternatively: standard specimen clamp, orientable)

### Disposable blade holder

(alternatively: standard knife holder)

### Section waste tray

**Disposable blades**, low profile  
(1 box, 50 pcs.)

### Dust cover

### Mains cable

### Manual

## Specifications

**Section thickness range** 0.5 - 60 µm

**Section thickness settings** 0.5 - 2 µm in 0.5-µm-steps  
2 - 10 µm in 1-µm-steps  
10 - 60 µm in 2-µm-steps

**Trim thickness settings** 10 µm, 20 µm, 30 µm,  
40 µm

**Horizontal advance** 28 mm

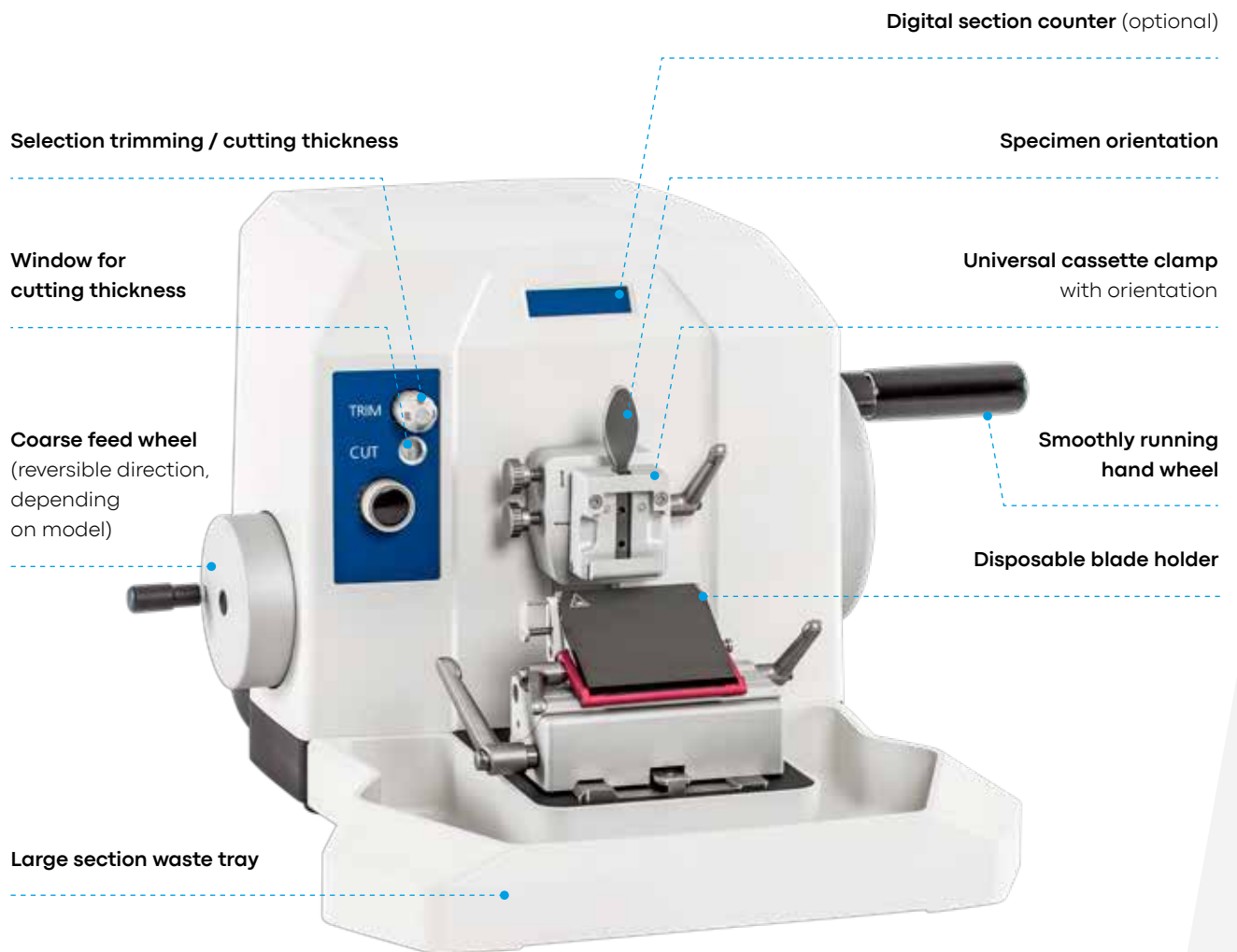
**Vertical stroke** 60 mm

**Specimen retraction** automatic

**Specimen orientation** ± 8°

**Dimensions** (W x D x H) 560 x 550 x 325 mm

**Weight** 33 kg



Optional accessories	Item No.
<b>Aquatec system</b>	10090056
<b>MTR bench top quick freezing unit</b>	10110000
<b>Magnifier with illumination</b> (dimmable)	10090060
<b>TC65 disposable blade holder</b> (for tungsten carbide blades)	10090041
<b>Tungsten carbide blade</b> (1 pcs.)	28406000
<b>Disposable blades</b> (cf. consumables)	
<b>Glass knife holder</b> (for triangle glass knives)	10090014
<b>Segment arc</b> incl. universal sample holder (for glass knife holder application)	10090015

Optional accessories	Item No.
<b>Super Mega cassette clamp,</b> orientable	10090027
<b>Super Mega cassette clamp,</b> fixed	10090021
<b>Standard specimen clamp,</b> orientable	10090006
<b>Standard specimen clamp,</b> fixed	10090007
<b>Foil clamp</b> (use in standard specimen clamp)	10090025
<b>Standard knife holder</b>	10090008
<b>Knife holder basis unit</b>	10090011
<b>Prism</b> (set)	10090017
<b>Round specimen holders</b> (different diameters)	on demand
<b>Section counter</b>	10090020
More on request	

## Easy to use



Trim and cutting thickness are easily adjustable via the centrally located controls. Through the viewing window the set cutting thickness can be seen at any time.

## Section counter



Optional digital section counter at eye level.

# CUT 5062 Semi-automatic precision microtome

The Slee semi-automatic precision microtome **CUT 5062** is designed for all applications in routine, research or industry. Years of experience and customer input have contributed to create one of the best semi-automatic microtomes available. The **CUT 5062** combines highest precision with user friendliness as well as best comfort. Like all Slee microtomes, the **CUT 5062** comes with a complete set of standard components which can be individually adapted to customer's needs, ready to be used out of the box.



## Highlights

- Ergonomic design
- Spacious, integrated section waste tray
- Wide range of accessories
- Intuitive control panel
- Hand wheel lock in any position
- Blade holder levers changeable (for left-handed users)
- 2 operation modes (standard and rocking mode)
- Motorized trimming up to 750  $\mu\text{m}$ , programmable
- Motorized advance / return of specimen (2 speeds)
- Display of section counter, section sum and remaining travel
- Tip function for precise specimen approach
- 2 specimen feed memory positions
- Variable retraction
- External control panel (optional)
- Second hand wheel brake (optional)

**Item No.****CUT 5062 100 - 240 V, 50/60 Hz**

10070001

## Standard components

**Specimen orientation****Universal cassette clamp**, orientable

(alternatively: standard specimen clamp, orientable)

**Disposable blade holder**

(alternatively: standard knife holder)

**Section waste tray****Disposable blades**, low profile (1 box, 50 pcs.)**Dust cover****Mains cable****Manual**

## Specifications

**Section thickness  
range**

0.5 - 100 µm

**Section thickness  
settings**

0.5 - 2 µm in 0.5-µm-steps

2 - 20 µm in 1-µm-steps

20 - 50 µm in 2-µm-steps

50 - 100 µm in 5-µm-steps

**Trim thickness settings**

0.5 - 750 µm

0.5 - 2 µm in 0.5-µm-steps

2 - 20 µm in 1-µm-steps

20 - 50 µm in 2-µm-steps

50 - 150 µm in 5-µm-steps

150 - 750 µm in 10-µm-steps

**Horizontal advance**

28 mm

**Feed speed SLOW**

75 / 150 / 300 / 600 µm/s

**Feed speed**

normal 3,000 µm/s

**Vertical stroke**

72 mm

**Specimen retraction**

0 - 200 µm, selectable

**Specimen orientation**

± 8°

**Electrical parameters**

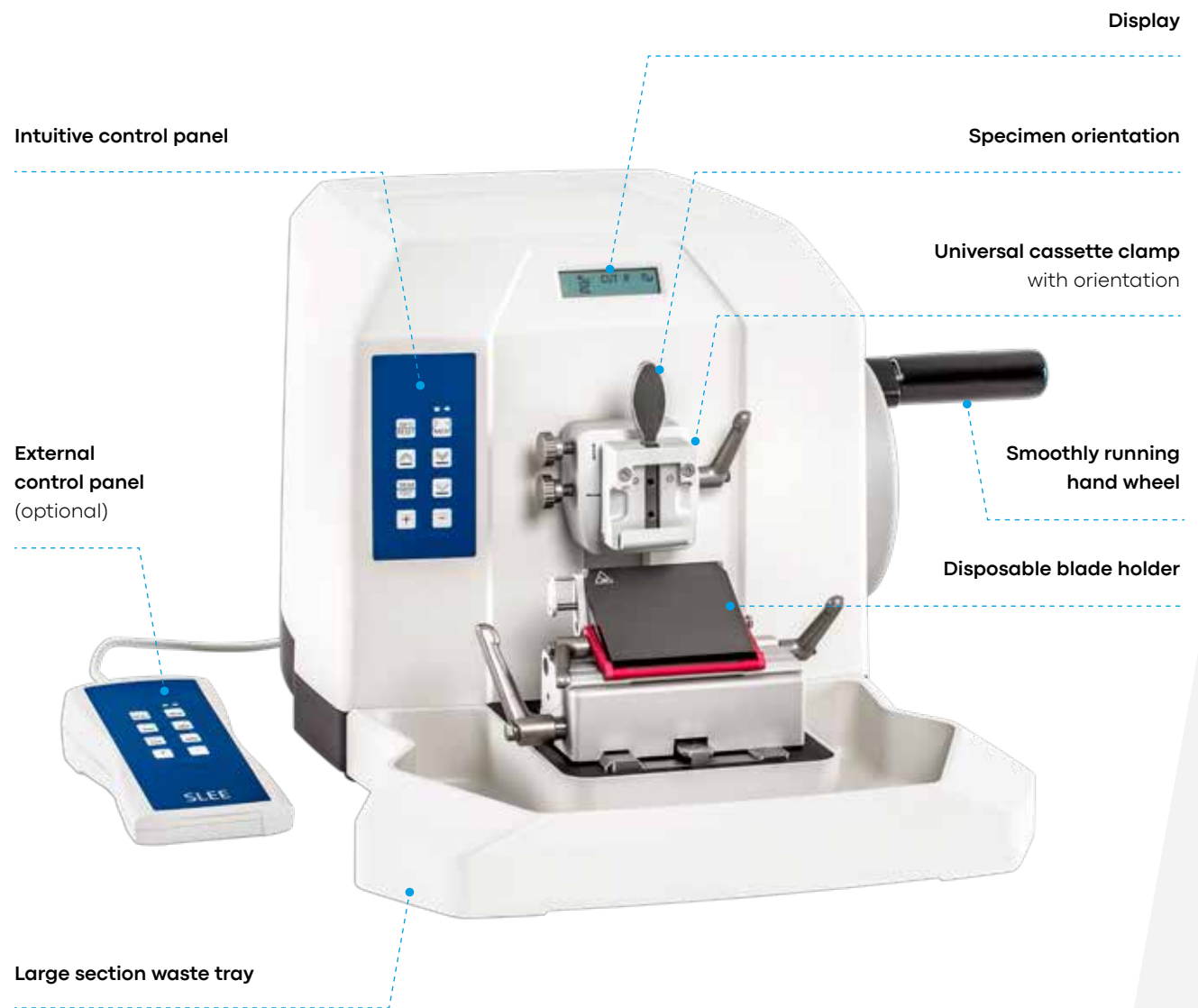
100 - 240 V, 50/60 Hz

**Dimensions (W x D x H)**

520 x 600 x 325 mm

**Weight**

33 kg



Optional accessories	Item No.
Aquatec system	10090056
MTR bench top quick freezing unit	10110000
Magnifier with illumination (dimmable)	10090060
External control panel CUT 5062	10090050
TC65 disposable blade holder (for tungsten carbide blades)	10090041
Tungsten carbide blade (1 pcs.)	28406000
Disposable blades (cf. consumables)	
Glass knife holder (for triangle glass knives)	10090014
Segment arc incl. universal sample holder (for glass knife holder application)	10090015

### Intuitive use

Having a variety of features sometimes ends up in difficult usage, but not with the CUT 5062: The device can be easily controlled via the intuitive control panel.



Optional accessories	Item No.
Super Mega cassette clamp, orientable	10090027
Super Mega cassette clamp, fixed	10090021
Standard specimen clamp, orientable	10090006
Standard specimen clamp, fixed	10090007
Foil clamp (use in standard specimen clamp)	10090025
Standard knife holder	10090008
Knife holder basis unit	10090011
Prism (set)	10090017
Round specimen holders (different diameters)	on demand
More on request	

### All in sight

All settings can be easily seen and monitored in the LCD display being in height of the eyes of the user at the front side of the CUT 5062.



# CUT 6062 Fully-automatic precision microtome

The Slee fully-automatic precision microtome **CUT 6062** is designed for all applications in routine, research or industry. Years of experience and customer input have contributed to create one of the best fully-automatic microtomes available. The **CUT 6062** combines highest precision with user friendliness as well as best comfort. The motorized sectioning combined with innovative features and accessories make the **CUT 6062** unique. Like all Slee microtomes, the **CUT 6062** comes with a complete set of standard components which can be individually adapted to customer's needs, ready to be used out of the box.



## Highlights

- Ergonomic design
- Spacious, integrated section waste tray
- Wide range of accessories
- Intuitive control panel
- Hand wheel lock in any position
- Blade holder levers changeable (for left-handed users)
- High efficient motorized sectioning (section window / variably adjustable cutting speeds)
- 7 different operation modes (motorized: continuous, program, single step, step, window / manual: standard and rocking mode)
- Motorized trimming up to 750  $\mu\text{m}$ , programmable
- Motorized advance / return of specimen (2 speeds)
- Display of section counter, section sum and remaining travel
- Tip function for precise specimen approach
- 2 specimen feed memory positions
- Variable retraction
- External control panel (optional)
- Second hand wheel brake (optional)



## Item No.

CUT 6062 100 - 240 V, 50/60 Hz

10080001

## Standard components

### Specimen orientation

**Universal cassette clamp**, orientable

(alternatively: standard specimen clamp, orientable)

**Disposable blade holder**

(alternatively: standard knife holder)

**Section waste tray**

**Disposable blades**, low profile (1 box, 50 pcs.)

**Foot switch** for motor drive

**Dust cover**

**Mains cable**

**Manual**

## Specifications

### Section thickness range

0.5 - 100 µm

### Section thickness settings

0.5 - 2 µm in 0.5-µm-steps  
2 - 20 µm in 1-µm-steps  
20 - 50 µm in 2-µm-steps  
50 - 100 µm in 5-µm-steps

### Trim thickness settings

0.5 - 750 µm  
0.5 - 2 µm in 0.5-µm-steps  
2 - 20 µm in 1-µm-steps  
20 - 50 µm in 2-µm-steps  
50 - 150 µm in 5-µm-steps  
150 - 750 µm in 10-µm-steps

### Horizontal advance

28 mm

### Feed speed SLOW

75 / 150 / 300 / 600 µm/s

### Feed speed

normal 3,000 µm/s

### Vertical stroke

72 mm

### Cutting speed

up to 450 mm/s

### Specimen retraction

0 - 200 µm, selectable

### Specimen orientation

± 8°

### Electrical parameters

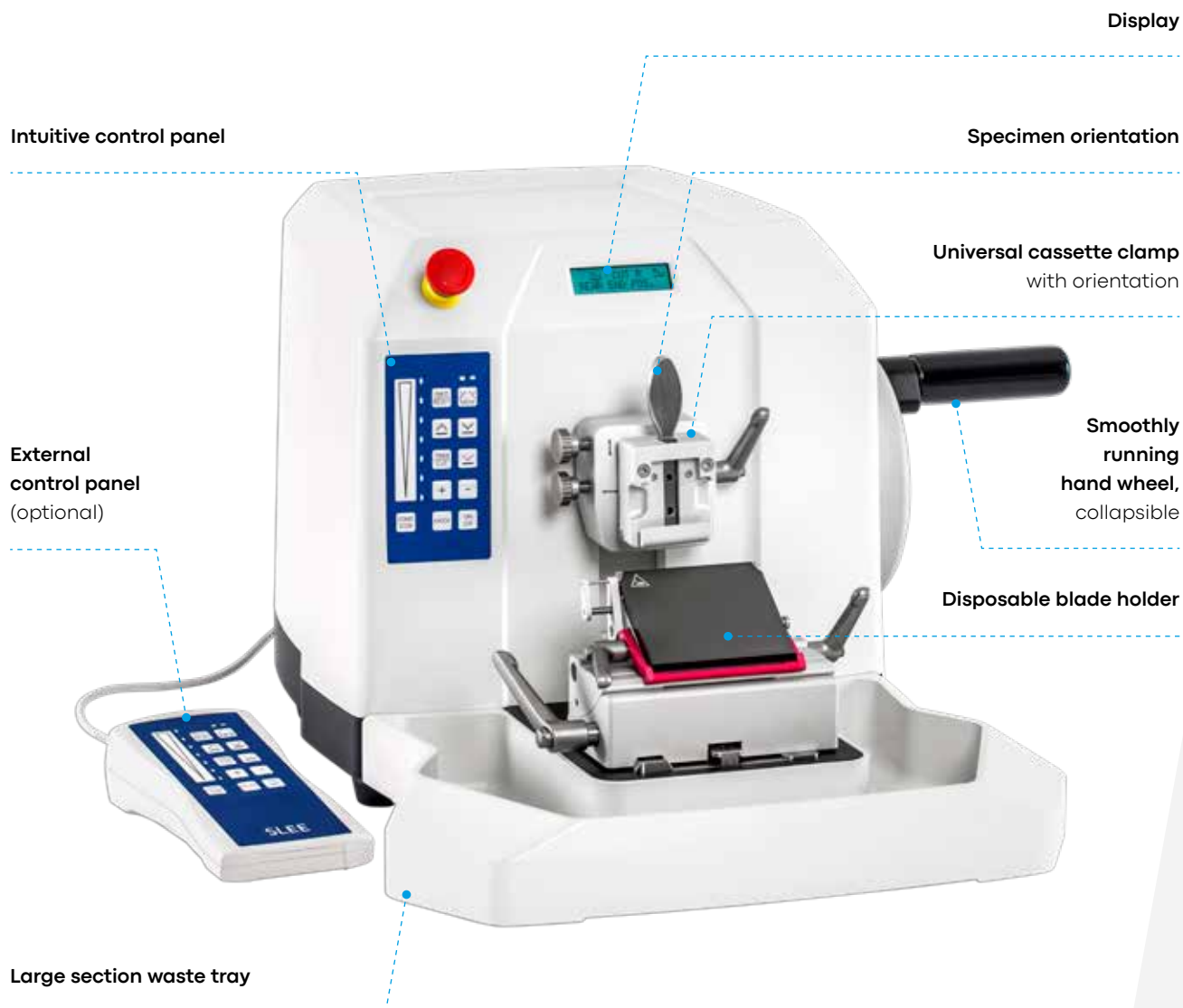
100 - 240 V, 50/60 Hz

### Dimensions (W x D x H)

520 x 600 x 325 mm

### Weight

34 kg



### Collapsible handle



The handle of the hand wheel of the CUT 6062 can be folded in to increase safety when the cutting motor is in operation.

### Comfort



For enjoying highest comfort when using CUT 6062, the device is delivered with a foot switch as a standard accessory.

Optional accessories	Item No.
Aquatec system	10090056
MTR bench top quick freezing unit	10110000
Magnifier with illumination (dimmable)	10090060
External control panel CUT 6062	10090051
TC65 disposable blade holder (for tungsten carbide blades)	10090041
Tungsten carbide blade (1 pcs.)	28406000
Disposable blades (cf. consumables)	
Glass knife holder (for triangle glass knives)	10090014
Segment arc incl. universal sample holder (for glass knife holder application)	10090015

Optional accessories	Item No.
Super Mega cassette clamp, orientable	10090027
Super Mega cassette clamp, fixed	10090021
Standard specimen clamp, orientable	10090006
Standard specimen clamp, fixed	10090007
Foil clamp (use in standard specimen clamp)	10090025
Standard knife holder	10090008
Knife holder basis unit	10090011
Prism (set)	10090017
Round specimen holders (different diameters)	on demand
More on request	

## Intuitive use



Having a variety of features sometimes ends up in difficult usage, but not with the CUT 6062: The device can be easily controlled via the intuitive control panel.

## All in sight



All settings can be easily seen and monitored in the LCD display being in height of the eyes of the user at the front side of the CUT 6062.

# Beyond standard application

The high precision microtomes of the **CUT** series are the basis for almost all applications where high-quality sectioning is requested. Together with add-on equipment such as the **MTR** bench top quick-freezing unit or the **Aquatec** system the **CUT** microtomes are ready for any kind of high performance cutting in the field of medical and industrial applications.

## Precise orientation



The specimen orientation on the x and y axis enables fast alignment of the specimens in the desired position.

## Flexible



Full flexibility due to the disposable blade holder or standard knife holder and the multiple clamps for any kind of specimen. The clamping levers and blade ejector are changeable (from left to right).

## Easy to clean



The design of the CUT microtomes supports the simplest and easiest cleaning possible.

## Section waste tray



The large waste tray fits perfectly to the base plate of the microtome and collects the waste during sectioning. Disposal of cutting waste is easy and fast.



### Perfect fit

The best microtome is nothing without the perfect blade. We offer premium quality high and low profile plasma blades as well as tungsten carbide blades and PTFE coated disposable blades.



### Best sight

To make even small biopsy samples visible, CUT microtomes can be equipped with a magnifier with dimmable illumination (optional).



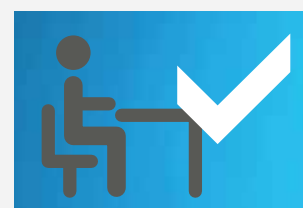
### Safety

The easy to operate hand wheel can be locked in any position. This ensures user's safety as well as protection for the sample. The blade holder features a finger protection system for increased safety.



### Organized

All tools needed for sectioning can be placed on the special area on top of the microtome housing. This allows fast and fatigue-free working.



### Ergonomics

All CUT microtomes have been created with the user in mind - ergonomics are just as important as the quality of the section. Fits perfectly on ergotec series workstations.

# Aquatec Transfer system for microtomes of CUT series

*The **Aquatec** system provides the solution to the daily challenges of cutting demanding paraffin sections. Already during the cutting process, the section is stretched due to the temperature-controlled laminar water film. The volume flow of the water film can be adjusted at any time according to the cutting requirements.*

When the transfer bridge is open, the damp cutting waste is led straight into the waste container and condenses there by collapsing in on itself. This massively reduces the volume. Frequent emptying of the cutting waste container is no longer necessary.

With the bridge closed, the selected section slides gently directly into the temperature-controlled water bath. In the illuminated water bath the section can be evaluated and selected. The high-quality sections can now be easily handled in the accustomed manner. All settings are carried out via the touch display on the front.



## Highlights

- Adjustable laminar water flow for perfect section stretching
- Significant reduction in the volume of section waste
- Easily removable waste tray
- Simplified cutting and simple creation of section ribbons
- Freely positionable unit for section illumination, dimmable
- Intuitive control via touchscreen
- Display with lock function to prevent unauthorized changes of device settings
- Integrated blade ejector
- Integrated power supply and electronic control

Item No.

Aquatec 100 - 240 V, 50/60 Hz

10090056



Setting up the device



Taking the sample

## Specifications

Water bath temperature	up to 50 °C
Water bath volume	750 ml
Pump reservoir volume	570 ml
Flow rate	0 - 500 ml/min

## Specifications

<b>Dimensions</b> (W x D x H)	
w/o transfer bridge, knife holder	
basic device	
mounted on microtome	300 x 235 x 128 mm
basic device	
not mounted on microtome	300 x 280 x 128 mm

<b>Electrical parameters</b>	100 - 240 V, 50/60 Hz
------------------------------	-----------------------

### Weight

basic device	
w/o transfer bridge, knife holder, incl. lid	5.0 kg
knife holder AQ	2.4 kg

# CUT

## External control panel

The external control panel allows the user to control the device from the left or right side of the unit. The greater distance is an additional protection from blades and moving parts.

Item No.

External control panel CUT 5062

10090050

External control panel CUT 6062

10090051



### Highlights

- Free positioning due to long supply cable with 1.8 m length (suitable for right- and left-handers)
- Reaching over the blade is avoided
- Same user interface of device and control panel
- Secure stand due to rubber feet, no slipping
- User-friendly shape



# Magnifier with illumination

*When miniature samples have to be processed precisely, attention to detail is crucial. The illuminated magnifier mounted directly on the microtome basis is the perfect accessory to meet these requirements.*

Item No.

Magnifier with illumination

100 - 240 V, 50/60 Hz

10090060



## Highlights

- Rotatable and adjustable through flexible metal tube
- Lens (Ø 72 mm, diopter: 6)
- Light source: 63 x light-emitting diode (LED), neutral white
- Dimmer (touch function)

# MTR

## Bench top quick-freezing unit

The **MTR** quick-freezing unit consists of a compressor cooling system with a 2 m flexible isolation tube and a cooling block which can be adapted to a standard specimen clamp of different types of microtomes.



### Highlights

- Low operating noise
- Self optimizing controller for temperature accuracy
- Manual defrost
- High cooling capacity down to -45 °C

Specifications

Cooling capacity	down to -45 °C
Dimensions (W x D x H)	410 x 485 x 310 mm
Weight	28 kg

Item No.

MTR 230 V, 50/60 Hz for CUT series	10110000
MTR 230 V, 50/60 Hz for Cuttec S	10110001
MTR 115 V, 60 Hz for CUT series	10110002
MTR 115 V, 60 Hz for Cuttec S	10110003

*Slee  
Fresh  
Design.  
New  
Ideas.*

# Microtome **Cuttec S**

*Manual sliding microtome with precise mechanics  
and flexible specimen orientation*



# Cuttec S

## Manual sliding microtome

The manual sliding microtome **Cuttec S** is designed for all applications in routine, research or industry, always focusing on the needs of the user. The precise mechanisms together with the smooth operation are contributing to best quality sections every day. Features like the specimen orientation are included as standard components.

### Specifications

Section thickness range	0 - 60 µm
Section thickness settings	0 - 15 µm in 1-µm-steps
	15 - 60 µm in 5-µm-steps
Automatic feed	0 - 60 µm
Specimen feed	30 mm
Maximum specimen size	50 x 70 x 20 mm
Specimen orientation	±8°
Length of cutting way	180 mm
Dimensions (W x D x H)	150 x 450 x 200 mm
Weight w/o accessories	18 kg

### Item No.

Cuttec S

10040001



### Highlights

- High quality sections
- Safety features to protect user and specimen
- Ergonomic design for fatigue-free working
- Precise specimen orientation
- Complete set of accessories
- Waste tray included

# Safe and easy operation

*Keeping the safety of the user and specimen in mind, e.g. by the locking mechanism or the finger protection system*



### **Specimen orientation**



Specimen orientation on the x and y axis allows quick alignment of the specimen to the desired position.

### **Finger protection**



Manipulations with the inserted knife are risky. To prevent injuries, the red finger guard offers protection.

### **Waste tray**



The waste tray included in the standard equipment perfectly fits to the housing and collects the cutting waste. Emptying is fast and easy.

### **Easy Operation**



Operation is simple and all settings are within reach of the user. E.g. you can find the cutting thickness selection on the front side of the device. Simply set the number on the wheel.

### **Safety**



Since the carriage of the Cuttec S is very smooth-running, it is important to brake it easily. This is achieved by the very easily accessible brake.

### **Perfect fit**



The best microtome is nothing without the perfect blade. Slee offers both low and high profile blades that perfectly fit the Cuttec S.



# Cryostats

*The Slee cryostats stand for reliability, precision, safety and convenience for a wide range of applications in histopathology as well as in industry for quality control and materials research. Since the development of the world's first cryostat, Slee stands for the highest quality medical devices and products. The devices offer best ergonomic features and efficiency. The **MEV** and **MNT** series are equipped with a spacious cooling chamber, have intuitive controls and an automatic defrost function. The heart of all devices is the precision rotary microtome in proven Slee quality. A wide range of optional accessories allows adaptation to individual requirements.*





# Overview cryostats



**MEV / MEV +**  
Routine cryostat

Exchangeable standard knife or disposable blade holder

Specimen orientation

Low temperature storage area for up to 24 object holders

Power saving mode

Automatic motorized retraction

## Options

- 2 quick freezing positions
- UV-C disinfection
- Object cooling (-45 °C)
- Extraction system

## Specifications

Cutting thickness 0.5 - 100 µm

Trimming thickness 0.5 - 750 µm

Horizontal advance 28 mm

Vertical stroke 57 mm

Specimen orientation x/y axis 8°, z axis 360°

Specimen holders 22 and 35 mm Ø, with grip protection

Cryochamber temperature 0 °C down to -35 °C

MEV 680 x 760 x 1,110 mm (W x D x H)

MEV 127 kg, MEV + 154 kg

MEV +: product based on MEV platform including the following options:

UV-C disinfection, 2 quick freezing positions and object cooling



**MNT**  
High-end cryostat

Exchangeable standard knife or disposable blade holder

Variable cutting speed

Specimen orientation

Low temperature storage area for up to 24 object holders

Power saving mode

Automatic motorized retraction

## Options

- 2 quick freezing positions
- UV-C disinfection
- Object cooling (-45 °C)
- Extraction system

## Specifications

Cutting thickness 0.5 - 100 µm

Trimming thickness 0.5 - 750 µm

Horizontal advance 28 mm

Vertical stroke 57 mm

Variable cutting speed 0.5 - 300 mm/s

Specimen orientation x/y axis 8°, z axis 360°

Specimen holders 22 and 35 mm Ø, with grip protection

Cryochamber temperature 0 °C down to -35 °C

MEV +, MNT 750 x 760 x 1,110 mm (W x D x H)

154 kg

# MEV/ MEV +

## Routine cryostat

The model **MEV** features convenient operation and a modern rotary microtome. The space-saving design has a large stainless steel cryo-chamber, an effective freezing bar with 24 positions and a cryochamber cooling temperature down to -35 °C.

Many years of experience in this market and regular feedback from customers enable us to provide the **MEV +** cryostat, covering the most common requirements most frequently needed in routine histology. The device is equipped with UV-C surface disinfection, 2 quick freezing positions and object cooling.



### Highlights

- Modern rotary microtome with high-precision automatic feed
- Integrated section counter
- Large anti-roll plate
- Intuitive control
- Automatic defrost
- 24 freezing positions
- Extraction system (optional)
- 2 quick freezing positions (optional)
- UV-C disinfection (optional)
- Object cooling (optional)

	Item No.
MEV 230 V, 50/60 Hz	10150000
MEV 115 V, 60 Hz	10153000

## Standard components

### Anti-roll plate

### Specimen holders (5 x Ø 22 mm; 5 x Ø 35 mm)

### Section counter

### Disposable blade holder

(alternatively: standard knife holder)

### Heat extractor (1 pcs.)

### Rack for specimen holders (stainless steel)

### Disposable blades (box with 50 pcs.)

### CryoGlue embedding medium (125 ml)

### Cryostat low temperature oil (50 ml)

### Set of Allen keys

### Clear-cut brush

### Mains cable

### Manual

	Item No.
MEV + 230 V, 50/60 Hz	10150700
MEV + 115 V, 60 Hz	10150701

**MEV + including:** UV-C disinfection, 2 quick freezing positions and object cooling

## Specifications

**Cryochamber temperature** 0 °C down to -35 °C

### Section thickness range

0.5 - 100 µm

### Section thickness settings

0.5 - 2 µm in 0.5-µm-steps  
2 - 20 µm in 1-µm-steps  
20 - 50 µm in 2-µm-steps  
50 - 100 µm in 5-µm-steps

### Trim thickness settings

0.5 - 750 µm  
0.5 - 2 µm in 0.5-µm-steps  
2 - 20 µm in 1-µm-steps  
20 - 50 µm in 2-µm-steps  
50 - 150 µm in 5-µm-steps  
150 - 750 µm in 10-µm-steps

### Horizontal advance

28 mm

### Vertical stroke

58 mm

### Specimen retraction

0 - 200 µm, selectable

### Specimen orientation, horizontal

8°

### Specimen orientation, vertical

8°

### Specimen orientation, z axis

360°

### Electrical parameters

115 V, 60 Hz | 230 V, 50/60 Hz

### Dimensions (W x D x H)

#### MEV

680 x 760 x 1.110 mm

#### MEV + and all devices

750 x 760 x 1.100 mm

with object cooling option

### Weight w/o accessories

127 kg MEV

154 kg MEV +



MEV stainless steel cryochamber with modern rotary microtome

## Options

	Item No.
<b>2 quick freezing positions</b>	10159000
<b>UV-C disinfection</b> 230 V, 50/60 Hz	10169000
<b>UV-C disinfection</b> 115 V, 60 Hz	10169001
<b>Object cooling</b> 230 V, 50/60 Hz	10164000
<b>Object cooling</b> 115 V, 60 Hz	10164200
<b>Debris extraction system</b> 230 V, 50/60 Hz	10167000
<b>Debris extraction system</b> 115 V, 60 Hz	10167200

## Optional accessories

	Item No.
<b>Standard knife holder</b>	10156010
<b>Section waste cloth</b> (set of 10 pcs.)	30000015
<b>Specimen holder</b> (Ø 22 mm; 5 pcs.)	30000002
<b>Specimen holder</b> (Ø 28 mm; 5 pcs.)	30000017
<b>Specimen holder</b> (Ø 35 mm; 5 pcs.)	30000000
<b>Specimen holder</b> (Ø 50 mm; 5 pcs.)	30000003
<b>Rack for specimen holders</b> (stainless steel)	31000769
<b>Cork plates</b> (Ø 20 mm; 100 pcs.)	30001001
<b>CryoGlue embedding medium</b> (4 x 125 ml)	30001100
<b>Clear-cut brush</b>	30001030
<b>Anti-roll plate</b> (disposable blade holder, plastic)	32001050
<b>Anti-roll plate</b> (standard knife holder, plastic)	32001049
<b>Steel knife</b> (16 cm-C-profile, 1 pcs.)	28000026
<b>Disposable blades</b> (cf. consumables)	
<b>Ergosit laboratory chair</b>	10157010

# MNT

## High-end cryostat

The **MNT** high-end cryostat is designed for histopathology and research applications. The device is equipped with a fully automatic rotary microtome with extremely high mechanical stability and backlash-free roller guides. Furthermore, the device has a state-of-the-art control system.



### Highlights

- Modern rotary microtome with high-precision automatic feed
- Integrated section counter
- Cutting motor with variable speed
- Large anti-roll plate
- Intuitive control
- Automatic defrost
- 24 freezing positions
- Extraction system (optional)
- 2 quick freezing positions (optional)
- UV-C disinfection (optional)
- Object cooling (optional)

MNT 230 V, 50/60 Hz 10160000

MNT 115 V, 60 Hz 10162000

## Standard components

Anti-roll plate

Specimen holders (5 x Ø 22 mm; 5 x Ø 35 mm)

Section counter

Disposable blade holder  
(alternatively: standard knife holder)

Heat extractor (1 pcs.)

Foot switch for motor drive

Rack for specimen holders (stainless steel)

Disposable blades (box with 50 pcs.)

CryoGlue embedding medium (125 ml)

Cryostat low temperature oil (50 ml)

Set of Allen keys

Clear-cut brush

Mains cable

Manual

## Specifications

Cryochamber  
temperature 0 °C down to -35 °C

Section thickness  
range 0.5 - 100 µm

Section thickness  
settings 0.5 - 2 µm in 0.5-µm-steps  
2 - 20 µm in 1-µm-steps  
20 - 50 µm in 2-µm-steps  
50 - 100 µm in 5-µm-steps

Trim thickness  
settings 0.5 - 750 µm  
0.5 - 2 µm in 0.5-µm-steps  
2 - 20 µm in 1-µm-steps  
20 - 50 µm in 2-µm-steps  
50 - 150 µm in 5-µm-steps  
150 - 750 µm in 10-µm-steps

Horizontal advance 28 mm

Vertical stroke 58 mm

Sectioning speed 20 - 300 mm/s, selectable

Specimen retraction 0 - 200 µm, selectable

Specimen orientation,  
horizontal 8°

Specimen orientation,  
vertical 8°

Specimen orientation,  
z axis 360°

Electrical parameters 115 V, 60 Hz | 230 V, 50/60 Hz

Dimensions (W x D x H) 750 x 760 x 1.100 mm

Weight w/o accessories 154 kg



MNT stainless steel cryochamber with modern rotary microtome and specimen holder

## Options

### Item No.

<b>2 quick freezing positions</b>	10159000
<b>UV-C disinfection</b> 230 V, 50/60 Hz	10169000
<b>UV-C disinfection</b> 115 V, 60 Hz	10169001
<b>Object cooling</b> 230 V, 50/60 Hz	10164000
<b>Object cooling</b> 115 V, 60 Hz	10164200
<b>Debris extraction system</b> 230 V, 50/60 Hz	10167000
<b>Debris extraction system</b> 115 V, 60 Hz	10167200

## Optional accessories

### Item No.

<b>Standard knife holder</b>	10156010
<b>Section waste cloth</b> (set of 10 pcs.)	30000015
<b>Specimen holder</b> (Ø 22 mm; 5 pcs.)	30000002
<b>Specimen holder</b> (Ø 28 mm; 5 pcs.)	30000017
<b>Specimen holder</b> (Ø 35 mm; 5 pcs.)	30000000
<b>Specimen holder</b> (Ø 50 mm; 5 pcs.)	30000003
<b>Rack for specimen holders</b> (stainless steel)	31000769
<b>Cork plates</b> (Ø 20 mm; 100 pcs.)	30001001
<b>CryoGlue embedding medium</b> (4 x 125 ml)	30001100
<b>Clear-cut brush</b>	30001030
<b>Anti-roll plate</b> (disposable blade holder, plastic)	32001050
<b>Anti-roll plate</b> (standard knife holder, plastic)	32001049
<b>Steel knife</b> (16 cm-C-profile, 1 pcs.)	28000026
<b>Disposable blades</b> (cf. consumables)	
<b>Ergosit</b> laboratory chair	10157010



# Water baths & slide warmers

*Slee offers a reliable and safe solution for every laboratory and all requirements. The devices are available as combination or as a single device*







## **Slidetec Water / Heat**

Water bath & slide warmer

### **Slidetec Heat**

Slide warmer

### **Slidetec Water**

Water bath

### **Slidetec Water S**

Water bath

# Overview

## Water baths & slide warmers



### Slidetec Water / Heat

*Water bath & slide warmer*

#### Specifications

Water bath volume	2 l
Capacity slide warmer	30 slides
Temperature range	RT up to 60 °C (water bath) RT up to 80 °C (slide warmer)
Electrical parameters	115 V, 60 Hz   230 V, 50/60 Hz
Consumption	600 W
Dimensions (W x D x H)	370 x 560 x 230 mm
Weight	18 kg

#### Item No.

Slidetec Water / Heat 230 V, 50/60 Hz	13000500
Slidetec Water / Heat 115 V, 60 Hz	13000501

### Slidetec Heat

*Slide warmer*

#### Specifications

Capacity slide warmer	30 slides
Temperature range	RT up to 80 °C
Electrical parameters	115 V, 60 Hz   230 V, 50/60 Hz
Consumption	300 W
Dimensions (W x D x H)	350 x 370 x 230 mm
Weight	15 kg

#### Item No.

Slidetec Heat 230 V, 50/60 Hz	13000510
Slidetec Heat 115 V, 60 Hz	13000511



## Slidetec Water

*Water bath*

### Specifications

Water bath volume	2 l
Temperature range	RT up to 60 °C
Electrical parameters	115 V, 60 Hz   230 V, 50/60 Hz
Consumption	300 W
Dimensions (W x D x H)	350 x 370 x 230 mm
Weight	10 kg

#### Item No.

Slidetec Water 230 V, 50/60 Hz	13000520
Slidetec Water 115 V, 60 Hz	13000521

### Optional accessories

#### Item No.

Lid for Slidetec Water or Water / Heat to cover the glass tray	13000550
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## Slidetec Water S

*Water bath*

### Specifications

Water bath volume	1.6 l
Temperature range	RT up to 60 °C
Electrical parameters	115 V, 60 Hz   230 V, 50/60 Hz
Consumption	300 W
Dimensions (W x D x H)	280 x 280 x 100 mm
Weight	2 kg

#### Item No.

Slidetec Water S 230 V, 50/60 Hz	13000530
Slidetec Water S 115 V, 60 Hz	13000531

### Optional accessories

#### Item No.

Lid for Slidetec Water S	13000551
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# Staining systems

*Slee offers three different staining systems for different demands. Each laboratory can be equipped with a suitable staining system according to its individual requirements.*





## **MSM**

Carousel slide stainer

## **Cromatec I / Cromatec II**

Flexible staining system  
with highest throughput

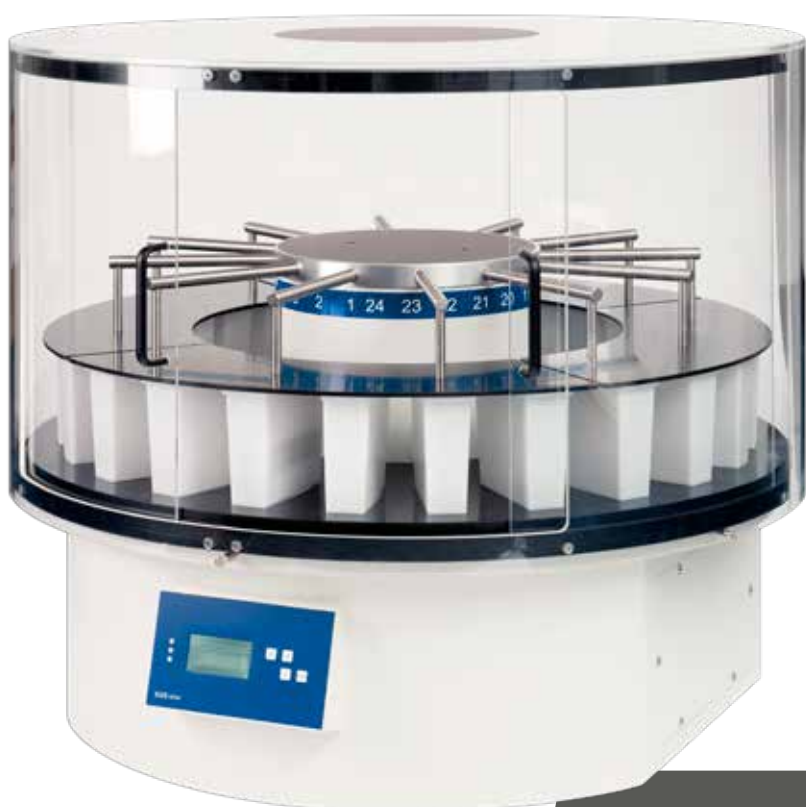
## **MAS**

Multi protocol stainer



# MSM Carousel slide stainer

With its simple user interface and sophisticated technology, the **MSM** carousel stainer is designed to meet the requirements for routine staining in histology and cytology laboratories. The device is equipped with 24 incubation stations containing up to 400 ml. The flex-programming option allows different staining protocols while using the same reagents. An integrated UPS (uninterruptible power supply, with built-in batteries) ensures highest process reliability even in environments with frequent power failures. A reliable extraction system with carbon filter reduces contact with reagent vapors for increased workplace safety.



## Highlights

- Easy loading and full process control due to rotating table principle
- Integrated UPS system protects your samples
- Flex-programming
- System status monitor
- Password protection
- Intuitive control panel

## Item No.

MSM 100 – 240 V, 50/60 Hz

12000205

## Standard components

**Staining cuvettes** (plastic, 24 pcs.)

**Transport basket** (plastic, 1 pcs.)  
capacity 30 standard size micro slides

**Mains cable**

**Manual**

## Specifications

### Staining cuvettes

material	plastic
dimensions (W x D x H)	130 x 40 x 135 mm
volume	400 ml

### Transport basket

material	plastic
capacity	30 standard size micro slides

<b>Programming</b>	20 staining programs, freely programmable
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<b>Electrical parameters</b>	100 – 230 V, 50/60 Hz
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<b>Dimensions</b> (W x D x H)	870 x 870 x 750 mm
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### Weight

w/o accessories	80 kg
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## Options

## Item No.

<b>Hood</b> for MTP / MSM (Perspex)	11000220
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<b>Staining cuvettes</b>	12000260
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<b>Slide basket</b> (30 slides)	12000261
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<b>Drying station</b>	12000256
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<b>Exhaust fan</b>	11000210
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<b>Exhaust fan</b> incl. carbon filter	11000211
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<b>Carbon filter</b>	11000254
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# Cromatec I / II

## Stainer with highest throughput

*The **Cromatec** series represents maximum productivity and highest economy in routine histology and cytology. It combines consistent staining quality with extraordinary ease of operation of the device. A continuous loading of the baskets with up to 30 slides supports the user to fulfil the daily requirements and enables staining with highest throughput.*

The Cromatec slide baskets can be processed directly in all Slee coverslippers. In case of using a different coverslipper, there are adapters available for using the baskets in the Cromatec product line.

The flexibility of the Slee Cromatec stainer is unique. This singularity is characterized by individually programmable time settings for each station and freely selectable positions for the washing cuvettes. The cleaning of the exhaust

air is accomplished by the integrated carbon filter or by a connection to a central extraction system. The very quiet operating noise avoids any disturbance. Due to the compact and space saving design, the stainer can be easily integrated into your laboratory. To safeguard the operation of the unit in case of power failures, every device is equipped as standard with an integrated uninterruptible power supply (UPS).

### Highlights

- Highest throughput in routine, e.g. H&E staining
- Individual time settings, station for station, for maximum flexibility
- Continuous loading with slide baskets
- Up to 6 washing cuvettes with controlled fresh water supply
- Reagent management system for maximum and consistent staining quality
- Smart device connectivity for monitoring staining processes, apps for iOS and Android
- Very quiet operating noise
- Integrated exhaust cleaning with carbon filter
- Easy handling via 7" touch display
- Integrated LED illumination of the working area
- Integrated uninterruptible power supply



	Item No.
Cromatec I 100 - 240 V, 50/60 Hz	17000000
Cromatec II 100 - 240 V, 50/60 Hz	17000001

## Highest flexibility

Cromatec I	Cromatec II
High process flexibility	High process flexibility
Maximum throughput	Maximum throughput
	Additional heating station

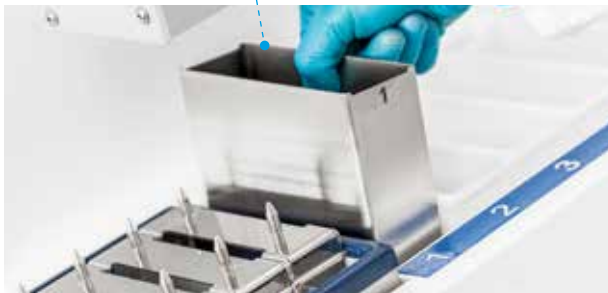


# Cromatec II

## Stainer with highest throughput

**Cromatec II** is based on model **Cromatec I** but offers an additional heating station. According to the user's requirement, it can be used as de-paraffinization or heating station. When this station is used as a de-paraffinization station, the heating function is additionally supported by a laminar air flow to warm up the slides in the slide basket quickly and evenly.

Cromatec II  
cuvette as  
de-paraffinization station



Cromatec II  
cuvette as  
heating station



### Highlights Cromatec II

- Integrated heating station
- Alternatively usable for de-paraffinization or heating
- Easy to remove heating station for easy cleaning
- Intuitively programmable heating parameters

## Standard components

**Cromatec I or Cromatec II**

**Staining cuvettes** (20 pcs.)

**Washing cuvettes** (6 pcs.)

**Heating station** (only Cromatec II)

**Basket carrier** (6 pcs.)

**Slide baskets** (6 pcs.)

**Transport container** with lifter

**Xylene container insert**  
with cover for unloading station

**Supply and drain hose**

**Mains cable**

**Manual**

## Specifications

**Cromatec I Cromatec II**

<b>Number of stations</b>	20
<b>Capacity of slide baskets</b>	30 slides
<b>Loading capacity</b>	20 slide baskets
<b>Throughput slides</b>	up to 1,800 pcs./hrs.
<b>Volume staining / washing cuvette</b>	400 ml
<b>Number of washing cuvettes</b>	up to 6
<b>Loading / unloading stations</b>	5 slide baskets each 20 programmes, with up to 20 steps each
<b>Programmes</b>	
<b>Incubation period</b>	5 sec. up to 1 hrs. up to 200 m <sup>3</sup> /hrs., nominal diameter for rear connection to central extraction system Ø 100 mm
<b>Exhaust / exhaust air volume</b>	
<b>UPS back-up time</b>	up to 4 hrs.
<b>Selectable temperature range</b>	- 30 °C up to 70 °C
<b>Process time</b>	- 0 sec. up to 59 min., 59 sec.
<b>Electrical parameters</b>	100 - 240 V, 50/60 Hz
<b>Dimensions (W x D x H)</b>	1,560 x 640 x 620 mm
<b>Weight</b>	110 kg 115 kg

## Optional accessories

**Item No.**

**Adapter clip** for SAKURA basket  
(20 slides) 41000900

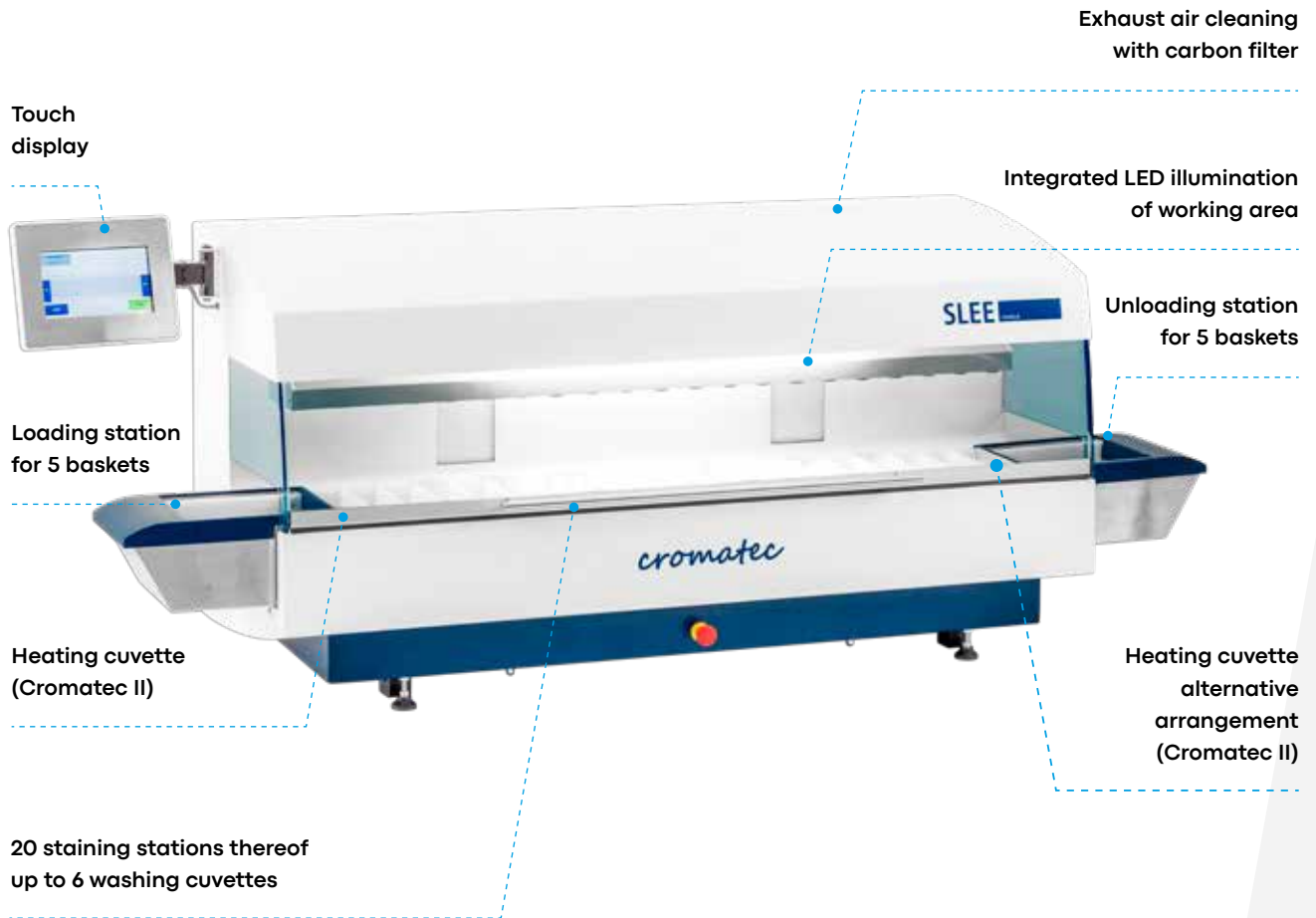
Further adapters on request

**Cromatec I and Cromatec II**

The devices can be adapted accordingly to the use of slide baskets from other manufacturers. Please contact us if required.

# Easy operation

Everything under control at all times. Super easy and absolutely reliable.



## Under control

7" touch display for real-time process monitoring as well as fast and direct interaction with the device. Designed for easy and effective parameter settings, multilingual.



## Process monitoring

All steps and their individual run time are clearly visible and under control; at any time. Start and end times are clearly visible to control the workflow. Real-time monitoring via app on smart device possible.



## Reagent Management System



The Reagent Management System helps the user to schedule the exact timing of changing the reagents. This ensures reproducible, high-quality staining run by run.

## Customized protocols



Up to 20 user-defined logs can be saved under individual names. The Cromatec stainer enables the user to define the process time for each single step.

## Loading station



Continuous loading using the loading station. Baskets are automatically taken out of the loading station when the Cromatec is ready to process the next staining step.

## Easy unloading



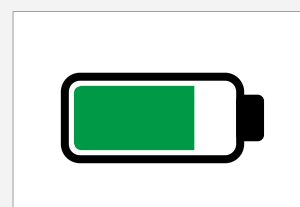
Easy unloading of 3 slide baskets using the special lifter. The removed baskets can be temporarily stored in the transport container which is also included in the standard equipment of the device.

## Cuvette arrangement



Filling of the reagents or cleaning of the cuvettes by simple removal. Washing cuvettes can be freely positioned or used as additional staining cuvettes.

## Safety



In case of a power failure the Cromatec processes the staining up to 4 hours due to the integrated uninterruptible power supply (UPS) and finishes the protocols safely. The power failure is shown on the display and in the app.

# Slee Device Manager App

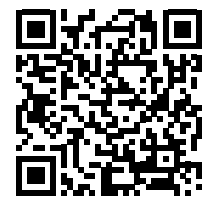
for Cromatec I / II

Interruptions in the staining process lead to bad results and consequently to high manual reworking efforts and sometimes even to a loss of the specimen. Bluetooth offers an easy possibility to connect tablets and smartphones with the Cromatec.

The current status of the staining process in real-time can

be monitored at any time with the Slee Device View App. In case of any interruption (e.g. power failure) or an unauthorized interference (e.g. opening the hood) an information or warning message is provided by the app.

The app enables the user to monitor and display several Cromatec stainers simultaneously.



***Slee***  
***Device***  
***View App.***  
***Management***  
***at its best.***

# MAS

## Multi protocol stainer

The tissue stainer **MAS** combines flexibility with speed and opens new dimensions in the field of automation. Due to the large number of 44 stations it is possible to work simultaneously with different staining protocols. The device can process up to 12 baskets containing 30 slides each. Programming and process control is executed via colored LCD display.

The Reagent Management System (RMS) ensures high sample quality and helps to reduce consumption and costs. User safety and comfort are ensured by a highly efficient integrated exhaust system including carbon filter.

### Highlights

- 4 x loading stations
- 4 x unloading stations
- 6 x washing cuvettes with controlled fresh water inlet
- 30 x staining stations with agitation
- 2 drying stations  
(optional, in combination with 4 water baths)
- Carbon filter or tubing for exhaust system
- Universal power input 230 V, 50/60 Hz



# Item No.

MAS 230 V, 50/60 Hz 14000500

MAS 230 V, 50/60 Hz  
with drying stations 14000502

MAS 230 V, 50/60 Hz  
with conveyer to coverslipper MCS I 14000600

MAS 230 V, 50/60 Hz  
with conveyer to coverslipper MCS I  
and drying stations 14000504

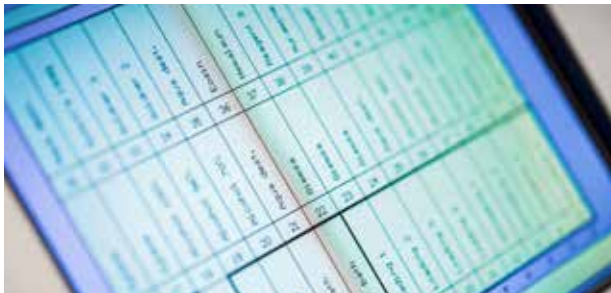
MAS 115 V, 60 Hz on demand





MAS interior with cuvettes

Standard components	MAS	MAS with drying stations	MAS with conveyer to coverslipper MCS I	MAS with conveyer to coverslipper MCS I and drying stations
Loading stations (4 pcs.)	✓	✓	✓	✓
Unloading stations (4 pcs.)	✓	✓	✓	✓
Staining cuvettes (30 pcs. à 360 ml)	✓	✓	✓	✓
Washing cuvettes (6 pcs.)	✓		✓	
Washing cuvettes (4 pcs.)		✓		✓
Drying stations (2 pcs.)		✓		✓
Slide baskets (4 pcs. up to 30 slides each)	✓	✓	✓	✓
Carbon filter	✓	✓	✓	✓
Conveyer system to coverslipper MCS I			✓	✓
Mains cable	✓	✓	✓	✓
Manual	✓	✓	✓	✓



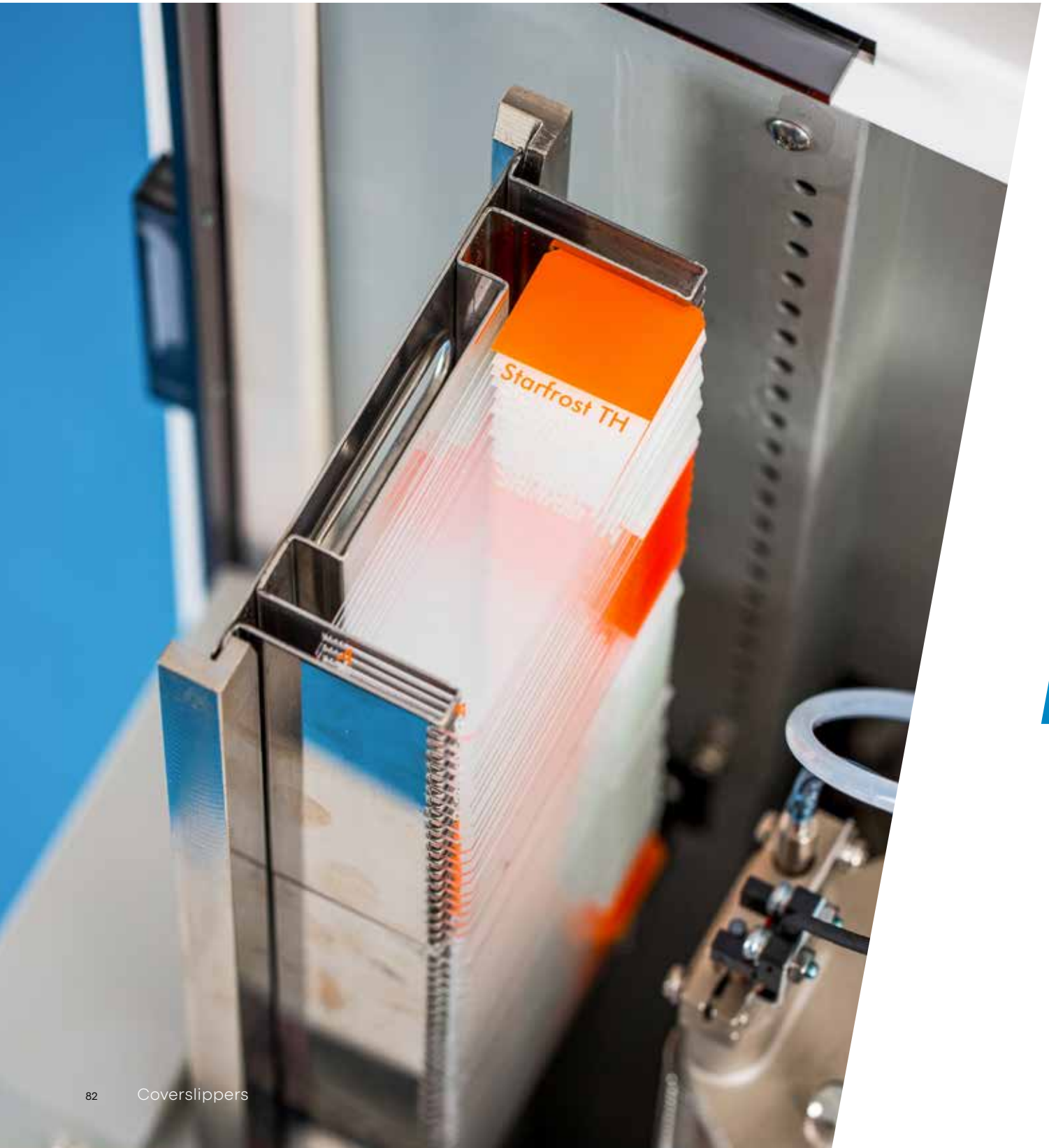
## Specifications

<b>Max. number of program steps</b>	40
<b>Incubation time for each station</b>	1 sec. up to 59 min.
<b>Drip collection</b>	adjustable drain time from 0 to 9 sec. patented drip collection technology
<b>Stations, total</b>	44
<b>Including</b>	4 loading stations 4 unloading stations 30 incubation stations with agitation 6 washing stations for running water
<b>Optional</b>	2 drying stations (temperature adjustable from 40 °C up to 90 °C) with 4 washing stations
<b>Electrical parameters</b>	230 V, 50/60 Hz
<b>Dimensions (W x D x H)</b>	1,210 x 670 x 640 mm
<b>Weight w/o accessories</b>	115 kg

# Coverslippers

*Highly reliable systems for a smooth workflow in the laboratory. The Slee coverslippers operate to the highest quality standards.*

*Make your workflows more effective!*







## **MCS I**

Coverslipper (to be combined with MAS multi protocol stainer)

## **MCS II**

Coverslipper

# **MCS I**

## **Coverslipper (to be combined with MAS multi protocol stainer)**

*Very efficient coverslipper in modular design. The combination uses a minimum of space and is a reliable device for the automation of your laboratory – also in times of small budgets.*

*The coverslipper **MCS I** can be directly connected to the stainer **MAS**. Simplify work-flows: staining and coverslipping in one step!*



### **Highlights**

- MCS I can be directly connected to the stainer MAS
- Modular design
- Simplified step of manual handover of the sample holders to full automation
- Space saving combination
- Affordable price

Item No.

MCS I 230 V, 50/60 Hz	14000000
MCS I 115 V, 60 Hz	on demand



MAS multi  
protocol stainer  
(not included)



Standard components

Slide baskets (8 pcs. up to 30 slides each)
Cover glass holder (50 and 60 mm, 2 pcs.)
Carbon filter (2 pcs.)
Mains cable
Manual

Specifications

Processing speed	up to 500 slides / hrs.
Dispensing volume	30 - 150 µl
Dimensions (W x D x H)	630 x 670 x 640 mm
Weight w/o accessories	65 kg

# MCS II

## Coverslipper (stand-alone)

*The innovative coverslipping technology enables an increased throughput and high reproducibility. The **MCS II** coverslipper is equipped with highest quality standards, coverslipping is processed separately for each single glass. Fast and without bubbles. This method guarantees a reliable throughput.*

*The **MCS II** coverslipper is designed as an open and stand-alone system.*



### Highlights

- High throughput of up to 360 slides per hour
- Regulated by a 7-step speed control
- Applicable to micro slide racks of different automated staining systems
- Easy integration into the workflow of a routine laboratory



**Item No.****MCS II 100 - 240 V, 50/60 Hz**

14000100

**Standard components****Slide baskets**

(8 pcs. up to 30 slides each)

**Cover glass holder** (50 and 60 mm, 2 pcs.)**Carbon filter** (2 pcs.)**Mains cable****Manual****Specifications****Processing speed**

up to 360 slides / hrs.

**Dispensing  
volume**

40 - 200 µl

**Electrical parameters**

100 - 240 V, 50/60 Hz

**Dimensions** (W x D x H)

500 x 540 x 640 mm

**Weight** w/o accessories

59 kg

# Centrifuges

*Slee offers two different centrifuge models for diverse requirements and applications in laboratory routine. Slee centrifuges allow you to use the respective model flexibly, customize it and increase the efficiency of your laboratory.*





## **CS I**

Cytocentrifuge

## **CS II**

Cytocentrifuge with 10 memory programmes,  
equipped with cooling depending on model

# CS I / CS II

## Cytocentrifuges

**CS I** and **CS II** centrifuges are a cost-effective alternative for monolayer cell preparation, providing consistent performance and user friendliness. The systems are equipped with an open or closed rotor for up to 12 loading positions which can be easily removed for external loading.

Single or double sample chambers are available as disposable or reusable after proper cleaning. For a flexible use of the system a variety of sediment rotors are available on request. The **CS II** centrifuge is depending on the model equipped with cooling. Up to 10 memory programmes can be saved.

### Highlights

#### **Flexible selection and handling of rotors**

- Cytocentrifugation open or closed (12 loading positions)
- Easily removable rotor for outside loading
- Large variety of rotors available (sediment, cytocentrifuge)
- CS II with optional cooling and up to 10 memory programmes

#### **Suitable consumables**

- Cytotunnel single or double (reusable or disposable)
- Large volume ECOtunnel® (reusable or disposable)
- Filter cards

#### **Easy and safe handling**

- Convenient preparation
- Slide clips applicable to reusable and disposable funnels
- Slide label readable at any time
- Indication of the RCF during centrifugation

	Item No.
<b>CS I 230 V, 50/60 Hz</b>	
Open rotor	15500000
<b>CS I 230 V, 50/60 Hz</b>	
Closed rotor	15500001
<b>CS I 115 V, 60 Hz</b>	on demand

	Item No.
<b>CS II 230 V, 50/60 Hz</b>	
Open rotor	15500100
<b>CS II 230 V, 50/60 Hz</b>	
Closed rotor	15500101
<b>CS II 230 V, 50/60 Hz</b>	
Open rotor, with cooling	15501100
<b>CS II 230 V, 50/60 Hz</b>	
Closed rotor, with cooling	15501101
<b>CS II 115 V, 60 Hz</b>	on demand





CS rotor with 12 loading positions

## Standard components

	CS I Open rotor	CS I Closed rotor	CS II Open rotor	CS II Closed rotor
<b>Cellclip rotor,</b> open (12 positions)	✓		✓	
<b>Cellclip rotor,</b> closed (12 positions)		✓		✓
<b>Cellclip</b> (stainless steel, 12 pcs.)	✓	✓	✓	✓
<b>Cytofunnel,</b> reusable (12 pcs.)	✓		✓	
<b>Filter cards for cytofunnel,</b> reusable Item No. 39910001 standard (200 pcs.)	✓	✓	✓	✓
<b>Cellslides</b> Item No. 39910003 (100 pcs.)	✓	✓	✓	✓
<b>Mains cable</b>	✓	✓	✓	✓
<b>Manual</b>	✓	✓	✓	✓



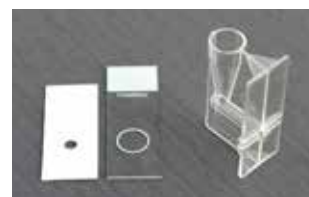
Specifications	CS I	CS II
<b>Application</b>	cytology	cytology, laboratory
<b>Cooling / temperature</b>	-	down to -20 °C (optional)
<b>Cytofunnel capacity</b>	single 0.5 ml / chamber double 0.5 ml / chamber ECOfunnel® 5 ml / chamber	single 0.5 ml / chamber double 0.5 ml / chamber ECOfunnel® 5 ml / chamber
<b>Memory programmes</b>	-	up to 10
<b>Rotor capacity</b>	up to 12	up to 12
<b>Applicable rotors</b>	cellclip rotor (cytocentrifugation) swing-out rotor (different sizes) fixed angle rotor (different sizes)	cellclip rotor (cytocentrifugation) swing-out rotor (different sizes) fixed angle rotor (different sizes)
<b>Centrifuge operation</b>	up to 6,000 rpm depending on the selected rotor), timer 0 - 99 min.	up to 15,000 rpm depending on the selected rotor), timer 0 - 99 min.
<b>Safety</b>	automatic rotor recognition, lid locking and holding	automatic rotor recognition, lid locking and holding
<b>Electrical parameters</b>	230 V, 50/60 Hz	230 V, 50/60 Hz
<b>Dimensions (W x D x H)</b>	370 x 430 x 260 mm	400 x 700 x 350 mm
<b>Weight</b>	25 kg	29 kg



# Reusable preparation systems

## Cytofunnel single, reusable

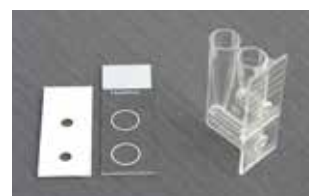
	Quantity	Item No.
<b>Cellclip</b>	1 pcs.	39910031
<b>Cytofunnel single</b>	12 pcs.	39910000
<b>Filter cards</b> (only for cytofunnel single 39910000) up to 0.5 ml	200 pcs.	39910001
<b>Filter cards</b> (only for cytofunnel single 39910000) thin, up to 0.4 ml	200 pcs.	39910006
<b>Cellslides single</b> , uncoated	100 pcs.	39910002
<b>Cellslides single</b> , coated	100 pcs.	39910003



Cytofunnel single, reusable

## Cytofunnel double, reusable

	Quantity	Item No.
<b>Cellclip</b>	1 pcs.	39910031
<b>Cytofunnel double</b>	12 pcs.	39910010
<b>Filter cards</b> for cytofunnel double up to 2 x 0.5 ml	500 pcs.	39910011
<b>Cellslides double</b> , uncoated (only for cytofunnel double, reusable 39910010)	100 pcs.	39910012



Cytofunnel double, reusable

## Cytofunnel ECOfunnel®, reusable

	Quantity	Item No.
<b>Cellclip</b>	1 pcs.	39910031
<b>Cytofunnel ECOfunnel®</b>	12 pcs.	39910020
<b>ECOseal</b> seal for ECOfunnel®	100 pcs.	39910021
<b>ECOslides</b> , coated	100 pcs.	39910022



Cytofunnel ECOfunnel®, reusable

## Accessories and consumables for third party products

All components of the CS centrifuge series like funnels, filter cards and slides are compatible to the Thermo Fisher / Shandon Cytospin series. To use CS centrifuge consumables in these third-party products, simply replace the original clip with the CS series cellclip Item No. 39910030.



# Rotors

## Rotor (closed)

**CS centrifuge**, removable, 12 positions

**Item No.**

39910100



## Rotor (open)

**CS centrifuge**, removable, 12 positions

**Item No.**

39910050



## EASY rotor (closed)

**12 positions**, without stainless steel clips,  
for EASY / double cytofunnel

**Item No.**

15500600



## EASY rotor (open)

**12 positions**, without stainless steel clips,  
for EASY / double cytofunnel

**Item No.**

15500601



## Swing-out rotor 8-point

for 15 ml

**Item No.**

39910042



## Swing-out rotor 6-point

for 50 ml

**Item No.**

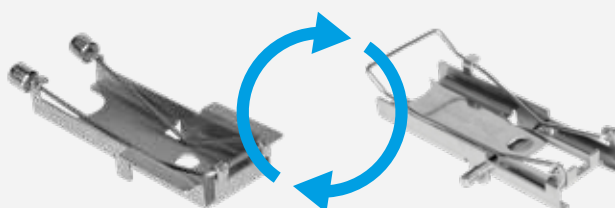
39910043

**Adapter for 15 ml** (only for 39910043)

39910044



The **cellclip of the CS series** can be easily  
exchanged for a third-party cellclip!



Cellclip of the CS series

Third-party cellclip

# Disposable preparation systems

*EASY cytology funnel can only be used in Thermo Cytospin or with the EASY rotor of the **CS** centrifuge!*

## EASY cytofunnel single, disposable

**With white filter card** up to 0.5 ml

**Quantity**

40 pcs.

**Item No.**

39910090

**With brown filter card** up to 0.5 ml

on demand



EASY cytofunnel single

## EASY cytofunnel double, disposable

**With white filter card** up to 2 x 0.5 ml

**Quantity**

40 pcs.

**Item No.**

39910091

**With brown filter card** up to 2 x 0.5 ml

on demand



EASY cytofunnel double

## Cytofunnel single, disposable

**Cellclip**

**Quantity**

1 pcs.

**Item No.**

39910031

**Cytofunnel single** up to 0.5 ml

100 pcs.

39910004

**Cytofunnel single** up to 0.5 ml

500 pcs.

39910005

**Cellslides single**, uncoated

100 pcs.

39910002

**Cellslides single**, coated

100 pcs.

39910003



Cytofunnel single,  
disposable

Cytofunnel double, disposable	Quantity	Item No.
<b>Cellclip</b>	1 pcs.	39910031
<b>Cytofunnel double,</b> sample chamber with 2 shifted holes, up to 2 x 0.5 ml	100 pcs.	39910014
<b>Cytofunnel double,</b> sample chamber with 2 shifted holes, up to 2 x 0.5 ml	500 pcs.	39910015
<b>Cellslides double,</b> uncoated (only for cytofunnel double 39910015)	100 pcs.	39910016
<b>Cellslides double,</b> coated (only for cytofunnel double 39910015)		on demand



Cytofunnel double,  
disposable

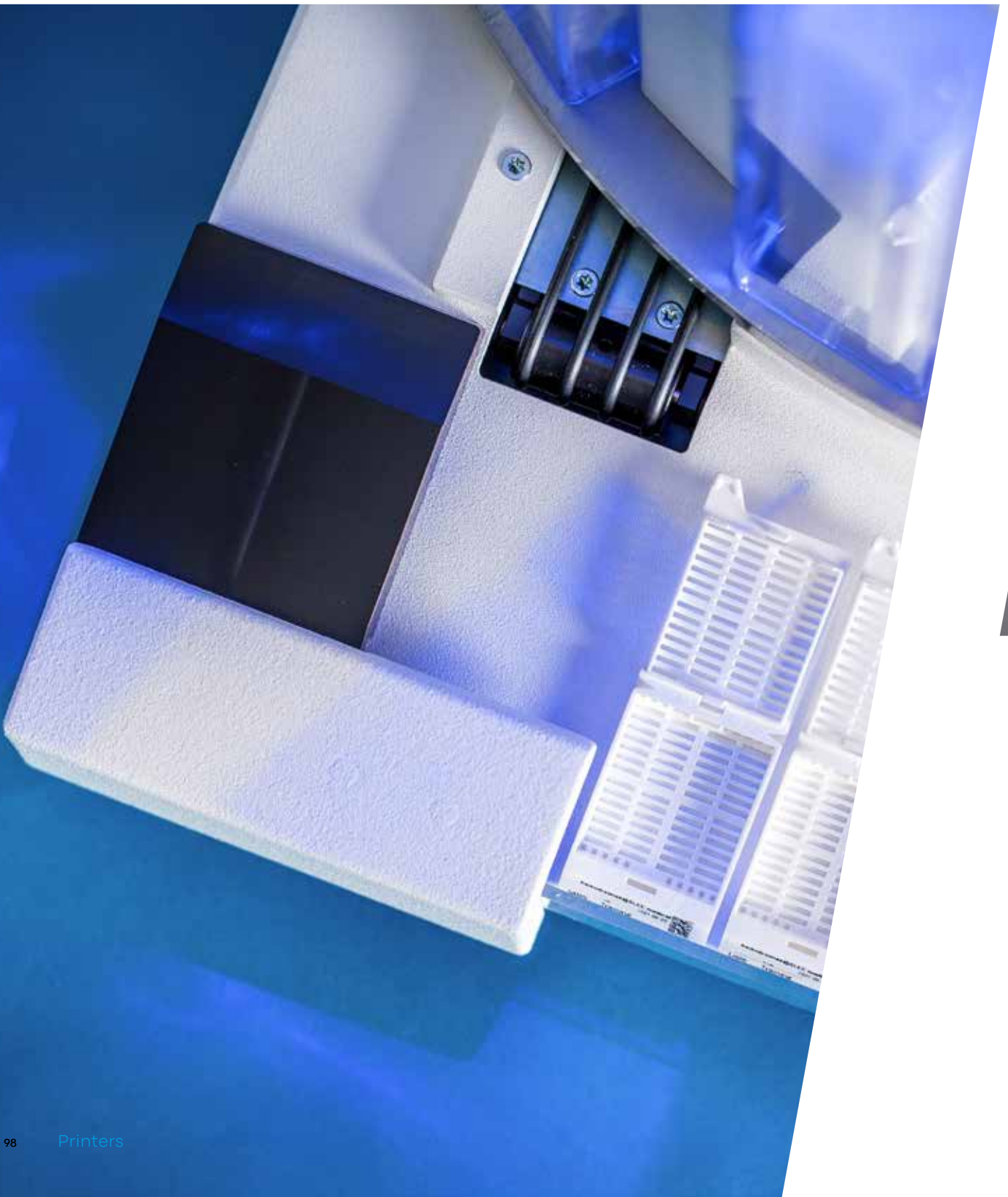
ECOfunnel®, disposable	Quantity	Item No.
<b>Cellclip</b>	1 pcs.	39910031
<b>ECOfunnel®, up to 5 ml</b>	100 pcs.	39910023
<b>ECOfunnel®, up to 5 ml</b>	500 pcs.	39910024
<b>ECOSlides, coated</b>	100 pcs.	39910022
<b>ECOSlides, uncoated</b>		on demand



ECOfunnel®,  
disposable

# Printers

*Slee printer solutions improve patient safety in your laboratory and help optimize daily workflow. Sources of error are eliminated, e.g. unintentional detachment of labels, smudging or illegibility of handwriting.*





## **Printtec S**

Slide printer

## **Printtec C**

Single cassette printer

## **Autoloader**

Batch printer



# Overview

## Printers, Autoloader



### Printtec S

*Slide printer*

100 slides per magazine,  
programmable ID chip, slide counter

Output tray: 15 slides

#### Printing speed

<b>black</b>	9 slides / min.
<b>monochrome</b>	5 slides / min.
<b>multicolor</b>	4 slides / min.

### Specifications

100 - 240 V, 50/60 Hz

180 x 320 x 218 mm (W x D x H)

7.6 kg



### Printtec C

*Single cassette printer*

1 cassette is inserted manually  
and removed after printing.

-

#### Printing speed cassette printing (single)

<b>black</b>	9 cassettes / min.
<b>monochrome</b>	6 cassettes / min.
<b>multicolor</b>	5 cassettes / min.

### Specifications

100 - 240 V, 50/60 Hz

222 x 244 x 244 mm (W x D x H)

7.5 kg



Printtec C  
printer for single  
cassettes is not  
included!

## Autoloader

*for batch printing\**

**Loading chutes:** 4 magazines x 40 cassettes

**Output:** 7 cassettes

**Output extension tray:** 10 cassettes,  
multiple extendable +10, +10, +10 cassettes

**Output tray:** 7 cassettes

**Printing speed** in combination with Printtec C

**black** 8 cassettes / min.

**monochrome** 5 cassettes / min.

**multicolor** 4 cassettes / min.

## Specifications

100 - 240 V, 50/60 Hz

304 x 658 x 490 mm (W x D x H)

33.6 kg

\* Note: Cannot be used separately, but only in combination with the single cassette printer Printtec C!



# Printtec S

## Slide printer

Slee's **Printtec S** slide printer can significantly increase the efficiency of your lab while helping to reduce the risk of misidentification of specimens. It prints directly onto slides, eliminating handwriting or expensive, difficult to apply xylene-resistant labels.

With impressive 300 dpi print resolution, you can print text, graphics and logos along with high-resolution linear and 2D bar codes on every slide you process. Printtec S is also a COLOR slide printer. This revolutionary feature lets

you purchase and keep inventory of only one slide color – plain white. With the slide printer you can print a wide range of colors and patterns for faster identification.



### Highlights

- Black or full color printing of text, graphics, barcodes and QR codes on demand
- Reduction of inventory effort for different colored slides by using only pure white slides and printing in color
- Output tray capacity: 15 slides
- Magazine capacity: 100 slides with programmable ID chip and slide counter
- Print directly onto slides
- Small footprint
- Chemical and UV resistant print to withstand common processes in laboratories - reliable identification of slides even after several years
- USB 2.0 interface for easy and direct connection to Windows 8.1 / 10 based devices like PCs and tablets

## Standard components

<b>Blue slide magazine</b> for 100 slides
<b>Standard ribbon</b> (black, 1 pcs.)
<b>Slides</b>
<b>USB cable</b>
<b>Printtec cleaning pen</b>
<b>Mains cable</b>
<b>Memory card</b> with manuals
<b>Quick start guide</b>

## Item No.

<b>Printtec S 100 - 240 V, 50/60 Hz</b>	10050001
<b>Printtec S with high pressure</b> <b>100 - 240 V, 50/60 Hz</b>	10050004

## Optional accessories

## Item No.

<b>Blue slide magazine</b> for 100 slides, spare magazine to optimize the workflow	39300002
<b>Colored ribbon</b> for Printtec S standard and Printtec S with high pressure, TC 1	39300008
<b>Colored ribbon</b> for Printtec S standard, TC 2	39300007
<b>Colored ribbon</b> for Printtec S standard and Printtec S with high pressure	39300005
<b>Monochrome ribbon black</b> for Printtec S standard and Printtec S with high pressure, TC 1	39300006
<b>Monochrome ribbon black</b> for Printtec S standard, TC 2	39300009
<b>Printtec cleaning pen</b>	39300015
<b>Barcode Scanner</b> Datalogic Medical Grade 2D incl. stand	39300011
<b>Printhead</b>	39300001
<b>PTNet server</b>	39300014
Further accessories on request	

## Specifications

<b>Capacity</b>	
magazine	100 slides in the magazine, programmable ID, slide counter
output tray	15 slides
<b>Printing speed</b>	
black	9 slides / min.
monochrome	5 slides / min.
multicolor	4 slides / min.
<b>Electrical parameters</b>	100 - 240 V, 50/60 Hz
<b>Dimensions</b> (W x D x H)	180 x 320 x 218 mm
<b>Weight</b> w/o accessories	7.6 kg

**Slide magazine**

**Slide output**



### *Easy handling*



Printtec S is designed for efficient, hands-free operation. Slides are stored in easy-to-load magazines - away from dust and other potential contaminants. It takes just a few seconds to change the magazine if you need standard slides for one study and positively-charged slides for others. The level of slides remaining in a magazine is easily viewed through the magazine's transparent blue LED backlit case.

### *Direct print*



Prints directly onto slides - eliminates illegible handwritings or labels that are hard to apply and can potentially fall off. Avoids disturbances of laboratory equipment.

### *Free software*



Free PTLab™ software - template-driven software for your individual design and data workflow and configurable data stream connection to LIS systems.

# Output extension for Printtec S, slide printer

The output extension for up to 100 slides enables the **Printtec S** to print larger quantities of slides without interruption.

Item No.

Output extension  
for up to 100 slides

39300003



## Highlights

- Ideal for printing larger quantities, up to 100 slides if required
- Inexpensive solution for batch processing, avoids waiting periods
- Removable slide container made of stainless steel for quantities up to 100 slides, for continuous operation
- Simple, low-maintenance design
- Easy mounting under the Printtec S

# Printtec C

## Single cassette printer

Slee's cassette printer **Printtec C** can significantly increase the efficiency of the laboratory and at the same time reduce the risk of misidentification of specimens. The cassette printer **Printtec C** prints in black, monochrome or multicolor as required! The user can print manually loaded cassettes with texts, graphics and logos along with linear and 2D bar codes directly onto the printing surface of the cassettes. This enables a more efficient workflow and additionally increases the safety for the patient.



Cassette tray

### Highlights

- Modular design
- Setting and selection of color variants to increase safety in the laboratory
- Quick and easy installation
- Capacity for one single cassette, for on-demand print
- For standard cassettes with 35° to 45° angles with either lid on or off, no adjustments needed
- High printing speed
- USB 2.0 interface for easy and direct connection to Windows 8.1 / 10 based devices like PCs and tablets

## Item No.

Printtec C 100 - 240 V, 50/60 Hz

10050002

## Standard components

### Cassettes

Standard ribbon, black, 1 pcs.

USB cable

Printtec cleaning pen

Mains cable

Memory card with manuals

Quick start guide

## Optional accessories

### Item No.

Colored ribbon for Printtec C, TC 1 39300008

Monochrome ribbon black  
for Printtec C, TC 1 39300006

Printtec cleaning pen 39300015

Barcode scanner Datalogic Medical  
Grade 2D incl. stand 39300011

Printhead 39300001

PTNet server 39300014

Further accessories on request

## Specifications

### Capacity

1 cassette

The cassette is inserted manually and removed after printing.

### Printing speed cassette printing (single)

black 9 cassettes / min.

monochrome 6 cassettes / min.

multicolor 5 cassettes / min.

Electrical parameters 100 - 240 V, 50/60 Hz

Dimensions (W x D x H) 222 x 244 x 244 mm

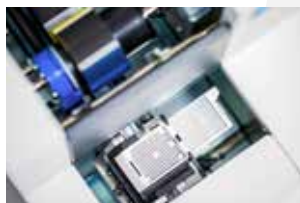
Weight w/o accessories 7.5 kg

### **Direct print**



Prints directly onto cassettes - eliminates illegible handwritings or labels that are hard to apply and can potentially fall off.

### **Easy handling**



A cassette is inserted manually and the print is started via the operating software. When the print is finished, the cassette is removed again.

### **Variety of colors**



The cassettes can be printed in black, single color or multicolor, depending on your needs! The possibility of color variation significantly increases the safety and efficiency of the laboratory.

### **Free software**



Free PTLab™ software - template-driven software for your individual design and data workflow and configurable data stream connection to LIS systems.

### **Single cassette printer**



One cassette at a time is loaded for single cassette print. Printing speed is extremely fast at about 6 seconds per cassette.

### **Optional Autoloader\***



4 x 40 cassettes can be automatically loaded for a batch print. Printing speed is very fast at about 8 seconds per cassette.

\* The autoloader version is available as an expansion to the Printtec C single cassette printer.



***Slee***  
***Always***  
***focusing***  
***on patient's***  
***well-being.***

# Autoloader\* for batch printing and color variations

The expansion of the cassette printer **Printtec C** with the **Autoloader** offers even more efficiency to the workflow of the laboratory while reducing the risk of misidentification of specimens. The **Autoloader** has been specially designed for fast and efficient processing. The 4 cassette reservoirs tremendously increase the number of the possible cassette prints. The magazine with the cassettes is simply inserted into one of the 4 loading chutes.

The quantity of remaining cassettes can be easily controlled through the front of the transparent magazine, illuminated with blue LED backlight, but is additionally displayed on the LCD screen.



Printtec C printer for single cassettes is not included!

## Highlights

- 4 transparent loading chutes with a capacity of up to 40 cassettes / magazine
- Capacity of up to 160 cassettes for on-demand or batch printing
- Output capacity: 7 cassettes, expandable with 10 cassettes with each output extension tray
- Possible forwarding of the cassettes via the output tray extension to the processing station
- Prints on standard cassettes with 35° to 45° angles with either lid on or lid off, no adjustments needed
- Printing speed\*:
  - up to 8 cassettes per minute (black)
  - up to 5 cassettes per minute (monochrome)
  - up to 4 cassettes per minute (multicolor)
- USB 2.0 interface for easy and direct connection to Windows 8.1 / 10 based devices like PCs and tablets

\* Note: Cannot be used separately, but only in combination with the single cassette printer Printtec C!

## Item No.

**Autoloader 110 - 240 V, 50/60 Hz**  
for cassette printer Printtec C\*

10050003

## Standard components

**Magazine for loading chutes** incl. separator, set of 4

**6-pin-mini-DIN cable**

**Output extension tray**, 1 pcs.

**Mains cable**

**Memory card** with manuals

**Quick start guide**

## Optional accessories

### Item No.

**Magazine for loading chutes**  
incl. separator, set of 4

39300004

**Output extension tray**

10510000

**6-pin-mini-DIN cable**

39300017

Further accessories on request

## Specifications

### Capacity

Loading chutes 4 magazines x 40 cassettes

Output 7 cassettes

Output extension tray 10 cassettes, multiple extendable +10, +10, +10 cassettes

**Printing speed**  
in combination  
with Printtec C\*

black 8 cassettes / min.

monochrome 5 cassettes / min.

multicolor 4 cassettes / min.

**Electrical parameters** 110 - 240 V, 50/60 Hz

**Dimensions** (W x D x H) 305 x 658 x 490 mm

### Weight

w/o accessories 33.6 kg

\* Note: Cannot be used separately, but only in combination with the single cassette printer Printtec C!



Printtec C  
printer for single  
cassettes is not  
included!

Loading chutes with magazines

Output

### Output extension tray



The extension of the output tray is multiple expandable with +10 cassettes each. A simple plug-in extends the output area so the workflow becomes more relaxing.

### Direct print



Prints directly onto cassettes - eliminates illegible handwritings or labels that are hard to apply and can potentially fall off.

### Free software



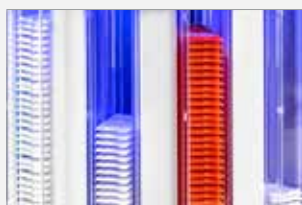
Free PTLab™ software - template-driven software for your individual design and data workflow and configurable data stream connection to LIS systems.

### *Easy handling*



The Autoloader version in combination with the Printtec C has been specially designed for fast and efficient processing. The magazines with the cassettes are simply inserted into the loading chutes.

### *Illuminated loading chutes*



The number of remaining cassettes can be easily seen through the transparent loading chutes with blue LED backlight.

### *Single cassette printer*



The printer is also available separately without Autoloader. Load one cassette at a time. Printing speed is extremely fast at about 6 seconds per cassette.

### *Autoloader version\**



4 x 40 cassettes can be automatically loaded for a batch print. Printing speed is very fast at about 8 seconds per cassette.

\* The Autoloader version is available as an extension to the single cassette printer Printtec C.



# Ergonomic workplaces

The **Ergotec** workplaces of Slee are the perfect solution for your laboratory set-up. The high-quality ergonomic **Ergotec** working tables are manufactured according to your individual requirements.

The **Ergosit** is a true enrichment for your laboratory. It is a user-friendly, ergonomically sophisticated laboratory chair which increases workplace quality and employee satisfaction. Customize your chairs and inspire your employees!

Our ergonomic workstations are suitable for many applications. The dimensions, heights and colors can be customized to the greatest possible extent. The design of the tables can be highly customized to meet customer needs and requirements.

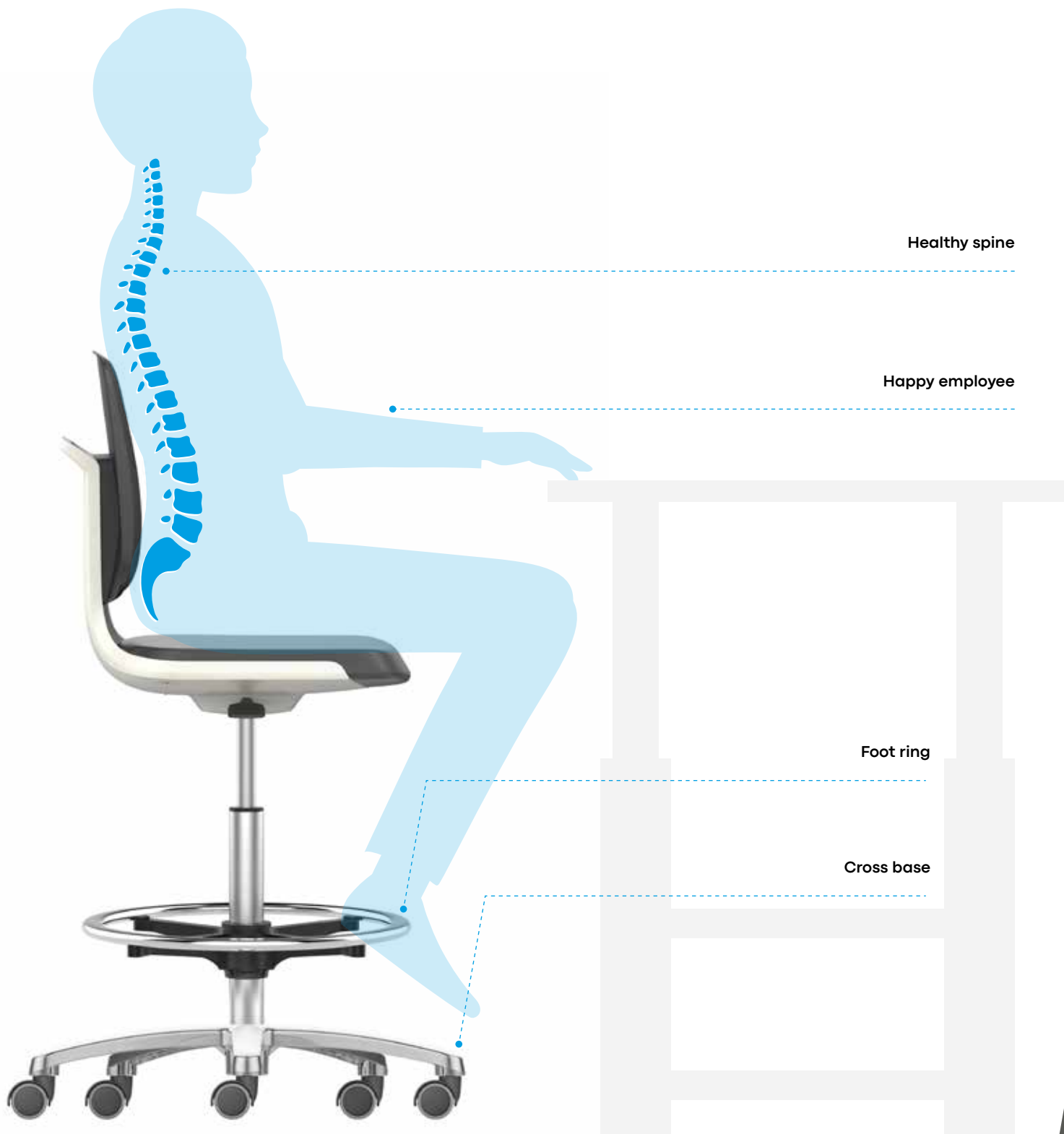
This allows us to manufacture the ultimate workstation perfectly suited to the particular ambient requirements.

The integration of different modules in the table top, such as cooling plate and water bath, is also available. The placement of the modules takes place individually according to customer requests.



# Ergosit laboratory chair

With stop & go castors (high version) and foot ring



#### Item No.

<b>Ergosit</b> high version	10157010
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<b>Ergosit</b> low version	10157011
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## Options\*

**Cover fabric**

**Seat color** (cf. color palette on the right)

**Seat height**

**Armrests**

\*Contact us for further information.

## Specifications

<b>Seat height</b> high version	560 up to 810 mm
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<b>Seat height</b> low version	450 up to 650 mm
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<b>Cleanroom class</b>	3 according to ISO 14644-1
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<b>Cover fabric</b>	integral foam (extremely robust and durable)
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<b>Seat color</b>	integral foam black 2000
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<b>Seat support</b>	plastic parts gray-white
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<b>Cross base</b>	polished aluminum
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<b>Stop &amp; go castors</b>	Ergosit high version only (Item No. 10157010)
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## Highlights

- 3D flex function in the back
- Flexible front edge of the seat
- Adjustable height
- Seat shell in various colors
- Handle on the backrest
- GMP compliant
- Contributes to increasing the quality of the workplace and employee satisfaction
- Hygienic-design (minimal joints, resistant

- to disinfectants and chemicals, anti-bacterial and anti-germ effects)
- Low weight, mobile through handle, compact design
- Ergonomic and comfortable, complicated adjustments and settings become redundant thanks to the innovative flex functions: seat front edge and backrest

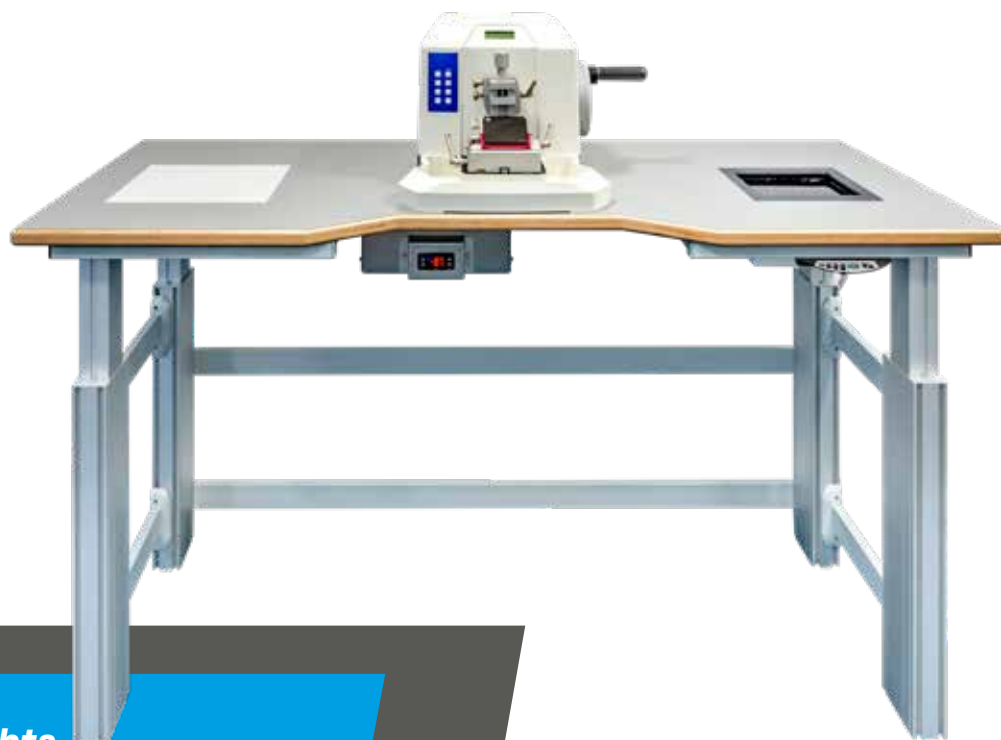
# Ergotec worktable

## Ergonomic design.

*Physiotherapists and occupational physicians increasingly attach great importance to the ergonomic design of workplaces, in particular the height adjustment of working desks. These desks help to avoid premature fatigue, joint and back pain while working. The **Ergotec** series worktables support this comprehensively.*

The design of the tables makes it very easy to switch between sitting and standing while working. Up to 4 different table heights can be saved electronically and recalled by simply pressing a button. This enables users to set their

desired working height at any time and adapt it to their current needs. Ergonomic cutouts in the table for the laboratory chairs create optimal seating and working comfort for the user.



## Highlights

- 4 different table heights, freely programmable
- Easy switching of positions, at the push of a button
- High load capacity up to 400 kg
- Variable selection of table width and depth
- Ergonomic cutout, optional
- Cooling plate, optional
- Water bath, optional

#### Item No.

**Ergotec** - standard version  
with height adjustment  
1,800 x 800 mm

10120001

More versions on demand

#### Options\*

#### Item No.

Integrated water bath	10120002
Integrated cooling plate	10120003
Cable channel*	10120004
Workplace with LED illumination*	10120005
Undertable drawer*	10120006
Ergonomic cutout	on demand

\*Contact us for further information.

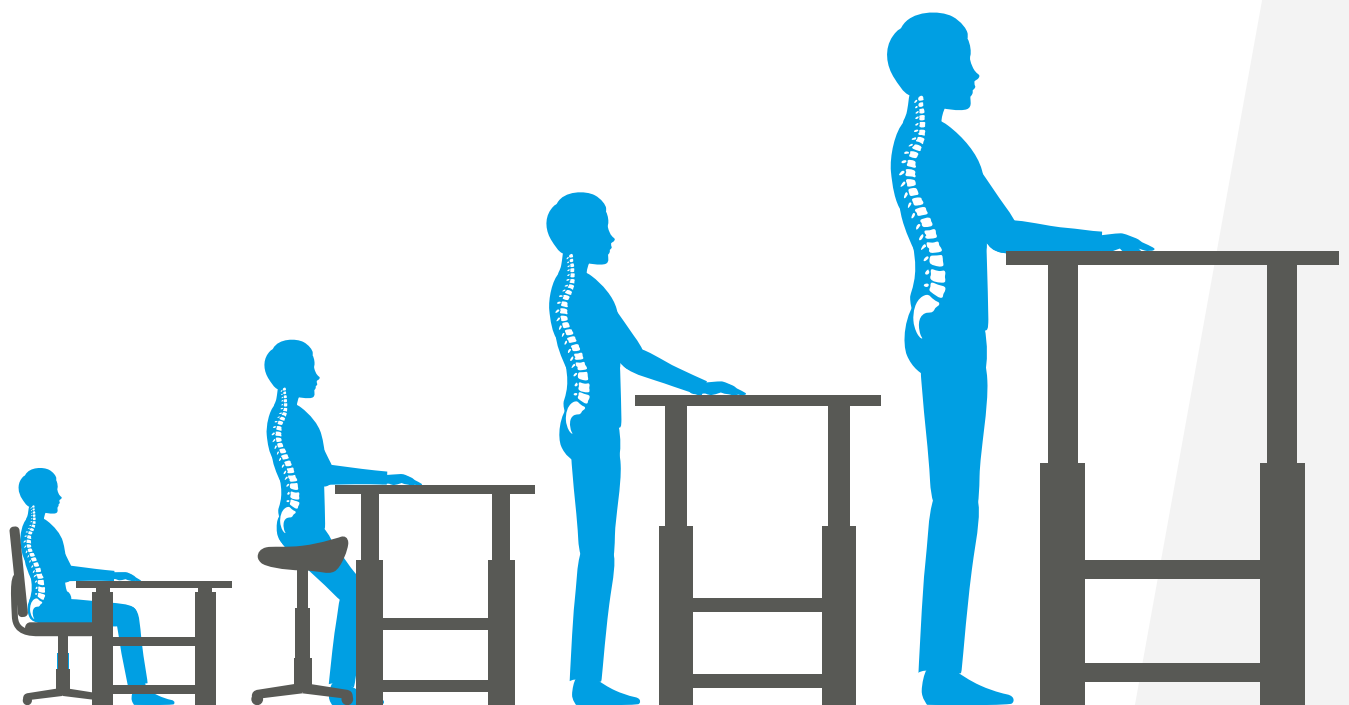
#### Specifications

Range of height adjustment	660 up to 1,100 mm
Programmable height levels	4 memory settings
Maximum load	400 kg
Thickness of table top	30 mm
Color of table top	selectable
Maximum dimensions (possible customization)	2,000 x 1,000 mm
Cooling plate dimensions	300 x 320 mm
Cooling plate temperature	+15 °C down to -15 °C
Water bath dimensions	260 x 214 x 60 mm
Water bath temperature	RT up to 85 °C

***Dimensions, color and equipment  
are individually selectable!***



Ergotec worktable with illumination and Ergosit laboratory chair



### **Undertable drawer**



Optionally available. Smaller parts can be stored safely directly at the place. You have everything within reach (image may differ).

### **Cable channel**



Optionally available. Have a neat and clean desktop. All cables remain hidden. The appropriate switches, sockets and USB ports are set according to your personal requirements.

### **LED illumination**



Optionally available. For a perfectly illuminated workplace at all times. Supports fatigue-free work through optimally coordinated LUX strengths.

### **Programmable height levels**



Sitting, standing, sitting. Staying mobile while working has never been easier. The height adjustment turns a static workstation into an active one.

### **Cooling plate**



The cooling plate can be integrated directly into the tabletop at your desired location. The work surface is not displaced by an additional device. Easy to clean.

### **Water bath**



Integrate the water bath directly into the tabletop at your desired location. Keeping all structures flat improves the workflow. Easy filling and emptying.

# Consumables

*All Slee consumables are subject to the highest quality requirements. Our product range includes blades with plasma coating, blades with PTFE coating, tissue embedding paraffin, slides and coverslips as well as the CryoGlue embedding medium and other consumables.*





# High quality microtome blades

## LPS, LPH, HPS, PTFE coated

The Slee blades for microtomes feature a special plasma technology, that considerably improves the sharpness as well as the durability of the blades. In addition, further blades with innovative PTFE coating are available. All Slee microtome blades are made of surgical steel.

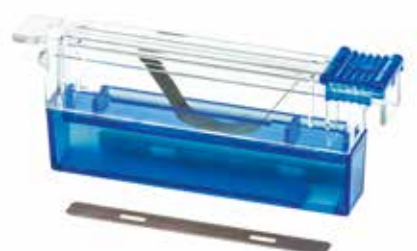
### Disposable blades (plasma coated)

Item No.

#### Low profile plasma LPS

for soft specimens, 50 pcs. / box

28407005



### Disposable blades (PTFE coated)

Item No.

**Low profile** suitable for all types  
of specimens, 50 pcs. / box

28407000



#### Low profile plasma LPH

for hard specimens, 50 pcs. / box

28407004



**High profile** suitable for all types  
of specimens, 50 pcs. / box

28408000



#### High profile plasma HPS

for soft specimens, 50 pcs. / box

28407007



# Paratec Premium, Paratec Tissue embedding paraffin

**Paratec Premium** consists of highly purified paraffin. With polymer additive for precise embedding and cutting, melting range 54 - 57 °C. Slee paraffin is DSMO-free.

Paratec Premium	Item No.	Paratec	Item No.
Premium paraffin		Paraffin	
1 kg	30010004	without polymer additive	
2.5 kg	30010006	melting range 54 - 56 °C	
10 kg	30010008	20 kg	30010002



# Slides / coverslips and accessory in premium quality

Perfect accessory for the Slee **Printtec S** slide printer /  
**MCS I & MCS II** coverslippers, **MEV / MEV +** and **MNT** cryostats.

## Slides

### Item No.

#### StarFrost® slides

26 x 76 x 1.0 mm,  
ground edges 90°,  
clipped slide corners 45° angle,  
color frosted marking area about 20 mm  
(available in white, orange, blue, green,  
yellow, pink)  
50 pcs. / box

on demand

#### StarFrost® slides

26 x 76 x 1.0 mm, adhesive,  
ground edges 90°,  
clipped slide corners 45° angle,  
color frosted marking area about 20 mm  
(available in white, orange, blue, green,  
yellow, pink)  
50 pcs. / box

on demand

#### StarFrost® slides

26 x 76 x 1.0 mm, advanced adhesive,  
ground edges 90°,  
clipped slide corners 45° angle,  
color frosted marking area about 20 mm  
(available in white, orange, blue, green,  
yellow, pink)  
50 pcs. / box

on demand

## Coverslips

### Item No.

#### StarFrost® coverslips

24 x 50 mm, 100 pcs. / box

30001051

#### StarFrost® coverslips

24 x 55 mm, 100 pcs. / box

30001052

#### StarFrost® coverslips

24 x 60 mm, 100 pcs. / box

30001053

## Accessory for cryostats

### Item No.

#### CryoGlue embedding medium (4 x 125 ml)

30001100

#### Cryostat low temperature oil, 50 ml

30001011

#### Section waste cloth (set with 10 pcs.)

30000015

#### Cork plates (Ø 20 mm; 100 pcs.)

30001001

## Highlights

- Slee StarFrost® slides in different styles and colors
- Slee StarFrost® coverslips in 3 different sizes, made for automatic coverslipping

# Service

We are committed to provide world-class support to our global customers at all times. We strive to advise you professionally before purchase and to support you during installation and initial setup. In addition, it goes without saying that we will always be available as a reliable partner during the longtime use of our products.

You can contact us directly with any kind of questions. In order to process your inquiries in time, please always include the following information:

- User name
- Address
- Phone number
- E-mail
- Type of device
- Serial number of device
- Date of purchase
- Detailed case description

**Service Hotline:** +49 (0) 6136 76997-0

**Service E-mail:** [service@slee.de](mailto:service@slee.de)

# Trainings

## *Service and application training*

Well-trained staff is crucial for the implementation of regular service and maintenance of high quality.

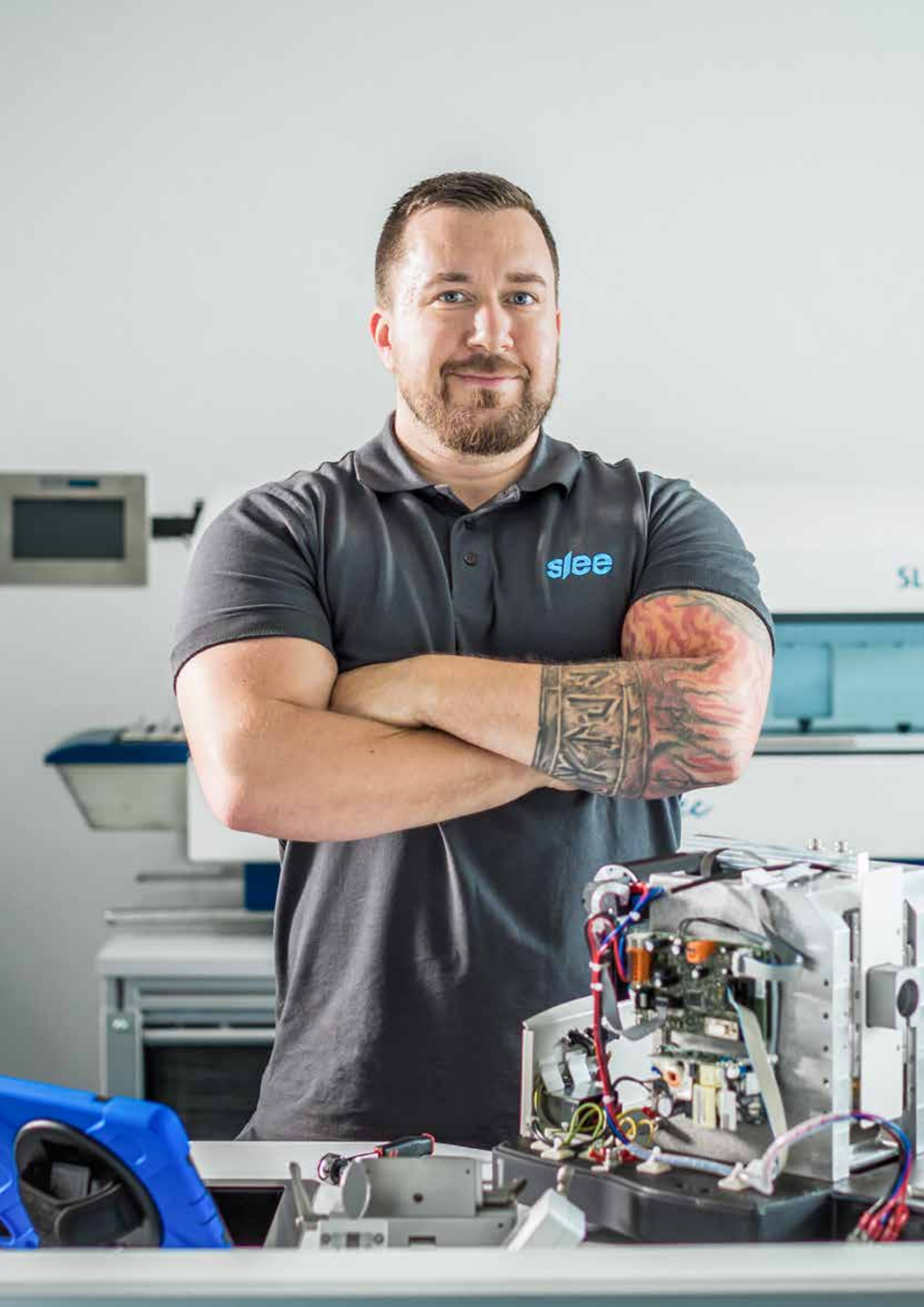
We offer regular service and application training for our worldwide distribution partners.

Visit [www.slee.de](http://www.slee.de) to access the training schedule and to download the registration form.

## **Training requests**

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[www.slee.de](http://www.slee.de)



YouTube



LinkedIn



Instagram