# Rotary Microtomes

All SLEE microtomes are produced at the company's seat in Mainz, Germany. The highly precise, modularly built rotary microtomes range from a manual unit, type CUT 4062, via the semi-automatic type CUT 5062 to the fully-automatic CUT 6062.

All microtomes are equipped with maintenance-free caged roller bearing guide ways and micrometer feed mechanism to provide highest stability and precision. A huge variety of accessories leaves the choice to customize your equipment and allows the use for any type of material or specimen in medical research, routine diagnostics or industrial applications.



## Overview



CUT 4062	CUT 5062	CUT 6062
Art. No. 10065000	Art. No. 10070001	Art. No. 10080001
Manual precision microtome	Semi-automatic precision microtome	Fully automatic precision microtome
Exchangeable standard knife or disposable blade holder	Exchangeable standard knife or disposable blade holder	Exchangeable standard knife or disposable blade holder
Trimming function in 4 steps 10; 20; 30; 40 μm	Motor trimming function, 0 – 750 μm	Motor trimming function, 0 – 750 μm
Ergonomically located coarse feed wheel		Motorized sectioning (section window / variably adjustable cutting speeds)
Object orientation	Object orientation	Object orientation
Acoustic signal at end positions	2 Specimen feed memory positions	2 Specimen feed memory positions
Automatic retraction	Automatic motor retraction	Automatic motor retraction
Options		
Section counter, universal cassette clamp, standard object clamp (up to 50 x 50 mm), foil clamp, prism set	Universal cassette clamp, standard object clamp (up to 50 x 50 mm), foil clamp, prism set	Universal cassette clamp, standard object clamp (up to 50 x 50 mm), foil clamp, prism set
Specifications		
610 D x 480 W x 350 H	610 D x 480 W x 350 H	610 D x 480 W x 350 H
33 kg	33 kg	34 kg
Cutting thickness 0.5 – 60 µm	Cutting thickness 0.5 – 100 µm	Cutting thickness 0.5 – 100 µm
Horizontal advance 28 mm	Horizontal advance 28 mm	Horizontal advance 28 mm
Vertical stroke 60 mm	Vertical stroke 60 mm	Vertical stroke 60 mm
		Cutting speed variable 3 – 450 mm/s
Specimen orientation x/y axis: 8° z axis: 360°	Specimen orientation x/y axis: 8° z axis: 360°	Specimen orientation x/y axis: 8° z axis: 360°



#### Manual precision microtome

The new SLEE CUT 4062 is a manual rotary microtome designed for paraffin sections and research-, plastic- and industrial applications.

- High precision specimen feed
- Smoothly running hand wheel
- Hand wheel lock in each position
- Trimming function in 4 steps (10, 20, 30, 40 μm)
- Specimen retraction upon backstroke
- Acoustic signal for end position of specimen movement
- Vibration free microtome base plate
- Ergonomically located coarse feed wheel
- Spacious, integrated section waste tray
- Wide range of accessories

**CUT 4062** 

Art. No. #10065000



#### Semi-automatic precision microtome

The SLEE CUT 5062 is a semi-automated rotary microtome designed for paraffin sections and research-, plastic- and industrial applications. The modular design allows custom-made assemblies from a huge range of accessories.

- Motorized trimming up to 750 μm, programmable
- Motorized advance (2 speeds) / return of specimen
- 2 Specimen feed memory positions
- Specimen size up to 50 x 50 mm with standard object clamp or standard cassette size for universal cassette clamp
- Intuitive control panel
- Variable retraction
- Section counter (Stroke / Distance)
- Spacious, integrated section waste tray
- Wide range of accessories



#### Fully automatic precision microtome

The SLEE CUT 6062 is a fully automated rotary microtome designed for paraffin sections and research-, plastic- and industrial applications. The modular design allows custom-made assemblies from a huge range of accessories.

- Motorized trimming up to 750 μm, programmable
- Motorized advance (2 speeds) / return of specimen
- 2 Specimen feed memory positions
- High efficient motorized sectioning (section window / variably adjustable cutting speeds)
- Variable retraction
- Intuitive control panel
- Section counter (Stroke / Distance)
- Specimen size up to 50 x 50 mm with standard object clamp or standard cassette size for universal cassette clamp
- Spacious, integrated section waste tray
- Wide range of accessories

CUT 6062 100 - 240 V, 50/60 Hz

Art. No. #10080001

Specifications	
Section thickness setting range	<b>CUT 4062</b> 0.5 – 60 μm
	<b>CUT 5062/CUT 6062</b> 0.5 – 100 μm
Section thickness selection	CUT 4062 0.5 – 2 μm in 0.5-μm steps 2 – 10 μm in 1-μm steps 10 – 60 μm in 2-μm steps
	CUT 5062/CUT 6062 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	<b>CUT 4062</b> 10 μm, 20 μm, 30 μm, 40 μm <b>CUT 5062/CUT6062</b> 0.5 – 750 μm
Specimen feed	<b>CUT 4062</b> 28 mm (via coarse feed wheel)
	<b>CUT 5062/CUT 6062</b> 28 mm (step motor) 75/150/300/600 & 3000 µm/s
Specimen feed memory	CUT 5062/CUT 6062 2 positions programmable
Vertical specimen stroke	60 mm
Sectioning speed	CUT 6062 3 – 450 mm/s, selectable via slider
Section window	CUT 6062 4 sizes selectable
Specimen retraction	<b>CUT 4062</b> automatic On return stroke
	<b>CUT 5062/CUT 6062</b> 0 – 200 µm, selectable
Specimen orientation, horizontal	8°
Specimen orientation, vertical	8°
Specimen orientation, z-axis	360°
Section counter	CUT 4062 Strokes (optional)
	CUT 5062/CUT 6062 Strokes / Distance
<b>Dimensions</b> (width x depth x height)	480 x 610 x 350 mm incl. handwheel and waste tray
<b>Weight</b> without accessories	<b>CUT 4062/CUT5062</b> 33 kg
	<b>CUT 6062</b> 34 kg

Standard components	CUT	CUT	CUT
	4062	5062	6062
Basic instrument	•	•	•
Object orientation	•		-
Universal cassette clamp, with oriental or standard object clamp	tion •		
3-component disposable blade holder (low and high profile blades) or standard knife holder			
Waste tray			
Disposable blade (low profile; 50pcs.)			
Foot switch for motor drive			
Operation Manual			
Dust cover			
Accessories			
External control panel CUT 5062		#1	10090050
External control panel CUT 6062		#1	10090051
Foot control element CUT 5062 / CUT	6062	#1	10090052
Magnifier with illumination		#	10090060
3-component disposable blade holder (tungsten carbide blades)		#′	10090041
Standard Object clamp, fixed		#1	10090007
Standard Object clamp (MTR), fixed		#1	10090026
Super-Mega-Cassette Clamp, fixed		#1	10090021
Super-Mega-Cassette Clamp, orientab	ole	#1	10090027
Foil clamp		#1	10090025
Section counter for CUT 4062 (installe	ed)	#1	10090020
Dissection needle		#3	30030095
Prism (Set)		#1	10090017
Disposable blade (low profile; 50 pcs)		#2	28407000
Disposable blade (high profile; 50 pcs)		#2	28408000
Tungsten carbide blades (1 pcs.)		#2	28406000
Microtome knife, Profile: C or D, Leng	th: 10 to	20 cm	



### **CUT** External control panel

- Intuitive Use of panel due to identical button design and layout
- Safe Workflow allows control of microtome functions at distance from blade and moving parts
- **Ergonomic Design** ensures fatigue free working
- Free Placement for right and left handed use of fully motorized microtome versions

#### 3-componentdisposable-blade-holder

- High Precision lateral adjustment of blade ensures that the entire width of the blade edge can be used
- Extra Safety finger protection guard engaged throughout processing (exchange of blade, lateral displacement, trimming, cutting)
- Multiple Functionality allows use of low and high profile disposable blades with the same holder
- **Easy Operation** for blade changing by special release mechanics and cutting angle setting by separate middlepiece
- **Durable Designed** blade clamping system
- **Hygienic Levers** made of high-grade steel

External control panel CUT 5062 Art. No. #10090050

External control panel CUT 6062 Art. No. #10090051

3-component-disposable-blade-holder

Art. No. #10090040



#### Magnifier with Illumination

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

- Rotatable and adjustable through metal flexible tube
- Lens (Dimensions Ø 72 mm lens; diopters: 6)
- Light source: 63x light-emitting diode (LED), neutral white, dimmer
- Electrical parameters: 100 240 V; 50/60 Hz



Magnifier with illumination

Art. No. #10090060

### **MTR**

#### Bench top quickfreezing unit

The fast cooling unit consists of a compressor cooling system with a flexible tube and a cooling block which can be adapted onto a standard object clamp of different kinds of microtomes.

- Extremely silent due to special valves
- Self optimizing controller for temperature accuracy
- Manual defrost
- High cooling capacity to -45°C

Specifications	
<b>Dimensions</b> (width x depth x height)	410 x 485 x 310 mm
Weight	28 kg
Cooling capacity	-45 °C

MTR 230V, 50/60 Hz Art. No. #10110000 MTR 115V, 50/60 Hz Art. No. #11000002

# Beyond standard application

The high precision microtomes of the CUT series are the basis for best quality sectioning. Together with add-on equipment such as the MTR bench top quick-freezing unit, the aquatec system or the video viewing devices, the system is ready for any kind of high performance sectioning in the field of medical and industrial applications.



#### Innovation in functionality and ergonomics



aquatec system (shown on CUT 6062)



ergotec height-adjustable workplace with optionally integrated cooling plate and water bath

#### Cooperation with distribution partners all over the globe.

Africa
Asia
Australia
Europe
Middle East

North America

South America



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Semi-automatic rotary precision microtome



High precision

Motorized advance

Ergonomic design

Wide range of accessories

**DESIGN AND MANUFACTURING** MADE IN GERMANY





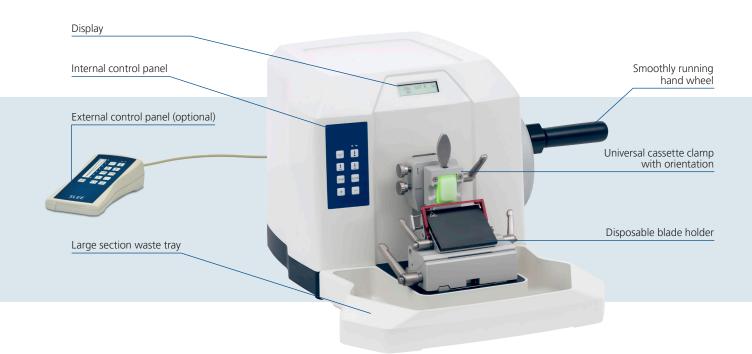
#### Semi-automatic rotary precision microtome

The SLEE medical semi-automatic rotary 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 being available. The CUT 5062 combines highest precision with user friendliness as well as best comfort and ergonomics. The manual sectioning is improved by the motorized specimen feed. Like all SLEE medical microtomes, the CUT 5062 comes with a complete set of standard components, ready to be used out of the box and a wide range of accessories to customize where needed.

#### 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 750µm, programmable
- Motorized advance / return of specimen (2 speeds)
- Display of number of sections, section-sum and remaining travel distance
- Tip function for precise sample advance
- 2 specimen feed memory positions
- Variable retraction
- External control panel (optional)
- Second hand wheel brake (optional)

Specifications	
Section thickness range	0.5–100µm
Section thickness settings	0.5–2µm in 0.5-µm steps 2–20µm in 1-µm steps 20–50µm in 2-µm steps 50–100µm in 5-µm steps
Trim thickness settings	0.5–750µm 0.5–2µm in 0.5-µm steps 2–20µm in 1-µm steps 20–50µm in 2-µm steps 50–150µm in 5-µm steps 150–750µm in 10-µm steps
Horizontal advance	28mm
Vertical stroke	72mm
Specimen retraction	0–200µm selectable
Specimen orientation	±8°
<b>Dimensions</b> (width x depth x height)	520 x 600 x 325mm
Weight	33kg



#### Precise orientation

The one-handed specimen orientation on the x- and y-axis as well as the blade holder positioning scale on the base plate allow a fast alignment.



#### Flexible

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



#### Easy to clean

The usage of paraffin leads to the need to clean the microtome. The CUT microtome design helps to make cleaning as easy as possible.



#### Section waste tray

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



#### Best sight

To make even small biopsy samples visible, CUT microtomes can be optionally equipped with a magnifier with illumination.



#### Safety

The handwheel can be locked in any position. The blade holder features a finger protection system for increased safety. A second handwheel brake is optionally available.



#### 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 – ergonomic is just as important as the section quality.

Perfect fit for workplaces of the ergotec series.







aquatec system (shown on CUT 6062)

MTR Bench top quick-freezing unit

#### Perfect fit

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



#### Intuitive use

Having a variety of features sometimes ends up in difficult usage. Not with the CUT 5062 which 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 5062.



#### Standard components

**Basic instrument** 

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.)

Mains cable

**Operation Manual** 

Dust cover

Optional accessories	Item No.
aquatec system	10090056
MTR Bench top quick-freezing unit	10110000
Magnifier with illumination	10090060
Remote control panel CUT 5062	10090050
TC65 Disposable blade holder (for tungsten carbide blades)	10090041
Tungsten carbide blades (1 pcs.)	28406000
Glass knife holder (for triangle glass knives)	10090014
<b>Segment arc</b> 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	10030007
Foil clamp	10090025
Prism (Set)	10090017
Round specimen holders (different diameters on demand)	
More on request	

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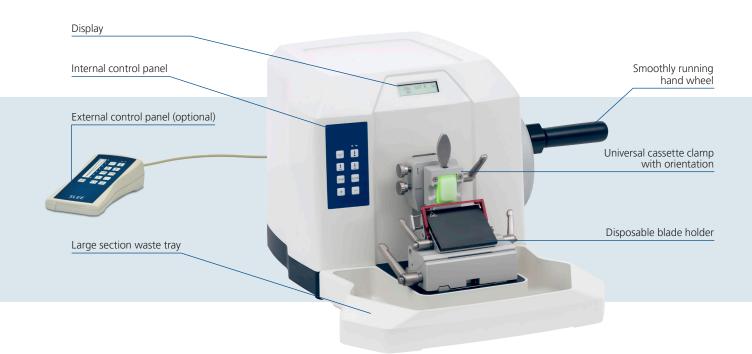
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