

Safest sectioning even of largest specimen –
Thermo Scientific Microm HM355S microtome

Precision Quality Ergonomics Safety



Thermo Scientific Microm HM355S – optimised microtomy from your partner around the lab

The demands on microtomy are the same worldwide – to create high quality sections that meet the need for information in medical, R&D and industrial laboratories. However, the specific requirements expected of a microtome vary from one lab to another.

The Microm HM355S is the premium rotary microtome in the Thermo Scientific Microtome Range. It was developed to meet almost every wish users expect of modern microtomy in terms of quality, safety, ergonomics, versatility and efficiency.

Advantages that stand out

- Finally large tissue cassettes (e.g. the Super Mega™) are available for vertical sectioning – faster sectioning for faster sample processing
- Patented single-handed operation – enhanced ergonomics
- Individually adjustable cutting windows – faster sectioning

Faster and better sectioning

- Ergonomic even in manual cutting mode. The “rocking mode” directly transmits the direction of the movement at the handwheel to the object – this helps to facilitate and speed-up the manual trimming process

Conveyor belt for your sections

- The sections are automatically conveyed onto the water bath. A continuously moving water flow makes it the most sensitive method of section transfer possible. More usable sections – less material used

Cool blocks with Cool-Cut

- Sample cooling directly on the microtome: Prevents expansion of the paraffin block due to ambient heat, ensuring consistent section quality without the need for subsequent cooling – better sections in less time

Thermo Scientific Microm HM355S rotary microtome – Leading in terms of safety, ergonomics and efficiency

Save time and material and reduce stress. Make life easy for yourself. Achieve higher precision and reliably reproducible sections with ease. Gain greater satisfaction.



Precision and convenience down to the last detail

- Maximum stability – for safe and accurate sample feed
- Easy to operate, easy to clean

Intuitive user guidance

- Effortless single-handed operation: Single-handed sectioning and adjustment without any reduction in speed or safety
- Clear layout of the function buttons
- Double Click feature: operating only one knob enables you to release the brake and to start sectioning – Safer than ever

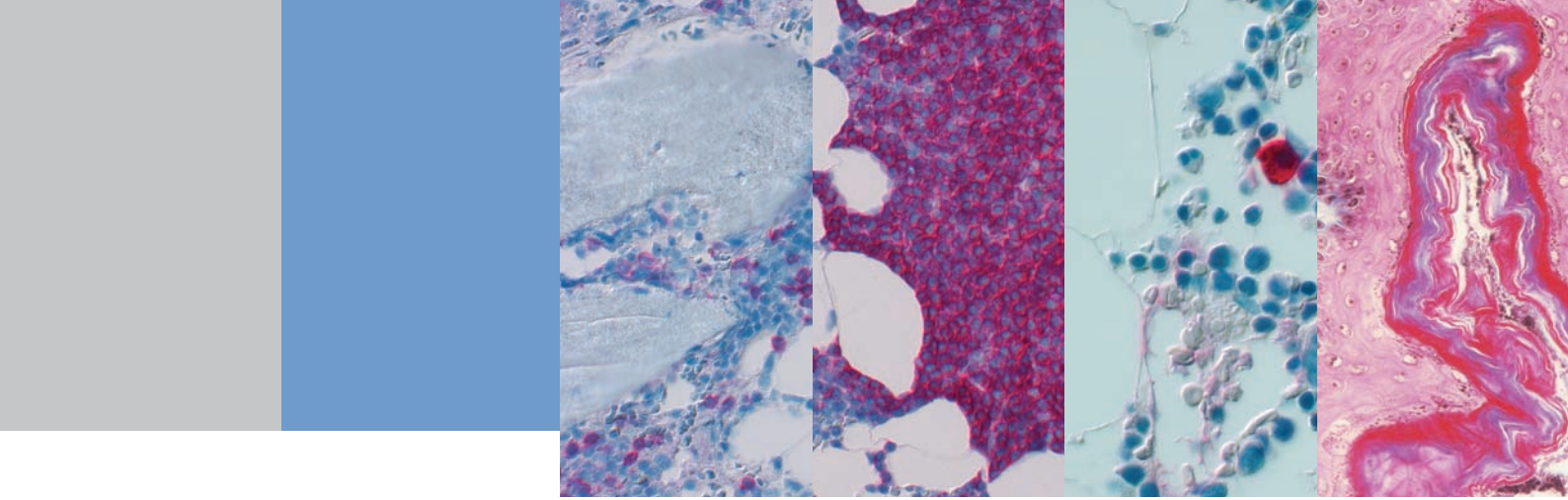
At the centre of your interest – the sample

- With quick-change function for specimen clamps and zero positioning with noticeable snap-in when specimen clamp position is in parallel alignment to the cutting plane
- Accepts all common clamps in the Thermo Scientific Microm product range
- Vertical sectioning through large samples even in Super Mega cassettes
- Precise, easy to operate quick-clamping device
- Quick exchange system for all clamps using a single lever
- Clamp can be rotated through 360°

Equal opportunities for left-handed operators

- Removable operating panel
- Can be used on the left or right-hand side of the microtome
- Knobs can be fixed on both sides of the operating panel
- Patented one-button sample feed operation







Freedom of choice of optional accessories – from the largest clamp to STS and Cool-Cut

Safety first

- Integrated safety functions
- Brake automatically applied when sectioning motor is not running
- Motor cannot be started inadvertently
- Finger protectors prevent injury while using the microtome
- Easily accessible, high-visibility emergency stop button in case of emergency

A strong but sensitive motor

- Single, interval, multi and continuous stroke
- High-precision stepping motor technology from 0.5 μm to 500 μm
- Subdivision into fine sectioning and trimming mode
- Retraction function on return stroke can be activated or deactivated
- Variable cutting windows: Individually adjustable cutting window within the stroke
- Manual sectioning using the handwheel is also possible

The HM355S forms a basis for every area of application

- Long stroke allows vertical sectioning through samples in large cassettes (e.g. Super Mega cassettes)
- Unique optional accessories: STS and Cool-Cut
- Attachable microscope and magnifier also available
- All parts and accessories harmonise with each other perfectly
- Extensive range of accessories allows maximum level of individualisation when working with the HM355S

Thermo Scientific Microm HM355S rotary microtome in brief

Dimensions	410 x 520 x 280 mm
Weight	31 kg
Certificates	CE; c-CSA-us
Section thickness range	from 0.5 – 500 µm
FINE section thickness range	from 0.5 – 5 µm in 0.5 µm steps
	from 5 – 20 µm in 1 µm steps
	from 20 – 30 µm in 2 µm steps
	from 30 – 60 µm in 5 µm steps
	from 60 – 100 µm in 10 µm steps
TRIM section thickness range	from 5 – 30 µm in 5 µm steps
	from 30 – 100 µm in 10 µm steps
	from 100 – 200 µm in 20 µm steps
	from 200 – 500 µm in 50 µm steps
Total horizontal feed	28.000 µm
Sectioning operating modes	Continuous, single, interval and multi stroke
Sectioning speed	Variable from 0 – 450 mm/s
Vertical specimen stroke	72 mm
Sample orientation	8° along the X-Y-axis, rotatable 360°
Sample retraction during return stroke	40 µm, can be deactivated
Current potential	100...240 V 1.6 A +/-10% 50...60 Hz
Electronic precision feed mechanism with stepping motor technology	
Vertical guidance by zero-backlash and maintenance-free cross roller bearings	
Operational health and safety due to unique safety functions	
Optional Accessory: STS section transfer system	Special disposable blade carrier TE with laminar-flow water bridge from the blade to an adapted heated water bath on the microtome
	Even and fast sample heating
	Closed circuit, infinitely adjustable water flow rate
	Temperature-controllable from ambient temperature up to + 45° C
	Water bath (aluminium) with a volume of 800 ml
Optional Accessory: Cool-Cut specimen cooling	Active cooling of the specimen clamp or the standard clamp
	Cooling to a steady 10°C at ambient room temperature
	Two versions available: – With specimen clamp for standard cassettes – With standard clamp for paraffin blocks

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