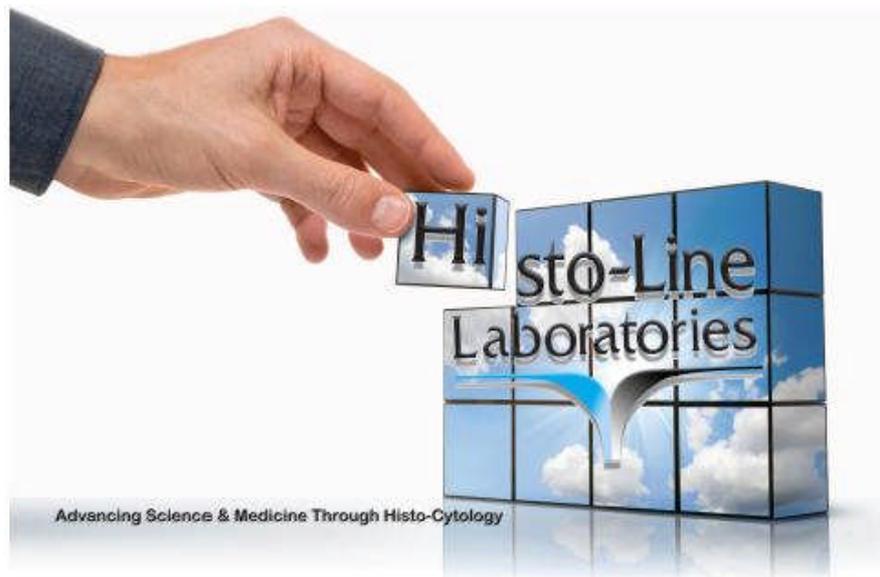




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Technical Sheet

MRS 3500 Ultra-Thin Semi-automated rotary microtome

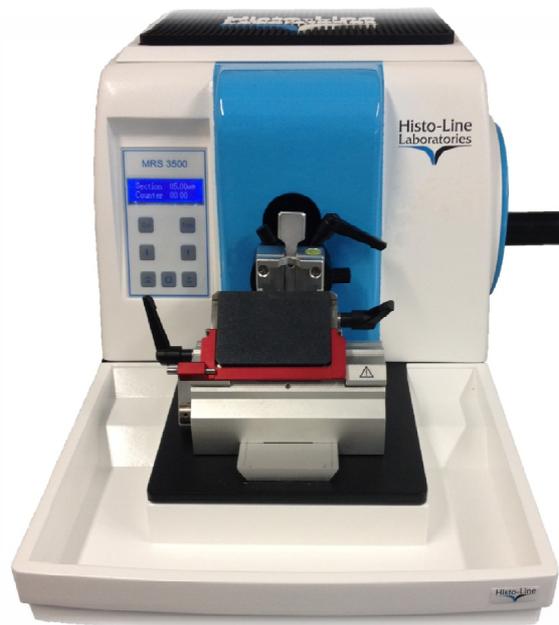


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1.Features



1.1 Information and specified use

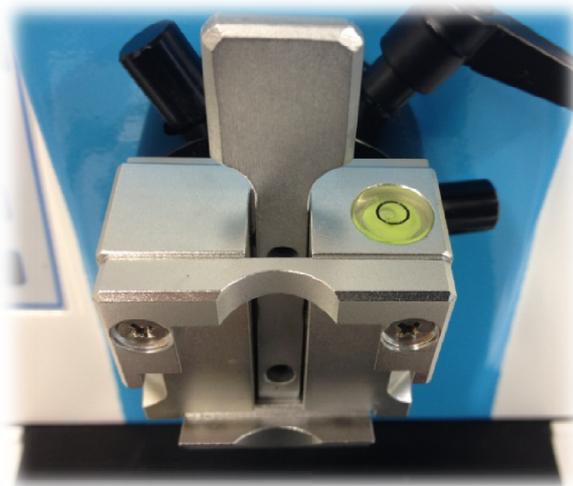
Histo-Line microtome MRS3500 model is a Semi-automated rotary microtome particularly suitable for cutting of paraffin sections, for normal use in histology, but also to the finer cuts used in the research field. The microtome is coated by a body in a special plastic material resistant to solvents and free of edges thus minimizing the risk of danger to the operators.

1.2 Safety and operation comfort

The flywheel is equipped with ergonomic handle for ease of cutting.

The blocking of the rotation handwheel is easily operated and can be accommodated in any position the arm sample holder. It also comes with a mechanical safety catch located under the flying shear.

The upper space of the microtome is equipped with a large area of work surface, covered with a tray that allows the operator to support the accessories needed for cutting (the package of disposable blades, the brush collect slice, etc.)



Orientation of the samples is possible in a simple and precise move; when bubble level is inside central circle, then the guidance plan is in zero position. The steel clamp is equipped with a device to "clamp" for quick change of the sample and sample holder fixed tilt.

The clamp is suitable for all types of standard cassettes, and is interchangeable by the operator with the standard block clamp (optional). The sample holder is equipped with a mechanism that allows a precise and quick orientation along the axes x and y.

Through the housing port disk sample it is possible to use the clamp for the super mega cassettes, equipped with a dovetail for insertion.

1.3 Reliability and precision of the cut



The microtome MRS3500 has the ability to adjust the cutting thickness and roughing.

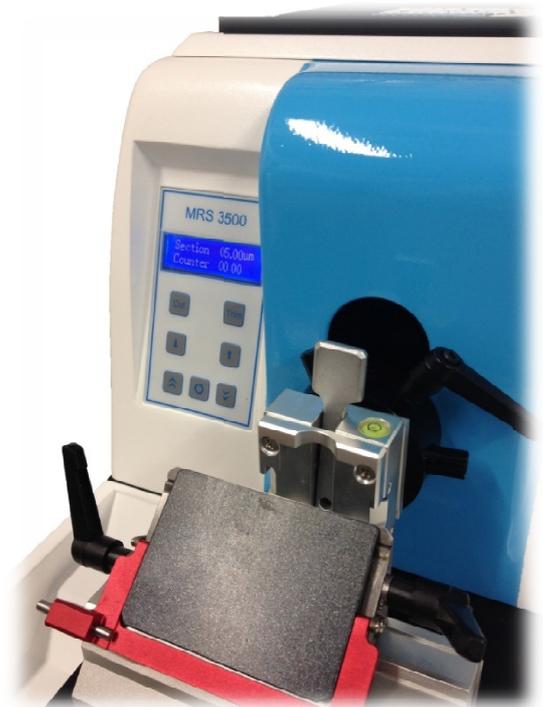
The holder is universal suitable for disposable blades, features the tilting protection.

The knife holder has the possibility of lateral translation to use the entire edge of the blade without removal of the same.

The translation of the knife holder is possible in the three positions corresponding to the length of a standard cassette (left, right, center), so as to allow the use of all the microtome blade without loosen the lock.

The high precision cut is suitable for any type of section embedded in paraffin, resin, for both routine and laboratory research activities. From 0,25 microns to 60 μm by stepper motors and roller bearings without play and low maintenance.

The microtome is also designed for cutting executions extremely fine increments of 0,25 μm from 0,25 to 2 μm .





The display, located on the left side of the operator, gives an indication of the most important working parameters, including:

- Cutting thickness
- Trimming thick
- Switching the operating mode "Cutting / trimming"
- Partial and total counting of sections

The control display is easy to use even when wearing protective gloves and can be easily cleaned.

The structure of the microtome is extremely stable, and is equipped with a powerful motor also for execution of particularly hard cuts.

Equipped with tray for collecting scrap sections surrounding the front area of work, including the underside of the blade, ergonomic for the operator and removed from the instrument for easy cleaning.

The tray lock is provided at the precise interlocking between the tray it self and the front structure of the microtome.

2. Technical specifications

2.1 Electrical data

Certification: CE, IVD

Protection class: I

Fuses type Fst: 10 A

Pollution class: 2

Over-voltage Category II Installation

Power supply: 220V ~ 50Hz and 110V ~ 60Hz

Maximum power draw: 100 V/A

2.2 Thickness section and advancement

The minimum thickness of cut is set to 0.25 μm .

For the setting "cutting" the setting range is from 0.25 to 100 μm

The allowable values increases are:

- 0,25 to 1 μm in 0,25 μm increments;
- 1 to 10 μm in 1 μm increments;
- 10 to 20 μm in 2 μm increments;
- 20 to 60 μm in 5 μm increments;
- 60 to 100 μm in 10 μm increments

The minimum thickness of Trimming is set to 1 μm .

Trimming setting range is from 0-900 μm .

The allowable values increases are:

- 1 to 10 μm in 1 μm increments;
- 10 to 20 μm in 2 μm increments;
- 20 to 100 μm in 5 μm increments;
- 100 to 900 μm in 50 μm increments;

2.3 Control features and functionality

Horizontal Specimen feed: 26 \pm 1 mm stepper motor

Vertical stroke: 52 mm

Maximum sample size (WxHxD): 50 X 60 X 40 mm

Sample orientation: Axes X and Y: 0 to \pm 8 $^\circ$, with the zero point.

Z axis: 90 $^\circ$ rotation

Specimen retraction: 50 μ m

2.4 Dimensions and weight

Width (with hand wheel):	413 mm
Width (without hand wheel):	300 mm
Depth:	618 mm
Height:	305 mm
Working height (knife edge):	100 mm
Weight (without accessories):	30 kg

2.5 Instrument equipment

Standard accessories

- 1 collection tray sections
- 1 holder blades
- 1 clamp for standard samples
- Power cable
- Manual instructions

Optional accessories

- 1 bottle (50 ml) of microtome oil
- 1 box of 50 disposable blades type S35