

MICROTOME & CRYOSTAT

SAFETY GUIDE



Sliding (Microtome) ₁



Rotary (Microtome) ₂



Freezing (Cryostat) ₃

Specialized precision cutting instruments used to slice extremely small sections from a block of embedded tissue, also called microsectioning.

Risks

- Cuts from sharp blades
- Exposure to extreme temperatures, potentially infectious materials/biohazards, chemical fixatives or disinfectants
- Potential aerosol generation
- Electrical shock from electrical components

PPE

- Lab coat, safety glasses, cut-resistant/cryogenic gloves, nitrile gloves

Safe Operation & Cleaning

- Train all users prior to use
- Adjust seat height and foot pedal position appropriate to user's size
- Ensure no blades or tissues remain from previous use
- Use guards and locks: Ensure roll guard is over blade and wheel is in Locked position when not in use and before engaging with machine
- Never directly handle parts or blades
 - Use forceps or tongs to remove tissue sections or blades
 - Keep hands clear from moving parts/blades
 - Keep hands clear when adjusting stage
- Perform safe sectioning
 - Use a sectioning brush for sample or chuck
 - Remove blade before removing sample or before cleaning