

Cryostat and Microtome Guidance

- Lab coat, gloves, and eye protection should be worn. Additional PPE (e.g., respirator) should be worn as appropriate for materials being handled.
- The blade, handwheel, and foot pedal (if applicable) should be locked and the blade guard (if available) should be in place before any manipulation of materials or blade. Blade guard (if available) should be used if instrument is not in use.
- The blade should be installed and removed using forceps or magnetic tool. Never remove blades with fingers. Wear cut resistant gloves when installing or removing blades.
- Hands and fingers should remain clear of the blade when working with materials. Use tools when removing slices or ribbons or to wipe block/plate.
- The foot pedal (if applicable) should be positioned to avoid accidental activation during operation. The foot pedal should have a cover or guard that will prevent unintended operation.
- If installing or changing blade, sample should be positioned before the blade is installed or changed.
- Blades should be removed prior to cleaning. Blades should be removed if equipment is not in use. Blade holder should not be removed with blade in place.
- Blades must be removed prior to equipment maintenance, service, transport, or disposal.
- Disposable blades are placed in a sharps container for disposal. Re-usable blades are placed into a rigid, covered storage container when not in use. Re-usable blades must be disinfected prior to storing or sharpening.
- A disinfectant that is effective against agents potentially present must be used when decontaminating equipment. Equipment must be decontaminated before service or maintenance work is performed and before transport or disposal. Contact manufacturer for information on which disinfectants cannot be used on the equipment. Wear cut resistant gloves when cleaning cryostat as the equipment may have other sharp edges.
- To help prevent injuries due to fatigue, schedule regular breaks.
- Be aware of potential cold hazards associated with cryostats (e.g., freezing chemicals, dry ice, liquid nitrogen). Do not use freeze spray when handling samples potentially containing aerosol transmitted pathogens. Do not use a flammable freezing spray.
- Cryostats should be defrosted and decontaminated regularly. Disinfectants should be poured onto surfaces or disinfectant-soaked towels should be used on surfaces.

Training:

- Placement, use, removal, and disposal of blades
- Decontamination of equipment
- Emergency response procedures
- Hazard communication for material handled