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Instruments

OTF7000 CRYOSTAT



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INTRODUCTION

Our OTF7000 Cryostat is the latest version of our machines designed to deliver reproducible tissue sections with expert temperature control. This cryostat can handle a large number of specimens and is available in two models, with the OTF7000/A benefitting from motorised sectioning.

This high quality and versatile cryostat is expertly engineered for a wide range of applications, including

- Biological research
- Pathological diagnosis
- Pharmaceutical research
- Neuroanatomical research
- Clinical cryo-sectioning needs

The OTF7000 Cryostat is available as the OTF7000 (semi-automated) or the OTF7000/ A (fully- automated).

FEATURES AND BENEFITS

- High stability and temperature control
- Stable section quality
- Integrated safety features
- Efficient and energy saving
- UV – to handle a large number of specimens and varying specimen types with UVC for increased user safety
- Individually controlled temperature settings on both the cryochamber and the specimen holder

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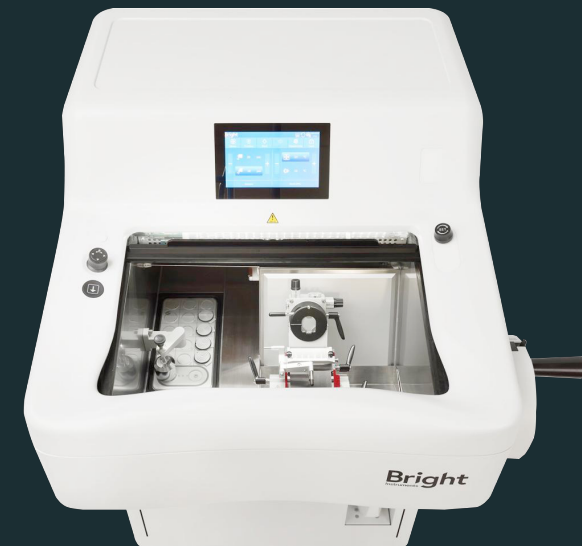
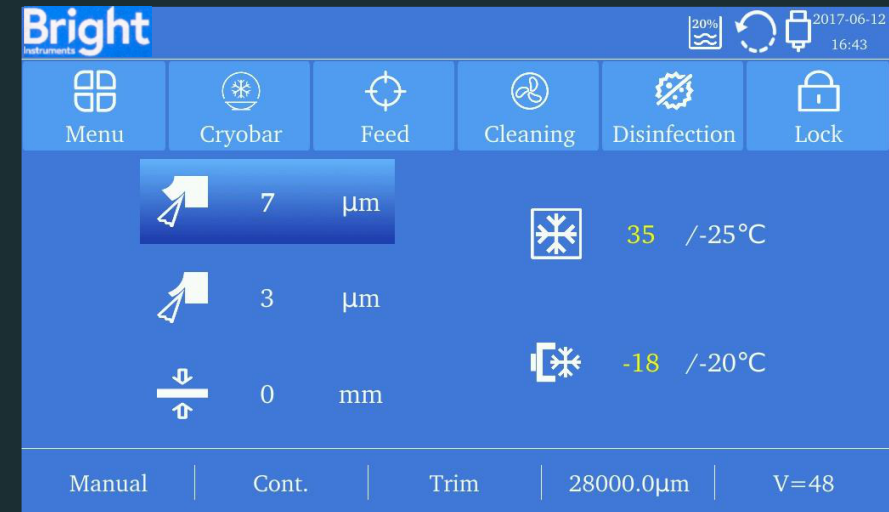
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TOUCHSCREEN

The 7- inch touchscreen makes any adjustment clear at a glance:

- The adjustment of temperature settings (Chamber & Specimen)
- The adjustment of thickness settings (Trim & Section)
- Manage and schedule the UVC disinfection and the defrost cycles
- Rapid sample positioning (Position memory & “Go to” function)
- Access historical record system



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High Stability and Temperature Control

Our cryostat is extremely consistent, both in terms of temperature control and sectioning quality. Temperatures are regulated in the cryochamber between 0 to -35°C via:

- An intelligent temperature control system
- A compressor that adopts frequency conversion working mode
- A cooling system that includes an adjustable temperature range of between -10°C and -50°C with a low pressure cooling system and semi-conductor refrigeration, faster temperature regulation and low failure rate.

Stable Section Quality

Stable sectioning is maintained by:

- Precision cross roller guide rails that guarantee section smoothness and accuracy
- Precise screw rods that meet 0.5µm sample section requirements
- Five phase, high resolution stepping motor with higher positioning accuracy and lower motor vibration
- Horizontal sampling slide crafted from aviation aluminium, with ultra-high strength and corrosion resistant material.



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Integrated Safety Features

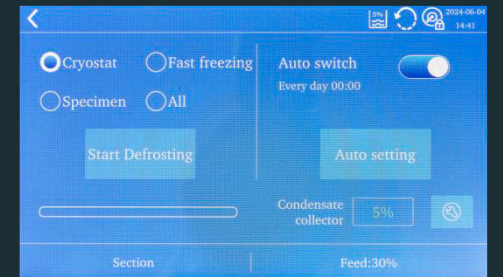
The OTF7000 Cryostat includes a range of important safety features:

- High-tech, low-temperature UVC disinfection technology that kills bacteria and viruses at an intensity of above 340 uw/ cm ², within both the inner surface and the air inside the cabinet.
- Ergonomic exterior cabinet with a circular arc design. This is available with an optional height-adjustable foot rest.
- Integrated waste management system that displays waste liquid volume on the touch screen.
- An alarm to notify the user when the waste management bottle is full.

Efficient and Energy Saving

This expertly engineered machine delivers efficiency with:

- A visually appealing 7 inch touch- sensitive screen.
- A joystick that controls coarse sampling, trimming and section switching, as well as section parameter adjustment
- Rapid and precise positioning with $\pm 8^\circ$ visual pointer facilitating adjustment of the specimen clamp to the target angle. This reduces trimming and sample waste.
- Efficient defrosting with a variety of options.
- Auto-sectioning option available for ease of use and consistent sectioning of all specimen types.
- Automatic sleep and wake-up feature that saves energy.
- Specimen loading via a single lever operation.
- Specimen marking to easily record and identify each sample.



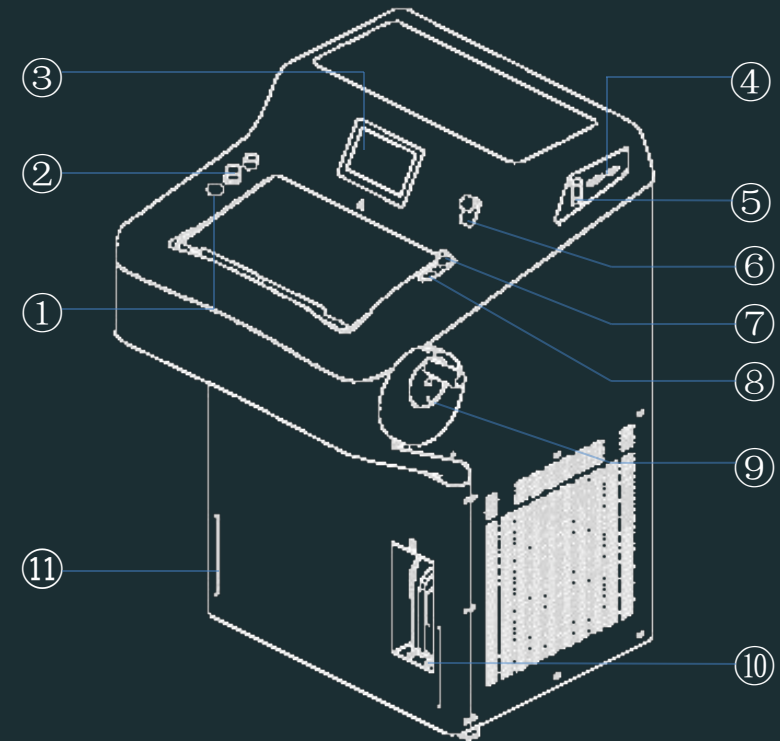
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CABINET CONTROLS

- 1 --- Feed advance button
- 2 --- Joystick
- 3 --- 7-inch touch screen
- 4 --- Foot pedal port
(Optional for OTF7000A)
- 5 --- Power switch
- 6 --- Emergency stop knob (OTF7000A)
- 7 --- Parameter adjustment knob
- 8 --- Automatic section control button
(Optional for OTF7000A)
- 9 --- Handwheel
- 10 --- Condensate collector
- 11 --- Adjustable foot rest



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HEIGHT - 1210 mm

WIDTH - 853 mm

DEPTH - 863 mm



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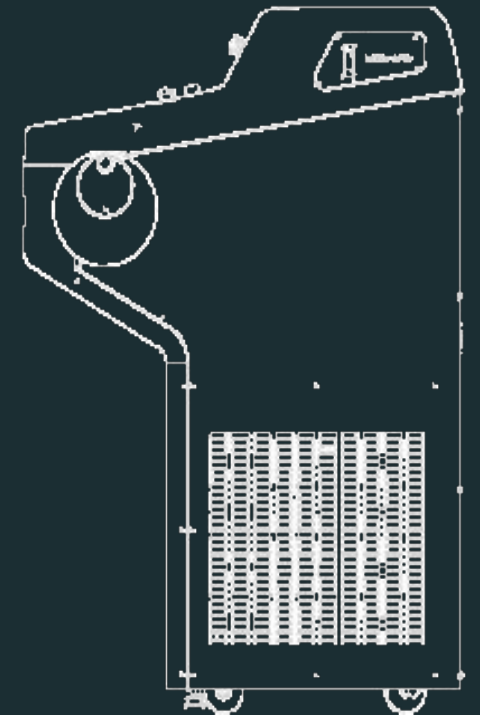
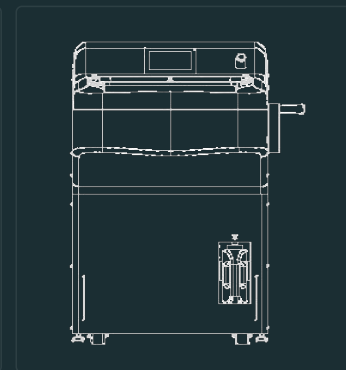
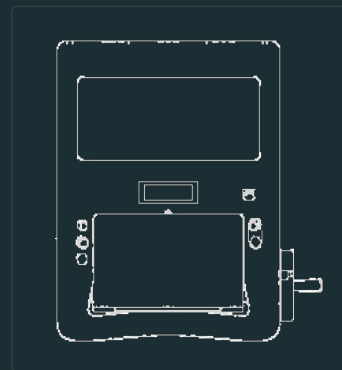
CRYOSTAT SPECIFICATION

Both OTF7000 and OTF7000/ A Cryostats Include:

- Section thickness setting range: 0.50–100 μm
- Trimming section thickness setting range: 1–800 μm
- Electric advance speed: 0- 1800 μm adjustable
- Specimen retraction: 0- 250 μm adjustable
- Specimen feed: 28m m
- Vertical stroke: 70m m
- Specimen orientation with zero position.
- Horizontal/ vertical rotation: X/ Y axis 8°
- Number of refrigerated sites: 15
- Number of fast cooling sites: 2
- Freezer refrigeration temperature: 0°C to - 35°C
- Sample head minimum cooling temperature: - 50°C
- Low profile microtome blade featuring PLASMA technology, measuring 0.010" x 3.15" / 254mm x 80mm with 35° angle

OTF7000/ A :

- Fully automated and semi-automated mode switch
- Emergency stop button
- Cut window function
- Slice speed selection
- Multiple sectioning modes
- Optional foot pedal



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OTF 7000 Supplied with

- Blade holder “E” (Compatible with low and high profile blades)
- Specimen cooling system
- UVC disinfection
- Specimen holder
- Handwheel
- Fast freeze system
- Freeze shelf (For place up to 15 position holder · include 2 Peltier)
- Fixed heat extractor
- 5 Specimen discs (φ 30 mm)
- Anti- roll assembly 100 μm(includes anti-roll glass)
- Waste liquid collector (2.5 L)
- Power cable
- Dummy Plug Connector (only for OTF7000A)
- User manual
- Tool set

OTF 7000 (A) / ACCESSORIES

The following accessories are also available

- FS800- F3: Stationary heat extractor
- FS800- F13: Foot rest
- S700A- F3: Foot switch (OTF7000 (A))
- FS800- F2: Blade holder assembly
- FS800- F14: Movable shelf
- FS800- F21: Storage system
- FS800: Specimen discs:
- FS800- F4 Specimen disc φ20 FS800-
- F5 Specimen disc φ30 FS800- F6
- Specimen disc φ40 FS800- F7 Specimen disc φ55

Replacement Microtome Blades (50241)

- Low profile microtome blade featuring PLASMA technology
- Dimensions: 0.010" x 3.15" / 254m m x 80m m, 35° angle, 50 pcs

AGENT AND DISTRIBUTOR INFO

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