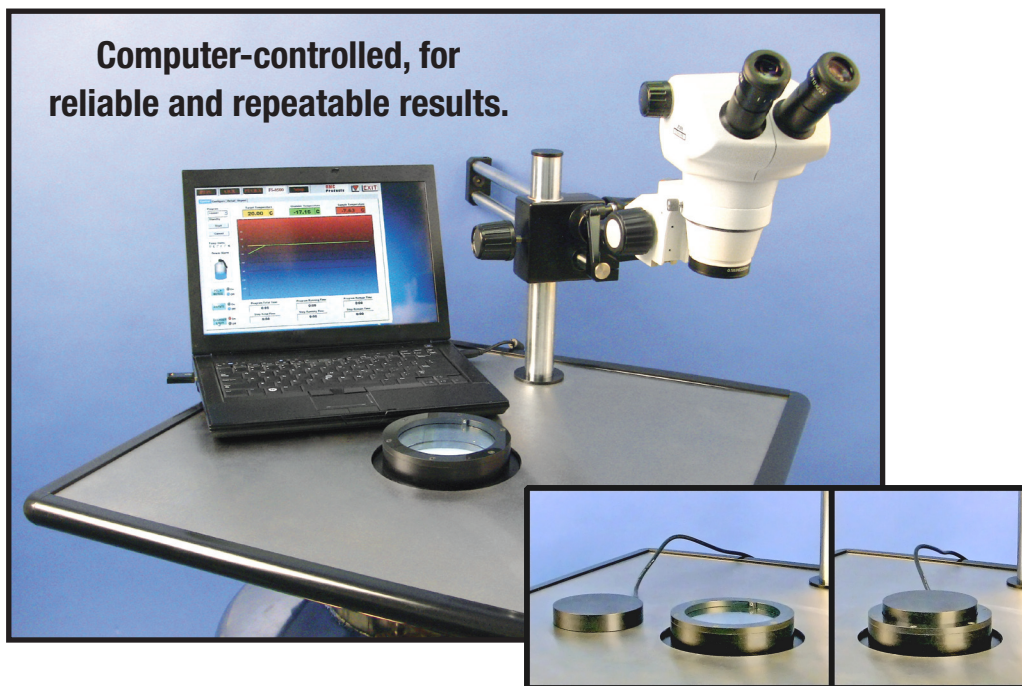


**Computer-controlled, for
reliable and repeatable results.**



UV LED Lamp

The FS-8500 Freeze Substitution System is designed with safety & operator convenience in mind. With a large volume, easy access, top loading, temperature controlled substitution chamber samples are slowly and gently dehydrated in a solvent solution, following which they are embedded in resin blocks for room temperature sectioning.

Cryofixed samples, typically stored in LN₂, are transferred into the FS-8500 where the substitution solvent is pre-programmed to a temperature below that where secondary ice crystal growth can occur.

The FS-8500 uses liquid nitrogen as a coolant to achieve a base operating temperature of -140C (133K) which is well below the ice recrystallization temperature in any biological structure. The temperature of the substitution chamber is set & regulated by the included

laptop computer to an accuracy of better than +/- 0.5C over the range from -140C to +50C.

The FS-8500 is a free standing, caster wheel mounted, system with a large, stainless steel worktop mounted to its 50 liter low-loss LN₂ Dewar. The temperature controlled substitution chamber is conveniently located in the center of the worktop for easy access. The chamber is provided with a viewing port/cover, which is removed to gain access into the substitution workspace. As it is removed, the ventilation system is automatically turned on to extract fumes and the chamber internal illumination is turned on.

These features combine to make the FS-8500 an extremely convenient to use and versatile Freeze Substitution System.

FEATURES

- ◆ Unlimited capability for storing protocols and reports
- ◆ Additional temperature sensor provided to measure sample temperature in a reagent vial during Freeze Substitution run.
- ◆ Low-loss LN₂ Dewar can be refilled during a substitution run
- ◆ Internal illumination of substitution work chamber automatically activated when chamber cover removed
- ◆ Specimen agitation
- ◆ Cryo transfer tool provided to safely & conveniently remove cold sample holders

SPECIFICATIONS

Supplied complete with a low-loss 50 liter LN₂ Dewar, stainless steel work table, laptop computer, Large Top-access Substitution Chamber with built-in illumination, exhaust fan and removable cover, Universal Specimen Holder Cup (400907), Inverted Polymerization Holder Cup (400915), Transfer Tool (400920), UV Polymerization Lamp.

Dimensions	Work table: 26 inches (660 mm) x 26 inches (660 mm) Height: 31 inches above floor (790 mm)
Weight (empty)	55 kg
Power Requirements	90-120 VAC 60 Hz or 220-240 VAC 50 Hz
Dewar	50 Liter LN ₂ capacity low-loss stainless steel, mounted on caster wheels
Temp Range	-140C to +50C ±0.5 C

System Components:

Low loss 50 liter liquid nitrogen Dewar on roller base with built-in fill & vent valve manifold with phase separator and DP LN2 level gauge (analog)

Large, top access, loading port & freeze substitution chamber

Stainless steel work surface with ample working space

Digital microprocessor controller

Laptop computer with FS-8500 software & GUI factory installed

LED polymerization lamp

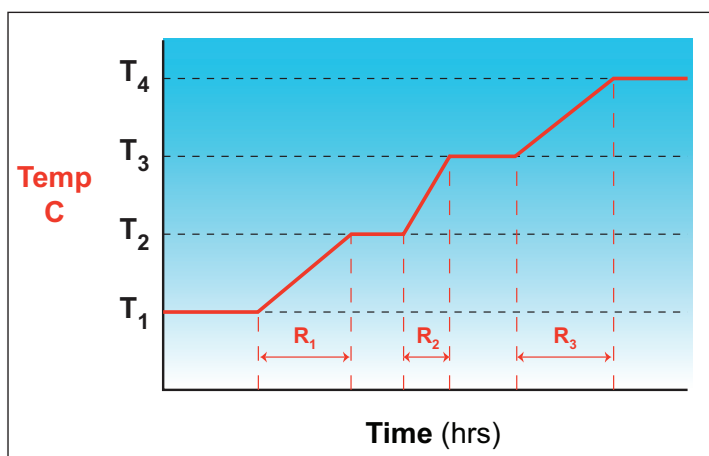
Stereomicroscope on adjustable support stand

Universal specimen holder cup with rack

Universal polymerization holder cup with rack

Cryo tool kit

Startup consumables kit



Graph of possible Soak Temp (Tx) and Ramp Temp (Rx) settings.

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