BLOOD BANK EQUIPMENT

Designed for the precise requirements of blood banking and processing applications, Thermo Forma Blood Bank Equipment meets American Association of Blood Banks (AABB), American National Red Cross (ANRC) and U.S. Food & Drug Administration (FDA) standards. Refrigerators, storage freezers, and platelet incubators feature alarm systems that alert you of critical power failures or temperature deviations. Inkless chart recorders track conditions for permanent records.

BLOOD BANK REFRIGERATORS: BLOOD BAG STORAGE AT 4°C

Our blood bank refrigerators ensure quick temperature recovery for maximum product protection after door openings. Recorder is standard on all models but optional on undercounter Model 3626 (3629).

<table>
<thead>
<tr>
<th>MODEL</th>
<th>CU. FT./LITERS</th>
<th>CAPACITY*</th>
<th>SHELVES/DRAWERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>3644 (3646)</td>
<td>2.8/79.3</td>
<td>40</td>
<td>3 adjustable wire shelves, 1 solid shelf</td>
</tr>
<tr>
<td>3626 (3629)</td>
<td>7.0/198.2</td>
<td>84</td>
<td>2 perforated drawers, 1 solid drawer</td>
</tr>
<tr>
<td>3881 (3889)</td>
<td>19.7/557.8</td>
<td>240</td>
<td>6 roll-out drawers</td>
</tr>
<tr>
<td>3883 (3887)</td>
<td>29.1/824.0</td>
<td>490</td>
<td>7 roll-out drawers</td>
</tr>
<tr>
<td>3866/3868 (3867)</td>
<td>48.0/1359.2</td>
<td>672</td>
<td>12 roll-out drawers</td>
</tr>
</tbody>
</table>

*Capacity is based on primary whole blood bag volume of 450ml (no dividers) and may vary, depending on storage container configuration. Model 3646 is CE Marked. Models 3626, 3881, 3889, 3883, 3886, and 3867 are CSA Certified. Models 3626, 3866, and 3867 are UL Listed.

- All models (except undercounter model) have glass doors and fluorescent lights for easy inventory viewing.

- Microprocessor Performance Monitor/Alarm on Models 3881 (3889), 3883 (3887), and 3866/3868 (3867) indicates temperature and alarm conditions, has an alarm test system, and tracks how many door openings occur in 24 hours.

PLASMA FREEZERS: SAFE STORAGE AT -30°C AND -40°C

Thermo Forma Plasma Freezers safely store single donor, fresh frozen plasma, and cryoprecipitate. Recorders are standard on all models.

<table>
<thead>
<tr>
<th>MODEL</th>
<th>CU. FT./LITERS</th>
<th>TEMP.</th>
<th>CAPACITY</th>
<th>DEFROST</th>
</tr>
</thead>
<tbody>
<tr>
<td>8624 (826)</td>
<td>13.0/368.1</td>
<td>-40°C (-40°F)</td>
<td>300 plasma boxes, 5 shelves</td>
<td>Manual</td>
</tr>
<tr>
<td>8097 (8103)</td>
<td>19.7/557.8</td>
<td>-30°C (-22°F)</td>
<td>350 plasma boxes, 7 solid drawers</td>
<td>Auto</td>
</tr>
</tbody>
</table>

- Model 8624 (826) — UL Listed, CSA Certified, CE Marked
  - Cold wall refrigeration system with 5.0" (12.7cm) of foamed-in-place polyurethane insulation for ultimate safe storage of plasma, Factor VIII, and rare types
  - Enviro-Scan™ Microprocessor Monitoring System with digital readout, audible/visual indicators, and sensi-touch keypad
  - Actual chamber temperature and control setpoint displayed
  - Quick and easy high and low alarm point programming

- Model 8097 (8103) — CSA Certified
  - Forced air refrigeration system
  - Microprocessor Performance Monitor/Alarm with audible/visual ringback alarm system, indicating power loss and/or deviation beyond high and low temperature limits

These storage freezers, which are based on our premium freezer line, maintain red cells safely below regulatory standards at -86°C (-123°F). Recorder is standard on both models.

- Built-in automatic voltage compensator detects and adjusts (boosts or bucks) incoming high and low voltage conditions, ensuring that the compressors operate within design parameters.

- Enviro-Scan Microprocessor Monitoring System incorporates a sensi-touch keypad, digital display, and audible/visual indicators, keeping you informed of all freezer functions.

- Cabinet warm-up and cool-down can be simulated using the monitor’s touchpad keys so you can quickly and conveniently verify the high limit/low limit setpoint.

### PLASMA/Blast Freezers: Plasma Freezing to -50°C

Our plasma/blast freezers maintain a -50°C (-58°F) temperature to rapidly freeze single donor, apheresed, and fresh frozen plasma. Rapid freezing also preserves Factor VIII. Full load of single donor units freezes in 75 minutes.

- Chests and uprights include a 5 HP air-cooled compressor mounted on a stand. Compressor can be located up to 50 ft. (15.2 m) from the freezer cabinet to eliminate noise and heat from the lab. (Distance between the freezer cabinet and the compressor can be extended based on refrigeration line sizing and compressor location.)

- Defrost cycle can be initiated to shut down the compressor and keep the cabinet frost-free.

- Externally mounted, 1/4 HP blowers—two in chests, one in uprights—provide maximum, efficient airflow throughout the cabinet.

### Table: Model Specifications

<table>
<thead>
<tr>
<th>MODEL</th>
<th>CU. FT./LITERS</th>
<th>CAPACITY</th>
<th>ELECTRICAL**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chests: 8098</td>
<td>4.0/113.3</td>
<td>30 pooled (650ml) or 96 single plasma units</td>
<td>120V, 60 Hz, 6.0 FLA Compressor: 208/230V, 3 PH, 4 Wire, 60 Hz, 23.0 FLA 208/240V, 50/60 Hz, 3.0 FLA Compressor: 380V, 3 PH, 5 Wire, 50 Hz, 12.0 FLA</td>
</tr>
<tr>
<td>(8091)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uprights: 8001</td>
<td>4.2/118.9</td>
<td>99 single plasma units</td>
<td>120V, 60 Hz, 8.0 FLA Compressor: 208/230V, 3 PH, 4 Wire, 60 Hz, 23.0 FLA 208/230V, 50/60 Hz, 6.0 FLA Compressor: 380V, 3 PH, 5 Wire, 50 Hz, 12.0 FLA</td>
</tr>
<tr>
<td>(8003)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Chests:* Optional compression racks (No. 600002) and flat freeze racks (No. 600029 and 600031) are available for all models. **Other compressor electrical configurations are available through our Customs Department. Contact us for details.

Continuing research and improvements may result in specification changes at any time.
THAWING BATHS: RAPID, UNIFORM THAWING

Model 2032 (2036), commonly used to thaw frozen plasma and red cell units, has an operating temperature of 5°C above ambient to 60°C (140°F) and control of ±0.4°C. Up to 4 red cell units can be thawed in only 12 minutes, and 1 to 8 plasma units can be thawed in 25 minutes (time is extended if an overwrap is used). Model 2032 is CSA Certified.

- Overtemperature safety thermostat protects your product. An adjustable 30 minute timer rings when thawing is completed.
- Filter screen protects pump intake from debris, such as labels.
- Drain line, with shut-off valve, can be connected to existing plumbing.
- Thawing baths come with your choice of two standard size (No. 185048) or one wedge-shaped (No. 185055) thawing rack. They also accommodate one optional red cell canister rack (No. 185004).

PLATELET INCUBATORS AND AGITATORS: 22°C PROTECTION

Our platelet incubators hold rotators and agitators for continual mixing. Incubator temperature can be set at 22°C (71°F) or controlled from 15°C to 40°C (59°F to 104°F). Uniformity is within ±0.5°C from top to bottom. Recorder is standard on all models. All platelet incubators are CSA Certified.

Quiet operating platelet agitators have a side-to-side, 1.5” (3.8cm) stroke at 70 times per minute. Models 4720 and 4722 are UL Listed.

ACCESSORIES

Additional equipment and accessories are available. Examples include a monitor/alarm system; back-up systems; Sensaphone® Telephone Dialing Systems; temperature/power monitors; remote alarms; and a datalogger kit (No. 201905) with a datalogger, four waterproof sensors, and bracket. Datalogger meets cGLP 21 CFR Part 58, Software Validation 21 CFR Part 820, and Electronic Records 21 CFR Part 11.