Shandon Pathology Workstations and Workbenches

- Downdraft or Back Draft Fume Removal
- Stainless Steel Construction
- Elevating or Fixed-height Work Surfaces
- Hands-free Controls
- Three Efficient Ventilation System Options

Analyze • Detect • Measure • Control™

Thermo ELECTRON CORPORATION
Shandon Gross-Star™ Pathology Workstations

Optional dictation system.

Shandon Gross-Star Workstation camera bracket and magnetic instrument bar.

Standard formalin disposal cup sink and optional formalin dispensing system faucet.

Sink, faucet, hand spray, and manual manifold rinse control valve.

To minimize contamination and maximize convenience, the Shandon Gross-Star is available with hands-free foot pedal controls for cold/hot water faucet, optional formalin dispensing system, and optional dictation system.

- Optional camera, monitor, and keyboard brackets are available.
- Monitor bracket is designed to hold a thin flat-screen display monitor.
- Telescoping arm for the camera slides along the width of the unit.

An organized workstation for the gross examination and sectioning of specimens.
Superior Functionality

- **Downdraft ventilation** is a standard feature.
- Models with **elevating or fixed-height work surface** are available.
- Elevating units have **user-adjustable work surface height** of 33” to 41” (83.8 to 104.1 cm).
- Fixed-height units have a work surface that is **factory set to your specification** from 33” to 41” (83.8 to 104.1 cm).
- **Deep sink** with cold and hot water faucet.
- **1/2 or 3/4 horsepower disposals** are available (please check with local authorities before ordering a unit with a disposal, because some areas prohibit the use of disposals).
- **Hands-free foot pedal controls** for cold/hot water faucet, optional dictation system, and optional formalin dispensing system.
- **Abundant light** is directed to the work surface.
- **Vacuum breaker-protected** water supply.
- Appliances **plug directly into the unit** for convenient use.
- One **hospital-grade duplex ground fault circuit interrupter (GFCI)** receptacle included on 110-120V units.
- One **point-of-use receptacle** included on 220-240V units.
- **Facility-supplied residual current device (RCD)** is required for 220-240V units.
- **Two optional tape recording units** available.
- **Ventilated base cabinet**.
- **Fume removal** is efficient and quiet.
- Optional camera, monitor, and key board brackets are available.
- Monitor bracket is designed to hold a thin flat-screen display monitor.
- **Telescoping arm for the camera** slides along the width of the unit.
- **Each unit comes complete** with magnetic instrument bar, integral centimeter ruler, paper towel dispenser, and photographic blue polyethylene dissecting board.
- **Built-in manifold rinse** washes down wetted internal surfaces quickly.

Superior Quality

- **Standard Type 304 or optional Type 316 stainless steel** construction.
- **Rugged design** provides stability and is built tough to withstand years of extensive work without corrosion.

Three Ventilation System Options

- Some models feature **formaldehyde neutralizing filters** and recirculated air.
- For short distance, external exhaust models are available with **filters and an integral blower**.
- Other models **connect to the facility remote exhaust system**.

Recommended Depth from Front of Unit to Wall

- For the purpose of room planning, **backs of fixed-height units can be flush to walls**.
- **Elevating units require approximately 1” (2.54 cm) clearance** between the backs of the units and walls to accommodate height adjustment.

Designed for Easy Shipping and Installation

- All Shandon Gross-Star™ workstations ship in **two convenient assemblies**.
- Both parts fit through a **standard 32” (81.3 cm) doorway**.
- The two halves link firmly with easy-to-assemble plates and fasteners.
- **Connects directly to facility cold and hot water supplies and drains**.
- **Units are hard wired** to facility electrical system.

Flexible Exhaust Duct Adapter for Elevating Units

It connects to your facility's exhaust duct system to permit unit height adjustment. This piece ships separately and installs to the top of elevating external and remote exhaust units.
## Shandon Hyperclean™ Fume Handlers

- Clear acrylic side panels are impervious to most chemicals.
- Filters are replaced easily without tools.
- 110-120V Blower Units are UL / cUL approved.
- 220-240V Blower Units are CE marked.

<table>
<thead>
<tr>
<th>Description</th>
<th>Order Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Charcoal Filter (except Hyperclean 2)</td>
<td>9990610</td>
</tr>
<tr>
<td>Fine Particle Filter (except Hyperclean 2)</td>
<td>9990611</td>
</tr>
<tr>
<td>Formaldehyde Vapor Filter (except Hyperclean 2)</td>
<td>9990612</td>
</tr>
<tr>
<td>Hyperclean 2 Charcoal Filter</td>
<td>9990613</td>
</tr>
</tbody>
</table>

## Filters & Accessories
- Charcoal Filter (except Hyperclean 2)
- Fine Particle Filter (except Hyperclean 2)
- Formaldehyde Vapor Filter (except Hyperclean 2)
- Hyperclean 2 Charcoal Filter

## Shandon Dissecting Instruments with Case
- Kit is available with complete set of instruments.
- Case is also available without instruments.
- Photograph may not represent actual set of instruments included with order number 9996969 (kit is subject to change without notice).

<table>
<thead>
<tr>
<th>Description</th>
<th>Size</th>
<th>Order Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shandon Instrument Case</td>
<td>12.75&quot; x 9.5&quot; x 2.5&quot; (32.4 x 24.1 x 6.4 cm)</td>
<td>1001382</td>
</tr>
<tr>
<td>Shandon Instrument Case</td>
<td>12.75&quot; x 9.5&quot; x 2.5&quot; (32.4 x 24.1 x 6.4 cm)</td>
<td>9996969</td>
</tr>
</tbody>
</table>

SEE PRODUCT CATALOG FOR COMPLETE LIST OF DISSECTING INSTRUMENTS.

## Shandon Polyethylene Dissecting Boards
- Durable, easy-to-clean 0.75" (1.9 cm) thick polyethylene will not dull fine surgical cutting edges.
- White opaque surface provides an excellent background for cutting surgical or research specimens.
- Photographic blue surface allows specimens to be photographed directly on the board; no need for removal to another location.
- Each is available in two sizes.

<table>
<thead>
<tr>
<th>Description</th>
<th>Order Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shandon Polyethylene Dissecting Board, white</td>
<td>36114</td>
</tr>
<tr>
<td>0.75&quot; x 23&quot; x 16&quot; (1.9 x 58.4 x 40.6 cm)</td>
<td>36114</td>
</tr>
<tr>
<td>Shandon Polyethylene Dissecting Board, white</td>
<td>361191</td>
</tr>
<tr>
<td>0.75&quot; x 16&quot; x 12&quot; (1.9 x 40.6 x 30.5 cm)</td>
<td>361191</td>
</tr>
<tr>
<td>Shandon Polyethylene Dissecting Board, photographic blue</td>
<td>B36115</td>
</tr>
<tr>
<td>0.75&quot; x 23&quot; x 16&quot; (1.9 x 58.4 x 40.6 cm)</td>
<td>B36115</td>
</tr>
<tr>
<td>Shandon Polyethylene Dissecting Board, photographic blue</td>
<td>B361192</td>
</tr>
<tr>
<td>0.75&quot; x 16&quot; x 12&quot; (1.9 x 40.6 x 30.5 cm)</td>
<td>B361192</td>
</tr>
</tbody>
</table>

ISO 9001 Registered Company
Shandon Gross-Star™ Pathology Workstations

**Description** Order Number

**Elevating Models 110-120V 60Hz, 1Ph**
- Recirculating via Filters and Integral Blower B21110
- External Exhaust via Integral Blower and 20' M ax. of Facility Duct B21101
- Remote Exhaust via Facility Duct and Blower (not included) B21102

**Elevating Models 220-240V 50/60Hz, 1Ph**
- Recirculating via Filters and Integral Blower B22200
- External Exhaust via Integral Blower and 20' M ax. of Facility Duct B22201
- Remote Exhaust via Facility Duct and Blower (not included) B22202

**Fixed Height Models 110-120V 60Hz, 1Ph**
- Recirculating via Filters and Integral Blower B21103
- External Exhaust via Integral Blower and 20' M ax. of Facility Duct B21104
- Remote Exhaust via Facility Duct and Blower (not included) B21105

**Fixed Height Models 220-240V 50/60Hz, 1Ph**
- Recirculating via Filters and Integral Blower B22203
- External Exhaust via Integral Blower and 20' M ax. of Facility Duct B22204
- Remote Exhaust via Facility Duct and Blower (not included) B22205

**Agony Approvals**
UL / cUL (110-120V only); CE (220-240V only); CSA NRTL/C (pending)

**Validated Exhaust Efficiencies**

<table>
<thead>
<tr>
<th>Description</th>
<th>Order Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recirculating</td>
<td>B21110</td>
</tr>
<tr>
<td>External*</td>
<td>B21101</td>
</tr>
<tr>
<td>Remote</td>
<td>B21102</td>
</tr>
</tbody>
</table>

**Shandon Gross-Star™ Pathology Workstation Specifications**

**Physical Specifications**

**Dimensions (H x W x D)**

- Overall:* 84” - 92” x 60” x 30” (213.4 - 233.7 x 152.4 x 76.2 cm)
- Height is fixed on Fixed-Height units.
- Work Surface Height:** 33” - 41” (83.8 - 104.1 cm)
- Customer-specified on Fixed-Height units.
- Right-Hand Sink: 14” x 16” x 7.5” (35.6 x 40.6 x 19.1 cm)
- Weight
  - Top Piece: Uncrated: 275 lbs. (124.7 kg) Crated: 375 lbs. (170.1 kg)
  - Bottom Piece: Uncrated: 400 lbs. (181.4 kg) Crated: 500 lbs. (226.8 kg)

**Electrical Specifications**

- Unit is hard wired to facility power.
- 110-120V models draw 20 amps and require a separate 15 amp circuit for one hospital-grade duplex ground fault circuit interrupter (GFCI) receptacle.
- 220-240V models draw 20 amps including up to 7 amps by the point-of-use receptacle with facility-supplied residual current device (RCD) protection required.

**Plumbing Specifications**

- 3/4” hot and cold water supply lines with shut off valves and 1 1/2” drain line must be supplied.
- 1/2” industrial grade flexible hoses with 3/4” female hose fittings are supplied for connection to water supply lines.
- 1 1/2” ID. reinforced flexible hose is provided for connection to facility drain line.

**Replacement Filters**

<table>
<thead>
<tr>
<th>Description</th>
<th>Order Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recirculating</td>
<td>Use of filters is required.</td>
</tr>
<tr>
<td>External Exhaust</td>
<td>Use filters if required for application.</td>
</tr>
<tr>
<td>Remote Exhaust</td>
<td>No filters are required.</td>
</tr>
</tbody>
</table>

**Included with Product**

<table>
<thead>
<tr>
<th>Description</th>
<th>Order Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type 304 Stainless Steel Topaz and Panels</td>
<td>—</td>
</tr>
<tr>
<td>Downdraft Ventilation</td>
<td>—</td>
</tr>
<tr>
<td>Formalin Disposal</td>
<td>—</td>
</tr>
<tr>
<td>Cold/Hot Water Faucet (Foot Pedal Controlled)</td>
<td>—</td>
</tr>
<tr>
<td>Manually-Controlled Manifold Rinse</td>
<td>—</td>
</tr>
<tr>
<td>Hand Spray</td>
<td>—</td>
</tr>
<tr>
<td>Electrical Receptacle</td>
<td>—</td>
</tr>
<tr>
<td>Glove Dispenser</td>
<td>—</td>
</tr>
<tr>
<td>Adjustable Lower/Fixed Upper Shelves</td>
<td>—</td>
</tr>
<tr>
<td>Fluorescent Light</td>
<td>—</td>
</tr>
<tr>
<td>Magnetic Instrument Bar</td>
<td>104393</td>
</tr>
<tr>
<td>Towel Bar and Dispenser</td>
<td>104268 / 1070214</td>
</tr>
<tr>
<td>Centimeter Ruler</td>
<td>104379</td>
</tr>
<tr>
<td>Polyethylene Dissecting Board (Photographic Blue)</td>
<td>B36115</td>
</tr>
<tr>
<td>Ventilated Base Cabinet</td>
<td>—</td>
</tr>
</tbody>
</table>

**Available Accessories**

<table>
<thead>
<tr>
<th>Description</th>
<th>Order Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/4 hp Disposal with Rocker Switch</td>
<td>B21111</td>
</tr>
<tr>
<td>3/4 hp Disposal with Rocker Switch</td>
<td>B21112</td>
</tr>
<tr>
<td>Hood Assembly</td>
<td>B21113</td>
</tr>
<tr>
<td>Back Draft (no downdraft)</td>
<td>B21114</td>
</tr>
<tr>
<td>Ventilated Trash Bin (specify left or right side of unit)</td>
<td>B21115</td>
</tr>
<tr>
<td>Foot Pedal Controlled Formalin Dispensing System</td>
<td>B21116</td>
</tr>
<tr>
<td>Camera Bracket without Optional Hood Assembly</td>
<td>B21125</td>
</tr>
<tr>
<td>Camera Bracket with Optional Hood Assembly</td>
<td>B21125/B21126</td>
</tr>
<tr>
<td>Monitor/Keyboard Brackets</td>
<td>B21110</td>
</tr>
<tr>
<td>Task Lamp (specify one or two)</td>
<td>B21006</td>
</tr>
<tr>
<td>Task Lamp with Magnifier (specify one or two)</td>
<td>B21118</td>
</tr>
<tr>
<td>Movable Requisition Rack</td>
<td>105417</td>
</tr>
<tr>
<td>Foot Pedal Controlled Dictation Interface and Microphone Assembly</td>
<td>B21117</td>
</tr>
<tr>
<td>Lanier VoiceWriter 360 Series Standard Cassette Recorder</td>
<td>109473</td>
</tr>
<tr>
<td>Lanier VoiceWriter 260 Series Microcassette Recorder</td>
<td>107147</td>
</tr>
<tr>
<td>Type 316 Stainless Steel Construction</td>
<td>—</td>
</tr>
</tbody>
</table>

**Choosing the Exhaust System To Fit Your Lab**

- **Recirculating**
  - For existing labs or labs without facility exhaust, it may be necessary to filter and recirculate the air. Specify a unit with integral blowers or filters.

- **External Exhaust**
  - For distances that do not exceed 20 feet (6.1 m), you may choose a unit with integral blower and filters that may be connected to your facility’s exhaust duct.

- **Remote Exhaust**
  - If your facility can supply an exhaust duct and remote blower system that provides an airflow of 550 to 600 cfm (5/8 - 2/8 cu. m/s), a ducted unit will best suit your needs.

- **Recirculating**
  - Use filters if required for application.
  - 110-120V models draw 20 amps including up to 7 amps by the point-of-use receptacle with facility-supplied residual current device (RCD) protection required.

- **Remote Exhaust**
  - Use filters if required for application.
  - 110-120V models draw 20 amps including up to 7 amps by the point-of-use receptacle with facility-supplied residual current device (RCD) protection required.

- **External Exhaust**
  - Use filters if required for application.
  - 110-120V models draw 20 amps including up to 7 amps by the point-of-use receptacle with facility-supplied residual current device (RCD) protection required.

- **Remote Exhaust**
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- **Remote Exhaust**
  - Use filters if required for application.
  - 110-120V models draw 20 amps including up to 7 amps by the point-of-use receptacle with facility-supplied residual current device (RCD) protection required.
Shandon Gross-Star™ Pathology Workbenches

Workbenches for the gross examination and sectioning of specimens.

- **Downdraft ventilation** is a standard feature.
- Water supply protected by vacuum breakers.
- Hands-free foot pedal controls to activate cold/hot water faucet and optional formalin dispensing system.
- **Remote exhaust** connects to your facility’s duct and blower system.
- Fume removal is efficient and quiet.
- Appliances plug directly into unit for convenient use.
- One hospital-grade duplex ground fault circuit interrupter (GFCI) receptacle included on 110-120V units.
- One point-of-use receptacle included on 220-240V units.
- Facility-supplied residual current device (RCD) is required for 220-240V units.
- Standard downdraft or optional back draft design for efficient capture of fumes at the work surface.
- Flat stainless steel work surfaces include three removable perforated grid plates.
- Each unit comes complete with an integral centimeter ruler, blue polyethylene dissecting board, and vented base cabinet.
- Workbenches ship in one convenient assembly.
- Installation is quick and easy.
- Fixed-height units have a work surface that is factory set to your specification from 33” to 41” (83.8 to 104.1 cm).
- Deep sink with cold and hot water faucet.
- 1/2 or 3/4 horsepower disposals are available (please check with local authorities before ordering a unit with a disposal, because some areas prohibit the use of disposals).
- Standard Type 304 or optional Type 316 stainless steel construction.
- Rugged design provides stability and is built tough to withstand years of extensive work without corrosion.
- Connects directly to facility cold and hot water supplies and drains.
- Units are hard wired to facility electrical system.
- For the purpose of room planning, backs of fixed-height units can be flush to walls.

**Agency Approvals**
- UL / cUL (110-120V only); CE (220-240V only); CSA NRTL/C (pending)

**Physical Specifications**

- **Dimensions (H x W x D)**
  - Overall: 45-53” x 60” x 30” (114.3-134.6 x 152.4 x 76.2 cm)
  - Work Surface Height: Height is fixed and customer specified.
  - Right-Hand Sink: 34” x 30” x 7.5” (86.4 x 76.2 x 19.1 cm)
- **Weight**
  - Unit: Uncrated: 425 lbs. (192.8 kg)  Crated: 550 lbs. (249.5 kg)

**Included with Product**

- Type 304 Stainless Steel Construction —
- Downdraft Ventilation —
- Formalin Disposal —
- Cold/Hot Water Faucet (Foot Pedal Controlled) —
- Manually-Controlled Manifold Rinse —
- Hand Spray —
- Electrical Receptacle —
- Centimeter Ruler 104379
- Polyethylene Dissecting Board B36115
- Ventilated Base Cabinet —

* Contents, Packaging, and Quantities of items listed under “Included with Product” are subject to change without prior notice.

**Available Accessories**

- 1/2 hp Disposal with Rocker Switch B21111
- 3/4 hp Disposal with Rocker Switch B21112
- Back Draft No Downdraft B21114
- Ventilated Trash Bin (specify left or right side of unit) B21115
- Foot Pedal Controlled Formalin Dispensing System B21116
- Task Lamp (specify one or two) B1001405
- Task Lamp with Magnifier (specify one or two) B21118
- Type 316 Stainless Steel Construction —

**Validated Exhaust Efficiencies**

<table>
<thead>
<tr>
<th>Description</th>
<th>Order Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remote Exhaust</td>
<td>—</td>
</tr>
</tbody>
</table>

- **Recommended Exhaust Airflow Volume:** 550 – 600 cfm (0.260 – 0.283 cu.m/s)
- Pressure loss through unit with Standard Downdraft: 0.15 – 0.18 in.w.g. (0.37 – 0.45 mb)
- Pressure loss through unit with Optional Back Draft: 0.27 – 0.33 in.w.g. (0.67 – 0.82 mb)

**Average Capture Velocity with Standard Downdraft at 3” above work surface:**

- 72 – 78 fpm (0.386 – 0.396 m/s)

**Average Capture Velocity with Optional Back Draft at back of work surface:**

- 156 – 170 fpm (0.792 – 0.884 m/s)

**Average Capture Velocity with Optional Back Draft at front of work surface:**

- 59 – 64 fpm (0.300 – 0.325 m/s)
**Shandon Grosslab™ Senior Pathology Workstation**

**Three Ventilation System Options**
- Some models feature **formaldehyde neutralizing filters and recirculated air**.
- Models that use **filters and an integral blower** are available for short-distance applications.
- Other models connect to the facility exhaust system.
- See the following page for technical information on exhaust ventilation options.

**Superior Functionality**
- Models with **elevating work surface or with fixed-height work surface** are available.
- Elevating units have a **user-adjustable work surface height** from 33.5" to 45.5" (85.1 to 115.6 cm).
- Fixed-height units have a work surface that is **factory set to your specification** from 33.5" to 45.5" (85.1 to 115.6 cm).
- **Deep sink** with cold and hot water faucet.
- **1/2 horsepower disposal** is standard; optional **3/4 horsepower disposal** is available (please check with local authorities before ordering a unit with disposal; some areas prohibit the use of disposals).
- **Hands-free or manual controls** for water, disposal, and optional dictation system.
- **Abundant light** directed to the work surface.
- **Vacuum breaker-protected water supply**.
- **Appliances plug directly into the unit** for convenient use.
- **One hospital-grade duplex ground fault circuit interrupter (GFCI)** receptacle on 110-120V units.
- **Two IEC 320 receptacles** on 220-240V units.
- **Facility supplied residual current device (RCD)** is required for 220-240V units.
- **Two optional tape recording units** available.
- **Each unit comes complete** with a magnetic tool bar, integral centimeter rulers, formalin dispenser, and paper towel dispenser.
- **Built-in table rinse** washes down work surfaces quickly.

**Superior Quality**
- **Stainless steel** work surfaces and panels.
- **Extruded aluminum frame** is designed to distribute weight evenly, stand up to heavy use, resist corrosion, add durability and minimize unit weight.
- Ships in **two easily manageable pieces** that fit through standard doorways.
- **Built tough** to stand up to years of extensive work without corrosion.

**Programmability**
- **Programmable microprocessor** allows clock time to be changed or the filter replacement alarm to be reset.

**Designed for Easy Shipping and Installation**
- All units ship in **two convenient pieces**.
- Both parts fit through a **standard 32” (81.3 cm) doorway**.
- **The two halves link firmly** with easy-to-lock latches.
- The unit **connects directly** to the facility’s cold and hot water supplies and drain.
- Units are **hard wired** to the facility’s electrical system.

**Validated Exhaust Efficiencies**

<table>
<thead>
<tr>
<th>Recirculating</th>
<th>External</th>
<th>Remote</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td>N/A</td>
<td>Average Air Velocity at 500 cfm (0.236 cu.m/s)</td>
</tr>
<tr>
<td>N/A</td>
<td>N/A</td>
<td>Pressure loss through unit 0.41 in. w.g. (1.02 mb)</td>
</tr>
</tbody>
</table>

**Vented Area with Side Panels:**
- 89 fpm (0.452 m/s)
- 106 fpm (0.538 m/s) Without Filters
- 80 fpm (0.406 m/s) With Filters

**Front of Unit with Side Panels:**
- 38 fpm (0.193 m/s)
- 55 fpm (0.279 m/s) Without Filters
- 22 fpm (0.112 m/s) With Filters

**Replacement Filters**

<table>
<thead>
<tr>
<th>Replacement Filters</th>
<th>Order Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Set of 2 Formaldehyde Neutralizing (Potassium Permanganate) Filters and 2 Fine Particle Filters</td>
<td>9990850</td>
</tr>
</tbody>
</table>

- **Recirculating** Use of filters is required.
- **External Exhaust** Use filters if required for application.
- **Remote Exhaust** No filters are required.
### Shandon Grosslab Senior™ Pathology Workstation

<table>
<thead>
<tr>
<th>Description</th>
<th>Order Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proximity Controlled Elevating Models 110-120V 60Hz, 1Ph</td>
<td>9700</td>
</tr>
<tr>
<td>• Recirculating via filters and integral blower</td>
<td></td>
</tr>
<tr>
<td>• External Exhaust via integral blower and 20 m of facility duct</td>
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<tr>
<td>• Remote Exhaust via facility duct and blower (not included)</td>
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<tr>
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<tr>
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<td>• External Exhaust via integral blower and 20 m of facility duct</td>
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<tr>
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<tr>
<td>• Remote Exhaust via facility duct and blower (not included)</td>
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</tr>
<tr>
<td>Manually Controlled Fixed Height Models 220-240V 50/60Hz, 1Ph</td>
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<tr>
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<td></td>
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</tr>
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</table>

### Agency Approvals
- UL / cUL (110-120V only); CE (220-240V only); CSA NRTL/C (pending)

### Proximity Controlled Elevating Models 220-240V 50/60Hz, 1Ph
- 1/2 hp Disposal
- Type 304 Stainless Steel Tabletop and Panels
- Upper and Lower Shelves
- Hand Spray
- Fluorescent Light
- Manually Controlled Tea Strainer Faucet

### Available Accessories
- 3/4 hp Disposal
- Camera Bracket
- Monitor Bracket
- Moveable Splash Shield
- Dictation Interface and Microphone Assembly with Proximity/Foot Pedal Control - compatible with Lanier VoiceWriter 160 Series 107149 and 260 Series recorders
- Lanier VoiceWriter Standard Cassettes Recorder, 160 Series 100473
to 545 lbs.

### Physical Specifications
- Overall**: 81" x 43" x 60" x Varies (205.7 - 236.2 x 152.4 x Varies cm)
- Work Surface Height**: 33.5" - 44.5" (85.1 - 112.6 cm)
- Right-Hand Sink: 14" x 12" x 6" (35.6 x 30.5 x 15.2 cm)
- Weight:
  - Top Piece: Uncrated: 285 lbs. (129.3 kg) Crated: 375 lbs. (170.1 kg)
  - Bottom Piece: Uncrated: 475 lbs. (215.5 kg) Crated: 543 lbs. (247.2 kg)

### Electrical Specifications
- **Unit is hard wired to facility.**
- **110-120V models draw 20 amps and require a separate 15 amp circuit for one hospital-grade duplex ground fault circuit interrupter (GFCI) receptacle.**
- **220-240V models draw 20 amps including up to 7 amps by the two IEC 320 receptacles with facility-supplied residual current device (RCD) protection required.**

### Plumbing Specifications
- 3/4" cold and hot water supply lines with shut off valves and 1/2" drain line must be supplied.
- 1/2" industrial grade flexible hoses with 3/4" female hose fittings are supplied.
- 1/2" reinforced flexible hose is provided for connection to facility drain line.

### Agency Approvals
- UL / cUL (110-120V only); CE (220-240V only); CSA NRTL/C (pending)
Shandon Grosslab™ Junior Pathology Workstations

- Benchtop models are **ergonomically designed** to be low to the counter.
- **Abundant fluorescent light** is directed to the work surface.
- **Rapid positive drainage.**
- **Vacuum breaker-protected** water supply.
- **Hands-free faucet control** on selected benchtop models uses an infrared signal to activate cold water; also has **manual override capability.**
- **Three exhaust ventilation options:** Recirculating, External Exhaust, or Remote Exhaust.
- Fume removal is **efficient and quiet.**
- Noise levels measure less than 65 decibels.
- **Appliances plug into the unit** for convenient use.
- **Two hospital-grade duplex ground fault circuit interrupter (GFCI)** receptacles on 110-120V units.
- **Four IEC 320 receptacles** on 220-240V units.
- **Facility-supplied residual current device (RCD)** is required for 220-240V units.
- **Back draft design** for efficient capture of fumes across the work surface.
- **Programmable microprocessor** allows clock time to be changed or the filter replacement alarm to be reset.
- **Flat stainless steel work surfaces** include three removable perforated grid plates on benchtop models.
- **Each unit comes complete** with a magnetic instrument bar, two integral centimeter rulers, tea strainer, and paper towel dispenser.
- Installation is **quick and easy.**
- **Movable acrylic splash shield** protects the user from sprays and splashes while dissecting specimens.
- **Benchtop models can be configured as stand-alone units with the use of the optional stand (No. 10456).**

**Choosing the Exhaust System To Fit Your Lab**

- **Recirculating**
  For existing labs or labs without facility exhaust, it may be necessary to filter and recirculate the air. Specify a unit with integral blowers or filters.

- **External Exhaust**
  For distances that do not exceed 20 feet (6.1 m), you may choose a unit with integral blower and filters that may be connected to your facility’s exhaust duct.

- **Remote Exhaust**
  If your facility can supply an exhaust duct and remote blower system that provides an airflow of 400 cfm (0.189 cu. m/s), a ducted unit will best suit your needs.

**An optional stand (No. 10456) allows you to use the Grosslab Junior Benchtop model as a stand-alone unit.** The stand is height-adjustable from 28” to 42” (71.1 cm to 106.7 cm). It has a sturdy, extruded aluminum frame and stainless steel shelf with back panel.
Shandon Grosslab Junior™ Pathology Workstations

### Description | Order Number
---|---
**Benchtop Models 110-120V, 60Hz, 1Ph**
- Recirculating via Filters and Integral Blower | 9600
- External Exhaust via Integral Blower and 20' max. of Facility Duct | 96001
- Remote Exhaust via Facility Duct and Blower (not included) | 96002

**Benchtop Models 220-240V, 50/60Hz, 1Ph**
- Recirculating via Filters and Integral Blower | 96002
- External Exhaust via Integral Blower and 20' max. of Facility Duct | 96003
- Remote Exhaust via Facility Duct and Blower (not included) | 96004

**Stand-Alone Models 110-120V, 60Hz, 1Ph**
- Recirculating via Filters and Integral Blower | 96003
- External Exhaust via Integral Blower and 20' max. of Facility Duct | 96004
- Remote Exhaust via Facility Duct and Blower (not included) | 96005

**Stand-Alone Models 220-240V, 50/60Hz, 1Ph**
- Recirculating via Filters and Integral Blower | 960032
- External Exhaust via Integral Blower and 20' max. of Facility Duct | 960042
- Remote Exhaust via Facility Duct and Blower (not included) | 960052

### Agency Approvals
UL/cUL (110-120V only); CE (220-240V only)

### Included with Product*

| Description | Order Number |
---|---|
Blower (not included with remote exhaust models) | — |
Tea Strainer Faucet (same as water faucet) | — |
Type 304 Stainless Steel Tabletop and Panels | — |
Upper and Lower Shelves | — |
Fluorescent Light | — |
Tea Strainer | 104402 |
Movable Dictation Machine Rack | 10629 |
Sharps Container | 1000794 |
Tower Bar and Dispenser | 10426B / 1032214 |
Magnetic Instrument Bar | 104393 |
Movable Splash Shield | 10707 |
Uni-Capsettes™ | 9996111 |
C-fold Towels | 104401 |
Centimeter Rulers (2 supplied) | 104379 |
Proximity-Controlled Cold Water Faucet (benchtop models only) | — |
Stainless Steel Hand Spray (benchtop models only) | — |
Adjustable Leveling Feet (benchtop models only) | 109576 |
Perforated Grid Plates (benchtop models only) | 10852 |
Stainless Steel Base with Tubular Frame and Cabinet (stand-alone models only) | — |
1/2 hp Disposal (stand-alone models only) | — |
Manually-Controlled Cold | Hot Water Faucet and Disposal (stand-alone models only) | — |
Hand Spray Combined with Faucet (stand-alone models only) | — |

* Contents, Packaging, and Quantities of Items listed under “Included with Product” are subject to change without prior notice.

### Available Accessories

| Description | Order Number |
---|---|
Magnifier Lamp (110-120V) | 1007355 |
Magnifier Lamp (220-240V) | 1007130 |
Adjustable Height Stand with Shelf - 28” - 42” (71.1 - 106.7 cm) (benchtop models only) | 10456 |
Foot Pedal-Controlled Faucet (stand-alone models only) | — |

### Benchtop Model Physical Specifications

| Dimensions (W x D x H) | Overall | External | Remote |
---|---|---|---|
Recirculating | 45.75” x 48” x 28” (116.2 x 121.9 x 71.1 cm) | 52.75” x 48” x 28” (134 x 121.9 x 71.1 cm) | 52.75” x 48” x 28” (134 x 121.9 x 71.1 cm) |

### Electrical Specifications

- One IEC 320 Power Entry Module and one point-of-use power cord.
- 110-120V and 220-240V models require facility receptacles with 15 amp circuits for each power cord.
- 110-120V models draw 15 amps including the two hospital-grade duplex ground fault circuit interrupter (GFCI) receptacles.
- 220-240V models draw 15 amps including the four IEC 320 receptacles with facility-supplied residual current device (RCD) protection required.
- One 1/2” NPT connection and 1” I.D. reinforced flexible hose is supplied for connection to facility drain line.

### Plumbing Specifications

- Two 1/2” industrial-grade flexible hose with 3/4” female hose fittings is supplied for connection to cold water supply lines.
- One 3/4” female hose fittings is supplied for connection to facility drain line.

### Stand-Alone Model Physical Specifications

| Dimensions (W x D x H) | Overall | External | Remote |
---|---|---|---|
Recirculating | 78.5” x 48” x 28” (199.4 x 121.9 x 71.1 cm) | 85.5” x 48” x 28” (217.2 x 121.9 x 71.1 cm) | 85.5” x 48” x 28” (217.2 x 121.9 x 71.1 cm) |

### Electronic Specifications

- One IEC 320 Power Entry Module and two point-of-use power cords.
- 110-120V and 220-240V models require facility receptacles with 15 amp circuits for each power cord.
- 110-120V models draw 15 amps including the two hospital-grade duplex ground fault circuit interrupter (GFCI) receptacles.
- 220-240V models draw 15 amps including the four IEC 320 receptacles with facility-supplied residual current device (RCD) protection required.
- One 1/2” I.D. reinforced flexible hose is supplied for connection to facility drain line.

### Replacement Filters

Includes 2 potassium permanganate filters and 2 fine particle filters.

| Description | Order Number |
---|---|
Recirculating | Use of filters is required. |
External Exhaust | Use filters if required for application. |
Remote Exhaust | No filters are required. |

### Validated Exhaust Efficiencies

| Area | Recirculating | External |
---|---|---|
Front of Unit: 10 fpm | 0.604 - 0.615 m/s |
Front of Unit: 15 fpm | 0.076 m/s |
Pressure Loss Through Unit: 1.15” w.g. (2.87 mb) |

### Filter Drawers

Filter drawers are located in the front of the unit for easy access.

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**Agency Approvals**

UL/cUL (110-120V only); CE (220-240V only)

**Included with Product**

- Blower (not included with remote exhaust models)
- Tea Strainer Faucet (same as water faucet)
- Type 304 Stainless Steel Tabletop and Panels
- Upper and Lower Shelves
- Fluorescent Light
- Tea Strainer
- Movable Dictation Machine Rack
- Sharps Container
- Tower Bar and Dispenser
- Magnetic Instrument Bar
- Movable Splash Shield
- Uni-Capsettes™
- C-fold Towels
- Centimeter Rulers (2 supplied)
- Proximity-Controlled Cold Water Faucet (benchtop models only)
- Stainless Steel Hand Spray (benchtop models only)
- Adjustable Leveling Feet (benchtop models only)
- Perforated Grid Plates (benchtop models only)
- Stainless Steel Base with Tubular Frame and Cabinet (stand-alone models only)
- 1/2 hp Disposal (stand-alone models only)
- Manually-Controlled Cold | Hot Water Faucet and Disposal (stand-alone models only)
- Hand Spray Combined with Faucet (stand-alone models only)

* Contents, Packaging, and Quantities of Items listed under “Included with Product” are subject to change without prior notice.
### Suresorb® Formaldehyde Neutralizer Pads
- Formaldehyde Neutralizer Pads reduce exposure by chemically bonding with formaldehyde.
- The chemical reaction of Formaldehyde Neutralizer Pads results in encapsulation of vapors within the pad.
- Formaldehyde Neutralizer Pads are ideal for grossing areas and autopsy work.

<table>
<thead>
<tr>
<th>Description</th>
<th>Pkg/Qty</th>
<th>Order Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suresorb Formaldehyde Neutralizer Pad Small, 8” x 10” (20.3 x 25.4 cm)</td>
<td>400 / Cs.</td>
<td>5641</td>
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<tr>
<td>Suresorb Formaldehyde Neutralizer Pad Small, 8” x 10” (20.3 x 25.4 cm)</td>
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<td>56411</td>
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<tr>
<td>Suresorb Formaldehyde Neutralizer Pad Large, 16” x 20” (40.6 x 50.8 cm)</td>
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<tr>
<td>Suresorb Formaldehyde Neutralizer Pad Large, 16” x 20” (40.6 x 50.8 cm)</td>
<td>25 / Cs.</td>
<td>56431</td>
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</tbody>
</table>

*Suresorb® is a registered trademark of National Nonwovens.*

### Shandon Biopsy Bags
- Allow unrestricted fluid movement around tissue.
- Reduce risk of small specimen loss.
- Reduce reagent carry-over and pressure artifact often found with sponges.
- Peel-open bag conveniently exposes specimen for rapid removal.
- Acid Resistant Biopsy Bags feature all the benefits of nylon biopsy bags, plus offer acid-resistance for decalcification.
- Small Biopsy Bags measure 1.2” x 1.7” (31 x 43 mm).
- Medium Biopsy Bags measure 1.8” x 2.6” (45 x 65 mm).
- Large Biopsy Bags measure 3” x 3.5” (75 x 85 mm).

<table>
<thead>
<tr>
<th>Description</th>
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<tr>
<td>Shandon Nylon Biopsy Bags, Small</td>
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<tr>
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<tr>
<td>Shandon Nylon Biopsy Bags, Medium</td>
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<tr>
<td>Shandon Nylon Biopsy Bags, Medium</td>
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<tr>
<td>Shandon Nylon Biopsy Bags, Medium</td>
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<td>Shandon Nylon Biopsy Bags, Large</td>
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<tr>
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<tr>
<td>Shandon Acid-Resistant Biopsy Bags, Large</td>
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### Shandon Grossing Consumables
- Shandon TBD-1™ Decalcifier
  - Rapid hydrochloric acid decalifier for processing bone marrow biopsies in as little as 15-30 minutes.
  - Thin pieces of dense bone process in 3-12 hours.
  - Permits utilization of routine end point tests, such as calcium oxalate.
  - Added ingredients protect cells from actions of acids.

<table>
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<tr>
<th>Description</th>
<th>Pkg/Qty</th>
<th>Order Number</th>
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<td>Shandon TBD-1™ Decalcifier</td>
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<tr>
<td>Shandon TBD-1™ Decalcifier</td>
<td>1 L x 4</td>
<td>6764002</td>
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</tbody>
</table>

- Shandon TBD-2™ Decalcifier
  - Formic acid decalifier for gentle, longer term processing.
  - Go up to 48 hours past end point without damaging specimens.
  - Permits utilization of routine end point tests, such as calcium oxalate.
  - Added ingredients protect cells from actions of acids.

<table>
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<tr>
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<th>Pkg/Qty</th>
<th>Order Number</th>
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<td>Shandon TBD-2™ Decalcifier</td>
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<tr>
<td>Shandon TBD-2™ Decalcifier</td>
<td>1 L x 4</td>
<td>6764004</td>
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</tbody>
</table>
Shandon Glyo-Fixx™
• Shandon Glyo-Fixx is a non-carcinogenic, non-sensitizing and environmentally friendly substitute for formalin.
• The active ingredient, glyoxal, is a di-aldehyde which has almost no vapor pressure.
• Convenient - uses the same protocols as with formalin.
• Shandon Glyo-Fixx does not have the unpleasant odor of formaldehyde.
• Results are superior to neutral buffered formalin, producing distinct and crisp cellular morphology.
• Does not cross-link as formaldehyde does. It fixes most antigens without impairing their immunoreactivity.
• With Shandon Glyo-Fixx, higher antibody dilutions can be used.
• Works well with conventional special stains including silver procedures, Schmorl’s for reducing substances, PAS, Alcian blue, mucicarmine, Verheoff-Van Gieson for elastin, and trichrome.
• Allows special stain colors to be sharp without background staining. It also presents fine detail in specimen structure.

Shandon Zinc Formal-Fixx™
• Excellent for immunohistochemistry.
• The fixative of choice to enhance H&E’s and special stains.
• Minimizes the need to enzyme digest; reduces protein cross-linking, producing well-defined nuclear detail.

Shandon Formal-Fixx™ and Formal-Fixx Concentrate
• Phosphate-free, 10% neutral buffered formalin produces consistent results, and extends life of rotary valve.
• Store all specimens without excessive shrinking or hardening.
• Use for storage of all tissue - eliminates presorting of EM specimens.
• Available premixed ready-to-use or in economical concentrate - just add water or alcohol.
• Concentrate is not affected by freezing, reduces shelf space and is less expensive to ship.
• Pre-filled, leak resistant cups are available.
• Cups are packed in sturdy trays for courier transport.

Shandon Tissue Marking Dyes
• Permanently mark the margins of excised surgical specimens for exact orientation.
• Available individually or as a kit which includes one each of black, blue, yellow, red, and green, 50 applicator sticks and storage base.
• Special binding pigment evenly coats the tissue without penetrating the tissue surface.
• Does not interfere with diagnostic interpretation because the colors are not similar to standard histopathology dyes.
• Quick-drying and easy-to-use; decreases time factor in urgent frozen sectioning.