Essentium DryBox™

The Essentium DryBox™ desiccant dry cabinet, for the storage of filament, intelligently maintains a low relative humidity (RH).

Fully network-capable with mobile connectivity and total accessibility from any networked device, Essentium DryBox™ Intelligent Dry Storage technology enables compatibility with smart factory, Industry 4.0 operations.

Essentium DryBox™ cabinets introduces a new level of recovery performance of less than three minutes to provide constant access to stored parts.

Unique interior “glow lighting” provides a bright white flood of light on command for inspection of contents and intelligently alters color to correspond with Compliant (Green), Working (Yellow), and Alert (Red) status that can be monitored at a glance.

To purchase, visit: Essentium.com/Materials
Questions: Sales@Essentium.com
INTELLIGENT LIGHT STATUS
Immediate visual confirmation of dry storage status means no more guessing about cabinet readiness. A simple glance at DryBox™ and its green, amber or red interior lighting tells operators if the unit can be accessed. It’s simple, effective and smart. An optional light tower can be integrated for visual status confirmation from across the factory floor.

FAST RECOVERY TIME
Market-leading recovery time of less than three minutes provides constant access to stored filament. Exceptional, self-regulating drying technology allows assembly specialists to retrieve critical moisture-sensitive filament from dry storage as many as 10 to 12 times per hour. That’s more than twice the access of competitive dry cabinets.

EXCEPTIONAL QUALITY
Designed and quality-built in the U.S.A.

NETWORK CAPABLE
Industry 4.0 Ready - Integrated DryBox™ network capability tracks performance and events from one or many Essentium DryBox™ storage cabinets. Access dry storage data 24/7 from any internet-enabled device.
Standard Features

**4.3” TFT LCD DISPLAY**
Full color HD touch screen display makes controlling DryBox™ easier than ever before.

**EASY-TO-USE**
Quick access to all control functions:
- Light and Mute Alarm
- Modes: DryBox™ and SmartBAKE™
- Graph: RH and Temperature Histogram

**FEATURES**

- **Restores floor life**
  - DryBox™ maintains safe storage thru controlled humidity during SmartBAKE™

- **Flexible bake cycle programming**
  - Manually set temperature, humidity and time

- **Maximizes the DryBox™ investment**
  - Combines storage and bake-out in a single, compact footprint
DB90

The DB90 has storage capacity of 283 liters (10 cu ft - 2 doors, floor shelf & 2 Reel Racks) in a 45”H x 20”W x 30”D footprint and offers built-in network capability and a user-friendly TFT LCD control display.

- DryBox™ Cabinet
- Floor Shelf
- 2 - Reel Racks
- User’s Guide
- Quick Reference Guide
- Warranty (2 Years)

Part Number: DB90-120/230
Doors: 2
Door Opening: 18.0”W x 17.5”H

DB90-SB

This DB90 includes SmartBAKE™ which incorporates a powerful heater and insulation for baking out filament. It has storage capacity of 283 liters (10 cu ft - 2 doors, floor shelf & 2 Reel Racks) in a 45”H x 20”W x 30”D footprint and offers built-in network capability and a user-friendly TFT LCD control display.

- DryBox™ Cabinet
- SmartBAKE™ (40-60°C bake heater)
- Floor Shelf
- 2 - Reel Racks
- User’s Guide
- Quick Reference Guide
- Warranty (2 Years)

Part Number: DB90-SB-120/230
Doors: 2
Door Opening: 18.0”W x 17.5”H
The DB270 has a storage capacity of 850 liters (30 cu ft) with two tall doors to facilitate easy accessibility for filament racks in a 70"H x 40"W x 30"D footprint and offers built-in network capability as well as a user-friendly TFT LCD control display.

- DryBox™ Cabinet
- 2 - Floor Shelves
- 6 - Reel Racks
- User's Guide
- Quick Reference Guide
- Warranty (2 Years)

**Part Number**  
DB270-120/230

**Doors**  
2

**Door Opening**  
18.0"W x 57.25"H
## DB90/DB90-SB Technical Data & Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>External Dimensions (H x W x D)</td>
<td>1143 mm x 508 mm x 762 mm (45&quot; x 20&quot; x 30&quot;)</td>
</tr>
<tr>
<td>Internal Dimension (H x W x D)</td>
<td>985 mm x 479 mm x 540mm (38.8&quot; x 18.8&quot; x 21.2&quot;)</td>
</tr>
<tr>
<td>Internal Capacity</td>
<td>283 liters (10 cu ft)</td>
</tr>
<tr>
<td>Number of Shelves/Racks</td>
<td>1 Floor Shelf &amp; 2 Reel Racks</td>
</tr>
<tr>
<td>Maximum Shelf Capacity</td>
<td>22 kg (50 lbs)</td>
</tr>
<tr>
<td>Maximum Cabinet Capacity</td>
<td>68 kg (150 lbs)</td>
</tr>
<tr>
<td>Recovery Time</td>
<td>&lt; 3 minutes</td>
</tr>
<tr>
<td>Power Consumption (Average)</td>
<td>10W Standby, 450W Max., 15W/Hr Ave. (1050W Peak w/ SmartBAKE Option)</td>
</tr>
<tr>
<td>Display Resolution (RH/Temp)</td>
<td>0.1% / 0.1°C (0.1°F)</td>
</tr>
<tr>
<td>Accuracy (RH/Temp)</td>
<td>± 1.8% / ± 1°C (1.8°F)</td>
</tr>
<tr>
<td>Casters</td>
<td>76.2 mm (3&quot;) Diameter</td>
</tr>
<tr>
<td>Cabinet Weight</td>
<td>&lt; 70 kg (154 lbs)</td>
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</table>
DB90/DB90-SB Installation Requirements

POWER SOURCE

The power requirements are listed on the cabinet serial number label. (230V 1ph, 50/60Hz or 120V 1ph 50/60Hz).

Position the unit to allow user access to the power cord for mains disconnect.

LOCATION

Allow a minimum of 75 mm (3") between the unit and any walls or obstructions which might block free air flow.

Avoid:

- Heat from radiators, ovens/production equipment
- Steam/moisture
- Direct sunlight
- Fast-moving air currents
- Heating/cooling ducts
# DB270 Technical Data & Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>External Dimensions (H x W x D)</strong></td>
<td>1778mm x 1016mm x 762mm (70” x 40” x 30”)</td>
</tr>
<tr>
<td><strong>Internal Dimension (H x W x D)</strong></td>
<td>1500mm x 990mm x 540mm (59” x 38.9” x 21.2”)</td>
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<tr>
<td><strong>Internal Capacity</strong></td>
<td>850 liters (30 cu ft)</td>
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<tr>
<td><strong>Number of Shelves/Racks</strong></td>
<td>2 Floor Shelves &amp; 6 Reel Racks</td>
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<tr>
<td><strong>Maximum Shelf Capacity</strong></td>
<td>22 kg (50 lbs)</td>
</tr>
<tr>
<td><strong>Maximum Cabinet Capacity</strong></td>
<td>113 kg (250 lbs)</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
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<tbody>
<tr>
<td><strong>Recovery Time</strong></td>
<td>&lt; 4 minutes</td>
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<tr>
<td><strong>Power Consumption (Average)</strong></td>
<td>25W Standby, 850W Max., 30 W/Hr Average</td>
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<tr>
<td><strong>Display Resolution (RH/Temp)</strong></td>
<td>0.1% / 0.1°C (0.1°F)</td>
</tr>
<tr>
<td><strong>Accuracy (RH/Temp)</strong></td>
<td>± 1.8% / ± 1°C (1.8°F)</td>
</tr>
<tr>
<td><strong>Casters</strong></td>
<td>76.2 mm (3”) Diameter</td>
</tr>
<tr>
<td><strong>Cabinet Weight</strong></td>
<td>&lt; 163kg (360 lbs)</td>
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</table>
**POWER SOURCE**

The power requirements are listed on the cabinet serial number label. (230V 1ph, 50/60Hz or 120V 1ph 50/60Hz).

Position the unit to allow user access to the power cord for mains disconnect.

**LOCATION**

Allow a minimum of 75 mm (3") between the unit and any walls or obstructions which might block free air flow.

Avoid:
- Heat from radiators, ovens/production equipment
- Steam/moisture
- Direct sunlight
- Fast-moving air currents
- Heating/cooling ducts
**Reel Rack**

- Vertical storage filament reels on one rack
- Three rows of up to 24 reels each for up to 72 reels (8mm wide tape)
- Fixed width reel supports at 48mm (1.9”) inside dimension

<table>
<thead>
<tr>
<th>Part Number</th>
<th>E60-3233-23-100</th>
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<tbody>
<tr>
<td>Dimension (wide x deep)</td>
<td>17.85” x 20.8” (424mm x 528mm)</td>
</tr>
<tr>
<td>Fits</td>
<td>DB90, DB90-SB, DB270</td>
</tr>
</tbody>
</table>

**Light Alarm Tower**

While the cabinet comes standard with a unique interior lighting system to indicate the cabinet’s status, a light alarm tower can be added for additional visibility. For situations where the cabinet status requires confirmation from across the factory floor or from the rear of the system, the light alarm tower provides a 360° view.

<table>
<thead>
<tr>
<th>Part Number</th>
<th>E55-7379-74</th>
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<tbody>
<tr>
<td>Colors</td>
<td>Red, Yellow, Green</td>
</tr>
<tr>
<td>Fits</td>
<td>DB90, DB90-SB, DB270</td>
</tr>
</tbody>
</table>

**Combination Door Locks**

Secure keyless entry functionality eliminates worry about lost keys or non-authorized access.

<table>
<thead>
<tr>
<th>Part Number</th>
<th>P57-7850-34</th>
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</thead>
<tbody>
<tr>
<td>Dials</td>
<td>3 (Resettable)</td>
</tr>
<tr>
<td>Fits</td>
<td>DB90, DB90-SB, DB270</td>
</tr>
</tbody>
</table>