Support Stands

Portable, adjustable height, stands are available for all chambers. They hold the chamber in place without transferring weight to your testing machine. Each stand is furnished with an 18 inch, electrically actuated lift system, four swivel casters with locks and an all welded frame.

Rear Loading Low Profile, (1) normally furnished for use with table-top or small machines with a raised base where there is clearance for the machine legs to slide underneath.

Rear Loading Straddle (2) for machines with no ground clearance or where the chamber will be used with several different machines.

Rear Loading Counter Balance (3), usually specified for heavy chambers and systems fitted with mechanical cooling.

Front Loading Straddle (4), often specified when rear loading is inconvenient.

Bemco FTU3.2-184X538C with counterbalance stand and large window. This unit uses LN₂ for cooling.

Options

Available accessories include:

- Window and interior light, 6” x 15” and 12” x 12” (316 C, 600 F maximum). 6” x 15” for 538 C (1000 F) maximum.
- Hand ports and glove rings.
- Double articulating door, standard with +538 C (+1000 F).
- Door cutoff switch.
- FM Approved high and low temperature safety.
- Recorders.
- Humidity package on -73 to 316 C (-100 to +600 F) units only.
- Computer interface.
- Remote control over an Ethernet Link.

Description:

Bemco’s Missimer Division was the first company to develop a standard chamber for use in a Universal Test Machine.

With over 50 years of experience, our FTU Chambers are amazingly reliable, easy to use, and convenient.

We have models to fit almost every universal test machine made.

Electrically heated and liquid nitrogen, CO₂ and mechanically cooled models are all available.

All FTU chambers include strain rod ports and a break-away plug, or an optional slotted plug.

Bemco FTU3.2-184X538C with counterbalance stand and large window. This unit uses LN₂ for cooling.

Contact Us
For a Free Quotation or Additional Information

2255 Union Place
Simi Valley, CA 93065
805-583-4970
805-583-5033 fax
http://www.bemcoinc.com

-184 to +538 C Maximum (LN2)
FTU - Universal Test Machine Chambers

**Conditioning**
Chamber air is recirculated by a balanced, high volume, stainless steel blower discharging through a guard and diffuser baffle to create a uniform environment around your test object and grips. The blower is driven by a vertically mounted motor with dual ball bearing races connected by an extended stainless steel shaft. Sheath type heaters behind a radiation baffle raise chamber temperature as required.

**Cooling**
For operation to -73 C (-100 F) either liquid nitrogen or liquid carbon dioxide (CO2) cooling is provided. For cryogenic operation down to -184 C (-300 F) liquid nitrogen cooling is provided.

When relatively frequent cold tests down to -73 C (-100 F) are required, mechanical cooling using a Bemco cascade, dual compressor, mechanical refrigeration system is recommended.

**Construction**
FTU chambers include 300 series stainless steel welded liners with high temperature fiberglass (316 C, 600 F) units) or ceramic wool (638 C, 1000 F units) insulation. No asbestos is used in chamber construction. Outer cases are fabricated from cold rolled steel finished in Bemco Blue. Chamber doors feature Bemco's high aspect ratio plug to minimize problems with expansion and contraction.

**Controls**
Each Bemco FTU chamber is furnished with a programmable 1/4-DIN solid state 256-step ramping controller which includes a 4-line LCD interface display and a large red LED display. Temperature inside the FTU chamber is sensed by a precision thermocouple.

Heaters are interlocked with a separate heavy duty power contactor and a factory preset high temperature safety control.

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**Model Specifications**

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Column Clearance</th>
<th>Interior Height</th>
<th>Interior Width</th>
<th>Interior Depth</th>
<th>Exterior Height</th>
<th>Exterior Width</th>
<th>Exterior Depth</th>
<th>Weight Pounds</th>
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<tbody>
<tr>
<td>FTU1.8</td>
<td>14”</td>
<td>20”</td>
<td>8”</td>
<td>20”</td>
<td>27”</td>
<td>13-1/2”</td>
<td>47”</td>
<td>220</td>
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<td>12”</td>
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<td>19”</td>
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<td>22”</td>
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<td>FTU7.0</td>
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<td>20”</td>
<td>22”</td>
<td>36”</td>
<td>29”</td>
<td>52”</td>
<td>430</td>
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</tbody>
</table>

Standard heating and cooling time on -73 to 316 C chambers from 23 C to -73 C and from 23 C to + 316 C (-100 to +600 F) is 30 minutes. Standard time for -184 to +638 C (-300 to +1000 F) chambers is 60 minutes.

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**Environmental & Space Simulation Systems**

We Deliver
Bemco chambers really simulate the environments expected. We take your specifications and requirements literally. Our equipment does what we promise and you specify. We are truly focused on Excellence.

Combined Environments

Request a Free Quotation or Analysis of your Testing needs. Our experienced engineers are ready to help you.