

**United**

AN ISO 9002  
COMPANY

Bulletin #71

# ENVIRONMENTAL CHAMBER



Engineered and manufactured in accordance with United's exacting quality standards, the United Environmental Chamber provides unparalleled accuracy and ease of operation while offering the assurance of years of reliable, service.

Designed to allow both tensile and compression testing to be conducted in a high or low-temperature environment, the chamber can be utilized with a variety of universal testing machines.

### **Standard Features of the United Environmental Chamber:**

Double Articulating Door

Remote Control Panel

Quartz Enclosed Heaters

Stainless Steel Interior

Ceramic Fiber Insulation

Interior Lighting

Over-temperature Safety Switch

Viewing Window

Door-activated Cutoff Switch

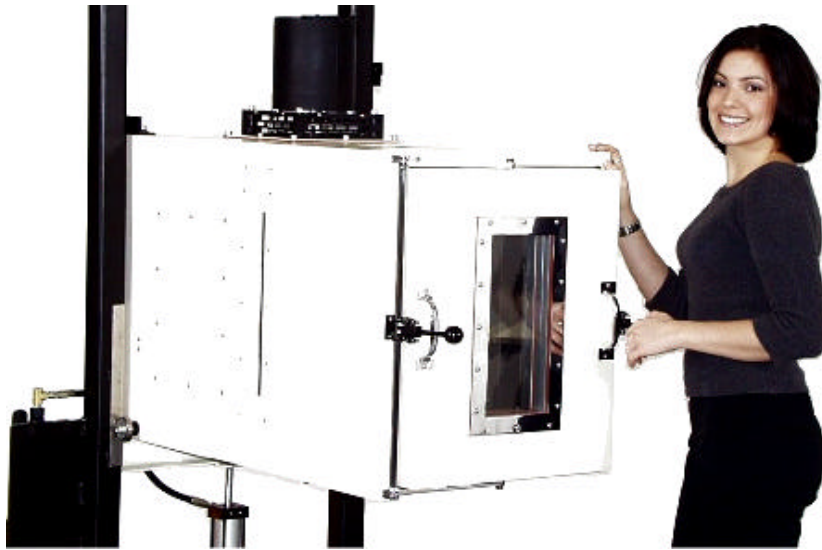
Adjustable Door Latches

Breakaway Safety Plugs

1/3 HP 1,725-rpm Fan Motor

Height-adjustable Floor Stand





**Control System:**

- Digital temperature controller
- Remote control enclosure
- Time-proportioning auto reset feature
- Temperature is read directly from digital display

**Heating System:**

- Eight quartz-enclosed heating elements
- Contamination-proof
- Enhance temperature stability

**Insulation:**

- High-density ceramic fiber
- 14-gauge steel outer shell
- 300-series stainless steel inner liner

**Cooling:**

- Cooling medium: CO<sub>2</sub> or LN<sub>2</sub>
- Solenoid valve controls flow of cooling medium

**Safety Features:**

- Door-activated cutoff switch
- Over-temperature switch
- Breakaway plugs
- Thermocouple break protection

**Add-on Options**

- Hand ports for internal sample manipulation
- Side window (use with laser extensometer)
- Lower-limit temperature to -300°F
- Solid state, digital high or low safety controls
- Dimensional changes
- Special paint

**Specifications :**

	<b>UEC 2.0 – 600</b>	<b>UEC 3.5 – 600</b>	<b>UEC 3.5 – 1000</b>
Interior Volume	2.0 ft <sup>3</sup>	3.5 ft <sup>3</sup>	3.5 ft <sup>3</sup>
Temperature Controls	± 2°F after stabilization		
Power	220V AC Single Phase 60Hz		
Heating	Electrical resistance		
Cooling	CO <sub>2</sub> or LN <sub>2</sub>		
Insulation Material	High-density Ceramic Fiber		
Inner Liner	Stainless steel		
Temperature Range	- 100° F to + 600° F	- 100° F to + 600° F	- 100° F to + 1000° F
Window Size	4-5/8" x 7-1/4" (11.7cm x 18.4cm)	5-5/8" x 7-1/4" (14.3cm x 18.4cm)	5-5/8" x 7-1/4" (14.3cm x 18.4cm)
Internal Workspace	9"W x 20"H x 20"D (22.9cm x 50.8cm x 50.8cm)	15-1/2"W x 20"H x 20"D (39.4cm x 50.8cm x 50.8cm)	15-1/2"W x 20"H x 20"D (39.4cm x 50.8cm x 50.8cm)
External Dimensions	13"W x 24-1/2"H x 38-1/2"D (33.0cm x 62.2cm x 97.8cm)	20-1/2"W x 24-1/2"H x 38-1/2"D (52.1cm x 62.2cm x 97.8cm)	20-1/2"W x 24-1/2"H x 38-1/2"D (52.1cm x 62.2cm x 97.8cm)
Weight	275 lbs. (125 kg)	325 lbs. (148 kg)	325 lbs. (148 kg)