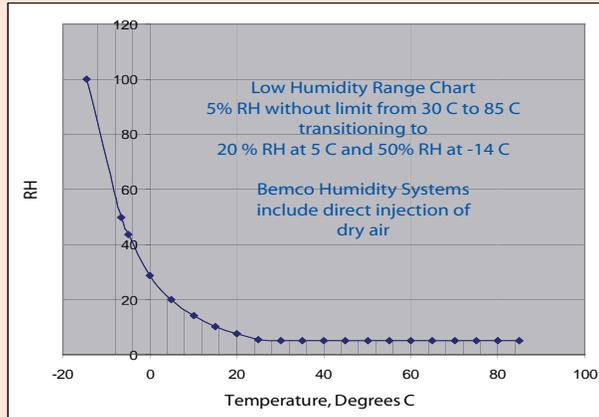


## Options

- Access Ports. Sizes are 2", 3", 4" and 6." One 3" access port in the left wall is provided with each chamber.
- A 5-gallon water reservoir with an internal pump, low level sensor, low level alarm and isolation valve to allow system operation without a source of pressurized water. This system requires occasional manual filling.
- A single cartridge, demineralization system that produces up to 4 liters / minute of water. Includes a water purity indicator.
- Casters, two swivel and two fixed.
- Shelf pilasters and wire-type stainless steel shelves.
- GN2 gas purge with pressure regulator, gauge, flow measuring and regulating valved rotameter and vent.
- Two refrigeration gauges mounted in the refrigeration compartment with or without isolation valves.



The FW30 Series allows you to test your products at low humidity over almost the entire operating range.

## Instrumentation

Available instrument options include:

- Microprocessor-based, FM Approved high over-temperature safety control.
- Set of two, one high and one low micro-processor-based, FM Approved temperature safety controls.
- Remote control over an Ethernet Link.
- 12-inch, two pen, chart printing, circular recorder.
- Pre-figured relay racks for mounting test items.
- Strip chart recorder.
- See Bemco Instrument Bulletin for further descriptions.



**Bemco Inc.**  
Focused on Excellence

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

## Description:

Take a giant step forward with an advanced conductively heated multi-pane glass door Humidity chamber that allows you to see your products while they are being tested.

With a standard desiccant drier and a direct humidity sensor you can reliably test at both high and low humidities.

Why settle for the appearance of testing when you can have a system that actually works?

Choose Bemco, the chamber that others only copy.

**Contact Us  
For a Free  
Quotation or  
Additional  
Information**

-18 C to 94 C (0 F to 200 F)

5% to 95% RH  
5 C to 85 C (41 F to 185 F)

Direct Dry Air Injection!

# FW30

Glass Front Door

*Environmental Test and Space Simulation Systems*



**Bemco Inc.**  
Focused on Excellence

# FW Temperature Humidity Chamber



Cooling rate from 75 C to -15 C in less than 90 minutes. Heating rate -15 C to 75 C in less than 60 minutes. Both with the chamber empty.

+ or - 1 C (+ or - 1.8 F) guaranteed control, + or - 0.15 C (+ or - 0.25 F) typical. + or - 5% RH guaranteed, + or - 1% RH typical. Humidity 5% RH to 95% RH, see chart. 95% RH at 85 C (185 F) maximum.

All electrical wiring meets the United States National Electric Code. U.L. and CSA approved components are used where possible.

## Conditioning

Chamber air is recirculated by a high volume, stainless blower discharging through a hinged right side mounted guard and diffuser baffle to create a uniform environment around your test objects.

A proportionally controlled air cooled refrigeration system utilizing modern environmentally friendly refrigerant cools the workspace. The system includes automatic hot gas bypass and suction cooling unloading.

Fast-response open type heaters behind a radiation baffle raise chamber temperature as required.

## Humidity

Chamber humidity is increased by a Bemco mass transfer vapor generator with a sight glass, low water sensor, and automatic drain freeze protection. It can be shutoff and drained when very low humidity control is desired.

Chamber humidity is decreased by the direct injection of -73 C (-100 F) dew point dry air produced by a dual bed regenerative compressed air drier furnished with an isolation valve, an inlet particulate and coalescing filter and an outlet filter regulator.

Water and air connections are located on the top.

## Construction

The FW30 has a sloped roof and a sloped floor to minimize drippage on test objects and to meet Mil-Std 810 and Mil-Std 202.

It includes a continuously heliarc welded 304 Series stainless steel liner with high temperature fiberglass insulation. No asbestos is used in chamber construction. The outer case is fabricated from cold rolled steel finished in Bemco Blue.

A matching machinery housing is mounted on the right hand side. The FW30 has a very large workspace for its extremely compact size.

## Controls

The FW30 is furnished with a two channel microprocessor based 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 chamber is sensed by a precision thermocouple.

Humidity is sensed by a direct reading electronic humidity sensor accurate to + or - 2% RH over the dew point temperature range of -20 C to 85 C (-4 F to 185 F). This sensor is mounted through a sleeve located on the roof near the left side of the door.

Model Number	Interior Height	Interior Width	Interior Depth	Exterior Height	Exterior Width	Exterior Depth	Weight Pounds	Live Load Watts, 0 C
FW30	67" <sup>(1)</sup>	31.5" <sup>(1)</sup>	27"	78.5"	72.5"	33.25"	1400	2100
<sup>(1)</sup> Clear door access height is 63" and clear door access width is 27" due to the door frame.								



## 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

Temperature, Humidity, Altitude, Vibration, Vacuum, Rain, Sunshine, Salt Spray, Sand and Dust, and Gasses. Space Simulation Systems, Walk-in Chambers, Drive-in Rooms, PAO Fluid Chillers, and Air Servos.