## **TESTRESÔURCES**

### **BioBath Products**



### About TestResources

We supply static, dynamic and fatigue test systems and accessories to researchers and device manufacturers. Each solution is application engineered from a modular product line to serve specific needs.

BB10 BioBath for vascular tests



BB10 Biobath for soft tissues tests





BB2 shown with single column 100



BB10 Biobath for medical device textile tests

### **BB Series Test Chamber Choices**

BB10 -- 12"W x 10"D x 12"H with front

- Robust (0.5" walls), clear acrylic
- Removable split top cover with center hole \* Input/output ports on back bottom
- \* Rated 70°C

BB6 -- 12"W x 10"D x 6"H (no door)

BB20-6-4 -- 12"W x 10"D x 6"H (no door)

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# **TEST**RES**Ô**URCES



**Creep Test System** 

Tall bath for high extension creep test of polymer based tubes - medical device manufacturer – sample is submerged in 37C saline.

BioBath systems provide a controlled temperature liquid environment for research and device testing. Systems are available for single and dual column load frames with machine adapters to work with existing test machines.

Systems can be configured with

- High force tensile grips
- Light tare weight tensile grips
- Flexural Fixtures (3 & 4 point)
- Compression Platens
- Air operated and fatigue grips are made to order

The robust clear acrylic chamber may be sized for access above the tank or via a front door (BB10).

Large chambers make it easy to load test samples or fixtures. Larger or smaller tanks are available for your requirement.

The removable cover is split to match the centerline of the load axis, and provided to minimize evaporation and protect the media from contamination.

Dual ports for flow in and out are located on back bottom.

A variety of pumps and temperature control configurations are available.

The BB10 includes a pump with a needle valve for an adjustable flow rate to  $\sim$ 2 GPM. Temperature control stability of +/- 0.5°F (0.2°C).



#### BB6D

Round 6" diameter Affordable solution in static bath applications.



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The typical bath includes a standalone digital temperature controller, heater, and remote RTD temperature sensor. The controller includes a thermal safety and options include an analog output signal for data acquisition and monitoring.

### Example of Temperature Control Options

T200 Circulating Media Temperature Controller for Biobath

- \* Enclosure; pump, heater, and controller
- \* Flow rate: 3 GPM 4.3 psi max
- \* Heat rate: 20 min to 37°C
- \* Temp control: ± 0.5°F (0.2°C)
- \* Accuracy depends on sensor location
- \* Power: 120 or 240VAC; 5 amps; 600 Watts
- \* Sheathed RTD sensor
- \* Self prime enables enclosure to be placed above bath
- \* Standalone temp controller
- \* Retransmitted analog output for data acquisition
- \* Set Point control with Auto-tuning PID
- \* Overtemperature limit switches
- \* Hoses (2) with manual valve
- AQH200 Affordable Submersible Heater for static baths
  - \* Temp control stability ± 2.5°F (1°C)
  - \* Manual Set point basic on/off
- \* Accuracy depends on proximity to sample
- \* Power: 120V 200 Watts
- \* Requires submersion



### **Stainless Steel Grips and Fixtures**

Materials located in the chamber and media are selected for corrosion resistance. The most common choice is stainless steel, except in high speed dynamic tests where light weight is important.



G23SS056 Stainless Steel Platen

- \* 56 mm (2.2") diameter
- \* 5/8"F cup with 8 mm pin
- \* Concentric rings for sample centering



Stainless Steel Bend Fixtures \* Fixed span designs \* G238X SS versions



- G140SS Stainless Steel Vise Grip \* Rated 200 N (50 lb)
- \* Tare weight ~120 g with jaws
- \* For specimens to 8 mm thick
- \* Jaws 15 X 15 mm (0.6" X 0.6")
- \* 10.22 E (ME) thread
- \* 10-32 F (M5) thread



G227SS Stainless Steel Vise Grip \* Rated 440 N (100 lb)

- \* Tare weight ~240 g with jaws
- \* For specimens to 6 mm thick
- \* Female 10-32 UNF (M5) thread
- \* Fatigue or static