

WHERE SERVICE AND QUALITY IS OUR FIRST NATURE

\_\_\_\_\_\_

ROUND WATER BATH / OIL BATH || WATER BATH RECTANGULAR 4, 6, 12 HOLES || SEROLOGICAL WATER BATH || UNSTIRRED WATER BATH || CONSTANT TEMPERATURE WATER BATH || KINEMATIC VISCOSITY BATH || CIRCULATING WATER BATH





WHERE SERVICE AND QUALITY IS OUR FIRST NATURE

\_\_\_\_\_\_\_

### 1. Round Water Bath/Oil Bath

### **Advantages**

- ❖ A clear bottom.
- ❖ A uniquely designed Bath.
- Ensures no heater burn out due to lack of water.
- ❖ An absolute over-temperature alarm with auto cut off.
- Double walled, internal and external chamber full stainless steel construction.
- ❖ A floating overshoot alarm set 5°C above set point.
- ❖ Absolute over temperature alarm audio with auto cut off.

## **Applications**

Round Baths are ideal for all applications requiring, reliable and safe reactions, extraction's, analysis and tests.

### **Constructions**

- ❖ Double walled, internal and external chamber full stainless steel construction.
- Double walled, internal full stainless steel construction and external mild steel powder coated construction.
- External Body oven baked epoxy finished.
- Insulated handles on sides for easy handling.

#### Standard Features

## Digital electronic PID controller with following parameters programmable by user:

- ❖ Temperature range: ambient up to 300°C (oil)
- Time: up to 99 hours and 59 minutes.
- Pt100 Sensor for precise monitoring.
- ❖ A floating overshoot alarm set 5°C above set point.
- ❖ Absolute over temperature alarm audio with auto cut off.
- ❖ Industrial grade long life special heaters for efficient transfer of heat.





WHERE SERVICE AND QUALITY IS OUR FIRST NATURE

Model	Round Flask Capacity	Bath size Ø x deep in mm	Temperature Range	Ratings	Material Of Construction
AIOBSS1L	1 Litre	Ø 165 x 90	Ambient to 300°C	500 W	internal and external chamber full stainless steel
AIOBSS2L	1 Litre	Ø 203 x 115	Ambient to 300°C	500 W	internal and external chamber full stainless steel
AIOBSS3L	3 Litre	Ø 230 x 130	Ambient to 300°C	1000 W	internal and external chamber full stainless steel
AIOBSS5L	5 Litre	Ø 260 x 150	Ambient to 300°C	1300 W	internal and external chamber full stainless steel
AIOBSS10L	10 Litre	Ø 350 x 200	Ambient to 300°C	1500 W	internal and external chamber full stainless steel
AIOBSS20L	20 Litre	Ø 385 x 229	Ambient to 300°C	1800 W	internal and external chamber full stainless steel

Model	Round Flask Capacity	Bath size Ø x deep in mm	Temperature Range	Ratings	Material Of Construction
AIOBMS1L	1 Litre	Ø 165 x 90	Ambient to 300°C	500 W	Internal : stainless steel & External : mild steel powder coated
AIOBMS2L	1 Litre	Ø 203 x 115	Ambient to 300°C	500 W	Internal : stainless steel & External : mild steel powder coated
AIOBMS3L	3 Litre	Ø 230 x 130	Ambient to 300°C	1000 W	Internal : stainless steel & External : mild steel powder coated
AIOBMS5L	5 Litre	Ø 260 x 150	Ambient to 300°C	1300 W	Internal: stainless steel & External: mild steel powder coated
AIOBMS10L	10 Litre	Ø 350 x 200	Ambient to 300°C	1500 W	Internal : stainless steel & External : mild steel powder coated
AIOBMS20L	20 Litre	Ø 385 x 229	Ambient to 300°C	1800 W	Internal : stainless steel & External : mild steel powder coated





WHERE SERVICE AND QUALITY IS OUR FIRST NATURE

\_\_\_\_\_\_

### 2. WATER BATH RECTANGULAR 4, 6, 12 HOLES

Our boiling water baths come in rectangular shape and engineered to meet most demanding needs of heated applications. We make 3 models that are available in 4 (four), 6 (six) and 12 (twelve) holes. Temperature range is Ambient +5°C to 99.9°C, which is controlled through thermostatic regulator. Temperature can be seen on LED display. These water baths are constructed with 304 stainless steel for inner chamber; exterior using powder coated GI sheet. External and internal surfaces feature corrosion resistance property and also easy to wipe and clean after use.

These units also have load indicators which indicate running status of machines. Water drain nozzle is fitted at back side of the machines. If you want to buy **Analysis Instruments rectangular water bath 6 and 12 holes**, please email your required size / dimensions, number of holes and other important details. We will contact you with precise quotation and price list and availability details.

### **TECHNICAL SPECIFICATIONS**

Model	AIWBH4	AIWBH6	AIWBH12
	AIWDN4	АІМ ВПО	AIWDIIZ
No of holes	4	6	12
Lid	Concentric rings	Concentric rings	Concentric rings
	75 mm dia.	75 mm dia.	75 mm dia.
Temperature	Ambient+5 to 99.9°C	Ambient+5 to 99.9°C	Ambient+5 to 99.9°C
Temperature	Thermostatic rotary knob	Thermostatic rotary knob	Thermostatic rotary knob
controller	_	•	· ·
Display	LED Display	LED Display	LED Display
Construction	Double walled	Double Walled	Double walled
Inner MOC	SS 304	SS 304	SS 304
External MOC	Mild Steel Powder coated	Mild Steel Powder coated	Mild Steel Powder coated
Insulation	Glass wool	Glass wool	Glass wool
Power supply	220 Volts 50 Hz	220 Volts 50 Hz	220 Volts 50 Hz
Optional	Digital temp. controller	Digital temp. controller	Digital temp. controller
	SS 304 exterior	SS 304 exterior	SS 304 exterior





WHERE SERVICE AND QUALITY IS OUR FIRST NATURE

\_\_\_\_\_\_

### 3. Serological Water Bath

Our serological water baths are widely used for day to day bacteriological and varied laboratory applications requiring incubation as well as general tests and procedures in variety of researches and testing laboratories including Wassermann, Kilmer tests. Apart from that, these serological water baths have a variety of usages in tissue culture applications, enzyme reaction studies, growth observation studies, fermentation analysis and various other general and specialized applications in various laboratories.

We specialize in both standard and customized models, specifically designed to meet the challenging demands of various scientists for individual and specialized research applications. Over a short period of time Analysis Instruments brand have been established as a reliable exporters of Serological water bath in India, catering to the vast markets in South East Asia, Middle East Africa and Europe.

### Salient features:

- Versatile usage
- Ergonomics Design
- Energy Efficient
- Long Life
- Low Maintenance
- Calibration And Protocol documentation

### **Construction:**

Our serological water baths are double walled convection heated units. Outer of our serological water baths is constructed out thick PCRC steel sheet duly pre-treated with primers for rust proofing and painted with air drying paint/stove enamel/powder coating. The inside chamber of the unit is made of heavy gauge stainless steel sheet of grade ss-304 The unit is provided with top opening cover made of steel with steel concentric rings, The unit provided with one stainless steel racks.

## **Heating:**

Indirect heating system is provided in our serological water comprising of air heaters made of high grade kanthal A-1 wires of suitable wattage. The temperature is evenly distributed throughout the chamber through natural water convection mechanism ,ensuring a very good temperature sensitivity.

**Temperature Range:** By Electronic Digital Display Temp Indicator Cum Controller Temperature range of our standard water bath models are 5°C above ambient to 99.9°C. However we have the capacity to modify the same to suit the individual specialized requirements of our customers.





WHERE SERVICE AND QUALITY IS OUR FIRST NATURE

\_\_\_\_\_\_

Model No.	AISWB14L	AISW	B18L	AISWB25L	AISWB32L
Chamber Size (mm)	250 x 175 x 175	350 x 25	0 x 175	450 x 250 x 175	600 x 300 x 175
No. of Racks	2	4		6	8
Capacity	14 Litre	18 L	itre	25 Litre	32 Litre
Load	1.0 KW	1.5 l	KW	2.0 KW	3.0 KW
Temperature range		5°C ab	ove amb	ient to 99.9°C	
Temperature Sensitivity			±0.5°C o	r better	
Temperature Sensor			PT-1	100	
Temperature Accuracy	+/-5°C				
Material of Construction	Inner chamber and	d lid	Stainless Steel (SS-304 grade)		
	Outer chamber		Mild Steel duly powder coated		
	Insulation			Special grade mir	neral wool
Heating	Immersion heaters (Kanthal brand)				
Control panel	- On/off switch				
		- Heatii	ng and m	ains indicators	
	- Digital temperature controller				
Power	220 V / 50 Hz				
Accessories	- Stainless steel top lid				
	- Tray				
Optional	- Stirrer with 1/20 hp Motor with S.S. rod and blade				
	- Digital Temperature Indicating Controller				
	- Microprocesso	or based P	ID Digita	l temp. Indicator-Cu	m-Controller





WHERE SERVICE AND QUALITY IS OUR FIRST NATURE

\_\_\_\_\_\_

#### 4. Unstirred Water Bath

#### **Features**

- PID microprocessor temperature control.
- ❖ Large bath opening lets you immerse samples conveniently.
- Inside stainless steel tank.
- Unstirred type.
- Long life immersion stainless pipe heater.
- ❖ Double walled construction fully made of st.steel 304Q, inner St.steel mirror finished and exterior made of St.steel matt finished.
- ❖ The gap between the two walls filled with ceramic wool insulation.
- ❖ A uniquely designed Bath.
- ❖ Heaters are externally fitted to ensure no heater burn out due to lack of water/oil.
- Temperature Controlled by electronic Microprocessor based Auto Tune PID controller with Pt 100 as sensor.
- ❖ Timer range provided 0-9999 mins
- ❖ Temperature range: 5°C above ambient to 99.9 Accuracy: +-1°C

Model	Capacity	Working Size (mm)	Material Of Construction
AIUWBSS5L	5 Litre	300 x 150 x 150 mm	internal and external chamber full stainless steel
AIUWBSS14L	14 Litre	320 x 300 x 150 mm	internal and external chamber full stainless steel
AIUWBSS20L	20 Litre	500 x 300 x 150 mm	internal and external chamber full stainless steel

Model	Capacity	Working Size (mm)	Material Of Construction
AIUWBMS5L	5 Litre	300 x 150 x 150 mm	Internal : stainless steel & External : mild steel powder coated
AIUWBMS14L	14 Litre	320 x 300 x 150 mm	Internal : stainless steel & External : mild steel powder coated
AIUWBMS20L	20 Litre	500 x 300 x 150 mm	Internal : stainless steel & External : mild steel powder coated





WHERE SERVICE AND QUALITY IS OUR FIRST NATURE

\_\_\_\_\_\_

### 5. Constant Temperature Water Bath

- ❖ Double walled construction inner made of St. steel 304 quality mirror finished and exterior made of St. steel matt. finished.
- ❖ The gap between the two walls filled with high grade glass-wool insulation.
- ❖ Heating is by immersion type heater.
- ❖ Temperature controlled by microprocessor based auto tune PID controller with Pt100 as sensor.
- ❖ A circulatory pump with motor is mounted on a base and fitted on the side of the bath for uniformity.
- ❖ Lid made of St. steel.
- ❖ Temperature range: 5°C above ambient to 99.9°C
- $\triangle$  Accuracy: +-0.5 $^{\circ}$ C

Model	Capacity	Working Size (inches)	Ratings
AICTWB15L	15 Litre	12" x 10" x 8"	1.5 KW
AICTWB26L	26 Litre	14" x 12" x 10"	2.0 KW
AICTWB47L	47 Litre	18" x 14" x 12"	2.5 KW





WHERE SERVICE AND QUALITY IS OUR FIRST NATURE

\_\_\_\_\_\_

#### 6. KINEMATIC VISCOSITY BATH

Used for determination of kinematic and intrinsic viscosity of Petroleum products, Bitumen, emulsion and allied materials at constant temperatures in Accordance with ASTM D 445/IS:1206 and other equivalent methods Double walled, outer chamber made of CRC powder coated with toughened Glass window panel, inner chamber made of S.S, FHP motorized stirrer for uniform Temperature, Dual Display Microprocessor Based Digital Temp. Controller with PT–100 sensor. Temperature range from 5° C above ambient to 150° C. Resolution and Control Accuracy  $\pm$  0.1°C (at 40°C). Complete with Low wattage lighting Attachment, Universal Viscometer Holder, Viscometer Tray. Built in Digital Stop watch and Calibration certificate with traceability. Working on 230 V single phase. The Viscosity bath can be supplied Digital temp. controller having resolution of 0.01°C at extra cost. Glass U Tube Viscometer with certificate of constant and Glass Thermometers are also available at extra cost.

### Compliance with Following International Standards: IP 71, ASTM D445, ASTM D446

**Purpose:** Used to determine the viscosity of oils and fuel, above room temperature up to a maximum of  $150^{\circ}$ C. Generally used @  $40^{\circ}$ C but can also be used at any other temperature between measuring range. Can also be used for other application where full visibility of sample and constant temp.is important for the test.

### **Construction:**

- Compact and self contained unit
- ❖ Rectangular shape
- ❖ Double walled unit with Glass wool insulation
- Inner Chamber is made of stainless steel (SS 304)
- Outer body made of G.I. Powder Coated.
- ❖ With toughened glass window panel / Heat resistant
- Observation Window on both sides (Front & Rear)
- Inner chamber is equipped with slow speed motorized stirrer
- ❖ Accommodates 4/6/8 (FOUR/SIX/EIGHT) Viscometers
- ❖ Work space illuminated brilliantly without glare
- Temp is controlled by Digital Microprocessor based PID Controller with certificate of calibration
- ❖ All electrical controls are mounted on a drawer chassis in the side part of the case of the bath.
- ❖ DIGITAL STOP WATCH is mounted on the control panel to precisely observe the elapsed time for fluid passing from viscometer lower mark to upper mark or vice versa
- Designed for easy cleaning and simple maintenance
- Built-in boost for initial fast heating
- Glass U Tube Viscometers of various size and shapes available. These are to be procured at extra cost.
- ❖ Digital temperature controller with resolution of 0.01 °C is also available. Price on request.





WHERE SERVICE AND QUALITY IS OUR FIRST NATURE

\_\_\_\_\_\_\_

## **Specifications:**

Model	AIVB4T	AIVB8T	AIVBR4T	AIVBR8T	
Inner Size	12 x 9 x 12 Inch	12 x 12 x 12 Inch	12 x 9 x 12 Inch	12 x 12 x 12 Inch	
Size	4 Viscometers	6 / 8 Viscometers	4 Viscometers	6 / 8 Viscometers	
Temperature Range	5°C above amb	pient to 150°C	10°0	C to 150°C	
Temperature sensor		PT	-100		
Temp. Controller		PID Temp Controlle	er w/ Accuracy ±0.5	S°C	
Construction		- Inner chamb	er: SS 304 /316		
		- Outer chamber:	MS powder coated		
		- Insulation	n: Glass wool		
	- Window: 2 side toughened glass windows				
	- Light: 1 tube light				
Heating System	Heating by tubular Heater vertically fitted in side chamber (2.0 K.W)				
Stirring	Stirring by S.S. shaft fitted with Motor				
Power	230 Volts 50 Hz				
Accessories	Viscosity holder, universal type				
Optional	- High / low				
	- Fluorescent lamp				
	- IQ, OQ, PQ & DQ documentation				
		- Voltage	estabilizer		
		Voitage	o o cao inizer		





WHERE SERVICE AND QUALITY IS OUR FIRST NATURE

\_\_\_\_\_\_

# 7. Circulating water bath with combination of refrigeration and heating REFRIGERATED WATER BATH

Refrigerated Water Baths meet the most demanding needs of applications that require refrigeration with circulation. These refrigerated (chiller) circulating baths can easily reach up to -30°C temperature and are easy to use and safe for operator and samples.

### **REFRIGERATION + HEATING**

We also manufacture water baths with a combination of refrigeration and heating, the machine works as *low as -30°C* and also high as 100°C. Such circulating baths provide reliable temperature control for a wide variety of laboratory cooling applications. Excellent temperature accuracy is what our refrigerated water bath circulators offer, once a temperature is achieved in the machine, it remains stable during overall working process. The construction is durable; interior is completely made of 304 stainless steel; with stainless steel, wiping and cleaning becomes easy after use. Exterior is made of either powder coated mild steel or stainless steel. For temperature adjustment, digital PID controller is fitted at front side of the unit.

We are refrigerated water bath manufacturers in India. To meet your requirements of specific application, we can design and construct the same unit which full-fills your needs. If you have any specific size, temperature range, controllers or any other accessory, please discuss with our engineering team.

### **FEATURES**

- ❖ Available in cooling only or cooling + heating combined
- ❖ Temperature -10°C to -30°C also available
- Precise water temperature accuracy
- CFC free refrigeration system
- Circulation through imported pump
- Stainless steel 304 inner tank
- Microprocessor PID temperature controller
- Caster wheels with brake on bottom

Model	AICRWB15L	AICRWB30L	
Volume	Up to 15 Liters	Up to 30 Liters	
Inner Dimensions (mm)	250 x 250 x 250	500 x 250 x 250	
Temperature range	5°C to 100°C (-10°C	to 100°C Optional)	
Inner chamber	SS 304		
Exterior	Powder coated GI sheet		
Lid	SS lid with handle		
Temperature controller	Digital PID controller with SV & PV		
Temperature sensor	PT100		
Refrigeration system	CRF free		
Heating system	ISI mark imme	ersion heaters	





WHERE SERVICE AND QUALITY IS OUR FIRST NATURE

\_\_\_\_\_

Circulation pump	10 - 15 liters per minute
Safety feature	Over temperature cut-off
Power supply	220 volts 50 Hz
Standard Fittings	Inlet & outlet ports
	Drain valve
	Low level cut-off
	Mains ON/OFF switch
	Pilot lamps
	Power cable
Optional	Temperature up to -20°C, -30°C
	Stainless steel exterior
	RS 232 interface
	Lockable caster wheels





