

# BATHS: WATER AND OIL, DRY BLOCKS AND ULTRASONIC



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*"The entrepreneur always searches for change, responds to it, and exploits it as an opportunity."  
Peter Drucker*



# BATHS; WATER AND OIL, SAND, AND ULTRASONIC

## Summary table of the different models

QUICK OVERVIEW



BATHS WATER / OIL Range	Model	Control	Safety thermostat	CAPACITY / PART No.					Stability	RS-232
				1.5 litres	1 litre	4 litres	2.5 litres	11 litres		
+30 ... 110 °C	Aquaterm	Thermostat	No	3000916					±2 °C	No
					1 litre					
+30 ... 110 °C	Baher	Thermostat	No	7000540					±3 °C	No
					4 litres					
+40 ... 80 °C	Termofin	Thermostat	No	3000459 (Paraffin)					±1 °C	No
					2.5 litres					
+5 ... 110 °C	Univeba	Thermostat	Yes	3000400					±1 °C	No
					2.5 litres					
+5 ... 200 °C	Univeba	Thermostat	Yes	3000401					±2 °C	No
					11 litres					
+5 ... 110 °C	Termobat	Thermostat	Yes	3000587					±2 °C	No
					11 litres					
+5 ... 200 °C	Termobat	Thermostat	Yes	3000588					±3 °C	No
					2 litres	5 litres	12 litres	20 litres	45 litres	
+5 ... 110 °C	Precistern	Thermostat	Yes	6000137	6000138	6000140	6000141	6000142	±1 °C	No
+5 ... 200 °C	Precistern	Thermostat	Yes	6000385	6000386	6000387	6000388	6000389	±2 °C	No
+5 ... 99.9 °C	Precisdig	Digital $\mu$	Yes	-	6001195	6001196	6001197	6001198	±0.1 °C	No
+5 ... 200 °C	Precisdig	Digital $\mu$	Yes	-	6001236	6001237	6001238	6001239	±0.5 °C	No
+5 ... 80 °C	Agibat-20	Digital	Yes	-	-	-	6032012	-	±0.5 °C	No
					2x2 litres	4x2 litres	6x2 litres			
+5 ... 200 °C	Precisbat	Thermostat	No	6001462	6001472	6001482	-	-	±2 °C	No
Baths with stirring or shaking				27 litres						
+5 ... 99.9 °C	Unitronic Reciprocating	Digital $\mu$	Yes	6032011 (Shaker bath)	-	-	-	-	±0.05 °C	Yes
0 ... 99.9 °C	Unitronic Reciprocating C	Digital $\mu$	Yes	6001173 (Shaker bath)	-	-	-	-	±0.05 °C	Yes

### Baths for viscometers

+5 ... 100 °C	VB-1423	Digital	Yes	-	-	-	3001423	-	±0.05 °C	No
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$\mu$ : with microprocessor. +5 indicates ambient temperature +5 °C.

### Sand baths

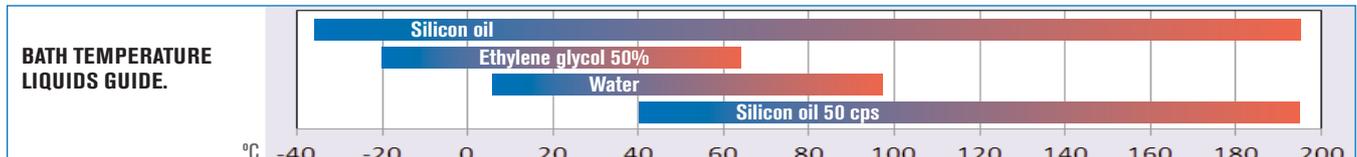
Model	Control	Height / Widht / Depth (usable) cm		Height / Widht / Depth (usable) cm				
... +400 °C	Combi-Sand	Electronic	5	18	38	5	30	30
Part No.			6000708				6000709	

### Ultrasonic cleaning baths with heating and with digital electronic regulation.

Part No.	Capacity litres	Height / Widht / Depth (usable) cm		Power heater W	
3000865	5	15	24	14	75
3000866	6	15	30	15	75
3000867	10	15	30	24	225
3000868	22	15	50	30	375
3000869	40	20	50	40	1000

### Ultrasonic cleaning baths without heating

Part No.	Capacity litres	Height / Widht / Depth (usables) cm		
3000512	1	6	14	14
3000683	2,6	9	23	13
3001208	4	10	30	14
3000513	6	15	30	14
3000837	6,5	14	24	Ø
3000617	9	15	50	14
3000514	9	15	30	23
3000515	20	15	50	30





## Water bath "Aquaterm"

ADJUSTABLE TEMPERATURE FROM 30 °C TO 110 °C. STABILITY  $\pm 2$  °C.

### Economic option

#### FEATURES

AISI 304 stainless steel tank with epoxy coated base.  
Heater element embedded in high temperature, corrosive resistant INCOLOY.

#### CONTROL PANEL

Temperature regulator thermostat switch, synchronised with an indicator lamp.

#### MODEL

Part No.	Capacity litres	Ø (usable) cm	Height cm	Ø (exterior) cm	Height cm	Power W	Weight Kg
<b>3000916</b>	1.5	20	11.5	22	20.5	640	1.3



#### ACCESSORIES IN AISI 304. STAINLESS STEEL

Perforated shelf.

Part No. **6000998**

Flat Lid with 5 concentric ring set.

Part No. **3000917**



## Boiling bath "Baher"

ADJUSTABLE TEMPERATURE FROM 30 °C TO 110 °C. STABILITY  $\pm 3$  °C.

#### FEATURES

Rapid boiling (6-7 minutes).

AISI 304 stainless steel tank and epoxy coated base.  
Heater element embedded in INCOLOY stainless steel.

#### CONTROL PANEL

Temperature regulator thermostat switch, synchronised with an indicator lamp.

#### MODEL

Part No.	Capacity litres	Ø (usable) cm	Height cm	Ø (exterior) cm	Height cm	Power W	Weight Kg
<b>7000540</b>	1	14	11	15	19	640	1



#### ACCESSORIES MADE OF STAINLESS STEEL

Lid with bakelite handle.

Part No. **7000572**

Rack 24 haemolysis tubes up to 13 mm diameter.

Part No. **7004002**

Rack for 24 tubes up to 18 mm diameter.

Part No. **7000541**

Perforated shelf.

Part No. **6001194**



## Water and oil baths "Univeba"

WATER BATH: ADJUSTABLE TEMPERATURE FROM AMBIENT +5 °C TO 110 °C STABILITY  $\pm 2$  °C.

OIL BATH: ADJUSTABLE TEMPERATURE FROM AMBIENT +5 °C TO 200 °C STABILITY  $\pm 3$  °C.

#### SAFETY:

CONFORMS TO THE DIN STANDARD 12877 BY INCORPORATING A MANUALLY RESET OVER TEMPERATURE SAFETY CUT-OUT.

#### APPLICATIONS

To be used with a rotary evaporator or as a stand alone Bains Marie bath.

#### FEATURES

Tank interior and exterior case made of AISI 304 stainless steel. The heater element is embedded in a protective INCOLOY stainless steel shield.

#### CONTROL PANEL

Illuminated main power switch indicator lamp. Hydraulic temperature thermostat regulator synchronised with an indicator lamp. Safety thermostat cut out indicator lamp.



#### MODELS

Part No.	Maximum Temperature °C	Capacity litres	Ø (usable) cm	Height cm	Height / Width / Depth (exterior) cm	Power W	Weight Kg
<b>3000400</b>	110	2.5	18	13	19 22 27	390	4
<b>3000401</b>	200	2.5	18	13	19 22 27	640	4

#### ACCESSORIES MADE OF STAINLESS STEEL

1- Heating element cover shelf.

Part No. **6000033**

2- Reduction ring cover lid of 110, 80, 60 and 37 mm Ø. With a thermometer location hole in the lid. Part No. **7004001**

3- Tube rack for 24 haemolysis tubes up to 13 mm Ø.

Part No. **7004002**

4- Tube support rack for 24 tubes up to 18 mm Ø.

Part No. **7000541**

5- Thermometer.

Part No.

**1000120** up to 120 °C.

**1000873** up to 220 °C.



## Water and oil baths “Termobat”

ADJUSTABLE TEMPERATURE FROM AMBIENT+5 °C TO 110 °C. STABILITY ±2 °C TO 200 °C. STABILITY ±3 °C.

### SAFETY:

CONFORMS TO THE DIN STANDARD 12877 BY INCORPORATING A MANUALLY RESET OVER TEMPERATURE SAFETY CUT-OUT.

### APPLICATIONS

To be used with a rotary evaporator for flasks up to 10 litres or as a stand alone bain marie.

### FEATURES

Tank interior made of AISI 304 stainless steel, with an epoxy coated base.

The heater element is embedded in a protective INCOLOY stainless steel shield.

### CONTROL PANEL

Main power switch, with luminous indicator lamp.

A hydraulic temperature thermostat regulator is synchronised with an indicator lamp.

### MODELS

Part No.	Maximum Temperature °C	Capacity litres	Ø (usable) cm	Height cm	Ø (exterior) cm	Height cm	Power W	Weight Kg
<b>3000587</b>	110	11	29	17	29	25	2100	5.5
<b>3000588</b>	200	11	29	17	29	25	2100	5.5

### Large capacity



### ACCESSORIES MADE OF AISI 304 STAINLESS STEEL

Reduction ring cover lid of 210, 180, 145, 115 and 80 mm Ø. With a location hole for a thermometer.

Part No. **7000589**



Heater element cover shelf.

Part No. **6000055**



Thermometer.

Part No.

**1000120** up to 120 °C.

**1000873** up to 220 °C.



## Sand baths “Combiplac-Sand”

ADJUSTABLE PLATE TEMPERATURE UP TO 400 °C.

### FEATURES

Electronic energy heater controller. The steel hotplate surface has an evenly distributed heater element providing homogeneous heat distribution. 

The non warping AISI 304 stainless steel sand bath can be easily removed for cleaning.

The Hotplate can be used independently without the sand bath. The hotplate casing is made of AISI 304 stainless steel.

### CONTROL PANEL

Mains power switch with luminous “On” indicator lamp.

Electronic heater power control between 0 to 100 %.

Heater operation indicator lamp.

The back of the unit is fitted for an electronic thermometer “Sensotherm” or digital electronic controller “Electemp-TFT” described under regulators and controllers (see page 293).



### MODELS

Part No.	Height / Width / Depth (usable) cm	Height / Width / Depth (exterior) cm	Power W	Weight Kg
<b>6000708</b>	5 18 38	18 22 41	2300	13
<b>6000709</b>	5 30 30	21 32 35	2800	15



## Circulation pump “Ciragit”

### FEATURES

Metal construction, with all components in contact with liquid made of AISI 304 stainless steel.

The unit can be adjusted to fit most tanks or baths, can be submerged and held in position by an adjustable height support clamp.

Pump circulation with adjustable flow rates allowing external circulation of liquids.

ON/ OFF illuminated power switch with light when on.

Interchangeable flow output connector:

- position A: Internal tank circulation.
- position B: External circulation.

### SPECIFICATIONS

OUTPUT water:

20 °C , 12 l/ min.- 150 mbar

OUTPUT silicon oil:

50 °C 4 l/min.- 130 mbar

Dimensions:

9.5 x 12.5 x 23 cm

Power: 30 W

Weight: 2.5 Kg.

Part No. **3000402**





## Water and oil baths "Precistern"

ADJUSTABLE TEMPERATURE RANGE FROM AMBIENT +5 °C UP TO 110 °C, STABILITY ±1 °C.

ADJUSTABLE TEMPERATURE RANGE FROM AMBIENT +5 °C UP TO 200 °C, STABILITY ±2 °C.

*Extensive range of sizes and accessories*

*Stainless steel interior and external case*



### FEATURES

Capacity; from 2 litres up to 45 litres.

Double skinned tank of AISI 304 stainless steel with an exterior case of AISI 304 stainless steel.

Heating elements embedded in INCOLOY heat and corrosion resistant stainless steel.

### CONTROL PANEL

Illuminated mains power switch.

Hydraulic thermostat temperature control, synchronised with the "ON" indicator lamp.

Safety thermostat cut out indicator lamp.

### MODELS

Part No.	Maximum Temperature °C	Capacity litres	Height / Widht / Fondo (usable) cm			Height / Widht / Depth (exterior) cm			Power W	Weight Kg
6000137	110	2	15	15	13	20	20	27	390	3.5
6000385	200	2	15	15	13	20	20	27	640	3.5
6000138	110	5	15	30	14	20	37	27	600	6
6000386	200	5	15	30	14	20	37	27	1110	6
6000140	110	12	15	30	30	20	40	42	1100	8
6000387	200	12	15	30	30	20	40	42	1400	8
6000141	110	20	15	48	30	20	58	42	1500	10
6000388	200	20	15	48	30	20	58	42	2100	10
6000142*	110	45	15	62	50	22	69	62	2400	18
6000389*	200	45	15	62	50	22	69	62	3800	18

All water baths are supplied with heating elements protection shelf.

\* With built in drain tap.

### SAFETY:

DIN 12877 STANDARD.

THE UNIT WILL CUT OUT IF THERE IS INSUFFICIENT LIQUID OR IF THE BATH TEMPERATURE EXCEEDS THE SET TEMPERATURE.

A MANUAL RESET ADJUSTABLE TEMPERATURE SAFETY THERMOSTAT IS PLACED AT THE BACK OF THE UNIT.



ACCESSORIES. See page 91.



## Water baths "Precisdig" with or without anti-evaporation folding lid

DIGITAL CONTROL AND DISPLAY OF TEMPERATURE AND TIME.

ADJUSTABLE TEMPERATURE RANGE FROM AMBIENT+5 °C TO 99.9 °C, STABILITY ±0.1 °C, HOMOGENEITY ±1 °C.

ADJUSTABLE TEMPERATURE RANGE FROM AMBIENT+5 °C TO 200 °C, STABILITY ±0.5 °C, HOMOGENEITY ±2.5 °C.

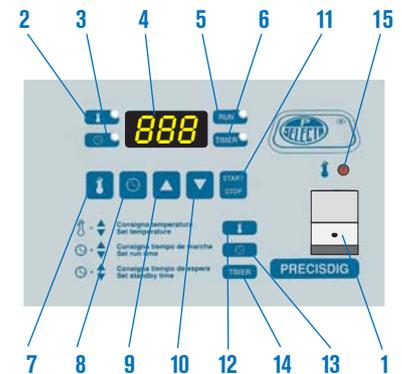
**SAFETY:** DIN 12877 STANDARD. THE UNIT WILL CUT OUT IF THERE IS INSUFFICIENT LIQUID OR IF THE BATH TEMPERATURE EXCEEDS THE SET TEMPERATURE. A MANUAL RESET ADJUSTABLE TEMPERATURE SAFETY THERMOSTAT IS PLACED AT THE BACK OF THE UNIT.

**Programmable temperature and time. Interior and exterior made from Stainless steel**



### FEATURES

Double skinned tank of AISI 304 stainless steel with an external case of AISI 304 stainless steel. Heating elements embedded in INCOLOY heat and corrosion resistant stainless steel. Comes complete with drain tap.



### CONTROL PANEL

1. Illuminated mains switch.
2. Temperature mode indicator.
3. Time mode indicator.
4. Temperature and time indicator.
5. Start time indicator.
6. Waiting / delay time indicator.
7. Temperature set button.
8. Time set button.
9. Increase, push button.
10. Decrease, push button.
11. Stop and start time.
12. Read Temperature.
13. Set start up time: from 1 min. to 9 hours 59 min, or up to 99.9 hours once the set temperature has been reached.
14. Set waiting / delay time: from 1 to 24 hours.
15. Safety thermostat indicator lamp.

### MODELS

Part No.	Temperature maximum °C	Capacity litres	Height / Widht / Depth (usable) cm	Height / Widht / Depth (exterior) cm	Power W	Weight Kg
6001195	99,9	5	15 30 14	20 37 27	600	6
6001236	200	5	15 30 14	20 37 27	1100	6
6001196	99,9	12	15 30 30	20 40 42	1100	8
6001237	200	12	15 30 30	20 40 42	1400	8
6001197	99,9	20	15 48 30	20 58 42	1500	10
6001238	200	20	15 48 30	20 58 42	2100	10
6001198	99,9	45	15 62 50	20 69 62	2400	18
6001239	200	45	15 62 50	20 69 62	3800	18

All baths with heating shelf and drainage. Faucet included.

### MODELS WITH MAKROLON® FOLDING LID

Part No.	Temperature maximum °C	Capacity litres	Height / Widht / Depth (usable) cm	Height / Widht / Depth (exterior+lid) cm	Power W	Weight Kg
6001186	99,9	12	15 30 30	40 40 42	1100	8
6001187	99,9	20	15 48 30	40 58 42	1500	10
6001188	99,9	45	15 62 50	40 69 62	2400	18

All baths with heating shelf and drainage. Faucet included.

### MAKROLON® FOLDING LID PROPERTIES

Due to its transparency, you can visualize the bath's inside. It improves temperature stability, and restricts evaporation and pollution

**ACCESSORIES.** See page 91.



## Water bath with inner stirring “Agibat-20” with digital control and display of temperature and time

ADJUSTABLE TEMPERATURE RANGE FROM AMBIENT +5°C UP TO 80°C. STABILITY  $\pm 0.1^\circ\text{C}$ .  
SET TEMPERATURE ACCURACY  $\pm 1^\circ\text{C}$ , WORKING TEMPERATURE PRECISION  $0.1^\circ\text{C}$ .

*P.Selecta original model. More space. More accuracy. Economical.*



*Stirring detail by internal circulation pump.*

### FEATURES

Double skinned tank, inner case made of AISI 304 stainless steel.  
External case of AISI 304 steel.  
Submerged heating elements in INCOLOY special alloy.  
It comes complete with drain tap.

### STIRRING SYSTEM

These baths have an aspiration and outflow internal circulation pump which allow a constant flow stirring.  
Flow: 8 litres per minute.

### MODELS

Part No.	Lid Makrolon®	Maximum Temp °C	Litres Capacity	Height/Width/Depth (usable) cm	Height/Width/Depth (exterior) cm	Power W	Weight Kg
6032012	Yes	80	20	15 48 30	40 58 42	2010	11
6032013	No	80	20	15 48 30	40 58 42	2010	12

All baths with heating shelf and drainage. Faucet included.

**ACCESSORIES.** See page 91.

### CONTROL PANEL

See page 89.  
Three positions switch: only heater, heater + stirring and start/stop.

### MODEL WITH MAKROLON® FOLDING LID

Due to its transparency, you can visualize the bath's inside.  
It improves temperature stability, and restricts evaporation and pollution.

### SAFETY:

DIN 12877 STANDARD. THE UNIT WILL CUT OUT IF THERE IS INSUFFICIENT LIQUID OR IF THE BATH TEMPERATURE EXCEEDS THE SET TEMPERATURE. A MANUAL RESET ADJUSTABLE TEMPERATURE SAFETY THERMOSTAT IS PLACED AT THE BACK OF THE UNIT.



**ACCESSORIES FOR “PRECISTERM”, “PRECISDIG” AND “AGIBAT-20”**

Suitable for all “PRECISTERM”, “PECISDIG” and “AGIBAT-20” models.



**Removable constant liquid level.**  
Part No. **6001400**  
Note: Not compatible with gale and Makrolon® lid.



**Fixed, constant liquid level.**  
Part No. **6000123**

Únicamente para baños modelo “PRECISTERM”



**Thermometer support with locking screw (up to 40 mm).**  
Part No. **6000896**



**Thermometer.**  
Part No.  
**1000120** up to 120 °C.  
**1000872** up to 120 °C, extra long, suitable for Gable lid.  
**1000873** up to 200 °C, extra long, suitable for Gable lid.

1. Gable lid with thermometer location position hole.
2. Flat lid with concentric reduction rings of 105, 80, 60 and 37 mm Ø. With thermometer location position hole.  
**Note: The perforated lid avoids the lock of the Makrolon® folding lid.**
3. Support frame for tube racks.
4. Tube Racks various tube diameters available.



Capacity litres	Model code AGIBAT-20	Model code PRECISTERM	Model code PRECISDIG	1 Gable lid	2 Lid with concentric reduction rings	3 Support frame
2		6000137 - 6000385		-	<b>6003231</b> 1 place	-
5		6000138 - 6000386 - 6001195* - 6001236*		<b>6000710</b>	<b>6003232</b> 2 places	<b>1001199</b>
12		6000140 - 6000387 - 6001196* - 6001237*		<b>6000711</b>	<b>6003234</b> 4 places	<b>1001200</b>
20	6032012*6032013*	6000141 - 6000388 - 6001197* - 6001238*		<b>6000712*</b>	<b>6003236</b> 6 places	<b>1001201</b>
45		6000142* - 6000389* - 6001198* - 6001239*		<b>6000714</b>	<b>6001603</b> 12 places	<b>1001205</b>

\* Comes complete with drain tap. \* For all baths except those carrying Makrolon® lid.

Capacity litres	for PRECISDIG baths with Makrolon® lid	2 Lid with concentric reduction rings	3 Support frame
12	<b>6001186</b>	<b>6003234</b> 4 places	<b>1001200</b>
20	<b>6001187</b>	<b>6003236</b> 6 places	<b>1001201</b>
45	<b>6001188</b>	<b>6001603</b> 12 places	<b>1001205</b>

4 Tube racks (requires support frame)									
Part No.	Tube Ø mm	Number of tubes per rack	Rack Dimensions Height / Width / Depth (usable) cm			Number of racks by bath capacity litres			
			8	8.2	23.6	5	12	20	45
<b>1001202</b>	13	36	8	8.2	23.6	1	3	5	10
<b>1001203</b>	16	24	8	8.2	23.6	1	3	5	10
<b>1001204</b>	20	24	8	8.2	23.6	1	3	5	10



**Stabilising rings “circum”** prevents flasks from floating when placed in a water bath. Suitable for all types of flasks, erlenmeyers, etc. See page. 177.





## Histology paraffin section mounting bath "Termofin"

ADJUSTABLE TEMPERATURE FROM 40 °C TO 80 °C.  
STABILITY  $\pm 1$  °C.

### APPLICATIONS

Suitable for the fusion and preservation of paraffin wax in a liquid state that enables the user to see the floated sections.

### FEATURES

Aluminium inner tank and lid with a P.T.F.E. matt black coating. Thermometer location hole in the lid to read temperature.

### CONTROL PANEL

Mains power ON/OFF switch. Hydraulic temperature thermostat regulator synchronised with an indicator lamp.

### MODEL

Part No.	Capacity litres	$\emptyset$ (usable) cm	Height cm	$\emptyset$ (exterior) cm	Height cm	Power W	Weight Kg
<b>3000459</b>	4	25	10	34	14	430	2.3

Comes complete with lid and thermometer.

**P.T.F.E. coated**



### ACCESSORY

**Thermometer support** (can only be used without the lid).

Part No. **6004591**

NOTE: Wax dispenser (see page 217).



## Bank of oil and water baths "Precisbat"

ADJUSTABLE TEMPERATURES FROM AMBIENT +5 °C UP TO 200 °C, STABILITY  $\pm 2$  °C.  
INDEPENDENT TEMPERATURE CONTROL FOR EACH POSITION.

### FEATURES

Inner vessel made of AISI 304 stainless steel with the external case made of AISI 304 stainless steel.

The heater element is embedded in stainless steel INCOLOY alloy, that is corrosion and heat resistant.

Each position has a lid with concentric reduction rings of; 105, 80, 60 and 40 mm in  $\emptyset$ .

An adjustable support frame is mounted at the back of the unit to facilitate the mounting and support of flasks, condensers and other apparatus, etc.

Capacity: 2 litres per position.

### CONTROL PANEL

**Independent control for each position.**

Mains ON/OFF with luminous "ON" indicator lamp for each position.

Hydraulic thermostat temperature control synchronised with the "ON" indicator lamp.



### MODELS

Part No.	Temperature maximum °C	Number of places	Height / Width / Depth (usable each position) cm			Height / Width / Depth (exterior) cm			Power W	Weight Kg
<b>6001462</b>	200	2	12	14	12	19	35	29	1300	5.5
<b>6001472</b>	200	4	12	14	12	19	67	29	2560	10
<b>6001482</b>	200	6	12	14	12	19	100	29	3800	15

### ACCESSORIES



**Perforated shelf** (One per tank) made of AISI 304 stainless steel. Part No. **6000011**



**Clamp for supporting flasks and condensers.** Part No. **7000403**



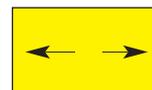
**Thermometer up to 220 °C.** Part No. **1000873**



**Bosshead for supporting clamps.** Part No. **1000069**



# Precise reciprocal shaking baths controlled by microprocessor “Unitronic Reciprocating Shaking Bath” and with refrigeration “Unitronic Reciprocating Shaking Bath C”



UNITRONIC RECIPROCATING SHAKING BATH LINEAR: TEMPERATURE RANGE FROM AMBIENT +5 °C TO 99.9 °C.  
UNITRONIC RECIPROCATING SHAKING BATH C LINEAR: TEMPERATURE RANGE FROM 0 °C TO 99.9 °C.  
STABILITY ±0.05 °C HOMOGENEITY ±0.1 °C, SET TEMP. ERROR ±1 °C, RESOLUTION 0.1 °C.

### SAFETY:

DIN 12877 STANDARD. THE UNIT WILL CUT OUT IF THERE IS INSUFFICIENT LIQUID OR IF THE BATH TEMPERATURE EXCEEDS THE SET TEMPERATURE. A MANUAL RESET ADJUSTABLE TEMPERATURE SAFETY THERMOSTAT IS PLACED AT THE BACK OF THE UNIT.

*Reciprocal linear agitation, controllable from 10 to 100 oscillations per minute*

*Controllable time from 1 minute to 99 hours 59 minutes*

MICROPROCESSOR CONTROL WITH DIGITAL DISPLAY AND PUSH BUTTON TEMPERATURE, SPEED AND TIME SELECTION. RS-232 INTERFACE FOR PRINTER OR COMPUTER OUTPUT.



### APPLICATIONS

Cell culture and biological samples, yeasts and general applications that require stable and reproducible temperatures.

### COMMON FEATURES

Linear motion sliding tray from 10 to 100 oscillations per minute, with a variable stroke length of 32 or 46 mm.

Digital display and selection of temperature, oscillations and time.

Temperature sensor: thermo-resistant Pt100.

Rack frame support made of AISI 304 stainless steel incorporated in the tank that can accommodate a selection of flasks and racks.

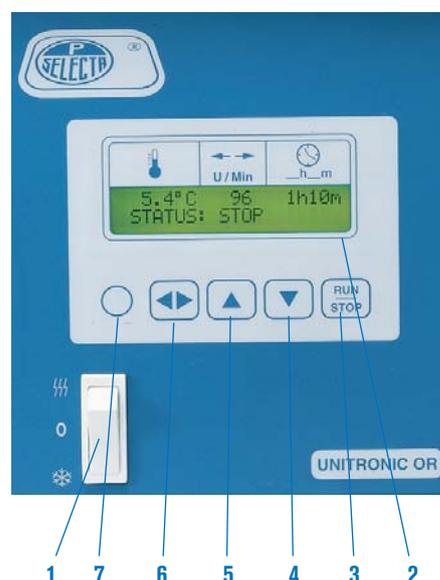
Internal tank made of AISI 304 stainless steel with an external case of AISI 304 stainless steel.

Built in drain tap.

Ventilated hermetically sealed compressor for refrigeration in the “Unitronic - C”.

### CONTROL PANEL

1. Mains power switch.
2. LCD screen that shows:
  - Temperature, oscillations per minute and time.
  - Alarms: set temperature and probe failure.
  - Configuration: °C or °F, temperature calibration and set working temperature limits.
3. Push button Start/ Stop.
4. Push button to decrease value.
5. Push button to increase value.
6. Push button for parameter selection: temperature, strokes per min. and time.
7. Push button for configuration.



## “Unitronic Reciprocating Shaking Bath”

## “Unitronic Reciprocating Shaking Bath C” Refrigerated Bath



### MODELS

	Part No.	Capacity litres	Height / Width / Depth (bath) cm	Height / Width / Depth (support carriage) cm	Height / Width / Depth (exterior) cm	Power W	Weight Kg
UNITRONIC RECIPROCATING	6032011	27	18 48 29	17 35 24	30 74 40.5	1500	25
UNITRONIC RECIPROCATING-C	6001173	27	18 48 29	17 35 24	30 74 63.5	1750	43

## ACCESSORIES FOR UNITRONIC RECIPROCATING SERIES



### Support Platform for Erlenmeyer flasks.

Made of AISI 304 stainless steel with location holes for various configurations of Erlenmeyer flask clip supports.  
Sizes: 50, 100, 250, 500 and 1000 ml.

Part No.	Width / Depth (platform) cm		No. of flasks and capacity per platform					Weight Kg
			50 ml	100 ml	250 ml	500 ml	1000 ml	
<b>3001004</b>	23.5	34.5	20	12	6	6	3	1



**Racks:** made of AISI 304 stainless steel.  
Capacity: 2 racks.

Part No.	Tube Ø mm	No tubes per rack	Height / Width / Depth (rack) cm	
<b>1001233</b>	13	70	8.5	11 34
<b>1001234</b>	16	48	8.5	11 34
<b>1001235</b>	20	48	8.5	11 34



### Adapter clips for Erlenmeyer flasks.

Made of tempered stainless steel.

Part No.

<b>1001003</b>	Adapter for 50 ml.
<b>1000978</b>	Adapter for 100 ml.
<b>1000979</b>	Adapter for 250 ml.
<b>1000980</b>	Adapter for 500 ml.
<b>1000981</b>	Adapter for 1000 ml.



**Gable Lid:** made of AISI 304 stainless steel.  
Part No. **6000713**



## Precision Viscometer Bath "VB-1423"

DIGITAL TEMPERATURE CONTROL FROM AMBIENT +5 °C TO 100 °C.  
STABILITY ±0.05 °C. HOMOGENEITY ±0.05 °C. SET ERROR VALUE ±0.09 °C.  
RESOLUTION 0.1 °C.

### SAFETY:

SAFETY THERMOSTAT CONFORMS TO THE DIN 12876. MANUAL RESET.

### FEATURES

Temperature sensor; Pt100 thermo-resistor, stainless steel AISI 304 lid with three viscometer locations ports, three independent lids and an additional location port for the control thermometer. The main body of the bath is made of a 20 litre borosilicate glass tank. A white plate is located at the back to help optimize and read the viscometers.

### CONTROL PANEL

1. Main power switch with luminous ON.
2. Temperature regulator:

  3. Real time temperature display.
  4. Push button increase value.
  5. Push button decrease value.
  6. Push button configure operation.

7. Safety thermostat safety lamp.



### MODEL

Part No.	Temperature control range °C	Capacity litres	Height / Ø (tank) cm		Height / Ø (total) cm		Power W	Weight Kg
<b>3001423</b>	amb.+5 up to 100	20	32	30	47	30	1000	8

## ACCESSORIES

**Universal viscometer support.** made from PTFE with stainless steel AISI 304 support. Suitable for the following viscometers :



- Cannon-Fenske for transparent liquids.
- Cannon-Fenske for opaque liquids.
- Ubbelohde.
- Ostwald.
- BS U Tube.
- Cannon-Manning semi-micro.

- Ubbelohde type BS/IP/SL, BS/IP/SL(S) & type BS/IP/MSL.
- DIN Ubbelohde.

Part No. **1001453**

**Calibration Chronometers** (see page 295).

**Thermometers for viscometer baths.**

Part No.

<b>1001454</b>	Thermometer ASTM 120C at 38.6 to 41.4 °C divisions of 0.05 °C.
<b>1001455</b>	Thermometer ASTM 121C at 98.6 to 101.4 °C divisions of 0.05 °C.
<b>1001456</b>	Thermometer ASTM 91C at 20.0 to 50.0 °C divisions of 0.1 °C.
<b>1001457</b>	Thermometer ASTM 92C at 40.0 to 70.0 °C divisions of 0.1 °C.
<b>1001458</b>	Thermometer ASTM 93C at 60.0 to 90.0 °C divisions of 0.1 °C.
<b>1001459</b>	Thermometer ASTM 94C at 80.0 to 110.0 °C divisions of 0.1 °C.



# Ultrasonic Cleaning Baths “Ultrasons”, “Ultrasons UB-1488”, “Ultrasons-H”, “Ultrasons-HD” and “Ultrasons-P”

## FUNDAMENTAL THEORY

The principal of ultrasonic cleaning consists of the use of high frequency sound waves (40 kHz), produced by a generator through a transducer, which propagates them mechanically inside the tank, this produces a cavitation effect which leads to the formation of millions of low pressure microscopical bubbles which carry out molecular cleaning, eliminating impurities, polluting agents and dirt from the parts or material which must be cleaned.

Complex parts can be cleaned without disassembly since the cavitation penetrates wherever the cleaning solution is in contact with the surface.

The generator of these baths is completely transistorised and incorporated, working through the “Sweeping frequency” system, which ensures uniform cavitation at all points of the resonance tank.

## COMMON FEATURES

Double bodied tank, made entirely of stainless steel.

Emptying drain, anti-parasite filter, adjustable timer and heating, model dependent.

## APPLICATIONS

**Laboratories in general:** acceleration of chemical reactions, degassing of liquids, cell disruption, cleaning of sieves, pipettes, micro-pipettes, cuvettes, trays, viscometers, decomposition of radioactive substances, etc.

**Dentistry:** Cleaning of prosthesis, instruments, etc.

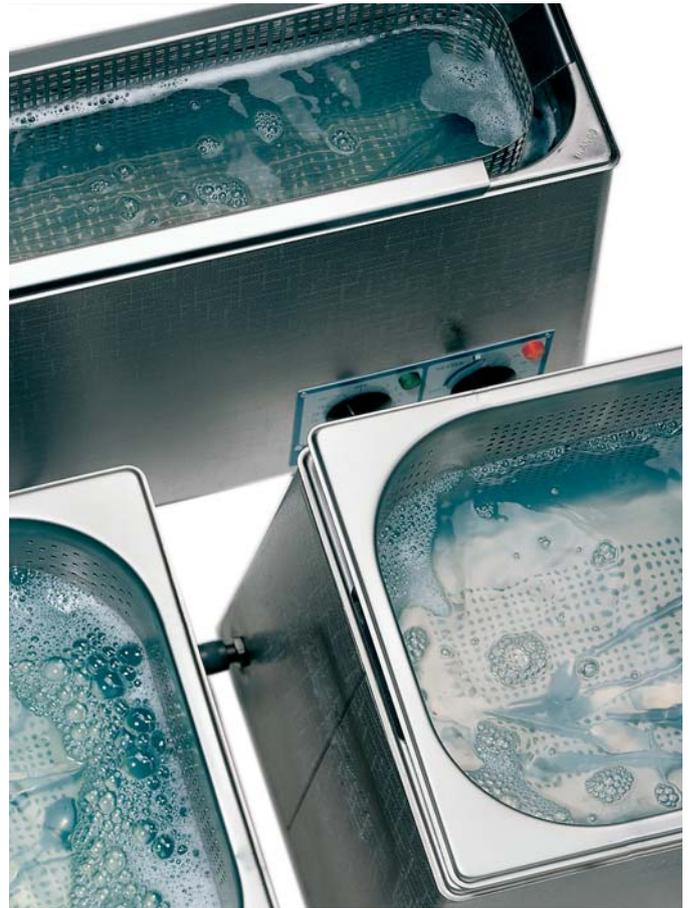
**Optics:** Cleaning of frames, lenses, and contact lenses, etc.

## SUMMARY TABLE

**Medicine:** Cleaning of instruments in general, forceps, probes, scalpels etc.

**Jewellery and Watch making:** Cleaning of all kind of watches and jewels.

**Industry:** Cleaning of all electronic components, printed circuit boards, semiconductors, petrol injector sieves and filters, etc.



## Ultrasonic bath, Automatic Lift and Dry “Ultrasons-UB-1488”

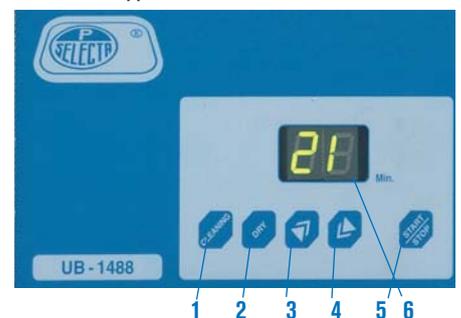
*Selecta original model. Quick dry, without having to control the instrument*



## FEATURES

Bath with automatic basket elevator that operates at the end of the time cleaning cycle.

Hot air drying by two-turbine air fans that switch on at the start of the elevation and finalise the complete operation. Waste drain at the front of the instrument. Removable support basket.



## CONTROL PANEL

1. Cleaning time control: 0-15 minutes.
2. Push button drying time: 0-15 minutes.
3. Push button increase value.
4. Push button reduce value.
5. Push button stop / start.
6. Digital timer display.

## MODEL

Part No.	Capacity litres	Height / Width / Depth (usable) cm			Height / Width / Depth (exterior) cm			Generator power W	Power total W	Weight Kg
<b>3001488</b>	6	15	30	14	30	40	34	150	2150	12

Comes complete with basket.



## Ultrasonic cleaning baths "Ultrasons" without heating

3 Part No. 3000513 Cap. 6L



4 Part No. 3000617 Cap. 9L



1 Part No. 3000512, Cap. 1L

2 Part No. 3000683 Cap. 2,6 L



5 Part No. 3000837 Cap. 6,5L  
(suitable for sieves and filters etc.)

8 Part No. 3001208 Cap. 4L

7 Part No. 3000515 Cap. 20L



6 Part No. 3000514  
Cap. 9L

### CONTROL PANEL

Timer switch for 0 -15 minutes or continuous operation. Indicator lamp when the unit is in operation.

### MODELS

Part No.	Capacity litres	Height / Width / Depth (usable) cm	Height / Width / Depth (exterior) cm	Generator power W	Timer 0-15'	Waste drain	Weight Kg
3000512	1	6 14 14	20 20 18	50	Yes	No	2,5
3000683	2,6	9 23 13	22 29 19	100	Yes	No	4
3001208	4	10 30 14	24 33 18	100	Yes	Yes	7
3000513	6	15 30 14	30 36 20	150	Yes	Yes	9,5
3000837	6,5	14 24 Ø	30 27,5 Ø	150	Yes	No	8
3000617	9	15 50 14	30 56 20	200	Yes	Yes	10,7
3000514	9	15 30 23	30 36 30	200	Yes	Yes	13
3000515	20	15 50 30	30 56 36	400	Yes	Yes	22

### COMPLEMENT



#### Detergent "BIO-SEL"

Bio-degradable, phosphate free. Excellent cleaning power just by mixing only 20ml per litre of water. BIO-SEL, in a 2% solution has a 9.7 pH level. Low toxicity. This detergent disperses, emulsifies, segregates, dissolves, suspends and breaks down dirtiness.

1000025 Capacity 1 litre.

1000026 Capacity 4 litres.

1000852 Box of 12 x 1 litre bottles.

1000853 Box of 4 x 4 litres bottles.

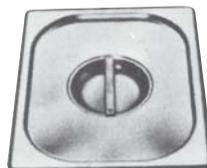
### ACCESSORIES

#### Baskets and Lids.

Made of AISI 304 stainless steel.



Lids are not compatible with baskets.



Lid with concentric reduction ring



Cleaner model Part No.	BASKET Part No.	BASKETS Height / Width / Depth (cm)	LID WITH CONCENTRIC REDUCTION RING Part No.	Number of positions	LID WITH HANDLE Part No.
3000512	6005123	5 11 11	6005122	1	6005121
3000683	6006833	7 20 12	6006832	1	6006831
3001208	6001209	7 26 13	-	-	6005131
3000513	6005133	12 26 13	6005132	2	6005131
3000837	6008373	13 23 Ø	-	-	6008371
3000617	6005144	12 46 12	6005134	3	6005124
3000514	6005143	13 29 23	6005142	2	6005141
3000515	6005153	13 49 29	6003236	6	6005151



## Ultrasonic Bath "Ultrasons-Digit"

5 CYCLES ELECTRONIC DIGITAL TIME CONTROL  
CAPACITY 1.4 LITRES

### FEATURES

Internal tank made from stainless steel, with minimum and maximum level indicator.

External case, basket and lid made from PVC.

Maximum cleaning power, frequency 42 KHz

### CONTROL PANEL

Pushbutton start/ stop

Timer 5 programs selection in seconds: 90" - 180" - 280" - 380" and 480".

Wide application range from jewellery, watches, optical components. Dentistry and general laboratory use.

### MODEL

Part No.	Capacity litres	Height / Width / Depth (usable) cm	Height / Width / Depth (exterior) cm	Power W	Weight Kg
5900650	1.4	6 13 16	15 17 22	70	1.75

Comes complete with basket and see through transparent PVC lid.



Model "Elegant".



## Heating cleaning bath "Ultrasons-HD"

DIGITAL ELECTRONIC REGULATION OF TEMPERATURE AND TIME  
FOR TEMPERATURES FROM AMBIENT +5°C TILL 80°C

### Optimum cleaning efficiency



It comes complete with a universal basket, lid with handle and drain device.

Bath Part. No. 3000865 (5 Litres capacity) is also supplied with basket for small items.

#### FEATURES

Double body container, completely made of stainless steel and with waste drain device.

#### CONTROL PANEL

Illuminated main switch.

Start-stop push button.

Increase/decrease time push button in minutes (from 0' to 60').

Increase/decrease temperature push button in °C.

#### MODEL

Part No.	Capacity litres	Height/Width/Depth (usable) cm	Height/Width/Depth (exterior) cm	Power Generator W	Power Heater W	Weight Kg
3000865	5	15 24 14	27 31 18	120	75	3,8
3000866	6	15 30 15	27 35 18	180	75	5,8
3000867	10	15 30 24	35 38 28	240	225	8,2
3000868	22	15 50 30	27 58 35	600	375	15
3000869	40	20 50 40	40 65 50	900	1000	25

It comes complete with a universal basket, small basket for small items, lid with handle and drain device.



## Heated Ultrasonic baths "Ultrasons-H"

ADJUSTABLE TEMPERATURE FROM AMBIENT +5 °C HASTA 75 °C.

#### APPLICATIONS

For long pieces cleaning (especially for pipettes) .



*Note: For cleaning long objects whose length may exceed that of the tank, such as tubes, pipettes, etc, it has been proved that they are submitted to the same cavitation effect by introducing them in a test tube filled with liquid and placed vertically in the cleaner.*

#### FEATURES

Evenly distributed heating element, adhered to the tank for maximum heat transfer.

#### CONTROL PANEL

Adjustable thermostat heater.

Heater "on" indicator lamp.

Timer switch from 0-15 minutes or continuous operation.

In operation on indicator lamp.

#### MODEL

Part No.	Capacity litres	Height/Width/Depth (usable) cm	Height/Width/Depth (exterior) cm	Power Generator W	Power Heater W	Weight Kg
3000839	9	15 50 14	30 56 20	200	800	11

#### ACCESSORIES

Basket, Height 12/Width 46/Depth 12 cm. Part No **6005144**

3 Lid with concentric reduction ring. Part No **6005134**

Lid with handle. Part No **6005124**

See page: 91



## Ultrasonic pipette cleaner "Ultrasons-P"

#### FEATURES

Designed for automatically cleaning and rinsing pipettes, mounted inside a basket, pipettes are ultrasonically cleaned and rinsed.

Minimum rinsing time by using a water siphon action through the inside of the pipettes.

Metallic areas in contact with liquid are made of AISI 316 stainless steel.

The outer casing is made of AISI 304 stainless steel.

Cylindrical vessel in transparent acrylic, with lid to avoid splashing.

Connector(1") water inlet and siphon-drain tube.

Basket with handle in polypropylene for the easy handling and carrying of the pipettes.

#### CONTROL PANEL

Timer from 0-15 minutes or continuous operation.

Indicator lamp showing when the bath is in operation.

#### MODEL

Part No.	Capacity litres	Ø / Height (usable) cm	Height / Width/ Depth (exterior) cm	Power W	Weight Kg
3000910	10	15 64	84 34 40	250	15