



**NICKEL - ELECTRO LTD.**  
Manufacturers of the Clifton Range

*Clifton Range*<sup>®</sup>

## Product Brochure

Water Baths,  
Shaking Baths,  
Ultrasonic Baths





Clifton

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**All Clifton baths have a three year warranty  
and comprehensive customer support.**



# Nickel-Electro Ltd.

## PROUD TO BE BRITISH



Nickel-Electro Ltd. is an independent family owned business, in its third generation. The company is proud to be a British Manufacturer with over 75 years experience, specialising in the design and manufacture of temperature control equipment in South West England.

Nickel-Electro Ltd. has a philosophy of manufacturing everything on-site, in order to control lead time, quality and most importantly, cost. This ensures that the company can provide customers with the highest quality products at affordable prices. All Clifton water baths are pre-calibrated before leaving the UK factory.

Combining cutting edge technology with traditional skills and values ensures that the highest standards are met. The company takes pride in being high quality precision engineers. Many of the team have been with the company for a considerable number of years. The wealth of experience gives the brand the credibility and enviable reputation that it has today. A full technical service is available to distributors and end users for all Clifton equipment. The company has excellent customer and aftercare service, with a quick response team. Products are designed, developed and manufactured in a tightly controlled ISO9001 environment and all products are compliant with the latest standards.

Made in Britain symbol on the company's products gives customers an assurance of quality.



## Clifton Unstirred Water Baths



Clifton analogue and digital unstirred water baths are designed for education and general laboratory use. They are economically priced without compromising quality.

Comprising of a high quality corrosion resistant stainless steel tank, with a bright clean finish housed in a durable painted outer case. Painted surfaces feature anti-bacterial finish with good chemical resistance.



The heaters and temperature sensors are concealed under the tank providing a clutter free working area which makes it easy to wipe and clean.

### Analogue Unstirred Water Baths

### Digital Unstirred Water Baths



Easy to use analogue dial pointer for setting temperature, graduated in 5°C increments.



Digital water baths have push buttons for setting values. Temperatures can be easily and rapidly set with the push button, wipe clean control panel, featuring a bold LED display.

## NE1 Series Unstirred Thermostatic Water Baths



The **NE1 series**, Thermostatic Clifton analogue baths are designed for general use and are economically priced without compromising quality.

Comprising of a high quality corrosion resistant stainless steel tank, with a bright clean finish housed in a durable painted outer case. Painted surfaces feature anti-bacterial finish with good chemical resistance.

Heaters and temperature sensors are concealed under the tank providing a clutter free working area which is easy to wipe clean.

	NE1-2.5	NE1-4	NE1-8	NE1-14
<b>GENERAL</b>				
Temp. Range	Ambient + 5°C - 100°C			
Temp. Control	Analogue Dial Pointer			
Sensitivity/Uniformity	±0.5°C / ±0.5°C	±0.25°C / ±0.1°C		
Heater Power (220-240V)	250W	400W	800W	1000W
Voltage	230V 50-60Hz	120V or 230V models available 50-60Hz		
<b>DIMENSIONS</b>				
Tank Capacity	2.5 Litre	4 Litre	8 Litre	14 Litre
External (mm)	270w x 190d x 240h	332w x 185d x 290h	332w x 270d x 290h	361w x 332d x 290h
Internal (mm)	230w x 130d x 150h	300w x 150d x 150h	300w x 240d x 150h	325w x 300d x 150h
Water Level Max. (mm)	130			
Water Level Min. (mm)	55			

	NE1-22	NE1-28	NE1-56
<b>GENERAL</b>			
Temp. Range	Ambient + 5°C - 100°C		
Temp. Control	Analogue Dial Pointer		
Sensitivity/Uniformity	±0.25°C / ±0.1°C		
Heater Power (220-240V)	1500W		2500W
Drain (12mm Bore)	Drain Outlet		Drain Tap Fitted
Voltage	120V or 230V models available 50-60Hz		
<b>DIMENSIONS</b>			
Tank Capacity	22 Litre	28 Litre	56 Litre
External (mm)	538w x 332d x 290h	538w x 332d x 290h	660w x 540d x 290h
Internal (mm)	500w x 300d x 150h	500w x 300d x 200h	620w x 500d x 200h
Water Level Max. (mm)	130	180	
Water Level Min. (mm)	55		

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## NE1D Series Unstirred Digital Water Baths



NE1D-14



Comprising of a high quality corrosion resistant stainless steel tank, with a bright clean finish housed in a durable painted outer case. Painted surfaces feature anti-bacterial finish with good chemical resistance. The NE1D series, Clifton Digital Baths are designed for immersion of flasks/bottles/racks in a highly stable temperature environment throughout the water bath.

	NE1D-4	NE1D-14	NE1D-22
<b>GENERAL</b>			
Temp. Range	Ambient + 5°C - 99°C		
Temp. Control	Digital, LED display showing actual or set temperature, resolution 1°C		
Sensitivity/Uniformity	±0.2°C / ±0.1°C		
Heater Power (220-240V)	400W	1000W	1500W
Voltage	120V or 230V models available 50-60Hz		
Drain (12mm bore)			Drain Outlet
<b>DIMENSIONS</b>			
Tank Capacity	4 Litre	14 Litre	22 Litre
External (mm)	332w x 185d x 290h	361w x 332d x 290h	538w x 332d x 290h
Internal (mm)	300w x 150d x 150h	325w x 300d x 150h	500w x 300d x 150h
Water Level Max. (mm)	130		
Water Level Min. (mm)	55		

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## NE2D Series Unstirred Digital Water Baths



The **NE2D series** provides a stable temperature environment ideal for meeting quality control requirements, featuring digital PID temperature control for precision. Controls feature auto alarm setting, illuminated on/off switch, heater and over temperature indications.

Comprising of a high quality corrosion resistant stainless steel tank, with a bright clean finish housed in a durable painted outer case. Painted surfaces feature anti-bacterial finish with good chemical resistance.

	NE2 - 4D	NE2 - 8D	NE2 - 10D	NE2 - 14D
<b>GENERAL</b>				
Temp. Range	Ambient + 5°C - 99°C			
Temp. Alarm	Over temperature alarm is automatically set 4°C above set point			
Temp. Control	PID Digital, LED display showing actual or set temperature, resolution 0.1°C			
Sensitivity/Uniformity	±0.2°C / ±0.1°C			
Heater Power (220-240V)	400W	800W		1000W
Voltage	120V or 230V models available 50-60Hz			
<b>DIMENSIONS</b>				
Tank Capacity	4 Litre	8 Litre	10 Litre	14 Litre
External (mm)	332w x 185d x 290h	332w x 270d x 290h	332w x 270d x 290h	361w x 332d x 290h
Internal (mm)	300w x 150d x 150h	300w x 240d x 150h	300w x 240d x 200h	325w x 300d x 150h
Water Level Max. (mm)	130		180	130
Water Level Min. (mm)	55			

	NE2 - 22D	NE2 - 28D	NE2 - 56D
<b>GENERAL</b>			
Temp. Range	Ambient + 5°C - 99°C		
Temp. Alarm	Over temperature alarm is automatically set 4°C above set point		
Temp. Control	PID Digital, LED display showing actual or set temperature, resolution 0.1°C		
Sensitivity/Uniformity	±0.2°C / ±0.1°C		
Heater Power (220-240V)	1500W		2500W
Drain (12mm Bore)	Drain Outlet		
Voltage	120V or 230V models available 50-60Hz		
<b>DIMENSIONS</b>			
Tank Capacity	22 Litre	28 Litre	56 Litre
External (mm)	538w x 332d x 290h	538w x 332d x 290h	660w x 540d x 290h
Internal (mm)	500w x 300d x 150h	500w x 300d x 200h	620w x 500d x 200h
Water Level Max. (mm)	130	180	
Water Level Min. (mm)	55		

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## ShallowBaths™ Series Unstirred Water Baths



Clifton ShallowBaths™ are available in digital or analogue option. Perfect for heating small height samples such as micro tubes, micro plates and bottles. These shallow baths require less water and less process chemicals, so are therefore economical to use.

Comprising of a high quality corrosion resistant stainless steel tank, with a bright clean finish housed in a durable painted outer case. Painted surfaces feature anti-bacterial finish with good chemical resistance.

	NE2 - 2D	NE2 - 5D	NE2 - 9D	NE1 - 9
<b>GENERAL</b>				
Temp. Range	Ambient + 5°C - 99°C			
Temp. Alarm	Over temperature alarm is automatically set 4°C above set point			
Temp. Control	PID Digital, LED display showing actual or set temperature, resolution 0.1°C			Graduated in 5°C increments
Sensitivity/Uniformity	±0.2°C / ±0.1°C			±0.25°C / ±0.25°C
Heater Power (220-240V)	200W	800W		
Voltage	120V or 230V models available 50-60Hz			
<b>DIMENSIONS</b>				
Tank Capacity	2 Litre	5 Litre	9 Litre	
External (mm)	332w x 185d x 135h	361w x 332d x 135h	535w x 332d x 135h	
Internal (mm)	300w x 150d x 65h	325w x 300d x 65h	500w x 300d x 65h	
Water Level Max. (mm)	40			
Water Level Min. (mm)	20			

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## NE3DT Series Digital Water Baths

Clifton digital NE3DT series baths come complete with run back and delay start timer, clear hinged polycarbonate lid and feature PID precision temperature control.

Comprising of a high quality corrosion resistant stainless steel tank, with a bright clean finish housed in a durable painted outer case. Painted surfaces feature anti-bacterial finish with good chemical resistance.



NE3-28DT with Polycarbonate Lid



### NE3 - 4DT

### NE3 - 8DT

### NE3 - 14DT

GENERAL			
Temp. Range	Ambient + 5°C - 99°C		
Temp. Alarm	Over temperature alarm is automatically set 4°C above set point		
Temp. Control	PID Digital, LED display showing actual or set temperature, resolution 0.1°C		
Temp. Control & Run Back Timer	Visual indicator and end message 00:01 to 99:59 (hh:mm) activates at set temperature		
Temp. Control & Delay Start Timer	Heating commences at a set time in the future, within 24 hours		
Sensitivity/Uniformity	±0.2°C / ±0.1°C		
Heater Power (220-240V)	400W	800W	1000W
Drain (12mm Bore)	Drain tap fitted		
Voltage	120V or 230V models available 50-60Hz		
DIMENSIONS			
Tank Capacity	4 Litre	8 Litre	14 Litre
External (mm)	332w x 185d x 290h	332w x 270d x 290h	361w x 332d x 290h
Internal (mm)	300w x 150d x 150h	300w x 240d x 150h	325w x 300d x 150h
Water Level Max. (mm)	130		
Water Level Min. (mm)	55		

### NE3 - 28DT

### NE3 - 56DT

GENERAL			
Temp. Range	Ambient + 5°C - 99°C		
Temp. Alarm	Over temperature alarm is automatically set 4°C above set point		
Temp. Control	PID Digital, LED display showing actual or set temperature, resolution 0.1°C		
Temp. Control & Run Back Timer	Visual indicator and end message 00:01 to 99:59 (hh:mm) activates at set temperature		
Temp. Control & Delay Start Timer	Heating commences at a set time in the future, within 24 hours		
Sensitivity/Uniformity	±0.2°C / ±0.1°C		
Heater Power (220-240V)	1500W	2500W	
Drain (12mm Bore)	Drain tap fitted		
Voltage	120V or 230V models available 50-60Hz		
DIMENSIONS			
Tank Capacity	28 Litre	56 Litre	
External (mm)	538w x 332d x 290h	660w x 540d x 290h	
Internal (mm)	500w x 300d x 200h	620w x 500d x 200h	
Water Level Max. (mm)	180		
Water Level Min. (mm)	55		

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## NE2D DuoBath™ Series



NE2D-4/8

Clifton digital DuoBaths™ have two independently controlled unstirred baths in one space saving unit. Specifically designed with the busy laboratory in mind. Supplied with three removable stainless steel perforated shelves, two at conventional low height and a taller 100mm version, designed to accommodate small media vessels/bijou style bottles in a shallow depth. Should only one chamber be required, a standby feature can be activated for the chamber not in use.

Typical applications include: eliminating problems associated with water level/disturbance when placing and removing containers of different sizes or routine operations involving two different temperatures and immersed depths such as keeping media molten in one chamber and incubation of samples in the other.

Comprising of a high quality corrosion resistant stainless steel tank, with a bright clean finish housed in a durable painted outer case. Painted surfaces feature anti-bacterial finish with good chemical resistance.

	NE2D - 4/4	NE2D - 4/8	NE2D - 8 / 22
<b>GENERAL</b>			
Temp. Range	Ambient + 5°C - 99°C		
Temp. Alarm	Over temperature alarm is automatically set 4°C above set point		
Temp. Control	PID Digital, LED display showing actual or set temperature, resolution 0.1°C		
Temp. Control & Run Back Timer	Visual indicator and end message 00:01 to 99:59 (hh:mm) activates at set temperature		
Sensitivity/Uniformity	±0.2°C / ±0.1°C		
Cross Tank Sensitivity	60°C tank effect on 37°C tank +0.1°C		
Heater Power (220-240V)	800W	1200W	2500W
Drain (12mm Bore)			Drain Outlet
Voltage	230V models available 50-60Hz		
<b>DIMENSIONS</b>			
Tank Capacity	4/4 Litre	4/8 Litre	8/22 Litre
External (mm)	361w x 332d x 290h	450w x 332d x 290h	800w x 332d x 290h
Internal (mm)	150w x 300d x 150h 150w x 300d x 150h	150w x 300d x 150h 240w x 300d x 150h	240w x 300d x 150h 500w x 300d x 150h
Water Level Max. (mm)	130		
Water Level Min. (mm)	55		

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## NE1 TripleBath™ Series



Clifton TripleBaths™ feature three independently controlled unstirred baths in one space saving unit. Ideal for heating samples in micro tubes and for other molecular biology applications.

Triple 4 litre baths are fitted with side lifting handles for easy lifting. All shallow baths require less water and less process chemicals, so are therefore economical to use. The low profile design allows easier access to samples in bath.

Each chamber comes complete with a removable Clifton “low” height stainless steel perforated shelf.

Comprising of a high quality corrosion resistant stainless steel tank, with a bright clean finish housed in a durable painted outer case. Painted surfaces feature anti-bacterial finish with good chemical resistance.

	NE1-2/2/2	NE1-4/4/4	NE1D-2/2/2	NE1D-4/4/4
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	NE1-2/2/2	NE1-4/4/4	NE1D-2/2/2	NE1D-4/4/4
<b>GENERAL</b>				
Temp. Range	Ambient + 5°C - 99°C			
Temp. Alarm	Over temperature alarm is automatically set 4°C above set point			
Temp. Control	Analogue Dial Pointer		Digital Thermostatic, LED display, resolution 0.1°C	
Sensitivity/Uniformity	±0.5°C / ±0.5°C		±0.25°C / ±0.1°C	
Heater Power (220-240V)	3 x 200W	3 x 400W	3 x 200W	3 x 400W
Voltage	230V / 50-60Hz			
<b>DIMENSIONS</b>				
Tank Capacity	3 x 2 Litre	3 x 4 Litre	3 x 2 Litre	3 x 4 Litre
External (mm)	535w x 332d x 135h	535w x 332d x 290h	535w x 332d x 135h	535w x 332d x 290h
Internal (mm)	300w x 150d x 65h	300w x 150d x 150h	300w x 150d x 65h	300w x 150d x 150h
Water Level Max. (mm)	30	130	30	130
Water Level Min. (mm)	10	55	10	55

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## Unstirred Bath Accessories - Lids

	Stainless Steel Gabled Lid with Insulated Handle	Stainless Steel Hinged Gable Lid with Insulated Handle	Stainless Steel Flat One Piece Lid with Insulated Handle	Clear Lift Off Gable Lid
UNSTIRRED BATHS				
NE1-2.5	Not Available	Not Available	LD-2.5	Not Available
NE1-2/2/2, NE1D-2/2/2, NE2-2D	SL1-4	Not Available	LD-4	GL1-4AF
NE1-4, NE1D-4, NE1-4/4/4, NE1D- 4/4/4, NE2-4D, NE2D-4/4	SL1-4	Not Available	LD-4	GL1-4AF
NE2-5D	SL1-14	Not Available	LD-14	GL1-14AF
NE1-8, NE2-8D, NE2D-4/8, NE2D-8/22	SL1-8	Not Available	LD-8	GL1-8AF
NE1-9, NE2-9D	SL1-22	SL1-22H	LD-22	GL1-22AF
NE2-10D	SL1-8	Not Available	LD-8	GL1-8AF
NE1-14, NE1D-14 NE2-14D	SL1-14	SL1-14H	LD-14	GL1-14AF
NE1B-14, NE1B-18W	Not Available	SL1-14H/SS	LD-14	GL1-14AF
NE1-22, NE1D-22, NE2-22D, NE2D-8/22	SL1-22	SL1-22H	LD-22	GL1-22AF
NE1-28, NE2-28D	SL1-22	SL1-22H	LD-22	GL1-22AF
NE1-56, NE2-56D	SL1-56	Not Available	LD-56	Not Available
NE1B-28	SL1-22SS	Not Available	LD-22	GL1-22AF

<p>Stainless Steel Lid with Concentric Rings SLR1-4 : 2 x 105 mm holes SLR1-8 : 4 x 83mm holes SLR2-8 : 2 x 105 mm holes SLR1-14 : 4 x 105mm holes SLR2-14 : 6 x 83mm holes SLR3-14 : 4 x 114.5mm holes SLR1-22 : 6 x 105mm holes SLR3:22 : 6 x 114.5mm holes</p>	<p>Clear Hinged Gable Lid</p>	<p>Polypropylene Spheres: Pack of 200</p>
		
Not Available	Not Available	BP0368 : 1 Pack
SLR1-4	GL1-4	BP0368 : 1 Pack
SLR1-4	GL1-4	BP0368 : 1 Pack
SLR1-14, SLR2-14 and SLR3-14	GL1-14	BP0368 : 2 Packs
SLR1-8 and SLR2-8	GL1-8	BP0368 : 2 Packs
SLR1-22 and SLR3-22	GL1-22	BP0368 : 2 Packs
SLR1-8 and SLR2-8	GL1-8	BP0368 : 2 Packs
SLR1-14, SLR2-14 and SLR3-14	GL1-14	BP0368 : 2 Packs
SLR1-14, SLR2-14 and SLR3-14	Not Available	BP0368 : 2 Packs
SLR1-22 and SLR3-22	GL1-22	BP0368 : 4 Packs
SLR1-22 and SLR3-22	GL1-22	BP0368 : 4 Packs
Not Available	Not Available	BP0368 : 4 Packs
SLR1-22 and SLR3-22	Not Available	BP0368 : 4 Packs

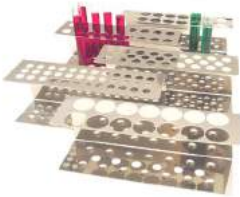


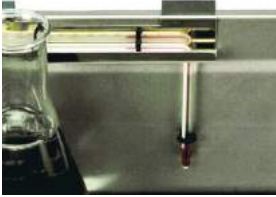
## Accessories for the NE1 B-18W Boiling Bath

ST-1	Raise and Lower Sterilising Tray
SA01409	Pair of Guide Rail Assembles for ST-1 Tray
SL1-14H/SS	Stainless Steel Hinged Gable Lid to suit 14 litre and 18 litre Boiling Baths
GL1-14AF	Lift Off Gable Lid to suit 14 and 18 litre Boiling Baths

## Unstirred Bath Accessories

	Stainless Steel Test Tube Racks	PVC Churchill Racks	Drain Tap
	6870 : 26 holes x 17mm DIA 6871 : 16 holes x 26mm DIA 6872 : 36 holes x 13mm DIA 6873 : 18 holes x 19mm DIA 6900 : 12 holes x 32mm DIA	C18-4 : 28 holes x 18mm DIA C18-8 : 44 holes x 18mm DIA C18-14 : 68 holes x 18mm DIA C25-4 : 28 holes x 25mm DIA C25-8 : 44 holes x 25mm DIA C25-14 : 68 holes x 25mm DIA	
UNSTIRRED BATHS			
NE1-2.5	1 Rack From Above Range	Not Available	Not Available
NE1-2/2/2, NE1D-2/2/2, NE2-2D	1 Rack From Above Range Chamber	Not Available	Not Available
NE1-4, NE1D-4, NE1-4/4/4, NE1D-4/4/4, NE2-4D, NE2D-4/4	1 Rack From Above Range	C18-4 and C25-4	Not Available
NE2-5D	4 Racks From Above Range	Not Available	Not Available
NE1-8, NE2-8D, NE2D-4/8, NE2D-8/22	2 Racks From Above Range	C18-4 and C25-8	Not Available
NE1-9, NE2-9D	6 Racks From Above Range	Not Available	Not Available
NE2-10D	2 Racks From Above Range	Not Available	Not Available
NE1-14, NE1D-14 NE2-14D	4 Racks From Above Range	C18-14 and C25-14	Not Available
NE1B-14	4 Racks From Above Range	Not Available	Not Available
NE1B-18W	4 Racks From Above Range	Not Available	BX0953
NE1-22, NE1D-22, NE2-22D, NE2D-8/22	6 Racks From Above Range	Not Available	BX0953
NE1B-28, NE1-28, NE2-28D	6 Racks From Above Range	Not Available	BX0953
NE1-56, NE2-56D	12 Racks From Above Range	Not Available	BX0953



<p>Flat n Fold™ Test Tube Racks</p> <p>6770 : 26 holes x 17mm DIA 6771 : 16 holes x 26mm DIA 6772 : 36 holes x 13mm DIA 6773 : 18 holes x 19mm DIA 6800 : 14 holes x 32mm DIA</p>	<p>Stainless Steel Wire Baskets</p>	<p>Bath Armor</p>	<p>Thermometer Clip With Bent Stem Thermometer</p>
			
1 Rack From Above Range	Not Available	BA-5 : 4 Litre Pack	TC-1
1 Rack From Above Range Chamber	Not Available	BA-5 : 4 Litre Pack	TC-1
1 Rack From Above Range	BSK-4	BA-5 : 4 Litre Pack	TC-1
4 Racks From Above Range	Not Available	BA-12 : 12 Litre Pack	TC-1
2 Racks From Above Range	BSK-8	BA-12 : 12 Litre Pack	TC-1
6 Racks From Above Range	Not Available	BA-12 : 12 Litre Pack	TC-1
2 Racks From Above Range	Not Available	BA-12 : 12 Litre Pack	TC-1
4 Racks From Above Range	BSK-14	BA-12 : 12 Litre Pack	TC-1
4 Racks From Above Range	BSK-14	Not Available	TC-1
4 Racks From Above Range	Not Available	Not Available	TC-1
6 Racks From Above Range	BSK-22	BA-12 : 2 x 12 Litre Pack Required	TC-1
6 Racks From Above Range	Not Available	BA-12 : 2 x 12 Litre Pack Required	TC-1
12 Racks From Above Range	Not Available	BA-12 : 2 x 12 Litre Pack Required	TC-1

## Common Accessories

BX0616	Drain Syphon
BKF-1	Bar Keepers Friend



37.0

- Green light with wavy lines icon
- Red light with triangle icon
- Green light with circle and slash icon
- Green light with thermometer icon

- Folder icon button
- Downward triangle icon button
- Upward triangle icon button
- Refresh icon button

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Anti-bacterial Protection

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## Clifton Stirred and Circulating Water Baths



Clifton analogue and digital stirred baths provide a stable temperature environment ideal for meeting quality control requirements. Designed for immersion of flasks, bottles and racks for a wide variety of laboratory applications.

Clifton digital water and oil circulators are designed for external circulation of temperature controlled water and heat transfer fluids in a closed circuit.



Both stirred and circulating baths comprise of a high quality corrosion resistant stainless steel tank, with a bright clean finish housed in a durable painted outer case with non slip rubber feet. Painted surfaces feature anti-bacterial finish with good chemical resistance.

### Analogue Stirred Water Baths



Analogue baths have an easy to use dial pointer for setting temperature, graduated in 5°C increments. When low liquid is detected heating is suspended and a warning indicator is visible.

### Digital Stirred Water Baths



Temperatures can be easily and rapidly set with the push button, wipe clean control panel, featuring a bold LED display. The high precision PID temperature controller ensures that uniformity and sensitivity is guaranteed.

## NE4 Thermostirrers & Circulators

Clifton thermostirrers and circulators can be fitted to laboratory water baths, tanks and containers using accessory mount bracket.

Durable stainless steel construction, painted surfaces are powder coated with tough anti-bacterial finish with good chemical resistance. Easy to use controls that wipe clean and have an anti-bacterial finish. Immersed components are corrosion resistant. Quiet running and providing good water temperature stability. Indication of heating and low liquid levels.



NE4-D With Accessory Mount Bracket



	NE4-T	NE4-D	NE4-P	NE4-HT
<b>GENERAL</b>				
Temp. Range	Ambient + 5°C - 99°C	Ambient + 5°C - 99°C (-20°C with accessory cooling)		
Temp. Alarm		Over temperature alarm is automatically set 4°C above set point		
Temp. Control	Analogue Dial Pointer	PID Digital, LED display showing actual or set temperature, resolution 0.1°C		
Sensitivity/Uniformity	±0.2°C/ ±0.05°C	±0.05°C/ ±0.01°C	±0.1°C/ ±0.01°C	±0.05°C/ ±0.01°C
Heater Power (220-240V)	1250W			
Voltage	230V 50-60Hz	120V or 230V models available 50-60Hz		
Timer		Visual indicator and end message - Variable 00:01 to 99:59 hh:mm		
Pump Capacity		10 Litres/min - 150mbar		
Connection Ports		4mm bore x 6mm o/d tubing		
<b>DIMENSIONS</b>				
Tank Capacity	8 to 28 litres	8 to 56 litres		
External (mm)	125w x 230d x 350h			

	NE4-D 2KW	NE4-P 2KW
<b>GENERAL</b>		
Temp. Range	Ambient + 5°C - 99°C	
Temp. Alarm	Over temperature alarm is automatically set 4°C above set point	
Temp. Control	PID Digital, LED display showing actual or set temperature, resolution 0.1°C	
Sensitivity/Uniformity	±0.1°C/ ±0.01°C	
Heater Power (220-240V)	2000W	
Voltage	120V or 230V models available 50-60Hz	
Timer	Visual indicator and end message - Variable 00:01 to 99:59 hh:mm	
Pump Capacity		10 Litres/min - 150mbar
Connection Ports		4mm bore x 6mm o/d tubing
<b>DIMENSIONS</b>		
Tank Capacity	28 to 56 litres	
External (mm)	125w x 230d x 350h	

## Common Accessories

NE4-MB	Allows mounting of NE4 series thermostirrer in any position around a tank
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## Stirred Water Baths

### NE4 - T Series Analogue Thermostatic Stirred Baths



NE4-14T



**Thermostirrer** complete with stainless steel tank with a bright clean finish housed in a durable painted outer case. Painted surfaces feature anti-bacterial finish with good chemical resistance.

#### NE4 - 8 T

#### NE4 - 14T

GENERAL	
Temp. Range	Ambient + 5°C - 99°C
Temp. Control	Analogue Dial Pointer
Sensitivity/Uniformity	±0.2°C / ±0.05°C
Heater Power (220-240V)	1250W
Voltage	230V models available 50-60Hz
DIMENSIONS	
Tank Capacity	8 litre
External (mm)	271w x 332d x 170h
Internal (mm)	129w x 300d x 150h
Water Level Max. (mm)	130

#### NE4 - 22T

#### NE4 - 28T

GENERAL	
Temp. Range	Ambient + 5°C - 99°C
Temp. Control	Analogue Dial Pointer
Sensitivity/Uniformity	±0.2°C / ±0.05°C
Heater Power (220-240V)	1250W
Voltage	230V models available 50-60Hz
Drain (12mm Bore)	Drain Outlet
DIMENSIONS	
Tank Capacity	22 litre
External (mm)	537w x 332d x 170h
Internal (mm)	395w x 298d x 150h
Water Level Max. (mm)	130

Accessories on Page 26 & 27

## Stirred Water Baths

### NE4-D Series Stirred Digital Baths



NE4-22D



Clifton stirred water baths feature a digital PID temperature controller and are designed for immersions of flasks, bottles and racks in an accurate temperature environment throughout the water bath.

The stainless steel tank is housed in a sturdy outer case and is supplied complete with a stainless steel shelf, which provides even water circulation and temperature stability.

	NE4 - 8D	NE4 - 14D	NE4 - 22D
<b>GENERAL</b>			
Temp. Range	Ambient + 5°C - 99°C (-20°C with accessory cooling)		
Temp. Alarm	Under/over temperature alarm is automatically set 4°C above and 4°C below set point		
Temp. Control	PID Digital, LED display, resolution 0.1°C		
Sensitivity/Uniformity	±0.05°C / ±0.01°C		
Timer	Visual indicator and end message - Variable 00:01 to 99:59 hh:mm		
Heater Power (220-240V)	1250W		
Voltage	120V or 230V models available 50-60Hz		
<b>DIMENSIONS</b>			
Tank Capacity	8 litre	14 litre	22 litre
External (mm)	271w x 332d x 170h	361w x 332d x 170h	537w x 332d x 170h
Internal (mm)	129w x 300d x 150h	219w x 298d x 150h	395w x 298d x 150h
Water Level Max. (mm)	130		

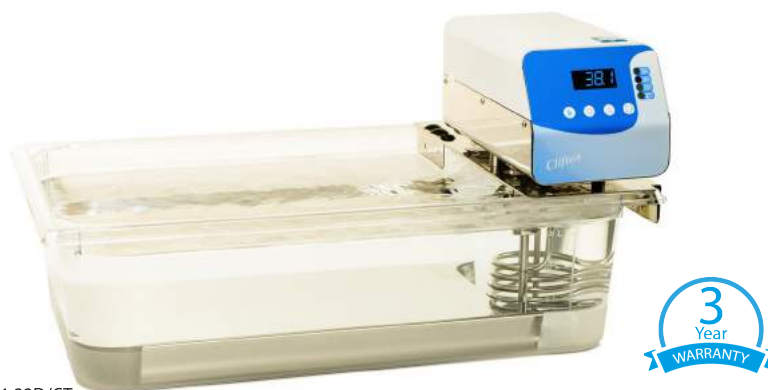
	NE4 - 28D	NE4 - 38D	NE4 - 56D
<b>GENERAL</b>			
Temp. Range	Ambient - 20°C - 99°C	Ambient + 5°C - 99°C (-10°C with accessory cooling)	
Temp. Alarm	Under/over temperature alarm is automatically set 4°C above and 4°C below set point		
Temp. Control	PID Digital, LED display, resolution 0.1°C		
Sensitivity/Uniformity	±0.05°C / ±0.01°C		±0.2°C / ±0.02°C
Timer	Visual indicator and end message - Variable 00:01 to 99:59 hh:mm		
Heater Power (220-240V)	1250W		2000W
Voltage	120V or 230V models available 50-60Hz		230V / 50-60Hz
Drain (12mm Bore)	Drain Outlet		
<b>DIMENSIONS</b>			
Tank Capacity	28 litre	38 litre	56 litre
External (mm)	537w x 332d x 290h	715w x 330d x 235h	660w x 540d x 290h
Internal (mm)	395w x 298d x 200h	570w x 295d x 200h	490w x 500d x 200h
Water Level Max. (mm)	180	190	180

Please Note : Temperature range for NE4-28D is shown with accessory cooling.

Accessories on Page 26 & 27

# Stirred Water Baths

## NE4 - D/CT Series Stirred Digital Baths



NE4-22D/CT

Digital stirred baths come complete with sturdy clear polycarbonate tank, allowing observation of samples. Complete with stainless steel shelf designed for good water circulation and temperature uniformity.

	NE4 - 8 D/CT	NE4 - 14D/CT	NE4 - 22D/CT
<b>GENERAL</b>			
Temp. Range	Ambient + 5°C - 90°C (-0°C with accessory cooling)		
Temp. Alarm	Under/over temperature alarm is automatically set 4°C above and 4°C below set point		
Temp. Control	PID Digital, LED display, resolution 0.1°C		
Sensitivity/Uniformity	±0.05°C / ±0.01°C		
Timer	Visual indicator and end message - Variable 00:01 to 99:59 hh:mm		
Heater Power (220-240V)	1250W		
Voltage	120V or 230V models available 50-60Hz		
<b>DIMENSIONS</b>			
Tank Capacity	8 litre	14 litre	22 litre
External (mm)	265w x 325d x 295h	530w x 325d x 295h	530w x 325d x 345h
Internal (mm)	130w x 290d x 150h	385w x 290d x 150h	385w x 290d x 200h
Water Level Max	130		

Accessories on Page 26 & 27

## Circulating Water Baths

### NE4 - HT Series Circulating Digital Baths

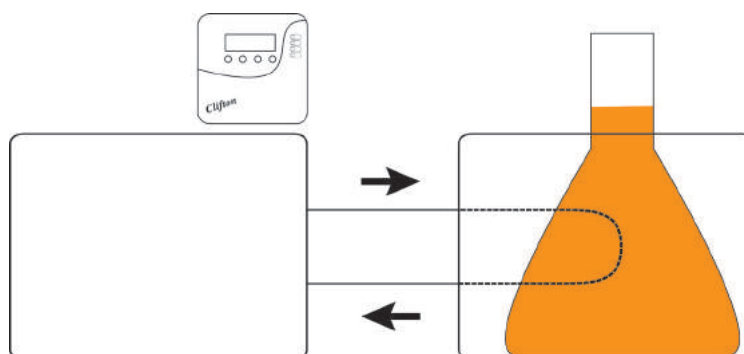


High temperature range for circulating water and heat transfer fluids. Designed to reach 130°C. Clifton digital water and oil heating circulators are designed for external circulation of temperature controlled water and heat transfer fluids in a closed circuit or for maintaining a stable temperature environment in the bath for the immersion of flasks, bottles and racks.

Comprising of a high quality corrosion resistant stainless steel tank, with a bright clean finish housed in a durable painted outer case. Painted surfaces feature anti-bacterial finish with good chemical resistance.

	NE4 - 8HT	NE4 - 14HT	NE4 - 22HT
<b>GENERAL</b>			
Temp. Range	Ambient + 5°C - 130°C (-20°C with accessory cooling)		
Temp. Alarm	Under/over temperature alarm is automatically set 4°C above and 4°C below set point		
Temp. Control	PID Digital, LED display, resolution 0.1°C		
Sensitivity/Uniformity	±0.05°C / ±0.01°C		
Timer	Visual indicator and end message - Variable 00:01 to 99:59 hh:mm		
Heater Power (220-240V)	1250W		
Voltage	120V or 230V models available 50-60Hz		
Pump Capacity & Pressure	10 litres/min - 150 mbar		
Pump Connection Ports	Inlet & outlet ports take 4mm bore x 6mm o/d tubing		
<b>DIMENSIONS</b>			
Tank Capacity	8 litre	14 litre	22 litre
External (mm)	271w x 332d x 170h	361w x 332d x 170h	537w x 332d x 170h
Internal (mm)	129w x 300d x 150h	219w x 298d x 150h	395w x 298d x 150h
Water Level Max. (mm)	130		

Accessories on Page 26 - 27



Capable of external circulation



# NE4 - P Series Circulating Digital Baths



NE4-8P



Clifton Circulating water baths are designed for circulation of temperature controlled water in a closed circuit or for maintaining a stable temperature environment in the bath for the immersion of flasks, bottles and racks.

## NE4 - 8P

## NE4 - 14P

GENERAL	
Temp. Range	Ambient + 5°C - 99°C (-20°C with accessory cooling)
Temp. Alarm	Under/over temperature alarm is automatically set 4°C above and 4°C below set point
Temp. Control	PID Digital, LED display, resolution 0.1°C
Sensitivity/Uniformity	±0.05°C / ±0.01°C
Timer	Visual indicator and end message - Variable 00:01 to 99:59 hh:mm
Pump Capacity & Pressure	10 litres/min - 150 mbar
Pump Connection Ports	Inlet & outlet ports take 4mm bore x 6mm o/d tubing
Heater Power (220-240V)	1250W
Voltage	120V or 230V models available 50-60Hz
DIMENSIONS	
Tank Capacity	8 litre
External (mm)	271w x 332d x 170h
Internal (mm)	129w x 300d x 150h
Water Level Max. (mm)	130

## NE4 - 22P




## NE4 - 28P

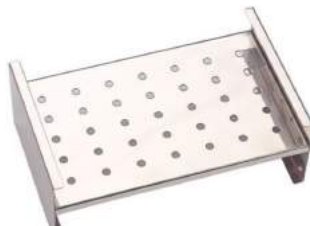

## NE4 - 56P

GENERAL	
Temp. Range	Ambient + 5°C - 99°C (-20°C with accessory cooling)
Temp. Alarm	Under/over temperature alarm is automatically set 4°C above and 4°C below set point
Temp. Control	PID Digital, LED display, resolution 0.1°C
Sensitivity/Uniformity	±0.05°C / ±0.01°C
Timer	Visual indicator and end message - Variable 00:01 to 99:59 hh:mm
Pump Capacity & Pressure	10 litres/min - 150mbar
Pump Connection Ports	Inlet & outlet ports take 4mm bore x 6mm o/d tubing
Drain (12mm Bore)	Drain Outlet
Heater Power (220-240V)	1250W
Voltage	120V or 230V models available 50-60Hz
DIMENSIONS	
Tank Capacity	22 litre
External (mm)	537w x 332d x 170h
Internal (mm)	395w x 298d x 150h
Water Level Max. (mm)	130

Accessories on Page 26 & 27

## Stirred & Circulating Bath Accessories

	Stainless Steel Gabled Lid with Insulated Handle	Stainless Steel Flat One Piece lid with Insulated Handle	Stainless Steel Lid with Concentric Rings LDR4-14 : 4 x 105mm holes LDR6-22 : 6 x 105mm holes
STIRRED & CIRCULATING BATHS			
NE4-8T, NE4-8D, NE4-8P, NE4-8HT	SL4-8	LD4-8	Not Available
NE4-14T, NE4-14D, NE4-14P, NE4-14HT	SL4-14	LD4-14	LDR4-14
NE4-22T, NE4-22D, NE4-22P, NE4-22HT	SL4-22	LD4-22	LDR6-22
NE4-28T, NE4-28D, NE4-28P	SL4-22	LD4-22	LDR6-22
NE4-38D	SL4-38	LD4-38	Not Available
NE4-56D, NE4-56P	SL4-56	Not Available	Not Available

	Stainless Steel Raised Shelves	Lab Bath Heat Transfer Fluid -15°C to 90°C LB-2.5: 2.5 Litres LB-5.0: 5 Litres
STIRRED & CIRCULATING BATHS		
NE4-8T, NE4-8D, NE4-8P, NE4-8HT	Not Available	LB-2.5/LB-5.0
NE4-14T, NE4-14D, NE4-14P, NE4-14HT	RS4-14	LB-2.5/LB-5.0
NE4-22T, NE4-22D, NE4-22P, NE4-22HT	RS4-14 RS4-22	LB-2.5/LB-5.0
NE4-28T, NE4-28D, NE4-28P	RS4-14 RS4-22	LB-2.5/LB-5.0
NE4-38D	RS4-14 RS4-22 RS4-38	LB-2.5/LB-5.0
NE4-56D, NE4-56P	SL4-56	LB-2.5/LB-5.0

<p>Flat n Fold™ Test Tube Racks</p> <p>6770 : 26 holes x 17mm DIA 6771 : 16 holes x 26mm DIA 6772 : 36 holes x 13mm DIA 6773 : 18 holes x 19mm DIA 6800 : 14 holes x 32mm DIA</p>	<p>Stainless Steel Test Tube Racks</p> <p>6870 : 26 holes x 17mm DIA 6871 : 16 holes x 26mm DIA 6872 : 36 holes x 13mm DIA 6873 : 18 holes x 19mm DIA 6900 : 12 holes x 32mm DIA</p>	<p>Polypropylene Spheres: Pack of 200</p>	<p>Drain Tap</p>
			
1 Racks From Above Range	1 Racks From Above Range	BP0368 : 1 Pack	Not Available
3 Racks From Above Range	3 Racks From Above Range	BP0368 : 2 Packs	Not Available
5 Racks From Above Range	5 Racks From Above Range	BP0368 : 3 Packs	Not Available
5 Racks From Above Range	5 Racks From Above Range	BP0368 : 3 Packs	BX0953
7 Racks From Above Range	7 Racks From Above Range	BP0368 : 5 Packs	BX0953
10 Racks From Above Range	10 Racks From Above Range	BP0368 : 8 Packs	BX0953

## Universal Accessories

CAL	Calibration Record
BX0616	Drain Syphon
NE4-MB	Mounting Bracket (NE4-HT, NE4-D, NE4-P2KW, NE4-D2KW, NE4-T, NE4-P - All Factory Fit)
BKF-1	Barkeepers Friend
HS-1	Push Fit Insulated Hose for Circulating Bath -40 to 130 °C 1m Length
HS-2	Push Fit Insulated Hose for Circulating Bath -40 to 130 °C 2m Length
TC-1	Thermometer clip with bent stem thermometer
NE4-CC	Cooling Coil - Water feed for background cooling
DC1-300	Immersion cooler for temperature -20 °C (Not for use with the NE4-T series more detail on page 42)
DC2-300	Immersion cooler for temperature -20 °C - Higher Powered Cooling (Not for use with the NE4-T series more detail on page 42)



## Boiling Baths



All Clifton boiling baths feature an integral constant level device to maintain constant water level during operation. On rectangular baths, the constant water level device has a visible water spout for checking water flow.

There are three styles in the range of Clifton boiling baths, designed for applications that require continuous boiling and for gentle heating of samples in steam.



**1100 Series**



The 1100 series rectangular boiling baths provide an effective source of heat for samples that may be otherwise thermally damaged by a naked flame. The baths are available in stainless steel or aluminium and are electrically heated. An energy regulator option allows the bath to be controlled from a gentle simmer to a vigorous boil.

### NE1B Series

The NE1B series of boiling baths comprise of a high quality corrosion resistant stainless steel tank, with a bright clean finish housed in a durable painted outer case. Painted surfaces feature anti-bacterial finish with good chemical resistance. Fitted with side lifting handles for easy lifting and non slip rubber feet.

**1000 Series**



The 1000 series of circular boiling baths provide an effective source of heat for samples that may be otherwise thermally damaged by a naked flame. The baths are round, manufactured from stainless steel and electrically heated. Available with an energy regulator option, to regulate from a gentle simmer to a vigorous boil.

# NE1B Series Boiling Baths



NE1B-14



Designed for applications that require continuous boiling. This bath also has the flexibility where the control can be regulated from a gentle simmer to a vigorous boil.

Fitted with a sheathed immersion element and thermal safety cut out. With the heater directly immersed in water it provides rapid boiling. A standard feature is a constant level device, which maintains a fixed level of liquid thereby eliminating the need to regularly top up the bath.

Comprising of a high quality corrosion resistant stainless steel tank, with a bright clean finish housed in a durable painted outer case. Painted surfaces feature anti-bacterial finish with good chemical resistance.

Boiling Baths

## NE1B - 14

## NE1B - 18W

## NE1B - 28

	NE1B - 14	NE1B - 18W	NE1B - 28
<b>GENERAL</b>			
Temp. Range	Simmer to boiling at 100°C		
Temp. Control	Analogue dial, energy regulator		
Heater Power (220-240V)	2500W		
Voltage	230V / 50-60Hz		
Drain (12mm Bore)		Drain Outlet	
<b>DIMENSIONS</b>			
Tank Capacity	14 Litre	18 Litre	28 Litre
External (mm)	362w x 332d x 290h		538w x 332d x 290h
Internal (mm)	325w x 300d x 150h	325w x 300d x 200h	500w x 300d x 200h

The analogue dial with proportional 1 to 10 scale via the energy regulator provides steady boiling from a gentle simmer to a vigorous boil.

## Specific Accessories for the NE1B-18W Boiling Bath

ST-1	Raise and lower sterilising tray
SA01409	Pair of guide rail assemblies for ST-1 Tray
SL1-14H/SS	Stainless Steel Hinged Gable Lid to suit 14 litre and 18 litre Boiling Baths
GL1-14AF	Lift off gable lid to suit 5, 14 and 18 Litre unstirred baths



## 1000 Series Boiling Baths



1026ER



1026E



Round stainless steel electrically heated, the 1026ER regulates from a gentle simmer to a vigorous boil, whereas the 1026E has a timed temperature. Fitted with concentric ringed lid to vary the hole size and fitted with a sheathed element and a resettable thermal cut-out for safety.

Features an integral constant level device to maintain constant water level during boiling and supplied with a set of rings to vary the diameter of aperture to accommodate different sizes of vessels e.g. evaporating dishes and glassware, including round-bottom flasks.

### 1026E

### 1026ER

GENERAL	1026E	1026ER
Temp. Range	Boiling at 100°C	Energy regulator controls the amount of boiling from a gentle simmer to vigorous boil
Temp. Control	Constant boiling no control	Simmer to boiling at 100°C
Heater Power (220-240V)	1000W	
Voltage	230V models 50-60Hz	
DIMENSIONS		
Tank Capacity	3.24 litres	
External (mm)	200w x 130d	

By removing concentric rings, the hole sizes can be varied to accommodate different sizes of vessels.

Centre ring - removed, aperture 30mm diameter hole

Ring 1 - removed, aperture 42mm diameter hole

Ring 2 - removed, aperture 58mm diameter hole

Ring 3 - removed, aperture 78mm hole

Ring 4 - removed, aperture 103mm hole

Ring 5 - removed, aperture 128mm hole

Ring 6 - removed, aperture 153mm hole



ACCESSORY	1026E
Energy Regulator	ER - 1 Can be connected to the boiling bath, allowing control of the amount of boiling from a gentle simmer to a vigorous boil.



## 1100 Series Boiling Baths

Rectangular, aluminium and stainless steel electrically heated, multi-place baths with fixed temperature for boiling water, fitted with resettable cut-out for safety and concentric ringed lids to vary the hole size.

The ER range regulates from a gentle simmer to a vigorous boil to whereas the E range has a timed temperature.



	1105E	1105ER	1101E
<b>GENERAL</b>			
Temp. Range	Boiling at 100°C	Simmer to boiling at 100°C	Boiling at 100°C
Temp. Control	Constant boiling no control	Energy regulator controls the amount of boiling from a gentle simmer to vigorous boil	Constant boiling no control
Heater Power (220-240V)	1000W		
Voltage	230V models 50-60Hz		
<b>DIMENSIONS</b>			
Tank Capacity	5 litres (Nominal Capacity)		4.5 litre
External (mm)	400w x 200d x 90h		321w x 219d x 90h

	1101ER	1104E	1104ER
<b>GENERAL</b>			
Temp. Range	Simmer to boiling at 100°C	Boiling at 100°C	Simmer to boiling at 100°C
Temp. Control	Energy regulator controls the amount of boiling from A gentle simmer to vigorous boil	Constant boiling no control	Energy regulator controls the amount of boiling from A gentle simmer to vigorous boil
Heater Power (220-240V)	1000W		
Voltage	230V models 50-60Hz		
<b>DIMENSIONS</b>			
Tank Capacity	4.5 litre	8.8 litre	
External (mm)	321w x 219d x 90h	425w x 321d x 90h	

By removing concentric rings, the hole sizes can be varied to accommodate different sizes of vessels simultaneously.

Number of holes in bath lid 6 or 12 off with maximum hole diameter 80mm.

In each aperture a 4 ring set is fitted.

Centre ring - removed, aperture 30mm diameter hole

Ring 1 - removed, aperture 42mm diameter hole

Ring 2 - removed, aperture 58mm diameter hole

Ring 3 - removed, maximum diameter 80mm hole



ACCESSORY	1105E	1101E	1104E
Energy Regulator	ER - 1 Can be connected to the boiling bath, allowing control of the amount of boiling from a gentle simmer to a vigorous boil.		



Clifton

## Shaking Baths



Clifton shaking water baths are ideal for day-to-day use. Available in digital or analogue option. Featuring a broad range of accessory flask clips and racks ensures flexibility for routine and specialised work.

Comprising of a high quality corrosion resistant stainless steel tank, with a bright clean finish housed in a durable painted outer case. Painted surfaces feature anti-bacterial finish with good chemical resistance. Fitted with non slip rubber feet.



**Analogue Shaking Bath**



Analogue shaking water bath features an analogue temperature and shaking speed control. An adjustable over temperature device can be set a few degrees above the set working temperature, protecting samples from damage and over heating.

Accessory clips and racks can be easily mounted onto the perforated tray which fits onto the reciprocating stainless steel trolley. The trolley can also be easily removed for cleaning.

**Digital Shaking Bath**



Digital shaking water baths allow temperatures to be easily and rapidly set with the push button, wipe clean control panel, featuring a bold LED display. The high precision PID temperature controller, ensures that accurate results and repeatability is guaranteed.

## NE5 Series Shaking Baths



The Clifton NE5-D shaking water bath, features precision PID control, allowing observation of set and actual temperature simultaneously. A broad range of accessory flask clips and racks ensures flexibility for routine and specialized work.

NE5-28 Clifton shaking water bath, features analogue temperature and shaking speed control available with a broad range of accessory trays, flask clips and racks ensures flexibility for routine and specialised incubations.


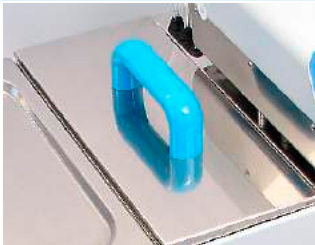


Comprising of a high quality corrosion resistant stainless steel tank, with a bright clean finish housed in a durable painted outer case. Painted surfaces feature anti-bacterial finish with good chemical resistance.

	NE5 - 10D	NE5 - 28D	NE5 - 28
<b>GENERAL</b>			
Temp. Range	Ambient +5°C - 99°C (-15°C with accessory cooling)		Ambient +5°C - 99°C
Temp. Alarm	Under/over temperature alarm is automatically set 4°C above and 4°C below set point.		Adjustable over temperature device
Temp. Control	Digital touch screen, high precision controller, resolution 0.1°C		Analogue dial pointer
Sensitivity/Uniformity	±0.1°C/±0.1°C @ 45°C (optimal water level 75mm to 120mm)		±0.2°C/+0.1°C @ 45°C (optimal water level 75mm to 120mm)
Heater Power (220-240V)	800W	1000W	
Voltage	230V models 50-60Hz		
Linear Shaking Control	from 0 to 400 Strokes/0 to 200 rpm		
Stroke length	Fixed 20mm Stroke	Variable 40mm Stroke	
Speed Display	Analogue		
Drain (12mm Bore)			Drain Outlet
<b>DIMENSIONS</b>			
Tank Capacity	10 litres	28 litres	
External (mm)	449w x 332 x 290h	715w x 332d x 290h	
Internal (mm)	242w x 300d x 200h	500w x 298d x 200h	
Perforated Shelf/Trolley (mm)	175w x 270d	376w x 276d	
Water Level Max. (mm)	120		
Water Level Min. (mm)	50		

Accessories on Page 38 & 39



## Shaking Baths Accessories

	Stainless Steel Gabled Lid with Insulated Handle	Stainless Steel Flat One Piece lid with Insulated Handle	Clear Polycarbonate Gable Lid with Insulated Handle	Clear Polycarbonate Hinged Gable Lid with Insulated Handle
SHAKING BATHS				
NE5-10D	SL1-8	Not Available	GL1-8AF	GL1-8
NE5-28 & NE5-28D	SL1-22	LD4-8	GL1-22AF	GL1-22

	Stainless Steel Flask Clips FC0025 : 25ml FC0050 : 50ml FC0100 : 100ml FC0250 : 250ml FC0500 : 500ml FC1000 : 1000ml FC2000 : 2000ml	Stainless Steel Perforated Tray	Stainless Steel Test Tube Rack Tray	Drain Tap
SHAKING BATHS				
NE5-10D	Attach selected clips to perforated tray supplied with Bath	SA01773	Not Required - attached test tube rack directly to perforated tray supplied with Bath	BX0953
NE5-28 & NE5-28D	Attach selected clips to perforated tray supplied with Bath	SBF01804	STT004	BX0953

<p>Stainless Steel Flask Clip Tray</p> <p>SFT0025 : 39 x 25ml  SFT0050 : 32 x 50ml  SFT0100 : 18 x 100ml  SFT0250 : 12 x 250ml  SFT0500 : 8 x 500ml  SFT1000 : 5 x 1000ml  SFT2000 : 2 x 2000ml</p>	<p>Stainless Steel Test Tube Racks</p> <p>6870 : 26 holes x 17mm DIA  6871 : 16 holes x 26mm DIA  6872 : 36 holes x 13mm DIA  6873 : 18 holes x 19mm DIA  6900 : 12 holes x 32mm DIA</p>	<p>Polypropylene Spheres:  Pack of 200</p>	<p>Universal Spring Tray</p>
			
Not Available	2 Rack From Above Range	BP0368 : 1 Pack	Not Available
1 Clip Tray from Above Range	4 Rack From Above Range	BP0368 : 2 Packs	SFT9000

## Universal Accessories

CAL	Calibration Record
BX0616	Drain Syphon
BKF-1	Barkeepers Friend
TC-1	Thermometer clip with bent stem thermometer
DC1-300	Immersion cooler for temperature to -15°C (not for use with NE5-28) more details on page 42
NE5-MB	Mountain Bracket for use with DC1-300

## Clifton Ultrasonic Baths



Clifton industrial ultrasonic baths are designed for demanding applications and suitable for continuous operation. Ideal for cleaning delicate or fragile components and glassware, especially where there may be a risk of breakage as a result of manual cleaning.

The SW series is constructed from high quality stainless steel for durability and features heater and timer controls with ultrasonic boost, degas and sweep functions.



The auto-degassing function is useful for liquid changes in the tank, de-carbonating and degassing HPLC solutions as well as a 12 hour run time.

### Analogue Unstirred Water Baths



Heating elements are controlled electronically to reduce energy demand and prevent overheating if allowed to run dry. There is an illuminated on/off power switch, side lifting handles for easy lifting, and non slip rubber feet.

### SW Range Controls



Temperature, time and activating sonics can be easily and rapidly set with the push button, wipe clean control panel, featuring an illuminated bold display.



## SW Series Ultrasonic Baths



This industrial strength ultrasonic bath is designed for demanding applications and suitable for continuous operation. Featuring heater and timer controls with ultrasonic boost, degas and sweep functions. Stainless steel tank and housing for durability. With auto switch-off after 12 hours, if no keys have been activated, feature prevents unintended operation.

	SW1H	SW3H	SW6H	SW12H
<b>GENERAL</b>				
Temp. Range	30°C - 80°C			
Temp. Control	Analogue dial pointer in increments of 5°C			
Timer	Time setting 1, 2, 3, 4, 5, 10, 15, 20, 25, 30 minutes and ∞ = 12 hours run time			
Voltage	120V or 230V models 50-60Hz			
Ultrasonic Effective Power	30W	200W		
Ultrasonic Peak Power/ Frequency	240W / 38kHz	800W / 38kHz		
Heater Power (220-240V)	60W	200W		800W
Drain Tap			Drain Tap Fitted	
<b>DIMENSIONS</b>				
Tank Capacity	1 litre	3 litre	6 litre	12 litre
External (mm)	200w x 100 x 180h	250w x 150d x 220h	310w x 160d x 270h	365w x 278d x 321h
Internal (mm)	190w x 85d x 60h	240w x 137d x 100h	300w x 150d x 150h	300w x 240d x 200h

	SW30H	SW45H	SW90H
<b>GENERAL</b>			
Temp. Range	30°C - 80°C		
Temp. Control	Analogue dial pointer in increments of 5°C		
Timer	Time setting 1, 2, 3, 4, 5, 10, 15, 20, 25, 30 minutes and ∞ = 12 hours run time		
Heater Power	1200W	1600W	2000W
Voltage	120V or 230V models 50-60Hz	230V models 50-60Hz	
Ultrasonic Effective Power	300W	400W	800W
Ultrasonic Peak Power/ Frequency	1200W / 38kHz	1600W / 38kHz	3200W / 38kHz
Drain Tap	Drain Tap Fitted		
<b>DIMENSIONS</b>			
Tank Capacity	30 litre	45 litre	90 litre
External (mm)	568w x 340d x 321h	615w x 370d x 467h	715w x 570d x 467h
Internal (mm)	505w x 300d x 200h	500w x 300d x 300h	600w x 500d x 300h

ACCESSORIES	SW1H	SW3H	SW6H	SW12H	SW30H	SW45H	SW90H
Plastic Lid	LD-1	LD-3	LD-6	LD-12	LD-30	LD-45	LD-90
Wire Basket, Stainless Steel	BSK-1	BSK-3	BSK-6	BSK-12	BSK-30	BSK-45	BSK-90
Neutral Foam-inhibited Cleaning Concentrate	SW-CL2						

## DC Series Immersion Dip Coolers



DC1-300 and DC2-300 immersion coolers constantly extract heat with the stirrer or circulator controlling the actual temperature of the bath liquid.

These units consist of a stainless steel coil on a 900mm, flexible stainless steel pipe with a protective outer shield which is in turn connected to the refrigeration unit.

For use with NE4 series of digital stirred baths; the cooling coil is placed at the rear of the thermostirrer and does not impact on the useable area of the bath thus maintaining maximum working space. The coolers must only be used to cool liquids which are at 40°C or below.

The outer casing of the refrigeration unit has an anti-bacterial painted finish. It is recommended that a lid is used on the bath to maximise efficiency. The immersion coolers are available in two sizes and cooling power. The DC2-300 is fitted with castors, which can be locked when in position.

Time taken to cool glycol / water mix from 20°C to -20°C based on NE4-8D and NE4-28D Bath:

	NE4-8D	NE4-28D
	DC1-300	DC2-300
0°C	13 mins	40 mins
-10°C	22 mins	120 mins
-20°C	40 mins	260 mins

	DC1-300	DC2-300
<b>GENERAL</b>		
Temp. Range	Ambient -20°C	
Temp. Control	None. Continuously providing counter cooling with stirrer/circulator providing temp control.	
Cooling Power	10°C : 800W 0°C : 580W -10°C : 400W -20°C : 250W Refrigerant : R134a	10°C : 1400W 0°C : 1000W -10°C : 700W -20°C : 450W Refrigerant : R134a
Voltage	230V 50-60Hz	
<b>DIMENSIONS</b>		
External (mm)	345w x 490d x 265h	345w x 465d x 315h
Internal (mm)	Coil diameter 65mm fitted on end of a 900mm long flexible cooling line.	





METALWARE RANGE™

*Clifton Range*®

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