



NICKEL - ELECTRO LTD.
Manufacturers of the Clifton Range



Clifton Range®

Water Bath Brochure



Contents

About Nickel-Electro Ltd.	4
Clifton Unstirred Water Baths	5
NE1 Standard Analogue Baths	6
NE1D Educational Digital Baths	7
NE2D Advanced Digital Baths	8
Shallowbaths™	9
NE3DT Pro Range Digital Baths	10
Duobaths™	12
NE1 Triplebaths™	13
Unstirred Bath Accessories	14-17
Clifton Stirred and Circulating Water Baths	19
NE4 Series Analogue and Digital Circulators	20
NE4-T Series Analogue Baths	21
NE4-D Series Digital Baths	22
NE4-D/CT Series Digital Baths	23
NE4-HT Series Digital Baths (High temperature)	24
NE4-P Circulating Digital Baths	25
Stirred Bath Accessories	26-27
Boiling Baths	29
NE1B Range	30
NE1BD Digital Range	31
1000 Series	32
1100 Series	33
Boiling Bath Accessories	34-35
Shaking Baths	37
NE5 Series	38
Shaking Bath Accessories	39
Ultrasonic Water Baths	40
SW Range and Accessories	41
Immersion Cooler	42

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 Lab Baths



Clifton lab 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.

Digital Lab Bath



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

Analogue Lab Bath



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

MADE IN BRITAIN 



NE1 Series Standard Analogue Lab 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
GENERAL				
Temp. Range	Ambient + 5°C - 100°C			
Temp. Control	Analogue dial pointer, graduated in 5°C divisions			
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		
DIMENSIONS				
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
GENERAL				
Temp. Range	Ambient + 5°C - 100°C			
Temp. Control	Analogue dial pointer, graduated in 5°C divisions			
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			
DIMENSIONS				
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			

NE1D Series Educational Digital Lab 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-8	NE1D-14	NE1D-22
GENERAL				
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	800W	1000W	1500W
Voltage	120V or 230V models available 50-60Hz			
Drain (12mm bore)	N/A			Drain Outlet
DIMENSIONS				
Tank Capacity	4 Litre	8 Litre	14 Litre	22 Litre
External (mm)	332w x 185d x 290h	332w x 270d x 290h	361w x 332d x 290h	538w x 332d x 290h
Internal (mm)	300w x 150d x 150h	300w x 240d x 150h	325w x 300d x 150h	500w x 300d x 150h
Water Level Max. (mm)	130			
Water Level Min. (mm)	55			

NE2D Series Advanced Digital Lab 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
GENERAL				
Temp. Range	Ambient + 5°C - 100°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			
DIMENSIONS				
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
GENERAL			
Temp. Range	Ambient + 5°C - 100°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		
DIMENSIONS			
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		



NE2-2D



Clifton ShallowBaths™ are available in digital or analogue option. Perfect for heating small height samples such as micro tubes, micro plates and bottles. ShallowBaths™ 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
GENERAL				
Temp. Range	Ambient + 5°C - 99°C			
Temp. Alarm	Over temperature alarm is automatically set 4°C above set point			N/A
Temp. Control	PID Digital, LED display showing actual or set temperature, resolution 0.1°C			Analogue dial pointer, graduated in 5°C divisions
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			
DIMENSIONS				
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			

NE3DT Series Pro Range Digital Lab Baths

The NE3DT pro series water baths feature precision temperature control with an option to enable a run back or delay start timers, the latter useful for pre-conditioning water temperature before use. Supplied with clear hinged lid*, painted antibacterial surfaces and touch flush fitting controls, with illuminated LED display for temperature and time values.

*except NE3-56DT



NE3-28DT with clear lid



	NE3 - 4DT	NE3 - 8DT	NE3 - 14DT
GENERAL			
Temp. Range	Ambient + 5°C - 100°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)	N/A	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 - 100°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	



Clifton

Clifton

45.7



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	
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			
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	2300W	
Drain (12mm Bore)		N/A		Drain Outlet	
Voltage		230V models available 50-60Hz			
DIMENSIONS					
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			



NE1D-2/2/2



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



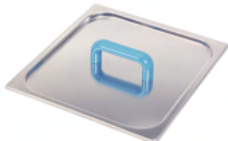

NE1-4/4/4




NE1D-2/2/2

NE1D-4/4/4

GENERAL				
Temp. Range	Ambient + 5°C - 99°C			
Temp. Control	Analogue dial pointer, graduated in 5°C divisions		Digital, LED display showing actual or set temperature, resolution 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			
DIMENSIONS				
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




Water Bath Accessories - Lids

	Stainless Steel Gabled Lid with Insulated Handle	Stainless Steel Hinged Gabled Lid with Insulated Handle	Stainless Steel Flat One Piece Lid with Insulated Handle	Clear Lift Off Gable Lid
Bath Product Code				
NE1-2.5	N/A	N/A	LD-2.5	N/A
NE1-4	SL1-4	N/A	LD-4	GL1-4AF
NE1-8	SL1-8	N/A	LD-8	GL1-8AF
NE1-14	SL1-14	SL1-14H	LD-14	GL1-14AF
NE1-22	SL1-22	SL1-22H	LD-22	GL1-22AF
NE1-28	SL1-22	SL1-22H	LD-22	GL1-22AF
NE1-56	SL1-56	N/A	LD-56	N/A
NE1D-4	SL1-4	N/A	LD-4	GL1-4AF
NE1D-8	SL1-8	N/A	LD-8	GL1-8AF
NE1D-14	SL1-14	SL1-14H	LD-14	GL1-14AF
NE1D-22	SL1-22	SL1-22H	LD-22	GL1-22AF
NE2-4D	SL1-4	N/A	LD-4	GL1-4AF
NE2-8D	SL1-8	N/A	LD-8	GL1-8AF
NE2-10D	SL1-8	N/A	LD-8	GL1-8AF
NE2-14D	SL1-14	SL1-14H	LD-14	GL1-14AF
NE2-22D	SL1-22	SL1-22H	LD-22	GL1-22AF
NE2-28D	SL1-22	SL1-22H	LD-22	GL1-22AF
NE2-56D	SL1-56	N/A	LD-56	N/A
NE3-4DT	SL1-4	N/A	LD-4	GL1-4AF
NE3-8DT	SL1-8	N/A	LD-8	GL1-8AF
NE3-14DT	SL1-14	SL1-14H	LD-14	GL1-14AF
NE3-28DT	SL1-22	SL1-22H	LD-22	GL1-22AF
NE3-56DT	SL1-56	N/A	LD-56	N/A
NE2D-4/4	SL1-4 / SL1-4	N/A	LD-4 / LD-4	GL1-4AF / GL1-4AF
NE2D-4/8	SL1-4 / SL1-8	N/A	LD-4 / LD-8	GL1-4AF / GL1-8AF
NE2D-8/22	SL1-8 / SL1-22	N/A	LD-8 / LD-22	GL1-8AF / GL1-22AF
NE1-2/2/2	SL1-4 (x3)	N/A	LD-4 (x3)	GL1-4AF (x3)
NE1-4/4/4	SL1-4 (x3)	N/A	LD-4 (x3)	GL1-4AF (x3)
NE1D-2/2/2	SL1-4 (x3)	N/A	LD-4 (x3)	GL1-4AF (x3)
NE1D-4/4/4	SL1-4 (x3)	N/A	LD-4 (x3)	GL1-4AF (x3)
NE2-2D	SL1-4	N/A	LD-4	GL1-4AF
NE2-5D	SL1-14	N/A	LD-14	GL1-14AF
NE2-9D	SL1-22	N/A	LD-22	GL1-22AF
NE1-9	SL1-22	N/A	LD-22	GL1-22AF

Stainless Steel Lid with Concentric Rings *Please see below for sizes	Clear Hinged Gable Lid	Polypropylene Spheres Pack of 200
		
N/A	N/A	BP0368 : 1 Pack
SLR1-4	GL1-4	BP0368 : 1 Pack
SLR1-8 and SLR2-8	GL1-8	BP0368 : 2 Packs
SLR1-14, SLR2-14 and SLR3-14	GL1-14	BP0368 : 2 Packs
SLR1-22 and SLR3-22	GL1-22	BP0368 : 4 Packs
SLR1-22 and SLR3-22	GL1-22	BP0368 : 4 Packs
N/A	N/A	BP0368 : 4 Packs
SLR1-4	GL1-4	BP0368 : 1 Pack
SLR1-8 and SLR2-8	GL1-8	BP0368 : 2 Packs
SLR1-14, SLR2-14 and SLR3-14	GL1-14	BP0368 : 2 Packs
SLR1-22 and SLR3-22	GL1-22	BP0368 : 4 Packs
SLR1-4	GL1-4	BP0368 : 1 Pack
SLR1-8 and SLR2-8	GL1-8	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
SLR1-22 and SLR3-22	GL1-22	BP0368 : 4 Packs
SLR1-22 and SLR3-22	GL1-22	BP0368 : 4 Packs
N/A	N/A	BP0368 : 4 Packs
SLR1-4	Included	BP0368 : 1 Pack
SLR1-8 and SLR2-8	Included	BP0368 : 2 Packs
SLR1-14, SLR2-14 and SLR3-14	Included	BP0368 : 2 Packs
SLR1-22 and SLR3-22	Included	BP0368 : 4 Packs
N/A	N/A	BP0368 : 4 Packs
SLR1-4	N/A	BP0368 : 2 Packs
SLR1-4 / SLR1-8 and SLR2-8	N/A	BP0368 : 2 Packs
SLR1-8 and SLR2-8 / SLR1-22 and SLR3-22	N/A	BP0368 : 4 Packs
SLR1-4 (x3)	GL1-4 (x3)	BP0368 : 1 Pack
SLR1-4 (x3)	GL1-4 (x3)	BP0368 : 1 Pack
SLR1-4 (x3)	GL1-4 (x3)	BP0368 : 1 Pack
SLR1-4 (x3)	GL1-4 (x3)	BP0368 : 1 Pack
SLR1-4	GL1-4	BP0368 : 1 Pack
SLR1-14, SLR2-14 and SLR3-14	GL1-14	BP0368 : 2 Packs
SLR1-22 and SLR3-22	GL1-22	BP0368 : 2 Packs
SLR1-22 and SLR3-22	GL1-22	BP0368 : 2 Packs

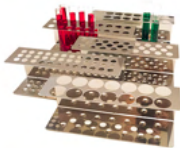


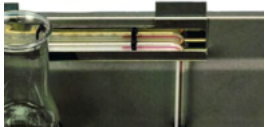
*SLR1-4 : 2 x 114mm holes / SLR1-8 : 4 x 83mm holes / SLR2-8 : 2 x 114mm holes / SLR1-14 : 4 x 114mm holes
 SLR2-14 : 6 x 83mm holes / SLR3-14 : 4 x 114mm holes / SLR1-22 : 6 x 114mm holes / SLR3-22 : 6 x 114mm holes

Water Bath Accessories

	Stainless Steel Test Tube Racks 6870 : 26 holes x 17mm Dia. 6873 : 18 holes x 19mm Dia. 6871 : 16 holes x 26mm Dia. 6900 : 12 holes x 32mm Dia. 6872 : 36 holes x 13mm Dia.	PVC Churchill Racks *Please see below for sizes	Drain Tap
Product Code			
NE1-2.5	1 Rack	N/A	N/A
NE1-4	1 Rack	C18-4 and C25-4	N/A
NE1-8	2 Racks	C25-8	N/A
NE1-14	4 Racks	C18-14 and C25-14	N/A
NE1-22	6 Racks	N/A	BX0953
NE1-28	6 Racks	N/A	BX0953
NE1-56	12 Racks	N/A	BX0953
NE1D-4	1 Rack	C18-4 and C25-4	N/A
NE1D-8	2 Racks	C25-8	N/A
NE1D-14	4 Racks	C18-14 and C25-14	N/A
NE1D-22	6 Racks	N/A	BX0953
NE2-4D	1 Rack	C18-4 and C25-4	N/A
NE2-8D	2 Racks	C25-8	N/A
NE2-10D	2 Racks	N/A	N/A
NE2-14D	4 Racks	C18-14 and C25-14	N/A
NE2-22D	6 Racks	N/A	BX0953
NE2-28D	6 Racks	N/A	BX0953
NE2-56D	12 Racks	N/A	BX0953
NE3-4DT	1 Rack	C18-4 and C25-4	N/A
NE3-8DT	2 Racks	C25-8	N/A
NE3-14DT	4 Racks	C18-14 and C25-14	N/A
NE3-28DT	6 Racks	N/A	Fitted
NE3-56DT	12 Racks	N/A	Fitted
NE2D-4/4	1 Rack / 1 Rack	C18-4 and C25-4	N/A
NE2D-4/8	1 Rack / 2 Racks	C18-4 and C25-4 / C25-8	N/A
NE2D-8/22	2 Racks / 6 Racks	C25-8 / NA	N/A
NE1-2/2/2	1 Rack / 1 Rack / 1 Rack	N/A	N/A
NE1-4/4/4	1 Rack / 1 Rack / 1 Rack	C18-4 and C25-4	N/A
NE1D-2/2/2	1 Rack / 1 Rack / 1 Rack	N/A	N/A
NE1D-4/4/4	1 Rack / 1 Rack / 1 Rack	C18-4 and C25-4	N/A
NE2-2D	1 Rack	N/A	N/A
NE2-5D	4 Racks	N/A	N/A
NE2-9D	6 Racks	N/A	N/A
NE1-9	6 Racks	N/A	N/A

*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.

Flat n Fold™ Test Tube Racks 6770 : 26 holes x 17mm Dia. 6773 : 18 holes x 19mm Dia. 6771 : 16 holes x 26mm Dia. 6800 : 14 holes x 32mm Dia. 6772 : 36 holes x 13mm Dia.	Stainless Steel Wire Basket	Bath Armor™ BA-5 : 4 Litre Pack BA-12 : 12 Litre Pack	Thermometer Clip with Bent Stem Thermometer
			
1 Rack	N/A	BA-5	TC-1
1 Rack	BSK-4	BA-5	TC-1
2 Racks	BSK-8	BA-12	TC-1
4 Racks	BSK-14	BA-12	TC-1
6 Racks	BSK-22	2 x BA-12	TC-1
6 Racks	BSK-22	2 x BA-12	TC-1
12 Racks	N/A	N/A	TC-1
1 Rack	BSK-4	BA-5	TC-1
2 Racks	BSK-8	BA-12	TC-1
4 Racks	BSK-14	BA-12	TC-1
6 Racks	BSK-22	2 x BA-12	TC-1
1 Rack	BSK-4	BA-5	TC-1
2 Racks	BSK-8	BA-12	TC-1
2 Racks	BSK-8	BA-12	TC-1
4 Racks	BSK-14	BA-12	TC-1
6 Racks	BSK-22	2 x BA-12	TC-1
6 Racks	BSK-22	2 x BA-12	TC-1
12 Racks	N/A	N/A	TC-1
1 Rack	BSK-4	BA-5	TC-1
2 Racks	BSK-8	BA-12	TC-1
4 Racks	BSK-14	BA-12	TC-1
6 Racks	BSK-22	2 x BA-12	TC-1
12 Racks	N/A	N/A	TC-1
1 Rack / 1 Rack	BSK-4 / BSK-4	BA-5 / BA-5	TC-1
1 Rack / 2 Racks	BSK-4 / BSK-8	BA-5 / BA-12	TC-1
2 Racks / 6 Racks	BSK-8 / BSK-22	BA-12 / 2 x BA-12	TC-1
1 Rack / 1 Rack / 1 Rack	BSK-4 (x3)	BA-5	TC-1
1 Rack / 1 Rack / 1 Rack	BSK-4 (x3)	BA-12	TC-1
1 Rack / 1 Rack / 1 Rack	BSK-4 (x3)	BA-5	TC-1
1 Rack / 1 Rack / 1 Rack	BSK-4 (x3)	BA-12	TC-1
1 Rack	N/A	BA-5	TC-1
4 Racks	N/A	BA-5	TC-1
6 Racks	N/A	BA-12	TC-1
6 Racks	N/A	BA-12	TC-1



37.0



Clifton

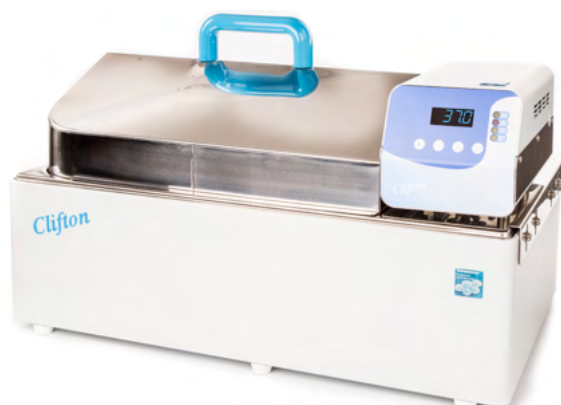
Anti-bacterial

Clifton Stirred Lab Baths



Clifton stirred lab baths provide a stable temperature environment ideal for meeting quality control requirements. Designed for immersion of flask, 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 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 Lab Bath



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 Lab Bath



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

MADE IN BRITAIN 

NE4 Series Analogue and Digital Circulators

Clifton thermostirrers and circulators can be fitted to laboratory water baths, tanks and containers using accessory mounting 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 via a float switch.



NE4-D with accessory mounting bracket

	NE4 - T	NE4 - D	NE4 - P	NE4 - H T
GENERAL				
Temp. Range	Ambient + 5°C - 99°C	Ambient + 5°C - 99°C*		Ambient + 5°C - 130°C*
Temp. Alarm	N/A	Under/over temperature alarm is automatically set 4°C above and 4°C below set point		
Temp. Control	Analogue dial pointer, graduated in 5°C divisions	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		
Heater Power (220-240V)	1250W			
Voltage	230V 50-60Hz	120V or 230V models available 50-60Hz		
Timer	N/A	Visual indicator and audible end message - Variable 00:01 to 99:59 hh:mm		
Pump Capacity	N/A		10 Litres/min - 150mbar	
Connection Ports	N/A		4mm bore x 6mm o/d tubing	
DIMENSIONS				
Tank Capacity	8 to 28 Litres	8 to 56 Litres		
External (mm)	125w x 230d x 350h			

	NE4 - D 2 K W	NE4 - P 2 K W
GENERAL		
Temp. Range	Ambient + 5°C - 99°C	
Temp. Alarm	Under/over temperature alarm is automatically set 4°C above and 4°C below set point	
Temp. Control	PID Digital, LED display showing actual or set temperature, resolution 0.1°C	
Sensitivity/Uniformity	±0.05°C/ ±0.01°C	
Heater Power (220-240V)	2000W	
Voltage	230V models available 50-60Hz	
Timer	Visual indicator and audible end message - Variable 00:01 to 99:59 hh:mm	
Pump Capacity	N/A	10 Litres/min - 150mbar
Connection Ports	N/A	4mm bore x 6mm o/d tubing
DIMENSIONS		
Tank Capacity	28 to 56 Litres	
External (mm)	125w x 230d x 350h	

*-20°C with accessory cooling

NE4 - T Series Analogue Stirred Baths



NE4-14T



Clifton NE4-T thermostatically controlled water baths are designed for immersion of flasks/ bottles/racks in a stable temperature environment. The stainless steel tank is contained within a sturdy outer case and supplied complete with a stainless steel shelf, which provides good water circulation and temperature stability. All Clifton stirred baths feature a low liquid level float switch, which ensures heating is switched off if the liquid falls below the recommended level.

NE4 - 8 T

NE4 - 14T

GENERAL		
Temp. Range	Ambient + 5°C - 99°C	
Temp. Control	Analogue dial pointer, graduated in 5°C divisions	
Sensitivity/Uniformity	±0.2°C / ±0.05°C	
Heater Power (220-240V)	1250W	
Voltage	230V models available 50-60Hz	
DIMENSIONS		
Tank Capacity	8 Litre	14 Litre
External (mm)	271w x 332d x 170h	361w x 332d x 170h
Internal (mm)	129w x 300d x 150h	219w x 298d x 150h
Water Level Max. (mm)	130	

NE4 - 22T

NE4 - 28T

GENERAL		
Temp. Range	Ambient + 5°C - 99°C	
Temp. Control	Analogue dial pointer, graduated in 5°C divisions	
Sensitivity/Uniformity	±0.2°C / ±0.05°C	
Heater Power (220-240V)	1250W	
Voltage	230V models available 50-60Hz	
Drain	N/A	Drain Outlet
DIMENSIONS		
Tank Capacity	22 Litre	28 Litre
External (mm)	537w x 332d x 170h	537w x 332d x 290h
Internal (mm)	395w x 298d x 150h	395w x 298d x 200h
Water Level Max. (mm)	130	180

NE4-D Series Stirred Digital Baths



NE4-22D



Clifton NE4-D 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. All Clifton stirred baths feature a low liquid level float switch, which ensures heating is switched off if the liquid falls below the recommended level.

	NE4 - 8D	NE4 - 14D	NE4 - 22D
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 audible end message - Variable 00:01 to 99:59 hh:mm		
Heater Power (220-240V)	1250W		
Voltage	120V or 230V models available 50-60Hz		
DIMENSIONS			
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
GENERAL			
Temp. Range	Ambient + 5°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 v 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	Drain Outlet		
DIMENSIONS			
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

*-20°C with accessory cooling

NE4 - D/CT Series Stirred Digital Baths

NE4-22D/CT



Clifton NE4D/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. All Clifton stirred baths feature a low liquid level float switch, which ensures heating is switched off if the liquid falls below the recommended level.

NE4 - 14D/CT

NE4 - 22D/CT

GENERAL	
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 audible end message - Variable 00:01 to 99:59 hh:mm
Heater Power (220-240V)	1250W
Voltage	120V or 230V models available 50-60Hz
DIMENSIONS	
Tank Capacity	14 Litre
External (mm)	530w x 325d x 295h
Internal (mm)	385w x 290d x 150h
Water Level Max	130

NE4-HT Series Digital Baths (High temperature)



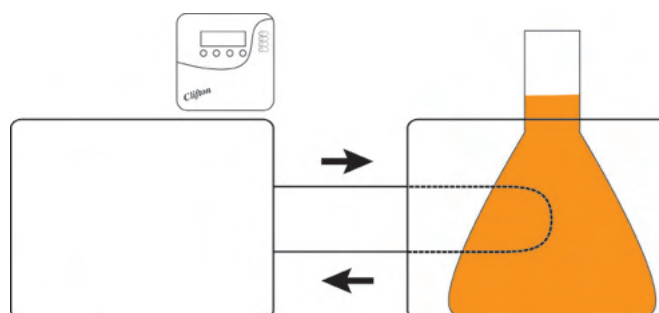
NE4-8HT



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. All Clifton stirred baths feature a low liquid level float switch, which ensures heating is switched off if the liquid falls below the recommended level.

NE4 - 8HT		NE4 - 14HT		NE4 - 22HT	
GENERAL					
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 audible 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			
DIMENSIONS					
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			



Capable of external circulation in a closed circuit

NE4 - P Circulating Digital Baths

Clifton NE4-P 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. All Clifton stirred baths feature a low liquid level float switch, which ensures heating is switched off if the liquid falls below the recommended level.



Stirred Water Baths

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 audible 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



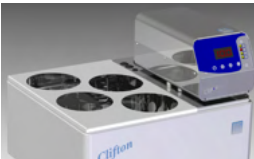
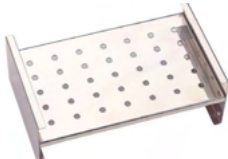
NE4-22P


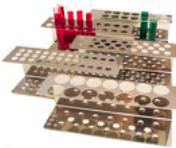

NE4-28P

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		±0.2°C / ±0.02°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	N/A	Drain Outlet	
Heater Power (220-240V)	1250W		2000W
Voltage	120V or 230V models available 50-60Hz		230V / 50-60Hz
DIMENSIONS			
Tank Capacity	22 Litre	28 Litre	56 Litre
External (mm)	537w x 332d x 170h	537w x 332d x 290h	660w x 540d x 290h
Internal (mm)	395w x 298d x 150h	395w x 298d x 200h	490w x 500d x 200h
Water Level Max. (mm)	130	180	

Stirred & Circulating Water 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	Stainless Steel Raised Shelves
Product Code				
NE4-8T	SL4-8	LD4-8	N/A	N/A
NE4-14T	SL4-14	LD4-14	LDR4-14	RS4-14
NE4-22T	SL4-22	LD4-22	LDR6-22	RS4-22
NE4-28T	SL4-22	LD4-22	LDR6-22	RS4-22
NE4-8D	SL4-8	LD4-8	N/A	N/A
NE4-14D	SL4-14	LD4-14	LDR4-14	RS4-14
NE4-22D	SL4-22	LD4-22	LDR6-22	RS4-22
NE4-28D	SL4-22	LD4-22	LDR6-22	RS4-22
NE4-38D	SL4-38	LD4-38	N/A	RS4-38
NE4-56D	SL4-56	N/A	N/A	N/A
NE4-8HT	SL4-8	LD4-8	N/A	N/A
NE4-14HT	SL4-14	LD4-14	LDR4-14	RS4-14
NE4-22HT	SL4-22	LD4-22	LDR6-22	RS4-22
NE4-8P	SL4-8	LD4-8	N/A	N/A
NE4-14P	SL4-14	LD4-14	LDR4-14	RS4-14
NE4-22P	SL4-22	LD4-22	LDR6-22	RS4-22
NE4-28P	SL4-22	LD4-22	LDR6-22	RS4-22
NE4-56P	SL4-56	N/A	LDR6-22	N/A

Stainless Steel Test Tube Racks	Flat n Fold™ Test Tube Racks	Polypropylene Spheres: Pack of 200
6770 : 26 holes x 17mm Dia. 6773 : 18 holes x 19mm Dia. 6771 : 16 holes x 26mm Dia. 6800 : 14 holes x 32mm Dia. 6772 : 36 holes x 13mm Dia.	6770 : 26 holes x 17mm Dia. 6773 : 18 holes x 19mm Dia. 6771 : 16 holes x 26mm Dia. 6800 : 14 holes x 32mm Dia. 6772 : 36 holes x 13mm Dia.	
		
1 Rack	1 Rack	BP0368 : 1 Pack
3 Racks	3 Racks	BP0368 : 2 Packs
5 Racks	5 Racks	BP0368 : 3 Packs
5 Racks	5 Racks	BP0368 : 3 Packs
1 Rack	1 Rack	BP0368 : 1 Pack
3 Racks	3 Racks	BP0368 : 2 Packs
5 Racks	5 Racks	BP0368 : 3 Packs
5 Racks	5 Racks	BP0368 : 3 Packs
7 Racks	7 Racks	BP0368 : 5 Packs
10 Racks	10 Racks	BP0368 : 8 Packs
1 Rack	1 Rack	BP0368 : 1 Pack
3 Racks	3 Racks	BP0368 : 2 Packs
5 Racks	5 Racks	BP0368 : 3 Packs
1 Rack	1 Rack	BP0368 : 1 Pack
3 Racks	3 Racks	BP0368 : 2 Packs
5 Racks	5 Racks	BP0368 : 3 Packs
5 Racks	5 Racks	BP0368 : 3 Packs
10 Racks	10 Racks	BP0368 : 8 Packs

Universal Accessories

CAL	Calibration record
BX0616	Drain Syphon
NE4-MB	Mounting Bracket (NE4-HT, NE4-D, NE4-P2KW, NE4-D2KW, NE4-T, NE4-P)
BKF-1	Barkeepers Friend
HS-1	Push fit insulated hose for circulating bath -40°C to 130°C 1m length
HS-2	Push fit insulated hose for circulating bath -40°C 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 (see page 44 for more details)
BX0953	Drain Tap (for use with 28, 38 and 56 litre stirred baths)
LB-2.5	Lab bath heat transfer fluid -15°C to 90°C (2.5 litres)
LB-2.5	Lab bath heat transfer fluid -15°C to 90°C (5 litres)





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.



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.

1100 Series



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

1000 Series



The 1000 series of circular boiling baths provide an effective source of heat for samples that may be damaged by a naked flame. The baths are manufactured from stainless steel. An energy regulator option allows bath to be controlled from a gentle simmer to a vigorous boil.

NE1B Series Boiling Baths



NE1B-14



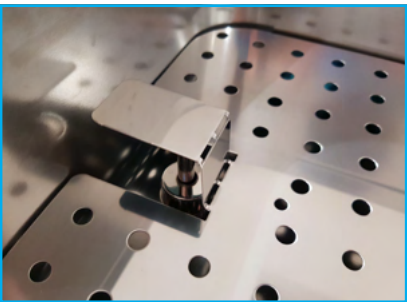
Boiling Baths

Designed for applications that require continuous boiling. This range of baths can be regulated from gentle simmer to vigorous boil. When low water level is detected the red warning light on the front panel illuminates and heating is suspended. Once refilled heating is restored, and temperature control resumes automatically. The concealed heater provides even heat distribution across the tank base. The perforated tray ensures an even spread of heat throughout the chamber.

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

The analogue dial has a proportional 1-10 scale, and the energy regulator provides control from gentle simmer to vigorous boil.

	NE1B - 14	NE1B - 18W	NE1B - 28
GENERAL			
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)	N/A	Drain Outlet	
DIMENSIONS			
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



Low Liquid float device

A low liquid float device protects the heaters and a red warning light on the front panel alerts users to refill the bath.

NE1BD Series Digital Boiling Baths



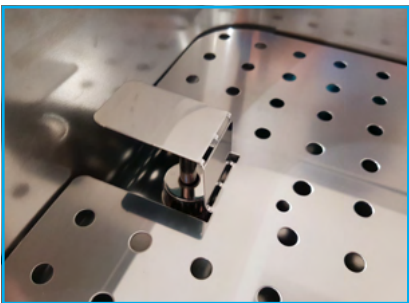
Designed for applications that require continuous boiling. This range of baths can be regulated from gentle simmer to vigorous boil. When low water level is detected the red warning light on the front panel illuminates and heating is suspended. Once refilled heating is restored, and temperature control resumes automatically.

Fitted with a sheathed immersion element with low liquid float device. 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 water thereby eliminating the need to regularly top up the bath.

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

Boiling Baths

	NE1BD - 14	NE1BD - 18W	NE1BD - 28
GENERAL			
Temp. Range	Simmer 80°C to boiling at 100°C		
Temp. Control	Digital, LED display showing actual or set, resolution 1°C		
Heater Power (220-240V)	2500W		
Water Level Alarm	Features low liquid level float switch, heating automatically suspended		
Voltage	230V / 50-60Hz		
Drain	N/A	Drain Tap	
DIMENSIONS			
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



Low liquid level switch
A low liquid float switch protects the heater and a red warning light on the front panel indicates the bath needs to be refilled.

1000 Series Boiling Baths



1026ER



1026E



Round stainless steel electrically heated Boiling Baths, the 1026ER regulates from a gentle simmer to a vigorous boil, whereas the 1026E continuously boils. Both fitted with a sheathed immersion heater, constant water level device and resettable thermal cut-out for low water condition. Supplied with a set of ring lids to vary the aperture diameter accommodating different sizes of vessels such as evaporating dishes, glassware and round bottom flasks heated by steam.

1026E

1026ER

GENERAL	
Temp. Range	Boiling at 100°C
Temp. Control	Constant boiling no control
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 Energy Regulator 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 sheathed immersion heater, 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 whereas the E range continuously boils.



1105ER & 1105E are made with aluminium.

1101ER, 1101E, 1104ER, 1104E & 1102E are made with stainless steel.

	1105E	1105ER	1101E	1102E
GENERAL				
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			
DIMENSIONS				
Tank Capacity	5 litres (Nominal Capacity)		4.5 litres	8.8 litres
External (mm)	400w x 200d x 90h		321w x 219d x 90h	425w x 321d x 90h
No. of holes & Diameter	6 hole x 80 mm diameter			6 hole x 101 mm dia

	1101ER	1104E	1104ER
GENERAL			
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		
DIMENSIONS			
Tank Capacity	4.5 litre	8.8 litre	
External (mm)	321w x 219d x 90h	425w x 321d x 90h	
No. of holes & Diameter	6 hole x 80 mm diameter	12 hole x 80 mm diameter	

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



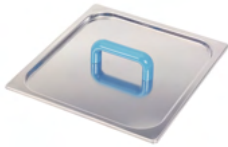

Ring 3 - removed, maximum diameter 80mm hole





Ring 4 - removed, maximum diameter 101mm diameter



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

Boiling Bath Accessories

	Stainless Steel Gabled Lid with Insulated Handle	Stainless Steel Hinged Gabled Lid with Insulated Handle	Stainless Steel Flat One Piece Lid with Insulated Handle	Clear Lift Off Gable Lid
Bath Product Code				
NE1B-14	N/A	SL1-14H/SS	LD-14	GL1-14AF
NE1B-18W	N/A	SL1-14H/SS	LD-14	GL1-14AF
NE1B-28	SL1-22SS	N/A	LD-22	GL1-22AF
NE1BD-14	N/A	SL1-14H/SS	LD-14	GL1-14AF
NE1BD-18W	N/A	SL1-14H/SS	LD-22	GL1-14AF
NE1BD-28	SL1-22SS	N/A	LD-22	GL1-22AF

Stainless Steel Lid with Concentric Rings *Please see below for sizes	Stainless Steel Hinged Gabled Lid with Insulated Handle	Stainless Steel Wire Basket	Clear Lift Off Gable Lid
			
SLR1-14, SLR2-14 and SLR3-14	GL1-14	BSK-14	GL1-14AF
SLR1-14, SLR2-14 and SLR3-14	GL1-14	N/A	GL1-14AF
SLR1-22 and SLR3-22	GL1-22	BSK-22	GL1-22AF
SLR1-14, SLR2-14 and SLR3-14	GL1-14	BSK-14	GL1-14AF
SLR1-14, SLR2-14 and SLR3-14	GL1-14	N/A	GL1-14AF
SLR1-22 and SLR3-22	GL1-22	BSK-22	GL1-22AF

***SLR1-4** : 2 x 114mm holes / **SLR1-8** : 4 x 83mm holes / **SLR2-8** : 2 x 114mm holes / **SLR1-14** : 4 x 114mm holes
SLR2-14 : 6 x 83mm holes / **SLR3-14** : 4 x 114mm holes / **SLR1-22** : 6 x 114mm holes / **SLR3-22** : 6 x 114mm holes

Accessories for NE1B-18W

ST-1	Raise and lower sterilising tray
SA01409	Pair of guide rail assemblies for ST-1 tray



Shaking Baths

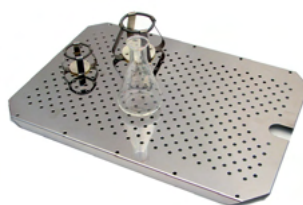


Clifton shaking water baths are ideal for day to day use. Available in digital or analogue option. Featuring a broad range of accessory flask clips and racks ensures flexibility for routine and specialised work.

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



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



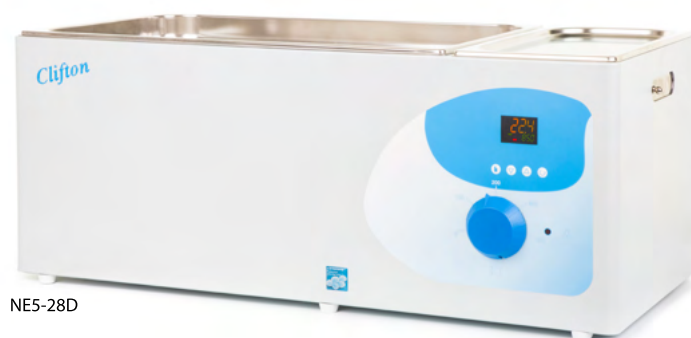
Analogue shaking water bath features analogue temperature and shaking speed control. An adjustable over temperature device can be set a few degrees above set working temperature, protecting samples from damage and over heating.



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

MADE IN BRITAIN 

NE5 Series Shaking Baths



The Clifton NE5-D series of shaking water baths, feature 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 specialised work.



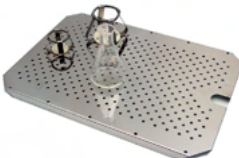
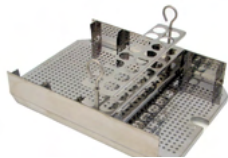
NE5-D features bold LED display of measured temperatures in real-time, increments of $\pm 0.1^{\circ}\text{C}$, using precision PID temperature control. NE5-28DT has a built in timer, settings variable, 00:01 to 99:59 [hh:mm] which activates at set temperature. Settings retained even after turning the unit off.

		NE5 - 10D	NE5 - 28D	NE5 - 28DT	NE5 - 28
Shaking Baths	GENERAL				
	Temp. Range	Ambient +5°C - 100°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 keypad, 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)
	Temperature Control and Run Back Timer	N/A		Audible end message, 00:01 to 99:59 [hh:mm], activates at set temperature	N/A
	Heater Power (220-240V)	800W	1000W		
	Voltage	230V models 50-60Hz			
	Linear Shaking Control	Shaking control 0 to 400 strokes / 0 to 200rpm			
	Stroke Length	Fixed 20mm Stroke	Variable up to 40mm Stroke		
Speed Display	Analogue				
Drain	N/A	Drain Outlet			
DIMENSIONS					
Tank Capacity	10 litres	28 litres			
External (mm)	449w x 332d 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	389w x 270d			
Water Level Max. (mm)	120				
Water Level Min. (mm)	50				

Shaking Bath Accessories -Lids



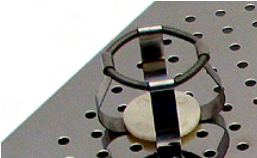

	Stainless Steel Gabled Lid with Insulated Handle	Stainless Steel Hinged Gabled Lid with Insulated Handle	Clear Lift Off Gable Lid	Clear Lift Off Gable Lid
Product Code				
NE5-10D	SL1-8	N/A	GL1-8AF	GL1-8
NE5-28D	SL1-22	SL1-22H	GL1-22AF	GL1-22
NE5-28DT	SL1-22	SL1-22H	GL1-22AF	GL1-22
NE5-28	SL1-22	SL1-22H	GL1-22AF	GL1-22

Trays

	Stainless Steel Flask Clip Tray *Please see sizes below	Universal Spring Tray	Stainless Steel Perforated Tray	Stainless Steel Test Tube Rack Tray
Product Code				
NE5-10D	N/A	N/A	SA01773	N/A
NE5-28D	1 Tray	SFT9000	SBF01804	STT004
NE5-28DT	1 Tray	SFT9000	SBF01804	STT004
NE5-28	1 Tray	SFT9000	SBF01804	STT004

*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

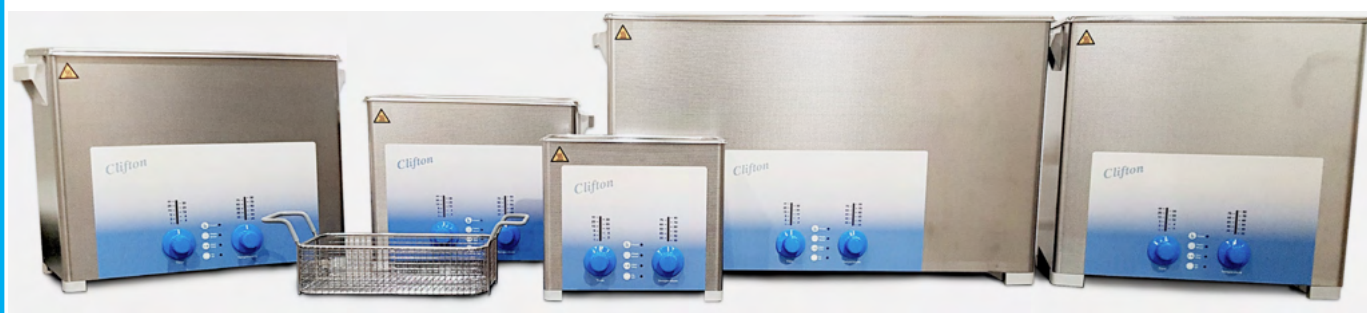
Universal

	Stainless Steel Test Tube Racks *Please see sizes below	Polypropylene Spheres Pack of 200	Stainless Steel Flask Clips *Please see sizes below	Drain Tap
Product Code				
NE5-10D	2 Racks	BP0368 : 2 Packs	Available	BX0953
NE5-28D	4 Racks	BP0368 : 4 Packs	Available	BX0953
NE5-28DT	4 Racks	BP0368 : 4 Packs	Available	BX0953
NE5-28	4 Racks	BP0368 : 4 Packs	Available	BX0953

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.

FC0025 : 25ml
 FC0050 : 50ml
 FC0100 : 100ml
 FC0250 : 250ml
 FC0500 : 500ml
 FC1000 : 1000ml
 FC2000 : 2000ml

Ultrasonic Baths



These industrial strength ultrasonic baths are designed for demanding applications and suitable for continuous operation. The baths are also ideal for cleaning delicate or fragile components which may otherwise be damaged by mechanical cleaning.

Featuring a function which allows frequently used parameters to be stored in memory. This guarantees the exact repetition of a cleaning or degassing process and is useful in quality control procedures.



The auto-degassing function is useful for liquid changes in the tank, de-carbonating and degassing HPLC solutions.

Control Panel



The touch pad, wipe clean, control panel shows time and temperature which can be set between 30°C and 80°C in 5°C increments. The timer can be selected to operate between 1-30 minutes or maximum of up to 8 hours with auto switch-off after 12 hours on the larger models.

Range of sizes






The baths are available from 1 to 90 litres capacity and feature an automatic sweep function for an efficient cleaning system and optimised performance. User-selectable option of boost and degas.

SW Series Ultrasonic Baths

	SW1H	SW3H	SW6H	SW12H
GENERAL				
Temp. Range	30°C - 80°C in 5°C increments			
Temp. Control	Analogue Dial Pointer			
Timer	Time setting 1, 2, 3, 4, 5, 10 ,15, 20 ,25 ,30 minutes and run time of up to 8 hours			
Voltage	120V or 230V models 50-60Hz			
Ultrasonic Effective Power	30W	80W	150W	200W
Ultrasonic Peak Power/ Frequency	240W / 37kHz	320W / 37kHz	600W / 37kHz	800W / 37kHz
Heater Power (220-240V)	60W	200W	400W	800W
Drain Tap	N/A		Drain Tap Fitted	
DIMENSIONS				
Tank Capacity	1 litre	3 litre	6 litre	12 litre
External (mm)	205w x 120 x 180h	300w x 190d x 220h	360w x 205d x 270h	365w x 290d x 320h
Internal (mm)	190w x 85d x 60h	235w x 135d x 100h	300w x 150d x 150h	300w x 240d x 200h

	SW30H	SW45H	SW90H
GENERAL			
Temp. Range	30°C - 80°C in 5°C increments		
Temp. Control	Analogue Dial Pointer		
Timer	Time setting 1, 2, 3, 4, 5, 10, 15, 20 ,25 ,30 minutes and run time of up to 8 hours	Time setting 1, 2, 3, 4, 5, 10, 15, 20 ,25 ,30 minutes and run time of up to 12 hours	
Voltage	120V or 230V models 50-60Hz	230V models 50-60Hz	
Ultrasonic Effective Power	300W	400W	800W
Ultrasonic Peak Power/ Frequency	1200W / 37kHz	1600W / 37kHz	3200W / 37kHz
Heater Power (220-240V)	1200W	1600W	2000W
Drain Tap	Drain Tap Fitted		
DIMENSIONS			
Tank Capacity	30 litre	45 litre	90 litre
External (mm)	570w x 350 x 320h	615w x 490d x 467h	700w x 680d x 467h
Internal (mm)	500w x 300d x 200h	500w x 300d x 300h	600w x 500d x 300h

Accessories

	Plastic Lid	Stainless Steel Wire Basket	Neutral foam-inhibited cleaning concentrate
Product Code			
SW1H	LD-1	BSK-1	SW-CL2
SW3H	LD-3	BSK-3	SW-CL2
SW6H	LD-6	BSK-6	SW-CL2
SW12H	LD-12	BSK-12	SW-CL2
SW30H	LD-30	BSK-30	SW-CL2
SW45H	LD-45	BSK-45	SW-CL2
SW90H	LD-90	BSK-90	SW-CL2

Clifton Immersion Dip Cooler

DC Series Dip Cooler



DC1-300

DC1-300 immersion cooler constantly extracts heat with the stirrer or circulator controlling the actual temperature of the bath liquid.

The unit consists of a stainless-steel immersion coil (65mm diameter) on a 900mm flexible stainless steel pipe with a protective outer shield which is connected to the refrigeration unit. 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 immersion cooler designed to cool liquids 20°C or below.

The outer casing of the refrigeration unit has an anti-bacterial painted finish. It is recommended that accessory lid or spheres are used on the bath to maximise efficiency.

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
0°C	13 mins	40 mins
-10°C	22 mins	120 mins
-20°C	40 mins	330 mins

DC1-300

GENERAL	
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
Voltage	230V 50-60Hz
DIMENSIONS	
External (mm)	345w x 470d x 300h
Internal (mm)	Coil diameter 65mm fitted onto the end of a 900mm long flexible cooling line.



Clifton Range[®]

METALWARE RANGE[™]

Nickel-Electro Ltd., Oldmixon Crescent, Weston-super-Mare, North Somerset, BS24 9BL,
United Kingdom

T : +44 (0) 1934 626691

W : www.nickel-electro.co.uk

E : clifton@nickel-electro.co.uk

Clifton Range[®] is a registered trademark of Nickel-Electro Ltd.

