



NICKEL - ELECTRO LTD.
Manufacturers of the Clifton Range

**Product Brochure - Water Baths,
Shaking Baths,
Ultrasonic Baths.**

Clifton

58.4



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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 standard.

The 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. Designed for immersion of flasks, bottles and racks for a wide variety of laboratory applications.

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 antibacterial finish with good chemical resistance. Fitted with side lifting handles for easy lifting and non slip rubber feet.

Above 60°C it is recommended that to achieve optimum performance the bath should be covered with a lid or layer of insulating spheres.

The Clifton unstirred water bath range consists of single chamber baths, dual chamber, triple chamber and shallow baths.

Heaters and temperature sensors are concealed under the tank providing a clutter free working area which is easy to wipe clean. Supplied with a removable sturdy, low height, stainless steel perforated shelf, for even heat distribution. The shallow shelf provides a deeper volume of water, for standing containers and accessory test tube racks in the bath. Water baths feature a thermal safety cut-out which is fitted to the heater, along with an illuminated on/off power switch and heater indication lamp.

Analogue Unstirred Water Baths

Analogue water baths have an easy to use dial pointer for setting temperature, graduated in 5°C divisions. Water baths are pre-calibrated for consistent accuracy.

Digital Unstirred Water Baths

Digital water baths have push buttons for setting parameters. 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 accuracy and repeatability is guaranteed. Temperature is set and displayed in increments of 0.1°C and retained in memory, even after 'power off'. NE1D series is set and displayed in 1°C increments.

There is an over temperature alarm automatically set at 4°C above set temperature, including a visual indicator and safety heating cut-out to protect samples from over heating. Digital baths are pre-calibrated at two separate temperatures for consistent accuracy.

NE1 Series Thermostatic Baths



NE1-2.5

NE1-4

NE1-8

NE1-14

GENERAL				
Temp. Range	Ambient + 5°C - 100°C			
Temp. Control	Analogue Dial Pointer			
Sensitivity/Uniformity	±0.5°C / ±0.5°C	±0.25° / ±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 270h	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		
Sensitivity/Uniformity	±0.25° / ±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		

ACCESSORY LIDS	NE1-2.5	NE1-4	NE1-8	NE1-14	NE1-22	NE1-28	NE 1-56
Flat Lid, Stainless Steel	LD-2.5	LD-4	LD-8	LD-14	LD-22		LD-56 (two part)
Gable Lid, Stainless Steel		SL1-4	SL1-8	SL1-14	SL1-22		SL1-56
Lift Off Gable Lid, Clear Polycarbonate		GL1-4AF	GL1-8AF	GL1-14AF	GL1-22AF		
Hinged Lid, Clear Polycarbonate		GL1-4	GL1-8	GL1-14	GL1-22		
Hinged Lid, Stainless Steel				SL1-14H	SL1-22H		
Polypropylene Spheres, No. of Packs Required Pack Quantity 200		BP0368 (1)	BP0368 (2)		BP0368 (4)		BP0368 (8)

NE1D Series Basic Digital Baths

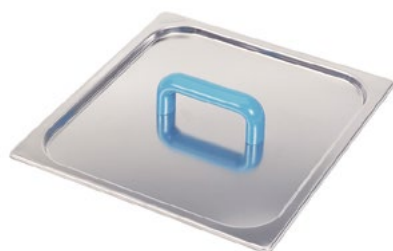


NE1D-4

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	1000W	1500W
Voltage	120V or 230V models available 50-60Hz		
DIMENSIONS			
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		



ACCESSORY LIDS	NE1D-4	NE1D-14	NE1D-22
Flat Lid, Stainless Steel	LD-4	LD-14	LD-22
Gable Lid, Stainless Steel	SL1-4	SL1-14	SL1-22
Lift Off Gable Lid, Clear Polycarbonate	GL1-4AF	GL1-14AF	GL1-22AF
Hinged Lid, Clear Polycarbonate	GL1-4	GL1-14	GL1-22
Hinged Lid, Stainless Steel		SL1-14H	SL1-22H
Polypropylene Spheres, No. of Packs Required Pack Quantity 200	BP0368 (1)	BP0368 (2)	BP0368 (4)

NE2D Series Digital Baths



NE2-4D

NE2-8D

NE2-10D

NE2-14D

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			
Sensitivity/Uniformity	±0.2° / ±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			
Water Level Min. (mm)	55			

NE2-22D

NE2-28D

NE2-56D

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			
Sensitivity/Uniformity	±0.2° / ±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			

ACCESSORY LIDS	NE2-4D	NE2-8D	NE2-10D	NE2-14D	NE2-22D	NE2-28D	NE2-56D
Flat Lid, Stainless Steel	LD-2.5	LD-8		LD-14	LD-22		LD-56 (two part)
Gable Lid, Stainless Steel		SL1-8		SL1-14	SL1-22		SL1-56
Lift Off Gable Lid, Clear Polycarbonate		GL1-8AF		GL1-14AF	GL1-22AF		
Hinged Lid, Clear Polycarbonate		GL1-8		GL1-14	GL1-22		
Hinged Lid, Stainless Steel				SL1-14H	SL1-22H		
Polypropylene Spheres, No. of Packs Required Pack Quantity 200		BP0368 (1)	BP0368 (2)		BP0368 (4)		BP0368 (8)

ShallowBaths™ Series



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.

	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			
Temp. Control	PID Digital, LED display showing actual or set temperature, resolution 0.1°C			Graduated in 5°C divisions
Sensitivity/Uniformity	±0.2° / ±0.1°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			

ACCESSORY LIDS	NE2-2D	NE2-5D	NE2-9D	NE1-9D
Flat Lid, Stainless Steel	LD-4	LD-14	LD-22	LD-22
Gable Lid, Stainless Steel	SL1-4	SL1-14	SL1-22	SL1-22
Lift Off Gable Lid, Clear Polycarbonate	GL1-4AF	GL1-14AF		
Polypropylene Spheres, No. of Packs Required Pack Quantity 200	BP0368 (1)	BP0368 (2)	BP0368 (4)	

NE3DT Series Digital Baths

Clifton digital NE3 series baths come complete with run back and delay start timer, clear hinged polycarbonate lid and feature a PID precision temperature controller.

	NE3 - 4DT	NE3 - 8DT	NE3 - 14DT
GENERAL			
Temp. Range	Ambient + 5°C - 99°C		
Temp. Alarm	Over temperature alarm is automatically set 4°C and 4°C below 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 and 4°C below 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)	130	
Water Level Min. (mm)	55	



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NE2D DuoBath™ Series



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 stand by feature can be activated for the chamber not in use.

NE2D-4/4

NE2D-4/8

NE2D-8/22

GENERAL	NE2D-4/4		NE2D-4/8		NE2D-8/22
Temp. Range	Ambient + 5°C - 99°C				
Temp. Alarm	Over temperature alarm is automatically set 4°C and 4°C below 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)					
Voltage	120V or 230V models available 50-60Hz				
DIMENSIONS	NE2D-4/4		NE2D-4/8		NE2D-8/22
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				

ACCESSORY LIDS	NE2D-4/4	NE2D-4/8		NE2D-8/22	
Flat Lid, Stainless Steel	LD-4	LD-4	LD-8	LD-8	LD-22
Gable Lid, Stainless Steel	SL1-4	SL1-4	SL1-8	SL1-8	SL1-22
Lift Off Gable Lid, Clear Polycarbonate	GL1-4AF	GL1-4AF	GL1-8AF	GL1-8AF	GL1-22AF
Polypropylene Spheres, No. of Packs Required Pack Quantity 200	BP0368 (1)		BP0368 (2)		BP0368 (4)

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. These shallow baths require less water and less process chemicals, so are therefore economical to use. All Triplebaths™ are supplied with three removable sturdy, low height, stainless steel perforated shelves, for even heat distribution. Triplebaths™ are available in two sizes, 3 x 2 litre and 3 x 4 litre chambers.

	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. 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° / ±0.5°C		±0.25° / ±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			

ACCESSORY LIDS	NE1-2/2/2	NE1-4/4/4	NE1D-2/2/2	NE1D-4/4/4
Flat Lid, Stainless Steel				LD-4
Gable Lid, Stainless Steel				SL1-4
Lift Off Gable Lid, Clear Polycarbonate				GL1-4AF
Polypropylene Spheres, No. of Packs Required Pack Quantity 200				BP0368 (1)

Unstirred Bath Accessories

TEST TUBE RACKS

Test tube racks to suit unstirred and stirred water baths. Supplied flat packed ready for assembly. Can be cleaned with detergents, ultrasonics or autoclaved.

N# OF RACKS						
	4	8	14	22/28	38	56
Unstirred:	1	2	4	6	-	12
Stirred:	0	1	3	5	7	10

TEST TUBE RACKS	NE2-2D, NE1-2/2/2, NE1D-2/2/2	NE1-4, NE1D-4, NE2-4D, NE3-4DT, NE2D-4/8, NE2D-4/4, NE1-4/4/4, NE1D-4/4/4	NE2-5D
Stainless Steel:			
26 holes x 17mm diameter	6870		
16 holes x 26mm diameter	6871		
36 holes x 13mm diameter	6872		
18 holes x 19mm diameter	6873		
12 holes x 32mm diameter	6900		

CHURCHILL TEST TUBE RACKS			
Nylon:			
28 holes x 18mm diameter	C18-4	C18-4	
28 holes x 25mm diameter	C25-4	C25-4	

FLATNFOLD™ TEST TUBE RACKS			
Stainless Steel:			
26 holes x 17mm diameter	6770		
16 holes x 26mm diameter	6771		
36 holes x 13mm diameter	6772		
18 holes x 19mm diameter	6773		
14 holes x 32mm diameter	6800		

WIRE BASKET			
Stainless Steel:	BSK-4		

BATH ARMOR™			
(replacement for water in bath)	BA-5 (4 litre pack, 1 pack required)	BA-12 (12 litre pack, 1 pack required)	

CHURCHILL TEST TUBE RACKS

Each rack fits into Clifton unstirred water baths and is easily removed and stored flat. Ideal for education. Maximum recommended operating temperature 70°C. Not recommended for use with phenols, alkalis, iodine and acids.

FLATNFOLD™ TEST TUBE RACKS

Test tube racks to suit unstirred water baths. Supplied flat; fold to shape. Can be cleaned with detergents, ultrasonics or autoclaved.

TEST TUBE RACKS	NE1-8, NE2-8D, NE3-8DT, NE2D-4/8, NE2D-8/22	NE1-9, NE2-9D	NE2-10D	NE1-14, NE1D-14, NE2-14D, NE3-14DT, NE1B-14,	NE1B-18W
Stainless Steel:					
26 holes x 17mm diameter	6870			6870	
16 holes x 26mm diameter	6871			6871	
36 holes x 13mm diameter	6872			6872	
18 holes x 19mm diameter	6873			6873	
12 holes x 32mm diameter	6900			6900	
50 holes x 32mm diameter				6875	

CHURCHILL TEST TUBE RACKS					
Nylon:					
44 holes x 18mm diameter	C18-8		C18-8		
44 holes x 25mm diameter	C25-8		C25-8		
68 holes x 18mm diameter				C18-14	
68 holes x 25mm diameter				C25-14	

FLATNFOLD™ TEST TUBE RACKS					
Stainless Steel:					
26 holes x 17mm diameter	6770			6770	
16 holes x 26mm diameter	6771			6771	
36 holes x 13mm diameter	6772			6772	
18 holes x 19mm diameter	6773			6773	
14 holes x 32mm diameter	6800			6800	

WIRE BASKET					
Stainless Steel:	BSK-8		BSK-8		BSK-14

BATH ARMOR™					
(replacement for water in bath)	BA-12 (12 litre pack, 1 pack required)				

BATH ARMOR™

Thermally efficient, aluminium pellets, which replace water in the bath. Easy to keep clean, pellets wash and sterilise easily. Good thermal heat distribution and no evaporation issues. The pellets enable the user to eliminate nearly all water bath cleaning and protects water bath from drying out. Bath Armor™ saves the needs for racks, or bottle weights. Available in a range of pack sizes to suit all unstirred water baths. Can only be used with unstirred water baths.

TEST TUBE RACKS	NE1-14, NE1D-14, NE2-14D, NE3-14DT, NE1B-14,	NE1B-18W	NE1-22, NE1D-22, NE2-22D, NE2D-8/22	NE1-28, NE2-28D, NE3-28DT	NE1-56, NE2-56D, NE3-56DT
Stainless Steel:					
26 holes x 17mm diameter				6870	
16 holes x 26mm diameter				6871	
36 holes x 13mm diameter				6872	
18 holes x 19mm diameter				6873	
12 holes x 32mm diameter				6900	
50 holes x 32mm diameter				6875	

CHURCHILL TEST TUBE RACKS		
Nylon:		
68 holes x 18mm diameter	C18-4	
68 holes x 25mm diameter	C25-4	

FLATNFOLD™ TEST TUBE RACKS	
Stainless Steel:	
26 holes x 17mm diameter	6770
16 holes x 26mm diameter	6771
36 holes x 13mm diameter	6772
18 holes x 19mm diameter	6773
14 holes x 32mm diameter	6800

WIRE BASKET		
Stainless Steel:	BSK-14	BSK-22

BATH ARMOR™			
(replacement for water in bath)	BA-5 (4 litre pack, 1 pack required)		BA-12 (12 litre pack, 2 pack required)
			BA-12 (12 litre pack, 4 pack required)



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 heating circulators are designed for external circulation of temperature controlled water and heat transfer fluids in a closed circuit. Convenient push-fit and lock fittings on both inlet and outlet ports on circulating baths provide secure external circulation.

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 antibacterial finish with good chemical resistance. The thermostirrer is robust and the entire casing is constructed from stainless steel for durability. Above 60°C it is recommended that to achieve optimum performance the bath should be covered with a lid or layer of insulating spheres.

Stirred and circulating baths are supplied with a removable stainless steel shelf, ensuring good water flow throughout the chamber. There is an illuminated on/off power switch and heater indication lamp.

NE4-D/CT series is complete with clear polycarbonate tank. All Clifton products have a three year warranty and comprehensive customer support.

Analogue Stirred Water Baths

Analogue baths have an easy to use dial pointer for setting temperature, graduated in 5°C divisions. When low liquid is detected heating is suspended and a warning indicator is visible. Once the bath is refilled, resetting the power switch from off to on resumes control. Water baths are pre-calibrated for consistent accuracy.

Digital Stirred and Circulating 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 accuracy and repeatability is guaranteed. Temperature is set in increments of 0.1°C and retained in memory, even after 'power off'.

When a low liquid level is detected a 'FILL' message automatically appears on the display and heating is suspended. Once refilled, heating is restored and temperature control resumes automatically. There is an under/over temperature alarm automatically set at 4°C below/above set temperature, including a visual indicator to protect samples. Water baths are pre-calibrated at two separate temperatures for consistent accuracy.

Immersion Dip Cooler is an accessory to be used with any Clifton stirred or circulating bath. The immersion cooler runs continuously providing counter cooling with the bath, resulting in temperature control from ambient to -20°C. Please see page 27 for more information.

NE4 - T Series Thermostatic Baths



NE4 - T

NE4 - 8 T

NE4 - 14T

GENERAL			
Temp. Range	Ambient + 5°C - 99°C		
Temp. Control	Analogue Dial Pointer		
Sensitivity/Uniformity	±0.02° / ±0.05°C		
Heater Power (220-240V)	1250W		
Voltage	120V or 230V models available 50-60Hz		
DIMENSIONS			
Tank Capacity	N/A	8 litre	14 litre
External (mm)	125w x 230d x 350h	271w x 332d x 170h	361w x 332d x 170h
Internal (mm)	N/A	129w x 300d x 150h	219w x 298d x 150h
Water Level Max. (mm)	N/A	130	

NE4 - 22T

NE4 - 28T

GENERAL			
Temp. Range	Ambient + 5°C - 99°C		
Temp. Control	Analogue Dial Pointer		
Sensitivity/Uniformity	±0.02° / ±0.05°C		
Heater Power (220-240V)	1250W		
Voltage	120V or 230V models available 50-60Hz		
DIMENSIONS			
Tank Capacity	22 litre		28 litre
External (mm)	537w x 332d x 170h		537w x 332d x 240h
Internal (mm)	395w x 298d x 150h		395w x 298d x 200h
Water Level Max. (mm)	130		180

ACCESSORIES	NE4-T	NE4-8T	NE4-14T	NE4-22T	NE4-28T
Flat Lid, Stainless Steel		LD4-8	LD4-14	LD4-22	
Gable Lid, Stainless Steel		SL4-8	SL4-14	SL4-22	
Hinged Gable Lid, Stainless Steel			SL4-14H	SL4-22H	
Polypropylene Spheres		BP0368 (1 packs required)	BP0368 (2 packs required)	BP0368 (3 packs required)	
Mounting Bracket	NE4-MB				

NE4D Series Digital Baths



NE4-D

NE4-8D

NE4-14D

NE4-22D

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, resolution 0.1°C			
Sensitivity/Uniformity	±0.1° / ±0.01°C	±0.05° / ±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			
DIMENSIONS				
Tank Capacity	N/A	8 litre	14 litre	22 litre
External (mm)	125w x 230d x 350h	271w x 332d x 170h	361w x 332d x 170h	537w x 332d x 170h
Internal (mm)	N/A	129w x 300d x 150h	219w x 298d x 150h	395w x 298d x 150h
Water Level Max. (mm)	N/A	130		

NE4-28D

NE4-38D

NE4-56D

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, resolution 0.1°C			
Sensitivity/Uniformity	±0.05° / ±0.01°C		±0.2° / ±0.02°C	
Timer	Variable 00:01 to 99:59 hh:mm			
Heater Power (220-240V)	1250W		2000W	
Voltage	120V or 230V models available 50-60Hz			
DIMENSIONS				
Tank Capacity	28 litre	38 litre		56 litre
External (mm)	537w x 332d x 240h	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			

ACCESSORIES	NE4-D	NE4-8D	NE4-14D	NE4-22D	NE4-28D	NE4-38D	NE4-56D
Flat Lid, Stainless Steel		LD4-8	LD4-14	LD4-22		LD4-38	
Gable Lid, Stainless Steel		SL4-8	SL4-14	SL4-22		SL4-38	SL4-56
Polypropylene Spheres, No. of Packs Required Pack Quantity 200		BP0368 (2)		BP0368 (4)			BP0368 (8)
Immersion Dip Cooler (Ambient to -20°C)*	DC1-300						
	DC2-300						
Mounting Bracket	NE4-MB						

*See page 27 for details.

NE4 - D/CT Series Digital Baths

Digital Thermostirrer comes complete with sturdy clear polycarbonate tank allowing observation of samples. Complete with stainless steel shelf designed for good water circulation and temperature stability.



	NE4-8 D/CT	NE4-14D/CT	NE4-22D/CT
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, resolution 0.1°C		
Sensitivity/Uniformity	±0.05° / ±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		
DIMENSIONS			
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			
Gable Lid, Stainless Steel	SL4-8	SL4-14	SL4-22
Polypropylene Spheres, No. of Packs Required Pack Quantity 200	BP0368 (2)		BP0368 (4)
Immersion Dip Cooler (Ambient to -20°C)*	DC1-300		
	DC2-300		

*See page 27 for details.

NE4 - HT Series Digital Baths

High temperature range for circulating water and oil. Designed to reach 130°C.



	NE4 - HT	NE4 - 8HT	NE4 - 14HT	NE4 - 22HT
GENERAL				
Temp. Range	Ambient + 5°C - 130°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, resolution 0.1°C			
Sensitivity/Uniformity	±0.05° / ±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			
DIMENSIONS				
Tank Capacity	N/A	8 litre	14 litre	22 litre
External (mm)	125w x 230d x 350h	271w x 332d x 170h	361w x 332d x 170h	537w x 332d x 170h
Internal (mm)	N/A	129w x 300d x 150h	219w x 298d x 150h	395w x 298d x 150h
Water Level Max. (mm)	130			



ACCESSORIES	NE4 - HT	NE4 - 8HT	NE4 - 14HT	NE4 - 22HT
Flat Lid, Stainless Steel		LD4-8	LD4-14	LD4-22
Gable Lid, Stainless Steel		SL4-8	SL4-14	SL4-22
Hinged Gable Lid, Stainless Steel			SL4-14H	SL4-22H
Polypropylene Spheres		BP0368 (2 packs required)	BP0368 (2 packs required)	BP0368 (4 packs required)
Immersion Dip Cooler (ambient to -20°C)*	DC1-300			
	DC2-300			
Mounting Bracket	NE4-MB			

*See page 27 for details.

NE4 - P Series Digital Baths

NE4-P Series feature a circulation pump with capacity of 10 litres per minute.



NE4 - P

NE4 - 8P

NE4 - 14P

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, resolution 0.1°C		
Sensitivity/Uniformity	±0.1° / ±0.01°C	±0.05° / ±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	N/A	8 litre	14 litre
External (mm)	125w x 230d x 350h	271w x 332d x 170h	361w x 332d x 170h
Internal (mm)	N/A	129w x 300d x 150h	219w x 298d x 150h
Water Level Max. (mm)	N/A	130	

NE4 - 22P

NE4 - 28P

NE4 - 56P

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, resolution 0.1°C		
Sensitivity/Uniformity	±0.05° / ±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		
Heater Power (220-240V)	1250W		
Voltage	120V or 230V models available 50-60Hz		
DIMENSIONS			
Tank Capacity	22 litre	28 litre	56 litre
External (mm)	537w x 332d x 170h	537w x 332d x 240h	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	



ACCESSORIES	NE4-P	NE4-8P	NE4-14P	NE4-22P	NE4-28P	NE4-56P
Flat Lid, Stainless Steel		LD4-8	LD4-14	LD4-22		
Gable Lid, Stainless Steel		SL4-8	SL4-14	SL4-22		SL4-56
Polypropylene Spheres, No. of Packs Required Pack Quantity 200		BP0368 (2)		BP0368 (4)		BP0368 (8)
Immersion Dip Cooler (Ambient to 20°C)*		DC1-300				
		DC2-300				
Mounting Bracket	NE4-MB					

*See page 27 for details.

Stirred Bath Accessories

TEST TUBE RACKS	NE4-8D, NE4-8D/CT, NE4-8P, NE4-8HT, NE4-8T	NE4-14D, NE4-14D/CT, NE4-14P, NE4-14HT, NE4-14T	NE4-22D, NE4-22D/CT, NE4-22P, NE4-22HT, NE4-22T
Stainless Steel:			
26 holes x 17mm diameter		6870	
16 holes x 26mm diameter		6871	
36 holes x 13mm diameter		6872	
18 holes x 19mm diameter		6873	
12 holes x 32mm diameter		6900	
50 holes x 32mm diameter			6875

TEST TUBE RACKS	NE4-38D	NE4-28D, NE4-28P, NE4-28T	NE4-56D, NE4-56P
Stainless Steel:			
26 holes x 17mm diameter		6870	
16 holes x 26mm diameter		6871	
36 holes x 13mm diameter		6872	
18 holes x 19mm diameter		6873	
12 holes x 32mm diameter		6900	
50 holes x 32mm diameter			6875

FLATNFOLD™ TEST TUBE RACKS	NE4-8D, NE4-8D/CT, NE4-8P, NE4-8HT, NE4-8T	NE4-14D, NE4-14D/CT, NE4-14P, NE4-14HT, NE4-14T	NE4-22D, NE4-22D/CT, NE4-22P, NE4-22HT, NE4-22T
Stainless Steel:			
26 holes x 17mm diameter		6770	
16 holes x 26mm diameter		6771	
36 holes x 13mm diameter		6772	
18 holes x 19mm diameter		6773	
12 holes x 32mm diameter		6800	

FLATNFOLD™ TEST TUBE RACKS	NE4-38D	NE4-28D, NE4-28P, NE4-28T	NE4-56D, NE4-56P
Stainless Steel:			
26 holes x 17mm diameter		6770	
16 holes x 26mm diameter		6771	
36 holes x 13mm diameter		6772	
18 holes x 19mm diameter		6773	
14 holes x 32mm diameter		6800	

Raised shelves to suit stirred baths also available. Please see website for more information.
See page 14 for accessory product description.

DC Series Immersion Dip Coolers

The accessory cooling system allows operation at or below room temperature. The DC1-300 and DC2-300 immersion coolers constantly extract heat with the bath's thermostirrer 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 powder coat 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 casters, which can be locked when in position.

Time taken to cool water at 20°C to -20°C based on [NE4-8D Bath](#):

	DC1-300	DC2-300
0°C	20 mins	20 mins
-10°C	60 mins	45 mins
-20°C	75 mins	60 mins

	DC1-300	DC2-300
GENERAL		
Temp. Range	Ambient -20°C	
Temp. Control	None. Continuously providing counter cooling with water bath 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	
DIMENSIONS		
External (mm)	345w x 445d x 265h	345w x 465d x 315h
Internal (mm)	Coil diameter 65mm fitted on end of a 900mm long flexible cooling line.	

Boiling Baths

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.

Available as an unstirred analogue bath, with the flexibility of controlling the water from gentle simmer to a vigorous boil. Also as a rectangular bath, in various sizes with energy regulator option and as a circular boiling bath, again with energy regulator option. 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.

Always place the boiling bath on a heat proof surface and connect the constant level device with laboratory tubing to a water supply, adjust the flow to gently top up the water level, whilst maintaining boiling. All Clifton products have a three year warranty and comprehensive customer support.

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 antibacterial finish with good chemical resistance. Fitted with side lifting handles for easy lifting and non slip rubber feet. The sheathed immersion element has thermal safety cut-out and is directly immersed in water providing rapid boiling. There is an analogue dial with proportional 1 to 10 scale and the energy regulator provides steady boiling. A perforated tray is provided and ensures even heat distribution.

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. Supplied with a set of ringed lids to vary the diameter of each aperture to accommodate different sizes of vessels of evaporating dishes and glassware, including round-bottom flasks.

1000 Series

The 1000 series of rectangular 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. Supplied with a set of ringed lids to vary the diameter of aperture to accommodate different sizes of vessels of evaporating dishes and glassware, including round-bottom flasks.

NE1B Series Boiling Baths



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



Constant level device maintains a fixed level of liquid thereby eliminating the need to regularly top up the bath.

ACCESSORIES	NE1B-14	NE1B-18W	NE1B-28
Flat Lid, Stainless Steel	LD-14		LD-22
Gable Hinged Lid, Stainless Steel	SL1-14H/SS		
Gable Lid, Stainless Steel			SL1-22H/SS
Concentric Ringed Lid 4 x 105mm, Stainless Steel	SLR1-14		
Concentric Ringed Lid 6 x 83mm, Stainless Steel	SLR2-14		
Concentric Ringed Lid 4 x 114.5mm, Stainless Steel	SLR3-14		
Concentric Ringed Lid 6 x 105mm, Stainless Steel			SLR1-22
Concentric Ringed Lid 4 x 114.5mm, Stainless Steel			SLR3-22
Polypropylene Spheres, No. of Packs Required Pack Quantity 200	BP0368 (2)		BP0368 (4)
Raise and lower sterilizing tray, Stainless Steel	ST-1		
Pair of guide rail assemblies for ST-1 Tray	SA01409		

Please see Page 14 for more boiling bath accessories.

1000 Series Boiling Baths



1026E

1026ER

GENERAL		
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	120V 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 simultaneously.

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

1100 Series Boiling Baths

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



	1105E	1105ER	1101E
GENERAL			
Temp. Range	Boiling at 100°C	Energy regulator controls the amount of boiling from A gentle simmer to vigorous boil	Boiling at 100°C
Temp. Control	Constant boiling no control	Simmer to boiling at 100°C	Constant boiling no control
Heater Power (220-240V)		1000W	
Voltage		230V models 50-60Hz	
DIMENSIONS			
Tank Capacity	3.12 litres		4.5 litre
External (mm)	400w x 200d x 90h		321w x 219d x 90h

	1101ER	1104E	1104ER
GENERAL			
Temp. Range	Energy regulator controls the amount of boiling from A gentle simmer to vigorous boil	Boiling at 100°C	Energy regulator controls the amount of boiling from A gentle simmer to vigorous boil
Temp. Control	Simmer to boiling at 100°C	Constant boiling no control	Simmer to boiling at 100°C
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

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

Number of holes in bath lid 6 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	



Clifton

Shaking Water Baths

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 antibacterial finish with good chemical resistance. Fitted with non slip rubber feet.

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. Shaking system is quiet when in use and by removing the trolley and replacing it with the perforated tray it can be used as a standard laboratory bath. The perforated tray and trolley are supplied complete with the shaking bath.

Heaters are concealed under the tank providing a clutter free working area, easy to wipe clean. The heating footprint covers the base of the tank. The low mass element provides rapid energy transfer, quicker heat up times and a reduction in energy consumption with improved temperature uniformity. Above 60°C it is recommended that to achieve optimum performance the bath should be covered with a lid or layer of insulating spheres. All shaking baths have a thermal cut-out fitted in the heater, along with an illuminated on/off power switch and heater indication lamp.

Analogue Shaking Water Bath

Analogue shaking water bath features an analogue temperature and shaking speed control from 0 to 380rpm. Stoke length is variable up to 40mm. An adjustable over temperature device can be set a few degrees above the set working temperature, protecting samples from damage and over heating. Water baths are pre-calibrated for consistent accuracy.

Digital Shaking Water Baths

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 accuracy and repeatability is guaranteed. Temperature is set in increments of $\pm 0.1^{\circ}\text{C}$ and retained in memory, even after 'power off'.

Digital shaking water baths have an over temperature alarm automatically set at 4°C above set temperature, including a visual indicator and safety heating cut-out. Features an automatic tuning option, allowing the bath to learn about the applications, environment and temperatures. Highly accurate PT100 sensor immersed directly in the bath.

Shaking movement is controlled by an analogue dial pointer, graduated in 100rpm divisions from 0 to 380rpm. Stoke length variable up to 40mm. Digital shaking baths have digital display of speed and are pre-calibrated at two separate temperatures for consistent accuracy.

Illuminated on/off power switch and heater indication lamp. Bath fitted with nonslip rubber feet.

NE5 Series Digital Shaking Baths



NE5 - 10D

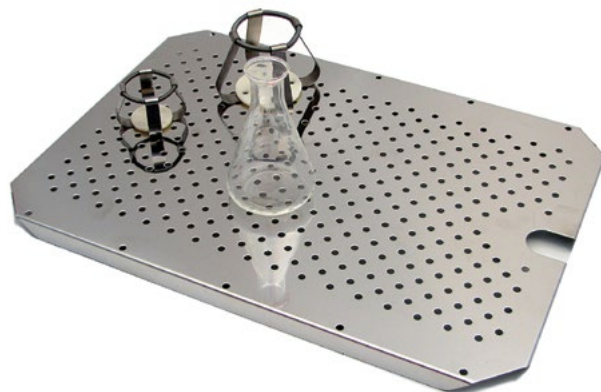
NE5 - 28D

NE5 - 28

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	Digital touch screen, high precision controller, resolution 0.1°C		Analogue dial pointer
Sensitivity/Uniformity	±0.1°C @ 45°C (optimal water level 75mm to 120mm)		±0.2°C @ 45°C (optimal water level 75mm to 120mm)
Timer	Visual indicator and end message 00:01 to 99:59 (hh:mm) activates at set temperature		N/A
Heater Power (220-240V)	800W	1250W	1000W
Voltage	120V or 230V models 50-60Hz		
Linear Shaking Control	from 0 to 380rpm (stroke length variable up to 40mm)		
Speed Display	Digital		Analogue
Drain (12mm Bore)			
DIMENSIONS			
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	NE5-10D	NE5-28D	NE5-28
Gable Lid, Stainless Steel	SL1-8		SL1-22
Hinged Gable Lid, Clear Polycarbonate	GL1-8		GL1-22
Hinged Gable Lid, Stainless Steel			SL1-22H
Lift Off Gable Lid, Clear Polycarbonate	GL1-8AF		GL1-22AF
Polypropylene Spheres	BP0368 (2 packs required)		BP0368 (4 packs required)
PERFORATED TRAYS			
Perforated Tray, Stainless Steel	SA01773		SBF01804
39 x 25ml Flask Clip Tray			SFT0025
32 x 50ml Flask Clip Tray			SFT0050
18 x 100ml Flask Clip Tray			SFT0100
12 X 250ml Flask Clip Tray			SFT0250
8 x 500ml Flask Clip Tray			SFT0500
5 x 1000ml Flask Clip Tray			SFT1000
2 x 2000ml Flask Clip Tray			SFT2000
Universal Spring Tray			SFT9000
FLASK CLIPS			
25ml Flask Clip		FC0025	
50ml Flast Clip		FC0050	
100ml Flast Clip		FC0100	
250ml Flast Clip		FC0250	
500ml Flast Clip		FC0500	
1000ml Flask Clip		FC1000	
2000ml Flask Clip		FC2000	
TEST TUBE RACKS			
Stainless Steel:			
26 holes x 17mm diameter		6870	
16 holes x 26mm diameter		6871	
36 holes x 13mm diameter		6872	
18 holes x 19mm diameter		6873	
12 holes x 32mm diameter		6900	
Test Tube Rack Tray			STT004



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 heating and timer controls with ultrasonic boost, degas and sweep functions. The bath has a sweep function for perfect and even distribution of ultrasonic activity, with an ultrasonic boost function for 25% more power. The auto-degassing function is useful for liquid changes in the tank, de-carbonating and degassing HPLC solutions.

Temperature, time and activating sonics can be easily and rapidly set with the push button, wipe clean control panel, featuring an illuminated bold display. Splash proof controls with a drip bar above the control panel, guides spills and drips away from the easy to use temperature and timer dials.

There is a touch keypad for boost, sweep and degas with start/stop and on/off functions. Temperature is set with analogue dial in increments of 5°C, time values in 1 minute increments with indication of time remaining as well as a permanent 'on' function. The bath will switch off after 12 hours if no keys have been activated, to prevent unintended operation.

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. Do not allow items to touch the base of the tank, an accessory basket is recommended when in use. A range of accessory lids are available. It is suggested that to achieve consistent heating, minimise evaporation and to prevent contamination when ultrasonic bath is not in use, it should be covered with a lid. This range is designed for intermittent and permanent 'on' use.

SW Series Ultrasonic Baths

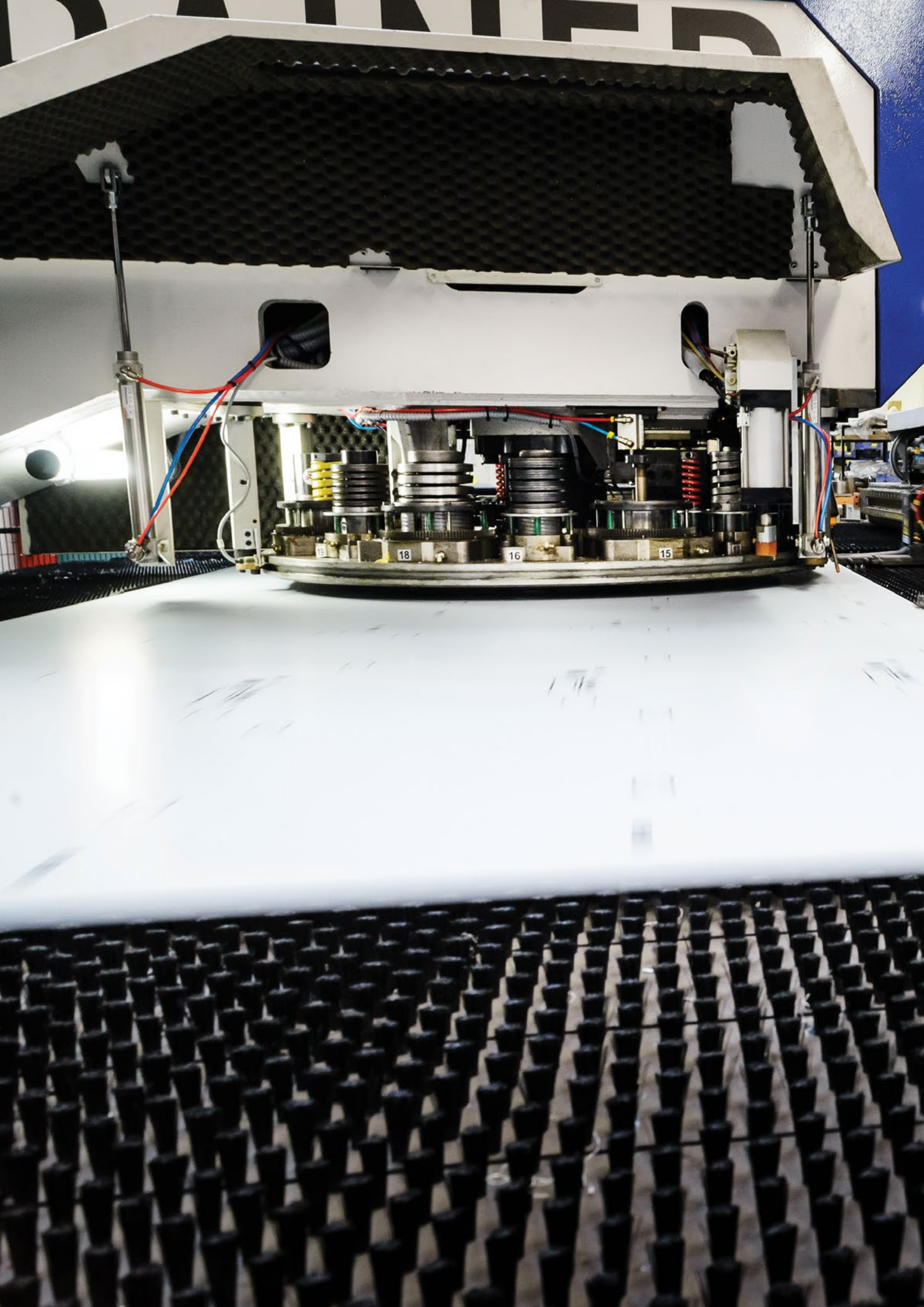
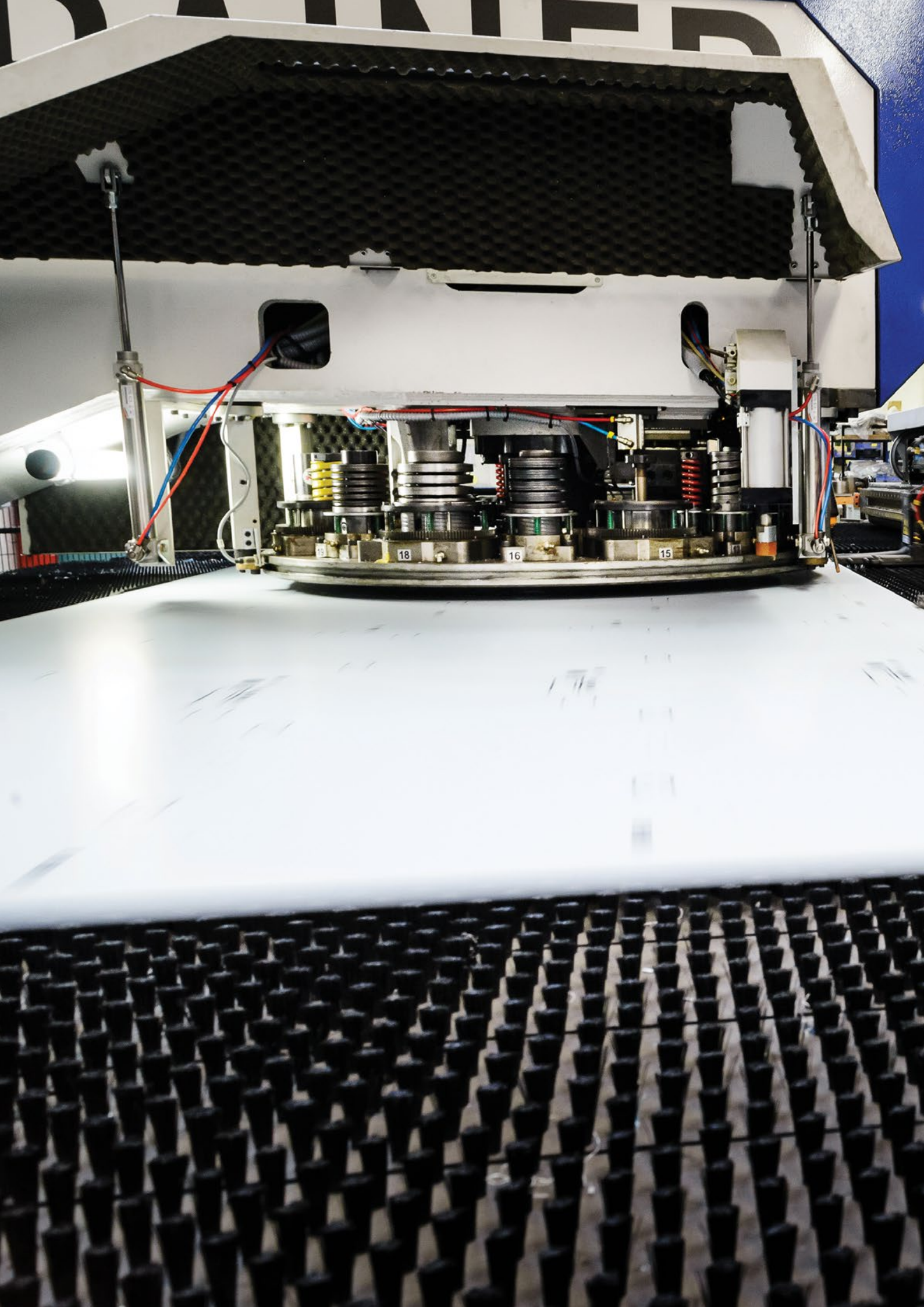


	SW1H	SW3H	SW6H	SW12H
GENERAL				
Temp. Range	30°C - 80°C			
Temp. Control	Analogue dial pointer in increments of 5°C			
Timer	Time setting 1 minute with indication of timer remaining or permanent 'on' function			
Heater Power (220-240V)	60W	200W		800W
Voltage	120V or 230V models 50-60Hz			
Ultrasonic Effective Output	30W	200W		
Ultrasonic Peak Power/ Frequency	240W / 38kHz	800W / 38kHz		
Drain (12mm Bore)				
DIMENSIONS				
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
GENERAL			
Temp. Range	30°C - 80°C		
Temp. Control	Analogue dial pointer in increments of 5°C		
Timer	Time setting 1 minute with indication of timer remaining or permanent 'on' function		
Heater Power (220-240V)		1200W	1000W
Voltage	120V or 230V models 50-60Hz		
Ultrasonic Effective Output		300W	
Ultrasonic Peak Power/ Frequency		1200W / 38kHz	
Drain (12mm Bore)			
DIMENSIONS			
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						









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