Clifton UNSTIRRED BATH

HEATING COOLING

BH series BLOCKHEATERS
HP series HOTPLATES
NE7st series THERMOSTATIC CABINETS
NE7 series COOLED INCUBATORS
NE8 series INCUBATORS
NE9 series OVENS
KS series STERILISERS

Clifton Range®

Welcome to the *Clifton Range*® from Nickel-Electro Ltd

The Clifton Range® is part of Nickel-Electro Ltd, a family firm based in Weston-super-Mare which was incorporated as a limited company in 1941, but its roots can be traced back to 1935 when the business first started. Now in its 3rd generation of family members, the company prides itself on being a strongly established, independent British manufacturer.

The company's original name back in 1935 was Nick-El-Ectro and upon incorporation in 1941 changed to Nick-El-Electro. In 1964 the company name was finally settled as Nickel-Electro, a much easier name to pronounce!

Continuous investment in the latest manufacturing and information technology means that the company can remain competitive and innovative with new products and designs.

Over the years Nickel-Electro has developed into a leading manufacturer of laboratory consumables and equipment. The company has extensive knowledge and expertise in manufacturing highly accurate temperature control equipment for the scientific market.

The Clifton brand takes its name from The Clifton Suspension Bridge in Bristol, which was designed and built by the famous Victorian engineer Isambard Kingdom Brunel and is recognized as engineering excellence.

Melvin Dickson

Managing Director
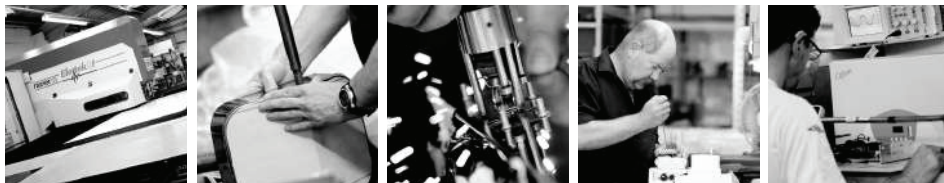
HEATING COOLING

BH series BLOCKHEATERS
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DIGITAL AND ANALOGUE

BH-1 series, Blockheaters

Clifton® Blockheaters provide a safe, dry and consistent method of heating accessory aluminium blocks with excellent thermal conductivity for heating tubes.

Cat No.	BH-1/DIG	BH-1T
Temperature range	ambient + 5°C - 150°C	ambient + 5°C - 120°C
Temperature control	0.1°C digital LED	analogue dial
Uniformity	±0.1°C @ 60°C	±0.5°C @ 60°C
Sensitivity	±0.1°C @ 60°C	±0.5°C @ 60°C
Temperature alarm	+ 4° C with heater cut-off, indication	-
Timer resolution	1 minute	-
Timer setting	variable, 00hrs.01mins - 99hrs.59mins	-
Heater, Watts	250W	
Well capacity[1]	1 or 2 blocks	
Well dims	140w x 50d x 72h mm	
Overall dims	200w x 295d x 85h mm	
Voltage	230V	
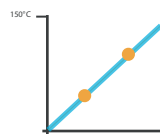
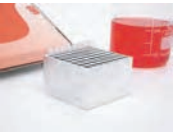1. Two of following accessory blocks can be fitted into heating well: DBK-0.2, DBK-0.5, DBK-1.5, DBK-2.0
2. Wide range of accessory blocks available.
3. BH-1/DIG is dual point calibrated at Factory.

150°C
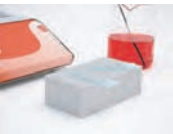
Factory pre-set two point calibration on every unit BH-1/DIG only.

Clifton Range® - 3 YEAR WARRANTY

ACCESSORIES

Any two blocks can be fitted in heating well, for micro tubes

DBK-0.2	0.2ml micro tube block 54 holes	DBK-0.5	0.5ml micro tube block 16 holes	DBK-1.5	1.5ml micro tube block 12 holes	DBK-2.0	2.0ml micro tube block 16 holes

Any one block can be fitted in heating well, for tubes

DBK-0	Plain block	DBK-10	10mm x 32 hole block	DBK-12	12mm x 32 hole block	DBK-13	13mm x 32 hole block

DBK-16	16mm x 18 hole block	DBK-19	19mm x 10 hole block	DBK-25	25mm x 10 hole block	DBK-50	50ml x 8 hole block

Bath Armor™ accepts any tube size

BA-0.5	Bath Armor 0.5 litre

Alternative to blocks, thermally efficient, accepts
any size shape tube or vessel the same time.

Lid Cover

BHL-1	Hinged lid safety cover

Slide Dryer

HIST-14	Slide Dryer for BH-1T
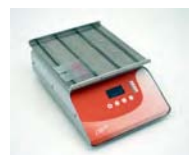
BLOCKHEATERS
DIGITAL AND DUO

BH-2 series, Blockheaters and DuoBlockHeater

Clifton® Blockheaters provide a safe, dry and consistent method of heating tubes and microtubes with precise temperature control. Available in single, double and DuoBlockHeater™ formats, the latter allowing independent control of each block in one space saving fomat.

The hinged lid provides incubation for microtubes and microplates.

Cat No.	BH-2/1	BH-2/2
Temperature range	ambient + 5°C - 105°C	ambient + 5°C - 105°C
Temperature control	0.1°C digital LED	0.1°C digital LED
Uniformity	±0.2°C @ 37°C	±0.2°C @ 37°C
Sensitivity	±0.2°C @ 37°C	±0.2°C @ 37°C
Timer with audible buzzer	variable, 00hrs.01mins - 99hrs.59mins	
Heater, Watts	100W	200W
Well capacity	single block	double blocks
Well dims	108w x 72d x 49h mm	108w x 144d x 49h mm
Overall dims	190w x 250d x 130h mm	210w x 365d x 150h mm
Voltage	230V	

Clifton Range® - 3 YEAR WARRANTY

ACCESSORIES
for BH-2 series

Cat. No.	Description
DBH-0.2	0.2ml micro tubes x 96 hole block
DBH-0.5	0.5ml micro tubes x 45 hole block
DBH-1.5	1.5ml micro tubes x 35 hole block
DBH-2.0	2.0ml micro tubes x 35 hole block
DBH-6	6mm diameter tubes x 40 hole block
DBH-10	10mm diameter tubes x 28 hole block
DBH-12	12mm diameter tubes x 24 hole block
DBH-13	13mm diameter tubes x 24 hole block
DBH-16	16mm diameter tubes x 14 hole block
DBH-19	19mm diameter tubes x 12 hole block

BH-DUO
ambient + 5°C - 105°C
0.1°C digital LED
±0.1°C @ 37°C
±0.1°C @ 37°C
variable, 00hrs.01mins - 99hrs.59mins
200W
Duo blocks, independently controlled
108w x 72d x 49h mm [duo]
210w x 365d x 150h mm
230V

THERMOSTATIC HOTPLATES

HP-1 series, Analogue Thermostatic Hotplates

These Clifton® analogue hotplates feature a generous working area, thermostatic control, with an illuminated on/of switch, heater and hot warning indicators.

Featuring a hob surface overlaps the body to ensure that no spillages enter the controls. The hob is solid aluminium for excellent thermal properties and even heat distribution.

Cat No.	HP1-1	HP1-2
Temperature range	ambient + 10℃ - 350℃	
Temperature control	Analogue thermostatic control	
Sensitivity	±10℃ @ 150℃	
Heater, Watts	1000W	2000W
Retort points	single M10 fixing point	double M10 fixing points
Hotplate dimensions	305w x 240d mm	457w x 305d mm
Overall dimensions	305w x 240d x 200h mm	457w x 305d x 200h mm
Voltage	230V	

Clifton Range® - 3 YEAR WARRANTY

Features Include:

* Accepts standard laboratory retort rods for scaffolding to be constructed.

* Solid aluminium top plate with excellent thermal properties.

* Hob overlaps the controls ensuring spillages do not ingress into controls.

* Hot warning indicator

ACCESSORIES
for HP-1 series

SANDBATH KITS

These kits provide a frame for sand to be contained on the hotplate allowing vessels to be heated from the base and sides being partially immersed in sand.

Cat. No.	Description
SB1-1	Sand bath kits for HP1-1 and HP1-1D Hotplates.
SB1-2	Sand bath kits for HP1-2 and HP1-2D Hotplates.
SB1-3	Sand bath kits for HP1-3 and HP1-3D Hotplates.

RETORT RODS FOR LABORATORY SCAFFOLDING

These retort rods with M10 fixing fit retort points at rear of each hotplate and with laboratory clamps hold hot vessels safely and securely in use. They also provide basis for affixing laboratory scaffolding to the hotplate.

Cat. No.	Description
8611	Retort Rod - aluminium - 600mm x 12mm diameter
8614	Retort Rod - aluminium - 500mm x 10mm diameter
8624	Retort Rod - stainless steel - 500mm x 10mm diameter
8631	Retort Rod - mild steel - 600mm x 12.5mm diameter
8632	Retort Rod - mild steel - 750mm x 12.5mm diameter
8633	Retort Rod - mild steel - 1000mm x 12.5mm diameter
8634	Retort Rod - mild steel - 500mm x 12.5mm diameter

HP1-3
ambient +10 C - 350°C
Analogue thermostatic control
±10°C @ 150°C
2400W
double M10 fixing points
686w x 305d mm
690w x 305d x 200h mm
230V

DIGITAL HOTPLATES

HP-1D series, Digital Hotplates

These Clifton® digital hotplates feature precision PID control providing degree by degree temperature setting and control.

Featuring a hob surface overlaps the body to ensure that no spillages enter the controls. The hob is solid aluminium for excellent thermal properties and even heat distribution over its working area.

We verify the performance of each Hotplate calibrating its controls and hob temperature.

Cat No.	HP1-1D	HP1-2D
Temperature range	ambient + 10°C - 350°C	
Temperature control	PID digital, LED display, resolution 1°C	
Uniformity	±0.5°C @ 60°C	
Sensitivity	±0.5°C @ 60°C	
Timer	variable, 00hrs:01mins - 99hrs:59mins	
Heater, Watts	1000W	2000W
Retort points	single M10 fixing point	double M10 fixing points
Hotplate dimensions	305w x 240d mm	457w x 305d mm
Overall dimensions	305w x 240d x 200h mm	457w x 305d x 200h mm
Voltage	230V	

Clifton Range® - 3 YEAR WARRANTY

Features Include:

* Accepts standard laboratory retort rods for scaffolding to be constructed.

* Solid aluminium top plate with excellent thermal properties.

* Hob overlaps the controls ensuring spillage's do not ingress into controls.

* Settings for temperature control only or a combination of temperature and time. Timer commences on hob reaching set temperature.

* Auto setting over temperature alarm.

HP1-3D
ambient +10 C - 350°C
PID digital, LED display, resolution 1°C
±0.5°C @ 60°C
±0.5°C @ 60°C
00hrs:01mins - 99hrs:59mins
2400W
double M10 fixing points
686w x 305d mm
690w x 305d x 200h mm
230V

ACCESSORIES
for HP-1D series

SANDBATH KITS

These kits provide a frame for sand to be contained on the hotplate allowing vessels to be heated from the base and sides being partially immersed in sand.

Cat. No.	Description
SB1-1	Sand bath kits for HP1-1 and HP1-1D Hotplates.
SB1-2	Sand bath kits for HP1-2 and HP1-2D Hotplates.
SB1-3	Sand bath kits for HP1-3 and HP1-3D Hotplates.

RETORT RODS FOR LABORATORY SCAFFOLDING

These retort rods with M10 fixing fit retort points at rear of each hotplate and with laboratory clamps hold hot vessels safely and securely in use. They also provide basis for affixing laboratory scaffolding to the hotplate.

Cat. No.	Description
8611	Retort Rod - aluminium - 600mm x 12mm diameter
8614	Retort Rod - aluminium - 500mm x 10mm diameter
8624	Retort Rod - stainless steel - 500mm x 10mm diameter
8631	Retort Rod - mild steel - 600mm x 12.5mm diameter
8632	Retort Rod - mild steel - 750mm x 12.5mm diameter
8633	Retort Rod - mild steel - 1000mm x 12.5mm diameter
8634	Retort Rod - mild steel - 500mm x 12.5mm diameter

MISCELLANEOUS

CAL	Calibration Record

THERMOSTATIC
CABINETS

NE7-ST+ series, Thermostatic Cabinets

Clifton® Thermostatic Cabinets provide chamber temperatures settable from 3°C to 40°C, a cost effective alternative to Cooled Incubators.

Thermostatic Cabinets provide a combination of heating and cooling producing a controlled environment with fan circulation for consistent chamber temperature. Featuring bold illuminated LCD display with easy to use touch sensitive controls on a wipe clean surface.

The aluminium lined chamber features a solid hinged lockable door and an access port. Supplied with wire shelves that can be adjusted for height on runners inside the chamber.

Factory calibrated at 37°C and supplied with certificate.

NE7-ST+ series controls, touch keypads, illuminated LCD display

NE7-ST5+

Cat. No.	NE7-ST1+	NE7-ST2+	NE7-ST3+
Capacity, litres	65 l	150 l	200 l
Internal Dims [2]	470w x 300d x 430h mm	520w x 420d x 660h mm	520w x 420d x 860h mm
Overall Dims	550w x 660d x 600h mm	600w x 610d x 850h mm	600w x 610d x 1050h mm
Door configuration	Single door	Single door	Single door
Sensitivity @37°C [1]	±0.2°C	±0.2°C	±0.3°C
Maximum shelf load	10kg	10kg	10kg
Shelves fitted	2	3	3
Shelves max no.	2	4	4
Watts	160W	170W	170W
Voltage	230V	230V	230V
Weight	30kg	48kg	52kg

1. Sensitivity measurements based on temperature readings on shelf in centre of the chamber.
2. Working capacity of chamber can be smaller.
3. Allow sufficient air gap at the rear of the unit.
4. Before ordering please check the room or building access where this Incubator will be installed and electrical power requirements.

Clifton Range® - 3 YEAR WARRANTY

Features Include:

* Temperature
  - range: 3°C to 40°C
  - display resolution 0.1°C

* Controls
  - Intuitive to use controls, illuminated LCD display, touch sensitive keypads with prompts.
  - Run continuously at set temperature, timed from 1 minute to 30days or delay start from 1 minute to 99h:59mins .
  - Program control of fan speed, temperature and time.
  - Data logging to USB or RS 232.
  - Auto diagnostics with alarms.
  - Real time clock.
  - High and low temperature alarm.
  - Door opening sounder and alarm.
  - Over temperature protection.
  - Defrost function.

ACCESSORIES - FACTORY FIT OPTIONS

NE7-ST+ series Thermostatic Cabinets

ADDITIONAL INTERIOR GLASS DOOR

Cat No.	Description
GD-ST1+	Additional interior glass door, for 65 litre cabinets
GD-ST2+	Additional interior glass door, for 150 litre cabinets
GD-ST3+	Additional interior glass door, for 200 litre cabinets
GD-ST4+	Additional interior glass door, for 250 litre cabinets
GD-ST5+	Additional interior glass door, for 300 litre cabinets

DOOR WITH VIEWING WINDOW

Cat No.	Description
W-ST+1	Exterior glass door, for 65 litre thermostatic cabinet
W-ST+2	Exterior glass door, for 150 litre thermostatic cabinet
W-ST+3	Exterior glass door, for 200 litre thermostatic cabinet
W-ST+4	Exterior glass door, for 250 litre thermostatic cabinet
W-ST+5	Exterior glass door, for 300 litre thermostatic cabinet

WIRE SHELVES

Cat No.	Description
WS-ST1+	Wire shelf, max 10 kg load, for 65 litre thermostat cabinet
WS-ST2-5+	Wire shelf, max 10 kg load, for 150 to 300 litre cabinets

PERFORATED SHELVES

Cat No.	Description
SP-ST1+	Perforated shelf, max 10 kg load, for 65 litre cabinet
SP-ST2+	Perforated shelf, max 10 kg load, for 150 litre cabinet
SP-ST3+	Perforated shelf, max 10 kg load, for 200 litre cabinet
SP-ST4+	Perforated shelf, max 10 kg load, for 250 litre cabinet
SP-ST5+	Perforated shelf, max 10 kg load, for 300 litre cabinet

NE7-ST4+	NE7-ST5+
250 *l*	300 *l*
520w x 420d x 1060h mm	520w x 420d x 1260h mm
600w x 610d x 1250h mm	600w x 610d x 1450h mm
Single door	Single door
±0.3°C	±0.3°C
10kg	10kg
4	4
6	7
330W	330W
230V	230V
61kg	66kg

ADDITIONAL ACCESSORIES ARE AVAILABLE ASK FOR DETAILS.

COOLED INCUBATORS

NE7 series, Cooled Incubators

This series of Clifton® Cooled Incubators feature precision temperature control with programming options providing consistent chamber temperatures. Depending on model, controls either feature touch sensitive keys with illuminated LCD display or colour touch screen.

Featuring high grade stainless steel chamber sealed shut with a solid door.

These Cooled Incubators can be fitted with a range of accessories including internal glass door, viewing window in the door, additional shelves and Photoperiodic or Phytotron lighting.

NE7-S series controls, touch keypads, illuminated LCD display

NE7-TP series controls, touch screen 5.7" colour LCD display

Cat. No.	NE7-56S NE7-56TP	NE7-112S NE7-112TP	NE7-240S NE7-240TP
Capacity, litres	56 l	112 l	240 l
Internal Dims [2]	395w x 360d x 395h mm	460w x 450d x 540h mm	600w x 510d x 800h mm
Overall Dims	590w x 560d x 950h mm	650w x 650d x 1095h mm	815w x 710d x 1420h mm
Door configuration	Single door	Single door	Double door
Sensitivity @37°C [1]	±0.2°C	±0.2°C	±0.2°C
Uniformity @37°C [5]	±0.2°C	±0.2°C	±0.2°C
Shelves fitted	2	2	3
Shelves max no.	5	7	10
Watts	400W	400W	800W
Voltage	230V	230V	230V
Weight	69kg	90kg	140kg

1. Sensitivity measurements based on temperature readings on shelf in centre of the chamber.
2. Working capacity of chamber can be smaller.
3. Temperature range can be extended to -10°C as an accessory item, factory configurable.
4. Before ordering please check the room or building access where this Incubator will be installed and electrical power requirements.
5. Uniformity measured in vertical axis in the chamber using Wired Shelves.
6. Incubator constructed from powder coated stainless steel.

Clifton Range® - 3 YEAR WARRANTY

Features Include:

* Temperature
  - range: 0°C to 70°C [3] (0°C to 47°C cooling range)
  - dual pt100 temperature probes [11]

* Controls, NE7-S series
  - Intuitive to use controls, illuminated LCD display, touch sensitive keypads with prompts.
  - Run continuously at set temperature, delay start or commence to start on a date and time in the future.
  - Offers 3 programs, up to 6 temperature and time time segments in each program.
  - Program control of fan speed, exhaust air flap, temperature, time, immediate start, delay start, future start.
  - Data logging to USB.
  - Auto diagnostics with sensor alarms.
  - Power fail alarm, recording and resumption.
  - High and low temperature alarm.
  - Door opening sounder and alarm.
  - Over temperature protection and sample protection.

* Controls, NE7-TP series
  - Touch screen colour LCD display, intuitive to use.
  - Temperature set and display, 1°C resolution, with fan speed, set temperature and date and time.
  - Run continuously at set temperature, delay start or commence to start on a date and time in the future.
  - Login for each user with 20 programs, up to 9 temperature and time segments in each program.
  - Program control of fan speed, exhaust air flap, temperature, time, immediate start, delay start, future start, cycle to repeat or enable 7-day mode.
  - Data logging to USB.
  - Auto diagnostics with sensor alarms.
  - Power fail alarm, recording and resumption.
  - High and low temperature alarm.
  - Door opening sounder and alarm.
  - Over temperature protection and sample protection.

NE7-400S NE7-400TP	NE7-750S NE7-750TP
400 *l*	750 *l*
800w x 510d x 1040h mm	1040w x 600d x 1200h mm
1015w x 710d x 1610h mm	1250w x 810d x 1780h mm
Double door	Double door
±0.3°C	±0.5°C
±0.4°C	±0.5°C
3	5
14	16
1200W	1800W
230V	230V
180kg	280kg

Ask about Chill Buckets - your mobile mini cooled incubator for 8 hours cold benchtop use. The ice bucket, reinvented. No more melted ice, puddles, floating tubes or wet and contaminated samples.

ACCESSORIES - FACTORY FIT OPTIONS
NE7 series Cooled Incubators

ADDITIONAL INTERIOR GLASS DOOR

Cat No.	Description
GD-56	Additional interior glass door, for 56 litre incubators
GD-112	Additional interior glass door, for 112 litre incubators
GD-240	Additional interior glass door, for 240 litre incubators
GD-400	Additional interior glass door, for 400 litre incubators
GD-750	Additional interior glass door, for 750 litre incubators

DOOR WITH VIEWING WINDOW

Cat No.	Description
W-56	Door with viewing window, for 56 litre incubators
W-112	Door with viewing window, for 112 litre incubators
W-240	Door with viewing window, for 240 litre incubators
W-400	Door with viewing window, for 400 litre incubators
W-750	Door with viewing window, for 750 litre incubators

WIRE SHELVES

Cat No.	Description
WS-56	Wire shelf, max 10 kg load, for 56 litre incubators
WS-112	Wire shelf, max 10 kg load, for 112 litre incubators
WS-240	Wire shelf, max 10 kg load, for 240 litre incubators
WS-400	Wire shelf, max 10 kg load, for 400 litre incubators
WS-750	Wire shelf, max 10 kg load, for 750 litre incubators

PERFORATED SHELVES

Cat No.	Description
SP-56	Perforated shelf, max 10 kg load, for 56 litre
SP-112	Perforated shelf, max 10 kg load, for 112 litre incubators
SP-240	Perforated shelf, max 10 kg load, for 240 litre incubators
SP-400	Perforated shelf, max 10 kg load, for 400 litre incubators
SP-750	Perforated shelf, max 10 kg load, for 750 litre incubators

PHOTOPERIODIC SYSTEM
Featuring day and night simulation software, maximum night temperature range -10°C to 70°C and +5°C to 70°C for day temperatures. Light intensity is fixed.

Cat No.	Description
PH-2-56	2 light elements, ceiling mounted, for 56 litre incubators
PH-3-112	3 light elements, ceiling mounted, for 112 litre incubators
PH-5-56	5 light elements, door mounted, for 56 litre incubators
PH-6-112-240	6 light elements, door mounted, for 112, 240 litre incubators
PH-8-240-400	8 light elements, door mounted, for 240, 400 litre incubators
PH-10-750	10 light elements, door mounted, for 750 litre incubators

ADDITIONAL ACCESSORIES ARE AVAILABLE ASK FOR DETAILS.

FAN CIRCULATION

NE8 series, Incubators, fan circulation

Clifton® Incubators feature intuitive easy to use controls with on screen guidance within a bold illuminated LCD display, offering precise time and temperature control from ambient +5°C to 100°C.

The Incubator can run at a set temperature immediately, delay start or commence to start in the future at a given date and time. Additionally with three available programs with up to 6 segments in each program, which allows the creation of temperature time profiles of your choice.

All control surfaces feature smooth easy to wipe clean surfaces.

The digital microprocessor controls feature real time clock, diagnostics, digital LCD display to 0.1°C resolution, dual pt100 probes, including event log and data log of actual temperatures along with USB and RS232 interface. Every unit is supplied with a Calibration Certificate for validation.

Featuring a stainless steel interior with stainless steel outer case powder painted. Particular attention paid to providing a good tight door closure and hinge design to maintain a sealed chamber in use. Case is well insulated to reduce heat loss in use. Access port fitted as standard.

NE8-S series controls, touch keypads, illuminated LCD display

NE8-56S shown above

Cat. No.	NE8-15S	NE8-32S	NE8-56S
Capacity, litres	15 l	32 l	56 l
Internal Dims [2]	320w x 180d x 240h mm	400w x 250d x 320h mm	395w x 360d x 395h mm
Overall Dims	440w x 350d x 520h mm	520w x 435d x 600h mm	590w x 560d x 700h mm
Door configuration	Single door	Single door	Single door
Sensitivity @37°C[1]	±0.5 ℃	±0.2°C	±0.2°C
Uniformity @37°C [5]	±0.5 ℃	±0.2°C	±0.2°C
Shelves fitted	1	1	2
Shelves max no.	2	3	5
Watts	300W	300W	800W
Voltage	230V	230V	230V
Weight	27kg	37kg	50kg

1. Sensitivity measurements based on temperature readings on shelf in centre of the chamber.
2. Working capacity of chamber can be smaller.
3. Before ordering please check the room or building access where this Incubator will be installed and electrical power requirements.
4. Uniformity measured in vertical axis in the chamber using Wired Shelves.

Clifton Range® - 3 YEAR WARRANTY

Features Include:

* Temperature
  - range: ambient +5°C to 100°C
  - dual pt100 temperature probes

* Controls, NE8-S series
  - Intuitive to use controls, illuminated LCD display, touch sensitive keypads with prompts.
  - Run continuously at set temperature, delay start or commence to start on a date and time in the future.
  - Offers 3 programs, up to 6 temperature and time time segments in each program.
  - Program control of fan speed, exhaust air flap, temperature, time, immediate start, delay start, future start.
  - Data logging to USB.
  - Auto diagnostics with sensor alarms.
  - Power fail alarm, recording and resumption.
  - High and low temperature alarm.
  - Door opening sounder and alarm.
  - Over temperature protection and sample protection.

ACCESSORIES - FACTORY FIT OPTIONS

NE8 series Incubators

ADDITIONAL INTERIOR GLASS DOOR

Cat No.	Description
GD-56	Additional interior glass door, for 56 litre incubators
GD-112	Additional interior glass door, for 112 litre incubators
GD-240	Additional interior glass door, for 240 litre incubators
GD-400	Additional interior glass door, for 400 litre incubators
GD-750	Additional interior glass door, for 750 litre incubators

DOOR WITH VIEWING WINDOW

Cat No.	Description
W-56	Door with viewing window, for 56 litre incubators
W-112	Door with viewing window, for 112 litre incubators
W-240	Door with viewing window, for 240 litre incubators
W-400	Door with viewing window, for 400 litre incubators
W-750	Door with viewing window, for 750 litre incubators

WIRE SHELVES

Cat No.	Description
WS-56	Wire shelf, max 10 kg load, for 56 litre incubators
WS-112	Wire shelf, max 10 kg load, for 112 litre incubators
WS-240	Wire shelf, max 10 kg load, for 240 litre incubators
WS-400	Wire shelf, max 10 kg load, for 400 litre incubators
WS-750	Wire shelf, max 10 kg load, for 750 litre incubators

PERFORATED SHELVES

Cat No.	Description
SP-56	Perforated shelf, max 10 kg load, for 56 litre
SP-112	Perforated shelf, max 10 kg load, for 112 litre incubators
SP-240	Perforated shelf, max 10 kg load, for 240 litre incubators
SP-400	Perforated shelf, max 10 kg load, for 400 litre incubators
SP-750	Perforated shelf, max 10 kg load, for 750 litre incubators

ADDITIONAL ACCESSORIES ARE AVAILABLE ASK FOR DETAILS.

NE8-112S	NE8-240S	NE8-400S	NE8-750S
112 l	240 l	400 l	750 l
460w x 450d x 540h mm	600w x 510d x 800h mm	800w x 510d x 1040h mm	1040w x 600d x 1200h mm
650w x 650d x 845h mm	815w x 710d x 1140h mm	1015w x 710d x 1380h mm	1255w x 810d x 1620h mm
Single door	Double door	Double door	Double door
±0.2°C	±0.2°C	±0.4°C	±0.4°C
±0.2°C	±0.2°C	±0.4°C	±0.4°C
2	3	3	5
7	10	14	16
400W	800W	1200W	1800W
230V	230V	230V	230V
85kg	150kg	250kg	380kg

FAN CIRCULATION OVENS

NE9 series, Drying Ovens, fan circulation

Clifton® Drying Ovens feature intuitive easy to use controls with on screen guidance within a bold illuminated LCD display, offering precise time and temperature control from ambient +5°C to 300°C.

The Oven can run at a set temperature immediately, delay start or commence to start in the future at a given date and time. Additionally with three available programs with up to 6 segments in each program which allows the creation of temperature time profiles of your choice.

All control surfaces feature smooth easy to wipe clean surfaces.

The digital microprocessor controls feature real time clock, diagnostics, digital LCD display to 0.1°C resolution, dual pt100 probes, including event log and data log of actual temperatures along with USB and RS232 interface. Every unit is supplied with a Calibration Certificate for validation.

Featuring a stainless steel interior with stainless steel outer case powder painted. Particular attention paid providing a good tight door closure and hinge design to maintain a sealed chamber in use. Case is well insulated to reduce heat loss in use. Access port fitted as standard.

NE9-S series controls, touch keypads, illuminated LCD display

NE9-56S shown above

Cat. No.	NE9-15S	NE9-32S	NE9-56S
Capacity, litres	15 l	32 l	56 l
Internal Dims [2]	320w x 180d x 240h mm	400w x 250d x 320h mm	395w x 360d x 395h mm
Overall Dims	440w x 350d x 520h mm	520w x 435d x 600h mm	590w x 560d x 700h mm
Door configuration	Single door	Single door	Single door
Sensitivity @ 70°C[1]	±0.7 °C	±0.4°C	±0.3°C
Uniformity @150°C [4]	±0.7 °C	±0.4°C	±0.3°C
Shelves fitted	1	1	2
Shelves max no.	2	3	5
Watts	600W	1100W	1600W
Voltage	230V	230V	230V
Weight	27kg	37kg	61kg

1. Sensitivity measurements based on temperature readings on shelf in centre of the chamber.
2. Working capacity of chamber can be smaller.
3. Before ordering please check the room or building access where this Incubator will be installed and electrical power requirements.
4. Uniformity measured in vertical axis in the chamber using Wired Shelves.

Clifton Range® - 3 YEAR WARRANTY

Features Include:

* Temperature
  - range: ambient +5°C to 300°C
  - dual pt100 temperature probes

* Controls, NE9-S series
  - Intuitive to use controls, illuminated LCD display, touch sensitive keypads with prompts.
  - Run continuously at set temperature, delay start or commence to start on a date and time in the future.
  - Offers 3 programs, up to 6 temperature and time time segments in each program.
  - Program control of fan speed, exhaust air flap, temperature, time, immediate start, delay start, future start.
  - Data logging to USB.
  - Auto diagnostics with sensor alarms.
  - Power fail alarm, recording and resumption.
  - High and low temperature alarm.
  - Door opening sounder and alarm.
  - Over temperature protection and sample protection.

ACCESSORIES - FACTORY FIT OPTIONS
NE9 series Drying Ovens

WIRE SHELVES

Cat No.	Description
W-15	Wire shelf, max 10kg load, for 15 litre Drying Ovens
W-32	Wire shelf, max 10kg load, for 32 litre Drying Ovens
W-56	Wire shelf, max 10kg load, for 56 litre Drying Ovens
W-112	Wire shelf, max 10kg load, for 112 litre Drying Ovens
W-240	Wire shelf, max 10kg load, for 240 litre Drying Ovens
W-400	Wire shelf, max 10kg load, for 400 litre Drying Ovens
W-750	Wire shelf, max 10kg load, for 750 litre Drying Ovens

PERFORATED SHELVES

Cat No.	Description
SP-15	Perforated shelf, max 10kg load, for 15 litre Drying Ovens
SP-32	Perforated shelf, max 10kg load, for 32 litre Drying Ovens
SP-56	Perforated shelf, max 10kg load, for 56 litre Drying Ovens
SP-112	Perforated shelf, max 10kg load, for 112 litre Drying Ovens
SP-240	Perforated shelf, max 10kg load, for 240 litre Drying Ovens
SP-400	Perforated shelf, max 10kg load, for 400 litre Drying Ovens
SP-750	Perforated shelf, max 10kg load, for 750 litre Drying Ovens

ADDITIONAL ACCESSORIES ARE AVAILABLE ASK FOR DETAILS.

NE9-112S	NE9-240S	NE9-400S	NE9-750S
112 *l*	240 *l*	400 *l*	750 *l*
460w x 450d x 540h mm	600w x 510d x 800h mm	800w x 510d x 1040h mm	1040w x 600d x 1200h mm
650w x 650d x 845h mm	815w x 710d x 1140h mm	1015w x 710d x 1380h mm	1255w x 810d x 1620h mm
Single door	Double door	Double door	Double door
±0.5°C	±0.6°C	±0.7°C	±0.7°C
±0.7°C	±1.0°C	±1.5°C	±1.6°C
2	3	3	5
7	10	14	16
2400W	3000W	3900W	5400W
230V	230V	400V 3 N ac	400V 3 N ac
85kg	150kg	250kg	380kg

STERILISERS
DRY HEAT OR STEAM

KSD series, Dry heat Sterilisers, fan circulation

Clifton® Dry heat Sterilisers feature intuitive easy to use controls with on screen guidance within a bold illuminated LCD display, time and temperature control from ambient +5℃ to 250℃.

All control surfaces feature smooth easy to wipe clean surfaces.

The digital microprocessor controls feature real time clock, diagnostics, digital LCD display to 0.1℃ resolution, including event log and data log of actual temperatures along with USB and RS232 interface. Every unit is supplied with a Calibration Certificate for validation.

Featuring a stainless steel interior.

KSD-56S shown above

Cat. No.	KSD-56S	KSD-112S	KSD-240S
Capacity, litres	56 *l*	112 *l*	56 *l*
Internal Dims [2]	395w x 360d x 395h mm	460w x 450d x 540h mm	600w x 510d x 800h mm
Overall Dims	590w x 560d x 700h mm	650w x 650d x 845h mm	815w x 710d x 1140h mm
Door configuration	Single door	Single door	Double door
Sensitivity @150℃ [1]	±0.5 ℃	±0.5°C	±0.5°C
Shelf max. workload	10kg	10kg	10kg
Shelves fitted	2	2	3
Shelves max no.	5	7	10
Watts	1600W	2400W	3000W
Voltage	230V	230V	230V
Weight	61kg	85kg	150kg

1. Sensitivity measurements based on temperature readings on shelf in centre of the chamber.
2. Working capacity of chamber can be smaller.
3. Before ordering please check the room or building access where this Incubator will be installed and electrical power requirements.

ACCESSORIES AVAILABLE ASK FOR DETAILS.

Clifton Range® - 3 YEAR WARRANTY

KS series, Koch Steam Steriliser

Koch Steam Sterilisers boil water to produce steam for sterilising laboratory instruments and non-porous equipment.

Removable shelves with looped handles make for retrieval and ease loading and unloading.

The lid is designed to ensure steam is condensed and runs back into the chamber. Insulated handles are fitted to lid and unit.

For safe steaming the water level is governed by a reservoir which requires connection to a regulated water supply, to maintain safe water level and boiling water.

Cat. No.	KS1	KS2	KS3
Volume	35 *l*	60 *l*	180 *l*
Internal Dims	300w x 300d x 500h mm	400w x 400d x 500h mm	470w x 770d x 580h mm
Overall Dims	329w x 329d x 690h mm	431w x 431d x 690h mm	500w x 800d x 600h mm
Shelf size	288w x 288d mm	380w x 380d mm	450w x 750d mm
1st shelf working height	202mm	202mm	480mm
2nd shelf working height	190mm	190mm	-
Shelves fitted	2	2	1
Watts	1000W	1000W	2000W
Voltage	230V	230V	230V

Service and Support

Nickel-Electro Ltd provides comprehensive spares, product support and aftercare service.

Investing in the Future

We recognise the importance of investing in new technology, and have an on going programme of investment in the latest manufacturing equipment and information systems.

A wide Range of Products for a wide range of Markets

We produce laboratory euipment for a variety of market sectors. These include hospitals, secondary and higher education, the food and dairy industry, veterinarians, pharmeceutical companies, industry and quality control laboratories.

World-wide Reputation

Upholding the traditions of high quality Bristish products, Nickel-Electro Ltd exports across the globe, with major markets in Europe, the Middle East, Africa and Australasia.

Anti-bacterial surfaces

Anti-bacterial finishes inhibit the growth of bacteria. It has been tested by independent specialist test houses such as Law Laboratories (in the UK) using internationally recognized test methods and proven to be effective versus a wide range of bacteria species including Escherichia coli and Staphylococcus aureus (MRSA).

Hygienic coatings are part of a controlled approach to cleaner facilities. Within its formulation an active ingredient with proven anti-bacterial properties is bound into the coating. The efficacy of the finish applied to the Clifton range is maintained over its lifetime, as the anti-bacterial agent is integral within the paint.

In a busy laboratory environment, this finish effectively limits everyday bacteria transfer from operator to equipment and then on to other operators. This is one less source of contamination, contributing to essential clean working practices.

Key to dimensions
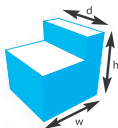
Trademarks

NE logo and Clifton range are registered trade marks of Nickel-Electro Limited.

Safety and Product marking

Clifton range laboratory equipment carries CE mark indicating that it meets the requirements of applicable European Directives.

The Clifton range meets International Standards BS EN 61010-1, Safety requirements for electrical and electronic equipment for measurement, control and laboratory use.

Equipment used for heating additionally meets BS EN 61010-2-010 Particular requirements for laboratory equipment for the heating of materials.

Equipment used for mixing additionally meets BS EN 61010-2-051 Particular requirements for laboratory equipment for mixing and stirring.

Centrifuges meet requirements BS EN 61010-2-020 Particular requirements for laboratory centrifuges.

The Cliton range meets International Standards BS EN 61326-1 Electrical equipment for measurement, control and laboratory use - EMC Requirements both A and B classes.

Every piece of Clifton equipment has a unique serial number, recorded on our database with its manufacturing inspection data. Every item is electrically tested for safety, and a copy of test certificate enclosed in the instruction book.

Temperature performance

We pride ourselves on assuring that Clifton range performs to the highest level. All Clifton temperature controlled equipment undergoes temperature calibration, in controlled conditions, to thoroughly test its performance before release to you.

Analogue controlled equipment is checked at one temperature over its working range against a UKAS calibrated reference device. We adjust the equipment to reference temperature.

Digital controlled equipment is checked at one or two temperatures over its range against a UKAS calibrated reference device measuring actual and and indicated temperatures.

Quality System

Our products are designed, developed and manufactured in a tightly controlled ISO9001 environment and all products are CE compliant.

Enviromental Policy

We recognise our responsibility towards the environment and fully aware of legislation, have a policy of re-use, recycle and waste minimisation.

NICKEL-ELECTRO LTD

Manufacturer of the Clifton Range.
Manufacturer of the Metalware Range.
Manufacturer of laboratory, medical and clinical equipment.

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