



**Severn
Sales**

Laboratory Equipment

New
high quality
laboratory
equipment

Issue 3

Welcome to



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Laboratory Equipment

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Autoclaves - bench top

Kambic bench-top autoclaves

These autoclaves are designed to sterilize various semes, materials, plastics, rubbers, fabrics as well as liquids in open or closed vessels. They operate an integral recirculating water reservoir system and a special air-removal process coupled with electronic microprocessor controls for quick, efficient and effective sterilisation cycles. Manufactured to ISO 9001:2000.

Model A-21

Features

- Simple & easy to operate
- Fully variable temperature & time acarameters
- Circular AISI 316 stainless-steel chamber
- Compact footprint
- Programmable control
- Variable cooling rates
- Single door locking mechanism
- Built in pressure gauge

Specifications

Exterior dimensions	500 x 400 x 550 mm (WXHXD)
Chamber dimensions	250Ø x 400mm
Volume	21L
Sterilization temperature range	105°C...135°C adjustable
Sterilization time	1...90 minutes adjustable
Drying time	1...90 minutes adjustable
No. of programs	5
Control	Microprocessor
Temperature display	Digital
Pressure display	Digital
No of shaves	4
Type	Horizontal table-top
Power supply	230V - 50 Hz / 2000W



A21

Model A-21 CA

Same as the Model A-21 but includes the following features.

Features

- Digital pressure gauge
- RS232 printer interface

Specifications

Exterior dimensions	500 x 400 x 550 mm (WXHXD)
Chamber dimensions	250Ø x 400mm
Volume	21L
Sterilization temperature range	105°C...135°C adjustable
Sterilization time	1...90 minutes adjustable
Drying time	1...90 minutes adjustable
No. of programs	5
Control	Microprocessor
Temperature display	Digital
Pressure display	Digital
No of shaves	4
Type	Horizontal table-top
Power supply	230V - 50 Hz / 2000W
Communication Port	RS232



A21CA

Autoclaves - portable

Dixons portable autoclaves

A well established range of portable autoclaves that has been continually updated to keep abreast of current legislation, suitable for media and waste sterilisation.

Features

- Electronic temperature control
- Lid locking safety HSE PM73
- Die cast aluminium/stainless steel construction

Specifications

Model	Volume	Int. dim (mm)	Cycle
ST19T	14		121°C Manual
ST19V	14	280Ø x 230H	variable time and temperature
ST1528	15		121°C Manual
ST1528V	15	280Ø x 245H	variable time and temperature
ST2228	22		121°C Manual
ST2228V	22	280Ø x 355H	variable time and temperature
ST3028	30		121°C Manual
ST3028V	30	280Ø x 490H	variable time and temperature



ST19T



ST2228



ST1528



Vario controller -
for variable cycle
temperature and
time control

Balances - analytical

Adam laboratory balances

A range of high quality balances and accessories. Rapid delivery, 3 years guarantee.

PW Analytical Series

Features

- GLP compliant
- Fully automatic/key activated calibration
- Multiple weighing units and functions
- RS232 data output
- Kensington type lock bracket
- Large back-lit LCD display

Specifications

Model	Capacity (g)	Readability (g)	Pan size (mm)	Cal Type
PW124	120	0.0001	90Ø	Auto
PW184	180	0.0001	90Ø	Auto
PW254	250	0.0001	90Ø	Auto

Accessories	Description	Accessories	Description
3584	Thermal paper roll	8003	Dust cover
8023	Basic Printer	8030	Security lock and cable
7995	Below Balance Hanger	7452	Density Determination kit
8031	In-use cover	8036	Anti-Vibration Table



PW254

Ohaus Pioneer™ - analytical

The best balance for basic weighing. Designed for uncomplicated performance, the Pioneer analytical and precision balances have all the features necessary for routine weighing in the lab, classroom or industry.

Features

- Internal or external calibration
- Simple 3 button operation
- LCD display
- Multiple weighing units and functions
- 15 months guarantee
- Integral weigh below hook
- RS232 communication port

Specifications

Model	Capacity (g)	Readability (g)	Pan Size (mm)
PA214	210	0.0001	90Ø
PA114	110	0.0001	90Ø
PA64	65	0.0001	90Ø

Accessories	Description
80251994	STP103 Thermal Printer (excluding cable)
80500571	Printer Interface Cable



Pioneer - analytical

Balances - precision

Adam PGW precision

Features

- Available with Internal (i) or External (e) calibration
- GLP Compliant
- RS232 Data Output
- Large back-lit LCD display
- Multiple weighing units and functions



Specifications

Model	Capacity (g)	Readability (g)	Pan size (mm)	Draughtshield
PGW153	150	0.001	140 x 140	✓
PGW253	250	0.001	140 x 140	✓
PGW453	450	0.001	140 x 140	✓
PGW753	750	0.001	140 x 140	✓
PGW1502	1500	0.01	192 x 192	✗
PGW2502	2500	0.01	192 x 192	✗
PGW3502	3500	0.01	192 x 192	✗
PGW4502	4500	0.01	192 x 192	✗

PGW4502

Add suffix 'i' for internal calibration - see price list

Accessories	Description	Accessories	Description
3584	Thermal paper roll	8002	Dust cover
8023	Basic Printer	7995	Below balance hanger
8031	In-use cover	7453	Density determination kit (1mg models only)

Ohaus Pioneer - precision

Features

- Simple 3 button operation
- LCD display
- Supplied with protective in-use cover
- Multiple weighing units and functions
- Integral weigh hook below
- Internal or external calibration
- RS232 communication port
- 15 months guarantee



Specifications

Model	Capacity (g)	Readability (g)	Pan Size (mm)	Draughtshield
PA213	210	0.001	120Ø	✓
PA413	410	0.001	120Ø	✓
PA512	510	0.01	180Ø	✗
PA2102	2100	0.01	180Ø	✗
PA4102	4100	0.01	180Ø	✗
PA4101	4100	0.1	180Ø	✗

Pioneer - precision

Add suffix 'C' for internal calibration - see price list

Accessories	Description
80251994	STP103 Thermal Printer (excluding cable)
21253677	Printer Interface Cable
80850045	Density Determination kit (1mg & 0.1mg models only)

Balances - large capacity

Adam PGL series

Features

- RS-232 interface
- AC power or rechargeable battery
- 8 weighing units including 1 custom unit
- Below balance weighing
- All metal construction
- Large backlit LCD display with dual text display and capacity tracker
- Stainless steel platform



Specifications

Model	POL 203	PGL303	PGL2002	PGL3002	PGL4001	POL 6001	PGL8001	PGL10001	PGL20001
Maximum capacity	200g	300g	200g	300g	4000g	6000g	8000g	10kg	20kg
readability	0.001 g		0.01 g		0.1 g			0.1 g	
Repeatability (S.D.)	0.002g 0.003g		0.02g 0.03g		0.1 g			0.2 g	
Linearity(±)	0.004g 0.006g		0.04g 0.06g		0.1 g			0.4 g	
Fan size	145mm x 125mm				192mm x 192mm			400mm x 300mm	

Adam CBK Basic

Features

- Multiple weighing units and functions
- RS232 data output
- Mains/battery operation
- Back-lit LCD display

Model	Capacity (g)	Readability (g)	Pan size (mm)
CBK4	4000	0.1	225 x 275
CBK8H	8000	0.1	225 x 275
CBK16	16000	0.5	225 x 275
CBK32	32000	1	225 x 275

Accessories

Accessories	Description
8023	Basic Printer (with cable and paper)
5006	In-use cover
6081	Below balance hanger (factory fitted)



CBK8H

Ohaus ES™ Platform Series

Features

- Simple 2 button operation
- LCD display
- 4 selectable weighing units
- Mains or battery powered
- Low profile
- 3-way indicator mounting bracket

Specifications

Model	Capacity (kg)	Readability (g)	Pan Size (mm)
ES6R	6	1	310 x 270
ES30R	30	10	310 x 270
ES50R	50	20	310 x 270
ES50L	50	20	520 x 400
ES100L	100	50	520 x 400
ES200L	200	100	520 x 400



ES - platform

Balances - moisture analyser

Adam PMB moisture analyser

Adams PMB moisture analyser offer smart features developed specifically for simple operation and outstanding performance. Setting new standards for data collection and repetitive tests with a direct connection USB flash drive to store results and test programs. The rugged metal housing, simultaneous display of test parameters and results, a single circular halogen heat lamp for uniform drying and easy functionality make the PMB moisture analyser an ideal choice for all moisture determination applications.

Features

- Large backlit LCD display
- Membrane keypad
- Multiple weighing modes
- Various heating set-up programs
- 50 to 160°C temperature range
- Direct USB flash drive connection for data collection
- Internal memory up to 99 test results
- Halogen heating for quicker results
- Automatic test start
- Takes 90mmØ disposable pans
- Levelling bubble with adjustable feet
- Robust cast metal construction
- Various accessories available

Specifications

Model	PMB53	PMB202
Capacity:	50g	200g
Readability:	0.001g / 0.01%	0.01g / 0.05%
Pan size:	90mm dia.	
Weighing units:	Gram / %moisture / %solids / %moisture/dry bases / %solids/dry bases	
Interface:	USB Host / USB I/O / RS232	
Calibration:	External	
Heating element:	Halogen	
Temperature range:	50 to 160°C (+/-1°C)	
Power requirements:	240V / 400W	
External dimensions:	185 x 250 x 360mm HWD	
Weight:	6kg	



PMB53

Baths - boiling

Clifton boiling baths

Clifton boiling baths are manufactured in the UK using high quality materials and designed with a simple, robust construction making them an economic choice.

Rectangular, multiplace range

The rectangular, multiplace baths are designed to effectively heat samples that otherwise may be thermally damaged by a naked flame.

Features

- Concentric rings to take multiple size flasks
- Integral constant level device to maintain water level
- Class 1 over-heat protection device
- All stainless steel construction
- Optional remote energy regulator available



Specifications

Model	1101E	1102E	1104E
Power requirements:	230V / 1kW	230V / 1kW	230V / 1.5kW
No. of holes:	6@80mmØ	6@101mmØ	12@80mmØ
Dimensions: (HWD)	90 x 321 x 219mm	90 x 321 x 425mm	90 x 321 x 425mm

NE1B range

Designed for applications that require continuous boiling. The built in thermostat controls the temperature from gentle simmer to a vigorous boil.

Features

- High grade stainless steel tank
- Removable perforated SS shelf
- Concealed heating element for easy cleaning
- Safety over-heat cut-out device
- Integral constant level device to maintain water level
- Drain outlet fitted to 28 litre model
- Lids available as optional extra



NE1B-8

Specifications

Model	NE1B-8	NE1B-14	NE1B-28
Power requirements:	230V / 800W	230V / 1kW	230V / 1.5kW
Capacity:	8 L	14 L	28 L
Internal dims: (HWD)	150 x 240 x 300mm	150 x 325 x 300mm	200 x 500 x 300mm
External dims: (HWD)	290 x 361 x 332mm	290 x 332 x 270mm	290 x 538 x 332mm

Baths-circulator/cooled

Jeiotech range

Both the CW-G & RW-G series includes dual digital displays, accurate PID temperature control, digital timer, 3 programmable set-points and a stainless steel circulation pump unit with variable flow rate adjustment. Over-temperature safety limiter and low fluid level cut-out with audible & visual warnings are fitted as standard.

CW-G series

These compact yet versatile circulators are ideal for external temperature controlled applications running at ambient or above.

Features

- Compact and powerful unit
- Microprocessor controls with splash-proof keypad
- Ambient +5 to 150°C temperature range
- Digital timer with delayed on/off function
- Stainless steel pump unit with variable flow rates
- Seamless stainless steel tank with drain valve
- Integral water-cooling coil
- RS232 data interface
- Complete with flat lid

Specifications

Model	CW-05G	CW-10G	CW-20G	CW-30G
Capacity:	5 L	10 L	20L	30L
Temperature range:	Ambient +5 to 150°C (+/-0.1) for all models			
Pump flow rate: (Max)	28L/m for all models			
Opening dims: (LW)	99 x 150 mm	154 x 211mm	214 x 290mm	264 x 300mm
Bath depth:	160mm	180mm	200mm	230mm
External dims: (HWD)	424 x 220 x 395mm	444 x 281 x 450mm	464 x 360 x 510mm	494 x 370 x 560mm
Power requirements:	240V / 1035W	240V / 1540W	240V / 2020W	240V / 2020W
Weight:	12.5kg	15kg	17.5kg	19.5kg



RW-G series

The RW-G series cooled circulators can be used for internal & external temperature controlled applications running at below ambient but have scope to be used up to 150°C.

Features

- Compact and powerful unit
- Microprocessor controls with splash-proof keypad
- -25 to 150°C temperature range
- Digital timer with delayed on/off function
- Turbulence reduced SS pump unit with variable flow rates
- Seamless stainless steel tank with drain valve
- Built-in cooling coil for open or closed bath applications
- Removable front grill for easy condenser cleaning
- CFC-free refrigerant
- RS232 data interface
- Complete with flat lid

Specifications

Model	RW-0525G	RW-1025G	RW-2025G	RW-3025G
Capacity:	5 L	10 L	20L	30L
Temperature range:	-25 to 150°C (+/-0.1) for all models			
Pump flow rate: (Max)	28L/m for all models			
Cooling capacity:				
@ -20°C	30W	50W	260W	390W
@ 0 °C	230W	250W	410W	570W
@ +20 °C	320W	380W	560W	680W
Opening dims: (LW)	99 x 150 mm	154 x 211mm	214 x 290mm	264 x 300mm
Bath depth:	160mm	180mm	200mm	230mm
External dims: (HWD)	690 x 302 x 438mm	780 x 360 x 490mm	825 x 380 x 560mm	895 x 440 x 620mm
Power requirements:	240V / 1610W	240V / 2115W	240V / 2945W	240V / 3175W
Weight:	37kg	44kg	60kg	67kg



Baths - shaking

Jeiotech BS shaking waterbaths

The BS series offers a truly comprehensive range of Shaking Waterbaths. Packed with user-friendly features as standard, along with the attention to detail in the design and manufacturing, make these baths a very economical proposition. The shaking mechanism operates by a brushless DC motor giving finer speed control with less noise and transmitted vibrations.

Features

- 4 sizes – 17 to 55 litres
- Ambient +5 to 100°C temperature range
- Microprocessor PID controller with splash-proof keypad
- Dual digital displays
- Digital timer with delayed start / stop function
- Separate over-temp limiter
- Corrosion resistant SS tank, carriage & lid
- Independent controls for the shaking mechanism
- Reciprocal shaking motion with soft start
- Complete with gabled lid and removable spring rack
- 2 tier height adjustable spring rack for quick flask securing

Specifications

Model	BS-06	BS-11	BS-21	BS-31
Capacity:	17 L	25 L	37 L	55 L
Temperature range:	Ambient +5 to 100 °C (+/-0.1)			
Shaking motion:	Reciprocal			
Stroke length:	30mm			
Speed range:	20 to 180rpm			
Opening dims: (LW)	243 x 109mm	243 x 229mm	243 X 389mm	350 x 670mm
Bath depth:	235mm	235mm	235mm	235mm
External dims:	H 355mm	355mm	355mm	355mm
	W 430mm	550mm	710mm	860mm
	D 430mm	440mm	440mm	490mm
Power requirements:	240V / 850W	240V / 1060W	240V / 2050W	240V / 2050W
Weight:	26kg	30kg	35kg	42kg



Baths - static / stirred

Clifton range

Clifton static and stirred water baths provide a highly stable temperature environment for immersion of flasks, bottles or racks. Durable, corrosion resistant tanks are enclosed in a sturdy outer case with a chemical resistant paint finish. Static baths provide good temperature control with simplicity and economy, and stirred baths a further degree of accuracy, with either dial control or digital for continuous temperature readout.

NE1 static analogue baths

Features

- 304 grade stainless steel tanks
- Removable perforated shelf
- Thermostat control, ambient + 5 to 100°C
- Sensitivity $\pm 0.25^{\circ}\text{C}$, uniformity $\pm 0.1^{\circ}\text{C}$
- Lids available as optional extra
- 3 year guarantee

Specifications

	NE1-2.5	NE1-4	NE1-8	NE1-14	NE1-22	NE1-28	NE1-56
Capacity, litres	2.5 L	4 L	8 L	14 L	22 L	28 L	56 L
Internal dims	230 x 130 x 100	300 x 150 x 150	300 x 240 x 150	325 x 300 x 150	500 x 300 x 150	500 x 300 x 200	620 x 500 x 200
Overall dims	270 x 190 x 240	332 x 185 x 290	332 x 270 x 290	362 x 332 x 290	537 x 332 x 290	537 x 332 x 290	660 x 540 x 255
Heater, Watts	500W	500W	800W	1000W	1500W	1500W	2500W
Voltage	230V	230V	230V	230V	230V	230V	230V

NE4 stirred baths, analogue (T) or digital (D)

Features

- Analogue for economy, or high precision digital control
- Safety cut-out float switch
- Analogue - sensitivity $\pm 0.2^{\circ}\text{C}$, uniformity $\pm 0.05^{\circ}\text{C}$
- Digital - sensitivity $\pm 0.1^{\circ}\text{C}$, uniformity $\pm 0.01^{\circ}\text{C}$
- Lids and accessory cooling available as optional extras.
- 3 year guarantee

Specifications

	NE4-8T/D	NE4-14T/D	NE4-22T/D	NE4-28T/D
Capacity, litres	8 L	14 L	22 L	28 L
Internal dims W x D x H	129 x 298 x 150	219 x 298 x 150	395 x 298 x 150	395 x 298 x 200
Overall dims W x D x H	271 x 332 x 170	361 x 332 x 170	537 x 332 x 170	537 x 332 x 240
Heater, Watts	1250W	1250W	1250W	1250W
Voltage	230V	230V	230V	230V

Analogue (T)

Digital (D)

Lid

NE1-8



NE4-14T



NE4-8D



Baths - viscometer

Jeiotech VB viscosity bath

The VB series offer ultra high precision control across its entire temperature range to meet ASTM standards plus benefits from easy-to-use electronic PID controller, powerful stirrer motor with baffle plate screens and full safety tempered glass sides for clear viewing. An integrated closed cooling coil is included for linking up to a cooled circulator when operating at near ambient or below. High quality corrosion resistant stainless steel tank with drain valve for easy draining and cleaning.

Features

- 2 sizes – 25 & 40 litres
- Ultra precise temperature control to within $\pm 0.02^{\circ}\text{C}$
- Normal operating temperature range: ambient $+5$ to 150°C
- Cooling coil for below ambient running
- Microprocessor PID controller with splash-proof keypad
- Dual digital displays
- Separate over-heat limiter
- 3 program set-point memory
- Digital timer with delayed start / stop
- Vane type stirrer with baffle plate screens
- Double tempered safety glass sides
- 51mm \varnothing holes with lids for suspending viscometer tubes
- Mounting hole for thermometer
- Tank drain valve
- Viscometer tube holders available

Specifications

Model	VB-25G	VB-40G
Capacity:	25 L	40 L
Temperature range:	Ambient $+5$ to 150°C ($\pm 0.02^{\circ}\text{C}$)	
No. of places:	5 x 51mm \varnothing	8 x 51mm \varnothing
Opening dims: (LW)	265 x 145mm	265 x 295mm
Bath depth:	368mm	368mm
External dimensions: (HWD)	547 x 492 x 374mm	547 x 642 x 374mm
Power requirements:	240V / 3000W	240V / 3000W
Weight:	28kg	37kg

Accessories: Viscometer Tube Holder for dual opening tubes – supplied singly



Baths - ultrasonic

Ultrawave ultrasonic baths

You can easily find an Ultrawave bench top model to suit your budget and application. All the baths benefit from a unique transducer technology, which means outstanding reliability and cleaning performance.

Features

- Capacities from 0.5- 28 litres
- Heated or unheated

Specifications

Units	Capacity	Internal dimensions LxWxH (mm)	Control panel	Heat °C
U50	0.5	150 x 85 x 65	Manual	N/A
U100	1.5	150 x 140 x 100	Digital / Manual	20-80
U300	2.5	240 x 140 x 100	Digital / Manual	20-80
U400	3.75	240 x 140 x 100	Digital / Manual	20-80
U500	4.5	300 x 150 x 150	Digital / Manual	20-80



Q series ultrasonic baths

Features

- Frequency leap technology provides vastly improved cleaning results
- SD port allows easy validation between bath & PC
- Easily traceability of cycle number, time, temperature and sonics validation
- No need to store hard copy records of each cleaning cycle
- Easy to use, programme menu
- Supplied with stainless steel basket & lid (Q Series lids reduce the volume of noise generated by the ultrasonic bath while their tight fit minimises the potential of aerosol escape)
- All baths heated 0-80°C
- 0-99 minute timer facility fitted as standard
- Drain outlet



Specifications

Model	Working capacity (litres)	Max capacity (litres)	External dimension (mm)	Tank dimensions (mm)	Basket dimensions (mm)	Approx weight	Ultrasonic power
QS3	2.5	2.75	285 x 184 x 267	240 x 140 x 100	220 x 125 x 40	4.5 kg	50 Watts
QS4	3.75	4	285 x 184 x 267	240 x 140 x 150	215 x 120 x 90	5 kg	50 Watts
QS5	4.5	5	345 x 200 x 267	300 x 150 x 150	273 x 125 x 90	5.5 kg	100 Watts
QS10	9.5	10.5	550 x 183 x 267	500 x 140 x 150	460 x 110 x 90	7 kg	200 Watts
QS12	12.5	14	345 x 288 x 366	295 x 245 x 200	265 x 215 x 140	10 kg	200 Watts
QS18	17.5	18.5	374 x 347 x 366	330 x 300 x 200	285 x 260 x 140	15 kg	300 Watts
QS25	25	28	551 x 347 x 366	500 x 300 x 200	470 x 270 x 140	17 kg	400 Watts

Fluids

For the best results use one of Ultrawave's specially formulated cleaning fluids. All fluids are non-foaming and biodegradable. The range includes a medically approved fluid and specialist fluids for many other applications.

Available in 11, 5l and 25l containers (minimum quantity 5 litres)

Cabinets - enviromental / humidity

Jeiotech TH-ME temperature & humidity cabinets

This range of temperature & humidity Cabinets are exceptionally well designed using high quality materials, fitting many useful features into a compact & lightweight bench top unit without compromising on performance or control.

Features

- 3 sizes – 25, 65 & 100 litres
- Compact design with high performance
- -20 to 120°C temperature range
- From 30 to 95% humidity range
- Multi-programmable digital controller
- Alphanumeric graphic LCD display
- Electronic humidity sensor for greater control accuracy
- Overheat & overcool limiters
- Door open & low water level alarms
- Glass inner door
- Integral pull-out water tank for easy filling
- Cable entry port
- RS232C data interface
- Stainless steel chamber interior
- Optional stacking frame or trolley
- Optional computer interface for data recording and programming
- Optional digital data recorder

Specifications

Model	TH-ME-025	TH-ME-065	TH-ME-100
Chamber capacity:	25 L	65 L	100 L
Temperature range:	-20 to 120°C (+/-0.3°C)		
Heating time:	55 mins. (From -15 to 120°C without humidity)		
Cooling time:	60 mins. (From 120 to -15°C without humidity)		
Humidity range:	55 to 95%RH @ 15°C (+/-1.5%RH) 40 to 95%RH @ 30°C 30 to 95%RH @ 70°C		
Water capacity:	5 L	6 L	9 L
Internal dimensions:	H 350mm W 350mm D 220mm	495mm 400mm 330mm	530mm 500mm 380mm
External dimensions:	H 850mm W 500mm D 760mm	1000mm 550mm 890mm	1030mm 650mm 1000mm
Power requirements:	240V / 2800W	240V / 3030W	240V / 3300W
Weight:	80kg	110kg	130kg

TH-ME-025



Cabinets - filter fume

Esco Ascent Max™ filter fume cabinets

Esco Ascent ductless fume hoods filter out chemical fumes and recycle air directly back into the laboratory, providing energy savings, personnel and environmental protection, convenience (no complicated ducting systems) and mobility, as ductless hoods do not require connection to extraction systems.

Esco's Nanocarb™ activated carbon filters have high filter efficiency, retention capacity and operator protection. Generously sized filters with more activated carbon by weight retain more chemicals and last longer. Filters are to be purchased separately at the time of order and are individually installed onto each fume hood and certified at the factory before shipment.

Features

- All cabinets have been independently tested & comply with all major international standards
- Sentinel™ Silver microprocessor control system supervises operation of all functions
- Sealed membrane keypad with LCD display
- Continuous temperature compensated airflow monitoring
- Audible & Visual alarms
- Configurable post-purge cycle for safer operation procedures
- Configurable administrator controlled access with PIN
- Tempered glass side panels and sliding sash
- Backward-curve motorised impeller design guarantees better airflow uniformity, lower noise & lower overall energy consumption
- Stainless steel work surface
- Auto-Purge™ slots at the back of the work zone improves containment & operator protection
- Excellent filter retention properties with Nanocarb™ Filters and dual diffusers
- 7 different filter types available to meet every requirement
- Optional secondary back-up carbon filter or HEPA filter
- Certified containment – chemical vapours are contained within the enclosure and will not leak through the front opening
- Antimicrobial coating on all painted surfaces
- Optional accessories include Stands, electrical, gas & water outlets, motorised sash and VOC Sensor
- Other Models / Sizes available – please ask for a full detailed brochure

Specifications

Model	ADC-4D1
Nominal width:	1.2m / 4ft
Inflow airflow velocity:	from 0.4m/s
Air volume:	457m ³ /h
Pre-filter:	Disposable polyester fibre
Filter size:	2 x 14kg – activated carbon
Internal work area:	H 780mm W 1268mm D 642mm
External dimensions:	H 1410mm W 1340mm D 714mm
Power requirements:	240V / 350W
Weight:	225kg

Cabinets - filter fume

Accessories

- A wide range of support stands and accessories available - Please ask for details.



Cabinets - laminar flow

Esco Airstream laminar flow cabinets

Esco laminar flow clean benches offer a combination of value, high quality construction, low operating noise levels, and a wide product range to suit all budgets. Esco Airstream Laminar Flow Cabinets are available in both horizontal and vertical flow models. In both models, air is taken in from above the cabinet and passed through a ULPA filter. The Sentinel™ Delta Control System monitors the airflow to prevent sample contamination saving both time and money.

In the horizontal flow models filtered air is passed through the main chamber of the clean bench in a horizontal laminar (unidirectional) air stream and is exhausted through the front opening of the cabinet.

In the vertical flow models, filtered air is passed through the main chamber of the clean bench in a vertical laminar (unidirectional) air stream before being exhausted through the front opening of the clean bench. Auto-Purge™ slots minimize airflow turbulence in the rear of the work space. The vertical air flow design minimizes direct airflow which may lead to dry eyes and fatigue on horizontal flow models. Esco vertical laminar flow cabinets utilise extremely efficient backward curve fans, allowing for exceedingly low levels of cabinet power consumption resulting in greater cost-savings for the user with no compromise in cabinet performance.



AHC-4DI

Cabinets - laminar flow

Features

- High Performance Blower System
- ULPA Filtration System provides superior protection over conventional HEPA filters
- >99.999% at 0.1 to 0.3 micron sizes
- An additional disposable pre-filter traps large particles in the inflow air prior to reaching the main filter, protecting against damage and prolonging filter life
- Angled front, curved work surface front edge and glass sides promote ergonomics
- Soft touch controls for blower, light, power outlets and UV lights where fitted
- Temperature-compensated air velocity sensor and real-time display allows airflow to be monitored more accurately compared with conventional pressure gauges
- The intelligent blower system maintains airflow as the filter becomes loaded, ensuring optimum efficiency and product protection
- Warm white lighting provides excellent illumination of the work zone and reduces
- Stainless steel work surface with spill-retaining recessed central area
- Antimicrobial coating on all painted surfaces
- Optional accessories include Stands, Power & Gas outlets and UV Lights
- Other sizes/models available - please ask for a full detailed brochure

Specifications - Horizontal model

	AHC-4DI	AHC-5DI	AHC-6DI
Nominal width:	1.2m	1.5m	1.8m
Average airflow velocity:	← 0.45m/s		→
Air volume:	1099m ³ /h	1383m ³ /h	1667m ³ /h
Internal work area:	1185 x 625mm	1490 x 625mm	1795 x 632mm
External dimensions:			
H	1105mm	1105mm	1175mm
W	1340mm	1645mm	1950mm
D	797mm	797mm	804mm
Power requirements:	240V / 390W	240V / 400W	240V / 850W
Weight:	150kg	169kg	190kg

Specifications - Vertical model

	AVC-4DI	AVC-5DI	AVC-6DI
Average airflow velocity:	← 0.45m/s		→
Air volume:	1204m ³ /h	1506m ³ /h	1806m ³ /h
Internal work area:	1270 x 700mm	1575 x 700mm	1880 x 700mm
External dimensions:			
H	1250mm	1250mm	1250mm
W	1340mm	1645mm	1950mm
D	770mm	770mm	770mm
Power requirements:	240V / 380W	240V / 400W	240V / 750W
Weight:	152kg	171kg	225kg

A range of support stands are available.

Centrifuges

Hettich range

Hettich centrifuges are known for their dependable functionality and fast, easy operation. Centrifuges and accessories are developed in collaboration with users from medicine, chemistry, research and industry, and are continuously improved. They comply with all relevant EU standards and are subjected to the strictest quality control. Manufactured to ISO9001:2000, they are known for safety and reliability all over the world.

EBA 20

Features

- Practical and handy, the EBA 20 is ideal for a small quantity of samples. The small, microprocessor-control centrifuge is supplied with an 8-place angle rotor. It accepts a variety of tubes up to a volume of 15 ml and generates a max. speed of 6,000 min⁻¹ corresponding to 3,421 RCF.

Specifications

Small centrifuge with rotor	EBA 20
Power supply	208 - 240 V
Frequency	50 - 60 Hz
Consumption	65 VA
Max capacity	8 x 15 ml
Max RPM (speed)	6,000 min
Max RCF	3,421
Running time	1 - 99 min, 00 continuous run, short cycle mode (impulse key)
Dimensions H x W x D	216 x 231 x 292 mm
Weight	approx. 4 kg



EBA20

Rotofix 32A

Features

- Rugged, versatile and indispensable for routine tasks in doctors' practices and small hospitals. The Rotofix 32A is ideal for tasks in clinical chemistry and in cytology. With a wide variety of accessories, Rotofix 32A can be also used for the preparation of samples in industrial and research laboratories. Tubes that are suitable for chrome bath testing are also available.

Specifications

Benchtop centrifuge, without rotor	Rotofix 32A
Power supply	208 - 240 V
Frequency	50 - 60 Hz
Consumption	300VA
Max capacity	4 x 100 ml
Max RPM (speed)	6,000 min
Max RCF	4,186
Running time	1 - 99 min, 00 continuous run, short cycle mode (impulse key)
Dimensions H x W x D	261 x 368 x 437 mm
Weight	approx. 15.5 kg



Rotofix 32A

Centrifuges

Rotor for Rotofix 32A

A1624	Swing out rotor without buckets
A1381	100ml screw top bucket (set of 4)
A1382	Screw cap for A1381 bucket (set of 4)

Other rotors available - please call our sales office for details

Universal 320/320R

Features

- Our multi-talented centrifuges save space and costs. There many good reasons for calling these centrifuges universal.

Their excellent performance and comprehensive range of accessories enable them to carry out virtually any centrifuging task, and, since the Universal 320 / 320 R can be used for both standard and special applications, they are not only cost effective, they also save valuable space in the laboratory.

A refrigerated version provides for temperature sensitive applications.

Specifications

Benchtop centrifuge, without rotor	Universal 320	Universal 320 R refrigerated
Power supply	200 - 240 V	200 - 240 V
Frequency	50 - 60 Hz	50 - 60 Hz
Consumption	400VA	800VA
Max capacity	4 x 100 ml	4 x 100 ml
Max RPM (speed)	15,000 min	15,000 min
Max RCF	21,382	21,382
Running time	1 s - 99 min: 59 s or continuous run, short cycle mode (impulse key)	1 s - 99 min: 59 s or continuous run, short cycle mode (impulse key)
Dimensions H x W x D	346 x 395 x 520 mm	346 x 401 x 695 mm
Weight	approx. 29 kg	approx. 52 kg
Temperature control, infinitely variable		from - 20 to + 40 °C

A1416 12 place angle rotor

A1624 Swing out rotor, 4 place

A1381 100ml screw top buckets (set of 4)

A1382 Screw cap for 100 ml screw top buckets (set of 4)

Various rotors available - please call our sales office for details.



Universal 320



Universal 320 R

Chloride analysers

Jenway model PCLM3

The Jenway PCLM3 is designed as a dual purpose chloride analyser for clinical and industrial applications. The unit has three measurement ranges: two are for use in clinical determinations and require 200uL or 100uL samples, and the third range is for industrial determinations and requires 500uL sample.

The system operates on the proven coulometric principle, providing a quick and easy method for multiple measurements. Automatic indication is given when the reagent requires replacing or the electrodes need cleaning.

The PCLM3 will determine concentrations in biological samples such as serum, plasma, urine, sweat, and CSF, and in industrial samples with low ionic strength, neutral pH, low solid matter and low levels of dissolved solids.

Features

- Clinical & industrial versions
- Three measurement ranges
- Large, clear LED display
- Simple to operate
- Fast, reliable results
- Low maintenance

Specifications

	Clinical	Industrial
Range	10 to 299 mmol/l	10 to 999mg/l
Sample Volume	20ul or 100ul	500ul
Reproducibility	±1% for 100ul @ 100mmol/l ±1.5% for 20ul @ 100mmol/l	±3mg/l
Linearity	Better than 1mmol/l or ±1% of the concentration value (whichever is the greater) over the range of 10 to 299mmol/l	±3mg/l or 1% (whichever is the greater) over the range of 10 to 999mg/l
Power	240/115V a.c. 10% @50/60Hz	240/115V a.c. ±10% @50/60Hz
Size	240 x 215 x 160mm	240 x 215 x 160mm
Weight	3.1Kgs	3.1Kgs
504 043	Model PCLM3 (clinical version) supplied complete with mains lead, buffer, gelatin, clinical chloride standard, 3 silver electrodes, 2 silver anodes, electrode polish, glass beaker, stirrers, tweezers and manual.	
504 044	Model PCLM3 (industrial version) supplied complete with mains lead, buffer, gelatin, industrial chloride standard, 3 silver electrodes, 2 silver anodes, electrode polish, glass beaker, stirrers, tweezers and manual.	

25011 acid buffer, 500ml
25014 chloride standard 200mg/L
25012 gelatin (30ml)
25195 combined acid buffer 500ml
silver electrodes (pack of three)
electrode polish



Colony counter

Rocker Galaxy 230 colony counter

Designed to accommodate a wide range of petri-dish sizes. Innovative PC software enables you to record, trace, or report sample number, data, users name, row count, dilution factor and total count. Pressure sensor design with big LCD count display with zero and back keys. Ring light, magnifier and contrast plate are included as standard.

Features

- Robust metal construction
- Takes 90 to 150mmØ petri-dishes
- Large LCD count display
- Ring shaped illumination
- Pressure sensitive counting with acoustical signal
- Adjustable magnifier

Specifications

Model	Galaxy 230
Display:	4 digit LCD (0 to 9999)
Magnification:	2 to 3x
Petri-dish size:	90 to 150mmØ
Zero reset:	Yes
Count back:	Yes
Illumination:	Glare-free ring lamp
Pressure sensitivity:	Adjustable
Acoustical signal:	Adjustable
Data interface:	RS232
External dimensions:	360 x 313 x 346mm HWD
Weight:	5.2kg



Colorimeters

Sherwood Chroma range

Sherwood Scientific manufactures a range of three filter photometers, the model 252 analogue, the model 264 digital, and the model 267 concentration. The range together with an extensive array of accessories covers the full requirements for colorimetric analysis.

Chroma model 252 analogue colorimeter

Features the traditional scale readout showing the relationship between optical density and % transmission.

Specifications

Concentration	By factor or known standard
Stability	Less than $\pm 0.005A$ in any 15 min period
Warm up	15 minutes
Photometric reproducibility	$\pm 1\%$ T same cuvette or test tube
Light source	Pre-focused tungsten lamp
Detector	Silicon photodiode
Size and weight	218L x 230W x 188H (mm); 2.2kg
Power requirements	90 to 127V or 198 to 264V or 12V DC battery

Filters (gelatin) set of 8

430nm	540nm
470nm	580nm
490nm	600nm
520nm	710nm

Filters (interference) available individually 405, 510, 546, 600, 660, 680, 720nm



252

Compressors

Bambi air compressors-BB range

Ultra low noise with high performance for laboratory applications. With noise levels as low as 40 dB(A) these receiver mounted compressors can be located near where you work without inconvenience.

- 10 micron airline filter
- Adjustable outlet pressure regulator
- High clarity receiver and outlet pressure gauges
- Easy to use receiver drain



Specifications

Model No.	Output 1/min@	Output 1/min@ 6bars	Max pressure Bar/psi	Motor hp	Air receiver (litres)	dB(A) 1m	Weight (kg)	Dimensions (cm)
BB8	50	33	8/120	0.5	8	40	20	43 x 28 x 28
BB15V	50	33	8/120	0.5	15	40	25	45 x 34 x 34
BB24	50	33	8/120	0.5	24	40	32	48 x 34 x 72
BB24D	100	66	8/120	1.0	24	42	46	48 x 34 x 72

Bambi oil free air compressors-VT range

Features

- Soft start solenoid valve
- Internally coated air receivers
- Sequential start system on duplex units with more than one compressor

Specifications

Model No.	Output 1/min@	Max pressure Bar/psi	Air receiver (litres)	dB(A)	Weight (kg)	Dimensions (cm)	Air drier (✓)
VT75	120	8/120	24	72	29	63 x 50 x 41	-
VT75D	120	8/120	24	72	29	63 x 50 x 41	✓
VT150	175	8/120	50	74	40	84 x 50 x 41	-
VT150D	175	8/120	50	74	40	84 x 50 x 41	✓
VT200	220	8/120	50	74	44	84 x 50 x 41	-
VT200D	220	8/120	50	74	44	84 x 50 x 41	✓
VT300	350	8/120	100	76	75	77 x 115 x 40	-
VT300D	350	8/120	100	76	75	77 x 115 x 40	✓
VT400	440	8/120	100	76	85	78 x 115 x 42	-
VT400D	440	8/120	100	76	85	78 x 115 x 42	✓



VT150



VT200



VT200D



VT400



VT150D

Density meter

KEM DA-130N density meter

Features

- Portable handheld instrument
- Left or right handed operation
- Resonant frequency detection action
- Quick & easy sampling
- Fast results with multiple measurement ranges
- Backlit graphic LCD display
- Infrared data communication port

Specifications

Model	DA-130N
Measurement method:	Resonant frequency detection
Measurement range:	0 to 2g/cm ³
Accuracy:	+/- 0.001g/cm ³
Temperature range:	0 to 40°C
Sample volume:	2ml
Measurement time:	1 to 4 minutes
Sampling pump:	Manual hand pump
Calibration method:	Pure water / dry air
Interface:	Infrared port
Power requirements:	2 x 1.5V AAA Batteries
External Dimensions:	333 x 65 x 115mm
Weight:	360g



Desiccators

Kartell plastic vacuum desiccator

The Kartell plastic vacuum desiccator provides a stable environment for storage of moisture sensitive items in a reduced pressure atmosphere.

Incorporates a polycarbonate non-return valve and a polyethylene vacuum release tap assembly.

Will hold a vacuum of 740mm Hg for 24 hours, with loss not exceeding 20mm Hg.

Durable and lightweight, available in two sizes.

Features

- Transparent polycarbonate top with O-ring seal
- Vacuum connection valve with controlled air inlet
- Polypropylene base
- Removable desiccant pan
- Two sizes available

Size (dia in mm)

200mm
250mm



250mm desiccator

Drying/warming cabinets

Genlab drying cabinets

The Genlab Drying/warming cabinets are suitable for drying a range of items such as glassware and instruments and any general purpose warming applications. Two variations are available: standard non-insulated units or insulated units for improved efficiency plus energy and cost savings. The insulated range of units give far greater temperature control, allowing greater accuracy during the drying and warming process.

Features

- Maximum temperature 50°C above ambient
- Easy clean powder coated body
- Thermostat control for set temperature
- Toughened glass doors
- Fan circulation on 500 & 1000 litre
- Full two year warranty
- Insulated range with increased accuracy and savings in running costs
- Extraction system on 500 & 1000 litre units (optional)



1000 litre cabinet DC1000



125 litre cabinet DC125

Specifications - non insulated cabinets

Model	Approx capacity (Litre)	Internal Dims H x W x D cm	External Dims H x W x D cm	No. of shelves	Weight (kg)
DC125	125	43 x 72 x 40	60 x 74 x 42	3	40
DC250	250	52 x 98 x 48	66 x 100 x 50	3	55
DC500	500	138 x 58 x 62	168 x 60 x 65	3	75
DC1000	1000	138 x 116 x 62	168 x 118 x 65	3	130

Specifications - insulated cabinets

Model	Approx capacity (Litre)	Internal Dims H x W x D cm	External Dims H x W x D cm	No. of shelves	Weight (kg)
IWC100	100	40 x 67 x 37	60 x 75 x 42	3	45
IWC200	200	49 x 93 x 45	66 x 100 x 50	3	60
IWC425	425	135 x 53 x 59	168 x 60 x 65	3	80
IWC885	885	135 x 111 x 59	168 x 118 x 65	3	140

Filtration manifolds

Rocker BioVac filtration manifolds

Available in either 3 or 6 place, these 316 all-stainless steel manifolds come complete with 100ml, 300ml or 500ml cups and frits. The cups use a bayonet-type quick coupling system and are individually

Features

- 3 or 6 place manifolds
- Robust all stainless steel construction
- Individually controlled cups
- Quick & easy coupling system
- Larger size cups available at extra cost
- Replaceable stainless steel frits

Specifications

Model

BioVac 310 – 3 place Filtration Manifold with Cups & Frits
BioVac 610 – 6 place Filtration Manifold with Cups & Frits
300ml SS Cup
500ml SS Cup



Flame photometers

Jenway model PFP7

With automatic flame failure detection and large clear digital display - safe and easy to use, this low temperature single channel flame photometer has been designed for the routine determinations of Na & K. Additional filters are available for the measurement of Ca, Ba and L.

Features

- Low temperature, single channel
- Na & K filters fitted as standard
- Ca, Ba and Li filters optional
- Electronic flame failure detection
- Fine & coarse sensitivity controls
- Operates on propane, butane, natural gas or L.P.G supplies

Specifications

Model	PFP7 (Industrial)	PFP7 (clinical)
Ranges	0 - 199.9	120 - 160mmol Na (linearised) - 10.0mmol/l K
Limits of detection	Na/K 0.2ppm Li 0.25ppm Ca 15ppm Ba 30ppm	Li 0.25ppm Ca 15ppm Ba 30ppm
Reproducibility	1%/Coefficient of Variation for 20 consecutive samples using 10ppm Na set to read 50	
Linearity	Better than 2% when concentration of 3ppm Na/K and 5ppm Li are set to read 100	
Specificity	Interference from Na/K and Li equal in concentration to test element will be 0.5%	
Recorder output	Nominal 1.00V for a reading of 100.0	
Services	Electrical: 90-125V or 190-250V @50/60Hz Air: Moisture and oil free 6 litre/minute @ 1kg/cm2 (14psi)	

Flame photometer PFP7
Model 8515 air compressor
Lithium filter
Calcium filter
Barium filter



PFP7

Flash point testers

Setaflash series 3 closed cup flash point tester

Conforms to: ASTM D3278: ASTM D3828-IP303; ISO3679; EN456; ISO3680: BS3900 Part A13; UN Class 3 non-viscous flammable liquids.

Portable, low cost instrument providing rapid test results over the range ambient to 300°C (sub-ambient using accessory coolant module). Features digital setting of test parameters, automatic flash detection and digital readout of temperature and time. A 2ml sample is required for flash points up to 100°C and 4ml sample for flash points between 100°C and 300°C. The test flame is fuelled via a rechargeable gas tank with on/off switch and fine adjustment. Fuelling is by accessory LPG (cigarette lighter) cartridges. Supplied with 2ml sample syringe and ignitor. Without gas charge. Overall 280 x 256 x 256mm W x D x H. Weight 4kg.

Setaflash 3, closed aluminium cup

Series 3 open cup flash point tester

Conforms to: ASTM D4260; BS3900 Part A11; ISO DIS (TR) 9039; UN Class 3 Test L.3; CFR 49-173-120; IATA Dangerous Goods Regs. Section 3.3.5; H.S.C. Carriage of Dangerous Goods by Road & Rail App B.

For open cup testing. Similar construction and specification but with an aluminium, open cup for flash/no flash, finite determinations or sustained combustion tests. A manually operated sweeping arm is fitted to the cup. Supplied with 2ml sample syringe and ignitor. Without gas charge. Overall 280 x 256 x 256mm W x D x H. Weight 4kg.

Setaflash 3, open aluminium cup

Accessories

Power adapter for 12V d.c. vehicle system
Carrying case
Metal cooling block
Coolant module (requires, but does not include a supply of dry-ice).



Closed cup



Open cup

Fluorimeter

Jenway 6280 fluorimeter

The high sensitivity of fluorimetric measurement techniques enables trace levels to be determined in a broad range of samples. Selectivity is also enhanced enabling interference free analysis of even the most complex sample matrix.

All models in the 62 series enable simple raw fluorescence measurements to be made without the need to calibrate. These comparative fluorescence levels can be used as a basic indicator or for method evaluation procedures.

Precise concentration measurements can be made by calibration with a blank and standard solution. Where expected sample concentrations may cover a wide range, a calibration curve can be created, using up to six standards.

Features

- High sensitivity photomultiplier detector
- Wavelength range 190-650nm
- Raw fluorescence and concentration display
- Kinetic (timed readings) function

Specifications

Model	6280
Light Source	Pulsed xenon lamp with press to read operation
Expected lifetime	No replacement required in normal operation
Sensitivity (quinine sulphate)	< 1ng/ml
Dynamic range	5.2×10^5
Detector	Photomultiplier
Wavelength range	190 to 650nm
Wavelength selection	Intelligent filter modules (IFM)
Raw fluorescence	Yes
Concentration	Yes
Calibration	Blank + up to 6 standards
Kinetics	
(Timed readings)	In both above modes
Time limits	1 reading every 3 to 999 seconds
Methods stored	20
Results stored	100/method
GLP	Method lock with password access Time and date stamped results Last calibration date and time stored stored calibration interval set Calibration due reminder User ID
Option	RS232 Serial port
PS software	Compatible with DataWay (option)
Sample handling	10mm square cuvette holder (standard)
Heated sample holder	Option
Option	Option
Slipper pump	100 to 240Vac universal mains adapter
Power supply	12Vdc input (cigarette lighter cable and battery pack options)
Size	365 (W) x 272 (D) x 160 (H) mm
Weight	6Kgs



6280

6280 Fluorimeter 190 - 650nm (not including filters-POA)
Heated sample holder
Slipper pump

Freeze dryer

Kambic Lio 5 freeze dryer

Compact and reliable, this neat versatile freeze dryer is popular with users who require a unit which provides powerful lyophilisation with a small bench footprint. The wide range of standard accessories accommodates most applications.

Features

- Minimum temperature -55°C
- 2.3kg ice capacity in 24 hours
- Digital displays for temperature and pressure
- Front mounted vacuum connection & drain valve
- Stainless steel chamber and face plate
- Accessories include Acrylic chamber & shelves, 8 place flask manifold and mobile trolley

Specifications

Model	Lio-5
Condenser volume:	7.2 L
Condensing area:	0.17m ²
Ice capacity:	up to 2.3kg in 24 Hours
Minimum temperature:	-55°C
Pressure range:	0.001 to 100mbar
External dimensions:	330 x 470 x 620mm HWD- (excluding attachments)
Power requirements:	240V / 330W



Fridges / freezers general

Labcold economy fridges and freezers

These models provide basic refrigerated storage at a lower price while still providing the confidence of the Labcold name and support. Lower cost production methods have been used, and certain convenience features omitted, in order to offer the best price possible without significant sacrifices in the important area of function and reliability. Contact our sales office for higher specification models.

Features

- Low cost laboratory units
- Underbench or free-standing models
- Auto defrosting refrigerators
- Operator controlled defrosting on freezers

Specifications

Model number	RLPLO4043	RLFR1804	RLVL03203	RLVF1825
Configuration	Underbench refrigerator	Free-standing refrigerator	Underbench freezer	Free standing freezer
Capacity (litres)	117	505	90	505
Exterior size (mm)				
High	855	1710	855	1710
Wide	505	765	505	765
Deep	500	725	500	725
Sparkfree interior	No	No	No	No
Internal fan	No	Yes	No	No
Door lock	No	Yes	No	Yes
Temp display	No	Yes	No	Yes
Alarm	No	No	No	No
Auto defrost	Yes	Yes	No	No
No. shelves/drawers	4	4	4	6
Operating temp (nominal)	+4°C	+4°C	-20°C	-20°C



RLVL03203



RLFR1804

Freezers - ultra low temperature

Labcold compact economy ultra-low temperature freezers

Labcold compact ULT freezers utilize a Japanese adaptation of a refrigeration technique tried and tested for many years in freezers operating at temperatures as low as -150°C using a single, commonly available, European compressor and fewer moving parts than more conventional ULT freezers. These products will provide reliable storage at temperatures down to -83°C .

Features

- Extremely compact and lightweight design
- Quiet, with low heat output
- Unique application of proven technology
- Low cost
- Digital display with integral alarm

Specifications

Model number	ULTF80	ULTF320	ULTF420
Configuration	Chest	Chest	Chest
Capacity (Litres)	74	276	383
Exterior size (mm)			
High	875	885	855
Wide	550	1260	1560
Deep	645	695	695
Door lock	Yes	Yes	Yes
Temp display	Yes	Yes	Yes
Alarm	Yes	Yes	Yes
Alarm contacts	Yes	Yes	Yes
Operating temp (nominal)	-83°C	-83°C	-83°C



ULTF80



ULTF320

Furnaces - ashing

Carbolite furnaces

Carbolite produce a comprehensive range of laboratory and industrial furnaces. We list the most popular laboratory types and ranges. All Carbolite Furnaces benefit from superior design, high quality materials and robust construction coupled with electronic PID controllers for unmatched temperature uniformity, operating efficiency and reliability. Made in the UK.

AAF ashing furnaces

These models are heated by wire wound heating elements protected from chemical and mechanical damage by a hard wearing alumina based liner. The graded winding allows heating from all four sides to compensate for any heat loss and additionally used to pre-heat the air entering the furnace. This ensures maximum temperature uniformity despite the higher airflow through the chamber.

Features

- 3 sizes available
- 1100°C maximum temperature
- Long life wire wound elements
- Designed especially for Ashing
- Pre-heated regulated airflow
- Digital PID controller with ramping facility
- Vertical lift door positions hot surfaces away from operator
- Chimney & inconel trays and loading handle included
- AAF11/18 comes with two tier shelf which doubles capacity

Specifications

Model	AAF11/3	AAF11/7	AAF11/18
Max. temperature:	1100°C	1100°C	1100°C
Volume:	3 L	7 L	18 L
Internal dimensions: H	85mm	90mm	235mm
W	150mm	170mm	196mm
D	250mm	455mm	400mm
Nominal heat up time:	80mins	110mins	60mins
Holding power: (@ 1000°C)	1200W	2300W	3500W
External dimensions: H	580mm	650mm	705mm
W	370mm	430mm	505mm
D	485mm	740mm	675mm
Height to chimney:	780mm	1060mm	905mm
Power requirements:	240V	240V	240V
Power rating:	1750W	3900W	7250W
Weight:	22kg	63kg	70kg



AAF



Inconel trays

Furnaces - chamber

Carbolite chamber furnaces

Carbolite produce a comprehensive range of laboratory and industrial furnaces. We list the most popular laboratory ranges, in sizes from 6 to 23 litres capacity, providing maximum temperatures of 1100°C in the economy ELF range, or up to 1300°C in the hardwearing CWF range.

ELF economy range

Features

- Suitable for general light duty laboratory work
- Maximum temperature 1100°C
- 6, 14 and 23 litres capacity
- Rapid heat up with low thermal mass chamber
- Ceramic chimney for ventilation
- Digital 201 controller with adjustable range to set point and timer
- 2 year guarantee

Model	ELF 11/6B	ELF 11/14B	ELF 11/23B
Maximum operating temp: (°C)	1100	1100	1100
Maximum continuous temp: (°C)	1000	1000	1000
Chamber dimensions: H mm	165	210	235
Chamber dimensions: W mm	180	220	255
Chamber dimensions: D mm	210	310	400
Heat up time to 1000°C (mins)	35 mins	40 mins	50 mins
Maximum power (W)	2000	2600	5000
Holding power (W)	900	1300	2400
Weight (kg)	24	31	38

Spare elements / chamber - see price list

ELF11/14B



CWF heavy duty range

Features

- High performance and reliability
- Hard wearing heating modules each side of the chamber provide rapid uniform heating
- High resistance to wear and tear
- 5, 13 and 23 litres capacity
- 1100°C, 1200°C or 1300°C maximum temperature
- Max continuous operating temp 100°C less than maximum temp.

Specifications

Model	CWF 5 Litre	CWF 13 Litre	CWF 23 Litre
(H) high mm	135	200	235
(W) width mm	140	200	245
(D) depth mm	250	325	400
Max. power (W)	2400	3100	7000
Nominal heat up time (mins)			
Model 1100°C	30	55	40
Model 1200°C	35	65	45
Model 1300°C	40	80	55
Net weight (kg)	30	47	68

Model 1100°C	CWF11/5	CWF11/13	CWF11/23
Model 1200°C	CWF12/5	CWF12/13	CWF12/23
Model 1300°C	CWF13/5	CWF13/13	CWF13/23

CWF11/13



Furnaces - tube

MTF tube furnaces

These models utilise a resistance wire heating element which is wound around the outside of a ceramic work-tube making it an integral part of the heating element. An additional work-tube is recommended if the tube is required to contain an atmosphere or is likely to be contaminated by spillage. Full details of the range of work-tubes and accessories are available on request.

Features

- 4 sizes available
- Up to 1200°C maximum operating temperature
- Work protected thermocouple
- Integral work-tube serves as open air chamber
- Digital PID controller with ramping facility
- Accommodates additional work-tubes
- Compact space saving design
- Outer mesh guard on heating chamber
- Horizontally mounted chamber on control box

Specifications

Model	MTF10/25/130	MTF12/25/250	MTF12/38/250	MTF12/38/400
Max. temperature:	1000°C	1200°C	1200°C	1200°C
Tube diameter: (ID)	25mm	25mm	38mm	38mm
Heated length:	130mm	250mm	250mm	400mm
Overall length:	150mm	300mm	300mm	450mm
Holding power: (@ 100°C below max.)	100W	200W	300W	300W
External dimensions: H	265mm	375mm	375mm	430mm
W	150mm	370mm	450mm	450mm
D	175mm	375mm	375mm	375mm
Power requirements:	240V	240V	240V	240V
Power rating:	400W	700W	1000W	1500W
Weight:	3kg	10kg	15kg	15kg

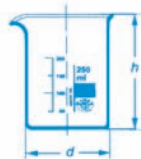


MTF 12/38/250

Severn Sales now supply a range of quality glassware, with many items in stock for immediate delivery.

Beakers, low form, catalogue no.155 _____

5, 10, 25, 50, 100, 150, 250, 400, 600, 800, 1000ml; pack qty 10
2000ml, 3000ml; pack qty 4
5000ml; pack qty 2



Erlenmeyer flasks, narrow neck, catalogue no. 24 _____

25, 50, 100, 200, 250, 300, 500, 1000ml; pack qty 10
2000ml, 3000ml; pack qty 6
5000ml; pack qty 2



Erlenmeyer flasks, strengthened rim, catalogue no. 24SR

100, 250, 500ml; pack qty 10

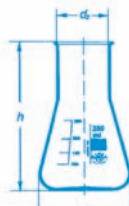


Erlenmeyer flasks, heavy wall, catalogue no. 24HW _____

125, 250, 500ml; pack qty 10

Erlenmeyer flasks, wide neck, catalogue no.25 _____

50, 100, 250, 500, 1000ml; pack qty 10
2000ml; pack qty 6



Erlenmeyer flasks, wide neck, strengthened rim, catalogue no.25SR

100, 250, 500ml; pack qty 10



Erlenmeyer flasks, wide neck, heavy wall, catalogue no.25HW _____

100, 250, 500ml; pack qty 10

Laboratory bottle, clear, graduated, catalogue no. 2070 _____

100, 250, 500, 1000, 2000ml; pack qty 10
5000ml; pack qty 6
10,000 & 20,000ml; pack qty 1



Laboratory bottle, amber, graduated, catalogue no. 2070/H _____

100, 250, 500, 1000, 2000ml; pack qty 10
5000ml; pack qty 6

**Flasks, volumetric with plastic stoppers, class B,
catalogue no. 1503/BPN**

5, 10, 25, 50, 100, 200, 250, 500, 1000ml; pack qty 10
2000ml; pack qty 6

**Flasks, volumetric with plastic stoppers, class A,
catalogue no. 1503/APN**

5, 10, 25, 50, 100, 200, 250, 500, 1000ml; pack qty 10
2000ml; pack qty 6

**Measuring cylinder with hexagonal base, class A blue graduations,
catalogue no. 1634/AM**

5, 10, 25, 50, 100, 250, 500, 1000, 2000ml; pack qty 1

**Measuring cylinder with hexagonal base, class B white graduations,
catalogue no. 1634/BB**

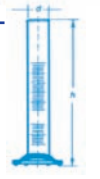
5, 10, 25, 50, 100, 250, 500, 1000, 2000ml; pack qty 1

**Measuring cylinder with round base, brown graduations,
catalogue no. B1202**

10ml; pack qty 25	250ml; pack qty 4
25, 50ml; pack qty 20	500, 1000ml; pack qty 2
100ml; pack qty 10	2000ml; pack qty 1

**Measuring cylinder with hexagonal base, white graduations,
standard joint and plastic stopper, catalogue, no. 1652/BBPN**

5, 10, 25, 50, 100, 250, 500ml; pack qty 10
1000ml; pack qty 4
2000ml; pack qty 3



Glassware washers

Lancer Labexia range

Lancer are the acknowledged European leaders in laboratory glassware washing. The range provides under bench models with or without hot air drying, and a taller model for larger items of glassware. All models provide for acid and detergent washing with a pure water rinse, providing guaranteed analytically clean glassware. A huge range of baskets and accessories are available, and larger models for specialist applications or higher throughput. Please contact our sales office for a detailed quotation designed to suit your individual requirements.

Features

- Easy selection of 4 standard washing programs
- Adjustable parameters
- Self diagnostic alarms
- Password protection
- Superior construction materials
- Easy installation
- Water injection directly at each level
- Stainless steel top and bottom washing arms



Labexia 810LX



Labexia 820LX



Labexia 910LX (on accessory plinth)

Machine (excluding baskets)

Labexia 810LX
Labexia 820LX
Labexia 910LX

A full range of baskets and accessories are available - ask our sales team for a detailed quotation.

Heating mantles

The E-series

The E-series are energy-regulated all purpose heating mantles. The time proportional double pole system allows stable control of the heating element, reducing risk of overheating liquids. The dial controller allows accurate temperature settings.

Specifications

Controlled mantles		Controlled mantles	
E 1005	50ml	E 105	2000ml
E 101	500ml	E 106	3000ml
E 102	250ml	E 107	5000ml
E 103	500ml	E 108	10000ml
E 104	1000ml	E 109	20000ml



E102

The ES series

The ES-series rotamantles feature an integral magnetic stirrer, which is independently regulated. The stirrer speed may be varied from 100 to 10000rpm and the temperature is controlled by an infinity bimetallic thermostat.

Specifications

Stirrer mantles		Stirrer mantles	
ES 301	100ml	ES 305	2000ml
ES 302	250ml	ES 306	3000ml
ES 303	500ml	ES 307	5000ml
ES 304	1000ml		



ES302

The DM series

The DM series features an integral digital temperature controller linked to a sensor probe, which is inserted directly into the flask. The temperature is shown clearly on an LED display and the desired temperature is controlled by a simple push button potentiometer.

Specifications

Digital mantle including temp. probe		Digital mantle including temp. probe	
DM 602	50ml	DM 605	2000ml
DM 603	500ml	DM 606	3000ml
DM 604	1000ml	DM 607	5000ml



DM604

S+J Juniper hotplates

This range of hotplates has been specifically designed for use in the general laboratory. The robust top casting, which is heated by an incoloy sheathed rod element, has angled sides to discard accidental spillage away from the base plinth which houses the temperature control and other electrical components. Two red baffle plates are positioned between the top casting and the base plinth to give extra protection from spillage and heat transfer. Temperature control is thermostatic with the option of digital control.

Specifications

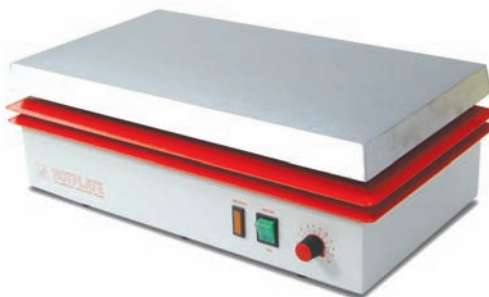
Aluminium top, thermostat control, max 320°C

Model No.	Dims (mm)	Power (W)
H104	205 x 305	1300
H106	255 x 455	2300
H114	305 x 610	2750

PTFE coated aluminium top, thermostat control, max 300°C

Model No.	Dims (mm)	Power (W)
H104P	205 x 305	1300
H106P	255 x 455	2300
H114P	305 x 610	2750

For digital models add suffix-eg. HD114P
- see price list



H106



HP114



HD114P

Hotplate stirrers

Bibby hotplates/magnetic stirrers CB and SB series

Features

- Choice of robust aluminium or chemically resistant ceramic tops
- Advanced safety features
 - Flashing HOT warning light
 - Spillproof design Independent safety circuit to protect against overheating
- Microprocessor control for accurate temperature setting
- Microprocessor control for accurate temperature setting

Specifications

Model	CB series	SB series	
Plate material	Glass ceramic	Aluminium/silicon alloy	
Plate dimensions, mm	160 x 160	160 x 160	
Heater area, mm	120 x 120	120 x 120	} Heated units only
Heater power, W	500	700	
Max.plate temp °C	450	325	
Stirrer speed, rpm	100 -1500	100 -1500	} Stirred units only
Maximum stirring			
Capacity, litres	15	15	
Overall dimensions (W x D x H) mm	190 x 300 x 110	190 x 300 x 110	
Net weight, kg	3.4	3.4	
Electrical supply	230V, 750W (max)	230V, 750W (max)	

SB160	Metal top hotplate
CB160	Ceramic top hotplate
SB161	Metal top stirrer
CB161	Ceramic top stirrer
SB162	Metal top hotplate stirrer
CB162	Ceramic top hotplate stirrer
SB161-3	3 - place Mag Stirrer with stainless steel top
SB162-3	3- place hotplate stirrer with aluminium top



SB162



SB162-3

Incubators - CO₂

Automatic water jacketed CO₂/humidity incubators, with IR sensor, and a temperature range of ambient +8 to 60°C with water pan, 3 shelves and gas shuttle switch. Modern styling, anti-corrosion features and a choice of three models, the compact 50 litre 'personal' model 3503, the robust general purpose model 3517 and the capacious model 3524 for those users needing large capacity.

Features

- Coved corners for easy cleaning
- Digital controls with audible/visual alarms
- Polished stainless steel interior
- New anti-corrosion anode for easy set-up & tap water use
- Patented copper-housed HEPA filter for superior contamination prevention
- Built-in CO₂ tank switcher
- Factory pre-set door thermostat
- Pre-heated CO₂ gas inlet for increased temperature uniformity
- Front-mounted connections for convenience
- 5 year warranty – 7 years on the CO₂ sensor

Specifications

Model	3503	3517	3524
Interior Dimensions (mm H x W x D)	320 x 400 x 400	655 x 520 x 508	720 x 520 x 510 (each chamber)
Exterior dimensions	670 x 530 x 570	1020 x 660 x 650	2040 x 660 x 650
Incubator volume	50 litres	170 litres	170 litres each chamber
Temperature range	ambient to 60°C	ambient to 60°C	ambient to 60°C
Temperature uniformity	+/-0.35°C at 37°C	+/-0.35°C at 37°C	+/-0.35°C at 37°C
Power rating		550W 240V Amps: 5A	
Shelves supplied	3	3	3
Shelf positions	8	16	32
CO ₂ sensor type	IR	IR	IR
CO ₂ recovery rate to 5%	< 5 minutes	< 5 minutes	< 5 minutes
Relative humidity range	up to 95%	up to 95%	up to 95%
CO ₂ range	0-20%	0-20%	0-20%



3517

Incubators - cooled

LMS cooled incubators series 1A

The LMS series 1A cooled incubator is a reliable and accurate temperature controlled cabinet (-10°C to +50°C) which has proved its worth over many years in laboratories both in the UK and overseas. The design of the purpose built incubator facilitates the addition of optional extras to provide greater flexibility for individual use.

Features

- Digital control with digital readout
- Fan assisted air circulation
- Full P.I.D heating control
- Pre-set overheat protection
- Refrigeration isolation switch
- Self-evaporating condensate drip-tray
- Doorlock (except on double glazed door)

Optional extras (POA)

- Automatic dual temperature control by (a) 24 hour timer with 10 minute settings or (b) 7 day timer with 2 hour settings
- Interior fluorescent/u.v lighting by 24 hour or 7 day timer
- Double glazed door (minimum 0°C)
- Inner clear perspex door
- Built-in chart recorder
- Safety cut-out with audible alarm
- Automatic defrost
- Special evaporator for corrosive conditions
- Access porthole
- Internal 13 amp socket

Specifications

Model	80	120	201	280
External (Height)	750	1070	1430	1750
Dimensions (Width)	520	520	520	520
(mm) (Depth)	580	580	580	580
Capacity (litres)	76	120	201	272
Shelf size (mm)	420 x 430	420 x 430	420 x 430	420 x 430
Number of shelves	2	3	4	5
Unladen weight	40	55	65	75



Incubators - general

Genlab incubators

Genlab incubators are a robust, well proven range providing simple operation, reliable temperature control and great durability. Removable wire grid shelves provide flexibility and options include digital display and an inner glass door for maximum stability.

Features

- Vertical (MINI) or horizontal (INC) style
- Stainless steel lined
- Thermostat or electronic temperature control
- Temperature Range-
 - Ambient +5°C to 100°C without fan
 - Ambient +8°C to 100°C with fan
 - Ambient +5°C to 60°C with transparent door
- Fluctuation: $\pm 0.25^{\circ}\text{C}$ at 37°C
- British made with two year guarantee
- 11 sizes: 6 litres to 200 litres
- Easy to clean powder-coated body
- Direct reading thermostat
- Safety overheat thermostat

Vertical style specifications

Ref:	Capacity (ltrs)	Internal Dimensions (H x W x D cms)		External Dimension (H x W x D cms)		No of shelves	No of shelf positions
		without fan	with fan	without fan	with fan		
MINI/6	6	15 x 23 x 18		39 x 32 x 32	N/A	1	1
MINI/18	18	26 x 26 x 27		50 x 36 x 40	N/A	2	2
MINI/30	30	24 x 36 x 35		49 x 45 x 47	49 x 45 x 59	2	2
MINI/40	40	32 x 36 x 35		57 x 45 x 47	57 x 45 x 59	2	3
MINI/50	50	33 x 49 x 33		58 x 61 x 45	58 x 61 x 57	2	3
MINI/75	75	33 x 49 x 64		58 x 61 x 58	58 x 61 x 70	2	3

Horizontal style specifications

Ref:	Capacity (ltrs)	Internal Dimensions (H x W x D cms)		External Dimension (H x W x D cms)	No of shelves	No of shelf positions
		without fan	with fan			
INC/75	75	42 x 53 x 35	45 x 49 x 35	55 x 85 x 47	1	1
INC/100	100	42 x 53 x 46	45 x 49 x 46	55 x 85 x 57	2	2
INC/125	125	52 x 53 x 46	55 x 49 x 46	65 x 85 x 57	2	2
INC/150	150	52 x 53 x 54	55 x 49 x 54	65 x 85 x 65	2	3
INC/200	200	72 x 53 x 54	75 x 49 x 54	85 x 85 x 65	2	3

Optional extras for general purpose incubators:-

- DIG Digital temperature control with LED display
- VIS Integral viewing window in door (maximum temperature 60°C - MINI version only)
- DD Double door (inner glass door) INC version only

To order an optional extra, simply insert reference after unit description, i.e. MINI/50 fitted with fan circulation

MINI/50



INC/75



Incubators - premium

Carbolite incubators

The Peak series offer economical high specification incubators that are suitable for any laboratory applications and microbiological culture. Two types of air circulation are available; natural convection offers greater economical value and more gentle airflow or fan circulation which provides better chamber uniformity and recovery rates. Both models have the same excellent build quality and electronic PID control system. Made in the UK.

Features

- Natural or forced air circulation models
- Ambient +10 to 80°C temperature range
- Electronic PID controller with digital display
- Stainless steel interior
- Glass inner door
- 4 sizes: 28 to 230 litres
- Multi-positional wire grid shelves
- Lever latch door & airtight silicone seal

Options: (may only apply to certain models)

- Separate over-temperature cut-out device
- Digital timer to switch incubator off
- Top access port for remote thermocouple
- Cable access port
- Variable airflow vent
- Extra shelves
- Stacking frame
- Key lock door
- Door switch
- Floor stands & wheeled trolleys



PIN60

Specifications

Model	Natural convection				Fan circulation			
	PIN30	PIN60	PIN120	PIN200	PIF30	PIF60	PIF120	PIF200
Capacity:	27 L	57 L	115 L	215 L	28 L	66 L	127 L	230 L
Max. temperature:	80°C	80°C	80°C	80°C	80°C	80°C	80°C	80°C
Temp. stability	+/-0.5°C	+/-0.5°C	+/-0.5°C	+/-0.5°C	+/-0.2°C	+/-0.2°C	C+/-0.2°C	+/-0.2°C
Temperature uniformity: (@ max. temperature)	+/-3.5%	+/-3.5%	+/-3.5%	+/-3.5%	+/-1.5%	+/-1.5%	+/-1.5%	+/-1.5%
Internal dimensions: H	255mm	350mm	450mm	700mm	300mm	400mm	500mm	750mm
W	330mm	392mm	492mm	592mm	290mm	392mm	490mm	590mm
D	320mm	420mm	520mm	520mm	320mm	420mm	520mm	520mm
Shelves: (supplied)	2	2	2	2	2	2	2	2
(Max. possible)	3	5	9	15	3	5	9	15
External dimensions: H	470mm	570mm	670mm	920mm	470mm	570mm	670mm	920mm
W	665mm	765mm	865mm	965mm	665mm	765mm	865mm	965mm
D	470mm	570mm	670mm	670mm	470mm	570mm	670mm	670mm
Power requirements:	240V	240V	240V	240V	240V	240V	240V	240V
Power rating:	250W	550W	700W	1000W	250W	700W	700W	1000W
Weight:	30kg	45kg	60kg	75kg	30kg	45kg	60kg	75kg

Microscopes - general

CETI laboratory microscopes

A comprehensive range of laboratory microscopes offering high quality optics at keen prices. The most popular models are listed, but more specialised instruments are available - please contact our sales office for details.

Star-24ED

The Star-24ED is a stereo microscope designed for educational and general use. It is particularly well suited to viewing specimens at low magnifications.

Specifications

Head type:	Binocular, inclined at 45° Interpupillary distance adjustment: 50-75mm Dioptic adjustment on one eyepiece
Eyepieces:	10x/20mm widefield
Magnification:	20x and 40x (with turret changer)
Working distance:	75mm
Illumination:	Episcopic - 12V/10W Diascopic - 12V/10W
Stage:	Frosted and black/white contrast plate
Accessories:	Eye-piece camera (globecam)
Mains power:	220-240V/50-60Hz

Star-24ED



Steddy

The Steddy is a stereoscopic zoom microscope available with either dual illumination or large rectangular dissecting base.

Specifications

Head type:	Binocular or Trinocular (including photo port), inclined at 45° Interpupillary distance adjustment: 55-75mm Dioptic adjustment on both eyepiece tubes
Eyepieces:	10x/20mm widefield
Magnification:	Zoom system - bilateral knobs with click stop feature Zoom range - 1x to 4x
Total Magnification:	2.5x to 120x (dependent upon eyepiece & objective used)
Working distance:	75mm
Illumination:	Episcopic - 12V/10W Diascopic - 12V/10W
Stage:	Frosted and black/white contrast plate
Accessories:	Numerous camera attachments. Additional lenses and eyepieces.
Mains power:	220-240V/50-60Hz

Steddy-B



Binocular dual illumination	Steddy B
Trinocular dual illumination	Steddy T
Binocular (illumination not included)	Steddy B with flat base

Microscopes - general

Magnum

The all new Magnum range provides extremely high quality, high specification biological compound microscopes for a broad array of laboratory and life-science applications. The Magnum has been ergonomically designed for operational comfort. With its new, eye-catching streamlined body and composite alloy construction it will withstand the rigours of daily use.

Specifications

Optical head	Binocular or Trinocular included at 30° with interpupillary adjustment from 55 to 75mm
Eyeieces:	10x/20mm widefield
Nosepiece:	Quintuple reversed and revolving with click stop
Objective:	4x/10x/40x100x(oil) Zi Objectives
Optical:	Achromatic / semi - planachromatic/ planachromatic / infinity corrected (please ask for details)
Condenser:	Brightfield Abbe - NA 0.90 (1.25 with immersion oil/ iris diaphragm)
Stage:	208 x 138mm, with built in mechanical stage & slide clip
llumination:	Halogen 6V / 20W
Mains power:	220-240-V/50-60Hz

Magnum-B
Magnum-T

Magnum-B



Magnum for phase contrast

Biological microscope equipped with a complete positive phase contrast. Standard specification as Magnum 'B' or 'T' with the following upgrades:

Specifications

Objectives	4 planachromatic positive phase objectives PC 10x/0.25/160/0.17PH+spring loaded PC 20x/0.40/160/0.17PH+spring loaded PC 40x/0.65/160/0.17PH+spring loaded PC 100x/1.25/160/0.17PH+(oil) spring loaded
Condenser	Phase contrast turret type - NA 1.25 4 phase annular stops, centrabale and 1 neutral brightfield position Iris diaphragm Supplied with (additional): centering telescope, green filter and manual

Brightfield application via neutral position in turret condenser.

Magnum B phase contrast
Magnum T phase contrast

Magnum-T with phase contrast and accessory camera



Microscopes - premium

Meiji Techno microscopes

A very high quality, ergonomically designed range of stereo, binocular and trinocular microscopes ideally suited for research or advanced laboratory use. Made in Japan, the superb optics and engineering of these microscopes puts them on a level with the leading makes in the field.

Meiji EMZ-5/PK and PKL

This is an advanced binocular or trinocular stereo-zoom microscope with an option of a plain or illuminated base.

Features

- Zoom range 0.7x to 4.5x
- With WF10x eyepieces
- Magnification 7x to 45x
- Working distance 93mm
- Interpupillary and dioptic adjustment

Specifications

EMZ-5/PK	Binocular	Plain ergonomic stand
EMZ-5TR/PK	Trinocular	Plain ergonomic stand
EMZ-5/PKL	Binocular	Ergonomic stand with dual illumination system
EMZ-5TR/PKL	Trinocular	Ergonomic stand with dual illumination system



EMZ-5TR/PKL

Meiji EMZ-5/UHM

The EMZ optical head can be mounted on a long arm stand to provide a versatile instrument for many inspection purposes.

Features

- Zoom range 0.7x to 4.5x
- With WF10x eyepieces
- Magnification 7x to 4.5x
- Working distance 93mm
- Interpupillary and dioptic adjustment

Specifications

EMZ-5/UHM	Binocular	Long arm stand
MA305/200		Fluorescent ring illuminator with starter



EMZ-5/UHM

Microscopes - premium

Meiji transmitted light biological microscope

MT4000 series

Features

- Widefield KHW 10X eyepieces
- Infinity corrected planachromatic objectives; 4x, 10x, S40x, and S100x oil
- Variable intensity control
- Abbe or Zerenike substage condensor
- Ceramic coated flat top stage
- Ergonomic easy-to-reach stage controls
- Modern, slim space saving design
- Low positioned coaxial focus control
- Trinocular and phase contrast versions available

Specifications

MT4200L	Binocular	Abbe condensor	LED illuminator
MT4300L	Trinocular	Abbe condensor	LED illuminator
MT4200H	Binocular	Abbe condensor	6V 30W Koehler
MT4300H	Trinocular	Abbe condensor	6V 30W Koehler
MT4210L	Binocular	Phase condenser	LED illuminator
MT4310L	Trinocular	Phase condenser	LED illuminator
MT4210H	Binocular	Phase condenser	6V30W Koehler
MT43101H	Trinocular	Phase condenser	6V30W Koehler



MT4200H

Meiji incident illuminated metallurgical microscope

MT7000 series

Features

- Trinocular viewing head
- Widefield 10x eyepieces
- Infinity corrected planachromatic objectives; 5x, 10x, 20x, and 50x
- 6v 30w incident illumination
- Variable intensity control
- Blue, green and ND 50 filters
- Ceramic coated flat top stage
- Ergonomic easy-to-reach stage controls
- Modern, slim space saving design
- Low positioned coarse and fine focussing controls
- Camera adapter and imaging system available at extra cost

Specifications

MT7000	Binocular Head	Met Mic
MT7100	Trinocular Head	Met Mic



MT7100

Retsch mill range

Retsch manufacture a comprehensive range of mills and particle sizing/size reduction equipment. Two of the most commonly used types are listed here (contact our sales office for details on the whole range).

ZM 200 ultra centrifugal mill

Features

- For soft, medium hard, brittle and fibrous materials
- Feed size up to 10mm
- Final fineness down to approx 0.04mm
- Supplied with a 2 year warranty, CE conforming



ZM200

Jaw crushers BB51/BB100/BB200

Features

- For hard, brittle and tough materials
- Feed size up to 35mm (BB51), 50mm (BB100), 90mm (BB200)
- Final fineness down to approx 0.5mm (BB51) or 2mm (BB100/200)
- Available with breaking jaws made of four different materials

Specifications

Table 1: Typical applications for Retsch ZM 200 ultra centrifugal mill

Typical ZM 200 application	Parameters	Result
Cereal, grain for N.I.R	14,000 rpm	<0.5 mm
Animal feedstuffs for N.I.R	10,000 rpm	<1.0 mm
Powder coating (epoxy)	14,000 rpm	<1.0 mm
Pharmaceutical tablets testing	15,000 rpm	<0.25 mm
Mixed domestic waste	10,000 rpm	<1.0 mm
Biomass/biofuel testing	14,000 rpm	<1.0 mm

Table 2: Typical applications for Retsch BB 51/BB100/BB 200 jaw crushers

Typical application	Gap width	Result
Soil for heavy-metal analyses	4.0 mm	<2.0 mm
Rock crushing (pre-crushing)	10.0 mm	<8.0 mm
Coke/coal crushing	10.0 mm	<8.0 mm
Glass frits	10.0 mm	<8.0 mm
Cement clinker	6.0 mm	<4.0 mm
Metal/minerals processing	20.0 mm	<10.0 mm

Ordering information

BB51 (bench top) jaw crusher (with manganese steel jaws)
 BB100 (floor standing) jaw crusher (with manganese steel jaws)
 BB200 (large capacity) jaw crusher (with manganese steel jaws)
 ZM200 ultra centrifugal mill without screws or rotors
 Screens for ZM200 (choice of sizes available)
 Rotor for ZM200 12/24 teeth



BB200

Mixers - blender

IUL Masticator series

Powerful, well designed, quiet in operation, the IUL masticator is the perfect answer to your need for homogenization of samples prior to analysis. The steady action of the dual paddles provides gentle yet thorough blending of the sample. The paddles are mounted on a long-lasting spring system removing the need for regular maintenance.

Features

- Digital display of time or strokes/minute
- Stainless steel case

Specifications

Model	Silver blender	Classic basic blender
Motor speed	500to1500rpm	1500rpm
Strokes/second	5,6,7or 8	8.5
Setting	Keyboard/display	Digital timer
Timer (seconds)	5/30/60/90/120/150/180/210/240	15-90
Sample bag size	400ml	400ml
Start/stop	Door activated	Door activated
Power	270 watts	270 watts
Dimensions (H x W x D)	300 x 240 x 400mm	260 x 240 x 400mm
Weight (Kg)	20	17



Silver blender



Classic basic blender

Mixers - high shear

Greaves mixer range

A range of British-made high shear mixers/homogenisers available from 40 to 370 watts fitted with either electric or pneumatic motors. All models give excellent simulation of production mixer techniques and capabilities. Stainless steel grade 316 contact parts are standard, suitable for:-

Emulsifying - Homogenising - Solubilising - Diluting - Disintegration

Specifications

Models

Model A	1-7 litres, 40 watt free standing laboratory mixer
Model B	2-15 litres, 90 watt free standing laboratory mixer
Model C	5-40 litres, 180 watt free standing mixer
Model D	15-90 litres, 550 watt floor standing laboratory mixer



Model A



Model B



Model C



Model D

Mixers - high shear

Advanced E.G.M. laboratory mixers

A range of recently developed more technically advanced stainless steel mixers for the more demanding research technician.

Features

- 60mm or 75mm, stirrer or emulsifier head
- High torque electronic variable speed controller
- AC 190 watt motor with housing located in a single stainless steel enclosed with integrally mounted control panel
- Built in reversing switch, which offers a cavitation mixing feature
- Free standing stainless steel base plate
- Safety circuits preventing the operator raising or lowering the mixer during the mixing process.
- Option of a built-in 1250 watt thermostatic heating plate, 50-320°C
- Electrical raise and lower control
- Adjustable timed mixing cycle
- Digital speed indicator

EGM,(B) - 60mm GP stirrer head

EGM,(C) - 70mm GP stirrer head

EGM,(B) - 60mm emulsifier head

EGM,(C) - 75mm emulsifier head



EGM Model D

Mixers - planetary

Commercial grade planetary mixers

Designed for performance and versatility, these mixers have a powerful motor coupled to a robust 3-speed gearbox with heat-treated steel gears and shafts for lasting usage and reliability. Interlocks on the bowl guard and lift mechanism and an emergency stop button for increased operator safety. Complete with a stainless steel bowl and attachments.

SP-800

Features

- 7.5 litre SS bowl
- Bench top model
- 3 speed gear driven transmission
- Cast metal construction
- Digital 15 minute timer
- Interlocking bowl guard and bowl lift
- No. 12 attachment drive
- Complete with whisk, dough hook & flat beater



SP-800

SP-100

Features

- 10 litre SS bowl
- Floor standing model
- 3 speed gear driven transmission
- Cast metal construction
- Interlocking bowl guard and bowl lift
- No. 12 attachment drive
- Complete with whisk, dough hook & flat beater



SP-100

Mixers - planetary

SP-22HI

Features

- 25 litre SS bowl
- Floor standing model
- 3 speed gear driven transmission
- Cast metal construction
- 15 minute run-back timer
- Interlocking bowl guard and bowl lift
- No.12 attachment drive
- Complete with whisk, dough hook & flat beater
- Optional mixer stand & half size attachments



SP-22HI

SP-30HI

Features

- 30 litre SS bowl
- Floor standing model
- 3 speed gear driven transmission
- Cast metal construction
- 15 minute run-back timer
- Interlocking bowl guard and bowl lift
- No.12 attachment drive
- Complete with whisk, dough hook & flat beater
- Optional bowl trolley & half size attachments



SP-30HI

Specifications

Model	SP-800	SP-100	SP-22HI	SP-30HI
Bowl capacity:	7.5 L	10 L	25 L	30 L
Speed range:	132/235/421rpm	106/196/358rpm	102/183/352rpm	99/176/320rpm
Timer:	Digital 15 min	No	Run-back 15 min	Run-back 15 min
External dims:	H 580mm W 300mm D 400mm	730mm 440mm 560mm	910mm 570mm 560mm	1170mm 580mm 670mm
Motor rating:	0.25hp	0.33hp	0.75hp	1hp
Power supply:	240V / 200W	240V / 250W	240V / 550W	240V / 750W
Weight:	29kg	90kg	120kg	200kg

Moisture analysers

GR Scientific coulometric KF analyser

Cou-Lo Aquamax KF moisture meters have been specifically designed for the determination of water content. Combining coulometry with the Karl Fischer method, Aquamax KF titrators determine the water content of samples by measuring the amount of electrolysis current necessary to produce the required iodine - this is an absolute technique which does not require the calibration of reagents.

Features

- Simple operation
- 10 user programmable methods
- 1ppm/100%
- Results in ppm, mg/kg, % & ug water
- Multi language display & print out
- Small footprint
- Integral high speed printer
- Fully portable
- Conforms to ASTM D1533, D4928, D6304, IP386, IP438, API MPMS Chapter 10.9, IEC60814, ISO 10101-3, 10337 & 12937

Specifications

Part No.	Product
71000	Cou-Lo Aquamax KF moisture meter
Optional accessories	Product
201109	Carry case (framed aluminum with moulded lining)
61000	Cou-Lo formula reagents pack

71000 (with reagent pack)



Rotronic water activity analysers

Obtain an accurate measurement of the active part of a product's moisture content. Water activity (a_w) is the relative humidity which is reached at equilibrium in a sealed container where a hygroscopic product has been placed, but expressed on a scale of 0 – 1.

Hygrolab 2

Features

- Four simultaneous digital probe inputs
- Easy to use - digital display
- RS232 interface
- Single or multiple point digital calibration directly by keypad

Specifications

Measuring range	0-100% RH, 0 – 1 aw, -40 to +85°C
Accuracy	at 23°C +/-1.5% RH, +/-0.015 aw, +/-0.3°C
Repeatability	better than 0.5% RH, 0.005 aw, 0.1°C
Power supply	9v power adapter



HygroPalm AW set

Features

- Handheld instrument for portable monitoring of water activity
- Fast, accurate aw measurement
- Single digital probe input
- Single or multiple point digital calibration
- Available with carry case
- Reads out in aw units/°C
- Battery powered (PP3 battery)

Specifications as above



Ovens - industrial

Genlab industrial ovens range 250°C / 300°C

Applications

The LCO range of industrial ovens are manufactured in the UK by Genlab Ltd, (ISO 9001 registered company) and carry a full 2 year guarantee.

- Interior finish - aluminium clad steel or stainless steel
- Exterior finish - powdercoat painted in light grey or colour of customer's choice
- Shoot bolt door closure system: easy to operate
- Safety thermostat - to protect contents of oven
- Fan circulation - for even heat distribution
- Control panel - integral within oven case
- Double doors - H models
- Single door - V models
- Manufactured to current European standards
- Digital temp control now fitted as standard

Full specifications and prices - available on request.

Example specifications

Ref.	Capacity (litres)	Internal dim. (H x W x D mm)	External dim. (H x W x D mm)
LCO/15V/SS/DIG	435	910 x 610 x 770	1270 x 730 x 900
LCO/18H/SS/DIG	510	910 x 920 x 640	1270 x 1040 x 740



LCO/15V/SS/DIG



LCO/18H/SS/DIG

Ovens - general

Genlab MINO and OV benchtop ovens

Genlab ovens are a robust, well proven range providing simple operation, reliable temperature control and great durability. Removable wire grid shelves provide flexibility and options include digital display and fan circulation.

- Vertical (MINO) or horizontal (OV) style
- Stainless steel lined
- Thermostat or electronic temperature control
- British made with two year guarantee

Features

- Temperature range: 40°C to 250°C
- Fluctuation: $\pm 0.75^\circ\text{C}$
- 11 sizes: 6 litres to 200 litres
- Easy to clean powder coated body
- Direct reading thermostat
- Safety overheat thermostat



OV/100
with DIG option

Vertical style specifications

Ref:	Capacity (litrs)	Internal Dimensions (H x W x D cms)		External Dimension (H x W x D cms)		No of shelves	No of shelf positions
		without fan	with fan	without fan	with fan		
MINO/6	6	15 x 23 x 18		39 x 32 x 32	N/A	1	1
MINO/18	18	26 x 26 x 27		50 x 36 x 40	N/A	2	2
MINO/30	30	24 x 36 x 35		49 x 45 x 47	49 x 45 x 59	2	2
MINO/40	40	32 x 36 x 35		57 x 45 x 47	57 x 45 x 59	2	3
MINO/50	50	33 x 49 x 33		58 x 61 x 45	58 x 61 x 57	2	3
MINO/75	75	33 x 49 x 64		58 x 61 x 58	58 x 61 x 70	2	3



MINO/40
with DIG option

Horizontal style specifications

Ref:	Capacity (litrs)	Internal Dimensions (H x W x D cms)		External Dimension (H x W x D cms)	No of shelves	No of shelf positions
		without fan	with fan			
OV/75	75	42 x 53 x 35	45 x 49 x 35	55 x 85 x 47	1	1
OV/100	100	42 x 53 x 46	45 x 49 x 46	55 x 85 x 57	2	2
OV/125	125	52 x 53 x 46	55 x 49 x 46	65 x 85 x 57	2	2
OV/150	150	52 x 53 x 54	55 x 49 x 54	65 x 85 x 65	2	3
OV/200	200	72 x 53 x 54	75 x 49 x 54	85 x 85 x 65	2	3

Optional extras for general purpose ovens:- DIG Digital temperature control with LED display

Ovens - premium

Carbolite Peak series benchtop ovens

This range of ovens provides excellent performance and reliability. Increased power and low thermal mass insulation ensure fast heat up times and reduced recovery times. Reduced holding power once at set temperature makes the range economical and outer case temperatures have been significantly reduced. Both gravity and forced air circulation models are available with a wide choice of control options. A stoving and curing option is available, and also a moisture extraction option.

Features/options

- Range of over-temperature protection systems
- Process timers-manual or automatic
- Mechanical or electronic time switches
- Stacking frame
- Lockable door latch
- Exhaust fan *
- Variable speed fan *
- Inert gas connection *
- Flow meter & needle valve
- Interior light
- Air inlet filter
- Cable entry port *
- Door switch
- Stands & trolleys
- Chart recorders
- Sealed inner chamber for use with inert gases



PF120

* These options may affect chamber uniformity

Specifications

Model	Natural convection				Fan assisted convection			
	PN30	PN60	PN120	PN200	PF30	PF60	PF120	PF200
Max temp (°C)	300	300	300	300	300	300	300	300
Chamber dimensions (H) (mm)	250	350	450	700	300	400	500	750
(W) (mm)	330	392	492	592	292	392	492	592
(D) (mm)	320	420	520	520	320	420	520	520
External dimensions (H) (mm)	470	570	670	920	470	570	670	920
(W) (mm)	665	765	865	965	665	765	865	965
(D) (mm)	470	570	670	670	470	570	670	670
Chamber capacity (litres)	27	58	115	215	28	66	128	230
Weight (kg)	30	45	60	75	30	45	60	75
Shelves (number supplied)	2	2	2	2	2	2	2	2
(max possible)	3	5	9	15	3	5	9	15
(max dist load/shelf kg)	10	10	10	10	10	10	10	10
(max load kg)	20	30	40	50	20	30	40	50
Performance								
Power rating at 240 v (watts)	750	1000	1500	2250	1000	1500	2000	2700
Holding power * at max temp (watts)	300	480	720	1160	350	600	800	1250
Temperature uniformity* (at max temp as a %)	±2.3	±2.3	±2.7	±3.5	±1.0	±1.0	±1.0	±1.0
Temperature stability on/off control (°C)	±1.5	±1.5	±1.5	±1.5	±1.0	±1.0	±1.0	±1.0
Temperature Stability PID control (°C)	±0.5	±0.5	±0.5	±0.5	±0.2	±0.2	±0.2	±0.2

Ovens - vacuum

Jeiotech OV vacuum oven

These vacuum ovens have a wide operating temperature range, an easy-to-use electronic PID controller and a 3-way port system for inert gas atmospheres making them an ideal choice for most applications.

Features

- 2 sizes – 28 or 65 litre
- Ambient +5 to 250°C temperature range
- Microprocessor PID controller with sealed membrane keypad
- Dual digital displays
- Digital timer with delayed start / stop function
- Over-temperature & door open alarms
- 3 programme set-point memory
- Separate vacuum & vent pipe-work and ports
- 3 way port for introducing inert gas atmospheres
- Analogue vacuum gauge
- Tempered glass door with easy-close mechanism
- Aluminium interior & shelves

Specifications

Model	OV-11	OV-12
Temperature range:	ambient +5 to 250 °C (+/- 0.3 °C)	
Chamber volume:	28 L	65 L
No. of shelves:	2	3
Vacuum range:	0 to 0.1mPa	0 to 0.1mPa
Internal dimensions:	302 x 302 x 305mm HWD	402 x 402 x 405mm HWD
External dimensions:	495 x 680 x 453mm HWD	595 x 780 x 557mm HWD
Power requirements:	240V / 2300W	240V / 2690W
Weight:	63kg	103kg



OV-11

REA vacuum oven model EV 018

A compact, single size, rectangular chamber vacuum oven from one of the oldest names in UK laboratory equipment, provided with a host of modern, user-friendly features and a good sized viewing window in the chamber door.

Features

- Digital controls for easy setup
- Easy to set 100 hour timer functions
- Multiple setpoints per program
- Stainless steel interior
- Square chamber to minimise wasted space
- 70 – 200°C temperature range

Specifications

	EV018
Temperature range	70-200°C
Temperature sensor	Fe-Const
Control system	Programmable microprocessor PID
Temperature set and display sensitivity	0.1°C
Timer	100 hours + hold position
Useful volume,	15 litres
No of shelves (standard/max)	2/3
Vacuum gauge	-1/+1 bar
Reading sensitivity	0.05 bar
Power consumption	950 W
Power supply	230 V, 50 Hz
Internal material	Stainless steel
External material	Epoxy-polyester painted steel
Internal dimensions (mm)	300 x 250 x 200
External dimensions (mm)	517 x 445 x 530



EVO18

pH meters - bench

Jenway pH meters

Jenway pH meters provide reliable and economical bench pH measurement. Clear LCD displays are complemented by dial or keypad controls and an electrode holder is fitted as standard.

Model 3505

Features

- Ideal for the education sector
- Mode selection via rotary controls
- Accidental calibration change prevented during measurement
- pH, mV and temperature modes
- Analogue output
- Wall mountable

Specifications

	Model 3505	Model 3510
pH range	-2.00 to 16.00pH	-2.000 to 19.999pH
Resolution	0.01pH	0.001/0.01/0.1pH
Accuracy	±0.02pH	±0.003pH
mV range	-1999 to 1.999mV	±1999.9mV
Resolution	1mV	0.1mV
Accuracy	±1mV	±0.2mV
Input impedance	> 10 ¹² ohms	> 10 ¹² ohms
Temperature range	-10 to 105°C	-10 to 105°C (14 to 221°F)
Resolution	0.1°C	0.1°C (1°F)
Accuracy	±0.5°C	±0.5°C (±1°F)
ATC range	-10°C to 105°C	0 to 100°C (32 to 212°F)
Manual TC range	-10°C to 105°C	0 to 100°C (32 to 212°F)
Calibration	Manual	1,2 or 3 point
Auto buffer selection	None	Jenway / DIN/NIST/JIS
Outputs	Analogue (buffered)	Analogue / RS232
Data logging	None	32 reading storage
Clock		
Display	25mm 3,1/2 digit LCD	Back lit custom LCD
Power	9V PP3 battery / optional power supply	9V power supply
Size / weight	210 x 250 x 55mm/850g	210 x 250 x 55 mm/850g

Model 3505 supplied with epoxy combination pH electrode (924 001), ATC probe (027 500), electrode holder, BNC shorting plug (009 146), 4, 7 and 10pH buffer sachets, battery (PP3), condensed operating instructions and instruction manual.

Model 3510 supplied with glass bodied combination pH electrode (924 005), ATC probe (027 500), electrode holder, BNC shorting plug (009 146), 4, 7 and 10pH buffer sachets, power supply, condensed operating instructions and instruction manual.

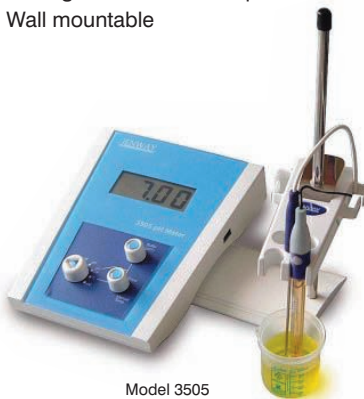
Full specifications and prices for other models on request

Model 3505
Model 3510

Model 3510

Features

- Ideal for routine laboratory operations
- 3 decimal place pH resolution
- 1, 2 or 3 point pH calibration
- Automatic or manual buffer selection
- 32 reading memory
- Analogue and RS232 outputs
- Wall mountable



Model 3505



Model 3510

pH meters - portable

Jenway portable pH meters

These hand-held pH meters are designed for general purpose use being simple and effective to use and housed in a robust, ergonomic case. Battery operated with auto-off, large backlit custom LCD display, replaceable electrode and 1 or 2 point calibration with auto-buffer recognition functions make these units very useful as well as being economical.

Model 350

Features

- Basic entry model
- Wide pH measurement range
- Manual temperature compensation
- Robust IP67 rated casing
- Replaceable electrode
- Backlit LCD display
- 1 or 2 point calibration
- Memory store & recall
- Battery operation with auto-off
- Complete with gel filled electrode & buffer solutions



350

Model 370

Features

- Wide pH measurement range
- mV / °C / °F measurement
- Automatic temperature compensation
- Robust IP67 rated casing
- Backlit LCD display
- Replaceable electrode
- 1 or 2 point calibration
- Memory store & recall
- Battery operation with auto-off
- Complete with gel filled electrode & buffer solutions

Specifications

Model	350	370
pH range:	-2.00 to 16.00pH (+/- 0.02)	-2.00 to 16.00pH (+/- 0.02)
mV range:	N/A	-1999 to 1999mV (+/-1)
Temperature range:	0 to 100°C (Manually set)	-10.00 to 105.00°F (+/-0.5)
Calibration method:	1 or 2 points automatic / manual	1 or 2 points automatic / manual
Power requirements:	2 x 1.5V battery	2 x 1.5V battery
External dimensions:	175 x 75 x 35mm HWD	175 x 75 x 35mm HWD
Weight:	370g	370g



370

Pumps - diaphragm

Compton diaphragm vacuum pumps/compressors

A British-made range of quality vacuum pumps/compressors for a wide range of applications. Economical single-headed or double-headed model that can be connected in series for maximum vacuum, or parallel for high throughput, provide great flexibility with reliable, low noise operation.

Features

- Oil free with stainless steel valves
- Good quality, low noise
- Easily changed from pressure to vacuum and vice versa
- Accessory regulating valve and gauge available
- All models 240V single phase

Specifications

Model	Typical application	Typical performance	Max pressure
D351VM	Air supply for flame photometer	15l/min at 15psi	8l/min at 30psi
D189	Air supply for AAS	35l/min at 40psi	16.5l/min at 60psi
2D351VM	Vacuum filtration	ult. vacuum 51mm Hg	30l/min at 30psi



D351VM



2D351VM



D189

Pumps - diaphragm ptfе - general

Rocker PTFE series

The Chemker chemically resistant and corrosion proof PTFE pumps can be used for a wide variety of applications. The simple design makes it quiet, safe, maintenance-free and a very cost effective solution.

Features

- Simple & sturdy design
- Quiet operation
- Dual chemically resistant PTFE head
- Corrosion proof PTFE 'wetted' surfaces

Specifications

Model	Chemker 300	Chemker 400	Chemker 410
Flow rates:	14.0 L/min	28.0 L/min	13.0 L/min
Ultimate vacuum:	143mbar	143mbar	13.2mbar
Power requirements:	240V / 60W	240V / 95W	240V / 95W
Weight:	5kg	7kg	7kg



Model 300



Model 400



Model 410

Pumps - diaphragm ptfе - premium

Charles Austen PTFE

The Innovac range of dry vacuum pumps are designed for use with corrosive gases and vapours in the laboratory. Offering class-leading performance, the Innovac features a unique composite bond PTFE diaphragm providing extended service life compared with existing technologies as well as a low ultimate vacuum. Robust alloy cased construction which features t-slot grooves for fitting accessories, flush folding carrying handle and a digital hour meter.

Features

- Extremely low vibration levels
- Dual chemically resistant PTFE heads
- Low ultimate vacuum
- 3 models to suit any application
- Strong alloy casing with carrying handle
- Digital hour meter for planned maintenance intervals
- Built-in cable tidy
- T-slot grooves for retro-fitting accessories
- Accessories available as below

Accessories

- T-slot clamp bar - This clamping bar allows the fitting of external lab scaffolding allowing support right where you need it and removing the need of cumbersome retort bases.
- Separator Kit - The glass separator can be used on both the inlet & outlet of the pump. Comes complete with all the necessary attachments and is plastic coated for implosion protection.
- Condenser Kit - The glass condenser is used to trap emissions from the pump exhaust and is ideal for use where there is no available fume extraction. Complete with all the necessary attachments and fittings.
- Vacuum Controller Kit - Used to control precise vacuum levels and shuts off the pump when not in use. The programmable electronic controller is equipped with 3 LCD displays, splash-proof membrane keypad and a serial interface for PC data recording and graph plotting. All fittings are supplied as standard (PC cable additional).

Specifications

Model	Innovac 20	Innovac 40	Innovac 60
Flow rates:	20.0 L/min	38.0 L/min	60.0 L/min
Ultimate vacuum:	8.0mbar	8.0mbar	12.0mbar
Overall dims: (HWD)	214 x 331 x 136mm	214 x 393 x 136mm	214 x 393 x 136mm
Power requirements:	240V	240V	240V
Weight:	8.5kg	11.6kg	12.0kg



Model 60

Model 40

Model 20

Pumps - dispensing

Accuramatic peristaltic dispensing

The Accuramatic MK7 is our current model, a versatile peristaltic pump which is ideal for laboratory use and small-scale industrial applications. The design combines superior accuracy with simplicity of operation, resulting in a robust and reliable machine.

Features

- Manual or automatic mode
- Operation by panel/footswitch or RS232 remote link
- Memory for filling/interval time
- Dose from 1ml to 2.5l
- Fast, slow or reverse flow stop
- Easy to clean

Specifications

Dimensions (mm)	155(W) X 250(H) x 360(D)
Weight	8.5 kg
Volume	1ml to 2.5 litres
Repeatability	+/-0.5%
Max flow rate	36ml/sec (doubles with twin pump option)
Supply	230V AC, 50Hz (other voltages on request)
Power	50 watts

Peristaltic dispensing pump

Peristaltic dispensing pump with double head



Accuramatic MK7

Pumps - oil filled vacuum

DVP rotary vane oil-filled vacuum pumps

An excellent range of European made pumps that offer high performance and durability at an affordable price. Normally available for rapid dispatch.

RD/RC range

Compact, portable units, the RD/RC range provide a good medium specification pump for routine work. Single or double stage, all pumps feature in-line design, stainless steel carrying handle, gas ballast, reliable operation and easy maintenance.

Specifications

Model	Pumping speed	Ultimate vacuum	Power rating	Weight
RD.2D two stage	2m ³ /hr	0.1 mbar	0.37 kW	6 kg
RC.4M one stage	3m ³ /hr	0.1 mbar	0.37 kW	11 kg
RC.4D two stage	4m ³ /hr	0.01 mbar	0.37 kW	12 kg
RC.8M one stage	8m ³ /hr	0.1 mbar	0.37 kW	12.5 kg
RC.8D two stage	8m ³ /hr	0.01 mbar	0.37 kW	13.5 kg



RD.2D

DB range

High vacuum, a low noise level, and very high reliability are the main features of this series, making it suitable for a wide range of laboratory and research applications. Standard equipment includes thermal circuit breaker, gas ballast, moulded handle, start/stop switch, and moulded UK plug.

Specifications

Model	Pumping speed	Ultimate vacuum	Power rating	Weight
DB.2D two stage	2m ³ /hr	0.005 mbar	0.25 kW	10 kg
DB.4D two stage	4m ³ /hr	0.005 mbar	0.75 kW	23 kg
DB.8D two stage	8m ³ /hr	0.005 mbar	0.75 kW	24 kg
DB.16D two stage	16m ³ /hr	0.005 mbar	0.75 kW	26 kg

Accessories

Vacuum oil AV68 5 litre container	
Oil mist filter (including all fittings).	9001039 (up to 8 m ³ /hr) 9001054 (up to 18 m ³ /hr)



DB.8D

Pumps - peristaltic

Autoclave peristaltic pumps - easy tube load range

This range of compact, straightforward easy to use pumps consists of six models.

EV IP40 pump	Manual control (150rpm max)
UV IP40 pump	Automatic – digital display
UPC IP40 pump	Programmable control
EV IP66 pump	Manual control – wash proof case
UV IP66 pump	Automatic – digital display – wash proof case
UPC IP66 pump	Easy load programmable dispenser

Features

- Variable speed
- Quick tube change
- 24hr duty
- Low maintenance
- Stackable heads
- Modern styling
- Brushless DC motor
- Takes six tube sizes

Specifications

Flow rate (tube bore in mm)	10-250rpm (m1/min)	15-150rpm (m1/min)
0.8	0.8 – 19	1.2 – 12
1.6	2.8 – 70	4.2 – 42
3.2	11 - 27	16 - 160
4.8	24 - 587	35 - 350
6.3	38 - 937	56 - 560
8.0	53 - 1312	78 - 780



Manual control



Auto control



Programmable control

3000 series heavy duty pumps

Ideal for viscous liquids – for use with thick wall tubing. All models 10 – 250rpm.

EV3000HD	Manual control, basic pump
UV3000HD	Automatic digital pump
UPC3000HD	Programmable pump
EV3000 IP66	Manual control – wash proof case
UV3000 IP66	Automatic pump – wash proof case
UPC3000 IP66	Programmable dispenser (– includes additional features of a user settable batch quantity and speed ramp.)

Features

- Variable speed
- Robust pump head
- Suitable for 24hr duty
- Digital display
- Membrane keypad

Specifications

Flow rate (tube bore in mm)	Flow (m1/min)
6.0	55 – 1375
8.0	97 – 2425
9.5	130 – 3250



Manual control



Auto control



Programmable control



Programmable dispenser

Pumps - peristaltic

EV range

Flexible range of low cost variable speed pumps

EV045	Takes 1.6mm wall tubing
EV500	Takes 1.6mm wall tubing
EV1500	Takes 2.4mm wall tubing
EV3000	Takes 3.2mm wall tubing
EV8000	Takes 3.2mm wall tubing

Features

- Variable speed
- Reversible rotation
- Easy to use dial controls
- Fast prime switch

Specifications

Model	EV045 ml/min	EV500 ml/min	EV1500 ml/min	EV3000 ml/min
Bore	1.6mm wall	1.6mm wall	2.4mm wall	3.2mm wall
1.6mm	0-12	2-23		
3.2mm	0-36	5-82		52-585
4.0mm	0-60	7-115		
4.8mm		11-185		
6.0mm			190-1710	210-1925
8.0mm			280-2570	330-3025
9.5mm				420-3850



EV045



EV500



EV3000

Refractometer

CETI refractometer

Whether it's in the lab, the factory or out in the field, CETI refractometers offer precision, versatility and excellent value. The SR95 has a triple measurement range making it a useful yet easy to operate all-in-one unit. A stainless steel sample plate ensures quick, high accuracy results.

Features

- Backlit LCD display
- Brix, refractive index & salinity measurements
- Automatic temperature compensation
- Fast read-out response
- RS232 data interface
- Compact portable design
- Supplied with carrying pouch

Specifications

Model	SR95		
	Range	Resolution	Accuracy
Brix:	0 to 95%	0.1%	+/-0.1%
Refractive Index:	1.3330 to 1.5318	0.0001	+/-0.00015
Salinity	0 to 30‰	0.1%	+/-0.1%
Power requirements:	9V Battery or AC power adaptor (supplied)		
Dimensions: (HWD)	60 x 180 x 100mm		



Rotary evaporator

Steroglass Strike 300

The Strike 300 rotary evaporator combines excellent operating characteristics and high performance all in an ergonomic and extremely compact design. Built with user safety paramount it includes a number of innovative features making it an efficient and economic choice.

Features

- Multifunction graphic LCD touch screen
- Programmable controls
- Exclusive maintenance-free PTFE and carbon graphite vacuum seal
- Dual mode PTFE coated evaporator bath with removable safety shield
- Powered glassware lift
- Compact design
- Vertical or slanting condenser assembly
- Rodavis evaporation flask connection system
- USB data interface
- GLP compliant
- Plastic coated glassware
- Optional vacuum controller and vacuum pump

Specifications

Model	Strike 300
Power requirements:	240V / 1400W
Control:	Microprocessor touch screen
Evaporation Flask:	1000ml (optional 50 to 3000ml)
Receiving Flask:	1000ml (optional 250 to 2000ml)
Speed range:	20 to 280rpm
Bath capacity:	5 L
Temperature range:	Ambient to 185°C (Dual setting for oil or water)
Overall Size :(HWD)	690 x 790 x 430mm (Slanting glassware version)
Weight:	26kg



Shakers - platform

Stuart SSL1 orbital shaker

This lab scale platform shaker has a powerful yet quiet shaking mechanism that has been designed for problem free continuous use. Electronically controlled motor provides smooth orbital action with a soft start making it ideal for most culturing and aeration applications. The cradle type platform has six rubber cushioned horizontal clamping bars which can be adjusted on two different levels to accommodate most sizes and types of vessels.

Features

- Electronically controlled motor for smooth shaking action
- Digital speed selection up to 300rpm with soft start
- Digital display for speed or timer
- Continuous or timed operation
- Can be used inside environmental chambers and CO₂ Incubators
- Fully adjustable cradle system
- 10kg platform load capacity
- Compact design

Specifications

Model	SSL1
Shaking action:	Orbital
Speed range:	30 to 300rpm
Orbit size:	16mmØ
Platform dims: (LW)	335 x 335mm
Maximum load:	10kg
Overall dims: (HWD)	270 x 360 x 420mm
Operational temp. range:	4 to 40°C
Max. possible humidity:	80%RH
Power requirements:	240V / 50W
Weight:	11kg



Sieve shakers

Model SV001 sieve shaker

This is a simple and low cost sieve shaker, ideal for both site and laboratory use.

Features

- Will accept 200, 250, 300 and 315mm, 8 and 12 inch diameter sieves
- Holds up to eight 200mm diameter sieves or seven 300mm diameter sieves
- Provides an effective sieving action
- Fitted with a 0 to 60 minute timer
- Wet sieving kits in the appropriate sizes may be used with this shaker

Specifications

Model	SV001
Power supply	220 - 240V 50 Hz 1ph
Rating	100 Watt
Dimensions	350 x 400 x 950mm
Weight	24 Kg



SV001

Retsch AS 200 sieve shaker

This premium range of shakers is ideal for more demanding work.

Features

- Measuring range 20 μm to 25mm
- Height of sieve stack up to 450 mm, $\text{\O}100/150/200/203$ mm
- Indication of sieve base acceleration and vibration height
- Available in 3 different models, basic, digit and control

Machines

- AS 200 basic sieve shaker (analogue controls)
- AS 200 digit sieve shaker (digital time display, interval operation)
- AS 200 control sieve shaker (micro processor control)

Clamping devices

- Economy for test sieves 100/150/200/203mm
- Standard for test sieves 200/203mm
- Comfort for test sieves 200/203mm
- Universal Standard for test sieves 100/150/200/203mm
- Universal Comfort for test sieves 100/150/200/203mm



AS200 basic

Spectrophotometers

Jenway 6300 visible and 6305 UV/visible spectrophotometers

The 6300 and 6305 are high quality, low cost measurement systems for routine analysis in QC applications, education and training. Simple operating procedures ensure quick and reliable operation. The specially designed LCD and easy to use keypad provide access to an extensive range of functions; press the up or down arrow keys to see the displayed wavelength increase or decrease, use the right or left arrow keys to select absorbance, transmission or concentration readout from the simple menu bar. The pulsed xenon lamp used in the model 6305 is a replaceable module that should give many years of operation under normal conditions and gives superior energy levels compared to traditional UV light sources.

Features

- Easy and intuitive operation
- Absorbance, %T and concentration modes
- Multi-parameter display with wavelength readout
- Wide range of sampling accessories

Specifications

Model	6300	6305
Wavelength range	320-1000nm	198-1000nm
Resolution	1nm	1nm
Accuracy	±2nm	±2nm
Spectral bandwidth	8nm	6nm over UV range
Ranges	0 to 199.9%T -0.300 to 1.999A -300 to 1999Conc	0 to 199.9%T -0.300 to 1.999A -300 to 1999Conc
Resolution	0.1%T, 0.0001A, 0.1-1C	0.1%T, 0.001A, 0.1-1C
Stray light	<0.5%T	<0.5%T
Conc Units	ppm, mg/l, g/l, M, %, blank	ppm, mg/l, g/l, %, blank
Light source	Tungsten halogen	Xenon lamp
Photometric accuracy	±1%	±1%
Noise	<1%	<0.001A@0A@400nm
Stability	1%/hr/ after warm up	<0.002A/hr/ after 30 minutes
Factor	0 to 999/9/1000 to 9999	0 to 999/9/1000 to 9999
Readout custom	Custom LCD	Custom LCD
Outputs	Analogue (0 to 1999mV) RS232 serial port	Analogue (0 to 1999mV) RS232 serial port
Input voltage	115/230 a.c -20% +10% 50/60Hz	115/230 a.c -20% +10% 50/60Hz
Input power	<50W	<50W
Size (W x D x H)	365 x 272 x 160mm	365 x 272 x 160mm
Weight	6 Kgs	6 Kgs



Model 6300



Model 6305

Stirrers - overhead

Heidolph overhead stirrers

Powerful and reliable overhead stirrers for a wide range of applications. Mechanical speed control for economy or electronic speed control for power and versatility. A 2-speed mechanical gear provides a wide speed range and maintenance free motors ensure long service life. All models are guaranteed for three years.

RZR1 basic mechanical stirrer

Features

- Power output: 18W
- Speed range: 25-250 and 280-2200rpm
- Viscosity range: up to 40,000 m Pa s
- Stirring capacity (H₂O) 20 litres

RZR 2020/2021 mechanical stirrer

Features

- Power output: 27W
- Speed range: 40-2000rpm
- Viscosity range: up to 60,000 m Pa s
- Stirring capacity (H₂O) 25 litres

RZR 2041 mechanical stirrer

Features

- Power output: 37W
- Speed range: 40-2000rpm
- Viscosity range: up to 100,000 m Pa s
- Stirring capacity (H₂O) 40 litres

RZR 2051 control electronic stirrer

Features

- Power output: 50W
- Speed range: 50-2000rpm
- Viscosity range: up to 10,000 m Pa s
- Stirring capacity (H₂O) 40 litres

RZR 2102 control electronic stirrer

Features

- Power output: 100W
- Speed range: 12-2000rpm
- Viscosity range: up to 100,000 m Pa s
- Stirring capacity (H₂O) 100 litres

RZR2102 control Z

Features

- Additional planet gear for viscous liquids
- Power output: 100W
- Speed range: 12-540 rpm
- Viscosity range: up to 350,000 Pa s
- Stirring capacity: 100 litres

Accessories

BR11	T - bar impellor
BR13	Square blade impellor
PR30	Pitched 3 blade propellor
S2	H - frame stand



RZR1



RZR2020



RZR2041



RZR2051 control



RZR2102 control

Stirrers - overhead

IKA overhead stirrers

Compact lab stirrers for general lab applications. Range of accessories available.

RW II basic "Lab egg"

Features

- Glass housing resistant to chemicals
- Max stirring quantity 2 litres (H₂O)
- Includes paddle stirrer

Specifications

Model RW 11 basic "Lab egg"

Stirring quantity (H ₂ O)	2 litres
Max viscosity	100mPas
Motor rating input/output	8/1W
Output at stirring shaft	1W
Max. ON time	100%
Max. torque on chuck	0,8 Ncm
Speed range	0 - 2.000 min-1
Plug-in coupling	4 mm

General Data

Dimensions (W x D x H)	86 x 175 x 89 mm
Weight	0,39 kg
Protection class acc.to DIN EN 60529	IP 42



RW 11

RW 20 Digital

Features

- Digital display
- Constant power drive
- Two speed ranges
- Push-through stirrer shaft
- Robust construction

Specifications

Model RW 20 Digital

Stirring quantity (H ₂ O)	20 litres
Max viscosity	10,000mPas
Motor rating input/output	70/35W
Output at stirring shaft	26W
Max. ON time	100%
Max. torque at chuck (per 100min)	150 Ncm
Speed range I (per 50 Hz)	60 - 500 min ⁻¹
Speed range II (per 50 Hz)	240 - 2000 min ⁻¹
Speed display	Digital
Chuck range	0.5 - 10 mm
Diameter/length of extension arm	13mm / 160 mm

Dimensions: (W x D x H)	88 x 212 x 294 mm
	3.1 kg
Protection rating	IP 20

General Data

Paddles

0513500 Dissolver stirrer, R1300 80mm dia
0741000 Propeller Stirrer, 4 bladed, R1342, 50mm dia

Accessories

2657700 Boss head clamp R182
1412000 H stand R2722
1412100 Telescopic stand R2723



RW 20

Storage cabinets

Severn Sales storage cabinets

An excellent range of British-made storage cabinets for solvents, chemicals or poisons/pesticides. A particular design feature is the semi-flush door handle providing protrusion free lines and reliable, secure door closure. Fully compliant with current government regulations, HSE guidance notes CS19 and HS(G) SI 1990. Factory inspectorate certificate of approval number 1, parts 3 and 4.

Features

- Made from 20 gauge steel with welded seams for extra strength
- Doors have welded reinforcement sections and semi-flush fitting lock with two keys
- Shelves are fully adjustable and a leak-proof deep bottom tray collects any spillage
- Supplied with warning label in accordance with BS5378



Specifications

Code	Type	Dimensions			Sump depth	Doors	Shelves
		H	W	D			
AC/FC/PC01	Cupboard	790	457	457	50	1	1
AC/FC/PC02	Cupboard	915	457	457	50	1	1
AC/FC/PC03	Cupboard	610	610	305	50	1	1
AC/FC/PC04	Cupboard	710	915	457	50	2	1
AC/FC/PC05	Cupboard	915	915	457	50	2	1
AC/FC/PC06	Cupboard	1220	915	457	150	2	1
AC/FC/PC07	Cupboard	1525	915	457	150	2	2
AC/FC/PC08	Cupboard	1830	915	457	150	2	3

Viscometers - general

Viscotech MYR viscometers

The MYR viscometers are rotational viscometers for use in various industrial sectors for quick and easy determination of viscosity measurements to BS, ISO and ASTM standards.

These viscometers are manufactured to the same DIN standards as other common rotational viscometers and use an identical operating principle making them fully compatible and reliable.

Features MYR V1

- LCD display with multiple data read-out
- Membrane keypad controls
- 19 speeds (0.3 to 200rpm)
- Wide viscosity measurement range
- Available in 3 viscosity spindle ranges – low, medium or high
- 100% compatible DIN standard spindles
- PT100 temperature probe
- RS232 data interface
- Spindle guard
- Small sample, ultra low & helicoidal attachments available
- Complete with stand, spindle rack and rugged carrying case

Features MYR V2

Same as the V1 viscometer but with the following extra features

- 21 speeds for wider viscosity range (0.1 to 200rpm)
- Bi-directional RS232 interface for PC control and monitoring
- Can be used for rheological measurement when coupled with special spindles (extra)



Specifications

Model	V1	V2
For low to medium viscosity	V1L	V2L
No. of spindles:	4	4
Viscosity range:	3 to 2,000,000 mPas/cP	3 to 6,000,000 mPas/cP
For medium to high Viscosity	V1R	V2R
No. of spindles:	6	6
Viscosity range:	20 to 13,000,000 mPas/cP	20 to 40,000,000 mPas/cP
For high to very high Viscosity	V1H	V2H
No. of spindles:	6	6
Viscosity range:	1.6 to 1,066,660 dPas/P	1.6 to 3,200,000 dPas/P
Speed range:	0.3 / 0.5 / 0.6 / 1 / 1.5 / 2 2.5 / 3 / 4 / 5 / 6 / 10 / 12 20 / 30 / 50 / 60 / 100 / 200rpm	0.1 / 0.2 / 0.3 / 0.5 / 0.6 / 1 2 / 2.5 / 3 / 4 / 5 / 6 / 10 / 12 20 / 30 / 50 / 60 / 100 / 200rpm
Temperature range:	-15 to 180°C (+/- 0.1)	-15 to 180°C (+/- 0.1)
Display readout:	Speed / Spindle / Viscosity Full scale % / Temperature Auto range limit	Speed / Spindle / Viscosity Full scale % / Temperature Auto range limit / Shear rate* Shear stress* * with special spindles

Viscometers - premium

Lamy Rheology viscometers

Lamy First RM viscometer uses advanced springless technology combined with state of the art electronics to bring you the very latest and best in viscosity measurement. Ideal for heavy usage due to robust springless head, quick-couple bayonet fitting spindles and support stand which does not require levelling. PT100 temperature probe fitted as standard. Wide viscosity measurements in accordance with the ASTM / ISO standards.

Features

- Advanced springless technology
- Backlit graphic LCD display
- Membrane keypad controls
- 21 speeds (0.3 to 250rpm)
- 6 spindles (ASTM 2 to 7)
- PT100 temperature probe
- Serial and USB data interfaces
- Robust construction
- Complete with stand, spindles & carrying case

Specifications

Model	First RM
Speed range:	0.3 / 0.5 / 0.6 / 1 / 1.5 / 2 / 2.5 / 3 / 4 / 5 / 6 / 10 12 / 20 / 30 / 40 / 50 / 60 / 100 / 200 / 250rpm
No. of spindles:	6
Viscosity range:	20 to 470,000,000 mPas/cP
Torque range:	0 to 10 mNm
Temperature range:	0 to 120°C (+/- 0.1)
Display read-out:	Temperature / Speed / Torque / Spindle Viscosity / Time



Water purification

Elga Process Water deionisers

Elga Process Water's range of deionisation systems produce from 30 to 540 litres/hr of high purity water for a wide range of process water and general manufacturing applications. The deionisers are cost effective stand-alone systems that provide low to medium volumes of either primary or deionised grade water. Water quality is easy to monitor, with built in meters or colour range indicators on the smaller deionisers and a range of optional conductivity/resistivity meters.

Wall mounted system

B114 deioniser

Features

- Disposable cartridge enables quick and clean exchanges upon resin exhaustion
- Battery operated colour coded resistivity indicator displays treated water quality



B114

Vision 125 & 250 deionisers

Features

- Colour change window indicates two resin exhaustion levels to enable users to monitor capacity status and cartridge replacement requirements
- Optional 6 meter coiled delivery line trigger applicator can be connected to either system



Vision 250

Water purification

Micromeg deioniser

Features

- Choice of either disposable or exchangeable cartridges.
- Battery operated colour coded resistivity indicator displays treated water quality



Micromeg

Floor standing systems

Features

- Compact floor standing units occupy a minimum of space.
- Systems are regenerable, and cylinders can be replaced in a matter of minutes.
- All floor standing systems are supplied with a spare cylinder as standard, to ensure purified water supply continuity
- Using the manufacturer's transportation service we will collect the exhausted unit from your premises and replace it with a freshly regenerated cylinder



Specifications

Treated water quality (Trace metals all <0.005 m/L)

Dimensions

Deioniser model	Conductivity	Silica	Carbon dioxide	Maximum flow	Litres cap	Height	Weight
	μS/cm	mg/l	mg/l	l/h	(250ppm TDS)	mm	kg
B114	1-0.1	<0.05	<0.05	30	43	380	2.2
Vision 125	1-0.1	<0.05	<0.05	60	130	385	2.5
Vision 250	1-0.1	<0.05	<0.05	60	260	660	4.2
Micromeg-MM DS	1-0.1	<0.05	<0.05	90	250	550	6.5
Micromeg-MM ES	1-0.1	<0.05	<0.05	90	200	550	6.5
B118	1-0.1	<0.05	<0.05	240	655	880	18.0
B119	10-50	Not removed	Not removed	240	1350	880	18.0
B124	1-0.1	<0.05	<0.05	360	1440	1095	34.0
B224	10-50	Not removed	Not removed	360	2520	1095	34.0
B500	10-50	Not removed	Not removed	540	5160	1130	50.0
B510	1-0.1	<0.05	<0.05	540	2750	1130	50.0

Waterstills

Aquatron A4000

Features

- Fully automatic operation
- High purity pyrogen free output
- Low temperature distillate
- Operates from any raw water supply
- Reservoir level control
- Simple conversion to pre-treated feed
- Supplied with wall mounting bracket
- Safety features allow unattended operation
- Simple to clean
- 4 litre/hour single distilled water

Specifications

Output	4 L/H	pH	5.0 - 6.5
Conductivity	1.0 - 2.0 uS/cm	Resistivity	0.5 - 1.0 mOhm - cm
Temperature	25 - 35°C	Pyrogen content	Pyrogen free
Power rating	3 kw	Dimensions	550 x 240 x 410 mm



A4000

Distinction D4000

Features

- All glass construction
- Two independent safety thermostats
- Safety reservoir full shut off
- Wall mountable
- Silica sheathed heaters
- 4 litres/hour single distilled water

Specifications

Output	4 litres/hr, single distilled
pH	5.0 - 6.5
Conductivity, uScm-1	1.0 - 2.0
Resistivity, mOhm-cm	0.5 - 1.0
Temperature	25 - 35°C
Pyrogen content *	Pyrogen free
Water supply	1 litre/min 3 - 100psi (20-700kPa)
Electricity supply	220 or 240V, 50-60Hz, single phase
Power requirement	3kw
Dimensions (wxdxh), mm	540 x 160 x 140



D4000

Waterstills

Merit W4000

Features

- Economical price
- Glass construction with long life metal heating element
- Two independent safety thermostats
- Wall mountable

Specifications

Output	4 litres/hr, single distilled
pH	5.0 - 6.5
Conductivity, uScm-1	3.0 - 4.0
Resistivity, mOhm-cm	0.25 - 0.3
Temperature	25 - 35°C
Pyrogen content *	Pyrogen free
Water supply	1 litre/min
	3 - 100psi
	(20-700kPa)
Electricity supply	220 or 240V, 50-60Hz, single phase
Power requirement	3kw
Dimensions (wxdxh), mm	540 x 150 x 450



W4000

Terms and conditions

Standard terms and conditions of trading

1. Making the contract

All orders are placed under the general law of contract except insofar as the same is inconsistent with these terms and conditions and is capable of modification thereby. These terms and conditions exclude any other terms and conditions inconsistent therewith which a buyer might seek to impose even though such other terms and conditions may be submitted in a later document and or purport to exclude or supercede any terms or conditions inconsistent with them or may be contained in any offer acceptance or counter offer made by the buyer. No variation of these terms and conditions is permitted unless expressly accepted by us in writing.

2. Cancellation

No cancellation by the buyer is permitted except where expressly agreed by us in writing.

3. Price

All quotations are made in good faith but we reserve the right to invoice the goods at the prices ruling at the date of despatch. All secondhand goods are offered subject to remaining unsold.

4. Terms of payment

All sums become due and payable under these terms and conditions not later than 30 days from the invoice date. Time for payment shall be of the essence.

5. Ownership of goods

We retain title to the goods until payment is made in full. However, the risk therein and all liabilities to third parties in respect thereof shall pass to the buyer on delivery.

6. Delivery

Delivery will be deemed to have been effected when the Goods leave our premises or the premises of our suppliers. In circumstances where the Goods are delivered direct from such suppliers, time of delivery is not of the essence. We reserve the right to make delivery by instalments and to tender a separate invoice in respect of each instalment.

7. Warranty

No representation or warranty is given as to the suitability or fitness of the Goods for any particular purpose and the buyer shall satisfy himself in this respect and shall be totally responsible therefore. If the Goods are in such a state as would but for this condition entitle the Buyer to repudiate the contract and/or claim damages from Severn Sales we reserve the right to repair or replace the Goods or reimburse to the Buyer the price paid therefore.

8. Health and safety

The Goods are supplied with such items of safety equipment as are fitted at the time of sale. Any additions which shall be necessary in connection with the installation or use of the Goods to satisfy the requirements of the Factories Acts, Health and Safety At Work Act or other statutory enactments for the time being in force shall be paid for separately. The buyer shall be responsible for complying at his own expense with any health and safety requirements necessary for the safe operation of the Goods.

9. Liability

Nothing in this clause shall be deemed to exclude or restrict our liability for death or personal Injury resulting from negligence.

Exclusion

This clause only covers defects caused by faulty design, manufacture, materials or workmanship. It does not cover defects caused by abnormal use, misuse or neglect or in the case of secondhand Goods fair wear and tear. We agree that if any defect covered by this clause is discovered during the period of three months commencing with the date of despatch, we will either repair the Goods at our own expense or, if we choose to do so, replace them or reimburse the purchase price. The Buyer cannot claim the benefit of this clause unless:

-he informs us of the relevant defect in writing within 7 working days of discovering it; and

- he returns the Goods to us at his own expense. The risk of accidental loss whilst the Goods are being returned will be borne by the Buyer. In consideration for receiving the benefit of this clause, the Buyer agrees that, apart from those terms set out in clause 7 no other terms, whether conditions, warranties or innominate terms, express or implied, statutory or otherwise, shall form part of this contract except where the Buyer deals as consumer within section 12 of the Unfair Contract Terms Act 1977 when the terms implied by section 13, 14 and 15 of the Sale of Goods Act 1979 shall be implied into the contract.

Exclusion of Consequential Loss

Severn Sales shall not be liable for any consequential or indirect loss suffered by the Buyer whether this loss arises from breach of a duty in contract or tort or in any other way (including loss arising from our negligence). Non exhaustive illustrations of consequential or indirect loss would be

- loss of profits

- loss of contracts

- damage to property of the Buyer or anyone else and

- personal injury to the Buyer or anyone else (except so far as such injury is attributable to our negligence).

Limitation

Severn Sales total liability for any one claim or for the total of all claims arising from any one act or default of ours (whether arising from our negligence or otherwise) shall not exceed £100,000 or the contract price whichever is the greater.

10. Proper law and jurisdiction

The Contract shall be governed by and construed in accordance with English law and all disputes arising in connection with the contract shall be submitted to the jurisdiction of English Courts.

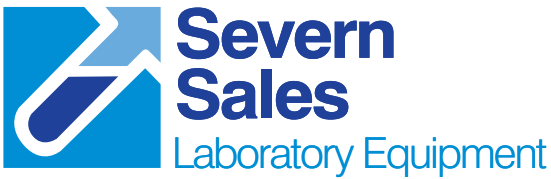
If the equipment you require is not listed, please ask us and we will try to source it for you.

For information or to place an order please call or fax on-

Tel: 0117 960 8858 or Fax: 0870 777 6071

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