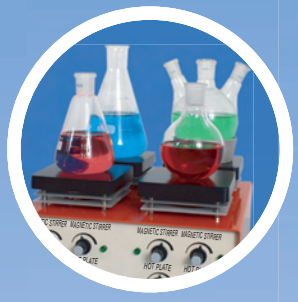
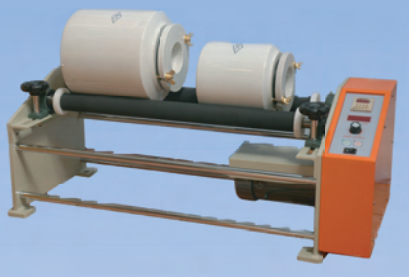
HROMalytic +61(0)3 9762 2034
ECHnology Pty Ltd
Australian Distributors; Importers & Manufacturers

Laboratory Equipment





HROMalytic Chromatography Products '08
ECHnology Australian Distributors
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

TABLE OF CONTENTS

A
Autoclaves 3
Abrasion Tester 37
Air Flow Measurement 62

B
Balances 4-6
Baths & Circulators 7-12,84
Blenders 13

C
Calibration Equipment 14
Centrifuges 15-24
Conductivity 62
Counters 24-25
Color Cabinet 57

D
Desicators 25-26
Distillation 3, 27

E
Electrophoresis 28-30
Enviromental Chambers 31-34

F
Force & Torque 35-37
Furnaces 38-41

H
Heating Equipment 42-47
Heating Mantles 48-49
Homogenizers 50
Hot Plates 51-53, 91-93

I
Incubators 54-61, 74

L
Lighting & Illumination 66

M
Meters 62-63
Microscopes 64-69
Mills 69-70
Mixers 71-73

O
Ovens 74-78
Oxygen 62

P
Printer 4
PH 62-63
Polarimeter 80
Peristaltic Pumps 79

R
Recorders 31
Refractometers 80-81

S
Shakers 82-88
Sieves 88
Spectroscopy 89
Stirrers 90-93

T
Temperature 99

U
Ultrasonic Baths 93-94

V
Vacuum Pumps 95-98
Viscometer 63

HROMalytic ECHnology Chromatography Products '08
Australian Distributors
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

16 Liter Autoclave, Class N

CE STE-Tan

Voltage V/Hz	Power W	Capacity L	Chamber size Ømm	Packing Size mm	Weight Kg
220/50	1800	16	240x360	645x500x425	64 (net:52)

Adopting N-wclass (prED-13060), with thermal vacuumizing & drying function, it can be used for A-type hollow instruments & solid instraments.
Thermodynamic vacuum guarantees elimination of cold air from the cavity and makes sure of perfect saturation of water dream.
Three sterilizing water quantity selections are respectively for different material, which embodies the individualized service
Automatic malfunction detecting system makes easy maintaining.

**** Liquid sterilizing option***

16 Liter Autoclave, Class B European Standard

CE STE-Tin

Voltage V/Hz	Power W	Capacity L	Chamber size Ømm	Packing Size mm	Weight Kg
220/50	1800	16	240x360	645x500x425	64 (net:52)

It adopts B-wclass(prED-13060), with 3-times pre-vacuum preceding vacuum drying. Residual humidity is <0.2: vacuum measure-ment reaches-0.7bar. It sterilizes and sanitizes miscellaneous packed or unpacked medical instruments, whether solid or A-type hollow, whether with multi- apertures or inset pipes. It efficiently rid air from every hollow area of any hollow instrument, such as hand-piece, making sure that water steam reaches every corner.
It is installed with BOWIC & DICK which measures the penetration of water steam. Mini printer can be attached to record the process of sterilization.

Distilled Water

Dist CE

Voltage V/Hz	Power W	Distilled water L/h	Chamber size Ømm	Outside Size mm	Weight Kg	Packing Size mm
220/50	750	1.5	180x200	290x290x390	3.5	245x285x510

Autoclave must adopt distilled water as operation medium.
Even Purified water has various minerals, and can produce furring scale after evaporation at high temperature, which, after a period of time, can lead to leaking of steam due to improper closure. It can also lead to the clog in the narrow pipes and pressure sensor, to the malfunction of temperature sensor and to other failures.
Once the furring scale enters handpiece and other instrument which are hollow inside or has apertures, it will clog the narrow pipes and axis, lowering the turning speed of handpiece, thus reducing its life span. Therefore, using distilled water is necessary.

HROMalytic Chromatography Products
Australian Distributors ECHnology '08
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

B Balances

Models: BB/BBA Serie, Precision Balance

BBA-600 BB-3100

Main Features

- Liquid crystal display
- 1/60000, 1/30000 display resolution
- Multi selectable weighing units
- Percentage weighing function
- Piece counting function
- Auto. calibration
- Battery saving sleep mode

Options

- Back light
- RS 232 Interface
- Security lock
- Windscreen

Specifications

Model	BB-1550	BB-3100	BBA-600	BBA-1200
Capacity	1550g	3100g	600g	1200g
Readability	0.05g	0.1g	0.01g	0.02g
Linearity	± 0.05g	± 0.1g	±0.01g	±0.02g
Pan Size	180 x 140mm		ø118mm	
Weight	1.8kg		1.7kg	
Display	Liquid crystal display 13mm high			
Dimension	193W x 213D x 66H			
Power	9V/500mA			
Environment	0˚C-40˚C (32˚F-104˚F) RH less than 85%			
Accessory	Manual, AC adaptor			

Model: NHV Serie, Digital Weighing Scales

Main Features

- Powerful all-in one high precison scales, equipped with weighing, checking, counting functions.
- Target weight checking function with visual HI, LO, GO signal.
- Backlighting facility.
- Auto calibration.
- Battery saving sleep mode.
- Low battery warning.

NHV-3

Specifications

Model	NHV-3	NHV-6	NHV-30
Accuracy	30,000 division		
Capacity	3Kg	6Kg	30Kg
Division	0.1g	0.2g	1g
Display	25.4mm LCD Display		
Pan size	260x200mm		
Environment	o^0c~40^{0}c Less than 85%RH		
Power	AC Adaptor 9V/500mA		

Printer For Balance

BBA-600 SH-42

- 40 Column printer with power supply & serial cable
- Dimensions & Weight: 160x105x40mm, 360gr.
- Paper width: 57.5mm

Parcel Scale

GB-4501

- 50 kg x 0.02 kg, 100 lb x 0.05 lb.
- LED display, Load cell transducer.
- 6 x 1.5V UM-3 batteries or AC adapter.
- Cabinet size : 295x 295 x 70 mm.
- Platform size : 295 x 295 mm.

HROMalytic Chromatography Products '08
Australian Distributors ECHnology
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

Model: AJ-Serie, High Precision Balances

Model	AJ-220CE	AJ-320CE	AJ-420CE	AJ-620CE
Capacity	220g	320g	420g	620g
Readability	0.001g			
Repeatability	±0.002g			±0.003g
Non-Linearity	±0.002g	±0.003g		±0.004g
Pan size	∅ 118mm			
Windshield	Sliding-door			
Dimensions(LWH)	235x182x165mm			
Power Sourse	AC120/230V DC9V			
Output	RS-232C			
Calibration	Semi-auto calibration with reference weight			
Display	LCD (16.5mm height)			
Weight	Approx. 1.3kg			

AJ-220CE~620CE

Main Features

- Adavanced ergonomic Desighn Allows easy operation
- Wide range of Capacity/Resolution Models
- Mono Metal Tuning Fork Sensor
- Multi Selectable Weighting Units
- Piece Counting & Percentage Function
- RS232 interface
- Semi Auto Calibration

AJ-2200CE~AJ12KCE

AJ-820CE/1200CE

Options & Peripherals

- ***AJ(S)BT:*** *Recharbale battery*
- *(12-hr charge, 32-hr operation)*
- ***SDI/SDR:*** *Satellite display*
- ***RTS:*** *Database software for Windows*
- ***AJUH:*** *Under weighting hook*

Specifications

Model	AJ-820CE	AJ-1200CE	AJ-2200CE	AJ-3200CE	AJ-4200CE	AJ-6200CE	AJ-8200CE	AJ-12KCE
Capacity	820g	1200g	2200g	3200g	4200g	6200g	8200g	12000g
Readability	0.01g	0.01g	0.01g	0.01g	0.01g	0.01g	0.1g	0.1g
Non Linearity	±0.01g	±0.01g	±0.02g	±0.03g	±0.03g	±0.03g	±0.1g	±0.1g
Repeatability	±0.01g	±0.01g	±0.02g	±0.02g	±0.02g	±0.03g	±0.1g	±0.1g
Pan size	170x142mm		180x160mm					
Dimensions	235x182x75mm		265x192x187mm					
Display	Liquid crystal display 16.5mm high							
Power	AC110/220v DC9V							
Weigh	1.3kg		2.8kg					

HROMalytic Chromatography Products '08
Australian Distributors ECHnology
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

B Balances

Compact Analytical Balance

SA-120E CA-120E AF-R220CE

- Compact & Ultralight
- Stable & Durable
- Efficient Windshield
- RS-232C Interface
- Mobile-Battery Operation
- CAL adviser
- One touch calibration
- ISO/GLP/GMP
- Easy to clean
- Wide weighing area
- One-handed door system

Options & Peripherals

AJ(S)BT: *Recharbale battery (12-hr charge, 32-hr operation)*
SDI/SDR: *Satellite display*

RTS: *Database software for Windows*
Printer
Explosion Proof

Model	SA-120E	CA-120E	AF-R220 CE
Capacity	120g		220g
Readability	0.0002g		0.0001g
Repeatability	0.0002g		0.0001g
Non Linearity	±0.0006g		±0.0003g
Pan Size	Ø 80mm		Ø 80mm
Windsheild	Sliding door	Roll-top	Sliding-door
Dimension (LWH)	251x207x260mm	235x182x165	320(L)x210(W)x335(H)mm
Power source	AC adaptor AC120/230V in DC9V Out		AC120/230V in DC9V
Output	RS-232C, PRINTER OUTPUT		RS-232C
Calibration	Semi-auto calibration with reference weight		Internal calibration
Display	LCD (16.5mm height)		LCD (18mm height)
Weight	Approx. 2.4kg	Approx. 1.6kg	5.5kg

Carat Balance For Diamonds

High resolution, quick response, high stability, light weight, & compact size. This innovative technology provides greater accuracy than in balances using load cells & greater stability than electro-magnetic balances. attractive styling, a built-in RS232C interface.

Features:

- Rall top draft shield affords easy access
- Shield stopper prevents unexpected closing
- Anti-static shield body prevents static electricity
- Compact size: 235x182x165
- Large LCD display with 16.5mm digits
- Light weight: approximately 1.6kg
- RS232C interface standard
- 120/230 Volt AC adapter or 9- Volt battery model
- Optional rechargeable battery for AC model; allows continuous operation for 32 hours
- Optional portable case

Model	CT-600CE	CT-600TCE
Capacity	600ct	600ct
Readability	0.001ct	0.001ct
Repeatability(s)	0.001ct	0.001ct
Non-Lnearity	±0.004ct	±0.004ct
Shield	Roll-top shield	3 Sliding door shield
Pan size	Ø80mm	
Dimensions	235x182x165mm	251x207x260mm
Power source	AC120/230V DC9V	
Output	RS-232C	
Measuring system	Tuning-fork frequency sensing (MMTS)	
Tare	Full weighing range	
Calibration	With external weight	
Display	LCD (16.5mm high)	
Weight	Approx. 1.6kg	Approx. 2.4kg

HROMalytic Chromatography Products
Australian Distributors ECHnology '08
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

Digital Immersion Circulator

Features:

- Digital set and display of actual operating temperatures
- PID controller provides very precise temperature control
- Adapts to many different containers
- Additional safety Cut-Off
- Temperature range: ambient +5°C to 100°C (with cooling -10°C to 100°C)
- Accuracy: approx.±0.1°C
- Pumping capacity: up to 12 l/min.
- Immersion depth: minimum 6 cm, maximum 15.5 cm
- Safety Cut Off

Dimensions:

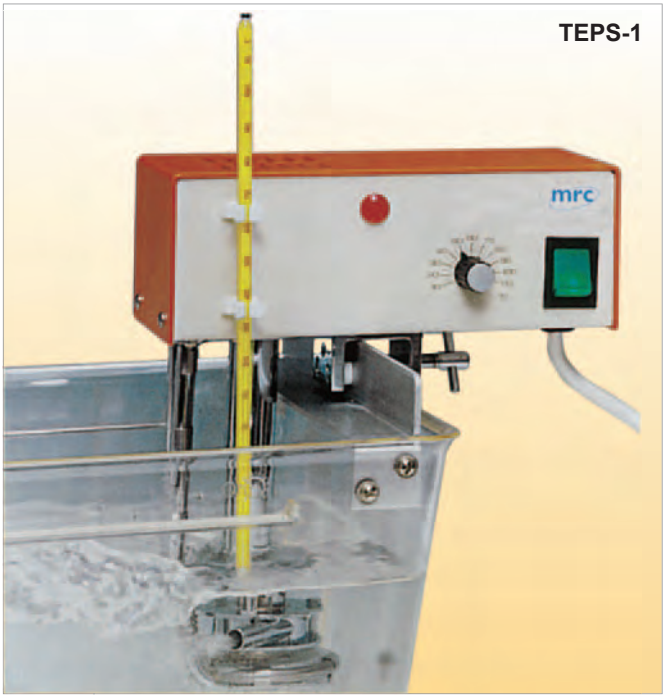
- (W X H X D) 20 x 24 x 9cm
- Net weight: 2.3 Kg.
  230 V (or 115 V), 50/60 Hz, 1000 W

Options:

- Pump set for external temperature applications

TEPS-4

Immersion Circulator



TEPS-1

Low cost fully compatible substitute for expensive Water-Bath Fast acting thermostat, serving also as low-water-level protector

Features:

- Temperature range: ambient to 100°C (with cooling +10 to 100°C)
- Accuracy: approx.±0.3 to±1°C
- Pumping capacity: up to 12 l/min.
- S - Optional Safety Cut Off

Dimensions:

- (W X H X D) 20 x 22 x 9cm
- Min. Immersion depth: 6 cm
- Nett weight: 2.0 Kg
  230 V (or 115 V), 50/60 Hz, 1000 W

Polycarbonate Tank TB Type for Immersion Thermostat / Circulator

PC Tank with bridge for fixing immersion circulator TEP(S)
Seamless Transparent Polycarbonate Tank - withstands 120°C

TB - 7	16 x 30 x 13 cm Height, 7 Liter
TB - 8	21 x 35 x 14 cm Height, 8.5 Liter
TB - 11	18 x 27 x 18 cm Height, 11 Liter
TB - 14	21 x 35 x 18 cm Height, 14 Liter
TB - 30	32 x 51 x 20 cm Height, 30 Liter

TB-30+TEPS-1

HROMalytic Chromatography Products
Australian Distributors ECHnology '08
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

B Baths & Circulators

Model: WB Serie, Polycarbonate Thermostatic Water Bath

Features :

- *Low-cost fully compatible substitute for expensive Water Bath.*
- *Seamless Transparent Polycarbonate Tank - withstands 120°C*
- *Fast-Acting Thermostat also serves as low-water-level protector, preverting heating-element burn-out and fire hazard.*
- *Temperature setting in°C from ambient to +100°C*
- *Temperature control accuracy of approximately ± 0.3°C ensures precise test conditions.*
- *Robust and reliable - designed for years of trouble-free service.*
- *S - Optional Safety Thermostat*

WB-11

Orbital Large Shaking Bath

B-701

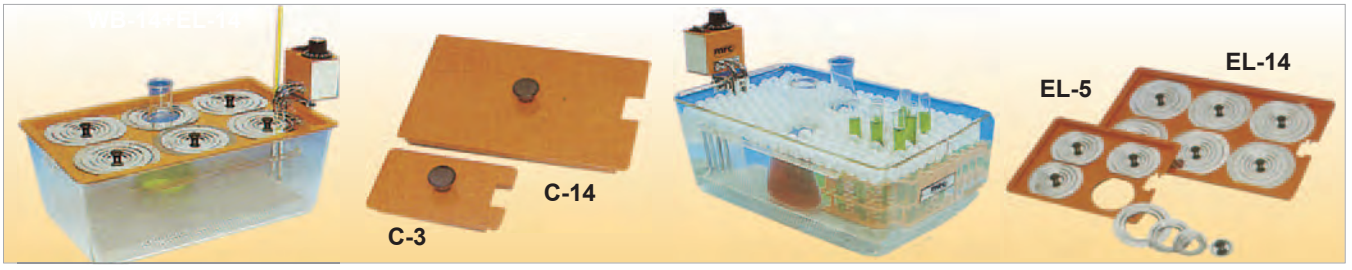
- *Digital temperature control & display*
- *Noiseless, smooth shaking, long life*
- *Stainless steel gable cover and netted Spring rack are optional accessories.*
- *Cooling device is available on special order*

Temp. range	*RT + 5°C~ 100°c*
Stability	*±0.1°C*
Setting/readout	*Digital*
Heater	*1.2KW*
Stirring	*By shaking motion*
Timer	*999 min or 999hr*
Shaking speed	*20~400rpm, adjustable, indicated by digital tachometer*
Orbit	*12.5mm*
Shaking plate	*W48.5 x D32cm*
Overall	*W72.5xD56.5xH53cm*
Power source	*110/220V 60/50Hz 12A/6A*

Capacity for flasks:

Flasks	*A-50ml*	*B-125ml*	*C-250ml*	*D-500ml*	*E-1Liter*	*F-2Liter*
Capacity	28	18	15	8	2	2

Accesories for polycarbonate thermostatic water bath

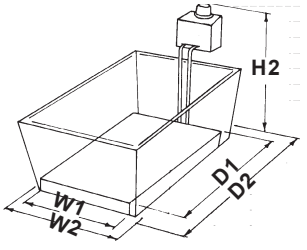


Boiling bath with Evaporation lids ***Bath Cover*** ***Floating Ball Blanket*** ***Evaporation lids***

Temp. Range: *from slightly above ambient to +100°C (with cover)*
Accuracy: *approx.±0.3°C at 37°C (depending on operating conditions)*
Voltage: *230V, 50Hz (or 120V, 50/60Hz).*

Standard Model	*With Safety Thermostat*	*Bath Capacity (Liters)*	*Inside Dim's (cm) W1 x D1 x H1*	*Outside Dim's (cm) W2 x D2 x H2*	*Watts*	*ACCESSORIES Bath Cover*	*Floating Balls*	*Evap. Lid*
WB-3	WBS-3	2.7	10 17 10	15 31 24	500	C-3	FB-3	-
WB-4	WBS-4	4.5	10 27 10	16 41 24	600	C-4	FB-4	-
WB-5	WBS-5	5.5	16 20 11	22 34 24	750	C-5	FB-5	EL-5
WB-7	WBS-7	7.0	16 30 11	22 44 24	1000	C-7	FB-7	-
WB-8	WBS-8	8.5	21 35 12	28 50 26	1000	C-8	FB-8	-
WB-11	WBS-11	11.0	18 27 16	24 43 30	1200	C-11	FB-11	-
WB-14	WBS-14	14.0	21 35 16	28 50 30	1500	C-14	FB-14	EL-14
WB-30	WBS-30	30	32 51 18	38 66 24	*2000	C-30	FB-30	EL-30

EL-5- *4x lids of 80mm*
EL-14- *6x lids of 105mm*
EL-30- *6x lids of 105mm*
EL-30- *8x lids of 105mm*
EL-30- *11 lids of 105mm*



*(*1500 W at 120 V)*

HROMalytic Chromatography Products
ECHnology '08
Australian Distributors
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

Model: BL Series, Refrigerated Circulating Baths

- *Compact design*
- *For external and internal temperature applications*
- *Low noise level*
- *Rapid cool down and heating time*
- *Water drain for easy cleaning of the inner tank*
- *Models BL-100 / 120 / 130 has casters*
- *Water level protector*

Options:

- *Display resolution to 0.01°C*
- *Build in RS-232 / 485*
- *PT-100Ω temperature probe for direct measurments and control of external systems*
- *Analog inputs and outputs for external programer and temperature recorder*

BL-30L

BL-130

Model	BL-20	BL-30H/BL-30L	BL-100	BL-120	BL-130H/BL-130L
Temperature Range	-20°C ~ 100°C	0°C ~ 100°C -30°C ~ 100°C	-10°C ~ 100°C	-20°C ~ 100°C	0°C ~ 100°C -30°C ~ 100°C
Temp. Constancy	± 0.1° C				
Temp. Control	PID				
Temp. Sensor	PT-100 Ω				
Circulation Pump	9L / min. max. head 2m		27L / min. max. head 7m		
Heater	1000W	1600W	1600W	2500W	2500W
Refrigerator	1/4 HP	1/3 HP	1/2 HP	3/4 HP	1 HP
Safety devices	Short Cricuit Breaker, Over Heat Protector, Sensor Abnormality, Over Load Protector				
Bath Opening (mm)	W 200 x D 150 x H 150		W 300 x D 210 x H 180		
Bath Dimensions	W 200 x D 300 x H 150		W 300 x D 360 x H 180		
Outside Dimensions	W 200 x D 450 x H 630		W 420 x D 530 x H 800		
Volume	9.0 L		19.4 L		
In / Output	9.5 mm		12.5 mm		
Weight	32 Kg	35 Kg	48 Kg	58 Kg	63 Kg

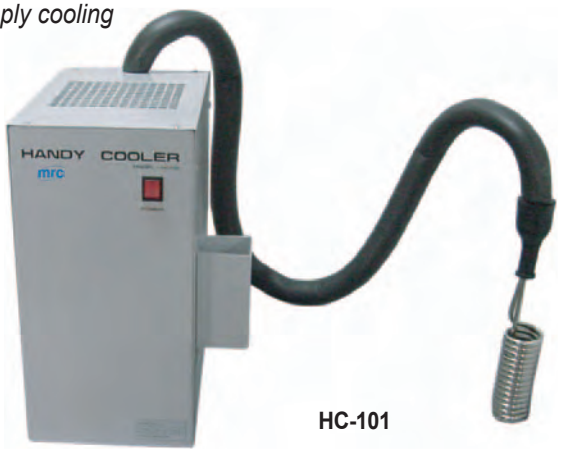
Refrigerated Chiller With Immersion Probe

In combination with water baths, shaker baths and other containers to supply cooling temperatures that experiments require.

Optional accessories: *Temperature controller*

Specifications:

Model	HC-101	HC-102	HC-103
Working range	R.T. ~ -20°C	R.T. ~ -30°C	R.T. ~ -30°C
Cooling Capacity (at20°c)	750 Kcal/hr	1000 Kcal/hr	1500 Kcal/hr
Dimension Probe	Ø5.1x13.2cm	Ø5.1x20cm	Ø5.1x20cm
Case	W23xD30.5xH45cm	W23xD32xH50cm	W23xD32xH50cm
Power Source	110/220V60/50HZ 3/1.5A	110/220V60/50HZ 3.5A/2A	110/220V60/50HZ 4A/2A



HC-101

HROMalytic Chromatography Products
Australian Distributors ECHnology '08
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

B Baths & Circulators

SCF-Serie, Refrigerated Chillers

Compact size ● Bench Top ● Digital setting & readout ● Designed and constructed for continuous operation
Coolflow SCFs are closed loop refrigerated recirculator designed to replace tap water in water cooled applications, Ideal for: ● Lasers ● GC/Ms's ● NMR's ● Condensers ● Power supply ● Ultra-centrifuge ● Diffusion pump ● SEM's-TEM's

Model	SCF-25	SCF-35	SCF-75
Temperature Working range	+5°C~35°C	+5°C~35°C	+5°C~35°C
Stability	±0.1°C	±0.1°C	±0.1°C
Setting & readout	Digital	Digital	Digital
Cooling capacity at 20°C			
Watts	560	950	2100
BTU/hr	1910	3060	7150
Kcal/hr	482	860	1806
Pump	5L/min 3kg/cm² (Optional: 18L/min, 4.8kg/cm²)		
Reservior	Ø10.0xL23cm	Ø10.0xL23cm	Ø19.5xL35cm
Capacity	1.8L	1.8L	10L
Overall	W30xD55xH59cm	W30xD55xH59cm	W42xD62xH67cm
Power source	110/220V 60/50Hz 4A/2A	110/220V 60/50Hz 4.5A/2.25A	110/220V 60/50Hz 5A/2.5A

4.5/10/20 liter unstirred baths

The MRC stainless steel water bath are available in 3 sizes.
Model BO-100 and BO-200 unstirred bath are used for general applications in laboratories. They provides excellent temperature uniformity of the liquid.
A PID temperature controller provides instant and accurate temperature. The tank of the bath is made of corrosion resistant stainless steel with round corners for easy cleaning.
Two types of cover are available flat cover or hood cover.

4.5 Liter Unstirred Bath

B-100

10 Liter Unstirred Bath

BO-200

20 Liter Unstirred Bath

BO-100

Model	B-100	BO-100	BO-200
Temp.Range	Room Temperature +5°C ~ 80		
Temp. Constancy	± 0.3	± 0.1	
Temp. Control	PID		
Heater	300 W	300 W	600 W
Safety Devices	Short Circuit, Over Heat Protector, Sensor Abnormality		
Bath Opening (mm)	W235xD135xH150	W295xD235xH150	W495xD295xH150
Inside Dimensions (mm)	W235xD135xH150	W295xD235xH150	W495xD295xH150
Outside Dimensions (mm)	W285xD185xH270	W420xD280xH185	W620xD340xH185
Volume	4.5L	10 L	20 L
Weight	3.6 Kg	6.5 Kg	9 Kg

HROMalytic Chromatography Products ECHnology '08
Australian Distributors
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

10/20 Liter Heated Circulating Bath

There are 2 models with internal circulation pump,
The immersion circulator bridge can easyly remove for easy cleaning of the tank.

Option:
- *Water level protector*

Model	BH-100	BH-200
Temp.Range	Room Temperature ~100°C	
Temp. Constancy	± 0.1	
Temp. Control	PID	
Internal Circulating Pump	Yes	
Heater	800 W	1200 W
Safety Devices	Short Circuit, Over Heat Protector, Sensor Abnormality	
Bath Opening (mm)	W200xD235xH150	W400xD295xH150
Inside Dimensions (mm)	W295xD235xH150	W495xD295xH150
Outside Dimensions (mm)	W340xD280xH320	W540xD340xH320
Volume	10 L	20 L
Weight	7 Kg	10 Kg

BH-200

BH-100 & Hood Cover

5.6 Liter Heated Circulating Bath

MRC heating circulator provide compact benchtop precise temperature control used for lab operations, control of viscometer. refractometers spectrophotometers. and jacket glassware.

Specifications:

Model	B300
Working Range	R.T. + 5°C~100°C
stability	± 0.05°C
Setting & readout	Digital
Heater	500W
Pumping flow	7L/min, 0.2kg/crrf
Reservoir	W15xD25.5xH15cm
Overall	W21xD31.5xH33cm
Power Source	110/220V 60/SOHz 5/2.5A

B300

Heated Circulating Oil Bath

3 Models with Choice of Temperature Range and Bath Capacity ● Over Heating Safety Device is Equipped ● Wide Range of Temperature Control ● Digital Temperature Setting & Readout ● External Circulating Pump is Available on Special Order

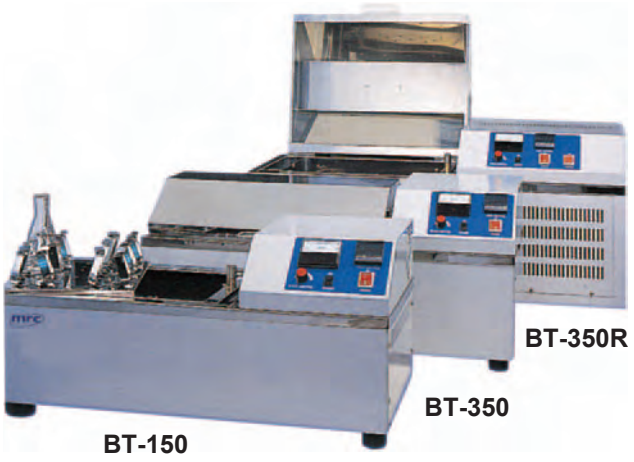
Specifications:

Model	B-501	B-502	B-503
Temp. Range	Room Temp.+5°C to 200 °C	Room Temp.+5°C to 200 °C	Room Temp.+5°C to 300 °C
Stability	±0.1C	±0.1C	±0.1C
Setting/readout	Digital	Digital	Digital
Heater	1.2KW	1.2KW	1.2KW
Stirring	By Built-in Circulation Pump		
Inside Dimension	W19.5xD23.5xH15cm	W39.5xD29.5xH15cm	W30xD30xH20cm
Outside Dimension	W54xD34.5xH35.5cm	W73xD39xH33.5cm	W66xD40xH39.5cm
Volume	6.8L	17.4L	18L
Power Source	110/220V50/60HZ 13A/6.5A	110/220V50/60HZ 13A/6.5A	110/220V50/60HZ 13A/6.5A

B-501

HROMalytic Chromatography Products
Australian Distributors ECHnology '08
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

Model: BT-Serie, Shaking Water Baths

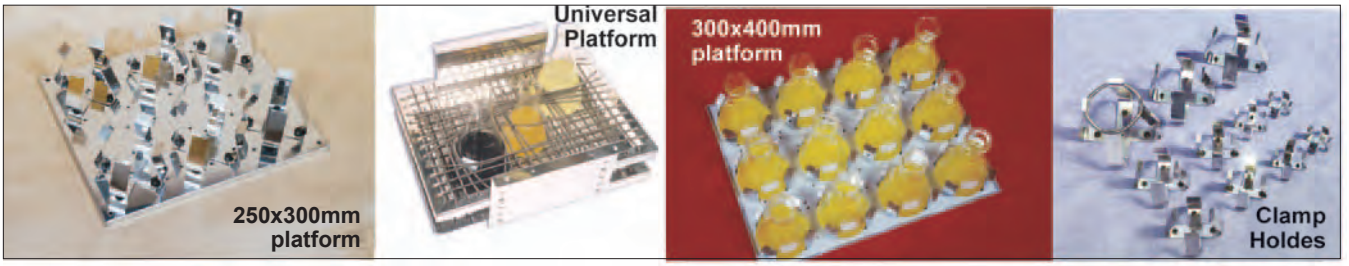


These reciprocating water bath shakers are available in three models. Model BT-150 small platform 250 x 300 mm, Model BT-350 large platform 300 x 400 mm and Model BT-350R refrigerated to 0°C.
Temperature control is precise, temperature range of 5°C above ambient to 100°C, speed range 20 - 200 rpm, heat loss and evaporation minimized with use of stainless steel hood cover. Easy emptying through a drain at the lowest point.
Microproccessor temperature PID controller with dual display of measured temperature and set temperature.

Option:

- *Water level protector*
- *Universal platform*

Accessories



Specifications

Model	BT-150	BT-350	BT-350R
System	Reciprocation Shakinng-Circulation		
Temp.range	Room temperature - 100°C		0°C- 100°C
Temp. constancy	±0.1°C		
Temp. control	PID		
Temp. sensor	PT-100Ω		
Inside material	SUS-304		
Rate of shaking	20~200 RPM		
Shaking width	20 and 40 mm variable		
Shaking plate	W 300 x D 250 x H 130	W 400 x D 300 x H 160	
Refrigerator			1/4 HP
Heater	1.0 KW	1.6 KW	
Safety devices	Short circuit breaker, over heat protector,		
	sensor abnormality. Refrigerator over protector		
Inside dimensions	W 500 x D 300 x H 150	W 600 x D 350 x H 180	
Outside dimensions (mm)	W 700 x D 350 x H 300	W 830 x D 415 x H 350	W 980 x D 415 x H 430
Volume	22.5L	37.8 L	
Weight	25Kg	30 Kg	53 Kg

Accessories

Model\Capacity For Clamp Holder	A-50ml	B-125ml	C-250ml	D-500ml	E-1000ml
BT-150	20	12	6	4	2
BT-350.BT-350R	35	20	12	6	4

HROMalytic Chromatography Products ECHnology '08
Australian Distributors
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

1/1.2 Liters Blenders for mixing, stirring, blending or homogenizing

Base: *Epoxy coated motor housing.* ***Capacity:*** *1 Liter/1.2 Liter*
Container: *S: 1 liter, Stainless steel with handle & two piece vinyl & styrene lid.*
G: 1.2 liter, Heat resistant glass with handle & ***two*** *piece vinyl and styrene lid.*

Overall Height: *350/400mm*
Power: *240V/50Hz*

800S
Switch Settings:
One speed
22,000rpm

8011S
Switch Settings:
Two speed
Low: 18,000rpm
High: 22,000rpm

8010S
Switch Settings:
Two speed,
60 second timer
Low: 18,000rpm
High: 22,000rpm

8012S
Switch Settings:
Seven speed.
3500, 7000, 11500, 14500,
17000, 19000, 22000rpm

LB20G
Switch Settings:
Variable speed
0-20,000rpm

Model: HGBSS, Two Liter Blender

HGBSS

Mid-size Blender Convenience.
MRC offers a blender specifically designed to process up to two liters of free-flowing material with high liquid content.
Big Blender Toughness.
Powerful, 2-speed:
Low-19,000rpm, High-23,000rpm
1-HP motor will emulsify, homogenize, grind, shred, disintegrate and mix a wide spectrum of materials in seconds.

Model: LBC10, Four Liter Blender

LBC10

The Standard in Handling. *Provides two handles for safer, easier lifting, pouring and carrying.*
The Standard in Long Service Life.
Sealed, precision, hi-tech ball bearing system extends the life of our blenders.
The Standard in Design and Control.
Ergonomic chassis design makes the unit easier to lift & clean.
Control panel with Pulse Mode provides precision operation.
The Standard in Quiet Operation.
Encases its industry-leading 3-HP motor for quiet operation.
The Standard in Stability. *Deeper, wider, full traction rubber non-skid feet keep the blender stable.*
Speed: Off:-Low-Med-Hi-Pulse
16,000-18,000-20,000rpm

Model: BHL120, Hazardous Location Blender

BHL120

Capacity: *1 liter. Stainless steel container*
Switch Settings: *Two speed switch available as an accessory - BHLSW, 18,900rpm*
Base: *Natural finished aluminum & steel housing*
Container: *One liter stainless steel with stainless steel lid available as an accessory -HL515*
Cord: *not included. Must be hard-wired via explosion -proof conduit*
Overall Height: *14-3/4"*
Weight: *19 lbs.*
UL Listed for use in Class 1, Group D hazardous locations Available in 110 volt
Heat is generated within motor housings during normal operation. This blender is designed to prevent the electrical arcing and generated heat from igniting ambient atmospheres.
UL Listed.

Model: 707SB, 1.2 Liter Explosion Resistant Blender

707SB

Capacity: *1.2 liters.*
Glass container
Switch Settings: *Two speed:*
High-22,000rpm, Low-18,000rpm
Base: *Zinc die-cast powder coated*
Container: *Heat resistant glass with handle & two piece vinyl & styrene lid*
Overall Height: *406mm*
These hazardous location blenders require external compressed air with delivery of minimum 10 SCFM, discharging of 10 PSIG.
Not UL Listed.

HROMalytic Chromatography Products
Australian Distributors ECHnology '08
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

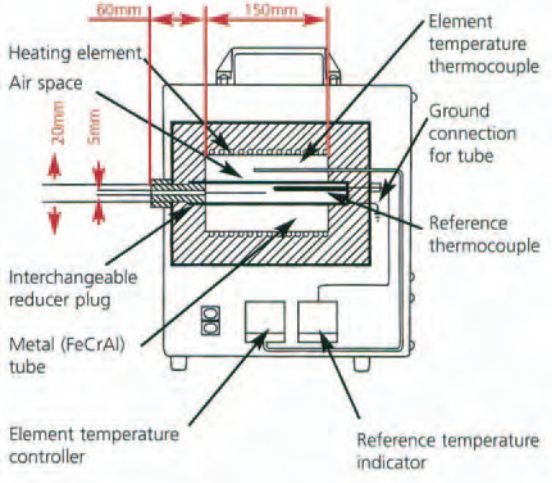
C Calibration Equipment

Thermocople Calibration Furnace 400÷1200°C

PTC 12/20

The Portable Thermocouple calibrator is a high stability heat source designed for the calibration of thermocouples up to 7.5mm, with a maximum operating temperature of 1200°C.
Thermocouples are inserted into the worktube through an insulation plug & can be compared with the temperature indicator.
It is portable and self contained, with built in PID microprocessor controller & separate digital temperature indicator giving 1°C resolution.
The special worktube design results in a much higher temperature uniformity than is normally associated with a furnace of this size.
The metallic work tube is earthed for operator safety when used with metal sheathed mineral insulated thermocouples.
The PTC 12/20 can be used in a laboratory or in site as its rapid heat up and stabilisation make it ideal for quick set up.
With optional RS-232 comunication to control the bath from a PC.

Model	PTC 12/20
Max. Temperature (°C)	1200
Continuous Temperature (°C)	1150
Temperature Range (°C)	400-1200
Stability	Better than +1°C
Overall Dimensions:	
H(mm)	399
W (mm)	310
D(mm)	225
Heated Length (mm)	150
Controller	Eurotherm 2132
Indicator	Eurotherm 2132
Heating Rate	20 mins (to 1 1 50°C)
Cavity Diameter (mm)	20
Weight (kg)	8.8
Furnace Voltage	120/240 externally selectable
Max .Power (W)	1100
Thermocouple type	N



Temperature Calibration Water Bath -30÷100°C

MRC Temperature Calibration Benchtop Bath *covers a range from -30°C to 100°C with stability & uniformity of ± 0.1C.*
tank volume is nine liter-large enough to test many sensors at once.
Bath opening is 200 x 150 mm, and 150 mm deep.
Using high precision PID microprocessor controller Eurotherm model 3216 with high stability RTD sensor.
With optional RS-232 comunication to control the bath from a PC.

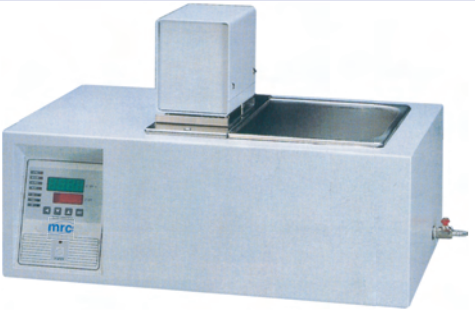
BL-30L-3216

Black Body Calibrator

- *Black Body, calibrator for the infrared thermomter.*
- *Temp. setting range: 33°C (room temp.) to 400°C.*
- *Temp. setting resolution: 0.1°C*
- *Accuracy: ± (1%+°C).*
- *Emissivity: 0.94.*
- *Sensing size: round, 120mm dia.*
- *Power supply: 110ACV or 220ACV.*
- *Weight: Approx. 12 kg.*
- *Dimensions (HWD): 190x400x335mm.*

With optional RS-232 comunication to control the bath from a PC.

Temperature Calibration Oil Bath up to 300°C



Model	B-503
Temp. Range	Room Temp.+5°C to 300 °C
Stability	±0.1C
Setting/readout	Digital
Heater	1.2KW
Stirring	By Built-in Circulation Pump
Inside Dimension	W30xD30xH20cm
Outside Dimension	W66xD40xH39.5cm
Volume	18L
Power Source	110/220V50/60HZ, 13A/6.5A

With optional RS-232 comunication to control the bath from a PC.

HROMalytic Chromatography Products
Australian Distributors ECHnology '08
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

Miniature Hematocrit Centrifuge, Four Places

ZO-1

Description:

The unique ZIP-ocrit centrifuge from MRC was designed to compliment the portable lab with its ease of operation and its lightweight streamline design, and offers premium-grade features including a lightweight aluminum-alloy design, built-in timer, maintenance-free brushless motor, and quiet and smooth operation. These portable centrifuges feature a 12 volts electronic system with a battery cable option, an ultra quiet 11,000 rpm to attain clear separation in minutes, a built-in-timer, and a clear lid with automatic shutoff. The ZIP-ocrit combines both quality and performance with low cost to give you the best value, making this centrifuge an industry leader in centrifugation and is the perfect choice for the biological, agricultural, and clinical industry, as well as for medical & vetrinary

MODEL	ZO-1
MAX SPEED	11,000 rpm
POWER CONSUMPTION	20 W
POWER SUPPLY	12V 1.2A
ROTOR	4-Place Microhematocrit Rotor
TUBE	Micro-hematocrit tube 75mm
TIMER	0-15 min
DIMENSIONS (MM)	L99×W148×H180
WEIGHT	1.6Kg

Specifications

Table top, attractive, practical, and durable design ● Lightweight aluminum-alloy design ● Four-place micro-hematocrit centrifuge for 75mm capillary tubes ● Maintenance-free brushless motor ● Good ventilation system ● LED power indicator light ● Transparent lid ● 15 minute timer

Miniature Centrifuge, Twelve or Six Places Rotor of 0.5ml/1.5ml/2ml Tubes

ZS-1

Description:

Handy, fast and versatile, ideal for field sample preparation.
This unique microcentrifuge includes both six-place and 12-place rotors for 1.5- to 2.0-mL & 0.5-mL microtubes. Centrifuge is designed with a small footprint to conserve space and features a safety switch lid and LED power indicator light.
Used for cell separations, microfiltration of HPLC samples, DNA preparations and cold room applications. Optional car battery cable allows use in field applications.

MODEL	ZS-1
MAX SPEED	7,000 rpm
POWER CONSUMPTION	20 W
POWER SUPPLY	12V 1.2A
ROTOR	6-place rotor & 12-place rotor
CAPACITY	0.5 ~ 1.5 ml tubes
SPEED CONTROLS	Variable
DIMENSIONS (MM)	L99xW148xH180
WEIGHT	1.6Kg

Specifications

Rotor for 6 x 1.5 to 2ml tubes ● Rotor for 12 x 0.5mL tubes ● 220 VAC power cord

Clinical Centrifuges, Eight Places Rotor of 15ml Tubes

DSC-158T

These centrifuges are widely used in many fields such as biology, medicine, pharmacology, vetrinary laboratory & other regions. They are small, compact, strong and easy and safe for operation. The centrifuge operate smothly and steadily. The design is up to date, beatiful outlook and durable. ABS outer shell can resist collision. It could accomodate 7ml, 10ml and 15ml centrifuge tubes without changing the rotor. With safely lock, when cover is opened, the motor can be stopped. Precision mechanical timer with bell can be set from 0 to 30 minutes. Speed is linear and stable. Auto balancing system. Vacuum rubber feet provide stable: "not walking" unit.

Specifications

Model	Power Supply	Speed range	Rotor angle	Max. RCF(xG)	Dimensions Weight	Timer	Max. Capacity
DSC-158T	220V/50Hz or 110/60Hz	up to 2500rpm or up to 3200rpm	45°	1210xG	(HxWxDmm) 220x255x255 3kg	0-30min	15ml x 8 Optional adaptors for 7ml and 10ml
DSC-N158T	110V/60Hz or 220V/60Hz	300-6000rpm	45°	4100xG	(HxWxDmm) 270x255x255 5kg	0-30min	15ml x 8 Optional adaptors for 7ml and 10ml

HROMalytic Chromatography Products ECHnology '08
Australian Distributors
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

C Centrifuges

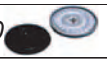
Microcentrifuge, Eighteen places tubes of 1.5 ml/2ml, Model: MCD-2000

Digital Hematocrit Centrifuge, Twenty Four Places, Model: HCD-2000

MCD-2000/HCD-2000

LED display speed and time; auto time setting device ● 10 memory programs for presetting parameters ● Microprocessor controlled ● Auto-accelerating, decelerating and transient centrifugal function ● Auto cover-lid lock, power cut off when open the cover ● Auto-brake system for presetting ● Stainless steel rotor inner can be sterilized ● Auto buzzer system when finish operation ● Auto-balance and imbalance device covering; see-through window ● Air auto-cooling circulation ● Dimensions: W290xD320xH245(mm)

Specifications

Model	MCD-2000	HCD-2000
Speed(rpm)	14,000	12,000
Max. RCF (x g)	16,000	15,000
Max. Capacity (ml)	1.5/2.0x18	Hematocrit x 24
Timer (min.)	0~99	0~99
Weight (kg)	10	10
Rotor (included)	REA-1518	RHT-240 

Hematocrit Centrifuge, Twenty Four Places

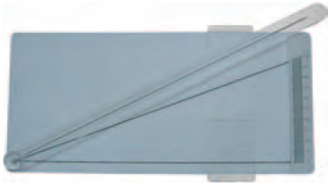
H-240

Power pilot lamp and fuse safety device ● Air auto-cooling circulation ● See-through window ● Low noise level ● Manual-braking system provides rapid deceleration ● Regressive time setting & the buzzer will sound when time is up ● Dimensions: W290xD320xH245(mm) ● Rotor included

Specifications

Fixed speed	Max. RCF	Capacity	Timer	Power	Weight
12,000 rpm	15,000xg	hematocrit x 24 pcs	0~15min	110/220V, 50/60Hz	8kg

Option:
Hematocrit reader.



Clinical Centrifuge With Eight or Twelve Places Rotor of 15ml

CN-820

Brush-less motor, change in speed step-less ● Power cut off when open the cover ● Auto-balance device ● Angle rotor ● Power pilot lamp & fuse safety device ● ABS plastics outer covering ● See-though window ● Air auto-cooling circulation & manual cover-lid lock ● 6ml adapter can be replaced ● Dimensions: W290xD320xH245(mm)

Specifications

Model	CN-820	CN-830
Speed rpm (50/60) Hz)	0~3,000/0~3,500	
Max. RCF (50/60Hz)	1,050/1,430 x g	
Capacity (ml x pcs)	15 x 8	15 x 12
Timer (min.)	0~30 or ON	
Weight (kg)	8	
Rotor (included)	R-8 Size: Max. 16.5x117 Min. 12x90	R-12 Size: Max. 16.5x100 Min. 12x90

HROMalytic ECHnology Chromatography Products '08
Australian Distributors
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

Compact Variable-Speed Universal Centrifuge, Model: CN-1050

CN-1050+RA-5006

Tachometer with an indication needle ● Optional rotors for various tube sizes ● Regressive timer: 0~30min. or ON for continuous operation ● Angle rotor can be changed in speed step-less ● Auto-accelerating and decelerating system ● Auto-current restraining function ● Power pilot lamp & fuse safety device ● Manual cover-lid lock ● Max. capacity: 300ml. ● Power cut off when open the cover ● Auto-balance device ● ABS outer covering ● See-through window ● Air auto-cooling circulation ● Dimensions: W290xD320xH245(mm) ● Optional rotors for varions tube site

Specifications

Rotor	Speed (rpm)	Max. RCF (x g)	Capacity (ml x pcs)	Tube size (∅xH) mm	
				Max.	Min.
RA-1508	0~5,500	3,310	15 x 8	16.7 x 122	15 x 90
RA-1512S		3,350	15 x 12	16.7 x 122	15 x 90
RA-5004		3,350	50 x 4	29.5 x 117	27.5 x 90
RA-5006		3,350	50 x 6	29.5 x 117	27.5 x 90
REA-1520		2,640	1.5 x 20	11 x 48	10 x 40

Programable Universal Centrifuge, Model: CN-2060

CN-2060+RA-1508

LED display speed and time ● 10 memory programs for presetting parameters ● Microprocessor controlled ● Auto-accelerating and decelerating system ● Auto cover-lid lock ● Auto-brake system for presetting ● Safety device for rotor imbalance ● Auto buzzer system when finish operation ● Max. speed: 6,000 rpm; Max. RCF: 3980 x g ● Power cut off when open the cover ● Auto-balance device ● Max. capacity: 300ml ● Air auto-cooling circulation ● ABS outer covering; see-through window ● Other rotors and accessories for replacement ● Dimensions: W290xD320xH245(mm) ● Optional rotors for varions tube site

Specifications

Rotor	Time & Speed	Max. RCF (x g)	Capacity (ml x pcs)	Tube size (∅xH) mm	
				Max.	Min.
RA-1508	0~99 min. 500~6,000 rpm	3,940	15 x 8	16.7 x 122	15 x 90
RA-1512S		3,940	15 x 12	16.7 x 122	15 x 90
RA-5004		3,980	50 x 4	29.5 x 117	27.5 x 90
RA-5006		3,980	50 x 6	29.5 x 117	27.5 x 90
REA-1520		3,140	1.5 x 20	11 x 48	10 x 40

14,000rpm High Speed Programable Universal Centrifuge, Model: CN-2200

CN-2200

LED display speed and time; auto time setting device ● 10 memory programs for presetting parameters ● Microprocessor controlled ● Auto-accelerating and decelerating function ● Auto cover-lid lock, power cut off when open the cover ● Auto-brake system for presetting ● Stainless steel rotor inner can be sterilized ● Max. speed: 14,000rpm; Max. RCF: 16,000 x g ● Max. capacity: 300ml; Timer: 0~99 min ● Auto buzzer system when finish operation ● Rotor imbalance safety device ● ABS plastics outer covering; see-through window ● Air auto-cooling circulation ● Dimensions: W290xD320xH245(mm) ● Optional rotors for varions tube site

Specifications

Rotor	Speed (rpm)	Max. RCF (x g)	Capacity (ml x pcs)	Tube size (∅xH) mm	
				Max.	Min.
RA-5006	7,000	5,400	50 x 6	29.5 x 117	27.5 x 90
RA-5004	8,000	7,000	50 x 4	29.5 x 117	27.5 x 90
RA-1512S	9,000	8,900	15 x 12	17 x 122	16 x 90
RA-1508	10,000	10,500	15 x 8	17 x 122	16 x 90
REA-1518	14,000	16,000	1.5 x 18	11 x 50	10 x 40

HROMalytic Chromatography Products ECHnology '08
Australian Distributors
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

C Centrifuges

Multi-Purpose Universal Centrifuge, Speed 5500rpm, Capacity 400ml

CN-3100

CN-3100 with LED display speed ● Regressive timer: 0 ~ 30 min. or "ON" for continuation ● Change in speed stepless; stable speed ● Auto current-restraining function ● Overheat & overload safety devices ● CN-3100 with safety door lock, hidden auto-balance and imbalance device ● Safety door lock and cover open indication ● Stainless steel inner, erosion-proof and anti-lash ● Breakdown indication and fuse safety device ● Auto-accelerating and decelerating function ● Air auto-cooling circulation ● See-through window ● Optional rotors for various tube size ● Low noise design.

Specifications

Model	Speed (rpm)	Max. RCF (x g)	Capacity (ml x pcs)	Timer (min.)	Weight (kg)	Size (cm) WxDxH
CN-3100	0-5,500	3,780	400	0-30 or "ON"	18	36x42x29

Multi-Purpose Universal Centrifuge, Speed 6500rpm, Capacity 400ml

CN-3300

LED display speed ● Regressive timer: 0 ~ 30 min. or "ON" for continuous ● operation ●Change in speed stepless; stable speed ● With auto current-restraining function ● Overheat and overload safety device ● Hidden auto-balance and imbalance device ● Safety door lock and cover-open indication ● Stainless steel inner, erosion-proof and anti-lash ● Breakdown indication and fuse safety device ● Auto-accelerating and decelerating function ● Air auto-cooling circulation ● See-through window ● Optional rotors for various tube size ● Low noise design

Specifications

Model	Speed (rpm)	Max. RCF (x g)	Capacity (ml x pcs)	Timer (min.)	Weight (kg)	Size (cm) WxDxH
CN-3300	0-6,500	5,280	400	0-30 or "ON"	20	36x42x29

Programable Universal Centrifuge, Speed 6000rpm, Capacity 400ml

CN-3600

LED display speed and time ● 10 memory programs for presetting parameters ● Microprocessor controlled ● Auto-brake system for presetting ● Safety device for rotor imbalance ● Auto buzzer system when finish operation ● High efficiency control system ● Overheat and overload safety device ● Hidden auto-balance device ● Power cut off when open the cover ● With auto cover-lid lock ● Power pilot lamp and fuse safety device ●Auto-accelerating and decelerating function Air auto-cooling circulation ● See-through window ● Optional rotors for various tube size ● Low noise design.

Specifications

Model	Speed (rpm)	Max. RCF (x g)	Capacity (ml x pcs)	Timer (min.)	Weight (kg)	Size (cm) WxDxH
CN-3600	500-6,000	4,500	400	0-99	17	36x42x29

HROMalytic Chromatography Products
Australian Distributors ECHnology '08
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

Optional Rotors & Adapters For Centrifuges CN-3100/3300/3600

Rotor		Max. Speed (rpm)	Max. RCF (x g)	Capacity (ml x pcs)	Tube Size (x 1)mm Max.	Min.	Cat. No.
RS-50		3,500	1,990	100x4	45x112	42x95	2-3400-21
		4,000	2,600	50x4	35x117	32x90	2-3400-22
		4,000	2,600	50x4TC	29.5x120	26.5x90	2-3400-23
		3,500	1,990	15x16	16.7x115	13.5x86	2-3400-32
		3,500	1,990	15x12TC	17x120	15x85	2-3400-24
		3,500	1,990	10x24	15.5x113	14x85	2-3400-25
		3,500	1,700	6x40	12.7x88	11x63	2-3400-26
		3,500	1,700	6x36	12x106	11x85	2-3400-27
		3,500	1,330	1.5x48	11x56	10x36	2-3400-28
	2-3400-21 2-3400-22 2-3400-23 2-3400-32 2-3400-24 2-3400-25 2-3400-26 2-3400-27 2-3400-28						
RS-1508		3,500	1,990	15x8	17x122	15x90	2-3000-14
RA-1508		6,000	3,940	15x8	16.7x122	15x90	2-5052-11
RA-1512S		6,000	3,940	15x12	16.7x122	15x90	2-5052-21
RA-1512H		6,000	4,500	15x12	16.7x122	15x90	2-6000-15
RA-1512		4,000	2,080	15x12	16.7x122	15x90	2-3000-11
RA-1516		4,000	2,250	15x16	16.7x115	15x90	2-3000-12
RA-1024		3,500	1,840	10x24	16.7x107	15x90	2-3000-13
RA-5004		6,000	3,980	50x4	29.5x130	27.5x94	2-5052-12
RA-5006		6,000	3,980	50x6	29.5x130	27.5x90	2-5052-22
RA-5008		6,000	4,500	50x8	29.5x117	27.5x90	2-1000-12
REA-1520		6,000	3,140	1.5x20	11x50	10x40	2-5052-13

HROMalytic Chromatography Products ECHnology '08
Australian Distributors
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

C Centrifuges

Large Capacity Universal Centrifuge, Speed 5000rpm, Capacity 480ml

CN-5100

LED display speed ● Regressive timer: 0 ~ 30 min. or "ON" for continuous ● operation ● Change in speed stepless; stable speed ● With auto current-restraining function ● Overheat and overload safety device ● Hidden auto-balance & imbalance device ● With auto cover-lid lock and cover-open indication ● Stainless steel inner, erosion-proof and anti-lash ● Breakdown indication and fuse safety device ● Auto-accelerating and decelerating function ● Air auto-cooling circulation ● See-through window ● Optional rotors for various tube size ● Low noise design.

Specifications

Model	Speed (rpm)	Max. RCF (x g)	Max. Capacity (ml)	Timer (min.)	Weight (kg)	Size (cm) WxDxH
CN-5100	0~5,000	4,640	480	0~30 or "ON"	40	45x53x34

AC 110/220V ' 50/60Hz

High Capacity Universal Centrifuge, Speed 6500rpm, Capacity 1000ml

CN-5300

LED display speed ● Regressive timer: 0 ~ 30 min. or "ON" for continuous ● operation ● Change in speed stepless; stable speed ● With auto current-restraining function ● Overheat and overload safety device ● Hidden auto-balance & imbalance device ● With auto cover-lid lock and cover-open indication ● Stainless steel inner, erosion-proof and anti-lash ● Breakdown indication and fuse safety device ● Auto-accelerating and decelerating function ● Air auto-cooling circulation ● See-through window ● Optional rotors for various tube size Low noise design.

Specifications

Model	Speed (rpm)	Max. RCF (x g)	Max. Capacity (ml)	Timer (min.)	Weight (kg)	Size (cm) WxDxH
CN-5300	0~6,500	5,280	1,000	0~30 or "ON"	40	45x53x34

AC 110/220V ' 50/60Hz

High Capacity Universal Programable Centrifuge, Speed 6000rpm, Capacity 1000ml

CN-6000

LED display speed and time ● 10 memory programs for presetting parameters ● Microprocessor controlled ● Auto-brake system for presetting ● With auto-count RCF function ● Safety device for rotor imbalance ● Auto buzzer system when finish operation ● High efficiency control system ● Overheat and overload safety device ● Hidden auto-balance device ● Power cut off when open the cover ● With auto cover-lid lock ● Power pilot lamp and fuse safety device ● Auto-accelerating and decelerating function ● Air auto-cooling circulation ● See-through window ● Optional rotors for various tube size ● Low noise design.

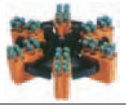
Specifications

Model	Speed (rpm)	Max. RCF (x g)	Max. Capacity (ml)	Timer (min.)	Weight (kg)	Size (cm) WxDxH
CN-6000	500~6,000	5,270	1,000	0~99	40	45x53x34

AC 110/220V ' 50/60Hz

HROMalytic ECHnology Chromatography Products '08
Australian Distributors
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

Optional Rotors & Adapters For Centrifuges CN-5100, CN-5300, CN-6000

Applicable Model	Rotor		Max. Speed (rpm)	Max. RCF (xg)	Capacity (ml x pcs)	Tube Size (φ x 1)mm Max.	Tube Size (φ x 1)mm Min.	Cat. No.
CN-5300 CN-6000	RS-250		3,500	2,250	1.5x96	10.7x100	8x41	2-6000-21
					6x112	12x110	8.5x60	2-6000-22
					10x80	15.8x100	12x60	2-6000-23
					15x40TC	16.5x122	14x60	2-6000-25
					15x48	17.2x122	14.5x60	2-6000-24
					50x16TC	29.5x125	27.5x50	2-6000-26
					250x4	62x130	58x70	2-6000-27
		2-6000-21	2-6000-22	2-6000-23	2-6000-25	2-6000-24	2-6000-26	2-6000-27
	RS-1548		3,500	2,430	15x48	17.5x107	14x80	2-6000-12
	RS-2504		3,500	2,480	250x4	65.5x130	61x90	2-6000-13
CN-5100 CN-5300 CN-6000	RS-9602		2,500	1,060	96micro x4	129x86	126x83	2-6000-14
	RS-100		3,500	2,090	6x56	13x105	10x50	2-5400-21
			3,500	2,150	10x48	16x107	13x50	2-5400-22
			3,500	2,150	15x16TC	16.7x135	13.5x86	2-3400-32
			3,500	2,150	15x32	17.5x115	14x80	2-5400-23
			4,000	2,770	50x4	35x135	32x90	2-3400-22
			5,000	4,640	50x4TC	29.5x137	26.5x90	2-3400-23
			3,500	2,120	50x8	35x120	32x90	2-5400-24
			3,500	2,120	50x8TC	29.5x127	26.5x90	2-5400-25
			4,000	2,930	100x4	45.5x130	42x95	2-3400-21
	2-5400-21	2-5400-22	2-3400-32	2-5400-23	2-3400-23	2-5400-24	2-5400-25	2-3400-21
	RS-50		4,500	3,350	15x16	16.7x115	13.5x86	2-3400-32
			4,000	2,600	50x4	35x117	32x90	2-3400-22
			5,500	5,270	50x4TC	29.5x120	26.5x90	2-3400-23
			5,000	4,200	100x4	45x112	42x95	2-3400-21
		2-3400-32	2-3400-22	2-3400-23	2-3400-21			
	RA-5008		6,000	4,500	50x8	29.5x118	27.5x90	2-6000-16
	RA-1512H		6,000	4,500	15x12	16.7x130	13.5x86	2-6000-15

HROMalytic ECHnology Chromatography Products '08
Australian Distributors
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

14,000rpm High Speed Programable Centrifuge, Capacity 400ml

CN-10000

LED display speed and time ● 10 memory programs for presetting parameters ● Microprocessor controlled ● Auto-brake system for presetting ● Safety device for rotor imbalance ● Auto buzzer system when finish operation ● High efficiency control system ●The motor with high torque ● Overheat and overload safety devices ● Hidden auto-balance device ● Power cut off when open the cover ● With auto cover-lid lock ● Power pilot lamp and fuse safety device ● Auto-accelerating and decelerating function ● Air auto-cooling circulation ● See-through window ● Optional rotors for various tube sizes ● Low noise design

Specifications

Model	Speed (rpm)	Max. RCF (x g)	Capacity (ml x pcs)	Timer (min.)	Weight (kg)	Size (cm) WxDxH
CN-10000	1000-14,000	16,000	400	0-99	17	36x42x29

Optional Rotors & Adapters for CN-10000

Model	Rotor		Max. Speed (rpm)	Max. RCF (x g)	Capacity (ml x pcs)	Tube Size (φx1)mm Max.	Tube Size (φx1)mm Min.	Cat. No.
CN-10000	RS-50		4,500	3,290	50x4TC	29.5x120	26.5x90	2-3400-23
					50x4	35x117	32x90	2-3400-22
			3,800	2,345	15x16	16.7x115	13.5x86	2-3400-32
	2-3400-23 2-3400-22 2-3400-32							
	REA-1518		14,000	16,000	1.5x18	11x50	10x40	2-5053-15
	RA-1508		10,000	10,500	15x8	17x122	16x90	2-5052-31
	RA-1512S		9,000	9,420	15x12	17x122	16x90	2-5052-41
	RA-1512H		9,000	10,130	15x12	17x122	16x90	2-3000-31
	RA-5004		8,000	6,720	50x4	29.5x117	27.5x90	2-5052-12
	RA-5006		8,000	6,720	50x6	29.5x117	27.5x90	2-5052-22
	RA-5008		6,500	5,280	50x8	29.5x117	27.5x90	2-1000-12

HROMalytic Chromatography Products '08
Australian Distributors ECHnology
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

Refrigerated Universal Centrifuge, Speed 6500rpm, Capacity 400ml

CFT-3000

LED speed, time, and temperature display ● Temperature range: -4°C ~ 40°C, P!D microprocessor controlled and LED display of present and set-value (PV & SV) ● Microprocessor control for easy operation ● Auto power off for rotor imbalance ● Auto buzzer when finish ● Overheat & overload safety protection ● Stainless steel inside bowl ● Breakdown indication and fuse safety device ● Auto accelerating and decelerating functions ● Auto-cooling air circulation ● Auto current-restraining function ● Optional rotor selections for various tube size ● Low noise.

Specifications

Speed(rpm)	Max. RCF (x g)	Max. Capacity (ml)	Timer (min)	Weight (kg)	Size (mm)
500~6,500	5,280	400	0~30 or "ON"	60	56x47x32

Rotor		Max. Speed (rpm)	Max. RCF (x g)	Capacity (ml x pcs)	Tube Size (x 1)mm Max.	Tube Size (x 1)mm Min.	Cat. No.
RS-50		3,500	1,990	100x4	45x112	42x95	2-3400-21
		4,000	2,600	50x4	35x117	32x90	2-3400-22
		4,000	2,600	50x4TC	29.5x120	26.5x90	2-3400-23
		3,500	1,990	15x16	16.7x115	13.5x86	2-3400-32
		3,500	1,990	15x12TC	17x120	15x85	2-3400-24
		3,500	1,990	10x24	15.5x113	14x85	2-3400-25
		3,500	1,700	6x40	12.7x88	11x63	2-3400-26
		3,500	1,700	6x36	12x106	11x85	2-3400-27
		3,500	1,330	1.5x48	11x56	10x36	2-3400-28
2-3400-21 2-3400-22 2-3400-23 2-3400-32 2-3400-24 2-3400-25 2-3400-26 2-3400-27 2-3400-28							
RS-1508		3,500	1,990	15x8	17x122	15x90	2-3000-14
RA-1508		6,000	3,940	15x8	16.7x122	15x90	2-5052-11
RA-1512H		6,000	4,500	15x12	16.7x122	15x90	2-6000-15
RA-1516		4,000	2,250	15x16	16.7x115	15x90	2-3000-12
RA-1024		3,500	1,840	10x24	16.7x107	15x90	2-3000-13
RA-5004		6,000	3,980	50x4	29.5x130	27.5x94	2-5052-12
RA-5006		6,000	3,980	50x6	29.5x130	27.5x90	2-5052-22
RA-5008		6,000	4,500	50x8	29.5x117	27.5x90	2-1000-12

HROMalytic Chromatography Products
Australian Distributors ECHnology '08
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

C Centrifuges & Counters

Seperation Basket Centrifuge

BK-15 (Fixed Type}: *For solid and liquid separation, inside can be treated with teflon coating ● The dipping part is in stainless steel SUS304.* ***BK-24 / 30 (Tripedal Type):*** *For materials separation in large volume ● Equipped with 3-point shake-proof device*

Specifications

Model	BK-15	BK-24	BK-30
Speed (rpm)	0~3000		
Capacity (L)	0.8	3	4.5
Motor (W)	100	200	400
Basket Size (cm)	φ15xH8	φ24xH14	φ30xH16
Body Size (cm)	W40xD40xH45	W48xD48xH50	W56xD56xH60
Weight (kg)	40	50	60

Swing 5000 Centrifuge

Specifications

0-5,000rpm (4,000 g) ● Brushless DC motor ● 8 test-tube (4-15ml) capacity ● Max. tube size17mm x100mm ● Programmable time and speed

Controls

Touch-pad time & speed controls ● 4-character digital display screen ● 1-60 minute programmable timer ● 500-5,000rpm programmable speed Includes ● 3-prong power cord ● 8 tube shields

Advantages

Straight-line separation for accurate processing ● Reduces high potassium results ● Tighter gel line reduces re-mixing ● Eliminates most re-spins ● Very high g-forces for fast separation ● Fast and accurate veterinary fecal flotations ● Platelet-Poor and Platelet-Free-Plasma in minutes

Design Features

Rubber feet to prevent slipping ● Impact-resistant lid with view port ● Zero-rpm interlocking lid ● Wide mouth for easy clean-up ● Metal rotor and tube shields

Swing 3000 Centrifuge

Swing 3000 centrifuge frame is made of high strength plastic, so its weight is low. The noise is low when it is running. It is controlled by microcomputer, can be operated simply and conveniently. It has the function of self-balance. It is safe and reliable because of being equipped with electronic lock. It can be used for qualitative analysis to serum, plasma, in the fields of biology, chemistry, medicine and so on.

Model	Swing 3000	Swing 5000
Speed	3050RPM	5000RPM
Angle Rotor Capacity	15ml x8, 50mlx4(Optional)	
Dimensions	L460xW365xH370mm	
RCF	1450 (Xg)	5000 (Xg)
Time	0-30 Min	0-60 Min
Power	110V/220V 60Hz	110V/220V 60Hz/250W
Weight	20KG	

Option: *4 x 50ml Rotor For Swing 3000/5000*

Differential Blood Cell Counter

Differential blood cell counter is used in hematology to classify and count white blood cells. We offer three types of differential blood cell counter, DBC-2, DBC-6, and DBC-9. They are compact, durable, and precision.

Features:

- *ABS outer shell can resist collision. (DBC-6, DBC-9)*
- *Color charts of white blood cells are supplied. (DBC-6, DBC-9)*
- *At one hundred increment of the total record, the bell sound "Don" will be heard. (DBC-6, DBC-9)*
- *Reset knob can easily clear all figures.*

Model	Total Of Keys	Total Of Windows (Totalizer/No Totalizer)	EachWindow Figure Range	Gross Weight (g)	Dimension (mm)LxWxH
DBC-2	2	2 (No Totalizer)	0~999	325	100x80x50
DBC-6	5	6 (Totalizer)	0~999	610	250x80x50
DBC-9	8	9 (Totalizer)	0~999	800	320x80x50

HROMalytic ECHnology Chromatography Products '08
Australian Distributors
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

Colony Counter With Electronic Register

CLC-570 WITH ELECTRONIC REGISTER

Colony counter 570 is designed with all solid state circuitry, and the pressure sensor system provides uniform sensitivity over the whole of working field; suitable for counting bacteria growing on all agar contained in different size of petri dishes.
The model has adapted the latest electronic type ring-shaped lamp for its illuminating device. At a touch, the fluorescent tube lights up directly or indirectly over the entire petri plate surface for a steady, non-glare and quiet illumination; providing the operator the most comfortable working environment. The number of counts is capable of being registered to maximum of 4-digits, i.e. 9999, & displayed on bright red LED. The adjustable focusing arm enables the magnifying glass to be placed at various angles of working position.
The focusing arm can also accommodate lens of various magnitude.
Intelligent counting technology enables the Model 570 to count with any kind of marking pen. Every time a count is registered, and the beeper gives an audible signal to verify entry.

Standard Accessories:
- *1.5x auxiliary - 1pc*
- *Adjustable focusing arm - 1pc*
- *Marking pen - 1pc*
- *Power cord - 1pc*

Optional Accessories: *Switch pen 8-02-1*

Features:
- *Built-in electronic register on deluxe model-operated by any pen.*
- *Pressure sensor system provides uniform sensitivity over the whole of the working field.*
- *A reset button provides immediate zeroing of the 4-digit counter.*
- *Flexible adjuster accepts 10 cm to 15cm petri dishes.*
- *Adjustable focusing arm allows 1.5x standard lens to be raised or lowered up to your preference.*
- *Lens can be rotated 360°for ready access to petri plates.*
- *Background plate can be changed to white or black for easy counting.*

Spesifications:

Working Principle:	*Pressure sensor system provides uniform sensitivity over the whole of the working field.*
Readout:	*4-digit bright red, 0.6" LED display*
Petri Dish Holder:	*Accept 10 cm to 15cm dish using flexible adjuster*
Illumination:	*Ring-shaped lamp provides direct or indirect illumination*
Zero Reset Button:	*Yes*
Modes of Counting:	*Marking pen counting (any pen), switch pen counting*
Dimension:	*30cm X 33cm X 10cm (W x D X H)*
Power:	*115/230 VAC, 50/60 Hz*
Net Weight:	*5 kgs*

PVC Desiccator Cabinet "Vertical Design"

0030

Latch Door "C" Type, PVC-ABS - 0030:
- ***Frame Color: Black***
- ***Body Color: Clear Transparent***

All clear PVC made UV model is suitable for the store of samples or products affected easily with UV (in violet) rays. Wave lengths less than 400nm are transmitted by the special plastic walls.
- *Body: PVC (Polyvinylchloride)*
- *Frame: ABS (Acrylonitrile Butadiene Styrene)*
- *Outside dimesions: 300X395X51Omm(H)*
- *Inside dimensions: 255X330X450mm(H)*
- *Accessories: 4 Shelves (Adjustable for max. 15 levels)*
  1 Desiccant tray
  1 Hygrometer (built-in)

Mini Desiccator Cabinet

0050

Mini Desiccator Cabine:
- ***224x200x170***

Injection molded PS cabinet is sturdy and unbreakable.
Sides and door are completely transparent for easy viewing.
The door AS made has a foam rubber gasket and two roller latches for an airtight seal.
When opened, the door slides into an out-of-the-way compartment beneath the cabinet.
Smoky transparent cabinet is excellent for protecting light-sensitive materials.
- *Suitable for the storage of highly sensitive components.*
- *Stackable to save bench top space.*
- *Materials: PS (Polystyrene)*
- *Compartment inside dimensions: 195X154X113mm(H)*
- *(Accessories): 1 jar of moisture-absorbing silica gel in each compartment.*

Vacuum Pyrex Desiccator

02-120

- *With ground stopcocks*
- *With porcelain plate*

Model	Size (mm)	Porcelain plate diameter (mm)	Overall Height (mm)
02-120	120	108	227
02-160	160	148	285
02-180	180	160	305
02-210	210	188	347
02-240	240	220	381
02-300	300	280	467
02-350	350	300	544

HROMalytic Chromatography Products ECHnology '08
Australian Distributors
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

D Desicators

Dry Serie Dry Cabinets

These dry cabinets with the thermoelectric dehumidi-fying system are used to store the materials and objects that required low humidity.
It is used in the electric and semiconductor industry to store IC wafers, electronic components.
Also in the pharmaceutical laboratories it is used to store reagents, specimens, chemicals standards and medicines.
As well it is used to store optical instruments: cameras, lenses, microscopes and optical products: films, video tapes, slides, microfilms, CD, DVD, X-ray films.
These are six models with two choices:
standard-20% RH and Super dry-10% RH.
1mm electro galvanized steel housing,
5mm tempered foggy glass door,
plastic frame with lock and key.

DRY-60-68 Liter

DRY-70-82 Liter

DRY-100-116 Liter

DRY-125-141 Liter

DRY-205-228Liter

Model	External Dimensions	Internal Dimensions	Capacity	Shelf	Weight	Power
DRY-60	W400xD430xH560mm	W398xD375xH480mm	68L	2PCS	15KGS	12W
DRY-70	W400xD430xH660mm	W398xD375xH580mm	82L	2PCS	17KGS	12W
DRY-100	W400xD430xH890mm	W398xD375xH820mm	116L	3PCS	20KGS	13W
DRY-125	W400xD440xH980mm	W438xD385xH900mm	141L	3PCS	25KGS	13W
DRY-230	W600xD480xH970mm	W598xD425xH900mm	230L	3PCS	30KGS	25W
DRY-205	W400xD530xH1290mm	W398xD475xH1210mm	228L	5PCS	30KGS	25W

APPLICATION

PHOTOGRAPHIC INSTRUMENTS
Camera, Lenses, Films, Binocular, Colour Slide, Micro film

OFFICE & HOMEUSE
LD, CD, Video tape, Paintings, Stamps, Dry Foods, Antiques

COMPUTERS INDUSTRY
PC Board, IC, SMD Floppy Disk, Electronic chip

HOSPITAL & MEDICALS
Reagent, X Ray film, Herb, Medicine, Medical equipments

SCHOOL & LABORATORY
Microscope, Precision instrument, Educational equipments

EXAMPLE OF OPTIMUM STORING HUMIDITY

Relative Humidity	Storing Articles
60%-50%	*Painting, Postal Stamp, Album, Currency Note, Bibble Antiques*
45%-40%	*Camera, Lenses, Microscope, Binocular, V8, Optical Products, Film, Video Tape, Clour Slide, Microfilm, Floppy Disc, CD, DVD, Musical Instrument, Object of Art, Clothing, Precious, Collections, Medicine, Herb, Tea, Coffee, Sugar, Condiment, Dry food*
40%-30%	*Precision Instrument, Measuring Equipment, Precision Tool, Electric Appliance & Parts, Chmicals, Industrial Materials*
30%-20%	*Reagent, Specimens, Seed, Spice & Object of Research*
10% Below	*Semiconductor, IC Wafer, Electronic Component & Photoelectronic Components*

HROMalytic Chromatography Products '08
Australian Distributors ECHnology
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

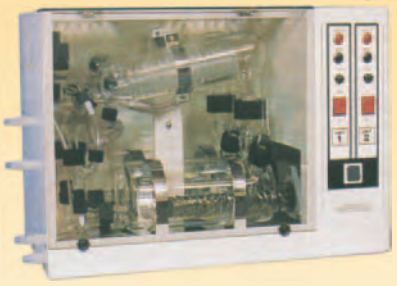
Aquamatic & Cabinet Water Stills

Economy Water Still

MRC economy water stills provide the same performance as four litre cabinet stills. The still features a high quality boiler & condenser distillation unit mounted on a stove enamelled metal chassis with all electrics in a metal housing.

WSE/4S — Fitted with silica heater

4 Liters/Hour Cabinet Stills
-WSC/4S - Fitted with silica heater



8 Liters/Hour Cabinet Stills
-WSC/8S - Fitted with silica heater

Double Distillation Cabinet Stills
-WSC/4D - Output approximately 4 liters per hour of high purity distillate. 4 silica heaters.

4 Liters/Hour Aquamatic Stills
-AWC/4S - Fitted with silica heater

8 Liters/Hour Aquamatic Stills
-AWC/8S - Fitted with silica heater

Double Distillation Aquamatic Stills
-AWC/4D - Output approximately 4 liters per hour of high purity distillate. Four silica heaters.

Technical Specifications:

Output		4 Liters/hr	4 Liters/hr	4 Liters/hr D.D	8 Liters/hr	8 Liters/hr
Heaters		Metal	Silica	Silica	Metal	Silica
Wattage		1x3Kw	2x1.5Kw	4x1.5Kw	2x3Kw	4x1.5Kw
Power		220/240v	220/240v	220/240v	220/240v	220/240v
Fuse		13amps	13amps	2x13amps	2x13amps	2x13amps
Minimum Supply Pressure		5psi	5psi	5psi	5psi	5psi
Dimensions (HxWxD)mm		400x590x240	400x590x240	400x590x340	400x590x340	400x590x340
Incl. Reservoir (HxWxD)mm		940x590x530	940x590x530	940x590x530	940x590x530	940x590x530
Nett Weight (kg)		12	12	20	20	20
Incl. Reservoir (kg)		32	32	40	40	40
Output Quality	pH	5.5-6.5	5.5-6.5	5.5-6.5	5.5-6.5	5.5-6.5
	Conductivity µs/cm	<2.5	<2.5	<1.5	<2.5	<2.5
	Resistivity megohm-cm	0.4	0.4	0.66	0.4	0.4
	Temperature	<35°C	<35°C	<35°C	<35°C	<35°C

HROMalytic Chromatography Products
Australian Distributors ECHnology '08
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

Wide Mini Gel System

WIDE MINI Horizontal Gel Electrophoresis System is designed for very fast and clear separation of DNA restriction fragments in agarose gels.
This System allows the user to cast, run, & perform Southern or Northern blotting of high quality, 105x83mm, 50x83mm agarose gel. Constructed of sturdy PC, this economical, easy-to-use unit feature a casting gel system. The casting gel system contain two size tray (casting 3 pieces of agarose gel in one time) that temperature capacity is 130°C. That don't crack when you pour the high temperature agarose gel in the tray. The simple gel casting and handle of WIDE MINI Gel Electrophoresis System help you maximize the consistency of your procedures from run to run.
Set-up is virtually effortless: just pour your gel in the casting system. There's never a need to bother with tape, clamps or springs. The WIDE MINI Gel Electrophoresis System offers many additional features for superior gel performance. Black well-visualization stripa aligned with the comb positions make sample loading easier.
The prevent electrical hazards during electrophoresis, the apparatus features a safety interlock lid.

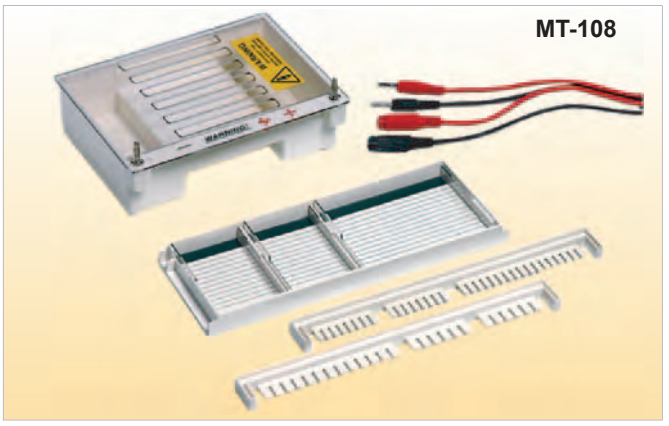
Feature:

Electrophoresis Tank -

- *Constructed of sturdy PC.*
- *Interlock Lid*
- *Ventilation Lid*
- *Max runs 83 mm long and 105 (WIDE MINI Tray) or 50mm (MINI Tray)wide.*

Casting System -

- *Cast 3 pieces of agarose gel in one time.*
- *Temperature capacity is very high (130 °C), Never worry about gel cracking when pour the high temperature of agarose gel.*
- *Tray contain black well-visualization stripa aligned with the comb positions make sample loading easier.*
- *No need to bother with tape, clamps or springs.*
- *Two type comb is included.*



Specification:

Dimension: 136x188x58 (WxHxL)
Construction: PC
Temprature Capacity : 130 °C
Gel Dimension : Tray (MT-T01) - 105 x 83 mm
Tray (MT-T02) - 50 x 83 mm
Maximum Gel Thickness : 10 mm
Working Buffer Volumn:
Complete with :

- *Electrophoresis Tank*
- *Gel Casting System (MT-G01)*
- *1 piece of 105x83 mm Tray (MT-T01)*
- *2 pieces of 50 x 83 mm Tray (MT-T02)*
- *Analytical Comb 1.0 mm-thick (MT-C01) (8 teeth x 2 for mini gel and 17 teeth for wide gel*
- *Analytical Comb 1.0 mm-thick (MT-C02) (6 teeth x 2 for mini gel and 13 teeth for wide gel*
- *Power Cord (MT-P01)*

Shorter Mini Gel System

SHORTER MINIHorizontal Gel Electrophoresis System is designed for very fast and clear separation of DNA restriction fragments in agarose gels. This system allows the user to fast cast, run and perform Southern or Northern blotting of high quality, 109x60 mm, 54x60 mm agarose gel. Constructed of sturdy PC, this economical, easy-to-use unit feature a casting gel system.
This system contain two set of the gel casting system contain with two size tray (casting 6 pieces of agarose gel in one time) that temperature capacity is 130°C. That will not crack when you pour the high temperature agarose gel in the tray.
The simple gel casting and handle of SHORTER MINI Gel Electrophoresis System help you maximize the consistency of your procedure from run to run. Set-up is virtually effortless: just pour your gel in the casting system. There's never a need to bother with tape, clamps or spring. The SHORTER MINI Gel Electrophoresis System offers many additional feature for superior gel performance. The tray contain with (please see fig 1) migration distance index line, agaorse level (4 mm) for reference and black well-visualization strip aligned with comb positions make sample loading easier. The prevent electrical hazards during electrophoresis, the apparatus features a safety lid.

Feature:

Electrophoresis Tank -

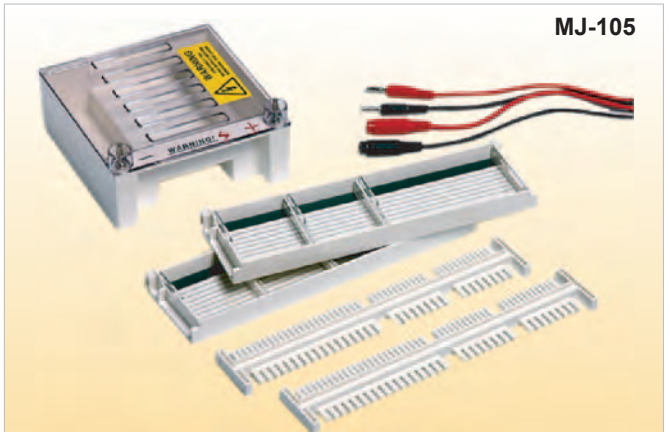
- *Contracted of sturdy PC; 2. Safety lid; 3.Ventilation Lid; 4.Max runs 60mm long and 109(wide mini tray) or 54 (mini tray) mm wide.*

Casting System -

- *Contain two set of the gel maker system*
- *Cast 6 pieces of agarose gel in one time.*
- *Temperature capacity is higher (130°C), never worry about tray cracking when pour the high temperature of agarose gel.*
- *Tray contain with black well-visualization strip aligned with comb positions make sample loading easier, migration distance index line and agaorse level (4 mm) for reference*
- *No need to bother with tape, clamps or springs.*
- *You can make 3 pieces of gel in one time (by single unit), 6 pieces (by double units) or more. (Please see fig 2)*

One comb with two size of teeth:

- *8 teeth x2 + 17 teeth (thick: 1.0mm), another side 12 teeth x2 +25 teeth (thick 1.5mm).*
- *You can run max. 25 samples at a time.*



Specification:

Dimension : 140x140x53 (W x L x H)
Construction : PC
Temprature Capacity : 130°C
Gel Dimension :
Tray(MJ-TOl) 52 x 60 mm
Tray(MT-T02) 107x60 mm
Maximum Gel Thickness : 10mm

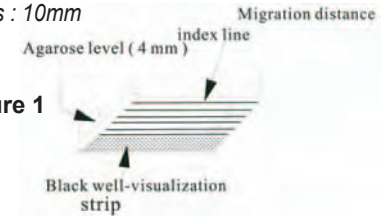


Figure 1

Figure 2

HROMalytic ECHnology Chromatography Products '08
Australian Distributors
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

Handy 100V Power Supply

MP-100

The Model MP100 HANDY Power Supply is Low-cost, compact and light-weight. Easy to operate - either 50 or 100 VDC is selectable as the output voltage. These voltages are sufficient for ordinary electrophoresis.

Compact: save precious laboratory space ● Powerful: power packed capacity 100 V, 40 W ● Two constant voltages 50 and 100; flexibility to perform horizontal electrophoresis runs. ● Safety design : a. shrouded plugs and sockets. b. No Load detect - The MP-100 will be turn off by itself when you disconnect any one DC power core from the power supply or electrophoresis apparatus ● Low cost: good value allows dedicated power to an individual electrophoresis tank.

MAX. Voltages	100 Voltages
MAX. Watt	40W
Output type	Constant voltage
Selected Voltage	50 & 100 Voltages
Safety	No load detect
Construction	Polycarbonate
Working TEMP.	0~50OC
Dimension	60x40x120mm (WxHxL)
Operating Voltages	100~120 Voltages only

100V/150V Power Suply

MP-100EP, MP-150EP

The e-power series power supply are developed to power the any horizontal gel electrophoresis system (such as MAJOR SCIENCE'S MJ-105 or MT-108, please see below figure 1). These units are designed and constructed to the most rigorous safety standard, have achieved recognition as the most compact and powerful power supply unit currently available on the market.

Compact Size: 10.5 x 15 x 7.5 cm (WxLxH) ● Powerful: Power Package Capacity MP-100EP 100V;400mA&40W MP-150EP 150V; 400 mA&60W ● One pair of output terminal ● Contains 4 steps constant Voltages: MP:-100EP 25; 50; 75 and 100 Voltages MP-150EP 75; 100; 125 and 150 Voltages ● Safety Design: Shrouded plug and socket; no load detection ● Low Cost and Economical Equipment.

Type:	MP-100EP	MP-150EP
Dimension:	10.5Wx 15Lx7.5Hcm	10.5Wx 15Lx7.5Hcm
Working Temp	0 ~ 50°C	0 ~ 50°C
Max. Voltages	100 V	150 V
Max. Current	400mA	400mA
Max. Watt	40 W	60 W
Output Type	Constant Voltages	Constant Voltages
4 Constant Voltages Steps	25; 50; 75 and 100V	75; 100; 125 and 150V
Terminal:	One pair	One pair
Safety:	No Load Detection	No Load Detection
Operation Voltages:	100-230V/50-60 Hz	100-230V/50-60 Hz

250V/300V Power Suply

MP-250N, MP-300N

The MIDI POWER Power Supply are a versatile microprocessor midi voltage power supply for horizontal or vertical gel electrophoresis. The unit is programmable and offers constant voltage and constant current.

Compact: save precious laboratory space ● Powerful: 1. power packed capacity 250 V, 400 mA, 100 W for MP-250N 2. power packed capacity 300 V, 400 mA, 100 W for MP-300N ● Microprocessor controller ● Program constant Voltage, Current in time ● Program storage up to 10 methods ● Alarm can be set at the end of a program ● Timer setting : 1-999m with alarm ● Auto Cut-Off ● Safety design : a. shrouded plugs and sockets c. Leaking detect ● 2 pairs of output terminals ● Compact, light weight, stackable

Cat. No.	MP-250N	MP-300N
Max. Voltages	250V	300V
Max. Current	400mA	
Max. Watt	100 W	
Output Type	Constant Voltages or Constant Current	
Programmable Storage	10 programmed methods	
Timer	1~999mins	
Safety	No load & leakage detect	
Operation Voltages	110 or 220 voltages	
Dimension	160x70x140mm (WxHxL)	
Construction	Aluminum	
Working Temp.	0~50OC	

HROMalytic Chromatography Products
Australian Distributors ECHnology '08
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

Models: MP-500P, MP-2000P, MP-2AP, Programmable Power Supplies

MP-500

- ***Versatile:*** *The MAX POWER Programmable Power Supply has a maximum output capability from 500 voltages to 2000 Voltages, 400 mA to 2 A and 200 watts. It can be used for a variety of applications. This unit is suitable for running multiple SDS gels, blotting and large submarine gels.*
- ***Fully Programmable:*** *The MAX POWER Programmable Power Supply can be easily operated by entering the system parameters via the membrane keypad and pressing the start key. It can be programmed to recall and run constant or multi-step electrophoresis in a variety of operational modes :*
  Constant operation with timer- *Program constant voltage, current or wattage with timer to eliminate the possibility of running samples off gels.*
  Programmable mode- *Program multi-step methods of up to 6 steps.*
  For example: running condition (File Number 01/constant voltages): step 1: 500V, 15 min step 2: 250V, 15 min

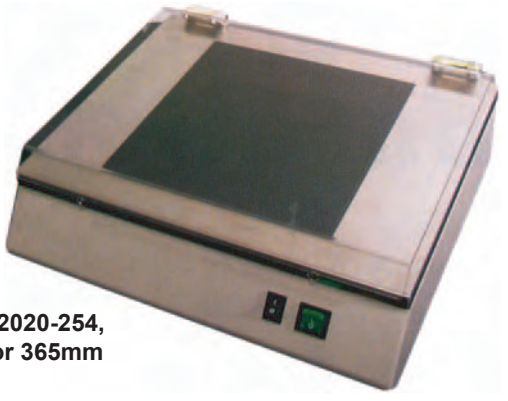
FO1	Step1	Step2	FO1	Step3	Step4	FO1	Step5	Step6
Volt	500	250	Volt	0	0	Volt	0	0
mA	400	400	mA	0	0	mA	0	0
Watt	200	200	Watt	0.0	0.0	Watt	0.0	0.0
Min	15	15	Min	0	0	Min	0	0

The MAX POWER Programmable Power Supply are highly performance, easy to operate instrument which can handle virtually any application from high voltage electrophoresis to high current blotting. It is unique in offering both graphic and text displays. The MAX POWER Programmable Power Supply are completely programmable with selfprompting menus and multiple operation modes.

Cat. No.	MP-500P	MP-2000P	MP-2AP
Max. Voltages	500V	2000V	200V
Max. Current	400mA	300mA	2A
Max. Watt	200W	200W	200W
Output Type	Constant Voltages: Constant Current or Constant Watt		
Program Storages	16 programmed files		
Program Multi-Step	Up to 6 steps		
Timer setting	1~999 mins with alarm		
Display	28x64 dot matrix display screen		
Safety	No load: leakage & overload detection		
Construction	Plastic		
Dimension	180x140x280mm (WxHxL)		
Operation Voltages	110 or 220 voltages		

Ultraviolet Transilluminator

The UV light box is a multitasking workstation which offer an ultra-violet light source to let biotechnology researcher to watch fluorescent stained electrophoresis gel for DNA, RNA and Protein. It also offer a space for researcher put tube rack, cutting tools or waste agarose gel in this area.
It is convenience when researcher need to cut gel bands.
The working space have a magnetic area can fix tube rack or cutting tools.
The new generation UV light box include a special designed UV leakage indicator which can change color when it detect UV from cover.



MUV2020-254, 306 or 365mm

Specifications:

- *Wavelength : 312 (or 254nm; 365 nm)*
- *Filter size : 20 x 20 cm*
- *Long life filter*
- *High efficiency reflector*
- *Light source: 8 W x 6 tubes*
- *Hi/Lo Intensity switch*
- *Fast lighting up: new and high quality starter to let the tubes lighting up at once when switch on and no blink*
- *UV resistant plastic cover : 330 W x 250 D mm*
- *Overall Dimension: 340 (W) x 295 (D) x 100 (H) mm.*

Ordering Information:

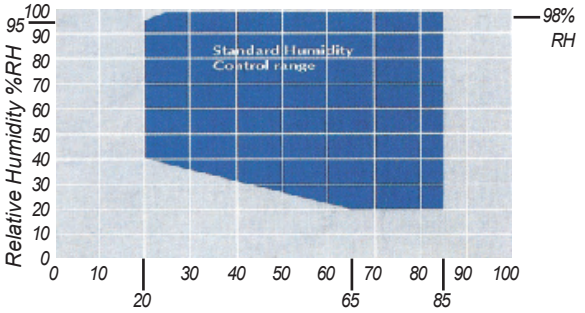
MUV2020-254	20x20 cm Transilluminator for 254nm
MUV2020-312	20x20cm Transilluminator for 312nm
MUV2020-365	20x20cm Transilluminator for 365nm
MUV2020-254/365	20x20cm Transilluminator for 254 & 365nm
MUV-T254	8W254nmUVlamp
MUV-T312	8W312nmUVlamp
MUV-T365	8W365nmUVlamp
MUV-F	20x20 cm filter
MUV-C	UV protected cover

HROMalytic ECHnology Chromatography Products '08
Australian Distributors
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

Bench Top 80 liter Constant Temperature & Humidity Chamber

BTH80/-20

BTH - Fix Point PID Control LED Display



Humidity Control Range - At+20'C Ambient temperature or+25°C water temperature and non-loaded

This model features not only improved testing performance but also the ability to have products respond to environmental conditions and the pursuit of humanized operation. With wide temperature & humidity ranges (-20°C to 100°C; 20-98% R.H.).

Specifications:

Model	BTH80/-20
Temp. Range	-20°C~100°C
Humid. Range	20%~98%RH
Temp. & Humid. constancy	±0.5°C ±2.5%RH
Temp. & Humid. unifomity	±1°C ±3%RH
Heating up time	20°C~100°C within 30 min
Cooling speed	20°C~-20°C within 60 min
Interior dimensions	W40xD40xH50cm
Exterior dimensions	W86xD81xH81cm
Interior/Exterior material	Steainless steel plate (SUS 304)/(SUS 304) tough powder-coated
Insulation	Rigid polyurethane foam
Refrigeration system	Single stage refrigeration
Sfety devices	Refrigerator over load relay. Refrigeration high preffure switch. Protection relay. Protection fuse. Boil dry protector, overheat protector. Alam
Accessories	Viewing window. Shelves (freely adjustable) 2pcs. Chamber lamp
Power	AC220V. 50/60Hz. 1PH

Recorders

CR87HT22C

0÷500°C

High Temperature Recorder

- Temperature range: 0°C to 500°C
- Remote readings from up to 2000ft.
- Programmable speed & temperature ranges, 0÷120°C, 0÷250°C, 250°C÷500°C,
- Operating Voltage: 220-240V, 50/60 Hz

CR87B220C

-40÷50°C

Temperature Recorder

- Temperature range: (-40°C to 50°C)
- Remote readings from up to 100ft. (optionai sensor wire p/n
- GABLE10T)
- Programmable speed and temperature ranges
- Operating Voltage: 220-240V, 50/60 Hz

CR4KTH

-40÷55°C, 0÷100%RH

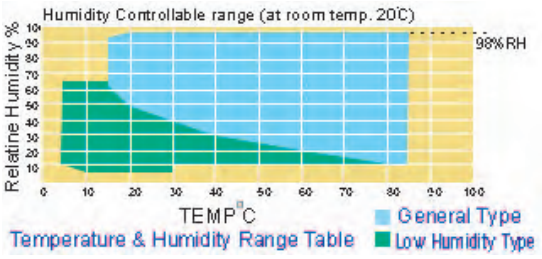
Temperature & Humidity Recorder

- Temperature range: -40°C to 55°C
- Humidity range: 0-100%
- Front panel touch pad
- Real Time data view
- Operating Voltage: 220-240V, 50/60 Hz (Battery backup)
- Field replaceable probes
- Field calibration of probes
- Independent Channel Alarms

HROMalytic Chromatography Products
Australian Distributors ECHnology '08
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

E Enviromental Chambers

- *Adjustable stainless steel shelfs*
- *Optional 100mm chart recorder*
- *Over / under temperature protection devices.*
- *Automatic water level control*
- *Volumes from 36 litre up to 800 litres.*
- *Viewing window with interior light*
- *Stainless steel access ports with plug, for convinient access to test items.*
- *Swivel casters for mobility*
- *Easily accessible service areas.*
- *Stainless steel internal and external chamber*
- *Solid state heating and humidity switching*
- *Stainless steel humidity generator with viewing window*
- *Low water level humidity heater protection.*
- *Wet Dry bulb humidity sensor*
- *Refrigeration system: high efficency, maximum reliability and low vibration & low noise. The air cooled refrigeration is working with CFC free refrigerant. The total cooling circuits is working with solenoid valve bypass techinque ensuring that the compressor will only be disconnected if cooling capacity has not been required for a prolonged period.*
- *Heating system: low mass electric resistance heater is located directly in front of the recirculating air blower. The PID microprocessor controllers with the solid state relays allows extremly precise and constant control.*



Temperature & Humidity Range Table

LG-60

Constant Temperature & Humidity Chamber

Model		HG-30	HG-40	HG-50	HG-60	HG-80	FG-40	FG-50	FG-60	FG-80	LG-40	LG-50	LG-60	LG-80	TG-50	TG-60	TG-80
Internal Dimensions (mm)	W	300	400	500	700	1000	400	500	700	1000	400	500	700	1000	500	700	1000
	H	400	500	600	850	1000	500	600	850	1000	500	600	850	1000	600	850	1000
	D	300	400	500	700	800	400	500	700	800	400	500	700	800	500	700	800
External Dimensions (mm)	W	720	930	1030	1230	1530	930	1030	1230	1530	930	1030	1230	1530	1030	1230	1530
	H	1060	1310	1410	1660	1810	1310	1410	1660	1810	1310	1410	1660	1810	1410	1660	1810
	D	620	810	910	1210	1310	810	910	1210	1310	810	910	1210	1310	910	1210	1310
Volume Litre		36	80	150	416	800	80	150	416	800	80	150	416	800	150	416	800
Temperature Range		0°C~100°C (150°)					-20°C~100°C (150°)				-40°C~100°C (150°)				-70°C~100°C (150°)		
Humidity & temperature uniformity		±0.5°C ±3%RH				±1°C ±5%	±0.5°C ±3%RH			±1°C ±5%	±0.5°C ±3%RH			±1°C ±5%	±0.5°C ±3%RH		±1°C ±5%
Temperature rising speed		0°C~100°C about 20 min					-20°C~100°C about 35 min				-40°C~100°C about 40 min				-70°C~100°C about 60 min		
Cooling speed		20°C~0°C about 20 min					20°C~ -20°C about 45 min				20°C~ -40°C about 60 min				20°C~ -70°C about 90 min		
Freezing system		Simoleon type full airtight air-cooled refrigeration system									Binary full airtight air-cooled refrigeration system						
Humidity Range		20%~98%RH							Temperature and humidity stability		±0.2°C ±2%RH						
Temperature & humidity adjustment		Balancing temperature & humidity adjustment method							External material		SUS304#Stainless steel						
Internal marerial		SUS304#Stainless steel							Humidification		Surface Steam type, stainless heating humidifier, with humidity water shortage power interruption & thermal protection						
Temperature preservation		Material rock wool hard PU polyurethane foams							Temperature preservation heating system		Stainless steel heating type humidifiner						
Circulation system		Fan forced recycling convection							Xeransis system		refrigeration invisible heat xeransis method						
Water supply system		Front-positioned water tank, fully automatic water supply control, recycling filter re-utilization with water shortage alarm device															
Safety device		Power leakage & overload protective device, compressor overload protective device, over-temperature & over-humidity circuit breaker protection, water shortage protection, humidifier over-heating protection, temperature limit protective device.															
Standard accessory		2 x Stainless steel adjustable board sets, vacuum glass perspective window, testing aperture, operating room light, motion wheel, control indicator															
Optional accessory		Recorder							Power		AC220V, 1PH, 50/60Hz						

Programmable Temperature & Humadity Chamber

Model		HP-30	HP-40	HP-50	HP-60	HP-80	FP-40	FP-50	FP-60	FP-80	LP-40	LP-50	LP-60	LP-80	TP-50	TP-60	TP-80
Internal Dimensions (mm)	W	300	400	500	700	1000	400	500	700	1000	400	500	700	1000	500	700	1000
	H	400	500	600	850	1000	500	600	850	1000	500	600	850	1000	600	850	1000
	D	300	400	500	700	800	400	500	700	800	400	500	700	800	500	700	800
External Dimensions (mm)	W	720	930	1030	1230	1530	930	1030	1230	1530	930	1030	1230	1530	1030	1230	1530
	H	1060	1310	1410	1660	1810	1310	1410	1660	1810	1310	1410	1660	1810	1410	1660	1810
	D	620	810	910	1210	1310	810	910	1210	1310	810	910	1210	1310	910	1210	1310
Volume Litre		36	80	150	416	800	80	150	416	800	80	150	416	800	150	416	800
Temperature Range		0°C~100°C (150°)					-20°C~100°C (150°)				-40°C~100°C (150°)				-70°C~100°C (150°)		
Humidity & temperature uniformity		±0.5°C ±3%RH				±1°C ±5%	±0.5°C ±3%RH			±1°C ±5%	±0.5°C ±3%RH			±1°C ±5%	±0.5°C ±3%RH		±1°C ±5%
Temperature rising speed		0°C~100°C about 20 min					-20°C~100°C about 35 min				-40°C~100°C about 40 min				-70°C~100°C about 60 min		
Cooling speed		20°C~0°C about 20 min					20°C~ -20°C about 45 min				20°C~ -40°C about 60 min				20°C~ -70°C about 90 min		
Freezing system		Simoleon type full airtight air-cooled refrigeration system									binary full airtight air-cooled refrigeration system						
Humidity Range		20%~98%RH							Temperature & humidity stability		±0.2°C ±2%RH						
Temperature & Humidity adjustment		Balancing temperature & humidity adjustment method							External material		SUS304#Stainless steel						
Internal material		SUS304#Stainless steel							Humidification		Surface Steam type, stainless heating humidifier, with humidity water shortage power interruption & thermal protection						
Temperature preservation		material rock wool hard PU polyurethane foams							Temperature preservation heating system		stainless steel heating type humidifier						
Circulation system		Fan forced recycling convection							xeransis system		refrigeration invisible heat xeransis method						
Water supply system		Front-positioned water tank, fully automatic water supply control, recycling filter re-untilization with water shortage alarm device															
Safety device		Power leakage & overload protective device, compressor overload protective device, over-temperature & over-humidity circuit breaker protection, water shortage protection, humidifier over-heating protection, temperature limit protective device															
Standard accessory		2x Stainless Steel adjustable shelves, vacuum glass perspective window, testing aperture, operating room light, motion weel, control indicator															
Optional accessory		Recorder							Power		AC220V, 1PH, 50/60Hz						

HROMalytic ECHnology Chromatography Products '08
Australian Distributors
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

- *Viewing window with interior light*
- *Stainless steel access ports with plug, for convinient access to test items.*
- *Swivel casters for mobility*
- *Easily accessible service areas.*
- *Stainless steel internal and external chamber*
- *Solid state heating switching*
- *Refrigeration system: high efficency , maximum reliability and lowg vibration and low noise. The air cooled refrigeration is working with CFC free refrigerant. The total cooling circuits is working with solenoid valve bypass techinque ensuring that the compressor will only be disconnected if cooling capacity has not been required for a prolonged period.*
- *Heating system: low mass electric resistance heater is located directly in front of the recirculating air blower. The PID microproessor controllers with the solid state relays allows extremly precise and constant control.*
- *Adjustable stainless steel shelves*
- *Optional 100mm chart recorder*
- *Over / under temperature protection devices.*
- *Volumes from 36 litre up to 800 litres.*

LC-60

High/Low Constant Temperature Chamber

Model		HC-30	HC-40	HC-50	HC-60	HC-80	FC-40	FC-50	FC-60	FC-80	LC-40	LC-50	LC-60	LC-80	TC-50	TC-60	TC-80
Internal Dimensions (mm)	W	300	400	500	700	1000	400	500	700	1000	400	500	700	1000	500	700	1000
	H	400	500	600	850	1000	500	600	850	1000	500	600	850	1000	600	850	1000
	D	300	400	500	700	800	400	500	700	800	400	500	700	800	500	700	800
External Dimensions (mm)	W	720	930	1030	1230	1530	930	1030	1230	1530	930	1030	1230	1530	1030	1230	1530
	H	1060	1310	1410	1660	1810	1310	1410	1660	1810	1310	1410	1660	1810	1410	1660	1810
	D	620	810	910	1210	1310	810	910	1210	1310	810	910	1210	1310	910	1210	1310
Volume (L)		36	80	150	416	800	80	150	416	800	80	150	416	800	150	416	800
Temperature Range		0°C~100°C (150°)					-20°C~100°C (150°)				-40°C~100°C (150°)				-70°C~100°C (150°)		
Temperature uniformity		±0.5°C				±1°C	±0.5°C			±1°C	±0.5°C			±1°C	±0.5°C		±1°C
Temperature rising speed		0°C~100°C about 20 min					-20°C~100°C about 35 min				-40°C~100°C about 40 min				-70°C~100°C about 60 min		
Cooling speed		20°C~0°C about 20 min					20°C~ -20°C about 45 min				20°C~ -40°C about 60 min				20°C~ -70°C about 90 min		
Temperature stability		±0.2°C															
Freezing system		Simoleon type full airtight air-cooled refrigeration system									binary full airtight air-cooled refrigeration system						
Internal material		SUS304#Stainless steel															
External material		SUS304#Stainless steel															
Temperature preservation		Material rock wool hard PU polyurethane foams															
Circulation system		Fan forced recycling convection															
Temperature preservation heating system		Stainless steel heating type humidifiner															
Safety device		Power leakage & overload protective device, compressor overload protective device, over-temperature & over-humidity circuit breaker protection, water shortage protection, humidifier over-heating protection, temperature limit protective device.															
Standard accessory		2 x Stainless steel adjustable shelves, vacuum glass perspective window, testing aperture, operating room light, motion wheel, control indicator															
Optional accessory		Recorder															
Power		AC220V, 1PH, 50/60Hz															

Option: Programmable Temperature Chamber's & Recorder

Controller Type A	2 Programs Of 8 Segments Type B	16 Programs Of 16 Segments Type C	Digital100mm Recorder
Type A	Type B	Type C	Type AL

HROMalytic Chromatography Products
Australian Distributors ECHnology '08
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

E Enviromental Chambers

Salt Water Spray Tester

Description:

- *Testing Chamber: It is made of P.V.C. sheet, its internal structure uses advance technical of stainless steel pipe. The feature is well-reinforced, temperature well kept, and deformed free and keep temperature stable.*
- *Heat-up method of chamber is "5 direction heat-up method", able to control constant temperature inside chamber (± 1°C)*
- *Saturated air tank: The heating air purpose saturated air tank for mist spraying is made of stainless steel SUS 304, its feature with press-resistant, water-leakage free, air-leakage free, and deformed free, This installation also included auto-deleted when over pressure, to ensure a longer life span.*
- *Heating constant temperature installation: It using 5-directions heating up by water type to control temp. Ensure temperature kept and constantly. It is also help to prevent the Choppy temperature- Electricity saving for long period use.*
- *Specimen placement: The specimen angle is 15°/30°. Place them average ready to test, standard specimen size is 150 x70mm or 100 x 65mm, finished-products test directly is also available.*

It is use glass-made nozzle and conformed to Bernoulli theorem to make salt a mist shape & fallen mist capacity is adjustable. (Generally use 1-2cc/hour)

Usage: *Salt spray tester is used for testing rust-proof treatment of material, such as metal surface that after painting, coating, electroplating, anodizing, films of organic and non-organic…etc.*

It's a corrosion and Rust-Resistant test. It is for checking the corrosion-resistant of products (specimen) under long time corrosion after treatment like anodize, rustproof oil, chemical, etc.

MSS-B

Accessories

1) Air compressor: 1Set.

2) Testing purpose pharmaceutical products: NaCl (Sodium chloride), NaOH(sodium hydroxide), CuCl (copper (I) chloride), and CH3COOH (glacial acetic acid) each one bottle.

Adjust appliances: Litmus paper, spoon, straw, and concoct tank for each.

**The main difference between the above stated types are the testing chamber's capacity. Other functions are the same.*

**The industrial standard request the testing capacity reached 0.43m3 or above. Selecting proper type according to consumer's specimen size requirement.*

Model		MSS-A	MSS-B
Internal Dim. WxHxD (cm)		60x40x45	90x50x60
External Dim. WxHxD (cm)		125x106x94	155x120x105
Quantity of collenting cup		1PC	2PC
Power of Heater (Watt)		1000W	2000W
Temp. range	Chamber	Room Temp.~50°C	
	Air	Room Temp.~63°C	
Features	Temp. Constancy	±0.5°C	
	Saturated air Pressure (Kg/cm2)	0.8 ~ 2.0 ± 0.01	
	Spray volume (ml/80cm2/hr)	0.5~3.0	
	PH-Salt Spray Test	6.5~7.2	
	PH-CASS Test	3.0~3.2	
Material	Exterior	P.V.C. or P.P	
	Interior	P.V.C. or P.P	
Systems	Salt Spray vehicle	Air+acid (base) liquid	
	Heating	SUS#316 stainless steel heater+Taflon coating	
	Control	Digital electronic control	
Power source		AC 1Ø, 220V ±10%, 50/60HZ	

HROMalytic Chromatography Products
Australian Distributors ECHnology '08
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

Model: B-Series, Multi-Purpose Material Testing Machine Tensile/Compression CE

B series is the solution for new century testing demand. This product fulfills all testing requirement without compromising in quality with competitive prices.
B series is with a multi-function indicator which can provide max and elongation value. It comes with a computer interface for connection to a PC, therefore it can provide data analysis, test setup and data can also be saved for future reference.
B series is driven by ball screw(s) and with timing belts. This anti-friction screw(s) provides a smooth and accurate linear motion during testing. Timing belts provides a high transmission power and smooth meshing results in a long-life belt which is reliable more than ever. In addition, with our dust-proof design, no special maintenance is required.

QC-505B
Material Testing Machine

QC-506B
Material Testing Machine

QC-508B
Material Testing Machine

Draw Test

Tensile Test

Features:

- *Resolution: 1/10,000*
- *Auto-stop after complete test and hold the peak value*
- *Display force and elongation value in the same time*
- *Unit switch-able. KG/LB/N for force, and MM/INCH/% for elongation*
- *Around 50 sets data saving memory*
- *Come with a normal printer interface.*
- *No expensive recorder required*
- *Indicator direction can be adjusted for friendly using*
- *Support two sensors to extend testing range*

- *Administer user password for data control*
- *Various testing method for selection*
- *Coordinate content in Graph can be selected*
- *Content of table can be selected by demand*
- *Complete report can be printed*
- *Software: Transmit testing data to computer*
- *Clamps: Various clamps or special made for different specimens*
- *Extensometer: For dumbbell specimen elongation*
- *Others: We also make relative equipments such as forming machine, specimen puncher, specimen mold ...etc*

Accessory:

B series material testing machine can be with different clamps to different test.
For example: Tensile, compression, peel, bending, puncture etc.

Computer System

Specimen Puncher

Clumps

Extensometer

Model	Capacity	Stroke	Speed	Space	Resolution	Column/Type
QC-513B	2KN	450mm	25-500mm/min	Ø140mm	1/10000	Single/bench type
QC-508B	2KN	800mm	25-500mm/min	Ø140mm	1/10000	Single/bench type
QC-506B	5KN	800mm	25-500mm/min	400mm	1/10000	Twin/bench type
QC-505B	20KN	1000mm	25-400mm/min	420mm	1/10000	Twin/bench type

Optional - Type A fully automatic computerized control

Others:	
TEXTILE	Motor Twist Counter/Abrasion Tester/Color Viewing Booth
RUBBER & PLASTIC	DIN Abrasion Tester/Universal Impact Tester/Dupont Impact Tester
TAPE	Tape Adhasion Tester/Motor Roller/Tape Initial Adhasion Tester
PAPER	MIT Folding Endurance Tester/Drop Tester
ELECTRONIC MATERIAL	MIT Folding Endurance Tester/Electronic Plug & Cord Bending Tester

HROMalytic Chromatography Products
ECHnology '08
Australian Distributors
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

F Force & Torque

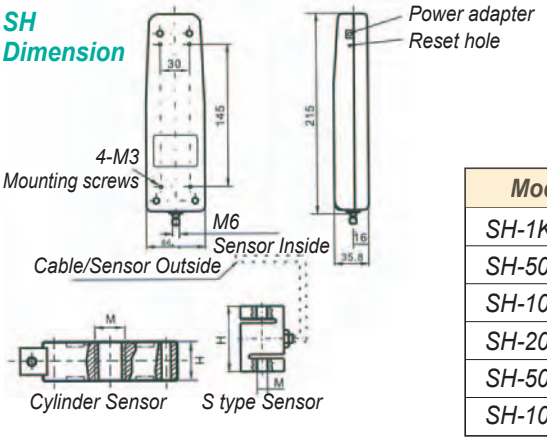
SH Series, of Digital Push Pull Gauge

The SH series of Digital Push Pull Gauge has its own characters, with facility, high resolution, which can be used not only for simple measurement of tension/compression but also used for various testing purpose; such as switch test, connector insertion/withdraw test ,and fracture test, and push pull test. It is a new efficient measuring equipment.

Specifications:

- *High accuracy & High resolution - The series have achieved extremely high accuracy; such as + 0.5%FS accuracy. And also,the SH series performance extremely high resolution. For example, the 50N capable device can indicate minimum 0.01N. It means 1/5000 resolution.*
- *Peak hold. Hold the peak value in test.*
- *Peak hold and clean automatically. Hold the peak value, keep the value in 1-10 seconds (time is selected).*
- *Auto power off. The gauge will power off in 1-60 minutes (time is selected), there is not operation*
- *Comparative function. Setting the upper limit and lower limit, the pilot lamp and buzzer to choose the eligible value*
- *Calculate the average value. Memory 10 data and calculate the average of memory data*
- *Three units. lbf, kgf, and Newton units are push-button selectable*
- *RS-232 series port digital output. The RS-232 series port output to printer. The printing data have max value, min value, average value, eligible value and incompetent value.*

SH Dimension



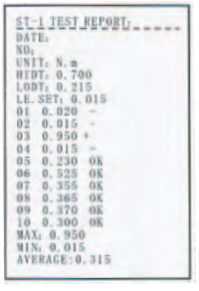
Model	H	M	Sensor
SH-1K-20K	76.2	M12x1.75	S type compressive & tensile
SH-50K	108	M18x1.5	
SH-100K	178	M30x2	
SH-200K	45	M36x2	Cylinder Compressive & Tensile
SH-500K	64	M42x2	
SH-1000K	90	M70x3	

Parameter:

Model	SH-2	SH-5	SH-10	SH-20	SH-50	SH-100	SH-200	SH-500	SH-1K	SH-2K	SH-5K	SH-10K	SH-20K	SH-50K	SH-100K	SH-200K	SH-500K	SH-1000K
Capacity	2N	5N	10N	20N	50N	100N	200N	500N	1000N	2000N	5000N	10KN	20KN	50KN	100KN	200KN	500KN	1000KN
Resolution	0.001N	0.001N	0.005N	0.01N	0.01N	0.05N	0.1N	0.1N	0.5N	1N	1N	0.005KN	0.01KN	0.01KN	0.05KN	0.1KN	0.1KN	0.5KN
Sensor Conformation	Sensor Inside (S type)								Sensor Outside (S type)							Sensor Outside (Cylinder)		
Accuracy	±0.5%															±1%		

ST Series, Digital Torque Meter

ST Series of Digital Torque Gauge is R&D for test and measure many kinds of torque. The gauge is applied with the measured and calibrated torque of motorize or air-driving clamps, torque screwdriver and torque spanner. It is applied with the test of wrench force, wrest fractured force. The gauge is used in Electric industry, Light industry, Machinery manufacture, Scientific research, and so on.



Specifications:

High Accuracy, High Resolution ● Automatic alarm ● Compared Function ● Peak Hold & Auto-release Function ● Memory 10 Values, Calculate the Average Value Function ● N.m, kgf.com, lbf.in transition ● RS-232, Digimatic analog outputs.

ST-1~20

ST-50~500

Parameter:

Model	ST-1	ST-2	ST-5	ST-10	ST-20	ST-50	ST-100	ST-200	ST-500
Sensor Conformation	1N.m	2N.m	5N.m	10N.m	20N.m	50N.m	100N.m	200N.m	500N.m
Resolution	0.0005N.m	0.001N.m	0.002N.m	0.005N.m	0.01N.m	0.02N.m	0.05N.m	0.1N.m	0.2N.m
Accuracy	±0.5%					±1%			

HROMalytic Chromatography Products '08
Australian Distributors ECHnology
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

Test stands are widely applied with insertion, withdraw, fracture, tensile, compressive fracture and many other force test. They are stable and easy to operation. The test stands do not included force gauge, scales or clamps.

Wheel Manual Test Stands

- *Vertical model.*
- *Manual operation, T-screw stroke power transfer, Easy and stable to operate.*
- *May install the stand on table for using, this installation is more steady.*

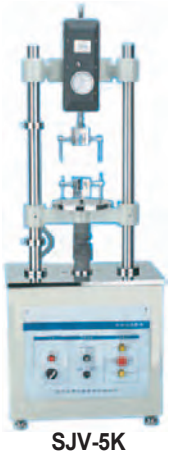
SLK

SLJ

*Are tester stands especially designed to match SH series. & can be combined into a wide use of stand ,which usually applied in various testing purpose, such as switch test, connector insertion/withdraw test, & fracture tester. L:250*W: 152*H:540, Weight: 8.8kg*

Motorize Vertical Test Stands

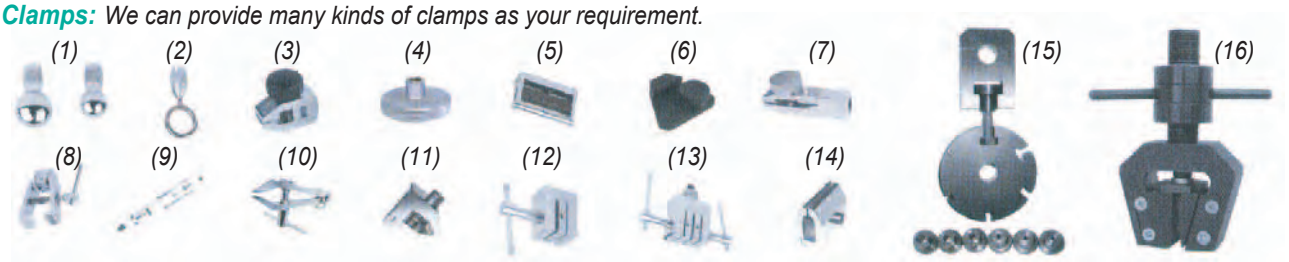
- *Continues speed control, Capacity: 5000N*
- *Stroke: 200mm*
- *Net weight: 58kg*
- *Dimension: L41xW25xH110cm*



SJV-5K

SJV-5K is a Electric vertical stand, specially designed to fix the analogy push pull gauge (SkN) for providing with much more stable & convenient, & low the error to its least. The dual –vertical stand pole structure leads our products durability, good performance, widely usage, easy to operate, & can be controlled automatically or handy. which are widely applied in switch test, connector insertion/withdraw test, & fracture test in latex-plastic, light weave, architecture, composite material, electrical wire & cable, automobile, mechanical industry and scientific research authority.

Clamps: *We can provide many kinds of clamps as your requirement.*



Motorize Horizontal Test Stand

- *Continues speed control, Capacity: 500N*
- *Stroke: 250mm*
- *Net weight: 35kg*
- *Dimension: L57xW20xH33cm*

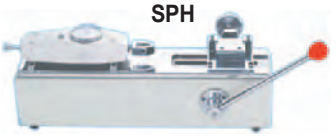
SJH-500

SJH-500 Electric horizontal stand is especially used to match the SH series, using dual -leader structure with stability, facility advantage, automatically adjust or handy to control, & you can also change the speed unlimitedly.

Manual Horizontal Test Stand

- *Capacity: 500N*
- *Stroke: 50mm*
- *Net weight: 12kg*
- *Dimension: L45xW15xH16cm*
- *Manual operation, Easy and stable to operate.*
- *May install the stand on table for using, this installation is more steady.*

SPH



*SPH is a tester stand especially designed to match SH series. and can be combined into a wide use of stand ,which usually applied in various testing purpose, such as switch test, connector insertion/withdraw test, and fracture tester. L:250*W: 152*H:540, Weight: 8.8kg*

Abrasion Tester

Foreword:

The main function is to use specified Grinding Wheel with specified Load to rub the surface of specimen, and after a setup number of timer of abrasive, evaluate the following conditions of the surface after test, and ratio the endurance characteristic of abrasion for this material.

- *Worn out condition*
- *The loss of the weight*
- *The loss of the physical volume*
- *The thickness that been worn out, etc.*
- *Use NBS standard gum to ratio the endurance characteristic of abrasion for this material.*

QC-619T

Specifications:

- *Machine Dimension: 33 ×43 ×30cm*
- *Machine Weight: 30 kg*
- *Power Supply:—V——Hz*
- *Rotary Speed: 60RPM (Or to be specified)*
- *Counter: LCD display, 6Digit (Optional Setting), Auto-Brake*
- *Load (Weights) : 250g, 500g, 1000g (Free assorting by user)*
- *Grinding Wheel specification: (As customer specifies)*
- *The cleft between Grinding Wheel and Specimen Plate-Holder: 37 ~ 38mm*
- *Grinding Wheel: Diameter 2", thickness 1/2"*
- *Pitch of Left and Right Grinding Wheel: 63.5mm*
- *Specimen size: Ø100mm, center hole: Ø8mm, thickness: 0.5~3mm (Adjustable), available for soft/hard material.*
- *Accessories: Vacuum cleaner 1Set, Specimen cutter 1Pc (A), Wrench 1Pc (K), Grind Wheel 1Set (B), Sand Paper 5Pcs (C).*
- *Attachment: Warranty Certificate, Instruction Manual each one piece.*

HROMalytic Chromatography Products
Australian Distributors ECHnology '08
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

F Furnacese

Model: MS-Series, Low Cost Chamber Furnace

The MS8 multi purpose furnace is bench mounted with a maximum temperature of 1200˚C. It is availabla with chamber size of of 3.6 litre or 6.2 litre. MRC's multipurpose furnces with stainless-steel cabinet, are suitable for every laboratory application, including burnout preheating, tempering casting and metallurgical process.
For dental laboratory.

Model: MS8-36

- **Max temperature:** 1050˚C
- **Inner dimensions:** W180xD205xH95mm
- **Outside dimensions:** W350xD380xH440mm
- **Power:** 220V/50Hz, 110V/60Hz, 1500Watt
- **Net weigh:** 23Kg

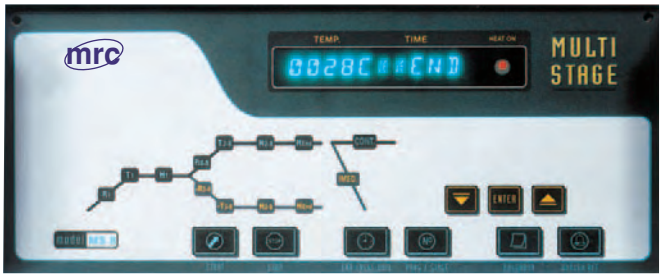
Model: MS8-62

- **Max temperature:** 1200˚C
- **Inner dimensions:** W180xD250xH135mm
- **Outside dimensions:** W400xD490xH530mm
- **Power:** 220V/50Hz, 2700 Watt
- **Net weight:** 41Kg

MS8-36

MS8-62

The drop down door can be used as a shelf when loading and unloading samples. A chimney is fitted for ventilation of the chamber.
Double security: hardware and software overtemperature protection to prevent exceeding maximum allowable temperature.
Advanced PID temperature programmer suite variety of applications.
The advanced setpoint programming temperature controller contains 15 separate programmes each with 8 stages.
Optional gas inlet available.



Advanced PID Controller

- 15 programs-up to 8 stages.
- Bright VFD alpha-numeric display
- End cycle date real time programming
- Advanced keybord, 9 key-pads only
- Heat up or cool down rates
- Calendar and time display
- Temperature and time override
- Fault and error automatic diagnostic messages:
  - Thermocouple brake - No current
  - Temperature fault - Date error
  - Over temperature - EE error
- Selectable language for messages: English, German, French, Italian.
- Celcius or Farenheit
- Automatically restart, the program will restart after a power failure during a burning cycle. The controller will recall the last temperature and resume program operation.

Unique Chamber Dimensions

MRC burnout furnaces are designed for maximum efficiency and provide a generous internal capacity despite modest overall size. Although the volume of the muffle is relatively small . This furnace enables to cast in one burnout.

MS8-36 for dental casting

MS8-36: *4 rings x 9 - 4 rings x 2*
MS8-62: *12 rings x 9 double layer.*
This advantage is very important, as it enables to gain maximum use of muffles volume.

HROMalytic ECHnology Chromatography Products '08
Australian Distributors
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

ELF 11/6B

1) Holding power is measured at 100°C below max. temperature, based on 240V supply, with an empty chamber.
2) Uniformity graphs are available on request, for most models.
3) All external dimensions are taken with the door dosed and include a chimney.
4) Heat up time is measured at 100°C below max. temperature with an empty chamber.

CWF Serie Chamber Furnaces

CWF 12/13/301

These furnaces integrate the best of traditional and modern materials to produce an outstanding combination of performance and reliability. The unique concept for this furnace is the heating module - with one situated on either side of the chamber. Each heating module consists of a high quality alumina based hard wearing element carrier, housing a free radiating coiled wire element. With the use of graded winding, the elements compensate for heat loss and optimise temperature uniformity within the chamber. The furnaces reach working temperature quickly and efficiently. Hard wearing refractories around the chamber entrance and in the chamber base provide excellent resistance to everyday wear & tear, whilst secondary low thermal mass insulation ensures maximum thermal efficiency. Service is aided by the removable instrument panel & easy access to the element modules & thermocouple through the rear of the case. Chamber sizes are 5, 13 and 23 litres with maximum temperatures of 1100°C, 1200°C and 1300°C.

1) Holding power is measured at 100°C below max. temperature, based on 240V supply, with an empty chamber.
2) Uniformity graphs are available on request, for most models.
3) All external dimensions are taken with the door closed and include a chimney.
4) Heat up time is measured at 100°C below max. temperature with an empty chamber.

ELF Serie Economy Chamber Furnaces

The ELF range is bench mounted with a maximum temperature of 1100°C and is available with chamber capacities of 6, 14 and 23 litres. These furnaces are suitable for light duty general laboratory work. The heating chamber is insulated with vacuum-formed low thermal mass insulation, which offers exceptional performance in achieving maximum temperature quickly and efficiently. A temperature of 1000°C is achieved in as little as 35 minutes. Semi-embedded free radiating wire wound elements are located on the two side walls - elements are not positioned in the hearth. A hard ceramic hearth is fitted as standard, which offers additional protection from spillage. The drop down door can be used as a shelf when loading and unloading samples. The door insulation also acts as a trap for radiated heat, thus improving the chamber uniformity, whilst the air gap behind the plug minimises the external door temperature. A ceramic chimney is fitted for the ventilation of the chamber, but if toxic / corrosive fumes are generated then a model from our dedicated ashing range should be recommended. The digital Eurotherm PID controller is fitted as standard and has an adjustable single ramp to set point, as well as an in-built timer which allows for a delayed start or a fixed process duration. An optional temp. programer is available

Model	ELF 11/6B	ELF 11/14B	ELF 11/23B
Max. Temperature (°C)	1100	1100	1100
Continuous Temperature (°C)	1000	1000	1100
Chamber Dimensions:			
H (mm)	165	210	235
W (mm)	180	220	255
D (mm)	210	310	400
External Dimensions:			
H (mm)	580	630	715
W (mm)	410	450	505
D (mm)	420	520	660
Heat up Time(mins)	35	40	29
Temperature uniformity 1000°c	±5°C	±5°C	±5°C
In a uniform envelope of:			
H (mm)	115	130	665
W (mm)	130	140	455
D (mm)	130	220	610
Max. (W)	2000	2600	5000
Holding Power (W)	900	1300	1500
Internal Volume (l)	6	14	23
Thermocouple Type	K	K	K
Weight (kg)	24	31	-

Model	CWF 5 Liter	CWF 13 Liter	CWF 23 Liter
Max. Temperature (°C)	1100	1100	1100
	1200	1200	1200
	1300	1300	1300
Continuous Temperature (°C)	1000	1000	1000
	1100	1100	1100
	1200	1200	1200
Chamber Dimensions:			
H (mm)	135	200	235
W (mm)	140	200	245
D (mm)	250	325	400
External Dimensions:			
H (mm)	585	655	705
W (mm)	375	435	505
D (mm)	485	610	675
Max. Power (W)	2400	3100	7400
Holding Power (W)			
Model 1100(°C)	790	1500	1900
Model 1200(°C)	850	1550	2250
Model 1300(°C)	1000	1800	2500
Heat up time (mins)			
Model 1100(°C)	30	80	40
Model 1200(°C)	35	65	45
Model 1300(°C)	40	80	55
Internal Volume (l)	5	13	23
HxWxD (mm)			
Model 1100(°C)	85x90x110	120x120x185	155x165x285
Model 1200(°C)	85x90x125	120x120x200	155x165x325
Model 1300(°C)	85x90x150	120x120x225	155x165x340
Thermocouple Type			
Model 1100(°C)	K	K	K
Model 1200(°C)	R	R	R
Model 1300(°C)	R	R	R
Weight (kg)	30	47	68

HROMalytic Chromatography Products ECHnology '08
Australian Distributors
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

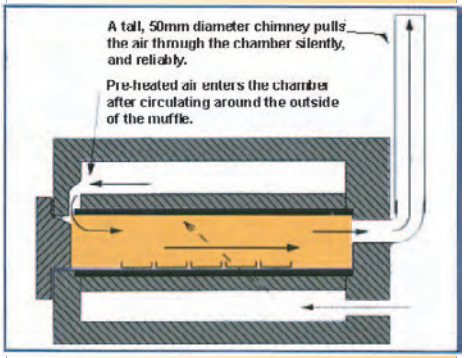
RHF 16/3/3508P1

RHF Serie: 1400°C, 1500°C & 1600°C Silicon Carbide Heated Furnaces

This comprehensive range is available at 1400, 1500 and 1600°C with four popular capacities of 2.9, 7.8,15 and 35 litres. Powerful silicon carbide heating elements provide fast heat up rates, typically 40 minutes to 1400°C depending on the model. Silicon carbide heating elements are ideally suited to the rigorous firing cycles often required in laboratory furnaces. These elements withstand the stresses of intermittent operation and give long life at elevated temperatures. Furnaces using these elements are designed with excess power to ensure that ageing is easily corrected and heating performance is maintained. The average life of the elements may be several years, depending on operating temperatures and conditions.
Two types of insulation are used: Hard wearing refractory brick around the doorway and in the floor to give resistance to abrasion and spillage. Lightweight ceramic fibre is used in all other areas to ensure energy efficiency and fast heating/cooling.
An optional temperature programer available.

Model	RHF 14/3	RHF 14/8	RHF 14/15	RHF 14/35	RHF 15/3	RHF 15/8	RHF 15/15	RHF 15/35	RHF 16/3	RHF 16/8	RHF 16/15	RHF 16/35
Max. Temperature (°C)	1400	1400	1400	1400	1500	1500	1500	1500	1600	1600	1600	1600
Temperature (°C)	1300	1300	1300	1300	1400	1400	1400	1400	1500	1500	1500	1500
Internal Volume (l)	2.9	7.8	15	35	2.9	7.8	15	35	2.9	7.8	15	35
Chamber Dimensions:												
H (mm)	120	170	220	250	120	170	220	250	120	170	220	250
W (mm)	120	170	220	300	120	170	220	300	120	170	220	300
D (mm)	205	270	310	465	205	270	310	465	205	270	310	465
External Dimensions:												
H (mm)	655	705	810	885	655	705	810	885	655	705	810	855
W (mm)	435	505	690	780	435	505	690	780	435	505	690	780
D (mm)	610	675	780	945	610	675	780	945	610	675	780	945
Heat up Time(mins)	33	22	35	38	45	40	45	46	42	35	58	56
Max. Power (W)	4500	8000	10000	16000	4500	8000	10000	16000	4500	8000	10000	16000
Holding Power (W)	1900	3200	2900	6000	2000	3500	3000	6200	2300	4000	3500	1100
Weight (kg)	42	64	125	179	46	61	125	178	42	61	140	179

AAF11/7/301



Trays Supplied With AAF Furnaces

AAF Serie: Ashing & Burn off Furnaces

These models are heated by wire heating elements protected from chemical and mechanical damage by a high quality, hard wearing alumina based liner. The graded winding and powerful double sided heating elements compensate for the heat loss, as well as preheating the air prior to it entering the chamber. Temperature uniformity within the chamber is therefore excellent, despite the higher airflow through the chamber. The AAF 11/3 and AAF 11/7 have a large floor area which allows many samples to be accommodated and because of the low chamber height the airflow is held close over the samples to promote burning. High airflow of between 4-5 changes per minute is ensured by use of an air inlet and a tall chimney, however it is not too high to disturb the samples in the crucibles, or chill them, as the incoming air is preheated. The AAF range is ideal for ashing materials such as food, plastics, coal & other hydrocarbons. The AAF 11/7 furnace complies with the following industry standards BS 1016 part 4, ISO 344 and 1171, ASTM D2361, D2795 and D3174.
The AAF 11/18 has high grade heating wire mounted behind silicon carbide tiles to protect against carbon or corrosive atmospheres. A two tier shelf is supplied as standard, which doubles the furnace capacity.
An optional temperature programer available.

Model	AAF 11/3	AAF 11/7	AAF 11/18
Max. Temperature (°C)	1100	1100	1100
Continuous Temperature (°C)	1000	1000	1000
Internal Dimensions:			
H (mm)	90	90	235
W (mm)	150	170	196
D (mm)	250	455	400
Internal Volume (l)	3	7	18
External Dimensions:			
H (mm)	480	650	705
W (mm)	290	430	505
D (mm)	340	740	675
Heit to top of Chimney	780	1060	1015
Max. Power (W)	2100	4000	7080
Holding Power (W)	1270	2300	3500
Heat up Time (mins)	140	155	70
Thermocouple Type	K	K	K
Weight (kg)	22	63	70

Accessories: *AAF 11/3 AAF 11/7 & 11/8 accessories are supplied with the furnace. GSM 11/8 & CWF/BWF are optional extras.*

HROMalytic Chromatography Products
Australian Distributors ECHnology '08
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

MTF/CTF Serie: Wire Wound Tube Furnaces to 1200°C

These models utilise a resistance wire heating element, which is wound around the outside of a ceramic worktube making it an integral part of the heating element.
If the tube is required to contain an atmosphere or is likely to be contaminated by spillage, an additional work tube should be used. The thermocouple is located in a protected position between the outside of the work tube and the heating element, allowing the full work tube diameter to be used and protects the thermocouple from mechanical damage.
Optional temp. programer available.

Small & Medium Tube Furnace	MTF 9/15/130	MTF 10/15/130	MTF 10/25/130	MTF 12/25/250	MTF 12/38/250	MTF 12/25/400	MTF 12/38/400	MTF 12/38/850
Max. Temperature (°C)	900	1000	1000	1200	1200	1200	1200	1200
Continuous Temperature (°C)	800	900	900	1100	1100	1100	1100	1100
Heat up Time(mins)	7	5	10	15	25	30	25	-
Inside Diameter of Fixed Element Tube (mm)	15	15	25	25	38	25	38	38
Heated Length (mm)	130	130	130	250	250	400	400	850
Overall Furnace Length (mm)	180	150	150	300	300	450	450	900
Horizontal Mounting on Control Box	✓	✓	✓	✓	✓	✓	✓	✓
Option of mounting: L stand/Wall bracket Blank base/Separated base	8	3	3	3	3	3	3	-
Uniform length +/-5 (°C)	30	30	45	60	90	100	130	-
Thermocouple Type	K	K	K	N	N	N	N	-
Max. Power (W)	220	400	400	700	1000	1000	1500	2800
Holding Power (W)	100	100	100	200	300	200	300	-
External Dimensions:								
H (mm)	180	265	265	375	375	430	430	-
W (mm)	90	150	150	370	450	370	450	-
D (mm)	180	175	175	375	375	375	375	-
Weight (kg)	2	3	3	10	15	10	15	-

Large Tube Furnace	CTF 12/65/550	CTF 12/75/700	CTF 12/100/900
Max. Temperature (°C)	1200	1200	1200
Continuous Temperature (°C)	1100	1100	1100
Heat up Time(mins)	45	45	90
Inside Diameter of Fixed Element Tube (mm)	65	75	100
Heated Length (mm)	550	700	900
Overall Furnace Length (mm)	600	750	950
Horizontal Mounting on Control Box	✓	✓	✓
Option of mounting: L stand/Wall bracket Blank base/Separated base	✓	✓	✓
Uniform length +/-5 (°C)	230	265	640
Thermocouple Type	N	N	N
Max. Power (W)	2000	3000	4500
Holding Power Requirement (W)	600	800	1000
External Dimensions:			
H (mm)	525	525	525
W (mm)	625	775	975
D (mm)	360	360	360
Weight (kg)	25	28	35

HROMalytic Chromatography Products ECHnology '08
Australian Distributors
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

Digital Dry Bath Incubator

Description:

Temperature Range --from ambient +5 to 150°C

Digital microprocessor controller is designed to accurately control temperature (from ambient + 5 ~ 150°C) & time (from 0 ~ 9999 mins). Easy the user to calibrate temperature upon in house standard when required, with leakage proof stainless steel block chamber, it can pour water/oil or insert one/two blocks on it. An Rs232 port is provided for monitoring and recording temperature. It is suitable for any reaction requiring high temperature condition, such as restriction digests, denature; in situ hybridization; hot start thermocycler etc.

MD-01N

MD-02N

Feature:

- *Digital performance at analog prices*
- *Microprocessor Control with Digital Display*
- *Easy User Calibration.*
- *Leakage Proof for Stainless Steel Block Chamber*
- *RS 232 for Data Log*
- *Single and Dual Block Models*
- *Optimal external temperature probe is available*

Specification:

- *Cat# : MD-01N-110 (or 220) for 110 (or 220V)*
- *Microprocessor Controller*
- *Display : One Digital Display*
- *Operating Temperature Range : ambient + 5 ~ 150°C*
- *Temp. Increase : 0.1°C*
- *Easy User Calirabtion*
- *Temperature Uniformity : +/- 0.2°C*
- *Temperature Accuracy : +/- 0.2°C*
- *Leakage Proof for Heating Chamber*
- *Optional external temperature probe is avaiable.*
- *Dimension: 200 x 270 x 80 mm (WxLxH)*
- *ANALOG PRICE with DIGITAL MICROPROCESSOR QUALITY.*
- *Block Type: variable block are available for 0.2; 0.5; 1.5; 2.0; 15; 50cc; Microplate; Titerplateand any special request (please see ordering information for more detail)*

Programmable Cool-Hotter Dry Bath Incubator

Description:

Temperature Range--from -10 to 100°C

COOL-HOTTER Dry Bath Incubator uses an large screen with advance programmable microprocessor controller to control temperature (from ambient -10 - 100°C) and time (from 0~ 9999 mins). Easy the user to calibrate temperature upon in house standard when required. Cooling and Heating Stainless Steel Block Chamber is leakage proof. It is suitable for any reaction requiring very low to high temperature conditions, such as storage enzyme; ligation reaction; nick translation; warm incubator or any reaction need high; low or high to low programmable temperature.

MC-01N

Feature:

- *Programmable Microprocessor Control er*
- *Max. 4 Steps Temperature Program and 9 Cycle Time*
- *Wide Temperature Range from -10 ~ 100°C*
- *Leakage Proof for Cooling & Heating Stainless Steel Block Chamber*
- *Easy User Calibration. . RS 232 for Data Log*

Constant Operation: Programmable Mode

Use 128x24 Dot Matrix Large Screen.
Two Operation Mode for Constant or Program operation

Specification:

- *Cat#:MC-01N(110or220V)*
- *Microprocessor Controller*
- *Display : 128 x 64 Dot Matrix Display*
- *Operating Temperature Range : - 10 ~100°C*
- *Temp. Increase : 0.1°C*
- *Easy User Calirabtion*
- *Temperature Uniformity : +/- 0.2 °C*
- *Temperature Accuracy : +/- 0.2°C*
- *Operation Mode :*

1. Constant Operation -- Constant temperature (-10~100°C) with Timer (0-9999 mins)

Constant Operation: T C - (0.0) Min - 0

2. Program Operation -- Programmable : 1~4 Step and 1-9 cycle time

	Temp.	Timer
Step 0	(0.0)	0
Step 1	0.0	0
Step 2	0.0	0
Step 3	0.0	0

Cycle Times

- *Data Log :Rs232*
- *Block Dimension : 125 x 90 x 50 mm (L x W x D)*
- *Block Type: variable block are available for 0.2; 0.5; 1.5; 2.0; 15; 50cc;*
- *Microplate; Titerplate & any special request(please see ordering information for more detail).*
- *Overall Dimension:200 x 295 x 140mm (WxLxH)*
- *Weight: 8 kg*

Multi-Well Stirrer & Heating Block

REACTION BLOCKS, Especially for Combinatorical Chemistry

Temperature Range-from 5°C~to200°C

Application:

Suitable for parallel synthesis of organic compounds, denaturations, derivatisations, combinatorial chemistry, sample concentrations, enzyme assays and process optimization

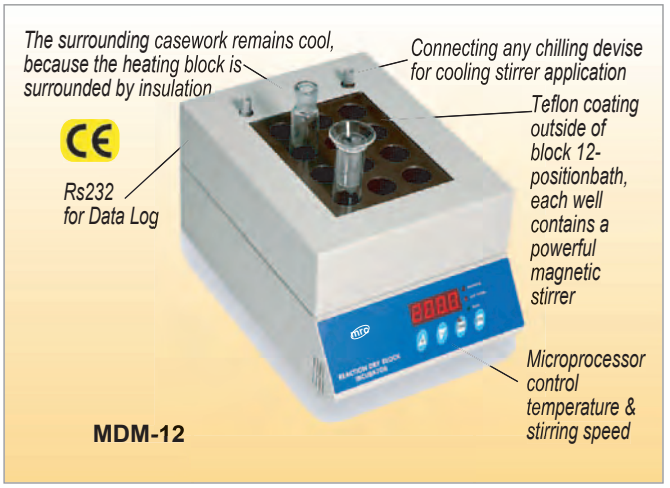
Feature:

Digital performance at analog prices • 12 Position Bath with individual powerful magnetic stirrer • Teflon Coating Reaction Block • Microprocessor Control with Digital Display for Temperature & rpm • Easy User Calibration • RS 232 for Data Log

Specification:

Cat# : MDM-12 *• Number of Position : 12 (3 x 4) wells • Vessel dia. : 25 mm (customerised size is also available) • Stirring speed : 200 ~ 3500 rpm • Temperature range: 5°C above ambient to 200°C (if require, it also could connect chiller for cooling reaction) • Temperature stability : +/- 0.2°C • Time : 9999 mins • Dimenson: 200 x 300 x 160 mm (WxLxH)*

Cat# : MDM-12-S *In addition to MDM-12, extra features: rapid temperature decreadsing rate.*

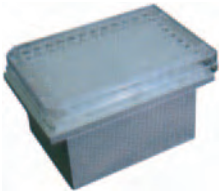


HROMalytic ECHnology Chromatography Products '08
Australian Distributors
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

Blocks for Dry Bath Incubator MD-01N/02N

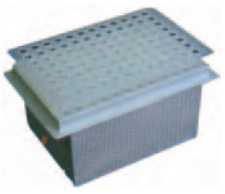
Aluminum Insert Block *79 x 104 x50 mm (WxLxH)*

MD-MP01-S



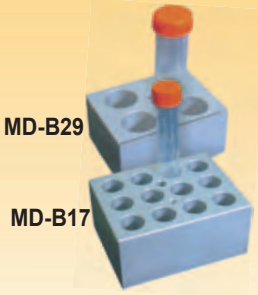
ForMicroplate; Titerplate (Plain Block for Single Block unit only)

MD-MP02-S



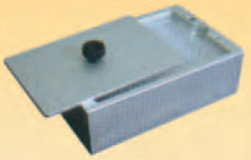
For 96 wells Deep Microplate or PCR plate (for Single Block unit only)

MD-B0.2
For 0.2 ml tube, 64 wells (or 0.2 ml PCR Strip tube for 8 wells x 8)
MD-B0.5
For 0.5 ml tube, 20 wells
MD-B1.5
For 1.5 ml tube, 20 wells



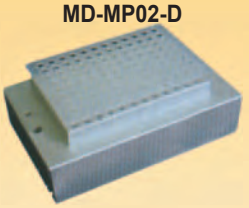
MD-B29
For 50 ml centrifuge tube, 6 wells
MD-B17
For 15 ml centrifuge tube, 12 wells

MD-MP01-D



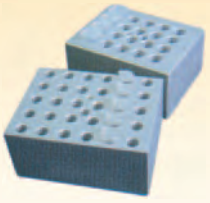
For Microplate; Titerplate (Dual Block unit only)

MD-MP02-D



For 96 wells Deep Microplate or PCR plate (for Dual Block unit only)

MD-B0.5/1.5



One Side for 1.5 or 2.Oml tube, 20 wells & another side for 0.5ml tube, 30 wells (on the opposite side)

MD-B0.5+1.5

Combination: for 0.5 ml tube, 12 wells; and for 1.5 ml tube, 12 wells (on the same side)

MD-B10/13/20/25

MD-B10
Well size 10 mm,20 wells
MD-B13
Well size 13 mm,20 wells

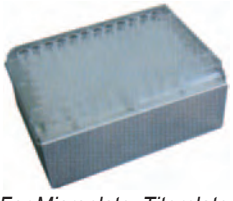
MD-B25
Well size 25 mm, 6 wells

MD-B20
Well size 20 mm, 12 wells

Blocks for Cool-Hotter Dry Bath Incubator MC-01N

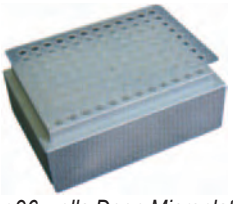
Aluminum Insert Block *90 x 127 x50 mm (WxLxH)*

MC-MP01



For Microplate; Titerplate (Plain Block)

MC-MP02



For 96 wells Deep Microplate or PCR plate

MC-B0.5+1.5

Combination: 1.5 ml or 2.0 ml tube, 15 wells and 0.5 ml tube, 15 wells (on the same side)

MC-B0.2+0.5+1.5

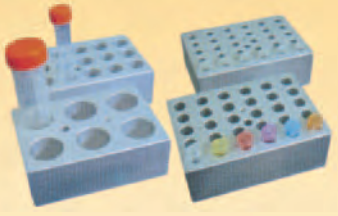
Combination: 0.2 ml tube (or Strip tube for 8 wells), 24 wells; 1.5 ml or 2.Oml tube, 10 wells and 0.5 ml tube, 10 wells (on the same side)

MC-B0.2H/0.5H/1.5H

MC-B0.2H
(1/2) Half Block for 0.2ml tube, 40 wells (or 0.2ml PCR Strip tube for 8 wells x 5)
MC-B0.5H
(1/2) Half Block for 0.5ml tube, 15 wells
MC-B1.5H
(1/2) Half Block for 1.5 or 2 ml tube, 15 wells

One Cool-Hotter Dry Bath Incubator can insert 2 ea of Half Block

MC-B0.5/1.5/10/13/17 /20/25/29



MC-B0.5
For 0.5 ml, 30 wells
MC-B1.5
For 1.5 or2.Oml, 30 wells
MC-B10
Well size 10 mm,30 wells
MC-B13
Well size 13 mm,30 wells
MC-B17
For 15 ml centrifuge tube, 15 wells
MC-B20
Well size 20 mm, 15 wells
MC-B25
Well size 25 mm, 6 wells
MC-B29
For 50 ml centrifuge tube,6 wells

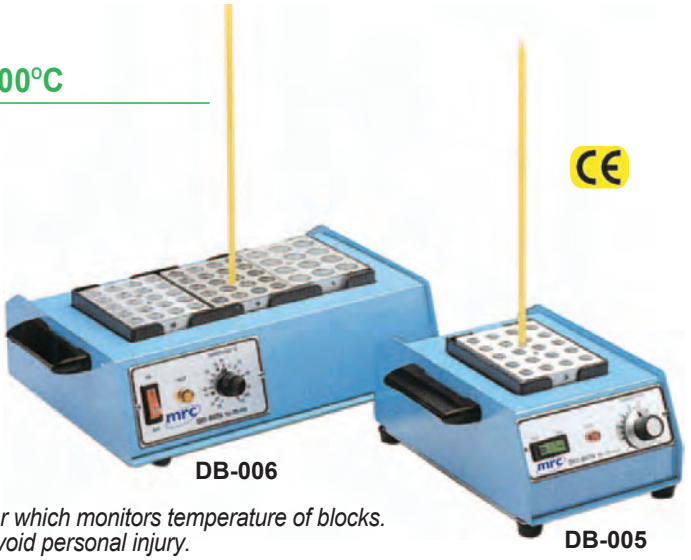
Adaptors for Economical Multi-Well Stirrer & Heating Block Incubator MDM-12

Aluminum Insert Adaptor ***MDM-B10*** *Adaptor for 10mm tube* ***MDM-B16*** *Adaptor for 16mm tube*

HROMalytic ECHnology Chromatography Products '08
Australian Distributors
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

H Heating Equipment

Model: DB-005/006, Analog Dry Bath Up to 100°C



Intended use

This Dry Bath Incubator provides controlled dry heat environment for test tubes containing in vitro diagnostic specimens or samples for a qualitative or quantitative procedure. Refer to the clinical laboratory method specified by the manufacturer of your test reagent or to methods established by medical technology.

Features

- *Applications for incubating DNA specimens, Cross matching and Screens in blood bank, incubating melted agar, Enzyme assays, Digestions, Residue tests for milk and also great for serology, hematology, "pathology and biochemistry etc.*
- *PID control compensates for temperature drift.*
- *Choose from various heating blocks that accommodate test tubes, cuvettes, and micro centrifuge tubes.*
- *Each block has a well to accommodate a removable thermometer which monitors temperature of blocks.*
- *Handle is applied to remove the heating blocks from the unit to avoid personal injury.*

Technical data

- *The impact and thick wall aluminum housing finished with baked enamel. It can also dissipate heat from housing easily.*
- *Accurate temperatures adjustable by precision temperature sensor and electronic temperature controller.*
- *Equipped with high quality heating elment for long life operation and produce speedy heating.*
- *Variable sizes of the blocks are optional to suit the proper applications of the test. Three aluminium blocks for tubes of different sizes can be heated at the same time.*
- *Handle is applied to remove the heating blocks from the unit to avoid the possible burns.*

Specifications

Model	DB-006E	DB-006	DB-005
Temp. setting	Digital	Analog	Analog
Temp. readout	Digital	Thermometer	Thermometer
Temp. range		100°C	
Temp. uniformity (at 37°C)	±0.5°C	±0.5°C	±0.5°C
Temp. control	PID	ELECTRONIC	ELECTRONIC
Over-heat alarm	Yes	N/A	N/A
Heater wattage	450W	450W	75W
Timer	Digital	N/A	N/A

DB-006E

Model: DB-006E, Digital Dry Bath up to 100°C

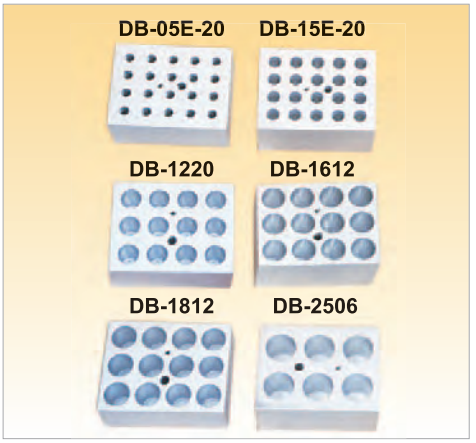
- *Features over-temperature alarm providing additional protection against overheating.*
- *Select the built-in digital timer lets you heat samples for up to 99 hours 59 minutes*
- *Activate auto-off function to automatically shut off heater at the end of the timed cycle.*
- *Digital temperature setting and display for actual temperature (PV).*
- *Timer starts working when the preset temperature has been stabilized.*
- *When complete the heat cycling, the timer will alarm and display 'END'*
- *Memory stores the set temperature and time of previous operation, use these set points to repeat the new operation and save time, or preset your new desired set points.*

Safety Devices :

- *Over temperature alarm; Heating failure alarm; Double overheating protection.*
- *Memory stores the set point and time, use these set points for the new operation or dial preset your new set points.*
- *Heat up time: 8 minutes to 37°C and 13.5 minutes to 56°C respectively.*

Aluminium Insert-Block

Catalog No.	Tube size Accepted	No. of openings	Opening Diameter
DB-0630	6mm	30	6.5mm
DB-1020	10mm	20	10.5mm
DB-1220	12 or 13mm	20	13.5mm
DB-1612	15 or 16mm	12	16.6mm
DB-1812	18mm	12	18.6mm
DB-2012	20mm	12	20.7mm
DB-2506	25mm	6	25.7mm
DB-15E-20	1.5ml Eppendorf	20	Tapered Hold
DB-05E-20	0.5 Eppendorf	20	Tapered Hold
DB-COM-3 (Combination)	25mm, 12 or 13mm and 6mm	3 5 6	
DB-0000	Solid (no holes), use as Hot Plate		
Blocks size	100mmL x75mmW x50mmH		



HROMalytic ECHnology Chromatography Products '08
Australian Distributors
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

COD (Chemical Oxygen Demand) Reactor

CR-25

Features:

- *Approved by ERA (method 410.4) of USA and most of the countries in the world*
- *Safer and easier than traditional open reflux method*
- *Save lab top space , power and water consumption*
- *Reduce waste and maximize safety*
- *Unique COD program makes it truly automatic.*

Description:

CR25 COD reactor is designed to meet USEPA 410.4 method. It can be used to digest closed micro reflux COD vial and other samples which diameter is 16 mm. Further, It is safer and easier than traditional open macro reflux method.
Unique COD program let CR25 to be a truly automatic reactor. When the reactor is powered on, just click the start/stop button, then it starts to heat to 150°C and keep for 2 hours then stop heating with a audio alarm. Samples are ready to be measured by titration or by colorimeter when they cool down. CR25 COD reactor is compatible with any COD detectors which use 16 mm COD vials. In additional to COD program, CR25 is also a microprocessor controlled block heater, with temperature range from 60°C to 200°C & timer from 0 to 999 minutes or continuous operation.

Specifications:

Read out	*4 digital LED of set temperature, set time, process temperature, residual time display*
Timer	*0-999 minutes with audible alarm and automatic shutoff or continuous operation*
Accuracy	*±2^{O}C (at 150°C)*
Temperature Range	*Fixed 150°C (COD program) 60°C~200°C, adjustable*
Safety	*Hot top indicator (flashing when block temperature is over 70°C). Automatic shutoff when block temperature is over 210°C*
Block Capacity	*25 of 16 mm sample vials. Optional block (with 8x20 mm & 6x25 mm vial holes) is available*
Structure	*Housing: Stainless steel with powder paint coating Block: anodized aluminum*
Ambient Operating Temp.	*10~50°C*
Power	*AC110V or 220V,50/60HZ, 220 Watt*
Dimension	*W18.9mm x H11.6mm x D31.5mm*
Weight	*Net: 4.5 KG Gross: 6.1 KG*

Ordering Information:

179100-45	*Optional block with 8 x 20mm Ø and 6 x 25mm Ø vial holes*

Thermal Cycler

S180/S320

Temperature cycler can be used for PCR in the scientific research such as immunology, human gene engineering, medical jurisprudence, oncology; organization biology, paleontology, zoology, botany and so on, clinic diagnose such as the diagnose of virus, tumor, genetic disease and so on.

Features:

TE module for excellent performance ● Rapid temp. shift to reduce experiment time ● Speed of temp.rise and decrease can be set ● Preserve in 4°C at the end of experiment ● Total and left time can be get while running ● Hot Lid design for oil-free operation ● Power-failure protection

Performance:

Scope of the Temperature Control: 4°C ~ 99°C ● Rate of Temperature Increasing: ≥ 1.5 °C/s ● Rate of Temperature Decreasing: ≥ 1.5 °C/s ● Accuracy of the Display: 0.1°C ● Accuracy of the Temp. Control: ≤±0.5 °C ● Hot Lid Temperature: 103°C-107°C ● Homogeneity of the Module: ≤±0.4 °C(at 55 °C), ≤±0.8°C(at 95 °C) ● Max Unit Number : 9 ● Max Cycling Number: 99 ● Max Segment Number: 9 ● Max Time at Constant Temp.: 99 min59s ● Max. Preserving Time : 99 h 59 min ● Program Storage: 45 files ● Power: 250VA

Type Parameter	*S320*	*S180*
Sample Wells	*32x0.2*	*18x0.5*
Tube Type (ml)	*0.2*	*0.5*
Fuse	*250V 2.5A ⌀5x20*	
Dimensions(mm)	*354x240x196*	
Net. Weight(kg)	*6*	

HROMalytic Chromatography Products ECHnology '08
Australian Distributors
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

H Heating Equipment

Thermostatic Controlled Immersion Heaters

IMMERSOHEAT

Thermostatically Controlled Immersion Heaters. Reliable element for accurately heating liquids to temperatures of up to 300°C with a tolerance of approx. ±1°C. Designed for trouble-free application.
Suitable for use in science and industry for: Distillation, evaporation, sterillisation, rotary evaporation, ultrasonic cleaning, photographic bath etc.

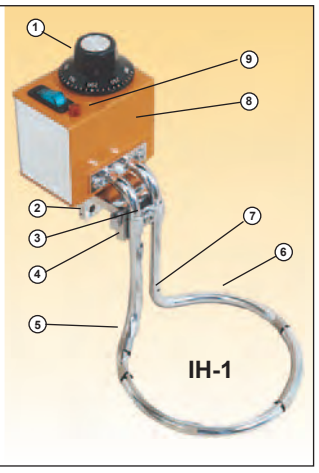
Immersoheat Features

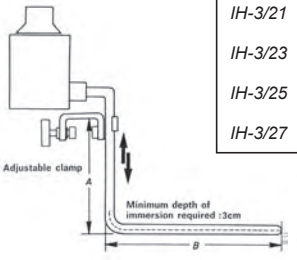
- *Easily converts any container into a thermostatically controlled bath from ambient to 300C.*
- *Rugged, reliable, convenient, maintenance-free, energy-saving and reasonable priced.*
- *Fully valid substitute for expensive water and oil baths.*
- *Permits utilization of the entire contents of the container, without effecting the functioning of stirrers.*
- *Heat is applied directly to the liquid, ensuring rapid rise of temperature.*
- *Safe - fast acting thermostat server as low-level cut out.*
- *You get the temperature you set.*
- *Control box is located on the outside and is uneffected by vaporous and temperature effects.*

Optional Safety Thermostat

IMMERSOHEAT IH-1/... Patented design

1. – Temperature setting in °C
2. – Threaded hole for attachment to stand.
3. – Height adjustment permits wide range of applications
4. – Mounting Bracket (Patented design) with Teflon-tipped disc permitting secure clamping to all surfaces, including glass.
5. – Heating element chromium-plated copper sheath ; also available in stainless steel on special order
6. – Fast-acting thermostat also serves as low-level cut-out, preventing element burn-out and fire hazard
7. – Shallow immersion depth (3 cm)
8. – The control housing is located outside the vessel and thus protected against vapours and temperature effects.
9. – Indicator-light

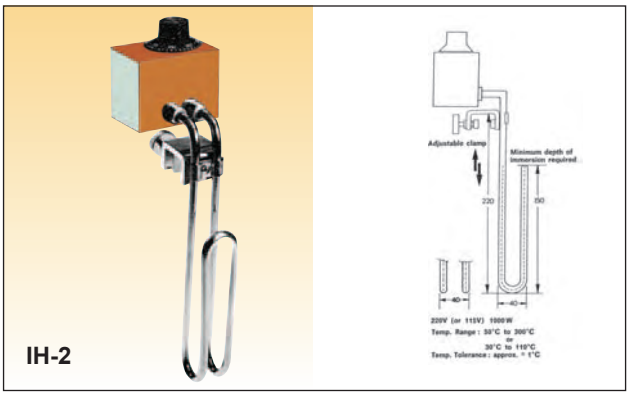


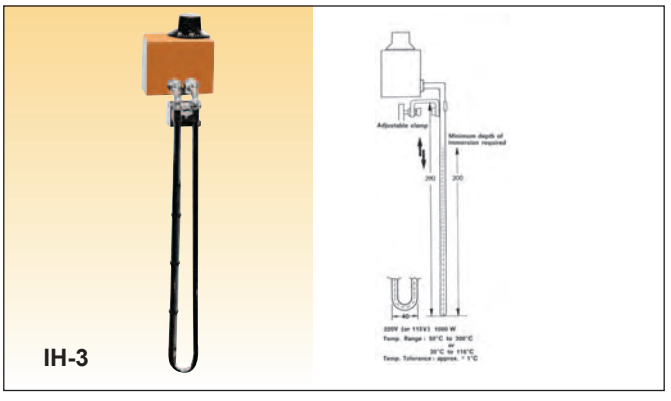


Model 50-300°C	Model 50-110°C	Watts	"A" mm	"B" mm Ø
IH-3/13	IH-1/13	500	100	130
IH-3/15	IH-1/15	750	110	150
IH-3/17	IH-1/17	750	120	170
IH-3/19	IH-1/19	1000	130	190
IH-3/21	IH-1/21	1000	150	210
IH-3/23	IH-1/23	1250	180	230
IH-3/25	IH-1/25	1500	200	250
IH-3/27	IH-1/27	1500	200	270

Voltage: *220V (or 115V)*
Temp. Range: *50°C to 300°C or 30°C to 110°C*
Temp. Tolerance: *approx.±1°C*
Weight: *0.8-1 kg*

Immersion Heaters





Model: CP-13/17, Circulation Pump

Pumping Capacity up to 13 liter/minute.
Model CP-13:
Max. Immersion Depth 13 cm.
Model CP-17:
Max. Immersion depth 17 cm.

CP-13

Immersion Thermostat/Circulator

Features:

- *Digital set and display of actual operating temperatures*
- *PID controller provides very precise temperature control*
- *Bridge size 110x326mm*
- *Temperature range: ambient +5°C to 100°C (with cooling -10°C to 100°C)*
- *Accuracy: approx.±0.1°C*
- *Pumping capacity: up to 9 l/min.*
- *Immersion depth: min. 9cm.*
- *230 V (or 115V), 50/60Hz, 1200W*

Dimensions:

- *(WxHxD) 11x32.6x25.5cm*

BH-Bridge

Options:

- *External pump circulation.*
- *Remote probe*
- *Comunication RS-232*
- *Low liquid protector*

HROMalytic Chromatography Products '08
Australian Distributors ECHnology
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

Heating tapes Width 1" up to 450°C

This unit can be round to pipe column, tube or curved material for insulation arming & heating.
These element are knitted together then brided material to form on insulated flat tape.
Should be used with controller.
Flexibility proviedes excellent heat transfer: can be tightly rapped on to your vessel.
Withstand 450°C internal maximum temperature.

1" Width Up To 450°C

Model	Width (") x Length (m)	Wattage
HT 1-1	1"x1m	200 W
HT 1-1.5	1"x1.5m	250 W
HT 1-2	1"x2m	300 W
HT 1-2.5	1"x2.5m	350 W
HT 1-3	1"x3m	400 W
HT 1-4	1"x4m	460 W

Option: Glass Silicone Tape

Just like masking tape. Bonds to all surfaces.
Provides excellent abrasion, solvent and electrical resistance.
Ideal for hi-temp. electrical insulation in motors, ovens, instruments, wiring, wire wrap etc.
Applications include sealing heat ducts & securing thermocouples, strain gauges, etc.
Use as a high temperature masking tape to protect critical surfaces during welding.

RESBOND Base Cont. Use °C	600 Glass 300
Max, Temp. °C	500
Thickness (mils)	7
Adhesion (oz./in.)	36
Dielectric (volts/mil)	500

Resbond 600-1: 1/2"x100'
Resbond 600-2: 1" x 100'

Temperature Controller

Digital Temperature Controller

For control of Heating Mantles, Hotplates, Ovens , Water Baths, Heating Tapes, Imersion heaters, incubators etc.

Features:

- *Digital set and read of actual temperature up to 450°C (option: up to 1200°C).*
- *PID microprocessor controller provides precise temperature regulation.*
- *Supplied with Thermocouple Probe, made of St. St., 25 cm long, 3mm dia. and 2 meter extension cable*
- *230 V, 50 Hz, 2000 Watt. For more details* *see page 14.*

Box: 3216

- *For more options see page 48*

Power Wattage Control

For control of Heating Tapes, Maximum watt 2000watt. Power regulator: 0-100%

Dimensions:

- *115x65x43mm*

HROMalytic Chromatography Products
Australian Distributors ECHnology '08
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

H Heating Equipment

Spillproof Flask Heater

- *For flasks 250 up to 1000 ml*
  Spill proof– St. St.
- *Heater*

Model K-1

- *Steplles heat control*
- *Operating temperature up to 750°C*

Dimensions:

- *(W xHxD) 12x17x18 cm (D includes rear bracket for support rod)*
- *Net weight: 1.2 Kg.*
- *220 Volt (or 110 V), 550 Watt*

Model K-2 *for flasks up to 2000ml*

K-1

Model: K-Series, Serial Flask Heater

- *For flasks 250 up to 1000 ml*
- *Spillproof–St .St. Heater*
- *Stepless– heat control*
- *Operating temperature: up to 750°C*
- *Includes 4 support rods*

Model K-4

- *Up to 4 flasks*
- *220 Volt (or 110 V), 4 x 550 Watt*
  Dimensions: (WxHxD) 60x19x20cm
  (D includes rear bracket for support rod)
- *Nett weight: 4.8 Kgs.*

Model K-6

- *Up to 6 flasks*
- *220 Volt (or 110V), 6 x 550 Watt*
- *Dimensions: (W x H x D) 80 x 19 x 20 cm*
  (D includes rear bracket for support rod)
- *Nett weight: 6.8 Kgs.*

K-6

Heating Mantle With Magnetic Stirrer

Heats and stirs liquids simultaneously

- *for flasks 250,500,1000 ml (one single mantle for*
- *different vessel sizes!) spill proof– St. St. Heater*

Model KM-1

- *Steeples heat control up to 650°C*
- *Variable speed control up to 1800 RPM*

Dimensions:

- *(W xH xD) 16 x17x24 cm (D includes 1/2" dia support rod clamps)*
- *230 V (or 115V), 50 Hz ,550 Watt*
- *Net weight: 2.3 Kg.*

KM-1

Heating Mantle With Magnetic Stirrer

Heating Mantle With Magnetic Stirrer

- *for flasks 500, 1000, 2000 ml (one single mantle for different vessel sizes!)*
- *spillprooff- St. St. Heater*

Model KM-2

- *Steeples heat control up to 650°C*
- *Variable speed control up to 1800 RPM*

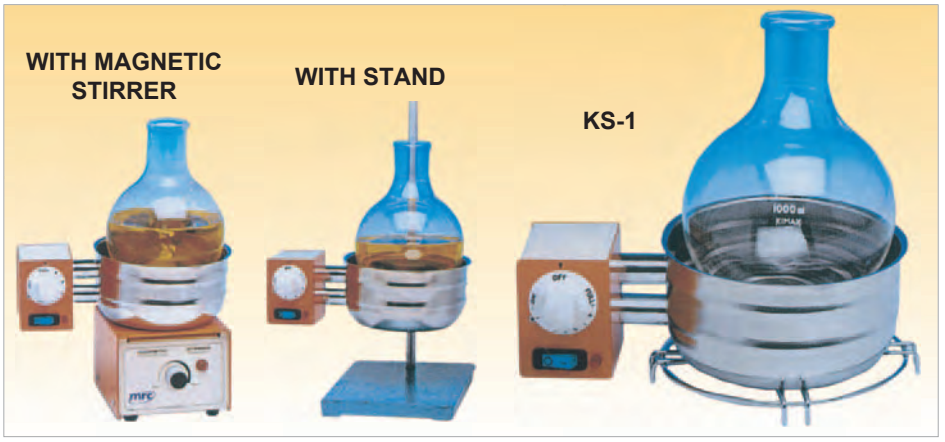
KM-2

Flask Heater Suitable for Stirrer

- *Converts any Magnetic Stirrer to a low-cost Heating Mantle/stirrer*
- *Accepts a Wide Range of Flasks 250 up to 1000ml.*
- *Stainless Steel Spillproof Heater*
- *Steeples Adjustable Heat Control up to 700°c*
- *"High" "Low" Position to accommodate proper Power Consumption*
- *Robust And Reliable*

Model KS-1

- *Temperature range: above ambient up to 700°c*
- *For Flasks: 250 up to 1000ml*
  Dimentions: (WxHxD) 230x80x180mm
  (D includes 13mm dia. support rod clamp)
  Nett Weight: 0.8Kg.
- *Power: 230 Volt(or 110V), 50/60 Hz, 550 Watt*



HROMalytic ECHnology Chromatography Products '08
Australian Distributors
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

MN/MN-C Serie, Heating Mantle With Control

- *Maximum 450ºc operating temperature.*
- *Aluminium housed case, rigid housing to support the weight of the vessel.*
- *Provide uniform heating of vessel without the danger of open frame.*
- *For vessel capacity: 50ml, 100ml, 250ml, 500ml, 1 litre, 2 litre, 3 litre, 5 litre, 10 litre, 12 litre, 20 litre, 22 litre, 50 litre.*
- *Covering only the bottom half of the vessels & provide full view of the contents of the vessel.*
- *Fabric mantles for effective heating & protection of glass vessels from thermal shock.*
- *MN-C serie manual control-proportional voltage control from 0-100%.*

MN-500C

Model No Control	Model Manual Control	Capacity	Power
MN-50	MN-50C	50ml	60W
MN-100	MN-100C	100ml	80W
MN-250	MN-250C	250ml	200W
MN-500	MN-500C	500ml	300W
MN-1000	MN-1000C	1,000ml	400W
MN-2000	MN-2000C	2,000ml	500W
MN-3000	MN-3000C	3,000ml	600W
MN-5000	MN-5000C	5,000ml	700W

Model: MNS Serie, Heating Mantles with Stirrer

- *The MNS Serie add magnetic stirring capability to the MN-Serie.*
- *Heating & stirring are independent, choose either or both.*
- *Stirring range: 0-1200rpm.*
- *Led indications for stirring & heating.*

MNS-250

Model	Capacity	Speed-Range	Power
MNS-250	250ml	0-1200rpm	200W
MNS-500	500ml	0-1200rpm	300W
MNS-1000	1,000ml	0-1200rpm	400W
MNS-2000	2,000ml	0-1200rpm	500W
MNS-5000	5,000ml	0-1200rpm	700W

Model: BMN Serie, Heating Mantles For Breakers

- *Maximum 450ºC operating temperature.*
- *Aluminnium housed case, rigid housing to support the weight of the beaker.*
- *Provide uniform heating of beaker without the danger of open frame.*
- *For beaker capacity: 250ml, 500ml, 1 litre, 2 litre, 3 litre, 5 litre.*
- *Fabric mantles for effective heating & protection of glass beaker from thermal shock.*
- *BMN-C serie manual control- proportional voltage control from 0-100%.*

BMN-500C

Model	Capacity	Power
BMN-250C	250ml	200W
BMN-500C	500ml	300W
BMN-1000C	1,000ml	400W
BMN-2000C	2,000ml	500W
BMN-3000C	3,000ml	600W
BMN-5000C	5,000ml	700W

Digital Temperature Controller

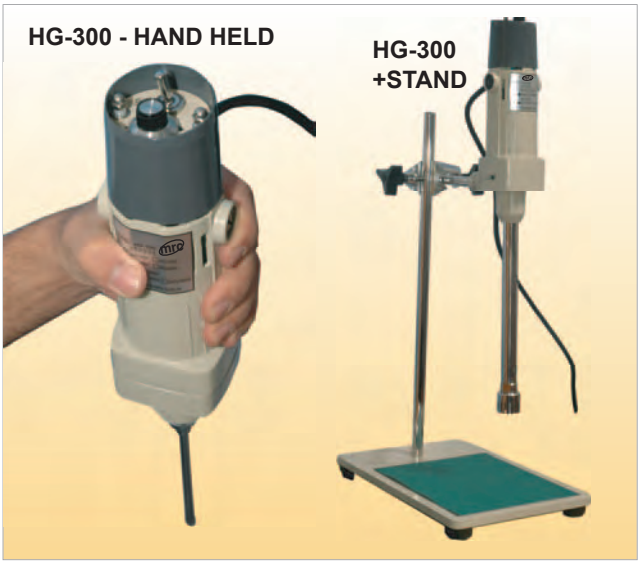
- *Wide range of temperature controls to match most heating applications: mantles, hotplates, heating tapes, small ovens & other resistive heating loads up to 3500 Watt.*
- *Quick conections for load and temperature sensor.*
- *Digital dual display for set point and process temperature indication.*
- *Automatic tuning feature ensures temperature accuracy with minimum overshoot.*
- *Stainless steel probe, thermocouple K.*
- *Optional RS-232 comunication.*
- *Optional over temperature protection (Model 2132).*
- *Optional four files/16 steps program capability (2416P4)*

MN-500 **box 3216**

HROMalytic Chromatography Products '08
Australian Distributors ECHnology
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

H Homogenizers

Homogenizer



Aplications

- *It can be widely used in dispersing various kinds of materials.*
- *It can also apply to the biology and medical research for skin tissue, cells and so on.*
- *Fibers, papers, cloth, cosmetic, dye & ink can be applide.*
- *Water and oil mixing and emulsifying.*

Features

- *250watt high torque motor with variable speed adjustment.*
- *Various container can be used.*
- *Operating capacity: 0.3ml~3L with the same drive.*
- *Different type of dispersing tools for choice.*
- *The impeller can be seperated completely and it is easy to clean and be sterilized.*

Model	Motor	Speed(rpm)	Weight(kg)	Size(mm)
HG-300	DC 250w	26,000	1.8	W200xD315xH500

Digital Homogenizer

Aplications

- *Digital speed meter display* ● *Spring elevator pole easy positioning with.*
- *Overheat, and fuse safety protection.*

Features

- *Various container can be used* ● *Operating capacity: 0.3ml ~ 3L with the same drive.*
- *Different homogenizer head choices* ● *The impeller can be seperated completely & it is easy to clean* ● *Spring hoister for easy operation* ● *Over-current, overheat protection, and fuse safety device.*

Model	Motor	Speed(rpm)	Weight(kg)	Size(mm)	Power
HG-200	DC 250w	20,000	10	W310xD270xH670	AC 110/220V, 50/60Hz

Generators

All generators feature quick connect design which allows the operator easily remove or lock a generator in place with an easy quarter turn.

		Model	Dimension (mm)	Application
7mm	*Saw tooth generator Sample range: 0.3ml to 10ml*	**K-7S**	Ø7x130	*Homogenizes and mixes cell tissue in small amount*
12mm	*Saw tooth generator Sample range: 2ml to 250ml*	**K-12S**	Ø12x170	*Disperses plant and animal tissue. Produces suspensions and emulsions. Homogenizing & mixing, extraction*
20mm	*Saw tooth generator Sample range: 5ml to 2000ml*	**K-20S**	Ø20x200	*Multi-purpose use as above*
30mm	*Open slotted generator Sample range: 100ml to 3L*	**K-30**	Ø30x250	*Disperses organic and inorganic matters Homogenizing and mixing, extraction*

HROMalytic Chromatography Products
Australian Distributors ECHnology '08
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

Models: HP-4 & GHP-4, Hotplate 175x175mm

The Laboratory Hotplate *is an ideal, general purpose Hotplate for laboratory work such as distillations, extractions and digestions. Chemical resistant top plate, easy to clean.*
Cast alluminium plate - 17.5 x 17.5 cm. Heated by a 750 Watt embeded heating element. The excellent heat conduction distributes the heat evenly and uniformity over the entire heating surface. Sensitive "stepless" temperature control is maintained by means of a hydraulic thermostat with minimum overshoot and undershoot making possible the processing of delicate materials at low critical temperatures. Pilot lamp indcates when heat is on. Special radiation shields keep apparatus relatively cool during continuous operation.
Model HP-4 for operation on 220 V / 50 Hz, 750 W. (On request 115V / 60 Hz). Approximate temperature: 40 - 300°C.

Dimensions: *Top Plate: 17.5 x 17.5 cm*
Net. weight: 2.6 kg
Width: 20 cm
Height: 15 cm
Depth: 26 cm

Supplied with a 3-wire line cord and sturdy screw type support device at the rear of the base to hold standard rod.
GHP-4 *is similar to the above described Model HP-4 but with 25 x 25 cm. top plate. 1500 Watt heating surface can be obtained by attaching two or more Hotplates together.*
Safety: *A fixed-temperature thermostat (operating at 327°C) prottects against fire hazard in case of control failure.*

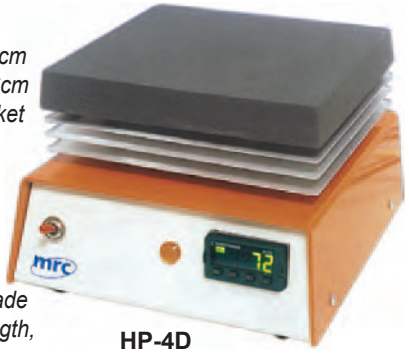
HP-4

Models: HP-4D & GHP-4D, Digital Hotplate

Features:
- *Digital set-point and read-out of actual temperature*
- *PID microprocessor Eurotherm 2132 controller provides precise temperature regulation all over the temp. range.*
- *Temperature may be controlled either at the plate surface by internalsensor,or at the sample by a Thermocouple Immersion probe*
- ***Safety****: in the event of broken sensor,power to the heater is shut-down*
- *Chemical resistant top plate*
- *Temperature range :above ambient to 300°C. (Optional: 400°C)*

Dimensions:
- *Top plate 17.5.x 17.5cm*
- *(W xH xD) 20 x15x26cm (D includes rear bracket for support rod)*
- *230 V (or 115 V), 50/60Hz , 750 Watt*
- *Net weight : 3.4 Kgs*

Accessory :
- *Immersion Probe made of St.St. 250 mm length, 3mm dia.*



HP-4D

GHP-4D *is similar to the above described Model HP-4D but with 25x25cm. top plate. 1500watt*

Models: HP-1 & HP-1D, Mini Hotplate 115x115mm

Compact and lightweight hotplate stirrer, great to use in limited space. Top plate 115x115mm. Powerful robust and reliable with chemical resistance top plate Heated by 450 Watt embedded heating element, with excellent uniformity over the entire heating surface. Sensitive "stepless" temperature control is maintained by means of a hydraulic thermostat with minimum overshoot, making possible the processing of delicate materials at low critical temperatures. Special radiations shields keep apparatus relatively cool during continous operation.

- ***Safety:*** *a fixted temperature thermostat protects against fire hazard in case of control failure.*
- ***Temperature range:*** *up to 300˚C*
- ***Dimensions:*** *Top plate 115x115mm*
- ***Overal dimensions:*** *W140xH110xD220mm (D includes support rod clamp)*
- ***Power:*** *220V/50Hz, 450W*

HP-1D *Digital PID temperature control.*

HP-1D

Models: HPK-4 & HPK-4D, Ceramic Hotplate

Features:
- *High impact strength Acid and alkali resistance*
- *Remains flat even at high temperatures*
- *Heats rapidly up to 540°C in 8 minutes*
- *Stepless heat control*
  Model HPK-4/300 *— up to 300°C*
  Model HPK-4/540 *— up to 540°C*

HPK-4/540

Dimensions:
- *Top plate 17.5x17.5cm*
- *Overall dimensions : (WxHxD) 20x12x23cm (D includes rear bracket for support rod)*
- *Nett weight : 3.4 Kgs*
- *230 Volt (or 110 V), 1150 Watt*

Not recommended for use with sand baths or metallic vessels.
HPK-4D*-Digital PID temperature control*

Mini Hotplate, 80mm diam.

- *Operating temperature: up to 450°C*
- *Stepless heat control*

Dimensions:
- *Heating surface 8 cm dia.*
- *(W x H x D) 12 x 18 cm. (D includes rear bracket for support rod)*
- *Nett weight : 1.1 Kgs*
- *230 Volt (or 115 V), 450 Watt*

E-1

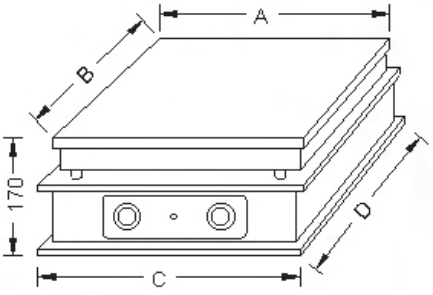
Accessory: *Aluminium top mould for round bottom flasks 250 up to 500ml*

HROMalytic Chromatography Products
Australian Distributors ECHnology '08
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

H Hotplates CE

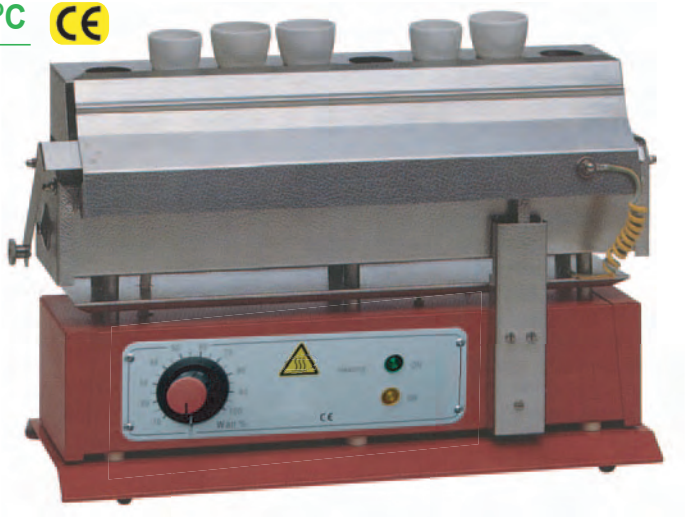
Models: HD-Serie, Giant Hotplates up to 370°C

Hot Plates, electric for continuous operation. Electrical hotplates with variable wattage controlr.
With optional digital Eurotherm 2132 temp. controller
Robust construction for continuous performance.
Aluminium alloy hotplate. temperature uniformity is guaranteed over the entire heating surface. Asbest-free insulation. The housing is constructed from high-grade, stainless steel No. 1.4301, whereby the central section has been additionally sprayed in orange. Four adjustable feet ensure extra stability. Connecting cable approx. 1,7 m. long, 230 Volt.



Hot plates with wattage power control								
Model	**Watt**	**Volt**	**Temperature**	**A (mm)**	**B (mm)**	**C (mm)**	**D (mm)**	**Weight**
HD 0	1800	230	max. 370°C	300	300	312	312	10kg
HD 1	2200	230	max. 370°C	350	350	358	358	12kg
HE 1	2400	230	max. 370°C	290	440	308	458	13kg
HD 2	2850	230	max. 370°C	350	500	364	514	18kg
HD 3-230	4000	230	max. 370°C	430	580	442	592	25kg
HD 3-400	4000	3x400, N+PE	max. 370°C	430	580	442	592	25kg
HB 300	2000	230	max. 300°C	610	160	200	618	11kg

Model: SVR/E-D, Rapid Incinerator up to 950°C CE



For single and series incineration of solid and liquid substances. The operating temperature of approx. 950°C can be reached within the space of a few minutes. The upper platform has 8 recesses with a diameter of 35 mm which can accommodate porcelain crucibles of up to 50 mm diameter for drying, pre-heating and fuming-off. The uninhibited exposure to oxygen speeds up the incineration process. The inclined position of the crucibles in the lower incinerating bed (which has a length of 400 mm) allows excellent observation and access to the contents during operation. Modern design, easy to operate, reliable, space-saving and of very good value.

Model SVR/E:
The upper part and the main housing are made of highgrade stainless steel, the housing comes with an orange finish (RAL 2002).
There is electrical wattage control.
The appliance is fitted with a safety switch which cuts off the mains supply to the heater immediately the service flap is opened. When the flap is closed, power is restored to the element. The ready-to-use apparatus is delivered complete with a 1.8 m cable and Schuko plug.

Model SVR/E-D:
As SVR/E, but with an additional Eurotherm PID temperature controller up to 999°C, this is controlled by a built-in,K type thermo couple.
The pre-selected temperature is shown on the digital display with a constant ACTUAL temperature.

Order No.	**SVR/E**	**SVR/E-D**
Voltage	230-240V,50-60Hz	
Performance	2500 Watt	
With & Depth	450mm x 180mm	
Height	310mm	
Max. Crucible Diameter	50mm	
Max. Crucible Height	50mm	
Weight	8.0kg	7.8kg
Order No. Spare Heating Element	**EH 400**	**EH 95**

HROMalytic Chromatography Products '08
Australian Distributors ECHnology
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

Multi Heating Apparatus

E-6

The Multi Heating Apparatus *offers such versatility that is suitable for many laboratory purposes: extractions, distillations, digestions, etc. The 6 separate heat controls allow the heaters to be used for several different projects or multiple runs of the same project. The Multi Heating Apparattus in conjuction with inter-changable top mould for round botton flasks - solves the most varied heating problems.*

Model E-6 *for 6 places*
220 Volt (on request 115 V), 2700 Watts (6 x 450 W).
Approximate temperature: 40 - 450 C. Hotplate top 85 mm. dia.
Dimensions *(W x H x D): 80 x 17 x 20 cm.*
Accesories: *6 interchangable aluminum top moulds for round bottom flasks up to 100 ml or 250 to 500 ml (Kjeldahl flasks 500 - 800 ml).*
4 support rods 800 x 12 mm. with 4 clamps.
Model E-4 *as described above, but for 4 places 220 Volts 1800 Watts (4 x 450 W).* ***Dimensions*** *(W x H x D): 60 x 17 x 20 cm.*

Model: SD Series, Sand Baths up to 370°C

SD

Electrical sandbaths with variable wattage control. Robust construction for continuous performance. Aluminium alloy hotplate. Because of the asymmetrical, long-term heating system (hotplate corners and edges are subjected to more heat) an even temperature is guaranteed over the entire heating surface.
The sandbaths consist of an aluminium alloy hotplate with a screwed-on, sealed stainless steel frame with a usable height of 50 mm. The sand lays direct of the hotplate. The housing is constructed from high-grade, stainless steel No.1.4301, whereby the central section has been additionally sprayed in orange.
4 adjustable feet ensure extra stability. Connecting cable approx. 1,7 m long, 230 Volt/3200 Watt with Schuko plug.

Type	Watt	Volt	Temp.	Weight kg	A mm	B mm	C mm	D mm
SD 7	2200	230	max. 370°C	13	360	360	358	358
SD 8	2850	230		21	360	510	364	514
SD 9-230	4000	230		27	400	590	442	592
SD 9-400	4000	3x400 N+PE						

Model: HB-110/300, Hot Plates up to 110°C/300°C

HB-110

Electrical hot plates with variable wattage control. Option: Digital tmp. controller.
Sturdy design for continuous operation. Upper plate consists of aluminium alloy. The asymmetrical long-time heating equipment has been designed to ensure a uniform temperature even at corners and edges which has never been reached before. Insulation without asbestos. Component parts of the housing are made of special steel, W. No. 1.4301. The center part is sprayed in orange colour shade. The four feet can be adjusted to a limited extent. 1,7 m cable. 220 Volt up to 3300 Watt with plug.

Types	Watt	Temperature	A mm	B mm	C mm	D mm	Weight
HB-110	1000	30~110°C	610	160	200	618	11kg
HB-300	2000	50~300°C					

Model: PZ-44/230, Digital hot plate to 450°C

PZ-44/230

PZ 44 is a hot plate with automatic control for precise temperatures from 20 to 450°C. The required temperature is preset on the digital regulator & remains automatically constant. The actual temperature is continuously displayed with 13mm high numbers.
The long-lasting electrical heating unit can be used in three heating stages - 825 - 1650 - 3300 Watt. Each stage can be finely tuned from 10 to 100% by an electronic output control to prevent overheating and any after- heating due to excessive power. The heating stages 825 and 3300 Watt, heat the total area of the plate. The special 1650 Watt stage heats only the right-hand section of the plate. Due to creeping heat, the temperature drops off from the right-hand section to the left-hand plate edge, by approx. 40% (temperature decline).
A low voltage 3-pole socket mounted on the right-hand side of the housing allows the following extras to be connected (however not conditional): ● *Timeswitch, for switching the heating unit on and off at preset times.* ● *Contact Thermometer* ● *Temperature fuse cut-out*
As temperature fuses must have heat contact, a 4 mm diameter hole has been bored on the edge of the right-hand plate for their insertion. The heating unit is automatically cut off from the mains supply after the fuse blows and the contact has reverted to the off position. The fuse has to be renewed once it has blown.
Details and structure of PZ 44 - *The hot plate is constructed of solid, low-distortion GG 15 casting. Cold housing, also in continuous operation.*
Material No. 1.4301, from rustproof high grade steel. Centre section is additionally sprayed in orange. Four adjustable feet for extra stability. Sturdy construction, 150 kg max. hot plate load. Ready for connection with 1.5 m. cable.

Type	PZ-44/230
Voltage	230-240V, 50-60Hz
Performance	3300 Watt
Plate Size	440mmx290mm
Temp. Range	20~450°C
Constant Temp.	±1K
Width & Depth	310mm x 475mm
Height	205mm
Weight	26kg

HROMalytic Chromatography Products
Australian Distributors ECHnology '08
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

Incubators

50 Liters CO_2 Incubator

3502-2

- New Anti-Corrosion Anode for Easy Set-up & Tap Water Use
- Patented Copper-housed HEPA Filter for Superior Contamination Prevention
- Factory Pre-set Door Thermostat
- Pre-heated C02 Gas Inlet for Increased Temperature Uniformity
- Front-Mounted Connections for Convenience

The 3502 series of personal C02 Incubators offer dependable Thermal Conductivity (TC) C02 Sensor control and are ideal for QA / QC applications.
This unit's compact size presents a small profile to conserve valuable lab bench space. The six gallon water jacket and intelligent microprocessor offer superb uniformity for even the most demanding in vitro incubations.

Model	3502/3502-2
Chamber Capacity	50 Liters/1.8 cu.ft
Temperature Range	Ambient +8°C to 60°C
Temperature Uniformity	+/-0.2°C (at 37°C)
Temperature Display Resolution	+/-0.1°c
$C0_2$ Sensor	Thermal Conductivity (TC)
$C0_2$ Range	0-20%
$C0_2$ Recovery Rate to 5%	<5 minutes
$C0_2$ Uniformity	+/-0.1% @ 5%
Alarm Conditions:	
Temperature	+/-1°c
CO_2	+/-1%
Humidity Range	Up to 95%
Exterior Dimensions (wxdxh)	53 x 57 x 67 cm/ 21 x 22.5 x 26.5 in.
Interior Dimensions (wxdxh)	40 x 40 x 32 cm/ 15.75 x 15.75 x 12.5 in.
Shelves Supplied (Max)	3(8)
Shipping Weight	79.5 kg/175 lbs
Net Weight	63.5kg / 140 lbs
Electrical Requirements	
Amps/Cycle Phase -120V	5 / 60 Hz
Amps/Cycle Phase -220V	3 / 50/60 Hz
Fitting Sizes Diameter	
Access Port	2.54 cm / 1 in.
$C0_2$ Sample Port	0.95 cm / 3/8 in.
$C0_2$ Inlet Port	0.95 cm / 3/8 in.
Fill Port	2.54 cm / 1 in.
Siphon Port	1.27 cm / 1/2 in.

170 Liters CO_2 Incubator

3507-2

Our incubators are easy to clean and keep clean because we employ 100% stainless steel chambers and shelving, fully-coved corners, a removable inner door gasket and our Quick Clean Shelf System. The 3500 Series Incubators come standard with a patented copper-housed HEPA filter to inhibit bacterial growth and provide continuous decontamination.
Our new anti-corrosion anode allows for the optional of use of distilled or tap water (de-ionized water should not be used) in the large 19 gallon water jacket, fully-coved corners make cleaning a breeze and the C02 sample port along with all of the data logger connections have been moved to the front control panel for quick and easy access. Maintain precise time/date stamped records of all incubator functions from one minute to 99 minutes. The 3500 series data logger features programmable outputs that transmit display data via the RS-232, direct to a printer, or to a remote alarm system.
● Coved Corners for Easy Cleaning ● New Anti-Corrosion Anode for Easy Set-up & Tap Water Use ● Patented Copper-housed HEPA Filter for Superior Contamination Prevention ● Built-in C02 Tank Switcher ● Factory Pre-set Door Thermostat ● Pre-heated C02 Gas Inlet for Increase Temp. Uniformity ● Front-Mounted Connections for Convenience

Model	3507/3507-2
Chamber Capacity	170 Liters/6.12 cu.ft
Temperature Range	Ambient +8°C to 60°C
Temperature Uniformity	+/-0.2°C (at 37°C)
Temperature Display Resolution	+/-0.1°c
$C0_2$ Sensor	Thermal Conductivity (TC)
$C0_2$ Range	0-20%
$C0_2$ Recovery Rate to 5%	<5 minutes
$C0_2$ Uniformity	+/-0.1% @ 5%
Alarm Conditions:	
Temperature	+/-1°c
CO_2	+/-1%
Humidity Range	Up to 95%
Exterior Dimensions (wxdxh)	66 x 65 x 102 cm/ 26.125 x 25.5 x 40 in.
Interior Dimensions (wxdxh) (single chamber)	52 x 50.8 x 65.5 cm/ 20.5 x 20 x 25.8 in.
Shipping Weight	127 kg/310 lbs
Shelves Supplied (Max)	3(16)
Net Weight	111kg / 245 lbs
Electrical Requirements	
Amps/Cycle Phase -120V	5 / 60 Hz
Amps/Cycle Phase -220V	3 / 50/60 Hz
Fitting Sizes Diameter	
Access Port	2.54 cm / 1 in.
$C0_2$ Sample Port	0.95 cm / 3/8 in.
$C0_2$ Inlet Port	0.95 cm / 3/8 in.
Fill Port	2.54 cm / 1 in.
Siphon Port	1.27 cm / 1/2 in.

HROMalytic Chromatography Products
Australian Distributors ECHnology '08
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

Refrigerated Incubator 150 Litre

LE-509

Options:

- Internal glass door
- Window (in this case cooling to 0°degc only)
- Internal power socket
- 38 mm cable port
- Gas inlet

The MRC model LE-509 *cooled incubator designed to obtain freezing, incubating, drying and test temperatures between –10°C and +60°C.*
It has stainless steel chamber and two doors, when the outer metalic door is opened there is inner glass door.
Very good uniformity is achived by forced air circulation.
A PID temperature controller provides constant and accurate temperature. Inside power socket enable the use of the shaker rotator or other instrument inside.
Cable port with cup is available upon request.

Illuminated Growth Chamber

The MRC model LE-539 *: Illuminated growth chamber features smart programer, allowing control of two temperature conditions day & night and an On /Off llunination cycle relative to the program selected. Each system operates independently. Timers can be set to adjust cycles from 10 minutes up to 24 hours.*

LE-539

Large 487 Litre Refrigerated Incubator

The MRC model LE-519 *is ideal for BIOCHEMICAL OXYGEN DEMAND of sewage and waste water. Other applications includes fermentation studies, drug stability tests. Excellent temperature uniformity is obtained by forced air circulation. A PID microprocessor temperature controller provide accurate and constant temperature. Dual display of setpoint and chamber temperature. Independent overtemperature protect on. Hermetically sealed compressor and automatic defrost.*

LE-519

Specifications

Model	LE-509	LE-519	LE-539
System	Forced air circulation		
Temp. range	-10°C ~ +60°C		0°C ~ +60°C
Temp. constancy	± 0.1°C		
Temp. uniformity	±1°C (at 37°C)	±1.5°C (at 37°C)	
Inside material	SUS-304		
Temp.control	PID		
Temp. sensor	PT-100Ω		
Temp. heat-up rate	25°C ~ 60°C (within 15 min)	25°C ~ 60°C (within 15 min)	
Temp. cool-down rate	25°C ~ 60°C (within 40 min)	25°C ~ 0°C (within 40 min)	
Heater	500 W	1000 W	
Refrigerator	1/5 HP	1/3 HP	
Illumination time			10 min ~ 24 Hr
Illumination			20 W x 9 tube
Safety devices	Short circuit breaker, over heat prtector, refrigerator over load protector, sensor abnormality, over low protector		
Inside dimensions (mm)	W 600 x D 500 x H 500	W 700 x D 580 x H 1200	
Outside dimensions (mm)	W 680 x D 760 x H 890	W 790 x D 860 x H 1770 (with casters)	
Volume	150 L	487 L	
Shelf	2	5	
Power supply	110 / 220 V (8A)	110 / 220 V (12A)	110 / 220 V (13A)
Weight	77 Kg	220 Kg	225 Kg

HROMalytic Chromatography Products
Australian Distributors ECHnology '08
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

Incubators

Hybridization Incubator

HD-80

The MRC model HD-80 *hydridization oven offers high performance with precise temperature control, safety and convenience. It is small and space saving oven.*
The bottle carusel is easily removable for easy cleaning of the chamber. The bottle carusel accept up to eight bottels (300mm). Very homogeneous temperature distribution in the chamber is obtained by airforced ventilation. This airflow system also ensure fast recover of chamer temperature after door opening. A PID temperature controller provide constant and no temperature overshoot. Dual display of actual chamber temperature & setpoint temperature. Tempered glass viewing window provides clear chamber visibility without opening the door. Simple operation of speed by means of rotary switch & the speed display is by analog tachometer.

Hybridization Incubator with shaker

HR-80

Model HR-80 *includes orbital shaker 310 x 210mm.*

Accessories: Bottles

Glass hybridization bottles available in 3 sizes: 150, 200 & 300 mm, diameter of 35mm, bottles with gasketed, leak-proof cups.

150 mm

200 mm

300 mm

Model	HD-80	HR-80
System	Forced air circulation	
Shaking	Rotation	Rotation + orbital
Rotation speed	5-50 PRM	
Rotation width	0-20 Variable	
Shaking speed		5-120 PM
Shaking width		25 mm
Shaking plate		W 310 x D 210
Temp. range	Room temperature - 70°C	
Temp. constancy	± 0.1°C	
Temp. uniformity	± 1°C (at 37°C)	
Heater	300W	
Temp. control	PID	
Temp heat-up rate	25°C - 70°C within 20 min	
Bottle capacity	Standard 4 Bottle, Maximum 8 Bottle	
Standard bottles	A-35 x 150mm B-35 x 200mm C-35 x 300mm	
Inside material	SUS-304	
Safety devices	Short circuit breaker, over heat protector, sensor abnormality	
Inside dimensions (mm)	W 350 x D 250 x H 250	W 350 x D 250 x H 425
Outside dimensions (mm)	W 440 x D 430 x H 430	W 440 x D 430 x H 650
Power supply	110 / 220 V (3A)	110 / 220 V (4A)
Weight	28 Kg	44 Kg

HROMalytic Chromatography Products '08
Australian Distributors ECHnology
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

Models: Inca 100-200, Incubator for Eggs

Professional incubator with leading edge technology especially designed for parrot egg incubation. It is well insulated & will operate well within a large range of ambient temperatures (15 to 35 degrees Celsius).
The Inca Incubator is designed for quality with high reliability, is easy to use and saves on electricity.

- *A new and exclusive heating technique that strengthens chick immunity*
- *Large and clear digital temperature display*
- *Automatic egg rolling that mimics the action of the brooding mother*
- *Full humidity control - Highly accurate unique humidity and temperature meter*
- *Easy & Simple to clean*
- *Maximum Visibility*

INCA-200

Model	Input power	Power consumption	External Dimensions (mm)			Capacity
			Length	Width	Height	
INCA 100	220-240 Volt	50 Watts	460	250	200	Up to 25 African Grey eggs
INCA 200	220-240 Volt	80 Watts	580	340	265	

Model: Lory 10-20, Brooder for chicks

LORY-10

Fully digital *Electronic temperature control with temperature display enables maximum accuracy & easy control of the brooder's temp.*
Fan assisted heating elements *Placed on the inner top of the brooder, these fairly low temperature heating elements are set on a metal heat sink and heat the brooder. They are controlled by an electronic temperature control unit that digitally shows the temperature. The temperature of the unit can be set to the accuracy of 0.1 degrees Celsius. The heat they generate is spread evenly throughout the brooder by an automatically controlled computer type fan mounted on the heat sink. The fan is supported by a DC current that generates minimal heat and preserves the brooder's temperature.*
Easy disessembely *All parts, including the complete heating elements, can be easily removed for cleaning and maintenance.*
Maximum Visibility
Sliding transparent doors for visual inspection, that can be lifted out.

Model	Input power	Power consumption	External Dimensions(mm)		
			Length	Width	Height
Lory 10	220-240 Volt	80 Watts	340	490	410
Lory 20	220-240 Volt	160 Watts	450	690	500

Colour Cabinet

Colour Comparison Cabinet

Verilux-200 *Color Comparison cabinet are designed in accordance with ASTM D1729, and lights standared of C.I.E the cabinet are intended for use by industry work shops, manufacturers, processors and inspectors, in short, for anyone involved with colour and colour matching on products, incorrect fomulation can be avoided.*

Application

- *Paint, ink, pigment, cream manufacturer and processor's and painting's colour matching.*
- *Plastic, rubber, textile and leather goods colour matching.*
- *Cars / Vehicles and machinerys finish colour matching.*
- *Cosmetic, food, chemical, medicine and papers industries colour assessment.*
- *Glass, porcelain, enamel, construction materials colour assessment.*

VERILUX-200

Lamps Of Light Source

D65	Artificial daylight	6500°K
A	Standard filament light A	2300°-2800°K
CWF	Cool white floroscent light	4000°K
UV	Ultraviolet light	360mm wave length

Remark: To ensure accurate colour matching, lamps should be changed every 2000 hours

Technical Data

Lamps	D25x2, Ax2, CWFx2, UVx
Outside dimension	710x460x580mm (LxDxH)
Inside dimension	680x420x405mm (LxDxH)
Housing	Steel case with paint finishing
Counter	9999/H
Power supply	AC110V/AC220V.60Hz/50Hz
Weight	Net weight 32Kgs

HROMalytic Chromatography Products
ECHnology '08
Australian Distributors
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

Incubators

Model: TU-400 Serie, Benchtop Shaker Incubator

Small & Medium size benchtop incubator shaker, temperature range of 5O°C above ambient to 70°C, speed range 20-250 RPM or 30-400RPM.
Space saving with transperent window in the front which provide good visibility that minimize the need to open the chamber, automatic cutout of shaker when lid is open to protect operator. Hydraulic lid opening control.
Platform 300 x 400 mm or 450 x 450mm accept flasks up to 2 litre, test tubes racks and gel trays. Areas of application: cultivation of cell and tissue cultures or microorganizms. Production of secondary natural substances and biogenetic pharmacentic etc.

TU-400 TU-453

Specifications

Model	TU-400	TU-400S	TU-453	TU-454
System	Forced air circulation			
Shaking system	Orbital			
Temp. range	Room temp. ÷5°C - 70°C			
Temp. constancy	±0.1°C			
Temp. uniformity	±1°C (at 37°C)			
Temp. control	PID			
Rate of shaking	20-250 RPM	30-400 RPM	30-300 RPM	30-400 RPM
Shaking width	25 mm			
Shaking plate size	W400xD300mm	W400xD300mm	W450xD450mm	W450xD450mm
Maximum Load	20kg			
Inside Dimensions	W450xD380xH260mm	W450xD380xH260mm	W510xD540xH430mm	W510xD540xH430mm
Outside Dimensions	W460xD490xH430mm	W460xD490xH430mm	W520xD650xH500mm	W520xD650xH500mm

Capacity for flasks

Model	A	B	C	D	E	F
Flask Holder	50ml	125ml	250ml	500ml	1000ml	2000ml
TU-453/454-Capacity	64	36	25	16	9	5
TU-400-Capacity	35	20	12	6	4	2

HROMalytic ECHnology Chromatography Products '08
Australian Distributors
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

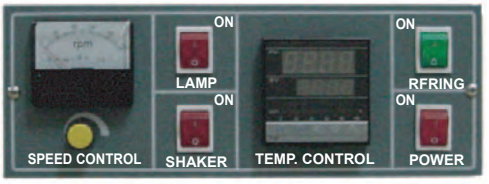
Benchtop Refrigerated/Incubated Shaker

LM-570

This multipurpose model can shake, incubate and refrigerate. The 480x380mm platform accepts flasks up to 6 litre. Large viewing window and internal light provide clear chamber visibility, with moveable window blind. One stationaty shelve for incubating added samples with a front opening door, the LM-570 can be used on the bench or on the floor, wide temperature range 0° to 60°c.

***Model LM-2570:** two stage shaker enable to shake two platform simultaneously.*

***Model: LM-570RT** temperature range above ambient to 60°C*



Specifications

Model	LM-570 RT	LM-570	LM-2570
System	Forced air circulation		
Shaking system	Orbital		
Temp. range	Room temp.÷ 5°C - 60°C	0°C-60°C	
Temp. constancy	±0.1^{O}C		
Temp. uniformity	±1^{O}C (at 37°C)		
Temp. control	PID		
Temp. sensor	PT-100Ω		
Inside material	SUS-304		
Rate of shaking	20-250 RPM		
Shaking width	25 mm		
Shaking plate	W480xD380	W480xD380	W480xD380 Double
Refrigerator	1/5 HP		
Heater	500 W		
Safety devices	Short circuit breaker, over heat prtector, refrigerator over load protector, sensor abnormality, over low protector		
Inside dimensions (mm)	W600xD500xH500		
Outside dimensions (mm)	W680xD760xH890		
Volume	150 L		
Shelf	1		
Power supply	110 / 220 V (8.5 A)		
Weight	80Kg	75Kg	80 Kg

Capacity for flasks

Model / Flask clamps	A-50 ml	B-125 ml	C-250 ml	D-500 ml	E-1000 ml	F-2000 ml	G-3000 ml	H-4000 ml	I-6000 ml	J-6000 ml
LM-570/LM-570RT	48	30	20	12	6	4	2	2	1	1
LM-2570	96	60	40	24	12	-	-	-	-	-

Options

- *Speed up to 400rpm*
- *Universal spring rack for different types of dishes*
- *Internal power socket*
- *38mm cable port*
- *Gas inlet*

HROMalytic Chromatography Products
Australian Distributors ECHnology '08
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

Incubators

Model: LM-510/530, Large Capacity Refrigirated/Incubator Shaker

The large capacity incubator shakers are available in two sizes and four models. Large capacity platforms 600 x 480 mm or 960x600mm accepts flasks up to 6 litre.
Wide temperature range 0-60°C and two choices of agitation 20-250 rpm or 20-400 rpm in a 25 mm or 50 mm circular orbit.
Large viewing window and internal light provides clear chamber visibility without opening the door, with moveable window blind.
Inside air circulation provide equal temperature and quick restore of temperature after opening the door.
Hydraulic opening door control and casters.

Option:
RT-Without cooling, temperature range above ambient to 60°C

Specification

Model	LM-510-2	LM-510-5	LM-530-2	LM-530-5
System	Forced air circulation			
Shaking system	Orbital			
Temp. range	0C ~ 60°C			
Temp. constancy	±0.1°C			
Temp. uniformity	±1°C (at 37)			
Temp. heat-up rate	25°C ~ 60°C within 15 min			
Temp. cool-down rate	25°C ~ 0°C within 40 min			
Temp. control	PID			
Temp. sensor	PT - 100			
Inside material	SUS - 304			
Rate of shaking	20 ~ 400 rpm	20 ~ 250 rpm	20 ~ 400 rpm	20 ~ 250 rpm
Shaking width	25 mm	50 mm	25 mm	50 mm
Shaking plate	W 600 x D 480		W 960 x D 600	
Refrigerator	1/4 HP		1/3 HP	
Heater	600 W		800 W	
Safety devices	Short Circuiit Breaker, Over Heat Protector, Refrigerator Over Load Protector, Sensor Abnormality, Over Low Protector			
Inside dimensions (mm)	W 690 X D 570 X H 530		W 1050 X D 690 X H 530	
Outside dimensions (mm)	W 1010 X D 760 X H 955		W 1370 X D 880 X H 955	
Volume	208 L		383 L	
Power supply	110 / 220 V, 50 / 60 Hz, (8.5 A)		110 / 220 V, 50 / 60 Hz, (14 A)	
Weight	183 Kg		216 Kg	

Capacity for flasks

Model / Flask clamps	A-50 ml	B 125 ml	C 250 ml	D 500 ml	E 1000 ml	F 2000 ml	G-3000 ml	H-4000 ml	I-5000 ml	J-6000 ml
LM-510-Capacity	80	48	30	20	12	6	6	4	2	2
LM-530-Capacity	160	96	60	40	24	15	8	8	6	6

HROMalytic Chromatography Products ECHnology '08
Australian Distributors
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

Large Capacity Refrigirated/Incubated Shaker LM-590/259

Front opening door provided easy access to all glassware in the chamber.
These large capacity incubator shakers are available in single platform or double platform and in two choices of speed 20-250 or 20-400 rpm.
Large viewing window and internal light provides clear chamber visibility without opening door, moveable window blind.
Large capacity accessory platform 600 x 480 mm accepts flasks up to 6 litre.
Two adjustable height, stationary shelves provide additional storage for incubating other experiments.

LM-590-2

Option:
RT-Without cooling, temperature range above ambient to 60°C

Specification

Model	LM-590-2	LM-590-5	LM-259-2	LM-259-5
System	Forced air circulation			
Shaking system	Orbital			
Temp. range	0C ~ 60°C			
Temp. constancy	±0.1°C			
Temp. uniformity	±1°C (at 37)			
Temp. heat-up rate	25°C ~ 60°C within 15 min			
Temp. cool-down rate	25°C ~ 0°C within 40 min			
Temp. control	PID			
Temp. sensor	PT - 100Ω			
Inside material	SUS - 304			
Rate of shaking	20 ~ 400 rpm	20 ~ 250 rpm	20 ~ 400 rpm	20 ~ 250 rpm
Shaking width	25 mm	50 mm	25 mm	50 mm
Shaking plate	W 600 x D 480		W 600 x D 480 Double	
Refrigerator	1/3 HP			
Heater	800 W			
Safety devices	Short Circuiit Breaker, Over Heat Protector, Refrigerator Over Load Protector, Sensor Abnormality, Over Low Protector			
Inside dimensions (mm)	W 700 X D 580 X H1200			
Outside dimensions (mm)	W 790 X D 860 X H 1770			
Volume	487 L			
Shelf	2		1	
Power supply	110 / 220 V, 60 / 50 Hz, (11 A)			
Weight	220Kg		240Kg	

Capacity for flasks

Model / Flask clamps	A-50 ml	B-125 ml	C-250 ml	D-500 ml	E-1000 ml	F-2000 ml	G-3 Litre	H-4 Litre	I-5 Litre	J-6 Litre
LM-5902, 5905-Capacity	80	48	30	20	12	6	6	4	2	2
LM-2592, 2595-Capacity	160	96	60	40	24	12	-	-	-	-

HROMalytic Chromatography Products
Australian Distributors ECHnology '08
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

M Meters

Heavy Duty pH/ORP/Temp Cmplete Kit PH

Rugged pH meter plus RS-232 PC interface for Datalogging ● *Dual display for pH or mV & Temperature (°C/°F)* ● *Large 1.4" (36mm) LCD display* ● *Easy 2 point Cal (pH 7) and Slope (pH 4 or pH 10) adjustments* ● *Manual & Auto Temperature Compensation using temperature probe* ● *Low Battery Indicator* ● *Min/Max/Avg, Auto off & Data Hold* ● *Built-in RS-232 PC interface with optional Data Acquisition Software & Optional Datalogger* ● *Includes meter, mini pH electrode PE-01 with 1m cable, temperature probe TP-07,& case.*

PH	*0.00 to 14.00pH*
mV	*0 to 1999mV*
Temperature	*32° 149°F (0 to 65°C)*
Max. Resolution	*0.01pH, 1mV, 0.1°*
Basic Accuracy	*±0.03pH, ±0.5%mV, ±1.8°F/1°C*
PC interface	*Optional software*
Memory	*Optional datalogger*
Dimensions/Weight	*(178x74x33mm)/388g*

PH-207

Features: ***General purpose pH/Ref electrodes PE-01 and PE-03*** *Rugged, polycarbonate construction features glass pH sensing bulb surrounded by protective teeth. pH range (0 to 14pH), operating temperature (0 to 80°C). Choice of Mini size: 9.5mm Dia. x 130mm (PE-01), or Standard size: 12.3mm Dia. x 160mm (PE-03).*
Flat surface electrode (Easy to clean) PE-08 *PVC bodied electrode, ideal for pH of solid products with minimal moisture like cheese, soils or electrophoretic/agar gels. pH range (0 to 14pH), operating temperature (5 to 80°C). Size: 15mm Dia x 106mm*
The PE-06HD *spear tip pH electrode is ideal for penetration pH measurements into meats, cheese, soil and other types of measurements requiring sample penetration.*
pH range : 0 to 14 pH. Temp, range : 0 to 60, Size : 12mm Dia x 157mm.
GL-42 *Glass bodied electrode Fast response and high accuracy, ideal for field or lab application. Connector available with BNC. Protective bottle with 4M KCl solution keep electrode wetting to extend electrode life. 0÷90°C, Size: 12mm Dia. x 155mm.*

PE-01 PE-03 GL-42 PE-08 PE-06HD

Heavy Duty Conductivity/Temperature Complete Kit CONDUCTIVITY

Rugged design Conductivity meter with 3 ranges plus RS-232 PC interface for Datalogging ● *Manual or Automatic Temperature Compensation* ● *Calibration adjust for cell* ● *Large 1.4" (36mm) LCD display* ● *Min/Max/Avg, Data Hold, & Auto Power off* ● *Built-in RS-232 PC interface with optional Data Acquisition Software & Optional Datalogger* ● *Complete with conductivity cell on 1.2m cable, 9V battery, & carrying case*

Specifications:

Conductivity	*0.1 to 1 99.9uS, 0.2 to 1 .999mS, 2 to 1 9.99mS 1500 Kcal/hr*
Temperature	*32°tOl400F(Oto60°C)*
Max. Resolution	*0.1µS,0.1°F/°C*
Basic Accuracy	*±(3%FS+1d), ±1.5°F/0.8°C*
Dimensions	*7x3x1.3" (178x74x32mm)/482g*

CD-4303

Heavy Duty Dissolved Oxygen Complete Kit OXIGEN

Dual display of Oxygen concentration in solutions and Temperature — plus RS-232 PC interface ● *Measures dissolved oxygen, oxygen, plus temperature* ● *Min/Max/Avg, Data Hold and Auto power off* ● *Automatic Temperature Compensation Super* ● *large 1.4" (36mm) LCD display* ● *Built-in RS-232 PC interface with optional Data Acquisition Software & Datalogger*

Specifications:

Functions	*Dissolved Oxygen*	*Oxygen*	*Temperature*
Range	*Oto19.9mg/L*	*0 to 100.0%*	*32to122°F(Oto50°C)*
Accuracy	*±0.4mq/L*	*±0.7%*	*±1.5°F/±0.8°C*
Probe Compensation & Adjustment	*Salt: 0 to 39%*	*Altitude 0 to 3900m*	*Temp: 0 to 50°C*
Dimensions	*Meter: 178x74x33mm; Probe: 190mm x 28mm*		
Weight	*482g*		

DO-5510

HROMalytic Chromatography Products '08
Australian Distributors ECHnology
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

Bench Top pH mV/Temp/Meter, Complete Kit

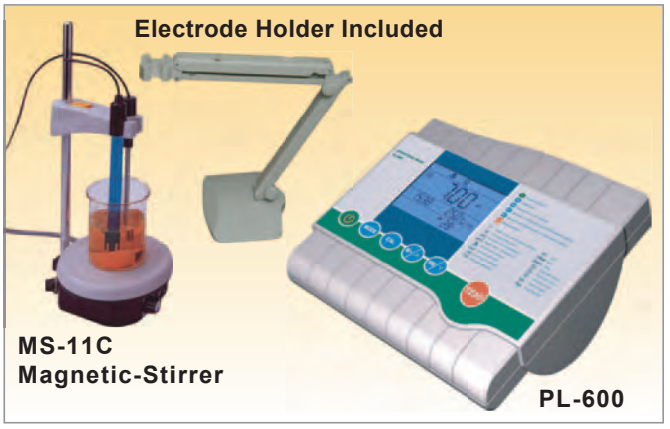
PH

Features

- Microprocessor based designed. Simultaneous display pH & Temperature, C/F switchable.
- Compensation by ATC or MTC. Backlight for operating conveniently anytime.
- Stores up to 64 reading which you can download to your computer via R232 output.
- All reading feature stamp meeting GLP guidelines.

Specifications

Model	PL-600		
	pH	mV	Temp.
Range	0-14pH	-2000-2000	-0.5-105°C
Accuracy	±0.01pH+1digit	0.1%mV/F.S	±0.2°C+1digit
Resolution	0.01pH	1mV	0.1°C
ATC	0-100°C		
Memory Datalogging	64 reading		
Output	RS 232		
Power	DC 9V by AC adaptor		
Dimensions	200x160x65mm		
Weight	650g		



Complete Kit

- pH electrode (glass)
- Temperature probe (Pt 100)
- Electrode holder.
- Buffer solution 4 & 7
- AC/DC adaptor
- Instruction manual, Gift box

Option

- Model: MS-11C magnetic stirrer with clamp for holding ph electrode & temp. probe

An Instrument For Measuring The Water Potential Of Plants, Arimad 3000

Arimad *uses a pressure chamber of the "Schulander" type to measure water potential of plants. This Indicates:*

- *prevailing soil moisture condition;*
- *influence of* ***environment*** *factors*
- *state of water within the plant*

Arimad *is light and portable. It can be operated easily by one person anywhere.*

Arimad *tests are simple and short. The five steps are:*

- *selecting a representative leaf;*
- *preparing the instrument;*
- *inserting pressure in the chamber;*
- *reading the plant's water potential.*

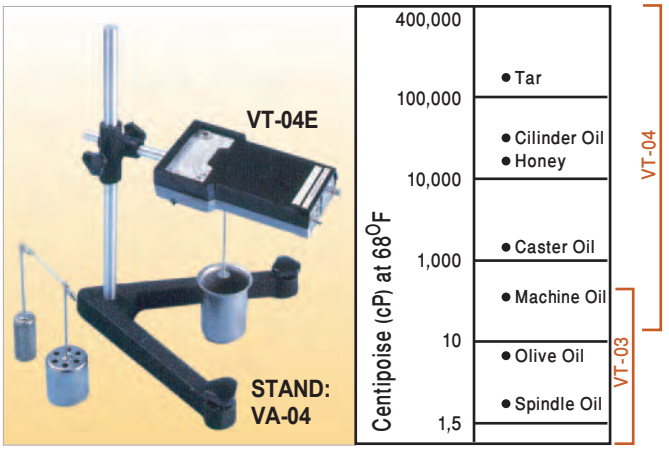
Arimad *is a plant tester in contrast to other instruments which test soils or climatic conditions. The pressure chamber method demonstrates the plant's reaction to moisture excess or deficiency. This data will determine an exact irrigation schedule.*

Viscotester

Portable Viscotester

Battery operated viscosity meter designed for handheld or tripod mounting

- Reliable one hand operation
- Direct readings on large analog display — three scales correlate to the rotor in use
- Fast, accurate determination of viscosity in fluids
- Ideal for adhesives, paint, oils and fats, inks, pulp, rubber, foods, petroleum products & cosmetics
- Low battery and level indicator
- Easy to clean with quick release accessories
- Dimensions: 7x3.9x1.6" (18xlOx4cm); weight: 1.45kg.



Low Range Viscotester.
Measures viscosity fluids from 2-330cP (mPa-s). Accuracy is ±3%FS. Includes three interchangeable rotors, 2 sample cups and batteries.

High Range Viscotester.
Most popular for fluids with viscosity ranging from castor oil or honey to tar. Covers 300 to 400,OOOcP (mPa-s); 0.3 to 4000 dPa-s. Accuracy is ±10% of reading. Complete with three interchangeable rotors, one rotor extension rod which extends the rotor arm to 3 ft, Viscosity illustration for use in deep vessels or high temperature fluids, one sample cup & batteries.
Optional accessory: *Stand VA-04, AC adapter VA-05*

HROMalytic Chromatography Products ECHnology '08
Australian Distributors
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

M Microscope

The MRC BI-Series Biological Microscopes with its standard features are designed for school applications. This system is for use in laboratories/ clinics, research facilities and medical schools. The modern and ergonomic design distinguish itself from the others. Its affordable price and excellent quality give you the best value for your money.

Head
There are five kinds of head for your choice, which are 360° rotating around its vertical axis. Two binocular heads are available, with standard 45° inclined and optional 30° inclined, providing adequate choices for your best viewing comfort. Also, diopter rings on both tubes are a standard feature to facilitate compensation for eye acuity. Graduated interpupillary distance adjustment is from 54mm to 76mm. Also, there are monocular, dual teaching and trinocular head available for selection.

Mechanical Stage
Built-in ball bearings mechanical stage provides a travel range of 76mm X 50mm in the X and Y direction respectively with graduations reading up to 0.1 mm for accurate positioning of specimen.

Coaxial Coarse and Fine Focusing Knobs
The precision Focusing mechanism is designed for frequent use and also provides a smooth adjustment of focus. The coarse focus is with adjustable tension device.

Condenser
The extremely efficient, removable N.A. 1.25 abbe condenser for brighter illumination level, and an iris diaphragm for resolution and contrast control.

Illuminator
A standard halogen lamp 1 2V/20W with the intensity control system is used, providing an even and bright illumination for all magnifications. Kohler illumination can be ordered as option which is centerable for advanced and special applications.

Objectives

A full range of achromatic(A-10X, A-40XR and A-100XR oil) & plan achromatic super contrast (Plan ASC4X, Plan ASC10X, Plan ASC40XR, and Plan ASC1OOXR oil) objectives in the BI series provide you with superior optical quality. A new device for anti-fungus is available, this effect can last for more than three years.

	Magnification	Item Code	N.A.
High performance Achromatic	PL4X	SG01.S01211	0.1
	A10X	SG01.S02211	0.25
	A20X	SG01.S03211	0.45
	A40X	SG01.S04211	0.65
	A60X	SG01.S05211	0.85
	A100X	SG01.S06211	1.25
Ultra high performance Plan Achromatic Super Contrast	Plan ASC4X	SG01.S01217	0.1
	Plan ASC10X	SG01.S02217	0.25
	Plan ASC40X	SG01.S04217	0.65
	Plan ASC100X	SG01.S06217	1.25

Model: B1-Series, Biological Microscope

Accessories For Microscope Applications

Phase Contrast
Phase contrast provides clear contrast of specimen without dying and therefore useful for observing alive or transparent specimens.

By simply rotating the turret, the condenser can be set for brightfield and phase contrast microscopy. It can be used with 1 Ox, 20x, 40x and 10Ox phase objectives. Simple plug in phase ring is also available for 1 OX, 20X and 40X phase objectives.

Polarizing
Polarizing - special polarizing equipment available with polarizer, analyzer and an optional pol specimen stage enable pol microscopy as Geology, Mineralogy etc.

Darkfield
Darkfield central stopenables darkfield observation at 4x through 40x when the attachment is mounted on the brightfield condenser bottom section.

Kohler Illumination
Kohler Illumination which is centerable and can be ordered as option.

HROMalytic Chromatography Products '08
Australian Distributors ECHnology
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

ADVANCED ZOOM STEREO MICROSCOPES

The SMZ-168 provides a zoom ratio of 1:6.7 with excellent optical performance, ultra long working distance, unbeatable depth of view as well as an extra large and comfortable working surface.

Advanced Zoom Stereo Microscopes

MRC introduces a new zoom stereo microscope - the SMZ-168 with continuous zoom range from 0.75X to 5X, complete image parfocality, 23mm field of view & using MRC's established high-performance optics with amazing clarify and depth of view.

SMZ-168-BL - The Zoom Body

35°inclined and 360°rotating head for flexible and comfortable viewing
Eyepiece : Standard WF10X / 23mm
Diopter adjustment for both eyepiece tubes : ±5
Adjustable interpupiliary distance from 52mm to 79mm
Zoom range : 0.75X - 5X
Zoom ratio : 1 : 6.7
Working distance : 113mm

- *Binocular zoom body (AX66.02601)*
- *Trinocular zoom body (AX68.02601)*

SMZ-168-TL - The Focusing Block

Ball bearing type focusing mechanism provides an accurate, smooth and stable focusing system with focusing range 50mm.

- *Focusing block with incident light 12V/10W (halogen) (**works only with AX40.00005 base stand)*
- *Focusing block without incident light [AX66.02605A], [AX66.02605B]*

Stereo Microscope

SMZ-168-BL

SMZ-168-TL - with MRC's 1300

The Base Stand

Streamlined base stand provides maximum working surface.

- *Streamlined base stand [SW01.09K3]*
- *Streamlined base stand with transmitted light 12V/10W (halogen), intensity control and universal power input 100V - 240V [AX40.00005]*

Advanced Zoom Stereo Microscopes Standard Configuration

	Order No.	SMZ-168BP	SMZ-168BL	SMZ-168TP	SMZ-168TL
Binocular zoom body	AX66.02601	■	■		
Trinocular zoom body	AX68.02601				■
Head holder with incident light halogen 12V/10W (**works only with AX40. 00002**)	AX66.02605A		■	■	■
Head holder without incident light	AX66.02605B	■		■	
Streamlined base stand	SW01.09K3	■		■	
Streamlined base stand with transmitted light halogen 12V/10W	AK40. 00007		■		■

	SMZ-168-BP/BL	SMZ-168-TP/TL
Optical System	Greenough	Greenough
Total Magnification	2.25X~320X	2.25X~320X
Zoom Body Magnification	0.75X~5X	0.75X~5X
Zoom Ratio	1:6.7	1:6.7
Eyepiece	WF10X/23 High eyepoint	WF10X/23 High eyepoint
Interpupiliary Distance	52mm~79mm	52mm~79mm
Diopter Adjustment	±5º	±5º
Observation Angle	35º	35º
Working Distance	113mm	113mm
Choice of Eyepiece	WF5X/23; WF6.25X/23; WF10X/21; WF15X/17; WF20X/13; WF30X/8; WF32X/8	WF5X/23; WF6.25X/23; WF10X/21; WF15X/17; WF20X/13; WF30X/8; WF32X/8
Additional Objectives Avaliable	0.3X WD=343mm 0.5X WD=200mm 0.75X WD=130mm 1.5X WD=54mm 2X WD=34.5mm	0.3X WD=343mm 0.5X WD=200mm 0.75X WD=130mm 1.5X WD=54mm 2X WD=34.5mm
Max. Magnification	320X	320X
Max. Field of View	102mm	102mm
Max. Working Distance	343mm	343mm
Top Light	12V/10W Halogen	12V/10W Halogen
Bottom Light	12V/10W Halogen	12V/10W Halogen
Photo & Video Adapter		Photo & Video adapter 1/3" CCD available

HROMalytic Chromatography Products
Australian Distributors ECHnology '08
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

M Microscope

Choices of Base stands

- 2105 - Universal stand [SW01.09K1]
- 2105S - Special universal stand [SW01.09K4]

SWO109K1

SWO109K4

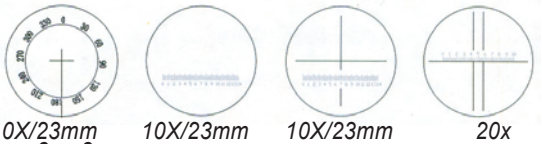
2105 Universal Stand
- Diameter of base 38mm
- Diameter of vertical pole 25mm
- Height of pole 200mm
- Diameter of pole for focusing mount 32mm

2105S
Special Universal Stand
- Length of base 250mm
- Height of pole 373mm
  Width of base 250mm
- Diameter of pole for focusing mount 32mm

A Complete Range Of Accessories

WF5X/23mm	[SG02T0606]	WF15X/17mm	[SG02T0314]
WF6.25X/23mm	[SG02T0103]	WF20X/13mm	[SG02T0406]
WF10X/21mm	[SG02T0219]	WF30X/8mm	[SG02T0701]
SWF10X/23mm	[SG02T0214]	WF32X/8mm	[SG02T0502]

Micrometer eyepiece



10X/23mm 360°:10° (SGO2T0211)
10X/23mm 14mm:0.2mm (SGO2T0212)
10X/23mm 14mm:0.1mm (SGO2T0213)
20x 10mm:0.1mm (SGO2T0403)

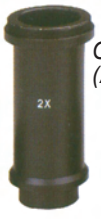
WF10X3600: 10°
WF1 OX 14mm: 0.2mm
WF10X 14mm: 0.1mm (with cross hair)
WF20X 10mm: 0.1mm (with cross hair)

Additional objectives

0.3X Objective (W.D. 343mm)	(AX6602607)
0.5X Objective (W.D. 200mm)	(AX6602608)
0.75X Objective (W.D. 130mm)	(AX6602609)
1.5X Objective (W.D. 54mm)	(AX6602610)
2X Objective (W.D. 34.5mm)	(AX6602611)

Eyepiece

Photo adapter+CCD adapter



CCD adapter (AX6602632)

Photo adapter (AX6602603)

Photo adapter-2x photo eyepiece for use with standard 35mm SLR cameras (fits T2 mount of different brands of cameras).
CCD adapter-For use with 1/3" CCD camera, standard magnification 0.3x.

Fibre Optical

CL-150+Twin Arm Fibre

The newest addition to our line of illumination equipment is the CL-150. It features "cold" illumination through filtration and a series of user defined colored filters. The cold light source has high intensity fiber optic illumination & accessories that allow you to position your light for best possible viewing.The original design shown. above features a sturdy small footprint through integrated solid state. circuitry. The 150 watt lamp is equipped with a variable control. The CL-150 provides the best illumination for high brightness & low temperatures.

Product Features

Streamline façade ● New Design for easy replacing lamp ● Adopt over loading protect set ● Brightness > 23000LU

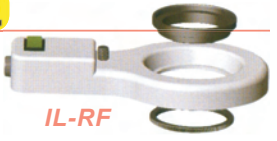
Specifications

Power Input **Power Output**	90V-265V 5V-21V	
Power Consumption	150W	
Dimensions	210mm×170mm×130mm	
Filter	Filter Red/Blue/Green/Yellow	
Reflector Lamp	21V/150W	
Fiber Adapter	F20	
Option Specification	Twin-Arm Fibre 2-F5X500mm	Ring Fibre F55XF10X1000mm
Option	Microscope Adapter for Ring Fiber	
Adapter Specification	M44X0.75 M48X0.75	M50X0.75 M54X0.75

Option: Dark field condenser

Fluorescent Ring Light CE

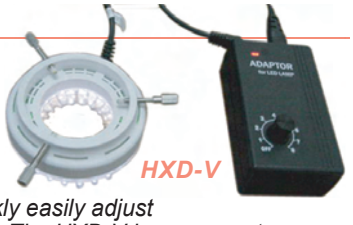
This is an excellent way to add Alighting to stereozoom microscopes.



IL-RF

- The bright 7W fluorescent lighting system provides cool white illumination.
- Long life bulb, spare bulb included.
- Ring desighn eliminates shadows.
- Fits cones between 4.5-6.5cm (1.8"-2.4" dia.)
- Adapters available to fit most models of stereozoom microscope.

Led Ring Light



HXD-V

The HXD-V is an innovative illumination white LEDs. Provide brilliant, shadow-free illumination for microscopy applications. Low & high intensity settings allow the user to quickly easily adjust illumination with just one knob. The HXD-V is a compact, white LED ring light offering a longer more optimized lifetime at an economical price. The controller unit is available from 96VAC to 260VAC input voltage. With more than 20,000 hours of lifetime. Further, HXD-V LED lamp provide different color temperature & lamp power illumination.

Consume power:	4.6W@48LEDs
Color temperature:	6400K, or Custom
Lamp life:	Greater than 20,000 hours
Mounting diameter:	Max. Ø62mm
Adapter Dimensions:	124X96X45mm
Adapter shell material:	ABS Plastic

HROMalytic Chromatography Products
Australian Distributors ECHnology '08
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

High Resolution Microscope Camera

2.0 Megapixel Resolution for Profesionals

MOTICAM 2000

standard accessories

- *Moticam 2000 CMOS Camera with C-ring*
- *16 mm CCTVlens*
- *28mm, 30mm, 34mm, 35mm eyepiece adaptors*
- *USB 2.0 connecting cable (permanently attached to camera)*
- *Calibration slide for accurate measurements*
- *Marco viewing tube*
- *Motic Images Multilanguage Application Software (latest version supplied)*
- *Motic USB2.0 PCI capture card*
- ** Motic B&S camera eyetube adaptor*

Motic Images Multilanguage Application Software included

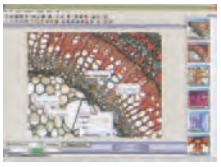
Features include - but are not limited to - the following:

- *Capture real-time still, moving or time-lapse image with a simple click of your mouse.*
- *Make accurate measurements which can be exported to Excel.*
- *Connect to another Motic Digital Microscope user with Distance Image Sharing (DIS) and share streaming video.*
- *Combine and compare images with amalgamation.*
- *Process the image with a variety of filters, or adjust brightness, contrast and color. You can also add narration, sounds or music to each image.*
- *Simple cell counting included.*
- *Add sound or narration to your image.*
- *Create detailed reports, findings and examination papers using Motic Report.*
- *This software allows the user to select between different languages. Available in 2004 are: English, German, French, Spanish, Portuguese, Italian, Korean, Arabic, Chinese.*

Live Capture Window

See live images on your computer screen directly from your microscope. Share these images on a projector or over the Internet at the click of a mouse.

Measurement



Use several tools to accurately measure and quantify your specimen in seconds. Once calibrated with the included certified calibration slide, you can rest assured of the accuracy at all times. Once all data has been collected, the results can be exported to an Excel format for further analysis

Annotations & Sound

Create multi-media images with the inclusion of sound tags which allow you to add your narration directly onto the point of interest. With several text & painting tools at your disposal, editing the image is easy.

Image Enhancement

Still images can be further enhanced with the different filtering and image enhancement algorithms provided. This software even allows the user to create custom-filters.

Now there is an easy way to capture the image without endless combinations of adaptors, converters, capture cards and cables.

2.0 Megapixel resolution and complete image control - Moticam 2000

For the ultimate in plug & play digital microscopy conversions, the Moticam 2000 is a professional high-resolution digital camera featuring an industrial metal case.

- *Focusing attention on a single position with integrated Region of Interest (ROI) selection.*
- *Saving of individual user settings for different microscopes.*
- *Allowing users to save their specific setup for any microscope reducing time moving the camera between different microscopes and different brands.*
- *Superior capture interface:*
  - allows for real time filtering with many different choices of effects.

For even more professional quality images, the Motic B&S adaptor is also provided in this amazing package. Simply remove the eyepiece and slide it into the eyetube.

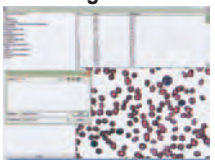
MOTICAM 2000

Image Device	*1/2" CMOS*
Lens	*16mm*
Effective Pixels	*1600x1200*
Still Image Resolution	*1600x1200*
Scanning System	*Progress scan mode*
Frame rate	*10fps@ 1240x1024 30fps @ 640x480*
Date Transfer	*480MB/second*
Minimum Illumination	*3 lux*
Lens Mount	*C-mount*
Shutter	*Automatic*
Video Output	*Transmission across Motic software direct • into memory of PC*
White Balance	*Automatic*
USB Output	*Yes*
USB Power Supply	*5V self-power from computer*
Microscope Adapter	*4 different Sizes included*
USB standard	*2.0*
Minimum system requirement	*P4 1 GHZ or higher, HDD 1G unused, RAM 256MB, Display Memory 32MB, Windows2000 & XP*

Report

Motic Report is an integrated word processing tool with which examinations, findings and reports can be written and printed out using the captured images.

Auto Segmentation



Auto Segmentation & Calculation provide a quick & easy tool to count & evaluate cell quantity in an image.

Amalgamation

With Amalgamation, two or more images can be combined & evaluated at the click of the mouse.

HROMalytic Chromatography Products ECHnology '08
Australian Distributors
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

M Microscope

Gemological Microscope

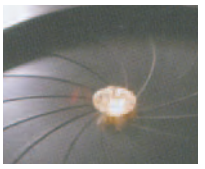
Overview:
The GM-168 utilizes the optical performance of MRC's SMZ-168 stereomicroscope to enhance distinct three-dimensional details with a zoom function.
Rugged and precise, the optics of the GM-168 performs sndenlifications, analyses, & measurements more accurately & efficient! thus reducing your workload.
At a working distance of 113mm, manipulation of the inspected gem or the addition of a further apparatus is permitted without obstruction
Available in a trinocutar version fort photographical or digital capture of the gem, the GM-168 provides you with an opportunity for extra revenue. Moreover, when teamed with MRC's MRCam 480, the GM-168 becomes your instrument of instruction for teaching and training by showcasing the gem in real time via a television, a projector, and computer simultaneously.

- *Magnification range: 0.75x-5x*
- *Zoom Ratio: 1: 6.7*
- *Observation angle: 35"*
- *Working distance: 113mm*

Eyepieces

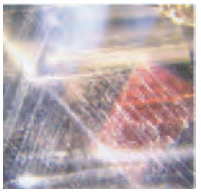
- *Magnification: lOx*
- *Field of View range: 30.7mm-4.6mm*
- *Mount Diameter: 030mm*
- *Reticules: 02Smm*

Illumination:



Bright Field Illumination
Integrating a consistent & powerful SOW Quartz Halogen Bright field illumination with a precise, adjustable aperture diaphragm [041mm - 02mm}, you are able to measure with a table gauge the proportions and pavilions of a diamond

Dark Field Illumination
Dark field is the ideal illumination for observation of inclusions. With MRC's versatile aperture diaphragm [pictured above], you can control the depth of field and contrast while using the dark field illumination for better identification.



Incident fluorescent illumination •Diamond Light
Designed for use with diamonds, the incident light can be adjusted for a thorough examination of the clarity, colour, and finishing. The bulb has a colour temperature of 6000K to reduce any yellowing effects on the gem.

Holders, Plates, & Analysers:

Rounded Edge Stone Holder ***Win Stone Holder*** ***Inclusion Pointer***

Wire Stone holder
The ideal holder for dimonds, rubies and sapphires.
Comprised of stainless steel for a long working life, the wire stone holder permits the maximum amount of observation.

Rounded Edge Stone holder
Perfect for irregular gems and jewellery.
Precisian Grafted of stainless steel to provide an adequate grip without corrupting irregular shaped gem samples.

Inclusion pointer
For rapid location of inclusions and fractures on the surface of gem.

Large gem stags piate
Magnetically attachable and covering the stage area of the GM168 base to provide a large surface far rough stones and large gems (i. e. fade) inspection in conjunction with the incident fluorescent illumination.

Dimonti Proportion Analyser Kit
Complete kit for effective 8, accurate identification 5 measurement of proportions 4 pavilions. Includes the magnetised diamond mount, diamond proportion reficule, and micrometer eyepiece (10x)

Immersion cell
Capable of rapid and easy detection of treated gems characteristics: such as clarity enhancement, HPHT annealing, irradiation, and surface colouration, the immersion cell is especially useful for rubies.

Accessories

Case
When mouving the microscope from place to place use our rigid case.
Model: SC-70: with lock & key.
Dimensions: 295x535x400mm (high)

Trolley
Our trolley Model TR-70

Stand Features & Benefits:

Rotary Base
360° rotary base allows you to showcase the gem to a customer or to confer with a colleague on proper identification.

Tilting Base
With a tilting range of 0' [upright] to 45°, the GM-168's base is accessible to users of various heights.

Focus Adjustment
Allowing for a total travel of 125mm for adaptation to different sizes of gems and stones, no sample is too small or too large.

Stage
Able to accommodate both a gem holder and inclusion pointer simultaneously in addition to different contrast methods.

HROMalytic ECHnology Chromatography Products '08
Australian Distributors
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

Discussion Microscope

DSK-700

With a dual discussion system, you are able to train, share, and consult without the need to neither change location nor transport the specimen. Therefore saving you money, time, and foot space.
It facilitate dual discussion through the use of an optical bridge from the main body, which is mounted on a specialised large working surface stand, to the observation head.
Include visual electronic pointer with joystick.
Zoom magnification 6÷31.
Option: Darkfield condenser.

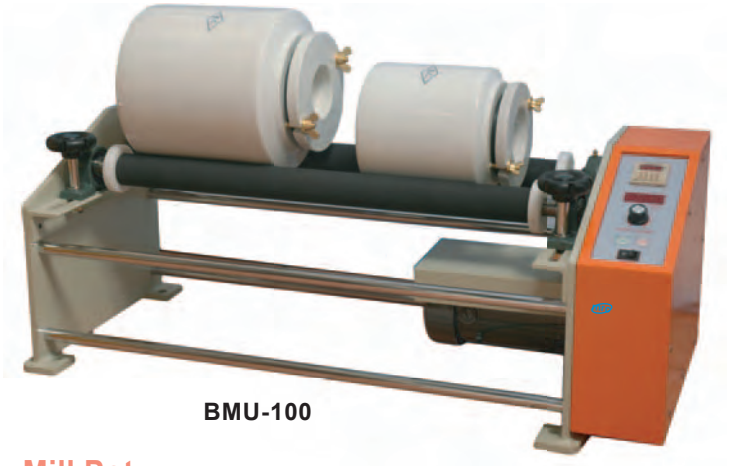
Small Ball Mill

BMT-30D

Digital speed control & timer, Suitable for different size of mill pots, 65mm~85mm diamete

Speed	O~480rpm	**Motor**	60w
Pot	6.5cm~8.5cm	**Size**	55x31x22cm
Roller	Φ 5mm	**Power**	220V/50Hz

Large Ball Mill



BMU-100

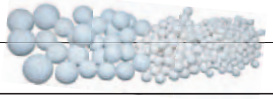
Digital speed control & timer, Suitable for different size of mill pots, 120mm~300mm diameter.
Roller's distance can be adjustable.

Speed	O~600rpm
Timer	99hours: 59min
Pot	Φ12~30cm
Motor	400w
Size	W97xD36xH41
Power	AC110/4A, AC220V/2A

Mill Pot

Model	Speed rpm	Useful Cap.	Total Cap.	Size (mm)
Mill pot 4	130	500	800	120x150
Mill pot 5	110	1,000	1,600	150x180
Mill pot 6	90	2,000	2,800	180x210
Mill pot 7	85	3,000	4,500	210x240
Mill pot 8	75	5,000	7,500	240x300
Mill pot 10	60	10,000	15,500	300x360

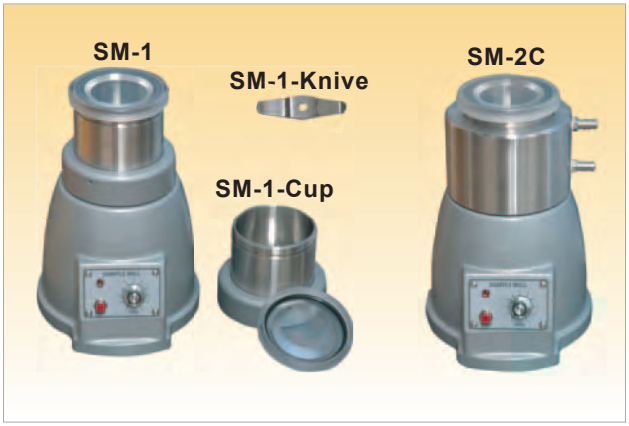
Balls For Mill Pot

	Mill Pot No.	Capacity Approx. ml.	Ball Φ			
			9mm	15mm	20mm	30mm
Recommen-dations for ball fillings	4	500	0.05kg	0.1kg	0.1kg	
	5	1,000	0.1kg	0.2kg	0.2kg	
	6	2,000	0.2kg	0.4kg	0.4kg	
	7	3,000	0.3kg	0.6kg	0.6kg	
	8	5,000	0.5kg	1.0kg	1.0kg	
	10	10,000	0.5kg	1.5kg	1.5kg	1.5kg
Number of balls per kg approx.			425 pcs.	130 pcs.	90 pcs.	16 pcs.
Bulk density of balls per litre approx.			1885g	1930g	2000g	1800g

HROMalytic Chromatography Products
Australian Distributors ECHnology '08
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

M Mills

Sample mill



This high power model is for laboratory use. Its speed is over 18,000rpm and the cutter blade is easy to clean. It can reduce grinding time. In general, sample can be grounded in less than 30 seconds. Samples cup is made of stainless steel, SUS#304. Use for crumbing iron alumina, bone, drugs, and seeds except anything wet & greasy. Optional cup with cooling jacket is available as shown in picture (SM-2C)

Model	SM-1	SM-2C
Speed	0-18,000	0-18,000
Power	AC 110V 220W 4A	AC 110V 220W 4A
Cup dimension	90diam.x65H(mm)400cc	90diam.x65H(mm)400cc
Overall dimension	220diam.x300H(mm)	220diam.x300H(mm)
Net weight	8kg	10kg

Tablet grinder

Made of cast steel and aluminum ● Separated Grind container ● Powerful disintegration device ● Grinding time: 1~60sec ● Power cut off automatically.

Model	F-306
Speed	2,000~10,000rpp
Timer	1~60 seconds
Power	AC110/220V-50/60Hz
Dimension	22x16x26cm
Net weight	4.7kg

Cutting Mill For Very Hard Materials

Spesifications:

Model	D3V-10
Speed (rpm)	28,000
Max. capacity (kg)	0.375kg (8oz)
Size (mm)	Ø270x300
Motor	2HP
Power	110/220V, 50/60Hz
Net weight (kg)	10

Leading-Coming- Air Grinder

- *Size of particles: above 150 mesh*
- *Ordinary medicine: 0.6kg per 10 minutes*
- *Adhesive substances: 0.6kg per 15-20 minutes*

Application:

Mineral substances, fiber, and adhesive substances. This machine has cooling wind device and continuous operation ability.

Spesifications:

Model	FDV
Speed	30,000rpm
Weight	14kg
Size	W32xD30xH53cm
Power	AC110V/220V, 50/60Hz, 2Hp

HROMalytic Chromatography Products
ECHnology '08
Australian Distributors
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

Models: DC-2E/3E/4E, Stirrer 45watt

Accessories:
- Stirring shaft: φ8x500mm
- Propeller: No. 8φ50mm

Options:
- "A"type stand Base: W400xD315xH54mm, 8kg
- Holder

DC-2E

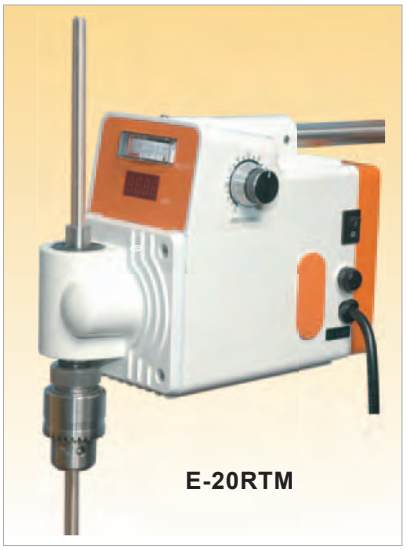
Feature

Outline paint is in medicine -resisting coating, stainless steel chuck and axis make no pollution ● The stirring shaft can be adjusted up and down freely ● The chuck can fix any stirring shaft which the daimeter is less than 10mm ● The thermal breaker is built in the motor to protect it from overheat ● The fuse cut off automatically while the max. torque is owerload ● Change in speed step-less ● RM model is equipped with a tachometer ● RTM model is equipped with a tachometer and torque meter

Specifications

Model	DC-2E	DC-3E	DC-4E
Motor	DC 45W		
Speed (rpm)	200~1,200	100~600	50~300
Torque (kg-cm)	2.5	5	10
Viscosity (1000cps/L)	20	50	100
Body Size (mm)	W130 x D180 x H170		
Body Net Weight (kg)	4.3		
Power	AC 110/220V, 50/60Hz, Single Phase		

Models: E-20/30/40RTM, Digital Stirrer 45watt


E-20RTM

Feature

Digital Speed Meter display ● Torque Meter in Needle type ● All in one construction with outer case; low noise when turning ● Torque increase automatically in high viscosity, with a stable speed ● The fuse cut-off automatically in overheat ● High quality stainless steel chuck ● The stirring shaft can be adjusted up and down freely

Accessories:
- Stirring shaft: φ8x500mm
- Propeller: No. 8φ50mm

Options:
- "A"type stand Base: W400xD315xH54mm, 8kg
- Holder

Specifications

Model	E-20 RTM	E-30 RTM	E-40 RTM
Motor	DC 45W		
Speed (rpm)	200~1,200	100~600	50~300
Torque (kg-cm)	2.5	5	10
Viscosity (1000cps/L)	20	50	100
Body Size (mm)	W97 x D210 x H161		
Body Net Weight (kg)	4.6		
Power	AC 110/220V, 50/60Hz, Single Phase		

Models: DC-300/600/1200E, High Torque Stirrer 200watt

DC-300E

Feature

Suitable for materials with high viscosity in large volume ● Medicine-resisting coating as well as stainless steel holder & axis make no pollution ● Small motor with high torque provides quiet & non-vibration ● The stirring shaft can be adjusted up & down freely ● The holder can fix any stirring shaft which the diameter is less than 10mm ● Change in speed step-less, auto-accelerating & auto current restraining function ● Safety device: overheat & current overload are limited automatically ● RM type equipped with a needle tachometer ● RTM type equipped with a needle tachometer & torque meter

Accessories:
- Stirring shaft: φ8x500mm
- Propeller: No. 8φ50mm

Options:
- "A"type stand Base: W400xD315xH54mm, 8kg
- Holder

Specifications

Model	DC-1200E	DC-600E	DC-300E
Motor	DC 200W		
Speed (rpm)	200~1,200	100~600	50~300
Torque (kg-cm)	15	30	60
Body Size (mm)	W125 x D250 x H250		
Body Net Weight (kg)	6.3		
Power	AC 110/220V, 50/60Hz		

HROMalytic Chromatography Products
Australian Distributors ECHnology '08
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

M Mixers

Models: CP-1/2/3/4, Microprocessor Controlled DC-Stirrer, 60 watt

CP-1 CP-2/3/4

High torque small motor, quiet & vibration free turning • Shaft and chuck in stainless steel • LED rpm display, touch senstive contrail pad. stepless speed setting. Compensation for constant speed • Microprocessor based controller • LED time (0-99 h),(59min) with alarm buzzer • CP-T series with LED tachometer & torque meter.

Model	CP-1	CP-2	CP-3	CP-4
Motor	DC 60W			
Speed (rpm)	200~3000	120~1200	60~600	30~300
Torque (kg-cm)	1.5	2.5	5	10
Viscosity (1000cps/L)	5	20	50	100
Time Setting	0~99 hours, 59 min.			
Body Size (mm)	W155xD120xH215	W150xD180xH178		
Body Net Weight (kg)	4	4.5		
Power	AC 110/220V ' 50/60Hz ' Single Phase			

Accessories:
- Stirring shaft : φ8x500mm
- Propeller: No. 8φ50mm

Options:
- "A"type stand Base: W400xD315xH54mm, 8kg
- Holder

Models: CH-25/40/RM/D, High Speed Stirrer, 60 watt

DC-CH DC-CHRM

High torque small motor, quiet turning • Chemical resistant, stainless steel chuck & stirring shaft • Motor over-heat protection • Fuse cut off automatically while the max. torque is overload • RM model equipped with analog tachometer • A- shape stand base included

Model	CH-25/CH-25RM	CH-40/CH-40RM
Motor	DC 60W	
Speed (rpm)	0~2,500	0~4,000
Torque (kg-cm)	2	1.5
Viscosity (1000cps/L)	5	3
Body Size (mm)	165x120x215	
Body Net Weight (kg)	3.8	
Power	AC 110/220V ' 50/60Hz ' Single Phase	

Accessories:
- Stirring shaft : φ8x500mm
- Propeller: No. 8φ50mm

Options:
- "A"type stand Base: W400xD315xH54mm, 8kg
- Holder

Models: CH-4000/7000RM/9000/RM/D, High Torque Stirrer, 200watt, 350watt, 900watt

CH-7000RM CH-9000D

Speed change step less, auto-acceleration and auto current restraining function • Small motor with high torque provides quie & vibration free operation • Over heat protection • "D" model with LED rpm metter • RM type with needle tachometer

Model	CH-4000RM/D	CH-7000RM/D	CH-9000RM/D
Speed (rpm)	0~4,000	0~7,000	0~4,000
Torque (kg-cm)	7	5.4	18
DC Motor	DC-200W	DC-350W	DC-900W
Net Weight (kg)	17	18	25
Power	AC 110/220V ' 50/60Hz ' Single Phase		

Accessories:
- Stirring shaft : φ8x350mm
- Propeller: No.11φ50mm,φ80mm

Options:
- "A"type stand Base: W400xD315xH54mm, 8kg
- Holder

HROMalytic ECHnology Chromatography Products '08
Australian Distributors
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

Bench Type Large Capacity Stirrer, 220watt/350watt

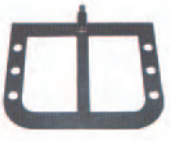
- *Suitable for the stirrer of medicines, dye, weave, adhesive, cosmetic, spice, paint, fiber, and general chemical drugs, as well as other using of stirrer, emulsification, homogenizing, & dispersing for relevant chemical materials.*
- *Outline paint is in medicine-resisting coating and make no pollution.*
- *Change in speed step-less and stable speed.*
- *Small motor with high torque provides quiet & non-vibration.*
- *Overheat and fuse safety device.*
- *Spring hoister device, easy operation.*
- *Auto spring hoister device can be chosen.*
- *HM type impeller can be replaced.*

HD-400

HM-400

Model	HD-300	HM-300	HD-400	HM-400
Speed (rpm)	0~12,000	0~12,000	0~7,000	0~7,000
Max. torque (kg-cm)	-	-	5.4	5.4
Motor	DC 220W	DC 220W	DC 350W	DC 350W
Stand base size (WxDxH)mm	370x270x500	370x270x500	399x376x840	399x376x840
Net Weight (kg)	10	10	17	17
Power		AC110/220V, 50/60Hz Sinhle Phase	AC110/220V, 50/60Hz	AC110/220V, 50/60Hz

Proppelors

No.1	No.2	No.3	No.4	No.5
Ø 4.5,5,6.5,7.5,8.5,9.5cm	Ø 5cm	Ø 5cm	Ø 5cm	Ø 5cm
No.6	**No.7**	**No.8**	**No.9**	**No.10**
Ø 3, 7, 10cm	Ø 5cm	Ø 5cm	Ø 5, 9cm	Ø 1.5, 2.5, 4cm
No.11	**No.12**	**No.13**	**No.14**	**No.15**
Ø 5, 6, 8, 10, 12, 14cm	Ø 10cm	Ø 5cm	Ø 5, 7, 10cm	Ø 8, 10, 12cm
No.16	**No.17**	**No.18**	**No.19**	**No.20**
Ø 8, 10, 12, 16, 20cm	Ø 5cm	Ø 5, 7, 7.5, 8, 11cm	Ø 9.5cm	Ø 7cm
No.21	**No.22**	**No.23**	**No.24**	**No.25**
Ø 3cm	Ø 2.5, 4cm	Ø 14cm	 Ø 10cm	Ø 4cm

HROMalytic Chromatography Products ECHnology '08
Australian Distributors
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

O Ovens

Model: DSO/DSI Serie, Economy Small Ovens/Incubators

DSI-300D Incubator

DSO-300D Oven

Model		DSI-300D DSO-300D	DSI-500D DSO-500D
Convection		D-Natural convection	
Temp. Range	Incubator Oven	Ambient ±5°C-70°C Ambient ±5°C-200°C	
Capacity		30 Litre	50Litre
Inside dimensions		W323xD310xH315	W380xD365xH390
Outside dimensions		W425xD420xH610	W480xD475xH695
Power	Incubator Oven	300watt 700watt	500watt 1000watt

PID temperature control provides automatic compensation after load changes, setting changes or door opening for excellent accuracy.

- *Natural convection heat distribution combines with adjustable air vents to provide excellent uniformity.*
- *Double wall construction, fiberglass insulation, and sillicon rubber door sealing reduce heat loss and power drain.*
- *Stainless steel interior chamber and shelves are corrosion resistant, durable and easy to clean.*
- *Power coating exterior is beautiful, durable, & corrosion resistant.*

Features:

- *Simple keypad input allows easy temperature setting.*
- *Led digital display enables users to monitor the chamber temperature at any given time.*
- *Visual alarm indicator alerts users of abnormal conditions if the chamber temperature exceeds the setting point by 10°C*

Ovens

- *The temperature can be controlled & maintained to 200°C*
- *Ovens feature a see-through window to view contents without opening. Window Dimensions: 220x150mm*
- *Adjustable shelves are included*
- *The temperature stability is ±0.5°C at 100°C: ±1.0°C at 200°C*

Incubator

- *The temperature can be controlled & maintained to 70°C*
- *Double doors allow samples viewing from the inner door*
- *Adjustable shelves are included*
- *The temperature stability is ±0.3°C at 37°C: ±0.4°C at 70°C*

Model: DK-500/600/800, 80 Liter, 150 liter, 240 liter ovens & Incubators

DK-600WT

DK-800WT

This modern range of ovens/ incubators is available in 3 sizes and 12 models. DP/DK series offers excellent uniformity and stability & are used for many applications as Glasswear drying, warming, sterillising, ageing , curing, softening, annealing, preheating and testing , incubation of culture test, drying slieds, microbiological incubation, bacteriological test and more.
The inner case is constructed from polished stainless steel.
All units are provided with wire plated shelves with multi-position settings. All models are with fan assisted air circulation, the chamber ventilation and exhaust vent are easily adjustable. Wide choice of control options is available, PID controler is fitted as standard with dual display of measured value and setpoint.

Options:
Internal glass door for incubator • 38 mm cable port • Gas inlet • 5 programs of 8 segments model: 3216CP • 4 programs of 16 segments model: 2416P4 • RS-232 / 485 comunication model: 3216E Circular 6" chart recorder model: CR87B

MODEL Ovens / Incubators	DK-500 DP-500	DK-500-W DP-500-W	DK-600 DP-600	DK-600-W DP-600-W	DK-800 DP-800	DK-800-W DP-800-W
Temp. range	DK-Room temperature-250°c/DP-Room temperature-100°C					
Temp. constancy	±0.1°C					
Temp. uniformity	±1°C at 100°C					
Temp. control	PID					
Temp. sensor	Thermo couple K					
Heater: Oven Incubator	1500W 400W		1800W 600W		2200W 800W	
Inside material	SUS-304					
Timer	99hr 59min					
Window	W200xH300				W200xH500	
Safety devices	Short circuit dreaker, over heat protector, sensor abnormality					
Inside dimensions(mm)	W500xD400xH400		W600xD500xH500		W600xD500xH800	
Outside dimensions(mm)	W620xD520xH620		W720xD620xH720		W720xD620xH1020	
Volume	80L		150L		240L	
Shelf	2		2		3	
Weight	47Kg		60Kg		76Kg	

HROMalytic Chromatography Products
Australian Distributors ECHnology '08
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

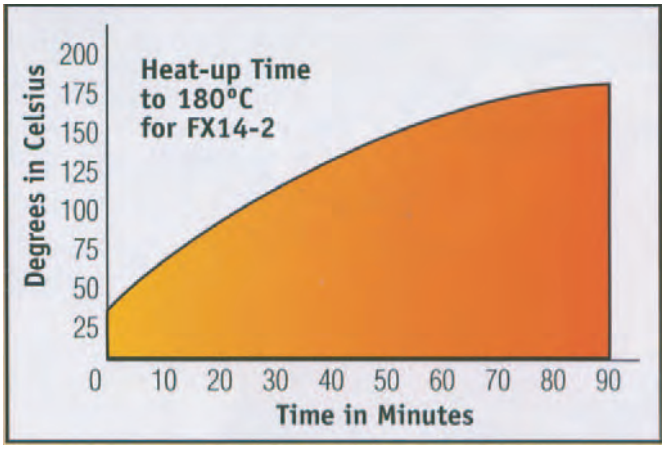
Model: FX14-2/FX28-2, 385 Liter, 793 Liter, Large Ovens

Large Capacity Chambers. *The FX14-2 features 385 liter of general purpose space. The FX28-2 at 793 liter is the large general purpose oven. These large capacity units are perfect for high volume sample processing and drying applications including production processes.*

Precise Temperature Control: Technology. *The independent overtemperature protection (DTP) control is user adjustable and provides added security against temperature overshoot. Other important standard features include a precision microprocessor controller, 99 hr./59 min. electronic timer and true forced air horizontal airflow.*

Precise Temperature Control: Construction. *We specify 90mm of insulation, wrapped in two layers. This seamless construction ensures that the insulation does not settle as a result of extended heat exposure. A chamber door gasket eliminates heated air leakage. The door hinges are user adjustable to maintain a positive seal over the life of the oven.*

True Horizontal Airflow. *The blower-assisted airflow design facilitates temperature uniformity and fast recovery. A turbo blower and heavy-duty motor combine to direct heated air over the shelves and samples for even, constant drying, curing and baking.*



Features/Benefits:

- Large capacity is efficient and accommodating
- True horizontal airflow provides excellent uniformity and faster heat-up
- Microprocessor control for precise temperature control
- Independent Safety Controller
- 99 hr/59 min Electronic Timer automatically turns off at selected time
- Adjustable exhaust port controls the rate of drying

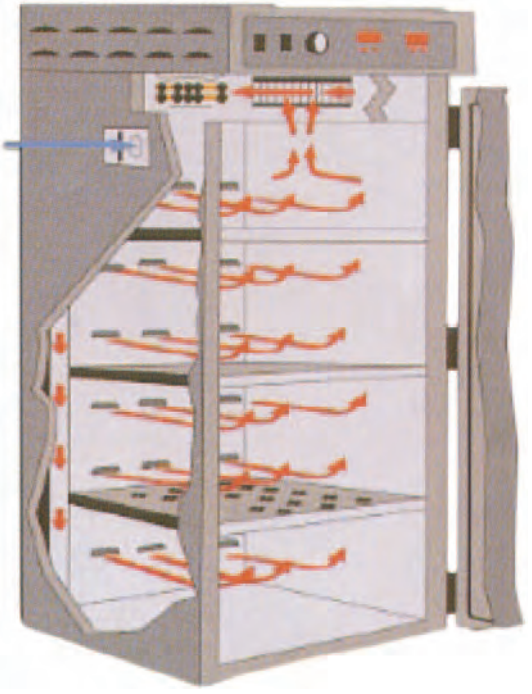
Applications:

- Batch Testing
- Sterilizing
- Electronic Burn-in
- Aging Tests
- Glassware Drying
- Stability Testing

Specifications:

General Purpose Model	FX14-2*	FX28-2*
System Type	Mechanical Convection	Mechanical Convection
Controls/Display	Single Setpoint mProc.	Single Setpoint mProc.
Chamber Capacity (Liters)	385 lit.	793 lit.
Temperature Range	Amb. +5 to 200°C	Amb. +5 to 200°C
Temperature Uniformity	±3°C at 110°C	±3°C at 110°C
High Limit Control	Yes	Yes
External Dimensions in cm (wdh)	94 x 86.4 x 119.4	94 x 86.4 x 200
Internal Dimensions in cm (wdh)	78.74 x 63.5 x 78.74	78.74 x 63.5 x 157
Shelves Supplied	3 Shelves	6 Shelves
Maximum Shelves	8 Shelves	16 Shelves
Shipping Weight in kilograms	154	204
Element Wattage	2000	4000
Electrical Requirements Max. Amp draw at 220Vac Power Frequency/Phase	 10 50-60 Hz/Single Phase	 19 50-60 Hz/Single Phase

*-2 denotes 220V



FX28-2 AirFlow Diagram

HROMalytic Chromatography Products ECHnology '08
Australian Distributors
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

Models: 1410 & 1430, Small Vacuum Ovens

Vacuum ovens are used for a wide variety of vacuum drying, curing and moisture content testing. Common applications include drying heat sensitive samples, moisture determination, and drying heat sensitive samples under a controlled atmosphere. MRC vacuum ovens are specifically designed for unparalleled performance when utilized for these, and other, applications.

Since there is no air in the vacuum chamber, heat is transferred from the heating elements to the interrior chamber wall, then to the shelves, and finally to the samples. MRC Vacuum ovens maximize conductive heat techniques. To minimaze conductivity resistance, ALUMINIUM shelves are provided with all MRC vacuum ovens. The oven chambers are wrapped in high temperature insulation which aids overall performance and promotes energy efficiency.

MRC offers both standard ANALOG vacuum ovens with mechanical thermostat and MICROPROCESSOR CONTROLLED models. Both ranges include unique design features which enhance the overall performance of the ovens. These features include durable construction with corrosion resistance stainless steel chambers, true vacuum valves, cross-flow ventilation through the oven chamber, and interchangeable door gasket for application specific use. Independent, resettable circuit breakers prevent any electrical overload.

MODEL	1410	1430
Control	Analog	Analog
Chamber capacity	16 Litres	47 Litres
Temperature range	35-245˚C	35-225˚C
Temperature uniformity	+/-3.5@100˚C	+/-3.5@100˚C
Heat up time, minutes	30@100˚C	30@100˚C
Shelves supplied	2	2
Ext. dims., HDW mm	457x444x508	495x635x571
Int. dims., HDW mm	229x305x229	305x508x305
Watts / Amps-115 Volt	550/4.6	1200 / 9.2
Watts / Amps-230 Volt	550/2.4	1200 / 5.2
Cycle	50/60 Hz	50/60Hz
Phase	Single	Single

- *CE limited up to 80ºC*

Analog Models For Accuracy and Economy

The Models 1410 and 1430 feature hydraulic thermostats and corrosion resistant stainless steel interior. A 13mm thick tempered glass observation window resists breakage under vacuum and permits easy viewing of the chamber interior. Glass viewing windows are "spring mounted" which allows the door to close squarely, thus ensuring a tight seal around the oven door. Furthermore, the door gasket has a beaded edge which also ensures vacuum integrity.

Door gaskets are designed to be easily removable and interchangeable. The standard gasket supplied with all models is made of highly resisstant SILICONE rubber. Also available as optional accessories are application specific gaskets. The BUNA-N gasket is available for solvent applications and is limited to a maximum temperature of 125˚C. The FLOUROSILICON gasket is available for applications involving acids and is limited to a maximum temperature of 200˚C.

1410 ANALOG OVEN

Digital Models For Top Performance and Accuracy.

The Models 1410DIG and 1430DIG feature PID (Proportional Integral Differential) controllers.

This controller delivers precise temperature stability and repeatability. Dual digital display of setpoint and actual chamber temperature.

1410DIG, DIGITAL OVEN

Options:

- *Temperature Programer 4 programs of 16 segments. Model: Eurotherm 2416P4*
- *RS-232/485 comunication. Model: Eurotherm 3216E.*
- *Oil vacuum pump Moldel: ST-92*

HROMalytic Chromatography Products '08
Australian Distributors ECHnology
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

Model: 1400 Serie, Small & Medium Vacuum Ovens

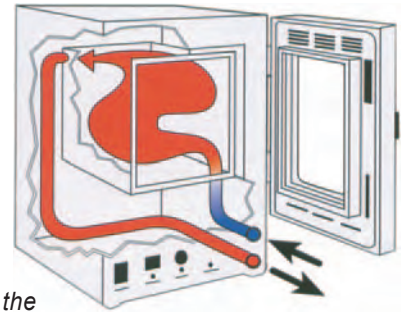
Vacuum ovens are used for a variety of applications such as drying, curing and moisture content testing.
Cool Outer Surface. *Our double plenum design exceeds CE safety requirements.*
Introduced Gas Saturates Chamber Uniformly. *Our unique cross-flow ventilation forces inert gas to fill the entire chamber.*
Maintains Precise Temperature. *Our PID controller, combined with appropriately sized heating elements, maintains precise temperature stability with no overshoot.*
Won't Overheat. *Our independent overtemperature protection (OTP) control maintains chamber temperature in the event of a main control malfunction.*
All of our vacuum ovens are built with a stainless steel chamber for exceptional durability. We use true brass vacuum valves built with 3/8" orifices to withstand heavy use and minimize downtime. The doors have positive latch handles with spring loaded glass to facilitate optimal vacuum seal without leaks. A selection of gaskets (for specific applications) and a small footprint increase the versatility of our ovens.

1445

Features/Benefits:
- Cross-flow ventilation for extended applications
- True solid brass valves with Teflon seats to prevent leaks & extend longevity
- Stainless steel chambers provide durable construction & corrosion resistance
- Double plenum design allows for cool outer surface
- Easily interchangeable door gaskets
- Microprocessor controlled for precise temperature stability
- Selection of gaskets available for special applications

Applications:
- Vacuum Drying & Curing
- Moisture Determination
- Out-gassing Solids & Liquids
- Aging Tests
- Electronic Process Control
- Vacuum Embedding
- Vacuum Storage
- Plating

Cross-Flow Ventilation featured in all Vacuum Ovens



All MRC vacuum ovens feature a unique cross-flow ventilation design to ensure superior performance. The vacuum port is located inside the chamber on the top, left side, while the vent port is located on the bottom right side of the chamber. During vacuum operation, heavy particles and condensation from the oven interior are not pulled into the vacuum pump. More importantly, nitrogen or other inert gas is forced across the greatest distance inside the oven chamber, passing over your samples and purging the chamber. Corrosion-resistant stainless steel tubing is used for the gas purge piping system.

Specifications:

Vacuum Ovens Model	1425, 1425-2*	1445, 1445-2*	1465, 1465-2*
System Type	Vacuum Oven	Vacuum Oven	Vacuum Oven
Controls/Display	Digital mProc.	Digital mProc.	Digital mProc.
Chamber Capacity Liters	16 lit.	47 lit.	127.5 lit.
Temperature Range	Amb. +15 to 240°C	Amb. +15 to 240°C	Amb. +15 to 240°C
Temperature Uniformity	±3.5% of Setpoint	±3.5% of Setpoint	±3.5% of Setpoint
High Limit Control	Yes-Independent	Yes-Independent	Yes-Independent
External Dimensions in cm (wdh)	58.4 x 48.3 x 43.2	66 x 68.6 x 50.8	81.3 x 78.7 x 66
Internal Dimensions in cm (wdh)	23 x 30.5 x 23	30.5 x 50.8 x 30.5	45.7 x 61 x 45.7
Vacuum Gauge	Analog	Analog	Analog
Standard Gasket Material	Silicon	Silicon	Silicon
Shelves Supplied	3 Shelves - Aluminum	3 Shelves - Aluminum	3 Shelves - Aluminum
Maximum Shelves	3 Shelves	3 Shelves	3 Shelves
Shipping Weight in kilograms	65.8 kgs.	113.4 kgs.	204 kgs.
Certifications	UL, CE	UL, CE	UL, CE
Electrical Requirements			
Max. Watts at 120Vac	750	1150	1500
Max. Watts at 220Vac	750	1150	1500
Max. Amp draw at 120Vac	7.0	10.0	13
Max. Amp draw at 220Vac	3.5	5.25	7
Power Frequency/Phase	50-60 Hz/Single Phase	50-60 Hz/Single Phase	50-60 Hz/Single Phase

*-2 denotes 220V

HROMalytic ECHnology Chromatography Products '08
Australian Distributors
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

Large Vacuum Ovens, 255 Liter, Max. 220°C

Unique Design. *The Model 1495D is a general purpose vacuum oven specially designed for professional and industrial use. The combination of the oven and a ruggedly constructed mobile stand creates an ideal vacuum application station. The stand is designed for mounting a vacuum pump at the base. All vacuum plumbing and KF25 connections are provided (vacuum pump not included).*

Precision Controllers. *The Watlow 981 temperature controller, programmable and microprocessor based, offers multiple ramp and soak capabilities, including storing and running up to 24 temperature profiles. A secondary independent high limit temperature controller provides overtemperature protection (DTP). The 1495D is one of the largest capacity vacuum ovens commercially available. Controls are easily adjustable and feature a user-friendly interface. A digital vacuum gauge shows chamber vacuum level in measurements of Torr and m/Torr.*

Rugged Construction. *High grade stainless steel construction is used for the exterior and chamber interior. Vacuum valves incorporate 3/8" brass orifices to withstand heavy use.*

Introduced Gas Saturates Chamber Uniformly. *Our unique cross-flow ventilation design forces nitrogen or other inert gases to fill the entire chamber. Gas is forced across the greatest distance of the chamber, purging the chamber as it passes over the samples. Corrosion-resistant stainless steel tubing is used for the gas purge piping system. Use this feature to reduce effects of oxidation.*

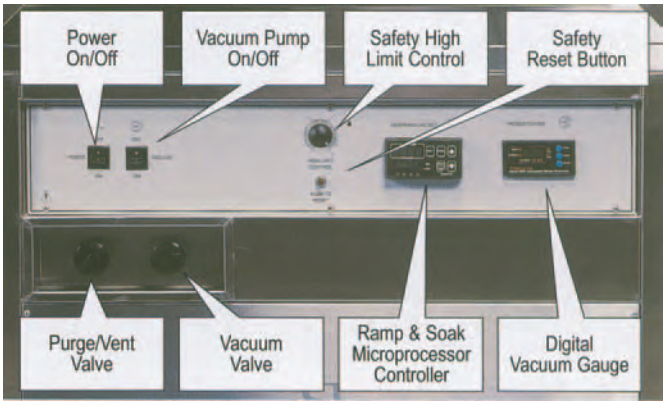
1495D

Aplications:

- Vacuum drying and curing
- Moisture determination
- Out-gassing solids and liquids
- Aging tests
- Electronic process control
- Vacuum embedding
- Vacuum storage
- Plating

Features/Benefits:

- Large capacity is efficient and accommodating
- All stainless steel construction
- Programmable Controller
- Digital Vacuum Gauge for accuracy
- Cross-flow ventilation allows for a dry oxygen free environment.
- System ready to receive vacuum pump



Specifications:

System Type	Vacuum Oven Station
Controls/Display	Digital mProc.
Chamber Capacity Liters	255 lit.
Temperature Range	Amb. +15 to 220°C
Temperature Uniformity	± 3.5% of Setpoint
High Limit Control	Yes-Independent
External Dimensions in cm (wdh)	92 x 114.3 x 157.5
Internal Dimensions in cm (wdh)	71 x 61 x 61
Vacuum Gauge	Digital-m/Torr Scale
Standard Gasket Material	Viton
Shelves Supplied	3 Aluminum
Maximum Shelves	7 Shelves
Shipping Weight in kilograms	445 kgs.
Element Wattage	3500
Electrical Requirements Max. Amp draw at 220Vac Power Frequency/Phase	 16 50-60 Hz/Single Phase

*-2 denotes 220V

HROMalytic ECHnology Australian Distributors Chromatography Products '08
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

BT-Series

BT01-BT03

BT04-BT06

Model	Head	Max. Head	Flow (ml/min)	Size (mm)	Weight (kg)
BT01	YZ1515	1	0.002-600	270x144x184	3.9
	YZ2515	1	0.07-400	270x144x184	3.9
	DG-1	1	0.005-60	270x144x184	3.9
	DG-2	2	0.005-60	270x144x184	3.9
BT02	YZ1515	1	0.007-1450	320x144x184	4.5
	YZ2515	1	0.2-1200	320x144x184	4.5
	DG-4	4	0.005-60	320x144x184	4.5
BT03	YZ1515	2	0.112-2736	340x144x184	6.0
	YZ2515	2	2.72-1988	340x144x184	6.0
	DG-8	8	0.005-60	340x144x184	6.0
BT04	YZ1515	1	0.002-600	270x144x184	3.9
	YZ2515	1	0.07-400	270x144x184	3.9
	DG-1	1	0.005-60	270x144x184	3.9
	DG-2	2	0.005-60	270x144x184	3.9
BT05	YZ1515	1	0.007-1450	320x144x184	4.5
	YZ2515	1	0.2-1200	320x144x184	4.5
	DG-4	4	0.005-60	320x144x184	4.5
BT06	YZ1515	2	0.112-2736	340x144x184	6.0
	YZ2515	2	2.72-1988	340x144x184	6.0
	DG-8	8	0.005-60	340x144x184	6.0

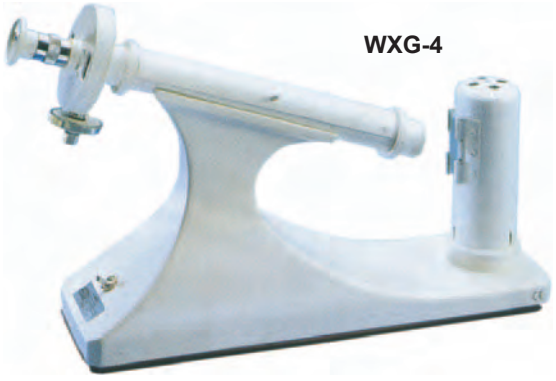
DG8 DG4 DG2 YZ1515 2 x YZ2515

O.D (mm)	3 (3#)	4 (4#)	4 (4#)	3.8 (13#)	4.6 (14#)	6.1 (16#)	7.8 (25#)	9.4 (17#)	10.9 (18#)	9.8 (15#)	11.4 (24#)
I.D (mm)	1	2	2.4	0.8	1.6	3.1	4.8	6.4	7.9	4.8	6.4
Wall Thickness (mm)	1	1	0.8	1.5	1.5	1.5	1.5	1.5	1.5	2.5	2.5
Flow (ml/min)	0.006-6	0.02-20	0.03-30	0.007-42	0.027-162	0.082-492	0.17-1020	0.29-1740	0.38-2280	0.17-1020	0.29-1740
Heads	DG-1,2,4,8			YZ1515						YZ2515	

HROMalytic Chromatography Products ECHnology '08
Australian Distributors
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

P Polarimeter

Disc Polarimeter



WXG-4

Characteristic	Visual aim, Manual Measuer, Easy Operation
Measuring Range	-180°~+180°
Minimum Value in Reading	0.05°
Accuracy	±0.05°
Sensitivity	0.05°
Quality	7.6kg
Outer Size	510x135x250mmSP

Refractometer

Refractometer

K-7135

Abbe refractometers are high precision instruments capable of reading almost the whole Brix range (0 to 95%) and the corresponding refractive index, simultaneously. It is possible to perform measurements on liquids, semi-liquids, solids and powders. Both models feature inlet/outlet ferrules for thermostatic control of the sample.

Ranges: *0-95% Brix, precision 0.2% Brix*
- *1.300-1.700 nD,precision 0.001 nD*
- *Manual temperature compensation from 0°C to 100°C*

Standard accessories: *calibrating glass prism; monobromonaphthalene standard, bottle; stabilised mains adapter; 2x lamps 6V/5W; calibrating screwdriver; dust cover.*

Digital Refractometer

Technical specifications:
Reading time: 3 seconds ● Working temperature: 0 to 40 °C ● Battery power: 9V ● Low battery indicator Automatic temperature compensation ● Auto-OFF after 2 minutes without use ● Dimensions: 185x105x50 mm ● Weight: 250 g.

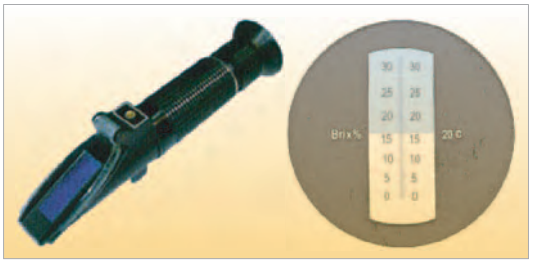
Portable digital refractometers provide convenient, rapid and precise measurement of different parameters in aqueous solutions, avoiding the subjectivity when reading analogue scales.

Digital

Model	Measurement	Applications	Range	Precision
REF-45	Brix Refr. Index	General Purpose	0-45% 1.3330-1.4098	0.1% 0.00015
REF-65	Brix Refr. Index	General Purpose	28-65% 1.3800-1.4535	0.1% 0.00015 nD
REF-92	Brix Refr. Index	General Purpose	60-92% 1.4400-1.5230	0.1% 0.00015 nD
REF-28	Precentage Refr. Index	Salinity Concentration	0-28% 1.3330-1.3903	0.1% 0.00015 nD
REF-P	Sp. Gravity, g/dl Refr. Index	Biological Fluids: urine, serum	1.000-1.050 0-12 1.3330-1.3903	0.001 0.1 0.00015
REF-W	Brix Percentage Oechsle Babo	Sugar Content in Wine/Grape musts Probable Alcohol in Wine	0-35% 0-22 Vol 0-150° 0-25°	0.1% 0.1 Vol 1° 0.1°

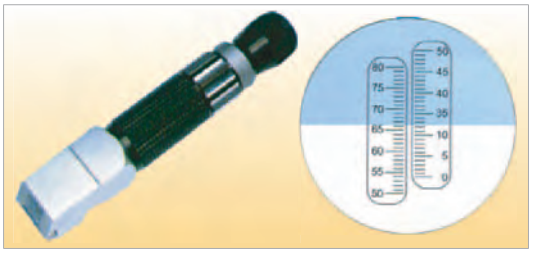
HROMalytic ECHnology Chromatography Products '08
Australian Distributors
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

Hand



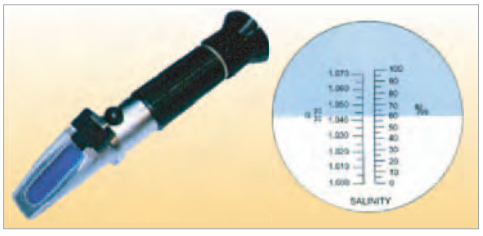
REF-113
0-32 %
Brix

The model was developed for most general purpose work.
It can measure concentration of fruit juice, puree, coffee drinks, cocoa drinks, soft drinks, tomato juice, water-soluble cutting oil, water- soluble washing solution, etc.
Scale range: 0-32% Brix, Minimum scale: 0.2%, Accuracy: ±0.2%
Model REF113 has a built-in automatic temperature compensation system.
Compensation temperature range 10°C-30°C.

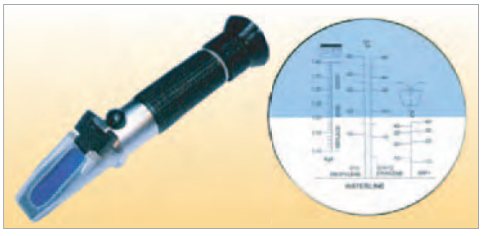


REF108
0-80%
Brix

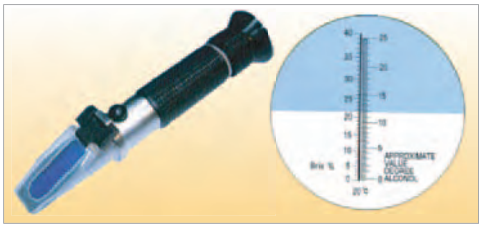
The model has two scales: Scale one is 0-50%, scale two is 50-80%.
Scale range : 0 to 80% Brix, Minimum scale: 1 %, Accuracy: ±1%



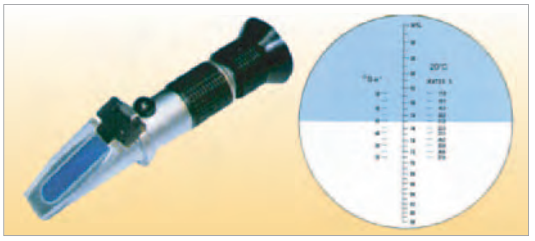
REF211
0-0-100%
0 Salinity
It can be used to measure the low Concentration of salt in sea water & prepared food solution & check salt content. Scale range : 0 to 100%0, Minimum scale : 0.1 %0 Accuracy : ±0.1%o. Model REF211 has a built-in automatic temperature compensation system. Compensation temperature range 10°C-30°C



REF414 Battery/
Coolants/Cleaner
This model can be used for measuring the freezing point of either ethylene glycol or propylene glycol based cooling systems, it can be used for checking the strength of electrolyte solution batteries. Scale range : -50-0°C; coolants, -40-0°C; cleaner, 1.10-1.40Kg/L; batteries Minimum scale: 5°C, 10°C, 0.01 Kg/L

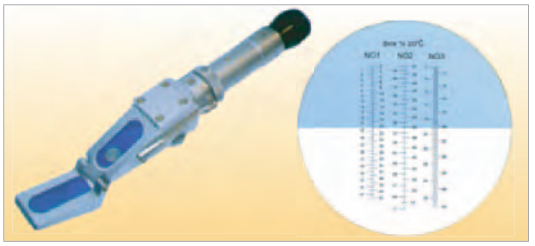


REF 513
VOL/Brix %
The model can directly read out the sugar content of the original grape juice and the alcohol degrees of the grape wine made by the original grape juice. Scale range: 0-25% vol, 0-40% Brix Minimum scale: 0.2% vol, 0.2% Brix
Model REF513 has a built-in automatic temperature compensation system. Compensation temperature range 10°C-30°C



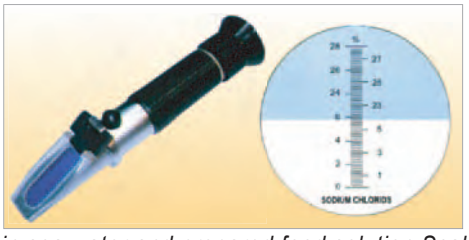
REF-116
58-90 %
Brix

The model was developed for the measuring of the three common indexes of honey. It is sugar content, baume and water content.
Scale range : 58 to 90% Brix 38 to 43° BE' 17%-27% water
Minimum scale : 0.5% Brix 0.5° Be' 1% water

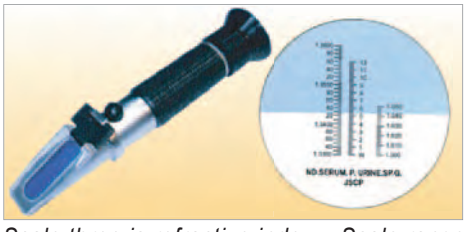


REF107
0-90%
Brix
(Nd1.333-
1.520)

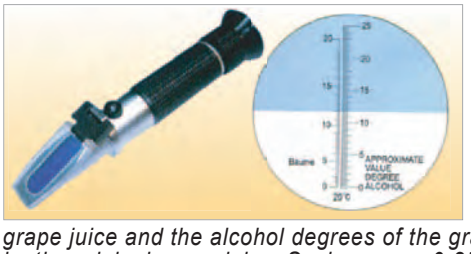
The model REF107 has three scales:
Scale one is 0-42%{1.333-1.40}, scale two is 42-71%(1.40-1.47), scale three is 71-90%(1.47-1.52).
(REF107b has 3-stage switching Nd1.333-1.520).
Scale range : 0 to 90% Brix (Nd1.333 to 1.520)
Minimum scale : 0.2% (0.001 Nd) Accuracy: ±0.2%



REF212
0 to 0-28%
Salinity
The model is basic refractometer for the measurment of salt in sea water and prepared food solution.Scale range: Oto28% Minimum scale: 0.2% Accuracy: ±0.2% Model REF212 has a built-in automatic temperature compensation system. Compensation temperature range 10°C-30°C



REF312
Protein
This model has three scales, Scale one is protein in serum, Scale two is urine specific gravity, Scale three is refractive index. Scale range : 0-12g/dl, 1.000-1.050sg 1.3330 to 1.3600RI Model REF312 has a built-in automatic temperature compensation system. Compensation temperature range 10°C-30°C.



REF514
VOL/Baume'
The model was specially designed for the measuring of Baume degrees of the original grape juice and the alcohol degrees of the grape wine made by the original grape juice. Scale range : 0-25% vol, 0-20% Baume' Minimum scale : 0.2% vol, 0.2% Baume'
Model REF514 has a built-in automatic temperature compensation system.Compensation temperature range 10°C-30°C.

HROMalytic Chromatography Products
ECHnology '08
Australian Distributors
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

S Shakers

MRC *orbital shakers are for shaking in ambient conditions on the bench or in incubator or warm room or cool room. These shakers are available in three models. Model TS-400P - flat platform shaker, moodel TS-400T universal platform shaker and model TS-400F flask clamps platform shaker.* ***Option:*** *Digital speed controller & timer*
Platform can be easily removed and replaced by opening the four screws on the center of the platform.
Model TS-400F platform can accomodate a mix of flask clamps.

Model: TS-400, 400x300, Bench Platform Shakers

UNIVERSAL PLATFORM

TS-400T
with 48x50ml tubes

FLASK CLAMP PLATFORM

TS-400F
with 12x250ml holders

DIGITAL FLAT PLATFORM

TS-400PD with digital
speed controller & timer

Model: TS-600, 600x480mm, Bench Platform Shakers

LARGE PLATFORM SHAKER
TS-600 with 80x50ml holders

A powerful, quiet, space saving, reliable, either for gentle shaking of liquids or vigorous mixing of materials. Maintenance free, the coated tray is proof against aggressive liquids. Simple operation, the control is set by means of rotary switch and the speed display is by analog tachometer. Flexible platform system. All kinds of dishes can be placed on the platforms: beakers, erlenmeyer flask, test tube racks ets.

Option: *Digital speed controller & timer*

Specifications

Model	TS-400P	TS-400F	TS-400T	TS-480	TS-600
Shaking system	Orbital				
Rate of shaking	20-250 rpm				
Shaking width	25 m				
Shaking plate	W 400 x D 300			W480xD380	W600xD480
Outside dimensions (mm)	W 400 x D 330 x H 165			W480xD380xH165	W600xD480xH210
Shaking plate	Plate	Flask rack	Test tube rack	Flask rack	
Power supply	110 / 220 V, 60 / 50 Hz (1A)				
Weight	11 Kg	12 Kg	13 Kg	18 Kg	25 Kg

Capacity for flasks

Model / Flask clamps	A-50 ml	B-125 ml	C-250 ml	D-500 ml	E-1000 ml	F-2 Litre	G-3 Litre	H-4 Litre	I-5 Litre	J-6 Litre
TS-400-Capacity	35	20	12	6	4	2	1	1	-	-
TS-480-Capacity	48	30	20	12	6	4	2	2	1	1
TS-600-Capacity	80	48	30	20	12	6	6	4	2	2

HROMalytic Chromatography Products '08
Australian Distributors ECHnology
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

MRC large capacity platform shakers are shaking in ambient condition on the bench or in incubator or warm room or cool room, these shakers are available in eight models in a range of sizes that can accomodate flasks up to 6 litres.

Models: TS-6102/TS-6105, 480x600mm platform

TS-6102

Maintenance free, the coated tray is proof against aggressive liquids

Models: TS-6202/TS-6205, 600x960mm platform

A powerful, quiet, reliable, either for gentle shaking of liquids or vigorous mixing of materials.

TS-6205

Option: *Digital speed controller & timer*

Specifications

Model	TS-610-2	TS-610-5	TS-620-2	TS-620-5
Shaking system	orbital			
Rate of shaking	20 - 400 rpm	20 - 250 rpm	20 - 400 rpm	20 - 250 rpm
Shaking width	25 mm	50 mm	25 mm	50 mm
Shaking plate	W 600 x D 480		W 960 x D 600	
Outside dimensions (mm)	W 600 x D 480 x H 210		W 960 x D 600 x H 210	
Weight	63 Kg		75 Kg	

Accessories

Model / Flask clamps	A-50 ml	B-125 ml	C-250 ml	D-500 ml	E-1000 ml	F-2000 ml	G-3 Litre	H-4 Litre	I-5 Litre	J-6 Litre
TS-610	80	48	30	20	12	6	6	4	2	2
TS-620	160	96	60	40	24	15	8	8	6	6

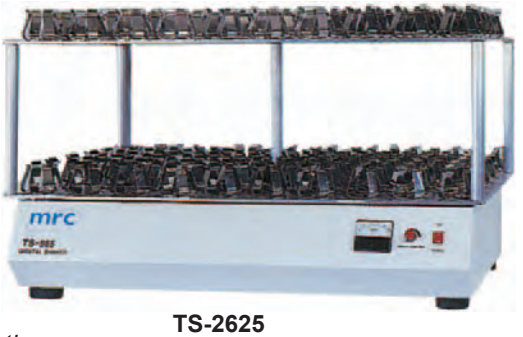
Models: TS-2612/TS-2615, 480x600mm double platforms

TS-2615

This space saving two stages shakers enable to shake two platform simultaneously. 600 x 480mm double platform.

Models: TS-2622/TS-2625, 600x960mm double platforms

Reliable, day after day operation, user friendly operation, 960x480mm double platform.



TS-2625

Option: *Digital speed controller & timer*

Specifications

Model Two Stage	TS-2612	TS-2615	TS-2622	TS-2625
Shaking system	orbital			
Rate of shaking	20 - 400 rpm	20 - 250 rpm	20 - 400 rpm	20 - 250 rpm
Shaking with	25 mm	50 mm	25 mm	50 mm
Shaking plate	W 600 x D 480 Double		W 960 x D 600 Double	
Outside dimensions (mm)	W 600 x D 480 x H 560		W 960 x D 600 x H 560	
Weight	75 Kg		95 Kg	

Capacity for flasks

Model / Flask clamps	A-50 ml	B-125 ml	C-250 ml	D-500 ml	E-1000 ml	F-2000 ml
TS-2612, 2615-Capcity	160	96	60	40	24	15
TS-2622, 2625-Capacity	320	192	120	80	48	30

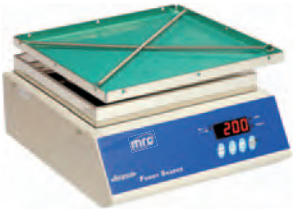
HROMalytic Chromatography Products
Australian Distributors ECHnology '08
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

S Shakers

Digital Shakers CE

The Digital Shakers are multi-functional mixing devices. Stepping Motor's device is maintenance free.
This device to be a solid, heavy-duty durable shaker to provide a uniform motion that is both mixing and vortexing in nature.
Regulated action scale for all modes. Microprocessor based keypad with digital to control and display of preset time, continuous time, action scale and RPM.
The unit provides with a 26 cm x 26 cm stainless steel platform and, it is perfect for bench-top, incubator and cold room operation.

Additional platform features include pop-on/pop-off installation, holes for securing samples and the ability to add an additional platform.



Specifications

	MS-OR - Orbital Shaker	MS-RC - Reciprocal Shaker	MS-RK - Rocking Shaker
Motion	Orbital Shaking	Linear Shaking	Linear Shaking
Orbit	20mm		
Multi-orbital	Continue or forward & reserve orbital shaking		
Forward & reserve orbital	0.1-10.0 circular; 0.1 circular increment.		
Maxi. Stroke length		20 mm	
Regulated Stroke length scale		1-10 (2.0-20 mm); 1 scale increment	
Max. title angle			12°
Regulated title angle scale			1~10 (1.2~12°); 1 scale increment
Speed range	0 ~ 200 rpm; 1 rpm increment	0-100 rpm; 1 rpm increment	0~100 rpm; 1 rpm increment
Timer	0~9999m ,ins; 1 min increment	0~9999m,ins; 1 min increment	0~9999m,ins; 1 min increment
Operation Temp. Range	4~65°C	4~65 °C	4~65 °C
Platiform size	260x260mm(WxL)	260x260mm(WxL)	260x260mm(WxL)
Carry Capicity	10kg	10kg	10kg
Dimension	260x310x130 mm(WxLxH)	260 x 310 xl30 mm (WxLxH)	260 x 310 xl30 mm (WxLxH)
Weight	8kg	8kg	8kg

2/3 D Waver Shaker CE

MW-23 (Shaker only) - MW-WB-110/220 (Water Bath only) - MW-23-WB-110 or 220 (Complete System)
The 2/3 D WATER Shaker combines shaking and rocking for maximal fluid movement. It can exactly control agitation depend on contains the microprocessor controller with timer. This unit provides with a 33 cm x 33 cm stainless steel or acrylic platform, it is perfect for benchtop, incubator and cold room operation. The platform angle is easily adjusted from 0 to 25 degree for a vigorous with action and rotational speed of platform is adjusted from 0 to 100 rpm. Lightweight for easy mobility, the 2/3 D WAVER Shaker provides quiet, reliable operation for any : research.

Feature:

- *Two Shaking Way in one — 2D* *or 3D*
- *Platform angle adjustable — From 0 to 25 degree*

MW-23+MW-WB

- *Variable speed control ~ From 0 to 100 rpm .*
- *Microprocessor controller*
- *Digital display — two of 4 digital red LED display*
- *Timer setting - 0 -999 mins with alarm*
- *Stainless steel or Acrylic platform - Open side platform to accommodate oversize containers.*
- *Easy to extension shelf*
- *Light weight for easy mobility*
- *15 kg carrying capacity*
- *Very easy maintenance - This unit do not contain belt and pulley etc.*

MW-23

HROMalytic ECHnology Chromatography Products '08
Australian Distributors
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

Models: VM-1000/2000, Vortex Mixer

Feature

Compact, robust, & durable design for efficiency ● Variable speed control ● Continuous operation or automatically press start ● Fast, thorough, & quiet vortex mixing action, but vibration free ● Using high quality motor to achieve the performance ● VM-1000 with a single cup head suitable for mixing the content of one tube; VM-2000 with a platform head suitable fo mixing the contents of several test tubes simultaneously or one flask only ● vacum rubber feet provide stable: "not walking" unit.

Specifications

Model	Max. speed (rpm)	Top head size	Weight	Size (mm) (W x D x H)
VM-1000	3,000	Rubber single cup head with ∅ 26mm	3.0kg	130x160x180
VM-2000		Rubber platform head with ∅ 100mm	4.5kg	140x180x180

Power Supply: AC110V 60Hz (220V 50/60Hz available)

Model: Genie 2, Vortex

GENIE 2

Feature

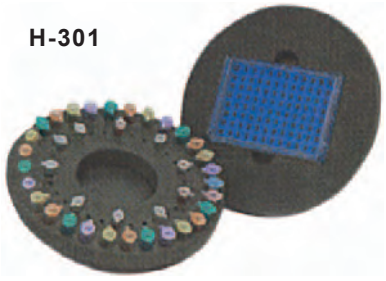
- *Shaking or Vortexing Action. Variable speed control allows slow speed shaking action up to high speed vortexing. In addition, each attachment is designed to produce different mixing actions, allowing users to choose the correct action for each application.*
- *Multi-Task Versatility. A broad range of attachments of various shapes, sizes, and materials allows for mixing of almost all common tubes or containers for Hands-Free or Touch operation.*
- *Hands-Free or Touch. A 3-position power switch operates with continuous action or "Touch On" control. With the true "Hands-Free" operation of continuous action, lab operators can greatly increase lab efficiency.*
- *Does not walk. Tough metal housing combined with "just enough weight", provides a stable platform for all types of mixing.*
- *Unmatched Reliability. Many years of proven performance in laboratories all over the world.*

Specifications

Supplied	*3 inch Platform (shown) & Pop-Off Cup*
Dimensions (base) (DxWxH)	*165x122x165mm (6.5x4.8x6.5in)*
Weight	*4Kg (8.8 lb)*

Multiple Sample Starter Set For Genie 2

H-301



The Multiple Sample Starter Set (Model H301) can be used with Vortex-Genie 2 mixer and consists of a 6-in (152mm) Platform (Part No. 146-6005-00), Microtube Foam Insert (Part No. 504-0234-00) and Microplate Foam Insert (Part No. 504-0235-00). Each insert fits snugly into the 6-in Platform attachment to accommodate either 60 microtubes or one standard footprint microplate, respectively.

Large Sample Set For Genie 2

H-302

The Large Sample Set (Model H302) can be used with Vortex-Genie 2 mixer for beakers, flasks and large tubes. It consists of a Recessed Platform (Part No. 504-0039-00), 2 Elastic Bands (Part No. 568-0001-00), and an assortment of Foam Inserts (Part Nos. 503-0278-00, 503-0279-00, 503-0280-00) for tubes of various diameters (10mm to 37.0mm). A Blank Foam Insert (Part No. 503-0277-00) is also provided for user customization.

HROMalytic Chromatography Products
Australian Distributors ECHnology '08
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

S Shakers

Rotator

Suspension mixer-SM-3000 is suitable for mix of blood and culture samples in laboratories. Variable speed can satisfy different users' requirements. Tubes can be loaded and unloaded easily. The motor can maintain stable, smooth, and quiet operation. Compact, durable, and attractive design is for efficiency.

SM-3000

Feature

Suitable for mix of blood & culture samples ● 360° rotating action Continuous or timing operation (0-30 minutes) ● Fixed mixing angle at 45° ● Easy to load & unload the tubes

Specifications

Order No.	Capacity	Speed (rpm)	Disc size (mm)	Weight (kg)	Size (mm) (W x D x H)
SM-3000-015 SM-3000-150 SM-3000-500	1.5mlx30 15mlx30 50mlx15	10~100	∅ 300	5.0	250x300x250

Power Supply: AC110V 60Hz or 220V 50/60Hz

Suspension Mixer

SM-3600-0018

Feature

Suitable for mix of blood & culture samples ● 360° rotating action ● Continuous operation ● Equipped with a tachometer to indicate speed ● Fully adjustable mixing angle from 0°~90° ● Easy to load & unload the tubes

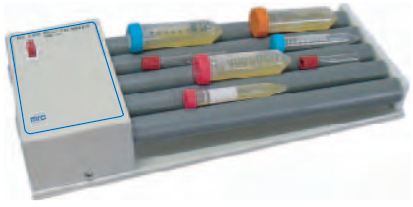
Specifications

Order No.	Capacity	Speed (rpm)	Disc size (mm)	Weight (kg) (N.W./G.W.)	Size (mm) (W x D x H)
SM-3600-0018 SM-3600-0029 SM-3600-1829	∅18mmx114 ∅ 29mmx40 ∅ 18mmx48 ∅ 29mmx20	40~240	∅ 310	12.0/13.0	310x310x460

Power Supply: AC110V 60Hz or 220V 50/60Hz ;
Option: *Speed from 10rpm to 100rpm is available upon request*
Special combinations of holes are available upon request

Roller Tubes Mixer

RM-500



Features:

Suitable for blending analysis samples such as blood samples ● Plastic roller suitable for use with a variety of tubes ● Gently rolling and tilting action ● Easily load and unload without turning off the unit ● Driving only with on/off switch and easy operation ● Designed for continuous operation and fixed speed

Specifications

Model	Speed (rpm)	Number of rollers	Roller size (mm)	Weight (kg) (N.W./G.W.)	Size (mm) (WxDxH)
RM-500	40 (fixed)	5	∅30xL320	4.0/5.0	455x180x95

Special Mixer

SM-100

Special mixer SM-100 is widely used in hematology, chemistry, research and bacteriology laboratories. Smooth, steady and quiet operation provides uniform consistently specimen quality in minutes. The platform can accommodate 16 test tubes & hold test tube firmly but gently. The rubber cushion also easily removes to be cleaned. The motor moves the platform in a positive, cyclic mix zone.

Speed	30rpm at 60Hz; 25rpm at 50Hz
Platform Dimension	W11.5 x D30.0 x H0.5 (cm)
Overall Dimension	W35 x D14 x H11 (cm)
Capacity	16 tubes
Power Supply	110V 60Hz (220V 50/60Hz available)
Gross Weight	1.6 / 2.0 Kgs

HROMalytic Chromatography Products
Australian Distributors ECHnology '08
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

Model: PS Serie, Platelet Shaker

PS-96

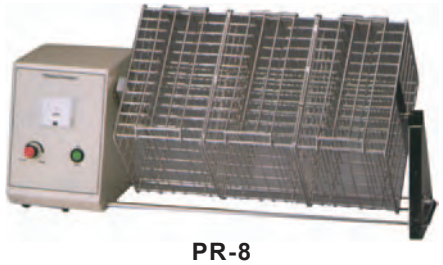
Specifications

Model	PS-48	PS-96
Capacity	42 bags	84 bags
Number of Shelve	7	
Speed	70rpm (fixed)	
Size (mm) (WxDxH)	460x350x360	840x350x360
Weight (kg)	25	37

Features:

Platelet shaker PS-48 and PS-96 are widely used in blood banks ● A stationary base drives the storage frame side-to-side 38mm ● Removable open mesh shelves provide air circulation ● A ball bearing drive motor and internal fan produce durable and reliable operation ● Stainless steel shelves can be easily cleaned ● PS-48 and PS-96 are easy to use

Model: PR Serie, Platelet Rotator



PR-8

Specifications

Model	PR-2	PR-4	PR-6	PR-8
Number of basket	1	2	3	4
Capacity	12 bags	24 bags	36 bags	48 bags
Speed	0~9rpm			
Size (mm) (WxDxH)	370x255x290	510x255x290	650x255x290	790x255x290
Weight (kg)	7.4	9.1	10.3	11.5

Features:

Platelet rotator PR-2, PR-4, PR-6, PR-8 are widely used in blood banks ● Robust, practical, and durable design for your economic choice ● The storage frame rotates 360° smoothly and steadily ● Platelet bags can be loaded easily on the stainless steel basket Attached with a tachometer, users can monitor speed easily

Cell Culture System Roller Mixer

RM-6000A-10D

Features:

● Cell culture system roller mixer is equipped with high-quality rubber rollers, which are mounted in permanently lubricated sealed ball bearings, designed for lifetime operation ● Cell culture system roller mixer allows large scale propagation of monolayer cultures in standard roller vessels ● The fully enclosed belt-drive system also assures years of trouble-free service ● Size: H182cm, W75cm, D56cm. Space between levels: 18.2cm. the levels can be changed ● Wheels (rollers) are made of rubber, with two bearing fixed at both rillers end respectively. Wheels (rollers) are not coated. Material of frame is made of aluminium, but, the bottom cabinet is made of iron ● The system would not be ignition, because, it runs under a low rpm, without brake ● It is used with synchronous belts (chains), this belts should not be ignition under a low rpm running during operation ● The system can be available for 104mm & 137mm diameter rolling bottles, 86mm diameter is too small.

Specifications

Model	Speed (rpm)	Capacity	Speed display
RM-6000A-10D	0.2~3.0	100pcsx2000ml culture vessels	Digital

Power Supply: AC110V 60Hz or 220V 50/60Hz

HROMalytic Chromatography Products ECHnology '08
Australian Distributors
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

S Shakers

Sieve Shaker

LS-200

Spesifications:

Model	LS-200
Rotation Speed	0~6,000rpm
Size of Sieve Container	φ200x60 Max. 8 pcs
Electronic Control	Step-less system
Timer	"ON" or 0~60 min.
Safety Device	Glass fuse 6 A
Power	110/220V, 50/60Hz
weight	25Kgs
Dimension	300x300x330mm

Sieve: Ø200x60mm

Spesifications:

ASTM mesh	4"	3-1/2"	3"	2-1/2"	2"	1-1/2"	1-1/4"	1"	3/4"	5/8"	1/2"
Size (mm)	101.60	88.900	76.200	63.500	50.800	38.100	31.700	25.400	19.100	15.900	12.700

ASTM mesh	3/8"	1/4"	3-1/2"	4	5	6	7	8	10	12	14
Size (mm)	9.520	6.350	5.660	4.760	4.000	3.360	2.830	2.380	2.000	1.680	1.410

ASTM mesh	16	18	20	25	30	35	40	45	50	60	70
Size (mm)	1.190	1.000	0.840	0.710	0.590	0.500	0.420	0.350	0.297	0.250	0.210

ASTM mesh	80	100	120	140	170	200	230	270	325	350	400
Size (mm)	0.177	0.149	0.125	0.105	0.088	0.074	0.062	0.053	0.044	0.040	0.037

Table Shaker - QUASAR VIBRATORE CE

QUASAR 4

A powerful, reliable, noiseless vibrator. Quasar vibrators 2, 4 & 8 guarantee a notable power changeable by means of an electronic circuit and anti-trouble filter. They are assembled in accordance with safety rules (protection fuse, schuko plug, green bright switch). They have a removable rubber surface with counter-sink edges for an easy cleaning even with steam (high thermic and mechanical resistance of the materials).
Quasar vibrators guarantee an high noiseless and steadiness by means of a perfect vertical movement, deadened by four little feet of soft mousse. Solid iron structure (2mm.) with stainless steel removable front little mask, that allows an easy maintenance if necessary.

Specifications

Model	QUASAR 2	QUASAR 4	QUASAR 8
Absorbed power	120 Watt	150 Watt	400 Watt
Current supply	230 Volt - 50 Hz	230 Volt - 50 Hz	230 Volt - 50 Hz
Fuse	1A	1.5A	2.5A
Useful work plane	13x15cm	15x23cm	34x24cm
Overall size	14.5x16.5x8.5cm	16x25x10cm	36x26x13cm
Weight	3.5kg	4.8kg	10kg

Compact Orbital Shaker

DSR-2800A

Suitable for operation on bechtop. Spacesaving design uses only a small amount of valuable bench space. Iron case vacum rubber feet provide stable: "not walking" unit. Platform with black rubber sheeting and spring holders provides a non slip surface for petri dishes, culture bottles, flasks test-tube racks, culture plates and printed well slides. Continually variable speed - adjust speed to obtain gentle agitation or vigorous orbital motion. Timer calibrated in minutes and can be set for continous operation or for timed shaking up to 30 minutes.

Specifications

Speed range	Max. load	Orbit size	Ambient conditions	Platform dimensions	Overal dimensions	Net weight	Power Supply
40-240 rpm with tachometer	500gr.	20mm	+15^{0}C up to 60^{0}C	280x280mm	W280x D280x H150mm	5,3kg	220V/50Hz or 110/60Hz

HROMalytic Chromatography Products '08
Australian Distributors ECHnology
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

UV Spectrophotometer

UV-200-RS

The UV-200-RS, MRC top-of-the-line spectrophotometers, works in both the ultraviolet and visible range (200-1000nm). Connect the fully digital UV-200-RS to your PC for easy data entry and graphing. The UV-200-RS is equipped with all the premium-grade features needed for a busy lab including RS-232 ports for computer and printer control, graphing and data-entry, as well as visible ranges and four cell holders. The UV-200-RS stands as a true eader in the industry for visible analysis. The 2 line LCD readout enables easy control at the machine without the computer control option. The UV-200-RS is the most accurate, precise, and advanced spectrophotometer and is a must-have.

Product Features

Excellent durability and reliability ● Accurate reading in both the visible and ultra-violet spectrums ● Four cell holder ● Dust cover & Power Cord

Specifications

Display	*2 line, 20 character*
Light Source	*Tungsten Halogen Lamp & Deuterium Lamp*
Wavelength Range **Wavelength Accuracy**	*200nm – 1000nm* *±2nm*
Bandwidth	*5*
Stability	*±0.002A @ 500nm*
Stray Light	*≤ 0.5%T @ 340nm, 220nm*
Photometric Range	*0-125.0%T | 0-2.0Abs. | 0-1999 C (0-1999F)*
Photometric Accuracy	*±0.008 A @ 0.5A*
Dimensions (mm) | Weight	*H180 x L460 x W355 | 5kg*
Data Output	*Analog / RS-232C*
Auto Zero	*Yes*

Visible Spectrophotometer

V-325-XS

The V-325-XS spectrophotometer from MRC offers premium-grade features and has been completely designed to compliment the modern lab. With its sleek design and accuracy, it is perfect for medical and research specialists of scientific discipline. The V-325-XS combines both quality and performance with low cost to give you the best value in professional spectrophotometry. The easy readout and variable wavelength dial combines accuracy with simplicity. The small footprint fits into any lab. The 3.5 line LCD readout enables easy control at the machine without the computer control option. The V-325-XS is the most accurate, precise, and advanced spectrophotometer and is a true leader in the industry for visible analysis. For medical and research specialists of every scientific discipline, the V-325-XS is the natural choice.

Product Features

Excellent durability and reliability ● Low stray radiant energy ● Designed for easy operation and maintenance ● Dust cover & Power Cord ● Instruction manual

Specifications

Display	*3.5 LCD*
Wavelength Range	*325nm – 1000nm*
Wavelength Accuracy	*±2nm*
Bandwidth	*6*
Stability	*±0.004A @ 500nm*
Stray Light	*≤0.5%T @ 340nm*
Photometric Range	*0-125.0%T | 0-2.0Abs*
Photometric Accuracy	*±1%T*
Dimensions (mm) I Weight	*H120 x L275 x W310 | 2.1kg*
Data Output	*Analog*

Visible Spectrophotometer

V-200RS

The V-200-RS is MRC most accurate and precise spectrophotometers. This unit operates in the visible range (320-1000nm). The V-200-RS is equipped with all the premium-grade features needed for a busy lab including RS-232 ports for computer and printer control, visible ranges, and four cell holder.

The V-200-RS stands as a true leader in the industry for visible analysis. The 2 line LCD readout enables easy control at the machine without the computer control option. The V-200-RS spectrophotometer is ideal for use in clinical, biochemical, and petrochemical laboratories, in addition to environmental protection and other various fields of quality control.

Product Features:

- *Excellent durability and reliability*
- *Accurate reading in both the visible and ultra-violet spectrums*
- *Four cell holder*
- *Dust cover & Power Cord*

Specifications

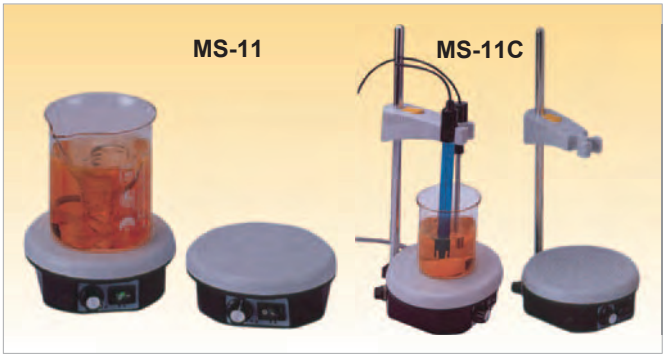
Display	*2 line, 20 character*
Light Source	*Tungsten Halogen Lamp*
Wavelength Range **Wavelength Accuracy**	*320nm – 1000nm* *±2nm*
Bandwidth	*4mm*
Stability	*±0.002A @ 500nm*
Stray Light	*0.1%T @ 340nm*
Photometric Range	*0-125.0%T, 0-2.0Abs., 0-1999 C (0-1999F)*
Photometric Accuracy	*±0.004 A @ 0.5A*
Dimensions (mm) | Weight	*H 7.2 x L18.1 x W14.0 | 12.4*
Data Output	*Analog / RS-232C*
Auto Zero	*Yes*

HROMalytic Chromatography Products
Australian Distributors ECHnology '08
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

S Stirrers

Mini Magnetic Stirrer up to 1000ml

Features:
Low cost, Lightweight and Compact.
Designed in a special round shape by ABS housings to resist most harmful chemicals.
The speed can be adjusted between 0 to 2300rpm.
Suitable for mixing thinly fluid media up to 1000ml.
The Clamp can be adjusted height easily for holding PH electrode or temperature probe (MS-11C only)
Specifications:
Speed range: 0-2300rpm (non load)
Max. stirring content: 1000ml water
Working diameter: 120mm
Power: 110 or 220 VAC
Dimensions: 135x49mm
Weight: 460g (stirrer with power cord)



Magnetic Stirrer up to 8 liter

Model F-13
- *Powerful drive magnet*
- *Strong motor-stirs up to 8 litre water*
- *Compact and light weight*
- *Variable speed control up to 1300 RPM*
- *Electronic speed control with "OFF" position*
- *Net weight :1.2 Kg*

Dimensions
- *(W x H x D) 12 x 10 x 13.5 cm*
- *(D includes 1/2" dia. support rod clamp)*
- *230 V (or 115 V), 50 Hz, 30 VA*

F-13

Bio Magnetic Stirrer

- *Cool running*
- *Electronic speed control up to 200RPM*
- *Gear motor (without belt)*
- *Powerful drive magnet*
- *Net weight :1 Kg*

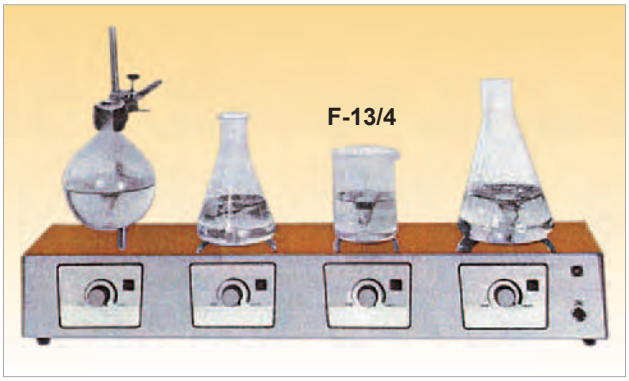
Dimensions :
(WxHxD)
12x10x13.5cm
(D includes 1/2" dia. support rod clamp)
- *230 V, 50 Hz , 2.5 VA (or 115 V, 60 Hz)*

Bio-1

Multimagnetic Stirrer

The Multimagnetic Stirrer provides 4 to 6 stirring places. Separate stirrer control knobs and pilot lamps are provided, so that each stirrer can be independentely controlled. 220 V / 50 Hz. (On request 115 V / 60 Hz).

Dimensions (cm):
***Model F-13/4**, 4 plates (W x D x H): 60 x 13 x 10*
***Model F-13/6**, 6 plates (W x D x H): 80 x 13 x 10*


F-13/4

Maxi Stirrer up to 20 liter

Super Powerful Drive Magnet
***Magnetic stirrer 175 x 175 mm** with a heavy duty brushless (non sparking) induction motor with condencer. Exclusive powerful magnet is especially designed for most efficient magnetic coupling. Stir up to 20-25 litre water.*

Stirring Assembly:
Electronic speed control provides constant torque over a speed range from 50 to 1200 RPM, regardless viscosity changes of the medium.

MS-5

***Model GMS-5:** The giant stirrer is similar to the above described Model MS-5 but with a 25 x 25 cm. top plate. The giant size top plate easily accomodates stirring loads as large as 20-25 liter water.*

HROMalytic ECHnology Chromatography Products '08
Australian Distributors
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

Hotplate Magnetic Stirrer

MH-4

Chemical Resistance Aluminum Hotplate: Heated by a 750 Watt embedded heating element. The excellent heat condition distributes the heat evenly and uniformly over the entire heating surface. Sensitive "stepless" temperature control is maintained by means of a hydraulic thermostat with minimum overshoot, making possible the processing of delicate materials at low critical temperatures. Special radiation shields keep apparatus relatively cool during continuous operation. Quiet direct drive motor/magnet system prvides speed from 100 to 1000 RPM.

Safety: *A fixed-temperature thermostat (operating at 327°C) protects against fire hazard in case of control failure.*

Dimensions: *Top Plate: 17.5x17.5cm Net. weight: 3.8kg*
Width: 20cm Height: 15cm Depth: 26cm

Can stirr loads as large as 8-10 litre of water. Supplied with a 3-wire line cord and a sturdy screw type support device at the rear base to hold standard rod. Independent controls & pilot lamps for heating and stirring.

Model MH-5 *for operation on 220 V / 50 Hz, 750 W. (On request 115 / 60 Hz). Approximate surface temperature 40-300°C. Based on the widely accepted MH-4 Hot Plate Magnetic Stirrer described above but with a heavy duty brushless (non sparking) induction motor with condenser. Exclusive powerful magnet is especially designed for most efficient magnetic coupling, for large quantities of 20-25 litre of water.*

Model MS-5 *Magnetic Stirrer as described above, but without Hotplate.*

Ceramic Hotplate Stirrer

Features

- *High impact strength*
- *Acid and alcali resistance*
- *Remains flat even at high temperatures*
- *Heats rapidly up to*

MHK-4/540

Model MHK-4/300 *- up to 300°C*

Model MHK-4/540 *- up to 540°C*

Dimensions:
Top Plate: 17.5 x 17.5 cm
(W x H xD): 20 x 12 x 23 cm (D includes rear bracket for support rod)
weight: 3.4 kg
230 V or 115 V, 1150 Watt.
Not recommended for use with sand baths or metallic vessels

- *Stepless heat control*
- *Quiet direct drive motor/magnet system provides speeds from 100 to 1000 RPM, can stirr 8-10 litre of water.*

MHK-4D*-Is similar to model MHK-4 but with digital temperature controller.*

Digital Hotplate Stirrer

Features:
Digital set-point and read-out of actual temperature.
PID microprocessor Eurotherm 2132 temperature controller provides precise temperature regulation.
Temperature may be controlled either at the plate surface by internal sensor, or at the sample by a Thermocouple Immersion probe
Safety*: in the event of broken sensor,power to the heater is shut-down. Quiet direct drive motor / magnet system provides speed from 100 too 1000 RPM, can stirr 8-10 litre of water.*
Model MH-4D
Temperature range :above ambient to 300°C
Top plate 17.5.x 17.5 cm, chemical resistant top plate
Overall dimensions :
(W x H x D)20 x 14 x 26 cm (D includes rear bracket for support rod)
Accessory :
Immersion probe made of St. St. 250 mm length, 3mm dia.
Net weight :3.4 Kgs
230V (or 115V), 50/60Hz, 750 Watt

MH-4D

Giant Hotplate Magnetic Stirrer

The Giant Hotplate Stirrer is similar to the above described Model ***MH-5*** *but with a* ***25 x 25 cm. top plate****. The giant size top plate easily accomodates stirring loads as large as 25 liter carboys. Sensitive "stepless" temperature controls is maintained by means of a hydraulic thermostat, for large quantities of 20-25 litre of water.*

Safety: *A fixed-temperature thermostat (operating at 327°C) protects against fire hazard in case of control failure.*

Model GMH-5 *for operation on 220 V / 50 Hz, 1500 W. (On request 115 V / 60 Hz). Approximate surface temperature: 40 - 300°C.*

Dimensions: *Top Plate 25 x 25cm, Height: 14.5 cm*
Net weight: 4.8 kg

Model GMS-5 *Maggnetic Stirrer as described above, but without Hotplate.*

Stirring Assembly:
Electronic speed control provides constant torque over a speed range from 50 to 1200 RPM, regardless viscosity changes of the medium. Sparkless heavy duty shaded-pole motor with overload protector.

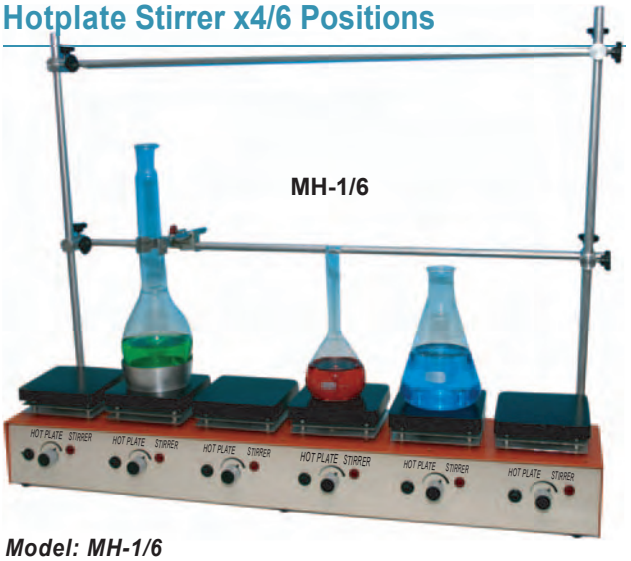
GMH-5

Model GMH-5D *Similar to model GMH-5, but with digital temperature controler.*

HROMalytic Chromatography Products
ECHnology '08
Australian Distributors
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

S Stirrers

Hotplate Stirrer x4/6 Positions



Model: MH-1/6

- *Multi position hotplate stirrer with six positions.*
- *Six individually controlled stirring and heating positions*
- *Each position can be used to stir oniy, heat only or heat and stir at the same time*
- *Ideal for a narrow bench-top or for applications needing support rack system*
- *The top plates are chemical resistant and heat quickly*
- *Stirrers are equipped with strong magnets & high torque motors*

Temperature range	*Up to 300°C*
Speed control	*Up to 1600RPM*
Dimensions	*Top plate 11.5x11.5cm* *Overall (WxHxD) 81x14.5x22cm* *(D includes support rod clamp)*
Power	*,(230V (or 115V* *50/60Hz, 3000W-6x500W*
Net weight	*12Kg*

Model: MH-1/4

Multi-position hotplate stirrer with four positions (in one row)
Same as model MH-1/6, except dimensions which are:
60.5x14.5x22cm, weight 8 kg, power 2000 watt-4x500 watt.

Options

Model: HP-1/4

Similar to the above described model:
MH-1/4 but without stirrers

Model: HP-1/6

Multi position hotplate with six positions

Hotplate Stirrer x4/6 Positions

Model: MH-1/2x2

- *Multi position hotplate stirrer with four positions (in two rows 2+2)*
- *4 individually stirring and heating positions*
- *4 chemical resistant top-plates, 11.5x11.5cm.*
- *The top plates are chemical resistant and heat quickly*
- *Stirrers are equipped with strong magnets and high torque motors*

Temperature range	*Up to 300°C*
Speed control	*Up to 1600RPM*
Dimensions	*Top plate 11.5x11.5cm* *Overall (WxHxD) 30x14.5x31cm* *(D includes support rod clamp)* *Placed in two rows 2+2*
Power	*230V (or 115V), 50/60Hz,* *2000W-4x500W*
Net weight	*8Kg*

Model: MH-1/3x2

Multi-position hotplate stirrer with six positions (in two rows 3+3)
Same as model MH-1/2x2, except dimensions which are: 45x14.5x31cm, weight 8 kg, power 2000 watt-4x500 watt.

- *6 individually stirring and heating positions*
- *6 chemical resistant top-plates, 11.5x11.5cm.*
- *The top plates are chemical resistant and heat quickly*
- *Stirrers are equipped with strong magnets & high torque motors*

Options

Model: HP-1/2x2

Similar to the above described model:
MH-1/2x2 but without stirrers

Model: HP-1/3x2

Multi position hotplate with six positions (in two rows 3+3)

Mini Hotplate Stirrer, 115x115mm

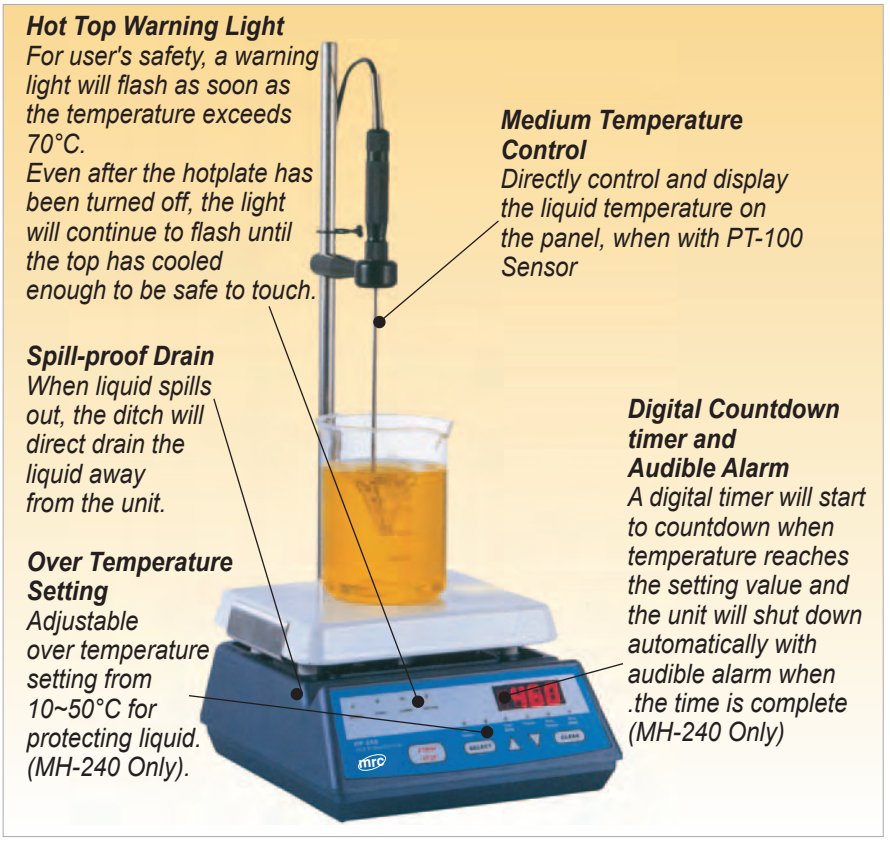
Compact and lightweight hotplate stirrer, great to use in limited space. Top plate 115x115mm. Powerful robust and reliable with chemical resistance top plate Heated by 450 Watt embedded heating element, with excellent uniformity over the entire heating surface. Sensitive "stepless" temperature control is maintained by means of a hydraulic thermostat with minimum overshoot, making possible the processing of delicate materials at low critical temperatures. Special radiations shields keep apparatus relatively cool during continous operation.

- ***Safety:*** *a fixed temperature thermostat protects against fire hazard in case of control failure.*
- ***Temperature range:*** *up to 300°C*
- ***Dimensions:*** *Top plate 115x115mm*
- ***Overal dimensions:*** *W140xH110xD220mm (D includes support rod clamp)*
- ***Power:*** *220V/50Hz, 450W*

HROMalytic ECHnology Chromatography Products '08
Australian Distributors
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

Models: MH-220, MH-240, Digital Hotplate Magnetic Stirrer CE

Digital setting and display for temperature, stirrer speed, timer and over temp. protection.
Smart microprocessor design provides consistent performance of heating & stirring.
Reliably memorizing the last setting.
User just presses strat key, the unit will run according to the last setting.
Very convenient for routine experiments.



Options

- PT-100 Sensor for medium temperature control
- Support set for PT-100 sensor (includes holder & support rod).

Features

- Enamle coated top plate, chemical resistance
- Digital set and display for temperature, stirrer speed, timer and AT. (Over temperature protection)
- Smart microprocessor design provides consistent performance of heating and stirring.
- Reliably memorizing the last setting. User just presses start key, the unit will run according to the last setting. Very convenient for routine experiments.
- Advanced safety features include:
  1. Adjustable over temperature setting from 10~50°C for protecting liquid.
  2. Safety circuit fixed at 520°C.
  3. Hot top warning light.
  4. Spill-proof design.

Model	MH-220	MH-240
Display	4 digit LED	4 digit LED
Top Plate Style	Stainless steel coated with enamel	Stainless steel coated with enamel
Top Plate size (cm)	14.5x18	14.5x18
Temperature Range -Top plate -Medium (with PT-100 sensor)	 50~500°c 40~200°c	 50~500°c 40~200°c
Medium temp. Accuracy (With PT-100 Sensor)	±2°c	±2°c
Stirrer speed (rpm)	50~1200	50~1200
Timer (min)	-	1~999 ∞
Adjustable Over temperature Protection (△T)	-	10~50°c, off
Safety Circuit Fixed temperature	520°c	520°c

Economic Ultrasonic Cleaner CE

CLEAN-01

Voltage V/Hz	Power W	Frequency kHz	Tank Size Mm(max.)	Outside Size mm	Weight Kg
220/50	300	39	240x142x149	317x218x267	6(net:4.5)

Rinse time can be set from 2 to 30 min, rinse temperature can also be set. Power is automatically cut off when is lack of water. External drainage system makes easy change of rinse liquid, low noise design makes quiet operation. Specialized basket is designed for delicate minute devices that should be free from friction and braise, for example, high-speed and low-speed handpiece turbines.
clear operation plate with digital display makes it easy to operate.

HROMalytic Chromatography Products ECHnology '08
Australian Distributors
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

U Ultrasonic

For intensive cleaning, degassing emulsifying, deflocculation homogenization, and the acceleration of chemical processes in the research, production, and maintenance sectors.

Principle

The clean function of ultrasonic wave is to use the waves over the frequency of human hearing conducting within the liquid. When ultrasonic waves, longitudinal waves, are conducting within the cleaner, which pushing function for the medium will enable the pressure within the liquid to change and produce mini vacuum bubbles referred as Cavitation.

When gas bubbles are pressed to break, they will produce so great excitation energy as to separate the dirts sticked to the dead cormer of object as well as to enhance clean effect of cleaner. With high frequency, short wave length and strong penertrating power, so that it can completely clean the article having hidden seam or complex structure.

Applications

Laboratories	Cleaning, degassing, homogenizing, emulsifying
Medicine	Cleaning surgical instruments, in the manufacture of implants and stants.
Dental	Cleaning instruments for dental treatment, cleaning dental prostheses
Optics	Cleaning spectacles, optical lenses before coating...
Jewellery and watches	Cleaning chains, rings, straps...
Chemical sector	Cleaning reactors, Acceleration of chemical reactions...
Plastics industry	Cleaning injection moulds...
Aircraft industry	Cleaning engine parts...

D-Standard Series

DG+1

D-80H

Model	DG1	D 80 / D 80 H
Internal Tank Size (LxWxH)	170 x 90 x 55 mm	150 x 135 x 100 mm
External Dimension (LxWxH)	193 x 113 x 110 mm	175 x 160 x 200 mm
Capacity Of Container	600 ml	2L
Operating Frequency	43 KHz	43 KHz
Internal Tank Stuff	SUS 304 # 0.7 t	SUS 304 # 1.0 t
External Stuff	ABS With Firepoof	FRP With Firepoof
Dust Cover Stuff	Semi Transperent Plastic	Stainless Steel SUS 304
Output Power	50 W	80 W
Timer	5 min	10 min / 30 min
Heater	Without	Without / 40 W
Net Weight	1 Kg	2 Kg
Power Source	AC 100 ~ 120 V / AC 220 V 50 /60 Hz	

DC - Power Full Serie

Model	DC80/DC80H	D150/D150H	DC150/DC150H	DC200/DC200H	DC400/DC400H
Internal Tank Size (LxWxH)	150x135x100mm	295x150x100mm	300x160x150mm	300x240x150mm	500x300x200mm
External Dimension (LxWxH)	175x160x270mm	320x175x200mm	330x205x330mm	330x285x330mm	530x345x380mm
Capacity Of Container	2 L	4.5 L	7.2 L	10.8 L	30 L
Operating Frequency	40 KHz	43 KHz	40 KHz	40 KHz	40 KHz
Internal Tank Stuff	SUS 304 # 1.0 t	Stainless Steel SUS 304 # 1.5 t			
External Stuff	Steel Plate Toast Paint				
Dust Cover Stuff	Stainless Steel SUS 304				
Output Power	80 W	150 W	150 W	200 W	400 W 600 W
Timer	30 min	99 min	99 min	99 min	99 min
Heater	Without/40 W	Without/115 W	Without/200 W	Without/200 W	Without/500 W
Net Weight	3.5 Kg	3.3 Kg	8 Kg	9.5 Kg 10.5 Kg	18.5 Kg 19.5 Kg
Power Source		AC 100 ~ 120 V / AC 220 ~ 240 V 50/60 Hz			

HROMalytic ECHnology Chromatography Products '08
Australian Distributors
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

Model: BioVac 225/240, Portable Bio-suction System

Absolutely safe - *double overflow protection to avoid medium flowing into vacuum pump*
Convenient - *aspiration adaptor set and foot switch make medium suction fast and convenient*
Low noise, No maintenance - *adopt oil-free vacuum pump, no maintenance required, low noise*

Aplications:

96, 48 or 24-well plates, with either needles or tips adapters.

Convenient & safe aspiration from all types of cell culture vessels

Dispose of waste with no pollution.

1. *Double overflow Protection*
BioSuction System includes a level float control in the suction bottle and disc filter between bottle and pump which will completely avoid medium flowing into vacuum pump

2. *Autoclavable*
Suction Bottle, tube and disc filter are autoclavable

3. *Adopt oil free vacuum pump*
No maintenance is required, low noise and durable

4. *Durable Case*
Whole A.B.S. made outer shell with light weight, shiny appearance and easy maintenance.*
**A.B.S. -Acrylonltrile Butadiene System*

5. *Facility*
Equipped with hanging case to store power cord conveniently, & additional foot switch for easy operating.

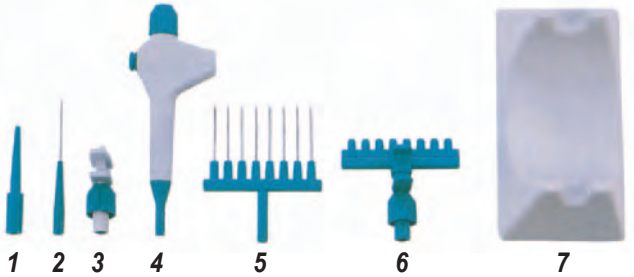
6. *CE approved*
Make sure the best quality and safety

Specification:

Model ***Pump Type***	***BioVac 225*** ***Twin Diahragm***	***BioVac 240*** ***Piston***
Motor Power	*25W*	*200W*
Max. Vacuum	*-680mmHg*	*-700mmHg*
Max. Flow	*25 l/min*	*40 l/min*
Pole	*4*	*4*
Safety	*Thermal Protector, Auto Reset*	
Foot Switch Control	*-*	*ON for sution, OFF for release*
Net/Gross Weight	*4.3/5.5Kg*	*12/16.2Kg*
Machine size (cm)	*37(L)x15(W)x25(H)*	*54(L)x26(W)x35(H)*
Dimention (cm)	*37(L)x22(W)x32(H)*	*62(L)x32(W)x44(H)*

Accessories:

Bio-Suction aspiration adapter set:
1. *Single channel plastic aspiration adapter*
2. *Single channel stainless steel aspiration adapter*
3. *Single channel plastic aspiration adapter with ejector for plastic tips*
4. *Hand operator*
5. *8 channel stainless steel aspiration adapter*
6. *8 channel plastic aspiration adapter with ejector for plastic tips*
7. *Stand for hand operator*



Suction bottles / Rack
1. *Hit resistant - adopt P.C. * material to improve anti-bump ability*
2. *Autocalvable - heating resistant up to 130°C*
3. *Safe - with float level control to prevent medium from flowing into the pump*
4. *Capacity: 1000ml, 2000ml, 3000ml * P.C.- Poly Carbonate*

0.2 µm Disc filter
1. *Made of hydrophobic PTFE which can prevents medium from flowing into the pump.*
2. *Being autoclaved (15 minutes at 121°C)*
3. *Air Flow Rate (at 10psi)*

HROMalytic Chromatography Products
Australian Distributors ECHnology '08
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

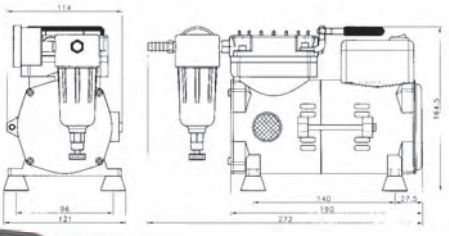
V Vacuum Pumps

Oil-free Vacuum Pump

Specification:

Power		110-120V/60Hz	220-240V/50Hz
Max. power comsuption (W)		65	60
Max. current (A)		0.7	0.3
Max. vacuum		-650mmHg=85.5kPa=110torr	
Vacuum	0mmHg	20l/min=0.71CFM	17l/min=0.6CFM
	100mmHg	17l/min=0.6CFM	14l/min=0.49CFM
	200mmHg	15l/min=0.53CFM	12l/min=0.42CFM
	300mmHg	12l/min=0.42CFM	9.5l/min=0.34CFM
	400mmHg	9.5l/min=0.34CFM	7l/min=0.25CFM
	500mmHg	6.5l/min=0.23CFM	4.5l/min=0.16CFM
	600mmHg	2l/min=0.071CFM	1.5l/min=0.05CFM
Motor Rotation		1700RPM	1450RPM
Capacitor		6uf/250V	2uf/450V
Horse power		1/8HP	
Pole		4P	
Net wet		4.1kg	
Gross Weight		5.1kg	
Port thread		5/16"	
Noise Level		50dB	

Dimension-Diagram



ROCKER 300

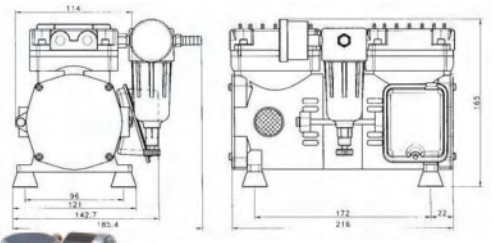
CE

Oil-free Vacuum Pump

Specification:

Power		110-120V/60Hz	220-240V/50Hz
Max. power comsuption (W)		100	80
Max. current (A)		1.0	0.4
Max. vacuum		-650mmHg=85.5kPa=110torr	
Vacuum	0mmHg	37l/min=1.31CFM	34l/min=1.2CFM
	100mmHg	34l/min=1.2CFM	31l/min=1.09CFM
	200mmHg	32l/min=1.13CFM	29l/min=1.02CFM
	300mmHg	27l/min=0.95CFM	23l/min=0.81CFM
	400mmHg	23l/min=0.81CFM	19l/min=0.67CFM
	500mmHg	15l/min=0.53CFM	13l/min=0.46CFM
	600mmHg	5l/min=0.17CFM	4l/min=0.14CFM
Motor Rotation		1750RPM	1450RPM
Capacitor		10uf/250V	3uf/450V
Horse power		1/6HP	
Pole		4P	
Net wet		5.2kg	
Gross Weight		6.2kg	
Port thread		5/16"	
Noise Level		50dB	

Dimension-Diagram



ROCKER 400

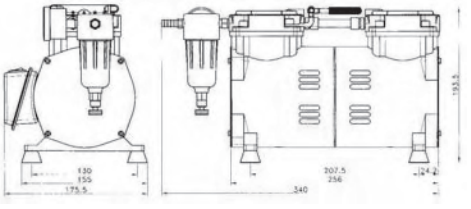
CE

Oil-free Vacuum Pump

Specification:

Power		110-120V/60Hz	220-240V/50Hz
Max. power comsuption (W)		210	190
Max. current (A)		1.9	1
Max. vacuum		-650mmHg=85.5kPa=110torr	
Vacuum	0mmHg	60l/min=2.12CFM	58l/min=2.05CFM
	100mmHg	56l/min=1.98CFM	52l/min=1.84CFM
	200mmHg	52l/min=1.84CFM	46l/min=1.63CFM
	300mmHg	48l/min=1.7CFM	40l/min=1.41CFM
	400mmHg	38l/min=1.34CFM	30l/min=1.06CFM
	500mmHg	24l/min=0.85CFM	16l/min=0.57CFM
	600mmHg	10l/min=0.35CFM	6l/min=0.21CFM
Motor Rotation		1700RPM	1450RPM
Capacitor		6uf/250V	5uf/400V
Horse power		1/4HP	
Pole		4P	
Net wet		7.6kg	
Gross Weight		8.6kg	
Port thread		5/16"	
Noise Level		52dB	

Dimension-Diagram



ROCKER 600

CE

HROMalytic Chromatography Products ECHnology '08
Australian Distributors
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

Chemically Resistant Vacuum Pump

Features:

- Acid, alkai and organic vapor resistant
- Compact-size, space-saving
- CE approved, excellent safety
- Low price, the most cost-effective
- Low noise level, only 50dB

Application:

- Various filtration applications
- Rotary Evaporator
- Gel drying, blotting afetr electrophoresis
- Centrifugal Evaporator
- Solid-Phase Extraction(SPE)

Description:

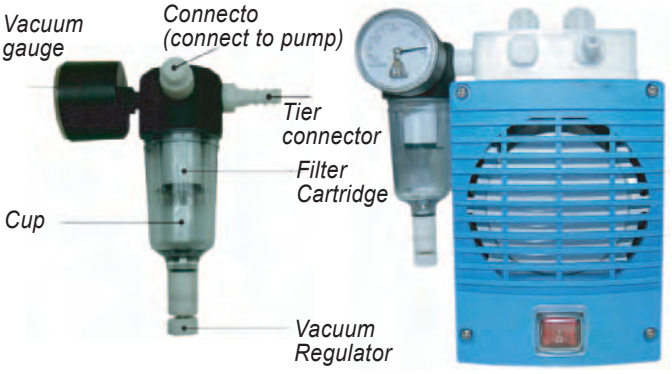
Chemker Series are chemical duty vacuum pumps that can apply to various applications.All wetted parts are made of PTFE material; the outer case is processed with squeeze-casting aluminum and anti-rust treatment. Air driven diaphragm, oil-free design will help to lower both cost and time on maintenance.

Chemker Series are designed under consideration of friendly operation and thanks to the innovative mechanical technology, the noise is only 50 dB which make user free from noise pollution in laboratory. To consider the safety, Chemker series pumps are all equipped with a thermal protection device that will automatically stop running once over-heated and will resume the running after working temperature cools down.

Vacuum regulator/moisture trap:

Vacuum regulator / moisture trap is an optional part that is used to adjust vacuum and absorb moisture and particle.

The complete accessories are illustrated at right. Please refer to the operation manual for installation. The filter cartridge is consumable and needs to be replaced when saturated.



Specifications:

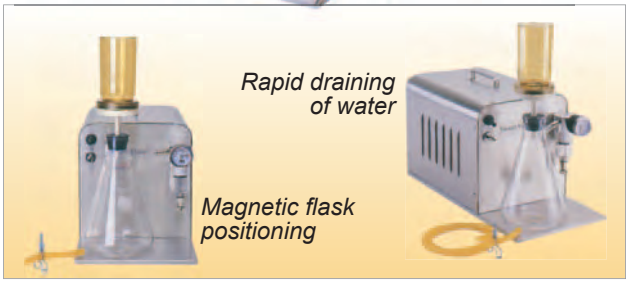
Model	Chemker 300		Chemker 400		Chemker 410	
Voltage/Frequency	110-120V/60Hz	220-240V/50Hz	110-120V/60Hz	220-240V/50Hz	110-120V/60Hz	220-240V/50Hz
Max. Power (W)	70	60	90	95	90	95
Max. Current (A)	0.8	0.32	1.3	0.6	1.3	0.6
Max. Flow Rate	25 l/min	22 l/min	38 l/min	34 l/min	28 l/min	25 l/min
Max. Vacuum	600mmHg=79kPa		600mmHg=79kPa		740mmHg=97kPa	
Max. Pressure	25PSI		30PSI		40PSI	
Motor Rotation	1700RPM	1450RPM	1700RPM	1450RPM	1700RPM	1450RPM
Capacitor	4uf/250V	4uf/450V	8uf/250V	4uf/400V	8uf/250V	4uf/400V
Horse Power	1/8HP		1/6HP		1/6HP	
Pole	4P		4P		4P	
Net Weight	5.0kg		7.0kg		7.0kg	
Gross Weight	5.2kg		7.4kg		7.4kg	
Dim. (L/W/H)	210/112/220mm		280/112/210mm		270/144/190mm	
Port Thread	5/6"		5/6"		5/6"	
Noise Level	50db		50db		50db	

HROMalytic Chromatography Products
Australian Distributors ECHnology '08
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

V Vacuum Pumps

Vacuum Filtaration Stand

VF 204



VF 204 is an innovatory vacuum filtration stand, which is the first unit to assemble all apparatuses in one base, enable us to save 1/2 table space than traditional way.
Unique magnetic fixing enable flask to be placed firmly.
Rapid draining design let operator be free from unpacking flask to pour out filtrated water.
Piston-powered and oil-free make it maintenance free.

Specification:

Power		110-120V/60Hz	220-240V/50Hz
Max. power comsuption (W)		100	80
Max. current (A)		1.0	0.4
Max. vacuum		-650mmHg=85.5kPa=110torr	
Vacuum	0mmHg	37l/min=1.31CFM	34l/min=1.2CFM
	100mmHg	34l/min=1.2CFM	31l/min=1.09CFM
	200mmHg	32l/min=1.13CFM	29l/min=1.02CFM
	300mmHg	27l/min=0.95CFM	23l/min=0.81CFM
	400mmHg	23l/min=0.81CFM	19l/min=0.67CFM
	500mmHg	15l/min=0.53CFM	13l/min=0.46CFM
	600mmHg	5l/min=0.17CFM	4l/min=0.14CFM
Motor Rotation		1750RPM	1450RPM
Capacitor		10uf/250V	3uf/450V
Horse power		1/6HP	
Pole		4P	
Net wet		9.3kg	
Gross Weight		12.1kg	
Port thread		5/16"	
Noise Level		50dB	

Aspirator

AS-3

Feature:
This apparatus is equipped with low-noise 150W motor, & this Aspirator of high suction ability. It can reach the vacuum station you need at very short time. Applied on the fields of vacuum evaporator, vapor filtration and all suction's procedures.

Specification:

Vaacuum Capacity	5°C	10°C	20°C	30°C
	7mmHg	12mmHg	20mmHg	28mmHg
Air Velocity	16~18L/Min x 2			
Motor	Induction motor 150W			
Tank	Polypropylene tank 10L			
Suction Port	Two suction port 8 mm			
Overflow & Drain	Overflow nozzle 17.5 mm			
Aspirator Tube	2 pieces			
Power	110V/220V, 260VA			
Diamentions	360L x 240W x 390H			

Option Accessories

Cooling Coil

CO-10

Vacuum Gauge With Regulator

VG-10

SUS304 Tank

ST-10

HROMalytic Chromatography Products '08
Australian Distributors ECHnology
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169

Model: L60+, Thermocouple Welder

The L60+ is designed for sensor manufacturers for the production of commercial grade thermocouple junctions, and for users of large numbers of exposed junction thermocouples such as test and development laboratories where multipoint temperature sensing of test pieces is required.
No special skills are needed and most people will be capable of producing quality work with minimal practice. The instrument can be operated via the front panel or by using the footswitch provided.
In addition to thermocouple work, the L60+ welder is used in many other applications involving the joining of wires to each other and to metal surfaces.
This model is suitable for welding wires up to 1.1mm diameter & has an argon gas shield facility.
A satisfactory thermocouple junction is produced without using argon, but where argon is available a momentary purge is automatically triggered immediately prior to the weld to give optimum weld integrity.

Standard Accessories

- Wire Holding Pliers & Lead
- Safety Glasses
- Magnifying Eyeglass
- Carbon Electrodes
- Spare 2A Fuse
- Argon Hose
- Mains Lead
- Footswitch for greater ease of use

Optional Accessories

- Spare Carbon Electrodes

Electrical

Power Supply	110-120 Vac or 220-250 Vac, 50-60Hz
Power Consumption	Power Consumption

Ordering Guide

Typical Part No. L60+, -220-250Vac

General

Energy Output	0-60 Joules
Welding Capacity	Wires up to 1.1mm diameter
Duty Cycle	Minimum 5-10 welds/min

Mechanical

Physical Dimensions	(WxHxD) 220x120x250mm
Weight	4kg

Temperature Probes

TP-01: Bead wire, length 1.2 meter, wire diam. approx. 1.75mm. Subminiature type K connector. -40°C to 250°C, teflon insulation
TP-01: Glass, glass/silica insulation. -40°C to 480°C

TP-02A: High temperature, Immersion/penetration probe 200mm, diameter 3.2mm, type K, -40°C to 500°C, 1 meter cable, subminiature connector.

TP-03: 87mm penetration probe, 3.2mm diameter, -40°C to 260°C, 673mm cable, subminiature type K connector.

TP-04: SHORT-Surface probe -50°C to 400°C, sensing head 15mm diameter, probe length 120mm (up to 150°) 1.5 cable, subminiature type K connector.

TPK-04: LONG-Surface probe -50°C to 400°C, sensing head 15mm diameter, probelength 120mm, 1 meter cable, subminiature type K connector.

Digital Thermometer 4 channels Data logger

TM747D

- Multi function for K/J/E/T/R/S/N types
- Single / Dual / Triple / Four Channels
- Programmable Hi / Lo audible alarm function
- With built-in "time" function
- RS-232 interface with window software
- 10000 records data logger for each channel

Thermocouple Conectors

1260-K mini plug type K

1260-T mini plug type T

1010-K standard jack K

1210-K mini jack type K

1210-T mini jack type T

1060-K standard plag K

Insulated Thermocouple Wires

CODE	T/C TYPE	INSULATION	WIRE DIAMETER (mm)	TEMP. LIMIT
K-20-2-304 K-24-2-304 K-30-2-304	K	Glass Silicon	0.813 0.508 0.254	480°C (540°C)
K-24-2-508 K-30-2-508	K	Teflon	0.508 0.254	204°C (260°C)
K-24-2-508 K-30-2-508 K-36-2-508	T	Teflon	0.508 0.254 0.125	204°C (260°C)

HROMalytic Chromatography Products
Australian Distributors ECHnology '08
www.chromtech.net.au E-mail : info@chromtech.net.au Tel : +61 3 9762 2034 Fax : +61 3 9761 1169