

COD Digestion Apparatus LI-0072

To determine the chemical oxygen demand . The unit is a solid state block heater unit with provision for sample to be digested at a time of 38 mm dia reaction vessels with 20 ml samples size to heat at temperature of 150° C +/-1°C controlled by digital temperature controller cum indicator .The unit has a provision with glass reaction vessels and air condensers. Fitted with 2 hrs timer . To work on 220/230 V AC, Single Phase Supply



LI - Macro Block Digestion System

The equipment is light portable, compact and efficient with built in control.

The unit has 12 aluminum digestion tubes of 250ml Temperature range from 50 to 450 deg C. The unit is supplied with digester. The temp is controlled by regulator.. Complete with two pilot lamps. Plugs,& cards To work on 220/230 V AC single Phase Supply



Optional accessories:

Digital temperature indicator cum control



Single Distillation apparatus All Glass Automatic LI-0072

The unit is made of borosilicate glass, fitted with all accessories like heating element, Stands, reservoir.

Flask Capacity:

03 Lits/hrs

05 Lits/hrs

10 Lits/hrs

Optional Accessories:

- Automatic low water cut off device
 Spare Distillation Flask
- 03 lits
- 05 lits
- 10 lits

Spare double walled condenser

- 03 lits
- 05 lits
- 10 lits
- Rubber tubing for distillation Coil of 10 mtres

Double Distillation apparatus All Glass Automatic LI-0073

The unit is made of borosilicate glass, fitted with all accessories like heating element, Stands, reservoir.

Flask Capacity:

03 Lits/hrs

05 Lits/hrs

10 its/hrs

Optional Accessories: :Automatic low water cut off device

Spare Distillation Flask

- 03 lits
- 05 lits
- 10 lits

Spare double walled condenser

- 03 lits
- 05 lits







10 lits

Rubber tubing for distillation Coil of 10 mtres

Triple Distillation apparatus All Glass Automatic LI-0074

The unit is made of borosilicate glass, fitted with all accessories like heating element, Stands, reservoir.

Flask Capacity:

03 Lits/hrs

05 Lits/hrs

10 Lits/hrs

Optional Accessories:

- Automatic low water cut off device
 Spare Distillation Flask
- 03 lits
- 05 lits
- 10 lits

Spare double walled condenser

- 03 lits
- 05 lits
- 10 lits

Rubber tubing for distillation Coil of 10 mtres

LI-QUARTZ DISTILLATION APPARATUS:

(with automatic low water cut-off device)

The water distillate obtained from Quartz Single/Double Distillation apparatus is beyond compare with water distillate obtained from other types/method of distillation apparatus.. The coil type heaters of high class nichrome wire are embedded in Electronic Grade transparent pure fused Quartz Tubes. The unit is supplied with metallic stand, electrical fittings, and Automatic cut-off device for safety of heaters. The distillate obtained from this apparatus is PYROGEN FREE, also free from metal ions.

(A) With Quartz Boiler and Corning Condenser.

CAPACITY

1.0 ltr/hr

2.0 ltr/hr

3.0 ltr/hr







4.0 ltr/hr 5.0 ltr/hr

LI-Rotary Vaccum Evaporator 20 L or 50 L Capacity

It comprises of superlative glass parts which can be easily replaced. They consist of non sparkling motor so that they can reduce the risk of fire at variable speed. Rugged structure and non abrasive nature are the unique features of our rotary vacuum evaporator. It permits continuous feed of solvent into evaporating pear shape flask and also distillation under control atmosphere. All glass parts are easily replaceable. It is supplied with 1 Lt. evaporator and receiving flask. Steam duct a condenser, inlet feed 2 clamps, a dry unit wire cord and Plug to work on 220 volts AC



Capacity

Flask Capacity 1 Ltr Flask Capacity 3 Ltrs. Flask Capacity 5 Ltrs.

Heating Mantle LI-0083

Suitable for laboratories, chemicals pharmaceuticals, dyes, glass plants etc. Used particularly for heating inflammable liquids. Electric heating net is hand knitted from glass yarn and there is no joint to maintain the strength of the yarn and stands high temperature up to 350°C . The body of the mantle is spun one piece from mild steel duly powder coated. The unit is fitted with switch and energy regulators. All heating mantles are lagged with special mineral wool. To work on 220/230 V, Single phase ,AC supply.



Capacity Rating Circuit 03 litrs 500W 01



05 litrs	600W	01
10 litrs	2x600W	01
20 litrs	2x650W	03

Laminar Air Flow LI-0096

Laminar Air Flow is the cabinet s are able to create particle free air of class II standard . The cabinet is fabricated out of thick temite proof board with sunmica laminated exterior. The working table is made of thick board which is also sunmica clad at top. Operate on 230 +/- 10 V , 50 Hz Ac supply . Shadow less uniform lighting is provided within working space. Unit is mounted on caster wheels and supplied with high quality plug and cord.

Size	Size of HEPA	No of HEPA,	No.of Prefilter	Illumnation
2'x2'x2	' 2'x2'x6"	01	01	1x20W
3'x2'x2	' 2'x2'x6"	01	02	1x20W
4'x2'x2	′ 4′x2′x6″	01	02	2x40W
6'x2'x2	' 3'x2'x6"	02	03	2x40W
8'x2'x2	′ 4′x2′x6″	02	04	4x40W



Fume hood LI-0082

Fabricated out of thick wooden board /mild steel powder coated designed so as to throw all toxic / harmful vapours ,thus protecting costly instruments and the person working in the laboratory from fumes . Outer is finished with sun mica . working table top is fitted with acid / alkali resistant tiles /FRP lining and S.S. . Steel wash basin with connection provided for inlet and outlet of water. An exhaust centrifugal fan of 0.75 HP ,1440 RPM is installed at the top to throw out the toxic fumes. The inner wall are also lined with FRP lining to protect them from corrosive fumes . The front door moves vertically up and down with concealed counter balanced weights. The unit is fitted with fluorescent light and a gas cock for gas /air supply. Two or three drawers and storage compartments are provided under the working table. The front facing panel is fitted with 15/5 Amp socket with switches for exhaust system and fluorescent light . Suitable to work on 220/230V, 50 Hz, Single phase AC supply.



Working Table size:



4'x2.5'x2' 6'x2.5'x2'

Optional Accessories:

- S.S lining on the work bench.
- Teflon linig on the work bench.
- FRP lining on the inner wall (per sqr feet).
- PVC fume Duct(Per running feet).

Bio Safety Cabinet LI-0059

The Bio Safety Cabinet is made of thick board duly sun mica covered . Interior surface is powder coated .The work table is made of heavy gauge S.S and fitted with UV Germicidal light ,Static Pressure Manometer and Exhaust system. Side panel is made of transparent glass duly framed . The unit is fitted with pre-filter and HEPA Filter . Dynamicallybalancing blowers drawn the air through pre-filter and made it pass through highly effective HEPA Filter having efficiency of retaining all air-borne particles of size 0.3 μ or large .Motor OF 0.25 HP operates with minimum noise level. The working area is illuminated by fluorescent lighting fitted . The height of table provides a comfortable sit down working position for the operator . Apart from all the facilities of Vertical Laminar Air Flow. Bio Safety Cabinet have a arrangement for re—circulation of air thus creating highest level of clean air . supplied complete with glove ports and gauntlets in the acrylic front sliding door . Suitable to work on 220/230 V , single phase AC supply.



Working Area	Size Of HEPA	No of HEPA	Illumination
2'x2'x2'	2'x2'x6"	01	01x20W
4'x2'x2'	4'x2'x6"	01	01x40W
6'x2'x2'	3'x2'x6"	02	01x40W

Optional Accessories:

PVC Exhaust duct (per running feet)



Inoculation Chamber LI-0092

Made of thick wooden board covered with sunmica ,working table also covered with sunmica .Front fitted with transparent plexi glass with option to lift the door up. Side also made of fixed plexi glass. Provided with glove port and gauntlets on front ,one fluorescent tube and light.



Size:

40"x24"x22" 27"x20"x16"

Membrane Filtration Assembly PC(LI-MFA 15)

We have emerged as a leading manufacturer and supplier of a superior quality range of 560m LI Membrane Filtration Assembly PC. Our professionals manufacture these in our state-of-the-art manufacturing plant where we use advanced machines and superior grade material. This ensures that the offered products have features like superior filtration and durable finish standards



LI DIGITAL AUTOMATIC MELTING POINT APPARATUS

Specifications

Display Digital 3 1/2 Digit, Bright LED

Accuracy

Operation Fully Automatic

Dimensions L 405 x B 360 x H 235 mm (approx)

Weight 5 Kg (approx.)

Power 230V + 10%AC, 50Hz

Accessories Capillary Tube - 100 No.

Cleaning Tool - 1 No.



0ff: D8/6, DLF Ankur Vihar, Ghaziabad,U.P-201102,labozinc.com,info@labozinc.com,8860356096



Micro-plate reader/, universal (Elisa Reader)

- Universal micro-plate reader store up to 75 custom assay definitions and eight test results
- Extensive on-board data analysis and with software for data manipulation
- 2 x 24-character LCD and a convenient soft keypad
- Extensive curve fitting options include linear, cubic, quadratic, 4-p, log-out, cubicspline and point-to-point
- Memory stores 25 standard curves and up to eight microplate test results
- With auto and manual plate layout for blanks, controls, standards and samples
- With control and assay validation, transformation and formula application and cutoff and call criteria
- Absorbance measurement range: 0 to 3.0 OD
- Accuracy: <1% at 2.0 OD
- Linearity: 1% from 0 to 2.0 OD

•

Colony Counter LI-0073

Our colony counter is fitted with automatic LED digital display. Colony Counter minimize the strain of counting. Each touch of marking Pencil on the Petri dish increments the colony count by '1' and the glowing LED digital display depicts the total colony count, thus relieving the technician from the tedious task of counting and eliminating the chances of error.

The Colony Counter is provided with a manual RESET of digital display, ON/OFF switch, counting pencil, cord and plug.

The Colony Counter is suitable to work on 220 V AC supply.

Available in following displays:

Three digit LED Display



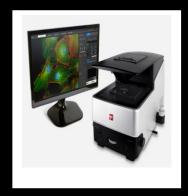




• Four Digit LED Display

LI- Digital Imaging System

Digital Imaging System Ideal for instant photography of a wide variety of samples, including hemi luminescence imaging and UV and white light gel, film and membrane imaging CCD camera with 4 megapixel resolution Alpha Ease FC software allows easy archiving of data and image analysis, including molecular weight sizing, 2D spot densitometry and automatic colony counting



LI-Micro Plate washer, automatic strip washer

- The unit Operator friendly, unit containing all required facilities .
- Automatic strip washer using shaking, soaking and bottom washing options up to 10 cycles
- Washing 1" x 8" or 1" x 12" strips or full 96-well plates
- Self contained and programmable ,Micro-controlled, syringedrive, positive-displacement pump for fluid delivery and variable control of aspiration rates
- Manifold type: 12-channel
- Residual volume: <4 mL/well
- Minimum wash speed: <130 second(3 cycles, 300mL/well,96 well)
- Dispense volume: 25 to 3000 mL/well
- Wash cycles: 1 to 10
- Buffer selection: three buffer
- Soak time: 1 to 600 second
- Function: wash, prime, dispense, aspirate, rinse, maintenance
 - routines
- Dimension: 16" x 14" x 6"Power: 250 V, 50/60Hz





DNA Analyzer Model: LI Series

DNA Analyzer with computer workstation completes with sequence analyzer software and fragment analyzer software. Standard plate accessories and spare parts are included. Printer is also included.

Power supply 230V, 50/60Hz

Installation, testing, commissioning service as well as staff training during commissioning are required



Mixer(digital with reversing function)

- Modular digital reversing mixer
- Remote controller, countdown timers, revising and timed cycles, heavy-duty motor
- With support stand and support clamp
- Speed: 40 to 2000rpm
- max torque: 142in-oz
- Power supply: 230VAC, 50/60Hz

Accessories

- 1. Mixer propeller
- 2. Mixer impeller(both compact and square)





Mortar and pestle

Grinding small quantities of material

Mortar outside diameter: 75,100,150, 200,250mm

Rotating

With safety shield

Motorized with ss backet



Oil Bath (High Temperature Oil Bath) Model: LI 0301

The Oil bath offered by us is basically designed to tolerate high temperatures with ease. These Oil Bath has double walled body with inner part manufactured using S.S. and the outer part is particularly powder coated. A wide range of application, such as oxidation stability test on oils, greases, etc, or any other test requiring high temperature control. Double-walled inside Stainless steel and outside Mild Steel Sheet painted with epoxy powder coating.

Calibration of High Temp Oil Bath 300c:

HIGH TEMPERATURE OIL BATH Calibrations range 300c. these are Suitable for a wide range of application, such as oxidation stability test on oils, greases, etc, or any other test requiring high temperature control. Double-walled inside Stainless steel and outside Mild Steel Sheet painted with epoxy powder coating.



Emulsifier (Homogenizer) LI-0076

Fitted with FHP Motor with speed control regulator with maximum speed up to 400 RPM with perforated S.S Disc . the unit is having arrangement for moving in horizontal and vertical direction . Complete on M.S stand

- With 1/20 HP motor and S.S Disc and regulator.
- With 1/4 HP motor and S.S Disc and regulator.
- With 1/2 HP motor and S.S Disc and regulator.





LI-PCR chamber

- PCR chamber with UV lighting and fluorescent air flow0.4-0.5m/s.
 High efficiency particulate arrestor HEPA and prefilter internal dimension:(wxdxh)mm601x555x600
- External dimension (wxdxh) 653x610x730. capacity 150L
- Supplied with operation manual Accessories
 Hepa filter Qty 2, prefilter Qty 10, UV lamp Qty 1, fluorescent lamp



PCR machine/thermal cycler

- Thermal cycler with extremely fast heating
- Gradient technology with Steady Slope technology
- Heating motorized lid with integrated electronic sample protection technology
- Highest temperature control speed due to silver block up to 60C/sec
- Programmable temperature gradient over 12 rows
- Gradient range of 10C to 240C
- Power supply 230V 50Hz Accessories
 - 1. Multimedia card

 ,1GB
 - 2. Can-bus connection between two thermal modules
 - 3. With both type of manuals



LI Thermal cycler

- With interchangeable block (60 x 0.5ml, 96 x 0.2ml, and 96 well plates 384 well and flat plate for in situ
- With two separate block on one cycler A and B)
- Power supply 230V 50Hz

Accessories

1. Free software upgrade from website





LI-Real-Time PCR Cycler

Specification:

- Base thermal cycler: MJ Mini Cycler
- Sample capacity: 48-well PCR plate 6 x 8-tube strips
- Sample volume : 10–100 μl (20 μl recommended)
- Weight: 6.8 kg
- Dimensions (W x D x H): 18 x 32 x 33 cm (7 x 12.5 x 13")
- Fluorescence excitation range: 470–500 nm
- Fluorescence detection ranges : Channel 1: 523–543 nm, Channel 2: 540–700 nm

Gradient Specifications

- Gradient range: 35–99°C
- Gradient accuracy: ±0.2°C of target at end columns within 30 sec (NIST-traceable)
- Temperature uniformity: ±0.4°C, in column, well-to-well, within 10 sec of target attainment
- Gradient calculator accuracy: ±0.4°C of actual column temperature (NIST-traceable)
- Temperature differential range: 1–16°C

PCR machine/thermo cycler Gene Amp

- □96-well gold plate PCR machine with great speed, reproducibility and capability
- □ Peltier heat pump for fast, uniform heating

PCR reaction tubes

0.5ml 8-strips PCR reaction tubes with caps









PCR reaction tubes

0.2ml 8-strips PCR reaction tubes with caps



PCR reaction plates

- □96-well PCR reaction plates
- ☐Clear optical
- □ Capable to fit with 8/12 strips reaction tube caps and full plate cover



PCR reaction tubes, caps, strips

- □PCR reaction tubes, caps, optical
- □8caps/strip
- \Box 12 caps/ strips



PCR reaction tubes base

- □96-well PCR reaction tubes bases
- ☐ Used to held reaction tubes
- ☐ Autoclavable



LI-PCR chamber

PCR chamber with UV lighting and fluorescent air flow0.4-0.5m/s. High efficiency particulate arrestor HEPA and prefilter internal dimension: (wxdxh)mm601x555x600 . external dimension (Wxdxh) 653x610x730 . capacity 150L

Accessories

Hepa filter Qty 2, prefilter Qty 10, UV lamp Qty 1, fluorescent lamp





Laboz-Water Bath (Double Walled) MODEL: LI-0201

The water bath is used for evaporating liquids like alcohol or for melting solids such as agar. The concentric rings can be removed to accommodate containers of various sizes. The water bath is double walled with the inner chamber made of Stainless Steel and outer wall made of thick mild steel sheet duly powder coated. The inner chamber is insulated from the outer atmosphere with special grade glass wool insulation. The concentric rings are chrome plated. The temperature is controlled by capillary thermostat from 5°C above ambient to 95°C. The water bath is supplied complete with two indicator lamps, concentric rings, ON/OFF Switch, Cord & Plug but without thermometer. Suitable to operate on 220 V, 1 ph, 50 Hz, AC supply

Size(L X B X H)

 $300 \times 250 \times 100$ mm with 6 holes of 75mm dia

 $330 \times 300 \times 100$ mm with 9 holes of 75mm dia

 $425 \times 325 \times 100$ mm with 12 holes of 75mm dia



Optional Accessories

• Digital Temperature Controller cum Indicator

Circulatory Water Bath Model No: LI-0202

The water bath will have a leak proof chamber insulated from the atmosphere with high grade glass wool.

The outer body will be made of mild steel duly powder coated(epoxy coated).

Inner body will be made of Stainless Steel(304)

The temperature is controlled through a thermostat . accuracy of \pm 1° C indicated by an L shaped thermometer.

Water inlet and outlet valve connected to high performance water circulation pump with speed control regulator.



Off: D8/6 DLF Ankur Vihar, Ghaziabad II P-201102 labozing com info@labozing com 8860356096



LI-Ultrasonic disintegrator (Sonicator)

Ultrasonic disintegrator for disintegration, disruption and homogenization of cells and particles

Power: 230V, 50Hz





1. Exponential microprove for use with of volume of up to 10ml. including 50 and 100ml glass tubes (heat resistant) 1 pack of 12 from each rubber sealing cap for 20ml and a50ml also tubes for both heated and coated vessels

Laboz Ultrasonic bath

Digital setting and time cycle 99min, temp display LCD, 220-250V, chamber size not less than 15 x 15 x 10cm, 230/250V 50/60Hz,03 lit

Vacuum pump

25 Lit /Min air Displacement 45 Lit /Min air Displacement 75 Lit /Min air Displacement



Digital Viscometer: Model - LI-730

Digital viscometer has the advantage of high accuracy, stable digital display, easy to operate and good anti – interference. It is widely used in the measurement of viscosity of various kinds of fluids such as grease, paints, food, medicine, adhesive and cosmetic etc., it can also be used to determine the viscosity resistance and absolute viscosity of the liquids. Its with led display. Measurement range is $10-1 \times 105$ mpa with 4 spindles, 6/12/30/60 rotor speed (rpm), +5% Newtonian fluid. Provided with rs232c interface





Laboz Vortex special type

②Application: For PCR, restriction preparation, gel loading buffers, pellets

re-suspension, etc

23-in1 format: mixes PCR plates, PRC tubes (single and strip) and

vortexes

☑Speed: 300-3000rpm in 50rpm increment

PNoise level: < 50dB</pre>

☑Power supply: 230VAC, 50/60Hz☑Dimension: 170 x 230 x 130mm



Laboz Warring blender

 \square High speed blending up to 22000rpm

②Container capacities up to 4 liters

②Explosion resistance models

With exclusive clover-leaf design stainless steel

☑Container blender assembly☑Power supply: 230V 50Hz



LI Digital Thermometer

Display: LCD, 4-digitRange: -60 to +150 0CResolution: 0.1 0C

Accuracy: + 0.5% of full scale

Power: 9V battery

Feature: reads either ⁰C or ⁰F





Laboz Weight scale

- Up to 5 kg capacity
- General purpose
- Digital reading/ display-indicates over and under weight
- Touch-key controls including ON/OF/MODE to select weighing in kg or lb and ZERO to tare the container
- Battery operated and supplied with long life
- Rechargeable battery and charging adapter



Laboz Electroporation system Multiporator

- Electroporation systems that enables simple and rapid introduction of foreign DNA into bacteria, yeast and other microorganisms
- Electronically regulated pulses in microsecond range to minimize damage to eukaryotic cells
- Description: Multiporator with bacteria module
- Application: Eukaryotes, bacteria and yeast
- Pulse voltage: 200 to 2500V
- Time constant: 5ms
- Pulse form: Exponentially diminishing
- Resistance: 600
- Multiple pulsing: 1 to 99, with 1 min intervals
- Power supply: 220V, 60//50Hz
- Dimension: 13" x 4" x 10"

Laboz Electrophoresis Power Supplies LI-0080

- Analog Fixed Model Electrophoresis Power Supply,
- LED display, Analog Model with fixed 200mA and also fixed voltage of 50V, 100V, 150V, 200V. It is recommended for mini Horizontal Electrophoresis Apparatus.







Electrophoresis Power Supplies LI-0081

- variable Model Electrophoresis Power Supply, Digital,
- Variable 0-300V, 0-200mA, with digital timer, Constant Current, Constant Voltage, Digital display of voltage and mA. It is recommended for both mini Horizontal and mini verticle Electrophoresis Apparatus.



Laboz Flow cytometer

- FACS-voltage flow cytometer with computer
- With coherent enterprise II laser model 621 and enterprise laser support kit
- With presser/vacuum pump and FL-1 and FL-2 PMT for laser 2
- With IDNO-1 filter set
- Clone CYT with indexsorts and cole-parmering system
- With BD PAC_kit, 15" and 18" LCD monitor
- With graphic card for 2-monitor display
- With printer Tektronix color 850 N and cell quest software and USB-key
- With instrument operation training
- With both types of manuals
- Operating manual
- Maintenance manual
- Flurochrome emission
- Primary laser flurochromes excitation at 488nm
- Second laser flurochromes excitation at 351-364nm
- Third laser flurochromes excitation at 568-647nm

•





Laboz Gene Gun:

Gene gun system

• Max current: 10mA peak

• Voltage input: 9V alkaline battery, replaceable

• Gas pressure: 600psi max Helium

• Safety relief pressure: 700 □35 psi at regular assembly

• Regulator adjustment: 800 psi limit max

• Discharges: 12 per cylinder, mechanical indexing

• Operating conditions: 10-300C, 30-80% humidity

• Storage condition: 0-600C, 10-900% humidity

• Dimension: 20 x 25cm

• Weight: 1.42Kg



Pipettes, variable volume

- Adjustable/variable volume pipettors,
- Lower part to be autoclavable

Volume range in µl:

- 0.1 to 2.5 μl
- 2 to 20 μl
- 10 to 100 μl
- 20 to 200 μl
- 100 to 1000 μl





- 500 to 5000 μl
- 1000 to 10000 μl
- Four digit volume display
- Lower pipettor part Autoclavable

8 channel pipettors,

Volume: 0.5 to 10 μ
 Volume: 10 to 100 μl



12 channel pipettors,

Volume: 0.5 to 10 μl
 Volume: 10 to 100 μl
 Volume: 30 to 300 μl

• Adjustable volume, tip ejector and autoclavable lower part

• With large volume adjustable knob

• Volume display always facing the user

Volume range in μl:

- 0.5 to 10 μl
- $2 \text{ to } 20 \mu l$
- 5 to 50 μl
- 10 to 100 μ1
- 20 to 200 μ1
- 100 to 1000 μ1
- 500 to 5000 μ1



Motorized pipette controllers

- Pipette controller with AC battery recharger and sterile filter
- Speed: Three speed range
- Pipetting rate: 10ml/sec
- With included and 5 replacement filters
- Power: NiMh battery, 220VAC

•

Motorized pipette controllers

- Pipette controller with AC battery recharge and sterile filter
- Speed: Three speed range
- Pipetting rate: 7.1ml/sec
- With included and 5 replacement filters
- Power: NiMh battery, 240VAC





Pipette jar

- Pipette cleaning jars for soaking and washing pipettes
- With flanged base for good stability
- For pipette length up to 32-inch

•

Pipette washing set

- Made of polyethylene with top inlet to prevent back-siphoning of contaminated water
- Connect directly to drain line
- Water flow: as low as 1.5 lit/sec
- With pipette basket made of high-density polyethylene to use with jars and washers
- For pipette length of up to 32-inch



Kjeldahl units



Dry Block Heater (Kjeldahl Digestion Unit,40 tubes)

LI-0075

The unit is light portable ,compact and efficient with built in control. The unit has 40 digestion tubes of 75 ml volume. The unit is supplied with digestor (made of casted aluminium having 40 tubes holes for digestion tube) and aluminium digestion tube stand. Temperature is controlled by energy regulator upto-400°C, complete with two pilot lamps, Plug and card (but without glass tube) To work 220/230V Single phase AC supply.



Optional accessories:

- Digital temperature controller cum indicator.

Kjeldahl Distillation Unit(Without Glass Part) LI-0094

This is useful for eastimation of nitrogen contentin the substance by digestion for 300 & 500ml flask provided with PVC fume duct, M.S. stand and pair of hangers.

Test Capacity: E.R
03 Test Mantle type 03 Nos.
06 Test Mantle type 06 Nos.



Micro Kjeldahl Digestion Unit LI-0095

The unit is useful for eastimation of Nitrogen content in the substance by digestion in micro-flask of 30,50 and 100 ml .The unit is made of M.S powder coated. Provided with PVC fume duct.M.S stand and pairs of hanger.

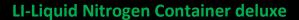
Test Capacity: E.R
03 Test Mantle type 03 Nos.
06 Test Mantle type 06 Nos.





LI- Liquid Nitrogen Container

- Plastic dewar flask
- Withstanding -196oC
- Borosilicate glass inner vessel
- With fold-down handle and vented push-fitlid
- Volume: 1000ml



- Transportable dewar flask
- Silvered and evacuated
- Galvanized steel plate with backed enamel finish
- Insulated synthetic lids with two spring locks/clips
- Volume: 4 lit
- Height: 14"

LI- Liquid Nitrogen Container

- Plastic dewar flask
- Withstanding -196oC
- Borosilicate glass inner vessel
- With fold-down handle and vented push-fitlid
- Volume: 1000ml





LABOZ GLASS VESSEL BIOREACTOR FERMENTER(Model :BIOREACT)

Laboz India presents a range of Autoclavable and in-situ sterilizable laboratory Bioreactors and Fermentors designed for performance and ease of use.

Using the latest in 16 bit microprocessor technology we offer Fermentors and bioreactors that use multi-loop process control techniques to maximize yields in cell-culture and fermentation.

At the heart of our Fermentors and bioreactors lie 16 bit microcontrollers from Microchip Technology Inc, USA. On board electronics and sensors are sourced from reputed and reliable manufacturers like Texas Instruments, Allegro Micro, National Semi, etc. to give a controller system for these Fermentors and bioreactors that works effectively and is extremely reliable.

Laboz Autoclavable and in-situ sterilizable laboratory Fermentors and bioreactors are controlled digital PID control algorithm. The temperature control range is from room temperature plus 3C to 60C. Using optional cooling system, temperature can be controlled from 10C to 60C. It has a stirrer agitation speed range from 100 to 1000 rpm and it can be used for anaerobic micro-organism or aerobic microorganism fermentation process.

Laboz fermentor is a compact, autoclavable and in-situ sterilizable laboratory fermentors and bioreactors perfect for a range of educational, research and industrial applications.

Fermentor systems are available for microbial and cell culture:

- Microbial Culture: Bacterial, Yeast and Fungi culture.
- Cell Culture: Plant, Animal and Insect culture.
- Moving up from a tissue culture flask and shaker.
- Interchangeable culture vessels (2.5 L, 4 L, 7 L) (as desired Extra Cost).

Dedicated microprocessor controller system that has been designed specifically for autoclavable and in-situ sterilizable laboratory bioreactor and fermentor control.





- ❖ Large 20x4 backbit LCD displays all Fermentors control parameters along with set values at the same time.
- ❖ 4 colour 16 key pad for user interface to input control parameters, calibrate sensors and set values.
- ❖ Stainless steel head plate with ports for sensors, feed and harvesting, heater, and gas/air sparger, motor.
- ❖ DC motor: Top driven for microbial culture and bottom magnetic driven for cell culture (optional).
- Peristaltic pumps provided at the side of controller unit for addition of acid & base (for pH control (Extra cost) and feed & harvest of media and culture.

Stirring & Agitation

Stainless Steel 316L stirring rod with propeller type stirrer .Motor PMDC motor, 12V, 80W, high starting torque. **Control Algorithm PID control Sensor Magnetic gear tooth sensor**.

Range 100-1000 RPM in 10 RPM increments.

Bioreactor Vessel 2 liter working volume and 3 liter total volume.

OPTIONAL ACCESSORIES

- pH Display & Control system: pH control range pH 2.0 to 11.0. Uses two peristaltic pumps with acid & base reservoirs.
- Dissolved Oxygen Display and control system: Two gases sparing system.
- Air compressor
- ► I hp oil free air compressor pressure cut of switch 20 lit storage tank
- > pH electrode
- > PT-100 temperature probe
- steam generator



Hot and cold water circulation system(OPTIONAL)

LABOZ-DIGITAL BOMB CALORIMETER WITH AUTOMATIC CALCULATION,

(PRINTER, COMPUTER INTERFACE AND AUTO GAS FILLING UNIT MODEL RSB -7)

We LABOZ Scientific Inc. are the leading specialist True OEM of Scientific, Heating cooling, analytical, Isothermal Digital & Automatic Bomb Calorimeters in Delhi.



INTRODUCTION OF PRODUCT

A Bomb Calorimeter is an apparatus used for measuring heats of combustion.

LABOZ – Digital Bomb Calorimeter provides a simple, inexpensive yet accurate method for determination of heat of combustion and the sulfur contents of liquid and solid hydrocarbons and other fuels (determining calorific values of organic matter, liquids, food products, biogases, animal feeds, husk, petrol / diesel etc). LABOZ – Digital Bomb Calorimeter is widely used in Industries in diversified fields for quality control, testing laboratories for research & development and in teaching establishments.

The accessories supplied are complete for analysis as per methods recommended by the Indian Standard Institutions (IS-1350, Part 2, 1970), British Standards Institution (BS 1016, Part 5, 1967) and the Institute of Petroleum (IP 12/63 T). Each component of the package has been finished and tested according to the specifications by these Institutions.



PRINCIPLE OF OPERATION

A sample is weighted and placed in heavy-duty stainless steel cylinder referred to as "Bomb". The Bomb is then sealed with Oxygen and the sample is ignited electrically. The complete oxidation of the compound releases heat and this is measured through the temperature change of the water bath surrounding the bomb. A Digital sensor measures the rise in temperature. The heat of combustion at constant volume can be calculated from the resulting rise in temperature.

FEATURES:

- 1. Micro controller based Digital Beckmann Thermometer with following features
- a. Least count: 0.001ºC
- b. Calibrated against NABL accredited (ERTL) calibrated instrument
- c. Automatic result calculation
- d. Memory to store last 10 results
- e. RS-232 interface (computer compatibility)
- f. In-built panel thermal printer
- 2. S.S. Bomb with Hydraulic Pressure Test Certificate
- 3. Auto Gas filling Unit fills oxygen in bomb with constant rate every time and thus increases the repeatability of results.
- 4. Outer Jacket with Puff Insulation



- 5. Offset stirrer (heavy duty)
- 6. Flexible Tube of High Pressure (for Gas Filling)
- 7. Benzoic Acid of Known Calorific Value (with Laboratory Test Certificate Photo Copy)