

#### **DISSECTION MICROSCOPES**

First time in India, we are providing proper design of dissecting eye pieces to have exact focal length of the eye pieces of 10x & 20x.

## 7001 DISSECTION MICROSCOPE

#### **MODEL BE-1**

Versatile instrument for demonstration, close study of small organism and for dissection work, optical performance and mechanical precision of highest quality combined with the utmost stability in any environment.

#### FEATURES:

- Stable cast iron round base.
- Wide glass stage, has two springs clips. Detachable hand rests on both sides provide support for hands during dissection.
- By rack & pinion mechanism operated by knobs on both sides
- By Plano-concave reflector below stage provide sufficient illumination in day light or under artificial light.
- 10x and 20x mounted on jointed arms allowing the whole area to be scanned.
- 10x and 20x Magnification
- All Brass Chrome Plated Parts like pipe, knobs & Lens holding arm.
- Overall height 180mm. Stage 90x95mm.

# PACKAGING: In Shockproof Styrofoam packing. Plywood storage box extra.

## 7003 DISSECTION MICROSCOPE (Entomological) MODEL BE-2

Heavy round base with a precisely designed body, providing convenience for easy lifting and movement. Sensitive focusing is done by rack & pinion moving on a lapped dovetailed guide way with a stopper to limit the downward movement. A joint Revolving Arm is provided for moving high eye point lenses over full area of the stage. It is easily replaceable by a special BULL EYE LENS 83mm diameter, to increase the field of vision. A Planoconcave mirror below the stage provides sufficient illumination in day light or under artificial light. Complete packed in a sturdy wooden carrying cabinet, with provision for placing the hand-rest, Bull Eye lens.

**Optics :** Eyepieces 10x and 20x & Special Bull Eye Lens 83mm diameter.

**Object Stage Size :** 100mm x 100mm with glass plate. Packed in Wooden Box



#### STUDENT MICROSCOPE WITH IRIS DIAPHRAGM



#### 7007 STUDENT MICROSCOPE WITH IRIS DIAPHRAGM MODEL BESTO - 4

U-shaped well balanced heavy base with 90° inclinable body. Stage 110x110mm with 2 stage clips. Separate coarse & fine focusing knob for body tube. Coarse focusing by rack & pinion mechanism with rack stop to prevent damage to slides. Triple revolving nose piece with accurate paracentring and identical repeated settings. Illumination is by Plano concave mirror of 50mm diameter. Stage is fitted with iris diaphragm to control the aperture.

#### OPTICAL COMBINATION:

Objectives: Achromatic 10x & 40x (SL) Eyepieces: WF 10x & Huygenian 15x

Comes in shock proof styrofoam packing inside an attractive and thick printed cardboard box.

#### 7008 SPARE PLYWOOD BOX

Please add extra for Plywood storage box with sunmica clad front door for above microscope.



#### How our Model BESTO-6, BESTO-9 & BESTO-10 Microscopes work in its unique way

This student proofed compound microscope provides the features you want and the value you need. Then we add rugged, cast metal body to ensure years of high performance and adjustable down stopper to prevent damage to specimen slides and objectives. Easy to use. Sturdy & balance monocular body. Inclinable at 90°.



Our Standard Wide Field Eyepieces WF 10x are modified over Huygenian eye-pieces so that larger portion of intermediate image can be seen.



Our Bright Field single lens condenser with Numerical Aperture 0.65 provides the best combination of contrast and resolution specially in our model BESTO-6.



BESTO Microscope of Model 9 & 10 have a condenser having standard diameter of 39.5mm which collects & concentrates the light before it passes through sample.



We introduce new concept of stage clips. Pressing from back raises, stage clips upwards to make space for inserting slides. Low bend prevents touching of objective lens, while rotating.



Microscope with silicon rubber feet prevents skidding & scratches on the work table and also provides positive grip.

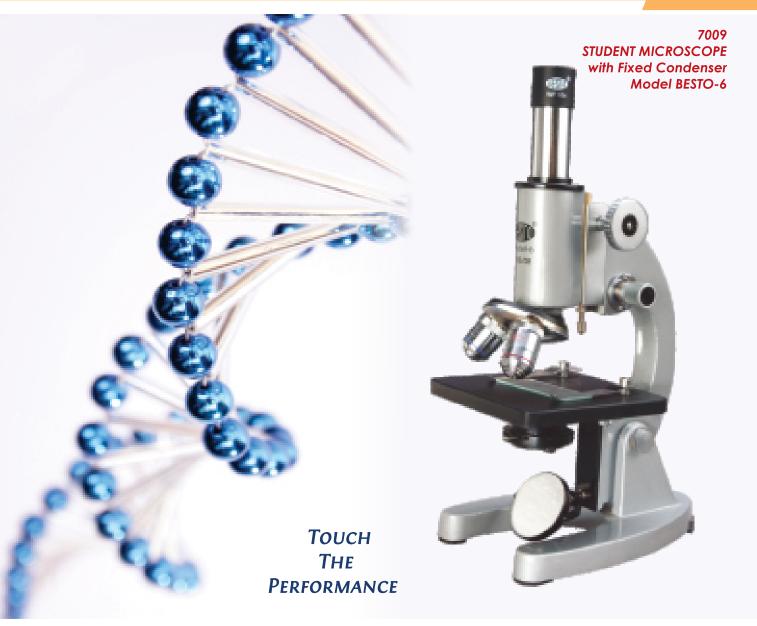
Now every BESTO-6, 9 & 10 Microscope is a LED illumination microscope with special LED light source.



Now you are independent of illumination of your microscope - Illuminate either with plano-concave mirror (reflector) or with LED light source(Cordless).



#### STUDENT MICROSCOPE with Fixed Condenser



#### How Model BESTO-6 Microscope works in its unique way

- Pressure Die Cast interchangeable Components
- Wide Field Eyepiece WF 10x & Huygenian eyepiece 15x
- Bright Field Condenser having N.A. 0.65
- Two standard achromatic par focal objectives 10x and 40x(SL)
- Square Plain Stage 110x110mm with newly developed spring stage clips.
- Special Rubber feet at microscope base for positive grip.

- Easy focus by coarse motion & very fine slow motion knobs.
- Magnification: 100x to 600x
- Cast iron heavy base to ensure years of high performance.
- Adjustable down stopper to prevent damage to specimen slides and objectives.
- Plano Concave Mirror Illuminator.
- Special LED lamp to convert our BESTO-6 Microscope into LED microscope.

#### STUDENT MICROSCOPES with Fixed Condenser



#### 7009A STUDENT MICROSCOPE

#### **MODEL BESTO-6**

#### OPTICAL COMBINATION

Objectives: Two standard achromatic

par focal objectives 10x

and 40x(SL).

Eyepieces: WF 10x and Huygenian 15x



#### 7009B STUDENT MICROSCOPE MODEL BESTO-6

#### OPTICAL COMBINATION

Objectives: Two coated achromatic par

focal objectives 10x and

40x(SL).

Eyepieces: WF 10x and Huygenian 15x



Coated objectives will give 10% better performance than standard achromatic objectives.

# ACCESSORIES with BESTO-6 Microscope

- 1. Cleaning Cloth.
- 2. Vinyl Cover.
- 3. Blue Filter.
- 4. Lens Paper, free of dirt.
- 5. Cleaning Brush.
- 6. One Year Warranty Card.
- 7. Illustrated Multi-Colored Working Manual.
- Working Microscope CD in 3D animation.
- 9. LED Microscope Lamp.

#### PACKAGING

Complete with BESTO Optics, these microscopes are packed in shockproof STYROFORM moulded box having provision for placing eyepieces & objectives and above listed accessories,

Plywood box extra.

#### 7010 SPARE PLYWOOD BOX

Please add extra for Plywood storage box with sunmica clad front door for above microscope.

Convert our Microscope model BESTO-6 into LED illumination Microscope with LED light source. The said light source is supplied absolutely free with every BESTO-6 Microscope.



- No lamp replacement required.
- No lamp re-validation required.
- Lower power consumption & environmentally friendly by workable on two pencil cells of 1.5V.



#### **JUNIOR MEDICAL MICROSCOPES**



## How Model BESTO-9 Junior Medical Microscope works in its unique way

- Two Achromatic par focal objectives 10x & 40x (SL).
- Wide Field Eyepiece 10x & Huygenian eyepiece 15x.
- Fine Focusing by screw lever mechanism having a graduated knob with sensitivity 0.002mm.
- Fixed Square Stage 120x120 mm with newly developed spring stage clips.
- Special Silicon Rubber feet prevents scratches & provide positive grip for life long.
- Rack and Pinion coarse adjustment.
- Double lens Abbe condenser, N.A. 1.25 with iris diaphragm can be move up & down by knob on lower left side.
- Plano Concave Mirror Illuminator.
- Magnification 100x to 600x.
- · LED Microscope Lamp.



SLOW MOTION KNOBS

Fine Focussing by Screw Lever Mechanism having a graduated knob on right side. (As generally found in High Priced Medical Microscope)

Travel Range : Fine 0-3mm Fine Focus Accuracy : 2mm per engraved division

#### **JUNIOR MEDICAL MICROSCOPES**



## 7011A JUNIOR MEDICAL MICROSCOPE MODEL BESTO-9

#### OPTICAL COMBINATION

Objectives: Two standard achromatic

par focal objectives 10x and

40x(SL).

Eyepieces: WF 10x and Huygenian 15x



## 7011B JUNIOR MEDICAL MICROSCOPE MODEL BESTO-9

#### OPTICAL COMBINATION

Objectives: Two coated achromatic par

focal objectives 10x and

40x(SL).

Eyepieces : WF 10x and Huygenian 15x



Coated objectives will give 10% better performance than standard achromatic objectives.

# ACCESSORIES with BESTO-6 Microscope

- 1. Cleaning Cloth.
- 2. Vinyl Cover.
- 3. Blue Filter.
- 4. Lens Paper, free of dirt.
- 5. Cleaning Brush.
- 6. One Year Warranty Card.
- 7. Illustrated Multi-Colored Working Manual.
- Working Microscope CD in 3D animation.
- 9. LED Microscope Lamp.

#### 7012 SPARE PLYWOOD BOX

Please add extra for Plywood storage box with sunmica clad front door for above microscope.

Convert our Microscope model BESTO-9 into LED illumination Microscope with LED light source. The said light source is supplied absolutely free with every BESTO-9 Microscope.



- No lamp replacement required.
- No lamp re-validation required.
- Lower power consumption & environmentally friendly by workable on two pencil cells of 1.5V.

PACKAGING

Complete with BESTO Optics, these microscopes are packed in shockproof STYROFORM moulded box

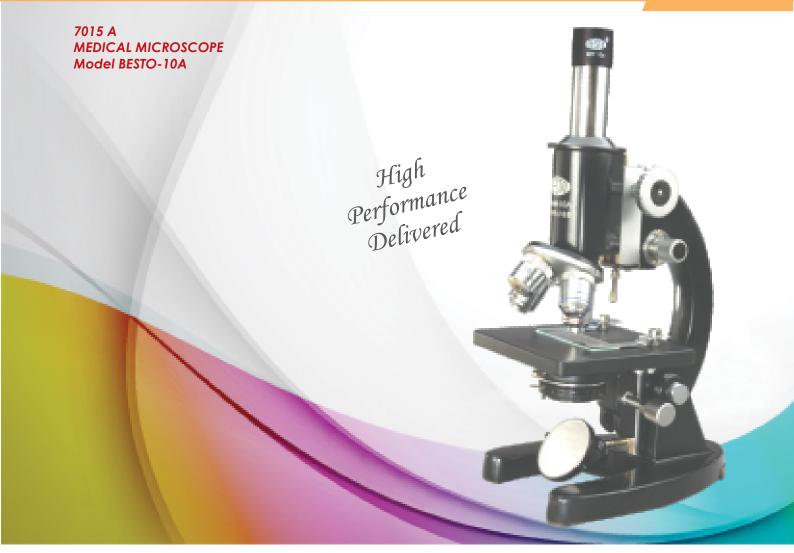
having provision for placing

eyepieces & objectives and above listed accessories.

Plywood box extra.



#### **MEDICAL MICROSCOPES**



### How Model BESTO-10A Medical Microscope works in its unique way

- Strain free & Antifungal Wide Field Eyepiece 10x.
- Huygenian Eyepiece 6x
- Four standard achromatic par focal objectives 4x, 10x, 40x(SL) and 100x(SL) Oil Immersion.
- Available with locked-in stage clips with attachable graduated mechanical stage.
- Separate coarse & graduated fine motion with sensitivity 0.002mm.
- Double lens Abbe condenser, N.A. 1.25 with iris diaphragm and filter holder, focusable by rack & pinion movement by knob on lower left side.
- 50mm plano concave mirror (interchangeable with electric illuminator)
- · LED Light source.
- Mechanical Tube Length 160 <u>+</u> 2mm.

## Graduated mechanical stage used with Model BESTO -10A



Use this precision stage to move your slide forward / backward and left / right. Graduation allowing you to find exact areas on the slides.

#### **MEDICAL MICROSCOPES**



#### 7015 B MEDICAL MICROSCOPE Model BESTO-10A

Specifications are same as per Cat. No. 7015A. Only standard achromatic objectives are replaced by coated achromatic objectives 4x, 10x, 40X (S.L) & 100x(S.L).



Coated objectives will give 10% better performance than standard achromatic objectives.

#### OPTICAL COMBINATION

Objectives: Four coated achromatic par

focal objectives 4x, 10x,

40x(SL) & 100x.

Eyepieces : WF 10x and Huygenian 6x.

Convert our Microscope model BESTO-10A into LED illumination Microscope with LED light source. The said light source is supplied absolutely free with every BESTO-10A Microscope.



- No lamp replacement required.
- No lamp re-validation required.
- Lower power consumption & environmentally friendly by workable on two pencil cells of 1.5V.

#### PACKAGING

Complete with BESTO Optics, these microscopes are packed in shockproof STYROFORM moulded box having provision for placing eyepieces & objectives & above listed accessories.

Plywood box extra.

# ACCESSORIES with BESTO-6 Microscope

- 1. Cleaning Cloth.
- 2. Vinyl Cover.
- 3. Blue Filter.
- 4. Lens Paper, free of dirt.
- 5. Cleaning Brush.
- 6. One Year Warranty Card.
- 7. Illustrated Multi-Colored Working Manual.
- Working Microscope CD in 3D animation.
- 9. LED Microscope Lamp.

#### 7016 SPARE PLYWOOD BOX

Please add extra for Plywood storage box with sunmica clad front door for above microscope.

BESTO Oil immersion is a technique used to increase the resolving power of a microscope.

This is achieved by immersing both the objective lens and the specimen in a transparent oil of high refractive index, thereby increasing the numerical aperture of the objective lens.



Every Medical Microscope Model BESTO-10A is supplied with special type of lens called an Oil immersion lens(100x). This lens is used by placing a drop of oil (cedar wood oil) on the top of the cover slip and adjusting the position of the front lens of the objectives so that it si touching the oil drop. The oil bends the light more than the air wound, so more light can enter the microscope. Oil immersion lenses make it easier to see sample, because they increase the amount of light going through the sample/slide & the microscope & into your eye.



#### **ADVANCE BINOCULAR MICROSCOPE**



#### 7027 SPARE PLYWOOD BOX

Please add extra for Plywood storage box with sunmica clad front door for above microscope.

#### 7026 ADVANCE BINOCULAR MICROSCOPE Model BE-13

This microscope offers more feature, higher quality and better performance than any other educational microscope in its class. This affordable larged sized student proof microscope giving better optical result to meet the demand of Education, Medical & Industry.

#### FEATURES:

#### **Optical System:**

- Coated WF 10x & Huygenian 6x eyepiece.
- 45° Inclined Binocular Head.
- JIS Standard Coated Achromatic par focal objectives 4x, 10x, 40x(SL) & 100x(SL) (High performance objectives).

#### Stage:

 Double plate stage size 140mm x 140mm, X/Y travel range 90mmx65mm. Low drive right side movement controls. Ceramic surface for scratch resistance. Double specimen holder clip

#### Illuminator:

• LED illumination fitted directly under the field lens, operate through solid state variable controlled transformer.

#### Focusing:

- Low Position coarse & fine focusing controls
- Stage moves up or down, eyepiece and body remain fixed.

#### Frame:

 Built of Aluminium cast metal with a staple gray finish and heavy base with electrical fittings results in stable viewing.

#### Reflector:

 Spare attachable reflector for use in case electricity is not available.

#### **PACKAGING**

Supplied with
Operating Manual,
Lens Cleaning Paper,
Immersion Oil Cedar Wood &
other standard accessories.
Packed in shockproof
STYROFOAM moulded box.
Plywood box extra.

#### **CO-AXIAL BINOCULAR MICROSCOPE**



7035 CO-AXIAL MICROSCOPE Model BEC-17XL

#### **Viewing Head:**

Binocular head inclined at 45° & rotatable through 360° attached to the microscope stand by means of a clamp screw, precisely adjusted for easy operation and stops in any direction.

#### Optics:

Ball Bearing Quadruple NOSE PIECE has a wide knurled gripping surface for easy rotation. **New 45 mm Par focal distance objective system DIN size SEMI PLAN coated objectives 4x, 10x, 40x(SL) & 100x(SL)** along with HKWF 10x provides a flatter image, better resolution and Par focality.

#### **Co-axial Coarse and Fine Focusing Knobs:**

The precision Focusing mechanism is designed for frequent use & also provides a smooth adjustment of focus. The coarse focus is with adjustable tension device.

#### **Mechanical Stage:**

Double plate stage size 140mm x 140mm, X/Y travel range 90mmx65mm. Low drive right side movement controls.

Ceramic surface for scratch resistance. Double specimen holder clip

#### Condenser:

Abbe type N.A. 1.25 condenser with iris diaphragm and swing-out filter holder, focusable by rack & pinion. The condenser is carried in a centering adjustable mount and interchangeable with professional accessories like Dark Field Condenser and Phase Turret Condenser.

#### **Illuminators:**

LED illumination provides higher level of illuminator for different types of applications. Independent on-off switch & light intensity control are provided for professional and practical use.

#### 7036 SPARE PLYWOOD BOX

Please add extra for Plywood storage box with sunmica clad front door for above microscope.



#### **PACKAGING**

Complete with BESTO Optics, this microscope is packed in shockproof STYROFORM moulded box having provision for placing eyepieces & objectives & above listed accessories.

Plywood box extra.



#### **BINOCULAR MICROSCOPE - Q SERIES**



#### 7045 BINOCULAR MICROSCOPE Model Q-45

The future of class room microscopy with crisp sharp image, very much convenient in working, easy to move, light weight, durability, ergonomic design and affordable prices.

It became an ideal instrument for school labs, medical institutes, colleges and universities.

#### 7046 WOODEN BOX For Model Q-45

Wooden Box for above, please add extra.

#### SPECIFICATIONS:

Viewing head : Inclined sliding type Binocular Head

Eyepiece : Paired Wide Field Eyepiece WF 10x/18

Paired Eye-piece 5x Huygenian

Objectives : Semi-Plan 4x,10x,40x(SL) &

100x(SL) Oil Immersion.

Nose-piece : Quadruple Nosepiece

Mechanical Stage: Double plate stage size 140mm x

140 mm, X/Y travel range 90mmx65mm. Low drive right side movement controls. Ceramic surface for scratch resistance. Double

specimen holder clip

Condenser : Abbe N.A 1.25 with Iris Diaphragm

Filter : Frosted White Filter Illumination : LED Illumination,

Brightness Adjustable

Light Source : Plano-concave Mirror

Carrying Case : Styrofoam Packing with standard

accessories.

#### **CO-AXIAL BINOCULAR MICROSCOPE - Q SERIES**





#### **SPECIFICATIONS:**

Optical System : Finite optical system

Stand : Sturdy stand with anti rust materials.

Magnification : 40x to 1000x forvisual observation

Eyepiece tube : Binocular head 30°, 360° rotatable, IPD 55mm-75mm
Eyepiece : Wide field eyepiece 10x,FQV 18mm,antifungal coated.

Nosepiece : Upright, quadruple nosepiece (Ball bearing type) with click stops

Mechanical Stage : Double plate stage size 140mm x 140mm, X/Y travel range

90mmx65mm. Low drive right side movement controls.

Ceramic surface for scratch resistance. Double specimen holder clip

Objectives : DIN Semi plan Achromatic objectives 4x (N.A.0.10, W.D 25mm),

10x (N.A 0.25, W.D.6.7 mm), 40x (SL,N.A.0.65, W.D 0.6mm) and 100x(SL), (N.A 1.25, W.D 0.17mm) antifungal, antireflection

coated.

Condenser : Abbe condenser NA 1.25 with aspheric lens, Iris diaphragm with

Frosted white filter,

Rack and pinion movement on stainless steel guides.

Coarse and fine : Co-axial coarse and fine focusing on gear systems for smooth

operation.

Fine adjustment 0.2mm/rotation with maximum2 micron scale

increment.

Illumination : LED 3.3W 3V illumination with variable control upto 100,000 hours

of LED life.

7051 WOODEN BOX For Model Q-45

Wooden Box for above, please add extra.



#### **IMPORTED BINOCULAR MICROSCOPE**

## 7052 IMPORTED BINOCULAR MICROSCOPE



Viewing Head : Binocular inclined at 45°. rotatable 360°.

Eyepiece : Wide Field Eyepiece 10x

Objectives : Anti fugal DIN Achromatic objectives 4x,

10x, 40x(SL) & 100x(SL)

Nosepiece : Smooth Quadruple revolving nosepiece with

rubber grip

Mechanical Stage: Smooth Co-axial double plate mechanical

stage 140x130mm

Focusing Range : Smooth Co-axial coarse and fine adjustment

2 micron

Illumination : LED Lamp, brightness adjustable.
Packaging : Packed in STYROFOAM moulded box.

The Microscope
Ultimate Microscope
with higher standards.



#### PHASE CONTRAST EQUIPMENT



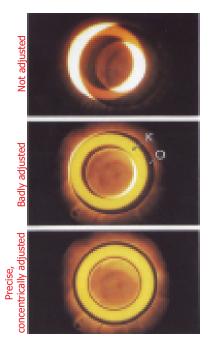


Auxilliary microscope eyepiece, sharply focused on the back focal plane.

Back Phase ring Objective

The basic principle behind a phase-contrast apparatus. The phase ring arrangement is schematically illustrated. Compare with photos at the right.

Pictures of a condenser-ring diaphragm (K) and a phase ring (O) at the back focal plane of the objective, photographed with the help of a centering telescope, a special eyepiece.



Such an adjusting procedure should be repeated every time an objective or condenser is changed, because improperly adjusted equipment results in poor images.



#### **ADVANCE STEREO MICROSCOPE**

## 7060 ADVANCE STEREO MICROSCOPES Model BS-42

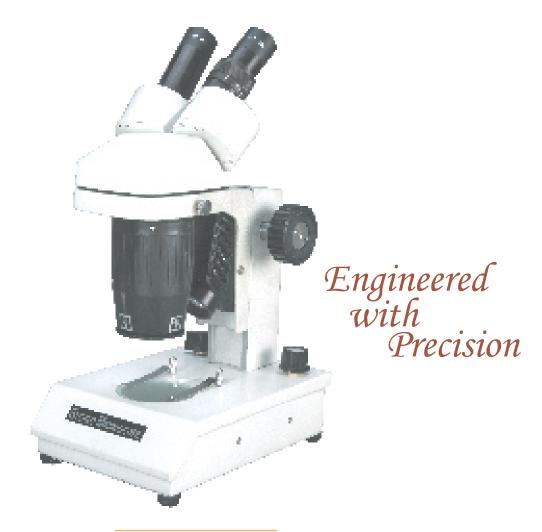
**BESTO Advanced Stereo Microscope Model BS-42**, affords viewing comfort, reduces eyestrain, and most of all provides a sharp, clear image of the specimen. Starting with heavy, all metal construction and a baked on reagent resistant finish, this Stereo Microscopes incorporate advanced optics to deliver better magnification and a critically clear image. Achromatic Objectives are housed in a smoothly rotating turret and are Para focal for quick changes in magnification ranges.

#### FEATURES:

- Binocular head inclined at 45°.
- Paired 10x WIDE FIELD EYE PIECE.
- Choice of objectives, combination of either 2x and 4x or 3x and 5x (Choice is yours)
- Rack & pinion focus control with slip clutch protection & positive stops.
- Control Knob on base allows selection of incident, transmitted or simultaneous lighting.
- Rectangular stage with 75mm diameter frosted glass insert.
- Supplied in a wooden storing cabinet.

#### SPECIFICATIONS:

Item	Description
Stand	Dual Light, Stable stand
Eye Tube	45° Inclined Binocular Head
Eyepiece	WF 10x or WF 15x (Choice is yours)
Objectives	Paired 2x-4x or 3x-5x resolving on turret Mount with quick indexing
Illumination	Incident light 6V-25W auto bulb and transmitted light 6V-25W auto bulb
Focus	Focussing Knob on stage



#### STEREO ZOOM MICROSCOPE



# Powerful Affordable Functional

#### 7065 STEREO ZOOM MICROSCOPE

Smooth focus control and a fluid 0.7x-45x Greenough zoom system guarantee stress free operation with minimal ware and tare to gears. Excellent image quality and optical performance with infinity parallel Optics systems. Comfortable Operation with Ergonomic Design principle with LED light for both incident and transmitted illumination, Providing even illumination and life expectancy can reach 6000 hours. A wide range of Accessories to be equipped with the Microscope for Multi-purpose. It is an outstanding assistance Industrial, Medical and Scientific Research Areas.

#### SPECIFICATIONS:

Optical system : Greenough Zoom Ratio : 1:6.4

Eyepiece : Wide field 10x/20mm, (inter-

changeable), 53-75mm IPD

Stand : Dual Light stand

Viewing Body : Integrated Binocular,45°

Working distance : 110mm

Magnification Range: 7x to 45x continuous

(with 10x eyepiece)

Object field diameter: 6.6to 28.5mm

Illumination control : Incident/Transmitted ("Oblique")

Setting )/ Combined illuminated

Incident light method: LED 32 Nos,3.3W

with intensity control

Transmitted light : 3.3W LED 48 Nos, Diffused Super

bright glow screen, low heat

emissions.

LED service life : Approx 6,000 hours.
Light quality : Homogeneous daylight

(6500°K), Free of UV na Dir

Power supply : Universal 110V-240V ,50/60 Hz

integrated power supply with

voltage flux stabilizer.

Packaging : Packed in Styrofoam moulded box.



#### OPTIONAL ACCESSORIES

- Pointer and micrometer Reticules
- Polarizing Kit
- 0.5x,1.5x or 2.0 auxilliary objective
- SWF 15x or SWF 20x eyepiece
- Trinocular Head
- Digital Camera with adapter
- Dark field with tweezer
- Built-in battery back up system 6hrs
- Fluorescent attachment kit
- External LIGHT Source.

#### **DIGITAL MICROSCOPY CAMERAS**



## revolutionary imaging



Only cameras with software will be supplied but without microscope & laptop.

## 7070 & 7071 DIGITAL USB CMOS MICROSCOPE CAMERA Model BM-210 & BM-510

Turn any microscope into a digital microscope with digital USB CMOS microscope camera of model BM-210 (2 mega pixels) & BM-510 (5 mega pixels).

We are supplying above two cameras with latest Calliper plus Software whose details are given below.

#### DETAILS OF CALLIPER PLUS SOFTWARE

The software if powerful for acquiring , storing retrieving any image. It handles different image formats BMP, TIFF, IMG, IMF, GIF, PCX, JPEG, PIC. It supports many cameras, frame grabbers and other USB-2 & Twain input devices.. Cut , copy, paste, Selected Copy by free hand AOL, controlled by four arrow key available in keyboard and mouse with zoom preview. Flood fill or spray with selected color are selected portion. Drawing tool curve, line square and circle, with node control and provision to change color and thickness of the line. write text in any color or font. Pointer to place on an object in four directions with provision to change color and thickness. Eraser works only on lines, arrows or any drawing tool. (Not on original image). Useful to merge different focuses on same image.

- (A) Spairtial calibration
- (b) Line measurement for distance .Length, width, perimeter, angle, Three point radius
- (C) Area by enclosed line control by four arrow keys available on the keyboard arrow with zoomed preview. The line measurement is not effected on zoomed images.

#### Reporting has three options:

- Direct print out digital image and tabular result.
- Export to MS Office
- Excel for further modification.

#### **DIGITAL MICROSCOPY CAMERA**



## 7070 DIGITAL USB CMOS MICROSCOPE CAMERA Model BM-210

#### FEATURES:

- 2.0 megapixels with progressive scanning CMOS image sensor.
- No compression, no interpolation.
- Support still image capture(JPG,BMP)
- Standard C-Mount makes connection to any microscope easy. Macro lens setups are also supported.
- Resolution: 1600 X 1200 (8bit);
   480 Mibt/Sec, DC5V±5%
- Pixel size : 3.4μm X 3.4μm.
- Frame Rate10fps @1600 x 1200
- 30 fps@640 X 480 Auto White Balance.
- Shutter Electronic10µs–32ms, Auto exposure
- Operating Temp: 0°C ~ 60°C

## 7071 DIGITAL USB CMOS MICROSCOPE CAMERA Model BM-510

#### FEATURES:

- 5.0 megapixels with progressive scanning CMOS image sensor.
- No compression, no interpolation.
- Support still image capture(JPG,BMP)
- Standard C-Mount makes connection to any microscope easy. Macro lens setups are also supported.
- Resolution: 2592 X 1944 (8bit);
   480 Mibt/Sec, DC5V±5%
- Pixel size: 2.2mm X 2.2mm.
- Frame Rate 0.8fps@2592 X 1944
- 30 fps@640 ×480 Auto White Balance.
- Shutter Electronic10µs–32ms,Auto exposure
- Operating Temp: 0°C ~ 60°C

#### Always Low prices - All Ways



#### 7072 PROJECTION CAMERA Model VGI-3000

#### FEATURES:

• Sensor : 3 Mega pixel (Aptina USA)

Sensor size : ½ inch
 Resolution : 2048X1536
 Output Interface : VGA Output
 Frame rate : 35 frames/Second

• Lens mount : C/CS

• White balance : Manual adjustment

Supplied with Capture Pro Software & 0.5x Reduction Lens







#### JIS STANDARD ACHROMATIC OBJECTIVES





## 7185 STANDARD ACHROMATIC OBJECTIVES

For use with **BESTO, Student Junior & Medical Microscope.** There is a ring provided in the high power objectives by moving this ring up or down, you can increase the length of 40x (SL) & 100x (SL) objectives, thus adjust the par focal.

These objectives are designed on JIS standard (Japanese Standard, 36mm Par focal distance).

Cat. No.	Description
7185(a)	4x(0.10)
7185(b)	10x(0.25)
7185(c)	40x(0.65) SL
7185(d)	100x(1.25) SL









## 7186 COATED ACHROMATIC OBJECTIVES

All objectives in this category are **JIS Standard (36mm Par focal distance)** as per Cat. No. 7185. The only difference is these objectives are **AR(Anti reflection coated)**. This reduces the loss of light caused by refection by entrances lens surfaces, thus enhancing the brightness.

Cat. No.	Description
7186(a)	4x(0.10)
7186(b)	10x(0.25)
7186(c)	40x(0.65) SL
7186(d)	100x(1.25) SL



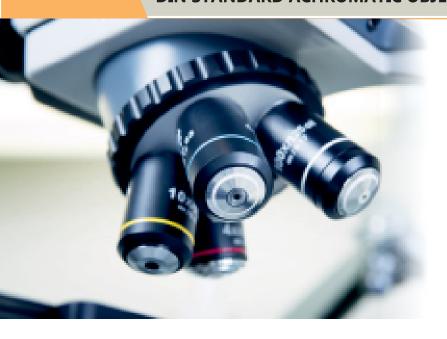






#### **DIN STANDARD ACHROMATIC OBJECTIVES**





## INSPIRED PERFORMANCE

## 7187 SPARE DIN SIZE COATED ACHROMATIC OBJECTIVES

Spare 45mm par focal distance DIN Size objectives for Co-axial microscopes

#### (DIN-DEUTSCHE INDUSTRIE NORM).

Cat. No.	Description
7187(a)	4x(0.10)
7187(b)	10x(0.25)
7187(c)	40x(0.65) SL
7187(d)	100x(1.25) SL

#### FLAT FIELD CORRECTION :







Achromatic 65% (Left) Vs. Semiplan 80% (Centre) vs. Plan 90% (Right)

Achromatic objectives have a flat field in the center 65% of the image. Plan objectives correct best overall and display better than 90% of the field flat and in focus. Semi-plan objectives are intermediate to the other two types with 80% of the field appearing flat.

#### 7188 SEMI PLAN ACHROMATIC OBJECTIVES

Spare 45mm par focal distance DIN Size objectives for Co-axial microscopes

#### (DIN-DEUTSCHE INDUSTRIE NORM).

Cat. No.	Description
7188(a)	4x(0.10)
7188(b)	10x(0.25)
7188(c)	40x(0.65) SL
7188(d)	100x(1.25) SL











#### **MICROSCOPE ACCESSORIES**

#### 7190 SPARE HUYGENIAN EYE PIECE

Design consist of two Plano convex lens positioned with both convex faces towards the object. Designed for use with low power achromatic objectives.

Cat. No.	Description
7190(a)	10x
7190(b)	15x
7190(c)	6x







#### 7191 SPARE POINTER EYE PIECE

Spare Huygenian Eyepiece 10x or 15x or 5x accurately centered & fitted with fine pointer. Supplied in velvet case.

Cat. No.	Description
7191(a)	10x
7191(b)	15x
7191(c)	5x







#### 7192 WIDE FIELD EYE PIECE

The antifungal Wide field eyepiece has a large field of view and a high eye point. Design consist of one achromat doublet and one Plano convex lens with the convex surfaces facing each achromatic objectives.

Suitable for student, junior & medical microscopes.



#### 7193 MICROMETER EYEPIECE

Huygenian eyepiece 10x fitted with ocular disc of 10mm divided into 100 divisions.



#### 7194 CONDENSER

Beneath the stage, all most all the BESTO microscope have a condenser, which collects and concentrated the light before it passed through the sample. Two lens Bright field Abbe condenser N.A. 1.25 with iris diaphragm. It has a standard outer diameter of 39.5 mm & suitable for all the BESTO microscopes.



#### 7195 IRIS DIAPHRAGM

Leaf diaphragm (made from phosphorus Bronze sheet) mounted within the condenser. It controls the size of illumination cone-the amount of light converging on the specimen.



#### **MICROSCOPE ACCESSORIES**



#### 7200 GRADUATED MECHANICAL STAGE

Horizontal movement 70mm and vertical movement 30mm by rack and pinion. Both scales graduated and read by verniers.



#### 7201 REFLECTOR

50mm diameter having one side plain and other concave mounted in a ring. Best quality.

#### 7202 METALLIC ARC

To hold 50 mm diameter Microscope Reflector. Brass C.P.



#### 7203 SUB STAGE ILLUMINATOR

Light alloy vented housing, Built in ground glass diffuser one side & blue filter on the other side along with LED bulb. Suitable for student Junior & Medical Microscopes.



- No lamp replacement required.
- No lamp re-validation required.
- Lower power consumption & environmentally friendly by workable on two pencil cells of 1.5V.

#### 7204 DOUBLE DEMONSTRATION EYE PIECE

This demonstration eyepiece fits any standard 23mm diameter eyepiece, making it possible for two people to see the same object at the same time. Teacher can use this in giving demonstrating the important points on a slide. A pointer is a standard part of the vertical Eye Piece. Both the vertical & horizontal Eye Piece has a magnification of 10x supplied in velvet cases.



#### 7205 WOODEN SLIDE BOX SUPERIOR QUALITY

Wooden Microscope Slide Box 75mm x 25mm glass slides in vertical position in serially numbered plastic grooves individually. Teakwood frame, sun mica Top.

Capacity: 100 slides

#### 7206 WOODEN SLIDE CABINET DELUXE MODEL

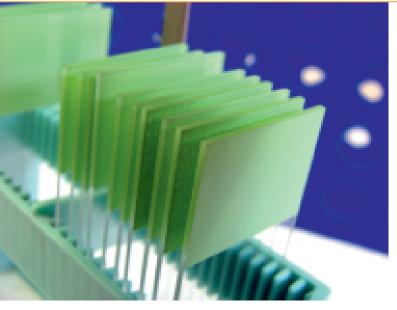
For keeping 75mm x 25mm glass slides in vertical position in plastic grooves individually. Cabinet frame of MDF finished with Laminated sheet Hinged door with lock is lined with velvet. Drawer frame of MDF with plywood bottom fitted with knob, index card holder & restraining lower is lined with velvet. Extra drawer in base with printed index sheets. Design prevents entry of dust into drawers.

Cat. No.	Сар	pacity
7206(a)	1000	10 Drawers of 100 slides.
7206(b)	2000	10 Drawers of 200 slides.
7206(c)	5000	25 Drawers of 200 slides.
7206(d)	10000	50 Drawers of 200 slides.





#### **IMPORTED SLIDES FOR MICROSCOPES**





#### 7210

#### **MICROSCOPIC SLIDES**

Slides on Human Histology, USA Make (imported) set of 100 slides.

#### List is given below:

C01 Simple squamous Epithelium sec.

C02 Simple Cuboidal Epithelium sec.

C03 Simple Columna Epithelium sec.

C04 Columna Pseudo strtified cillated epithelium

C05 Stratified squamous Epithelium sec

C08 Epidermis from human mouth

C10 Loose Connective Tissue W.M

C11 Dense Connective Tissue W.M

C16 Human Chromosome Nonmal Female W.M

C17 Human Chromosome Nonmal Male W.M.

C20 Smooth Muscle Teased Preparation W.M.

C23 Smooth Muscle I.S and C.S

C24 Skeletal Muscle I.S and C.S

C30 Tongue I.S. show filiform papilla

C34 Stomach fundic portion sec.

C35 Stomach Cardiac Region sec.

C36 Stomach Pyloric Region sec. C40 Ileum C.S. show villi and goblet cells

C51 Nerve cells

C52 Brochiolus

C53 Lung sec

C54 Artery sec

C55 Vein sec

C56 Large artery sec

C57 Large vein sec

C58 Heart I.S.whole

C59 Kidney I.S

C60 Kidney with Blood Vessel Injected sec.

C61 Ureter sec.

C62 Ovary sec.

C63 Placenta Human sec.

C64 Human Sperms smear

C65 Epididymis sec

C66 Prostate Gland Human sec.

C67 Fallopian Tube sec

C68 Penis C.S

C69 Cervix sec. C70 Thyroid Gland sec

C71 Thymus Gland sec

C72 Mammary gland sec

C73 Adrenal Gland sec

C74 Lymph Node sec

C75 Salivary gland C.S.

C76 Cerebrum sec

C77 Cerebellum sec

C78 Pituitary gland C.S.

C79 Tendon teased C.S. C80 Eye entail sec

C81 Eyeball sec

C82 Human Skin sec. show Thick Cornifie Layer

C83 Human Skin sec. Through sweat Gland

C84 Human Skinsec. Through Hair Folicle

C85 White fibrous tissue

C86 Mucous tissue ,umbilical cord

C87 Decalcified bone C.S.

C88 Infant developing bone section

C89 Developing membrane bone

C90 Muscle-tendon junction I.S.

C91 Muscle spindle

C92 Nerve bundle

C93 Sympathetic ganglion

C94 Motor cortex section

C95 Sentor cortex

C96 Cerebellar cortex

C97 Palatine tonsil

C98 Thin skin from human palm section

C99 Finger nail section

C100 Stomach-duodenal junction I.S.

#### 7211 MICROSCOPIC SLIDES

Microscope slides on human Histology set of 62 slides Germany make (imported)

#### 7212 **MICROSCOPIC SLIDES**

Microscope slides on MICROBIOLOGY imported USA Make, (set of 50 slides).

#### 7213 **MICROSCOPIC SLIDES**

Pathological slides, imported set of 100 slides.

For detail of slides sets mentioned under the Cat No. 7211, 7212 & 7213. Please Call us or Mail to us.

#### **MICROSCOPIC SLIDES**



## 7215 HAEMOCYTOMETER SET BRIGHT-LINED (Germany)

Haemacytometers, complete set in a plastic case, consisting off:

- Brightline Counting chamber without clamps with double net ruling and two cover glasses, each one blood diluting pipette.
- Thoma for red end white blood cells two silicon tubing of approx. 16 cm Length and each one red and white plastic mouthpiece.



#### 7216 STAGE MICROMETER

Calibrated Glass slide with 1mm scale length divided into 100 parts (One division = 0.01mm) used for determination of objective magnification & measurement of objects.



# All Slides sets are packed in suitable case with key card.

#### 7217 BOTANY SLIDES SET

Best Indian made slides, available sets only.

- a. Beginer's Slide Set (set of 12)
- b. Elementary Biology Set (set of 12)
- c. Elementary Biology Slide (Set of 25)
- d. General Biology Slide Set (set of 50)
- e. Basic Botany Slide Set (Set of 25 )
- f. Plant Tissue (set of 12)
- g. Algae (set of 12)
- h. Fungi (set of 12)
- i. Flower Placentation (sets of 6)
- j. Moss General Study (set of 6)
- k. Ovule Types (set of 5)

#### 7218 ZOOLOGY SLIDE SET

Best Indian made slides, available sets only.

- a. Beginer's Zoology Slide (set of 12)
- b. Zoology Slide (sets of 25)
- c. Beginner's Protozoan Slide Set (set of 10)
- d. Mammal Histology Slides Set (set of 50)
- e. Epithelium Types (Set of 10)
- f. Connective Tissue Set (set of 8)
- g. Blood Slide Set (Set of 5)
- h. Muscle Types Slide Set (Set of 5)
- i. Nervous Tissue Slide Set (set of 20)
- j. Digestive System (set of 20)
- k. Respiratory System (set of 5)
- I. Urinary (Excretory) System (set of 6)
- m. Reproductive System Slide Set (Set of 12)
- n. Endocrine System Slide Set (set of 8)
- o. Lymphatic Tissues Slide Set (set of 5)
- p. Bone and Cartilage (set of 8)
- q. Gland Types (Sets of 6)
- r. Hydra Slides Set (Set of 6)
- s. Bacteria Types (Set of 12)
- t. Histology slide set ( set of 50)
- u. Animal Tissue Slides (set of 25)

## Built on Trust Since 1962

#### **AUTOMATIC SLIDE STAINING MACHINES - 12 Stations**

## 7225 AUTOMATIC SLIDE STAINING MACHINE (12 STATIONS)

A simple, sturdy and economical model of Automatic Slide Staining Machine with 12 stations, recommended for hematology and also for staining of blood films and bone marrow spread etc.

#### **Key Features**

- Compact Bench Top Model
- Perfect H & E Stainer for Routine Application
- High Specimen Throughput
- Minimum Reagent Exposure
- · Easy to clean
- Simple to operate
- Highly recommended for Hematology and also for staining of Blood Films and Bone marrow spreads etc.

#### **Analog Model**

## 7226 MICROPROCESSOR CONTROLLED AUTOMATIC SLIDE STAINING MACHINE (12 STATIONS)

A simple, sturdy and economical model of Electronic Slide Staining Machine with 12 stations, recommended for hematology staining of blood films and bone narrow spread etc.

#### **Key Features**

- Feather touch key pad
- Digital display for adjusting timing sequence.
- · Battery backup to retain data
- 12 stage timing sequence can be programmed with each step of 1 minute to 16 hours.
- 12 Staining troughs
- Perfect H & E Stainer for Routine Application
- High Specimen Throughput
- Minimum Reagent Exposure
- · Simple to operate
- Highly recommenced for Hematology and also for staining of Blood Films and Bone narrow spreads etc.

## Microprocessor Controlled Model





Affordability
Flexibility
&
Rapid Production

#### **AUTOMATIC SLIDE STAINING MACHINE - 23 Stations**



## 7228 AUTOMATIC SLIDE STAINING MACHINE (23 STATIONS)

Model is the most advanced Automatic Slide Staining Machine with 23 stations having a two tier arrangement and specially designed to meet all types of requirements in staining techniques starting from the routine haematological techniques to the most advanced stage of staining in cytology and histology.

Its two tier arrangement has 11 troughs and a blank station in the upper tier and 12 trough stations in the lower tier. A simple switching system facilitates the use of this machine in the following three modes:

#### **Three Modes of Operations**

- A. As one unit utilizing all the 23 staining positions in series
- B. As two independent staining machines working at the same time and programmed separately (independent grouping)
- C. As two staining machines operating simultaneously at the same time staining cycle (parallel grouping)

## 7229 MICROPROCESSOR CONTROLLED AUTOMATIC SLIDE STAINING MACHINE (23 STATIONS)

Is the most advanced Electronic Slide Staining Machine with 23 stations having a two tier arrangement and specially designed to meet all types of requirements in staining techniques starting from the routine hematological techniques to the most advance staining in cytology and histology. Its two tier arrangement has 11 troughs and a blank station in the upper tier and 12 trough stations in the lower tier. A simple switching system facilitates the use of this machine in the following three styles:

#### **Three Modes of Operations**

- A. As one unit utilizing all the 23 staining positions in series
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- C. As two staining machines operating simultaneously at the same time staining cycle (parallel grouping)

#### **Analog Model**



## Microprocessor Controlled Model



#### **Discover Better Designs**



#### **SLIDE & BLOCK STORAGE CABNETS**

#### 7231

#### **MODULAR SLIDE STORAGE CABINETS (Horizontal)**

MODULAR SLIDE STORAGE CABINETS (horizontal) can store large quantity of slides in less space. They are made up of good quality cold rolled steel with powder coating finish

The drawers are slidable. The basic configuration has 3 independent cabinets and each cabinet has 5 drawers. Available in following different capacities:

Cat. No.	Capacity
7231(a)	Slide Storage 12500
7231(b)	Slide Storage 25000



#### **Horizontal Model**

#### 7233

#### **MODULAR SLIDE STORAGE CABINETS (Vertical)**

Same as cat. no. 7231 but slides are kept in vertical position in this model.

The drawers are slidable. The basic configuration has 3 independent cabinets and each cabinet has 5 drawers.

Available in following different capacities:

Cat. No.	Capacity	
7233(a)	Slide Storage 12500	
7233(b)	Slide Storage 25000	

#### 7235

#### **BLOCK STORAGE CABINETS**

These cabinets can store large quantity paraffin blocks, embedded in O-Rings or cassettes in less space. They are made up of good quality cold rolled steel with powder coating finish. The drawers are slidable. For each drawer handle is provided. Three differents models are available.

Cat. No.	Capacity
7235(a)	4000
7235(b)	8000
7235(c)	12000

#### **7236**

#### **SLIDE WARMING TABLE**

It incorporates a feather touch keypad with LCD display for setting the hotplate temperature. Precise temperature control. Corrosion resistant material for durability.

**Technical Specifications** 



#### **GROSSING WORK STATION**



We are working on High End Cameras with latest Software. Hopefully, it will be available by the end of December 2017.

Please call us for quotation.



#### 7231 GROSSING WORK STATION

Grossing work station made of High grade stainless steel. Continuous air flow along entire work area. Provided with Dictaphone, camera holder on railing system, magnifying glass light magnifier with flexible arms. Document holder for requisition forms, literatures tec. Magnetic instruments holder, paper towel holder, polythene cutting board. Mixer tap for hot and clod water sink with tap. Sturdy perforated insert able work plate. Sprinkle system with adjustable valve for bath sanitation located underneath the perforated working plate and Drawers.

#### Features:

- Made of high grade stainless steel.
- Continuous air flow along entire work area.
- Provided with Dictaphone, camera holder and railing system.
- Magnifying glass/ light magnifier with flexible arms.

#### Key Features:

- Integrated illuminated with UV germicidal light.
- Self supporting carriage with adjustable legs.
- Removable organizer bins.
- Safety splash shield.
- Adjustable sets of stools with rest to reduce back strains.



#### **HUMAN EYE - FIBRE GLASS MODELS**

#### **FACTS AND FUNCTIONS OF HUMAN EYE**



Human eye belongs to general group of eyes found in nature called "camera eyes'. Just as a camera lens focuses light onto film, a structure in the eye called the cornea focuses light onto a light-sensitive membrane called the retina.

The cornea is a transparent structure found in the very front of eye that helps to focus incoming light. Situated behind the pupil is a colorless , transparent structure called the crystalline lens. A clear fluid called the aqueous humor fills the space between the cornea and the iris.

" The cornea focuses most of the light , then it passes through the lens, which continues to focus the light".



7301 HUMAN EYE 3 Times, Full Size - 7 Parts

Removable parts includes:-

- Upper half of the schera with cornea and eye muscle attachments.
- Both halves of the choroid with iris and ratina.
- iii) Lens
- iv) Vitreous humors.Supplied on base.



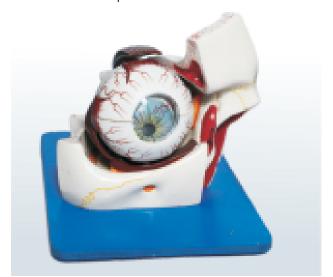
#### 7302 HUMAN EYE 5 Times, Full Size - 6 Parts

Same as Cat. No. 7301, but with larger size & more details.



#### 7303 HUMAN EYE WITH ORBIT 3 Times. Full Size

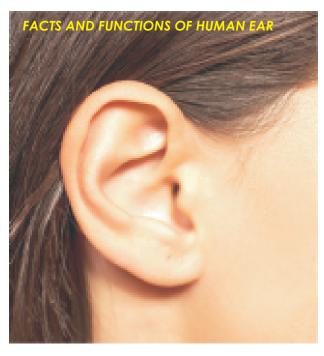
On base of long orbit , same features as Cat. No. 7301 Dissectable into ten parts.





#### **HUMAN EAR - FIBRE GLASS MODELS**





The ear isn't just the hearing organ. It is complex system of parts that not only allows humans to hear, but also makes it possible for human to walk.

Ears comes in many shapes and sizes. Typically, men's ears are larger than women.

Researchers also found that the average ears is about 2.5 inches (6.3 centimeters) long, and the average ear lobe is 0.74 inches(1.88 cms) long and 0.77 inches (1.96 cms) wide. The ear does indeed get larger as a person ages.

#### 7306 HUMAN EAR RUBBER 3 Times, Full Size

Made from vinyle rubber , flexible like human ear enlarge 2-3 times, Dissectible into 3 parts shown external , middle and internal portion, supplied on base.



#### 7307 HUMAN EAR Sharp Features

Superior quality, 3 times life-size sharp features, elaborated by detailed key card supplied on plastic base. Size  $12'' \times 6''$ 



# EASY VIEWING FROM ANYWHERE IN THE CLASSROOM!

#### 7308 HUMAN EAR 5 Times, Large Size

Dissectible into 6 parts representativion of outer, middle and inner ear, additionally with two removable base sections close to middle and inner ear. Supplied on base.





#### **HUMAN BRAIN - FIBRE GLASS MODELS**

#### **FACTS AND FUNCTIONS OF HUMAN BRAIN**



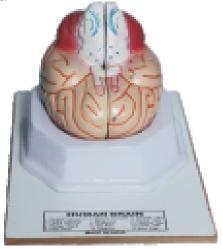
The human brain is a largest brain of all vertebrate relatives to bodu size. The brain makes up about 2 percent of a human body weight (approx 1.5 kg)

The human brain is a command centre for the human nervous system receives input from the sensory organs and sends output to the muscles. The human brain has the same basic structure as other mammal brains, but is larger in relation to body size than any other brains.



7310 HUMAN BRAIN - 2 Parts

Perfect for intermediate student, because of its affordable price/ immediately divided brain , supplied on pan/ removable base.



#### 7311 HUMAN BRAIN - 4 Parts

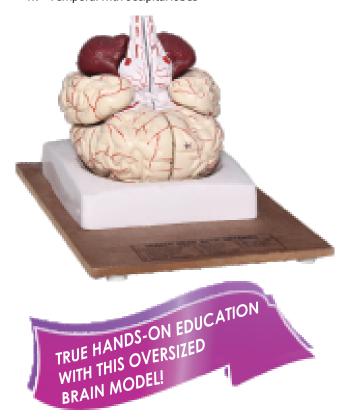
Same as Cat. No. 7310 but with four parts-detailed model of Human Brain, supplied on pan/removable base



#### 7312 HUMAN BRAIN - 8 Parts

Deluxe brain, divided in eight parts, full brain can be dissectable into:

- I. Half of brain stem
- ii. Half of cerebellum
- iii. Frontal with parietal lobes
- iv. Temporal with occipital lobes



#### **HUMAN HEART - FIBRE GLASS MODELS**



#### **FACTS AND FUNCTIONS OF HUMAN HEART**



The human heart is an organ that pumps blood throughout the body via the circulatory system, supplying oxygen and nutrients to the tissues and removing carbon dioxides and other wastes.

" The tissues of the body needs a constant supply of nutrition in order to be active".

#### 7315 CLASSIC HUMAN HEART 4 Parts (Natural Size)

This is very useful model to show the anatomy of human heart with ventricles, atriums valves, viens and the aorte in great details. The front heart is removable to view the chambers ad internal structure. natural size as to size of human heart (life-size) with exquisite details throughout. Supplied on removable stand.

#### 7316 CLASSIC HUMAN HEART 2 Parts (Natural Size)

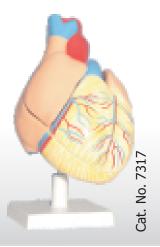
Same as Cat. No. 7315, but with two parts.

#### 7317 HEART 2 - TIMES, 4 PARTS

This is 2 times life- size heart m o d e l a l l o w s e a s y identification of all structures and is a perfect aid for lessons in large classrooms of lecture halls. The atrium walls and the front heart wall are removable to reveal the most professionally detailed and realistic heart available. Hand-painted in life-like colours to depict dozens of items of anatomical interest. Supplied removable stand.

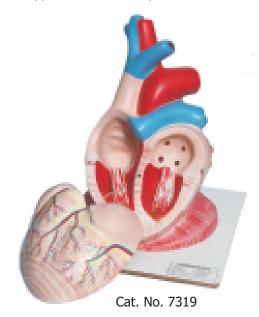






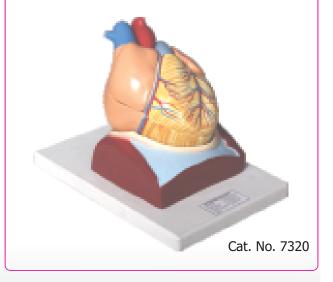
## 7319 GAINT HUMAN HEART, 8 Times 2 Parts

See every detail of heart with this gaint 8 times enlarged model. Supplied on base with keycard.



#### 7320 HEART 5 TIMES, 7 PARTS

Sale as Cat. No. 7319 but supplied with 7 parts . The front heart walls can be removed . Supplied on removable stand.



7318 HEART 2 - TIMES, 2 PARTS

Same as Cat. No. 7317 but supplies with 2 parts.



#### **HUMAN DIGESTIVE SYSTEM**

#### FACTS AND FUNCTIONS OF HUMAN DIGESTIVE SYSTEM

The digestive system begins at the mouth includes the esophagus, stomach, small intestine, large intestine ( also known as the colon) and rectum, and ends at the anus. The entire system-from the mouth to anus-is about 30 feet (9 meters) long.

The human digestive system is a series of organs that convert foods into essential nutrients that are absorbed into the body and eliminates unused waste material. It is essential to good health because if the digestive system shuts down, the body cannot be nourished or rid itself of waste.

#### 7322 HUMAN DIGESTIVE SYSTEM Large Size 12" x 32"

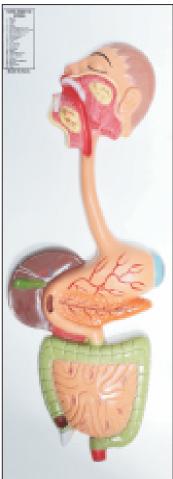
Life -size model which demonstrates the entire digestive system in graphic relief.

#### Features:

- Nose
- Mouth cavity and pharynx
- Oesophagus
- Gl tract
- Liver with gall bladder
- Pancreas
- Spleen

The duodenum, caecum and rectum are opened. The transverse colon and front stomach wall are also fixed. Mounted on baseboard.

Large Size: 12" x 32"



#### 7323 HUMAN DIGESTIVE SYSTEM Standard Size 9" x 21"

Same as Cat. No. 7322 but smaller in size.

Standard Size: 9" x 21"



THE MOST COMPREHENSIVE HUMAN DIGESTIVE MODEL!

#### **HUMAN CIRCULATORY & NERVOUS SYSTEM**



#### FACTS AND FUNCTIONS OF HUMAN CIRCULATORY SYSTEM

The circulatory system consists of three independent systems that works together the heart (cardiovascular) , lungs (pulmonary), and arteries, veins, coronary and portal vessels (systemic). The system is responsible for the flow of blood, nutrients, oxygen and other gases, and as well as hormones to and from cells.

#### 7325 HUMAN CIRCULATORY SYSTEM Large Size 12" x 32"

Life -size model which demonstrates the entire circulatory system.

#### Features:

- The arterial/venous system
- Heart
- Lung
- Gl tract
- Liver
- Spleen
- Kidneys
- Supplied on base

Large Size: 12" x 32"



#### 7326 HUMAN CIRCULATORY SYSTEM Standard Size 9" x 21"

Same as Cat. No.  $7325\,\mathrm{but}\,\mathrm{smaller}\,\mathrm{in}\,\mathrm{size}.$ 

Standard Size: 9" x 21"

#### 7328 HUMAN NERVOUS SYSTEM Large Size 12" x 32"

This model of nervous system is organized into two parts, the central nervous system which consists of brain and the spinal cord, and the peripheral nervous system, which connecting the central nervous system to the rest of the body. Supplied on board size 12" x 32"





#### 7329 HUMAN NERVOUS SYSTEM Standard Size 9" x 21"

Same as Cat. No. 7328 but smaller in size.

Standard Size: 9" x 21"



#### **HUMAN RESPIRATORY & SKELETON SYSTEM**

#### **FACTS AND FUNCTIONS OF HUMAN RESPIRATORY SYSTEM**

The primary organs of the respiratory system are lungs, which function to take in oxygen and expel carbon dioxide as we breathe. The human respiratory system is a series of organs responsible for taking in oxygen and expelling carbon dioxide.

#### 7330 HUMAN RESPIRATORY SYSTEM Large Size 12" x 32"

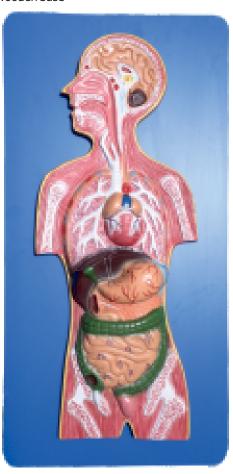
Facilitated learning about breathing and the anatomical complexities of human respitory system supplied on wooden base

#### **FACTS AND FUNCTIONS OF HUMAN SKELETON SYSTEM**

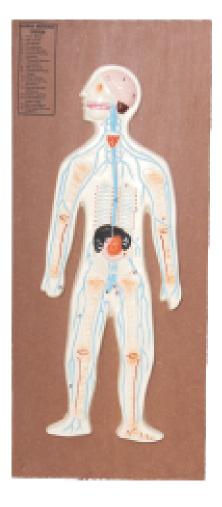
The adult human skeleton system consists of 206 bones, as well as a network of tendon, ligaments and cartilage that connects them. The skeleton system performs vital function- support, movement, protection, blood cell production, calcium storage and endocrine regulation that enables us to survive.

#### 7332 HUMAN SKELETON SYSTEM Large Size 12" x 32"

Beautiful model, showing different parts of human skeleton system.







7331 HUMAN RESPIRATORY SYSTEM Standard Size 9" x 21"

Same as Cat. No. 7330 but smaller in size. Standard Size: 9" x 21"

7333 HUMAN SKELETON SYSTEM Standard Size 9" x 21"

Same as Cat. No. 732 but smaller in size.

Standard Size: 9" x 21"

#### **HUMAN REPRODUCTIVE SYSTEM**



#### 7334 MALE REPRODUCTIVE SYSTEM Large Size

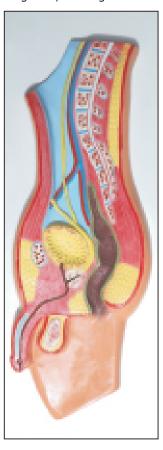
Large size, showing detail of male genital organs in detail.

Large size 12" x 32"

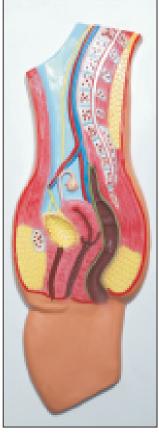
## 7336 FEMALE REPRODUCTIVE SYSTEM Large Size

Large size, showing detail of female genital organs in detail.

Large size 12" x 32"







7335 MALE REPRODUCTIVE SYSTEM Male Pelvis - Standard Size

This cross section of male genital organs shows all structure in detail.

Delivered on base board.



## 7337 FEMALE REPRODUCTIVE SYSTEM Female Pelvis - Standard Size

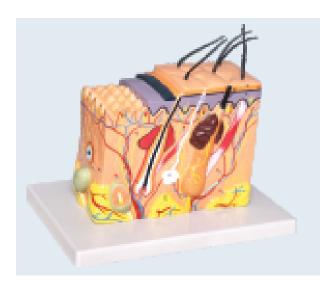
This cross section of female genital organs shows all structure in detail.

Delivered on base board.





#### **HUMAN SKIN & KIDNEY MODELS**



#### 7340 HUMAN SKIN MODEL 70 Times Enlarge, 3D

The distinctive model shows a section of human skin in three dimensional form, individual skin larger are differentiated and imported structure such as hair, sebaceous and sweat glands, receptors, nervous, erector pill muscles and vessels are shown in great detail.

#### 7341 HUMAN SKIN MODEL 70 Times Enlarged

This relief model show a section through the 3 layers of hair covered skin of the head.

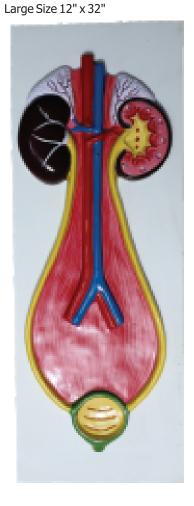
- Sweat gland
- Receptors
- Vessels
- Nerves
- Representation of hair follicles with sebaceous glands





#### 7343 HUMAN KIDNEY MODEL Large Size

Large size, showing maximum detail. Supplied on board.



#### 7344 HUMAN KIDNEY MODEL 3 Times Full Size

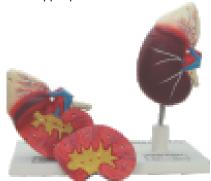
Longitudinal section of the right kidney. On base board.



7345 HUMAN KIDNEY MODEL 2 Parts, On Stand

#### Showing

- Kidney with adrenal gland
- Renal and adrenal vessels
- Upper portion of ureter



### **TEETH WITH UPEPR/LOWER JAW & LUNGS MODEL**



#### 7348 TEETH WITH UPPER AND LOWER JAW

Upper and lower jaw are opened to show the arrangement of the remaining teeth. Tooth roots, spongiosa, vessels and nerves are exposed. Supplied on base.



#### 7349 MOLAR WITH DENTAL CARIES 6 Parts

Different stages are shown by six parts. It features a longitudinal section through the crown . Two roots and the pulp cavity portion.



#### 7350 HUMAN TONGUE 2.5 Times Life Size

Supplied on board.



#### 7351 HEAD WITH NECK

Relief model on base board. Only one model is supplied with front & rear view.





Front View

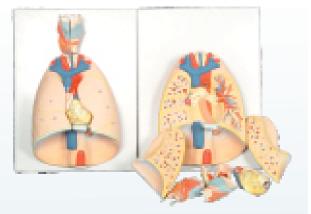
#### 7352 HUMAN LUNGS 2 Parts

Dissectable 2 parts showing all important parts. Supplied on stand.



#### 7353 LUNGS MODEL WITH LARYNX 7 Parts

Highly detailed model, great aid to teaching, even in large classrooms.



In the above picture we have shown two identical models - one in arranged manner and other in the open manner showing all 7 parts. At the time of supply only one model is supplied.



#### MALE / FEMALE MUSCULAR FIGURE

#### 7355 LIFE SIZE MALE MUSCULAR FIGURE 18 Parts

This sophisticated model shown the deep and superficial muscular in great detail.

The extraordinary accuracy makes this masterpiece a unique tool for teaching even in large lecture halls. Following parts can be removed and studied in detail: skull cap , brain, eye ball, breast and abdominal wall, parts of larynx, lungs, parts of heart, parts of stomach, liver with gall bladder, kidney, detachable arms, leg and head and abdominal wall for detail study, hand painted , mounted on a convenient roller wooden base.

7356 LIFE SIZE FEMALE MUSCULAR FIGURE 18 Parts

The female muscle figure without internal organs, brain and male genital insert provides the same quality characteristics as cat. no. 7355 model mounted on a convenient roller wooden base.



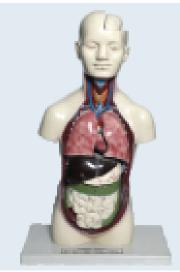
PROVIDES ALL QUALITY
CHARACTERISTICS
&
COMPONENTS
IN MUSCULAR FIGURE



HUMAN MUSCLE MODEL arge Size on Board







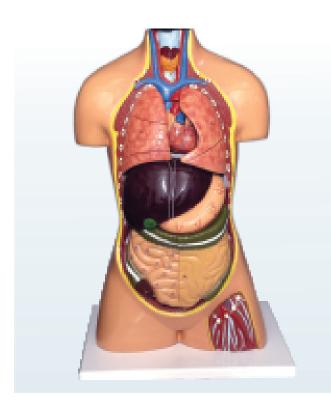
# 7358 TORSO HALF SIZE WITH HEAD (YOUNG) 8 PARTS

Youth model, approx 490 mm in height, dissectable into 8 Parts. Half of the brain can be taken out from the skull, right & left lungs with heart, liver, stomach and intestine are removable to show the internal structure. Mounted on base. Numbered with English Key Card.



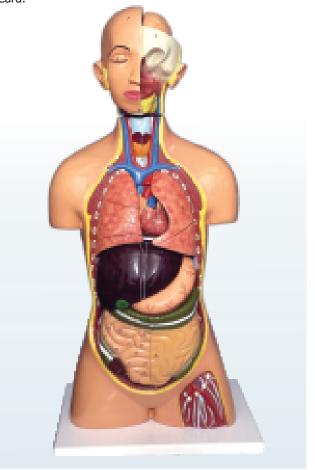
#### 7359 HUMAN TORSO WITHOUT HEAD - 7 Parts

Life Size, thoracic and abdominal organs, individually detachable lungs, Heart, stomach, liver and intestine. Numbered with English Key Card.



#### 7360 HUMAN TORSO - 10 Parts

Life Size, Sexless torso in 10 parts. The eye with optical nerve and half brain are removable. Thoracic and abdominal organs, individually detachable lungs, Heart, stomach, liver and intestine. Numbered with English Key Card.



#### MALE / FEMALE HUMAN TORSO - MAGNETIC

#### 7362 **HUMAN TORSO MALE / FEMALE MAGNETIC**

Tough, smooth-finished material mounted on a base Detachable head; Open back, exposed spine spinal cord segments; Interchangeable reproductive organs; female reproductive organs shall have a fetus which is removable.

The parts, structures of the model are correctly numbered with permanent markings. With English user's manual that includes diagram with labels consistent with the numbered parts in the actual model.

- 20 dissectable parts that include:
- Removable head (parts of mouth and nasopharynx exposed) with half brain expose with arteries
- Eye with optic nerve
- Female breast plate with plate rib
- Right and left lung
- 2-part heart
- 2-part stomach
- Liver with gall bladder
- Large intestine, with appendix flap
- Small intestine
- Kidney half
- Female genital organs (2 parts
- Male genital organs (2 parts)

All internal organs of the Male / Female Torso are built in strong magnet.

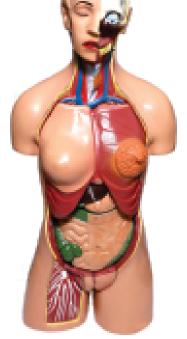




Torso

The quality of above Magnetic Torso is impressive, just like the price. Use it to answer all questions on internal human anatomy you ever had.

> These both torso are same-left hand side torso is showing complete view & and above one is showing with 20 dissectable parts.



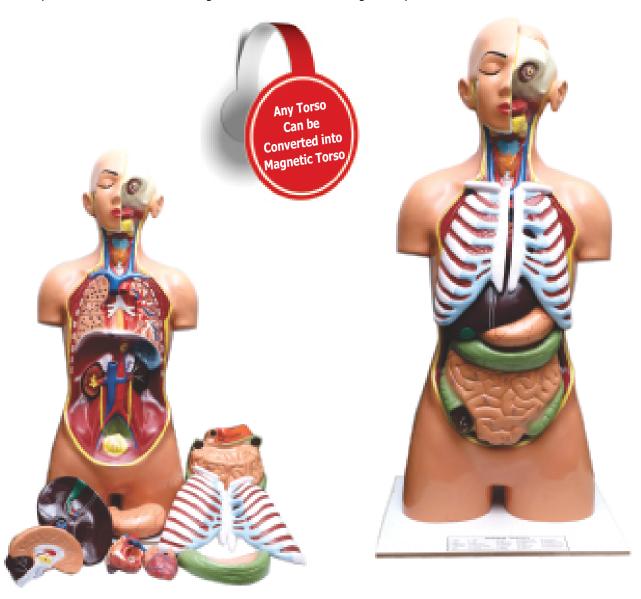
View of complete Male/Female Magnetic Torso.

#### **HUMAN TORSO - NON MAGNETIC**



#### 7363 HUMAN TORSO - 12 Parts

This 12 parts anatomically correct human torso is an educational tool of true quality. The unisex human torso model is hand-painted true to detail .It shows the human anatomy in great detail and contains the following removable parts:2-part Brain, 2 lungs with sternum and rib attachments, 2-part heart, 2-Part Stomach, Liver with gall bladder, intestinal tract, Front half of kidney, Vertebra detachable. All the organs in this human torso are hand painted for a quality product. This great human anatomy educational tool makes learning the location of the human organs easy.

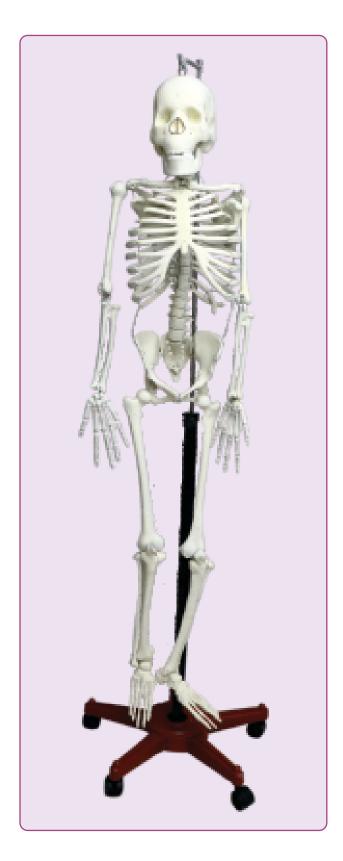


Non Magnetic Torso

These both torso are same-left hand side torso is showing with 12 dissectable parts & and above one torso is showing complete view.



#### **HUMAN SKELETON & STAND**



#### 7366 HUMAN SKELETON

The classic skeleton model has been the standard of quality in schools, universities and laboratories for over 50 years. This is the most affordable full size skeleton available anywhere, ideal for active us in teaching and demonstrations. The human skeleton model is easy to handle anatomical correct and economical prices.

#### Features:-

- Life size and realistic weight
- Top quality cast from real specimens
- Extremely accurate in every detail
- Final assembly carried out by hand
- Made from a durable and unbreakable synthetic material
- Limbs can be removes quickly and easily.
- Movable joints for the demonstration purpose.
- Developed in India

Under Cat. No. 7366,
only Human Skeleton is supplied.
Stand is not included.
Stand is used for clicking the photograph.
If you want this type of stand
please refer to Cat. No. 7368.

#### 7368 STAND FOR HUMAN SKELETON

Wheel type, heavy stand for above human skeleton.



Please call us for quotations.

#### **EMBRYONIC DEVELOPMENT**



# 7370 EMBRYONIC DEVELOPMENT

- An embryo about 6 days old, considerably enlarged.
- Uterus with Embryo in the first month of gestation.
- Uterus with Embryo in the third month of gestation.
- Uterus with foetus in the fourth month.
- Uterus with foetus placenta & umbilical cord.
- Uterus with foetus in the fifth month.
- Uterus with foetus in the seventh month of pregnancy.
- Uterus with foetus in the eight month of pregnancy.
- Uterus with foetus in the ninth month of pregnancy.

#### Complete with keycard.



# 7371 BASIC PREGNANCY SERIES Set of 5 Models on Board

This series consists of five models to show the most important stages of development. Stages included: 1st month, 2nd month, 3rd month, 5th month, 7th month. The 5th and 7th month stages have detachable foetuses. All models are mounted together on a base.

ANY MODEL
CAN BE MANUFACTURED
AS PER
YOUR SPECIFIC REQUIREMENT



#### 7372 ANIMAL CELL

Key features are colored and numbered for comparison with the key that is included. This model provides a visually and kinesthetically effective method for studying the structure and function of the various cell structure and organelles of an animal.



#### 7373 ANIMAL CELL - Large Size

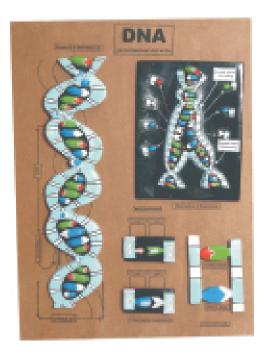
Colorful model of a greatly enhanced animal cells. Easily indentify the different structure of the cell, such as nucleus, endoplasmic, mitochondria, ribosome, Golgi apparatus, centrioles, lysosomes and fat vacuoles. Perfect for students.



#### 7374 DNA MODEL

This DNA Molecule is ideally suited to the classroom environment. Mounted on a large wooden base.

Size 18" x 24"



#### 7375 RNA MODEL

Size 18" x 24"



#### 7376 DNA MODEL

Same as above but small size - 18" x 12"

#### 7377 RNA MODEL

Same as above but small size - 18" x 12"



#### 7380 AMOEBA MODEL

it's molded of clear plastic and incorporates all the key structures including nucleus, food vacuoles containing diatoms and bacteria, contractile vacuole, fat dropet, plus granular and clear zones of cytoplasm. All are moided in combinatios of coloured and clear plastics to help the student envision the real prorozoan. Mounted on a hardwood base.



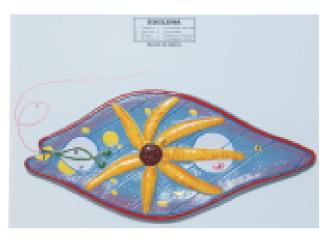
#### 7381 PARAMECIUM MODEL

A truly life-like paramecium model translucent plastic. Shows clearly the morphology of the fascinating protozoan and entice your students to examines more closely a real specimen. Includes cilia both an the gullet and for locomotion.



#### 7382 EUGLENA MODEL

This model is a perfect teaching tool structure include the flagella, stigma, blepharoplast, contracile, vacuale, chloroplast, pyrenoid, rhizoplast, nucleus and endosome. Mounted on base. Size 10" x 16"



#### 7383 HYDRA MODEL

Enlarged approximately 30 times. The anatomy of the hydra is shown in longitudinal section: entoderm, mesoglea, ectoderm, male and female egg cell, buds and mouth opening. Supplied on stand.



## 7385 ASCARIS MALE & FEMALE COMBINED

Show all internal organs like pharynx, intestine, testis, oviduct etc. Model mounted on board with keycard.

Dissectable model, showing all important organs of male & female ascaris in details. Size 12" x 18"



7392 LIFE CYCLE OF HOUSEFLY Beautiful Model in acrylic showcase. Beautiful Model in acrylic showcase. Beautiful Model mounted on large size Size 8" x 10"



7393 LIFE CYCLE OF SILKMOTH Beautiful Model in acrylic showcase. Size 8" x 10"



7394 LIFE CYCLE HONEY BEE Beautiful Model in acrylic showcase. Size 8" x 10" Size 8" x 10"



7395 LIFE CYCLE MOSQUITO Size 8" x 10"



7396 LIFE HISTORY MOSQUITO (Anopheles) Beautiful Model in acrylic showcase. Size 8" x 10"

LIFE HISTORY MALARIAL PARASITE Beautiful Model in acrylic showcase. Size 8" x 10"

LIFE HISTORY FROG (Development of Frog) Beautiful Model in acrylic showcase. Size 8" x 10"

7399 LIFE HISTORY COCKROACH Beautiful Model in acrylic showcase. Size 8" x 10"

7400 LIFE HISTORY BUTTERFLY Beautiful Model in acrylic showcase.



7402 LIFE HISTORY OF HONEY BEE

wooden base. Size 18" x 24"



7403 LIFE HISTORY OF HOUSE FLY

Beautiful Model mounted on large size wooden base. Size 18" x 24"



LIFE HISTORY OF EARTH WORM

Beautiful Model mounted on large size wooden base. Size 18" x 24"

> **ALL MODELS OF** LIFE HISTORY/CYCLE LISTED FROM CAT. NO. 7392 **TO 7401 ARE SUPPLIED IN ACRYLIC SHOWCASE OF** SIZE 8" X 10".



# 7405 ANIMAL CELL DIVISIONS MEIOSIS MODEL

Animal cell division meiosis model is used for biological study , and consists of a set of 12 models depicting stages in meiotic cell division for detailed examination. Comes with a convenient display on large base. Size  $18" \times 24"$ 



# 7406 ANIMAL CELL DIVISIONS MITOSIS MODEL

Animal cell division mitosis use this innovative model set to teach your students mitotic division. This model represent 10 stages of animal cell mitosis comes with a convenient display on large base. Size 18" x 24"



#### 7407 FROG DISSECTION

Cast in fibre glass and unbreakable even after years of use. Handpainted in bright, functional colours & mounted only large base. Size  $12" \times 16"$ 



#### 7408 FROG DEVELOPMENT

Beautiful model showing different stages of frog development. Size 18" x 24". Supplied on wooden base.

#### 7409 FISH DISSECTION ON STAND

Showing all general anatomy after dissection mounted on stand.

## 7410 EARTHWORM DISSECTION

Showing the external character in a portion and the dissection in the remaining, exhibiting all important systems, mounted on board.



#### **BOTANY MODELS**

#### 7421 PLANT CELL MODEL

This model presents the structure of a typical plant cell with cytoplasm and cell organelles, as viewed from electron microscope.

For better illustrations, all important organelles are raised and displayed in colors.



## 7423 PLANT CELL DIVISIONS MITOSIS

This set explains the stages of Mitosis with 10 enlarged models supplied on board, size 18" x 24".



# Large Large

**FLOWER ON STAND** 

7425

Student can learn to build a flower using this model that emphasizes the arrangement of floral components and the reproductive function of flowers. The patels, sepals and stamens are detachable and one another is sectioned to reveal pollen grains within. Adhering to the stigma are six pollen grains demonstrating the process of pollination. The process of double fertilization is also emphasized. Number coded and keyed for easy identification.



# 7422 COMPARISON MODELS ANIMAL & PLANT CELL

These enlarged models of an animal cell and a plant cell enables visual teaching about their structures, as well as their similarities and differences.



7424
PLANT CELL DIVISIONS MEIOSIS

With 12 models the stages of Meiosis are explained. supplied on board, size  $18'' \times 24''$ .



7426 TYPE OF OVULE

Set of four models on board.

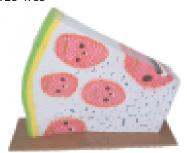


#### **BOTANY MODELS**



#### 7427 MONOCOT STEM T.S.

Modeled after a corn stem to show the general anatomy of a monocot in logitudnal and cross section. Features such as cuticle layer, epidermis, closed vascular bundles, parenchyma and several other are shown. Include key cards. Size 7" x 21" x 15"



# 7428 MONOCOT ROOT T.S.

Modeled after a corn stem to show the general anatomy of Size  $12" \times 18"$ 



#### 7429 MONOCOT LEAF T.S.

Modeled after a corn stem to show the general anatomy of Size  $12" \times 18"$ 

#### 7430 GERMINATION MODEL

Classroom activities supports hands – on learning and basic understandings of similarities and differences in seed development.

#### 7431 ROOT TIP OF FERN

This model show the pointed growth resulting from a apical cell with the cells which branch out spirally from point of vegetation. Root shown in longitudinal and transverse section, detachable with crown of the root removable.

#### 7432 DICOT STEM T.S.

Sunflower stem is displayed in cross, radial and tangential sections. Epidermis, cork layer, Phoem and xylem regions, pith and other vital structures are found. Size 8" x 20" x 14"

#### 7433 DICOT ROOT T.S.

Sunflower stem is displayed in cross, radial and tangential Size 12" x 18"



#### 7434 DICOT LEAF T.S.

Sunflower stem is displayed in cross, radial and tangential Size  $10" \times 16"$ 

# 7435 PLACENTATION TYPES Set of 6 Models

## LIFE HISTORY OF SPIROGYRA

On Board, Size 18" x 24"

#### 7437 PITCHER PLANT

On Board. Size 14" x 18"

#### 7438 FUNARIA PLANT

On Board. Size 12" x 16"

ALL TYPES OF
GEOGRAPHICAL MODELS
ARE ALSO AVAILABLE
PLEASE ASK US
FOR QUOTATION





# 7501 CHROMATOGRAPHY CABINET

Made of teakwood with glass on all four sides and on top. Internal surface wax coated for solvent resistance. Hinged top provided with rubber gasket for air tight closing. Window with air tight door in lower position. Heavy castors provided for easy movement. Finished in lacquer polish. Supplied with two stainless steel troughs and 4/6 glass rods.

Cat. No.	Description
7449 (a)	for 6 filter papers of 57x68cm.
7449 (b)	for 4 filter papers of 46x57cm.

This is useful for separating complex mixtures of compounds having similar polarity, for example, amino acids.

# 7502 PAPER CHROMATOGRAPHY CABINET

It is made of single piece modeling. The inner size of cabinet is  $6'' \times 8'' \times 9''$  with front sliding glass door. The lid of cabinet is also made of bakelite.

**Stainless steel solvent portion:** It is made of 316 quality S.S. It is having the volume capacity of 150 ml. it is required to hold the solvent mixture.

**Stainless steel hanger:** It is a stainless steel rod of size 6" and dia 2mm. it is used as hanger of Chromatography paper. It fits inside the groves of the cabinet.

**Drying stand :** One stand is supplied to accommodate processed (wet) chromatography paper and to put it in oven to dry the same.

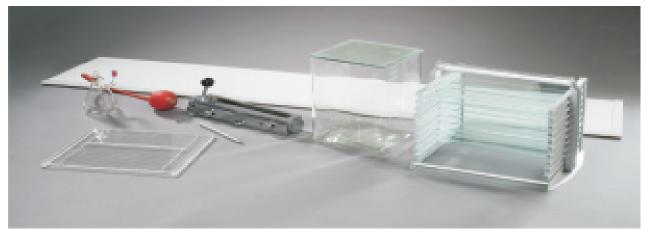
**Glass sprayer with rubber balloon:** The sprayer is made of Borosilicate Glass specially design for spraying the indicators on chromatography paper. A rubber ballon is connected Glass syringe: Glass syringes capacity 20ml, is provided to draw in the solvent from S.S pot after practical is over.

**TLC capacity:** Pkt of 25 high quality fine Capillaries are supplied with cabinet.





7503
THIN LAYER CHROMATOGRAPHY APPARATUS MODEL TLC-37



We're better than the rest.

#### APPLICATIONS

- **Purity of any sample :** Purity of sample can be carried out with TLC. Direct comparison is done between the sample and the standard or authentic sample. If any impurity is detected, then it shows extra spots and this can be detected easily.
- **Identification of compounds :** Thin layer chromatography can be employed in purification, isolation and identification of natural products like volatile oil or essential oil, fixed oil, waxes, terpene, alkaloids, glycosides, steroids etc.
- **Examination of reactions:** Reaction mixture can be examined by Thin Layer chromatography to access whether the reaction is complete or not. This method is also used in checking other separational processes and purification processes like distillation.

#### **Our TLC apparatus consists of :**

- a) Applicator made of electroplated brass
- b) Plate Rack or aluminum Rack
  This rack holds ten 20 x 20 cm plates which can
  be stacked horizontally
- c) Perspex base
- d) Spotting template made of Perspex
- e) Glass Plate for T.L.C.
  (Glass plate with polished edges

(Glass plate with polished edges, about 4mm thick)

- f) Reagent Sparayer (all glasses)
  - (This all glass reagent sprayer is a low cost yet efficient alternative to the TLC sprayer. It comes with a rubber pump but may also be operated from a compressed air or Nitrogen Supply.)
- g) Developing tank with lid(Borosilicate Glass)
- h) Scriber for marking lines, complete along with instruction manual.
- I Micro Pipette

#### ADVANTAGES

- · Less equipment is required.
- Very little time for separation is required.
- It is more sensitive.
- The lower detection limit of analytical sample in TLC is approximately on decimal lower than that is paper chromatography and very small quantities of sample is sufficient for analysis.



#### 7505 TISSUE CULTURE RACKS

"BESTO" Tissue culture racks are very useful for various types of tissue culture plants and other tissue culture work in tissue culture room. Used in areas of tissue culturing of plants as well as in other tissue culture work. It is Ideal for Agricultural Research Labs.

#### SALIENT FEATURES & CONSTRUCTION

- Low Cost.
- Minimum heating effect/heat dissipation.
- No Flickering effect.
- Tissue Culture Racks are made of mild steel angle frame, shelves & frame are powder coated painting in corrosion resistant paint or S.S.
- Each rack of size 50"x18" (depth).
- Distance between shelves to shelves is 15".
- UV Germicidal Light are fitted inside the rack/work area.
- Fitted with 0-24 Hours Mechanical Timers (optional, fitted in two models only)
- The whole rack is provided with four nos. castor wheels at the bottom for easy mobility to any place.

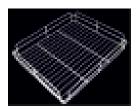
Cat. No.	Description
7505(a)	Rack fitted with 12 tubes, 6 bulbs , 3UV (4 shelves) (M.S.)
7505(b)	Rack fitted with 16 tubes, 8 bulbs , 4UV (5 shelves) (M.S.)
7505(c)	Rack fitted with 12 tubes (4 shelves) (M.S.)
7505(d)	Rack fitted with 16 tubes (5 shelves) (M.S.)
7505(e)	Rack (S.S) fitted with 12 tubes, 6 bulbs , 3UV (4 shelves)
7505(f)	Rack (S.S) fitted with 16 tubes, 8 bulbs , 4UV (5 shelves)
7505(g)	Rack (S.S) fitted with 12 tubes (4 shelves)
7505(h)	Rack (S.S) fitted with 16 tubes (5 shelves)





# 7508 TRAY FOR TISSUE CULTURE RACK

We offer trays for Tissue Culture Rack, made up of high quality polypropylene. These trays can be used while washing, filling autoclaving & incubation.



#### 7510 CULTURE TUBES / SPECIMEN TUBES

Made from 3.3 grade Borosilicate glass tubing.

#### **FLAT BOTTOM**

Cat. No.	Cap. (ml)	Size (mm)
7510 (a)	5	16X50
7510 (b)	10	25X50
7510 (c)	15	25X57
7510 (d)	20	25X75
7510 (f))	25	25X75
7510 (g)	30	25X95
7510 (h)	40	25X145
7510 (i)	45	20X145
7510 (j)	60	25X200

#### 7512 CULTURE TUBES / SPECIMEN TUBES

Made from 3.3 grade Borosilicate glass tubing.

#### **ROUND BOTTOM.**

Cat. No.	Cap. (ml)	Size (mm)
7512 (a)	10	16x125
7512 (b)	15	16x150
7512 (c)	30	25x100
7512 (d)	40	25x150
7512 (e)	45	25x150
7512 (f)	100	32x200
7512 (g)	150	38x200



#### 7513 HERBARIUM PRESS For Field Use

Teakwood batons fabrication. Adjustable strap for putting sufficient pressure. Spirit polish finishing.bvSize 45cm x 30cm.



#### 7514 HERBARIUM PRESS For Laboratory Use



MDF planks, lacquer finish. Provided with tilting type bolts with flynuts for putting sufficient pressure. Upper plank perforated for evaporation. Size 45cm x 30cm.

#### 7515 HERBARIUM CABINETS

For keeping botanical specimens securely placed in herbarium sheets. Cabinet frame of MDF finished with laminated sheet. Hinged MDF baton to collectively lock the drawers. Drawer frame of MDF with plywood bottom fitted with puller knobs and index card holder. Phosphor bronze clip provided inside drawer for keeping herbarium sheets in position. Drawers finished in spirit polish. Drawer Size 45cm x37cm x 8cm.

Cat. No.	Capacity
7515 (a)	Cabinet with 6 drawers
7515 (b)	Cabinet with 12 drawers
7515 (c)	Cabinet with 24 drawers





#### TISSUE FLOTATION BATH, WORKSTATION & MICROTOME

#### 7525 TISSUE FLOTATION BATH

It incorporates a feather touch keypad with LCD display for setting the Water Bath. Precise temperature control. Built in memory for storing set temp. Corrosion resistant for durability.

Water Temp. Range : Ambient to 90°C

Temp. Tolerance :  $\pm 1^{\circ}$ C Water Bath Dimensions :  $230 \times 180$ mm Power : 200VA

Overall Dimension : 320x320x110 mm



# 7526 TISSUE FLOTATION WORKSTATION

It incorporates a feather touch keypad with LCD display for setting the water bath & Hot plate Temp. Precise temp. control. Built in memory for storing set temp. Corrosion resistant for durability.

Water Temp. Range : Ambient to 90°C

Temp. Tolerance :  $\pm 1^{\circ}$ C

Water Bath Dimensions : 258 x 193 x 64 mm

Power : 200VA Integrated Hot Plate : Yes

Hot plate dimensions : 110 x 70 & 140 x 70mm

Integrated LED for

bath illumination : Yes



# 7528 PRECISION ROTARY MICROTOME (ERMA JAPAN TYPE)

It incorporates a ball and flange type object holder for specimen centering. Knife holder with lateral movement permits use of complete knife edge and has feed range of 1-25 micron in steps of 1 micron each. Supplied complete with one knife 120mm long with back and handle in box, 3 block holder, one honing stone, one bottle of lubrication oil and dust cover.



## 7529 ACCESSORIES FOR MICROTOMES

- a) ERMA JAPAN, Disposable Blade High Profile
- b) ERMA JAPAN, Disposable Blade Low Profile
- c) Disposable Blade Holder High Profile
- d) Disposable Blade Holder Low Profile
- e) Disposable Blade Holder Base
- f) Standard Cassette Clamp
- g) Object Holder (Set of Three)
- h) Microtome Knife 120mm
- i) Microtome Knife 140mm
- j) Microtome Knife 160mm
- k) Leather Strap
- Honing Stone
- m) L-moulds

#### **SENIOR PRECISION MICROTOME**



#### 7532 SENIOR PRECISION ROTARY MICROTOME (Latest Spencer 820 Type)

It is universally, approved, most modern and reliable sectioning equipment designed for very precise sectioning of tissue upto 1 micron thickness. The feed indicator, located in front of microtome is operated by the latest **'CAM DRIVE SYSTEM'** for accurate feed setting from 1-50 microns in steps of one micron. The interior mechanism rests on a heavy cast iron base and is covered with a full swing protective cover for easier cleaning & lubrication.

The salient features include independent feed mechanism with automatic safety device, universal knife holder with lateral movements permitting use of the entire knife edge, universal vice type object holder for accurate centering of the specimen.

#### TECHNICAL SPECIFICATIONS

Section thickness setting	1-50 microns in step of 1 micron
Operation	Manual
Knife length	120 mm
Block holder	Set of three
L moulds	50 x 25 x 20mm
Trimming section	Upto 10-20 micron
Vertical specimen stroke	55 mm
Max. specimen size	32 mm(section)
Specimen orientation	360°
Thickness control	Manual with microtome.
Object feed	With wheel
Honing steel	Provided



#### SPECIAL FEATURES

- Conveniently located feed indicator
- Automatic feed release mechanism
- Convenient specimen holder
- Safety device
- Smooth drive wheel with locking
- Vibration and shake proof operation
- Minimum maintenance
- · Reduce hand stress
- Sturdy, rigid construction
- Protective cover for easy cleaning and lubrication.



Rotary Spencer Type
Microtome with robust
feed mechanism,
automatic feed release
and specimen
refraction to deliver
virtually flat and
uniform sections.



#### **NEW ADVANCE ROTARY MICROTOME**

# 7533 NEW ADVANCE ROTARY MICROTOME

New advance rotary microtome the new approach to manual sectioning which provides unique user friendly, achieved through numerous new features which have never been offered before in the class of microtome.

#### TECHNICAL SPECIFICATIONS

TECHNICAL SPECIFICATIONS	
Section thickness setting	0.5-60µm
Setting value	From 0.5µm-2µm in 0.5µm increment
	From 2µm-20µm in 1µm increments
	From 20µm-60µm in 5µm increment
Trimming thickness	10μm-60μm
Vertical stoke	60mm
Specimen orientation	horizontal 8°, vertical 8°
Object feed	28mm
Max. sectioning area	60mmx50mm
Dimensions:	
Width (Incl. hand wheel)	460mm
Depth (Incl. waste tray)	500m
Height (Total)	300mm
Working Height (Knife edge)	105mm
Weight (Without acc.)	23kg(approx)

#### SPECIAL FEATURES

- Section thickness display
- Section thickness adjustment knob
- Coarse feed hand wheel
- Adjustable knife angle
- Auto retraction mechanism
- Anti roll plate
- Spacious section waste tray
- Standard/Universal cassette clamp



#### **SEMI AUTOMATIC MICROTOME**



#### 7534 SEMI AUTOMATIC MICROTOME

Semi automatic microtome has been specially designed for the experienced user who prefer manual over motorized sectioning.

#### TECHNICAL SPECIFICATIONS

TECHNICAL SPECIFICATIONS	
Section thickness setting	0.5-100μm
Setting value	from 0.5µm-5µm in 0.5µm increment
	From 5µm-20µm in 1µm increments
	From 20µm-60µm in 5µm increments
	From 60µm-100µm in 10µm increment
Trimming thickness	1μm-600μm
Specimen retraction range	5-100µm un 5µm increments
Minimum setting value	0-5mm
Object feed	28mm
Vertical stroke	60mm
Specimen horizontal feed	28mm
Max .speciman size	50x50mm
Operation	semi-automatic
Dimension(LXWXD)	(520X430X330)mm
Weight	24kg
Nominal voltage	220v,50Hz/110V,60Hz
Power draw	150VA

#### SPECIAL FEATURES

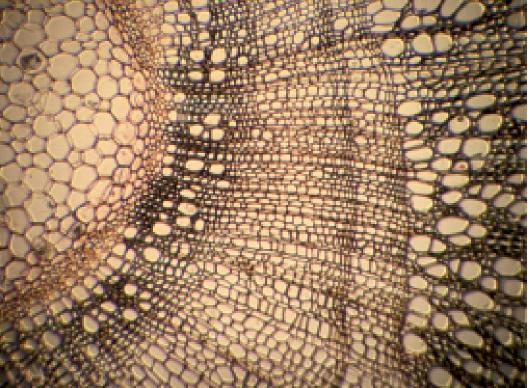
Microtome at a glance

- LCD display with feature touch keypad
- Cutting/trimming mode
- Fast forward/backward functions
- Increase/decrease section thickness
- Retraction can also be adjustable
- Section counter/section thickness display
- Motorized feed drive
- Finger protection guard





#### **AUTOMATIC MICROTOME**



**PHOTOGRAPH** 

**OF** 

**VEGETAL** 

**TISSUE** 

7535 AUTOMATIC MICROTOME (Touch Screen Model)





Fully Automatic

COMPETE
ON
VALUE,
NOT ON PRICE

#### **AUTOMATIC MICROTOME**



#### 7535

#### **AUTOMATIC MICROTOME**

Full automatic microtome embodies latest technological innovation and perfectly Harmonies with an ergonomic design and user safety.

#### TECHNICAL SPECIFICATIONS

Section thickness setting	0.5µm-100µm
Setting value	from 0.5µm-2µm in 0.5µm increment
Setting value	From 2µm-10µm in 1µm increments
	From 10µm-20µm in 2µm increments
	From 20µm-100µm in 5µm increment
Trimming thickness	
Trimming thickness	1µm-600µm
Setting value	1μm-10μm in 1μm increment
	10µm-20µm in 2µm increments
	20μm-100μm in 10μm increments
	100μm-600μm in 50μm increment
Object feed	28mm
Vertical stoke	60mm
Specimen Retraction	20μm
Max. specimen size	50x50mm
Specimen clamp orientation	360°
Nominal voltage	100/120/230/240v AC±10%
Nominal frequency	50-60Hz
Power draw	200 VA
DIMENSION	
Width(incl. hand wheel)	580mm
Depth(incl. waste ray)	360mm
Height(total)	310mm
Weight	35kg

#### SPECIAL FEATURES

- Motorized feed and sectionizing.
- Section and trimming thickness display
- Section counter
- Automatic/ Manual control
- Continous section/ single section control
- Fast forward/ backward function
- Section/trimming change over
- Automatic memorization and recovery
- Emergency stop
- Auto retracting mechanism
- Ergonomic design



#### **DISPOSABLE MICROTOME BLADES**

# 7537 DISPOSABLE MICROTOME BLADES (Patho cutter- HP)

- Specially honed & coated for incredible precision & durability.
- Durability save labs time & money.
- Ideal for sectioning hard tissues.

# 7538 DISPOSABLE MICROTOME BLADES (Patho cutter- R)

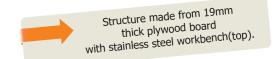
- Specially honed & coated for incredible precision & durability.
- Durability save labs time & money.
- Ideal for sectioning soft tissues.



#### 7575 HORIZONTAL LAMINAR AIR FLOW UNIT Model HLW-75 (Wooden Cabinet)

**Structure made of 19mm thick ply board covered with sun mica from outside.** Work Bench of perforated Stainless steel. Clear acrylic side panels. Front acrylic door of collapsible type.

The room air is taken through the bottom of the cabinet through the pre filter, which traps larger size particles and increase the life of main HEPA filter. Air is forced evenly through the HEPA filter, resulting a stream of unidirectional cleanair within the work zone of the cabinet.



#### SPECIFICATIONS:

- Made of 19mm thick Ply-board & Stainless Steel.
- Epoxy Painted inside.
- HEPA filter efficiency 99.97% upto 0.3micron.
- Protection grill for HEPA filter.
- Pre-filter efficiency 99% upto 5 microns.
- Stainless Steel work bench.
- UV germicidal lamp.
- Fluorescent illumination.
- Cock for gas.
- Static Pressure Manometer.
- Balanced blower with motor.

Cat. No.	Working Area Size
7575(a)	2' x 2'x 2'
7575(b)	3' x 2'x 2'
7575(c)	4' x 2'x 2'

All types of Laminar prices does not include packing/forwarding and freight charges. Please confirm before placing orders.







#### 7576 HORIZONTAL LAMINAR AIR FLOW UNIT Model HLM-76 (Mild Steel Cabinet)

The cabinets are fabricated out of thick mild steel cabinet duly powdered coated. The work table is made of thick stainless steel sheet. Side panels are provided of thick transparent acrylic sheets. The unit is fitted with pre-filter and is made to pass through highly effective HEPA (High Efficiency Particular Air) filter efficiency 99.97%, thus retaining all air borne particles of size: 0.3 micron and larger.

Using a dynamic machine, the blower and motor assembly is statically and dynamically balanced. Blowers are mounted on vibration isolation mounts to minimize vibration. The working is illuminated by fluorescent lighting fitted to the unit. Height of the working table provides comfortable "Sit-Down" working position for the operation to work on 220/230 volts AC supply.

Cat. No.	Working Area Size
7576(a)	2' x 2'x 2'
7576(b)	3' x 2'x 2'
7576(c)	4' x 2'x 2'



#### 7577 HORIZONTAL LAMINAR AIR FLOW UNIT Model HLS-77 (Stainless Steel)

The whole structure is constructed from S.S.304. Rest specifications are same as out Cat. No. 7575 or 7576

Cat. No.	Working Area Size
7577(a)	2' x 2'x 2'
7577(b)	3' x 2'x 2'
7577(c)	4' x 2'x 2'

Generally these types of Laminars are recommenced for Pharmaceutical industries Specifications of all three types of
Horizontal Laminars are same, the only difference is structure of
Cat. No. 7575 is made from 19mm thick plywood,
Cat. No. 7576 is made from mild steel and whole structure of
Cat. No. 7577 is from thick S.S. Sheet.
Rest of the specifications are the same.



#### 7580 VERTICAL LAMINAR AIR FLOW UNIT Model VLW-80 (Wooden Cabinet)

Structure made of 19mm thick ply board covered with sun mica from outside. Work Bench of perforated Stainless steel. Sides of work bench covered with transparent acrylic sheet.

Front acrylic door of collapsible type. Properly balanced blowers fitted on 1/4 H.P. electric motor provided on the top portion to supply sufficient air to HEPA Filter provided on the top of the work bench horizontally to supply clean air to the work bench vertically. Pre-filters provided on the top to supply pre-filtered air to the blowers.

#### SPECIFICATIONS:

- Made of 19mm Ply-board.
- Epoxy Painted inside.
- HEPA filter efficiency 99.97% upto 0.3micron.
- Protection grill for HEPA filter.
- Pre-filter efficiency 90% particle retention 75.0 micron.
- Stainless Steel work bench-304 grade.
- UV germicidal lamp 15/30W.
- Flourescent illumination.
- Cock for gas.
- Static Pressure Manometer 0-50mm range.
- Heavy duty blower dynamically balanced with 0.25HP Electric motor mounted on anti vibration load 1440rpm motor.

Cat. No.	Working Area Size
7580(a)	2' x 2'x 2'
7580(b)	3' x 2'x 2'
7580(c)	4' x 2'x 2'

All types of Laminar prices does not include packing/forwarding and freight charges. Please confirm before placing orders. Structure made from 19mm thick plywood board with stainless steel workbench(top).





#### 7581 VERTICAL LAMINAR AIR FLOW CABINET MODEL VLM-81 (Mild Steel Cabinet)

All features are same as per Cat. No. 7580, the only difference is that structure is made from mild steel instead of Plywood.

Cat. No.	Working Area Size
7581(a)	2' x 2'x 2'
7581(b)	3' x 2'x 2'
7581(c)	4' x 2'x 2'



Specifications of all three types of
Vertical Laminars are same, the only difference is structure of Cat. No. 7580 is made from 19mm thick plywood,
Cat. No. 7581 is made from mild steel and whole structure of Cat. No. 7582 is from Thick S.S. Sheet.
Rest of the specifications are the same.

Structure made from mild steel with stainless steel workbench(top).

# 7582 VERTICAL LAMINAR AIR FLOW CABINET MODEL VLS-82 (Stainless Steel)

Same as Cat. No. 7581, only wooden structure is replaced by thick S.S. Sheet. Hazardous chemicals, potential biohazards, radio nuclides and any material that is a potential allergen cannot be used in this type of equipment.

Cat. No.	Working Area Size
7582(a)	2' x 2'x 2'
7582(b)	3' x 2'x 2'
7582(c)	4' x 2'x 2'



#### **BIOSAFE CABINETS WOODEN**

#### 7590 BIOSAFETY CABINET Class-II, A-2 Model BCW-90 (Wooden)

**Structure made of 19mm thick ply-board with melamine lamination.** Work bench of perforated stainless steel. Front acrylic door with two holes provided with cloth sleeves. Properly balanced blowers fitted on 1/4 H.P. electric motor provided on the top portion to supply sufficient air to HEPA filter.

One HEPA filter provided on top of work bench horizontally to supply clean air to the work bench vertically. Another HEPA Filter provided on side for exhaust system. Efficiency of HEPA filters 99.97%, particle retention >0.3 micron. One Pre-filter provided on the top to supply pre filtered air to the blowers. One fluorescent tube and one U.V. germicidal tube provided over work bench. Static pressure manometer fitted. Cock for Gas or air & vacuum line. Ground level screw (4No.) fitted. Back cover fixed with screws for convenient removal for attending blowers, filters and motor when needed. Cabinet fitted with exhaust and virus burnt system.

Cat. No.	Working Area Size
7590(a)	2' x 2'x 2'
7590(b)	3' x 2'x 2'
7590(c)	4' x 2'x 2'



#### **BIOSAFE CABINETS**



#### 7591 BIOSAFE CABINET, Class-II, A-2 MODEL BCM-91 (Mild Steel)

Similar to above, but structure made of mild steel, powder coated. Work surface of Stainless Steel.

Cat. No.	Working Area Size
7591(a)	2' x 2'x 2'
7591(b)	3' x 2'x 2'
7591(c)	4' x 2'x 2'

All types of BioSafety Cabinets prices does not include packing/forwarding & freight charges.

Please confirm before placing orders.

#### 7592 BIOSAFE CABINET, Class-II, A-2 MODEL BCS-92 (Stainless Steel)

Similar to above, but structure made of Stainless steel. Work surface of Stainless Steel.

Cat. No.	Working Area Size
7592(a)	2' x 2'x 2'
7592(b)	3' x 2'x 2'
7592(c)	4' x 2'x 2'

Specifications of all three types of
Biosafety Cabinets are same, the only difference is structure of Cat. No. 7590 is made from 19mm thick plywood,
Cat. No. 7591 is made from mild steel and whole structure of Cat. No. 7592 is from thick S.S. Sheet.
Rest of the specifications

are the same.

# 7593 PORTABLE BIOSAFETY CABINET FOR FIELD USE

Working Area 32x24x27cm

Working Surface Glossy Stainless Steel

Dimensions  $H-55cm \times W-36 cm \times D-25 cm(Approx.)$ 

Weight 14.5 Kg. Approx

HEPA filter efficiency 99.97 % down to 0.3 micron
Pre filter efficiency 99 % down to 5 micron
Power Supply requirement 230V A.C. 50 Hz single phase

Power Consumption 200 Watt.

Medium Density Fibre (MDF) sturdy body sunmica finish (interior & exterior), Acrylic covers on front & slides, front door height adjustable removable base plate. Carrying Handle & Shoulder Strap for on-filed carrying 9 watt-ultra-violet germicidal lamp over working platform for bio-safety. Noiseless & efficient blowers with speed regulator.



**166** 



#### **FUME HOODS**

7595 FUME HOOD Model FHM-95 (Mild steel)

# **Q**UALITY NEVER GOES OUT OF STYLE



A Fume Hood or Fume Cupboard is a piece of laboratory equipment design to limit exposure to dangerous fumes. The air inside the fume hood is vented to the outside by air blower.

Superior in construction. The design based on independent rigid frame construction assures

- · Rugged installation
- Low vibration
- Low installation

The work surface of granite is fitted with small wash basin & good quality tap. A gas cock is also fitted. Sliding sash made of toughened glass moves vertically up and down with concealed counter balanced weights. Chamber is fitted with 36W polycarbonate fluorescent light assembly. Space underneath the work surface is provided with storage compartment. 15/5 Amp socket with switches is provided for light and exhaust system. Supplied with cord and plug to work on 220 volts 1/3 phase 50Hz A.C. Complete with motor blower for exhaust system and Duct to take out fumes.

- Made of Mild Steel duly powder coated.
- Granite Working Platform.
- High Speed Centrifugal Blowers.
- Front Sash with counter weights.
- Fluorescent illumination lights.
- Water tap and PP sink.
- Provision for gas and air connection storage cupboard.
- 15/5 Amp Switches and Socket.

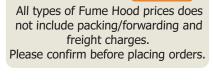
Working Area Size
3' x 2' x 2'
4' x 2' x 2'
4' x 2.5' x 2.5'
5' x 2.5' x 2.5'





Same as Cat. No. 7595, but structure made of stainless steel - Frame of S.S. 304 grade from outside & 316 grade inside.

Working Area Size
3' x 2' x 2'
4' x 2' x 2'
4' x 2.5' x 2.5'
5' x 2.5' x 2.5'





#### 7597 FUME HOOD Model FHW-97(Wooden)

Same as Cat. No. 7595, but structure made of Plyboard covered with melamine lamination from outside & epoxy painted from inside.

- Granite working platform
- High Speed Centrifugal blowers
- Front Sash with counter weights.
- Fluorescent illumination lights.
- Water tap and PP sink
- Provision for gas and air connection storage cup board.
- 15/5 Amp Switches and Socket.

Cat. No.	Working Area Size
7597(a)	3' x 2' x 2'
7597(b)	4' x 2' x 2'
7597(c)	4' x 2.5' x 2.5'



#### **INSECT STORAGE/ENTOMOLOGICAL EQUIPMENTS**



# 7601 INSECT STORAGE BOX

For pinning of insects both inside top & bottom. Teakwood frame with melamine lamination on top & MDF sheet bottom is nicely polished. Top & bottom lined with 8 mm thick soft pinning, washable EVA Sheet. Inside glazed white. Raised wooden wall with holes for insecticide inside bottom to make box air tight and pest proof. Fitted with brass hinges, index card holder & clips.

Cat. No.	Size
7601(a)	45x30x7.5 cm
7601(b)	30x23x7.5 cm



# 7602 INSECT DISPLAY & STORAGE SHOWCASE

For pining of insects only inside bottom. Specifications similar to Cat. 7601 but with glass in wooden frame on top and MDF sheet bottom is nicely polished. Bottom lined with 8mm thick soft pining, washable EVA sheet. Insects glazed white. Fitted with brass hinges, index card holder & clips.

Cat. No.	Size
7602(a)	45x30x7.5 cm
7602(b)	30x23x7.5 cm



7603
INSECT DISPLAY SHOWCASE

For display of insects in corridors, laboratory etc. MDF frame with MDF sheet bottom and glass top is nicely polished. Bottom lined with 8mm thick EVA sheet. Raised wall with holes for insecticide inside bottom to make box airtight & pest-proof. Fitted with clips, lock, handle, hanging hooks on ends and fluorescent tube inside.

Size 90 x 60 x 11 cm.



Cat. No. 7603

#### **INSECT STORAGE/ENTOMOLOGICAL EQUIPMENTS**



# 7605 INSECT SHOWCASE CABINET (Small)

For keeping insect storage & display showcase of size  $45 \times 30 \times 6.5$  cm of Cat. 7601. Cabinet frame of plyboard with melamine lamination. Hinged door is provided with lock and handle and is lined with velvet.

Cat. No	. Size
7605(a)	Cabinet with 6 Show cases
7605(b)	Cabinet with 12 Show cases
7605(c)	Cabinet with 24 Show cases
M.S. Ca	binet with powder coated paint finish
7605(d)	Cabinet with 10 Show cases
7605(e)	Cabinet with 20 Show cases





7606
INSECT SHOWCASE CABINET (LARGE)

Provided with 53 x 45 x 9cm size drawer for keeping insects. Drawer of MDF with MDF sheet bottom and removable glass top is lined with 8mm thick EVA sheet and is glazed white from inside. Strips with provision for insecticide fitted inside drawer. Glass top frame designed to make box air-tight and pest proof. Fitted with index card holder and puller knobs. Nicely polished. Cabinet frame of plyboard with melamine lamination. Hinged door is provided with lock and handle and is lined with velvet.

Cat. No.	Size
7606(a)	Cabinet with 12 drawers
7606(b)	Cabinet with 24 drawers

# 7608 INSECT BOX WITH STRETCHING STRIPS

Suitable for taking in field where the insects can be stretched on the spot and can securely be kept inside the box Teakwood frame with melamine lamination on top & MDF sheet bottom is nicely polished. Top & bottom lined with EVA sheet over which adjustable strips provided for stretching insects. Strips can be fixed at one place with fine screws and fly nuts. Fitted with brass hinges, index card holder, clips and handle. Size Approx. 43 x 30 x 11cm.





# 7610 INSECT STRETCHING BOARD (ADJUSTABLE)

Board adjustable along the support to obtain desired width for different size insects. Board top & groove fitted with 8 mm thick EVA sheet. Groove adjustable from 0 to 12mm with the help of fine fly-nuts. Material used is teakwood and finished in spirit polish. Size  $35 \times 12$ cm.



#### **INSECT STORAGE/ENTOMOLOGICAL EQUIPMENT**



7611
INSECT COLLECTING NET

Ring made of iron wire supported on handle with fine rubber grip at end, length of handle 75cm. 75cm long net bag fitted in ring through 5cm wide cloth rim. Dia of bag at free end 25cm. Ring dia 30cm. Powder coated paint finish.

Cat. No.	Description
7611(a)	With Aluminium Pipe Handle
7611(b)	With Iron Pipe Handle



7612
INSECT COLLECTING NET 'EXECUTIVE' (TELESCOPIC)

Insect Collecting Net, Executive, with Telescopic Handle adjustable from 55cm to 180 cm. Provided with carry bag.

Cat. No.	Description
7612(a)	With Aluminium Handle, Folding ring
7612(b)	With Aluminium Handle, Dual purpose
7612(c)	With Iron Handle, Triangle type



7615 STUDENT PLANKTON NET

Made of No. 12 standard silk bolting cloth, 125 mesh per sq. Inch. 89 cm. long net bag suspended by muslin reinforcement to a 24 cm. dia ring. Three braided leaders attached to swivel front. Tail of bag with 2 cm. Opening closed by tying cloth tape for placing glass vial.



#### **INSECT STORAGE/ENTOMOLOGICAL EQUIPMENT**



#### 7616

#### **ZOOPLANKTON NET**

Plankton Net. Diameter entrance: 130mm, ring diam. 180mm, includes bucket, meshes & Front demountable, available in 4 sizes: 63,80,153,243 um. Big bag.



#### **SPARE BAG FOR ZOOPLANKTON NET**

80/150/250 mesh size



#### 7620

#### **SURBER STREAM BOTTOM SAMPLER**

Surber Stream Bottom Sampler. 9" diameter where net collar meets net filter. 24" long from collar to filter, folds flat storage, Open base encloses area of 12"x12" (one square foot), available in 500 micron mesh, stainless steel frame for maximum corrosion resistance, includes case.



#### 7625 AQUATIC NET

Removable, rigid D-shape frame 30cm across, mesh bag with thick cloth rim. 75 cm iron pipe with powder coated paint finish handle with rubber grip at end.

Cat. No.	Description
7625(a)	Aquatic Net, D-Shape
7625(b)	Aquatic Net, Triangle Shape
7625(c)	Aquatic Net, Rectangular Shape
7625(d)	Aquatic Net, Round Shape
7625(e)	Telescopic Handle for Nets



# 7628 FIELD COLLECTION BAG

Fine quality water proof canvas bag with shoulder and back straps. Pockets on sides and front for bottles and specimen collection accessories and records.

Cat. No.	Description
7628(a)	Field Collection Bag (with accessories)
7628(b)	Field Collection Bag Executive (without accessories)
7628(c)	Field Collection Bag Executive (with accessories)



#### 7630 SORTING TRAY, PLASTIC

For sorting specimens of same population for individual examination. Made of moulded polystyrene.





#### **INSECT STORAGE/ENTOMOLOGICAL EQUIPMENT**

#### 7650

#### **VERSATILE INSECT STORAGE SYSTEM**

An all new 'VERSATILE' space efficient, elegant looking, sturdy and compact system for insect storage supported with care, safety-privacy vis-à-vis being compact to accommodate large quantity in less space, easy to handle, convenient to monitor-sort.

The system contains Compactor units which can be arranged to suite your requirements, according to the space available and above all can be secured with a single lock.

The metallic compactor units made of mild steel with powder coated paint finish can be moved for handling the specimens and again joined to be locked only on the end unit and all units are secured. Showcases are arranged in rows of 20 each with two rows in each unit. End units are for 40 showcases whereas the intermediate units accommodate showcases back to back, i.e., 80 showcases and again the end unit for 40 showcases.

Intermediate units can be increased as per space requirement. There are options for showcases, metallic or wooden. Size options of 53x45x7.5cm. or 45x45x7.5cm. or 45x30x6.5cm. with pinning EVA sheet is base, provision for insecticide, puller knobs, index card holder etc.



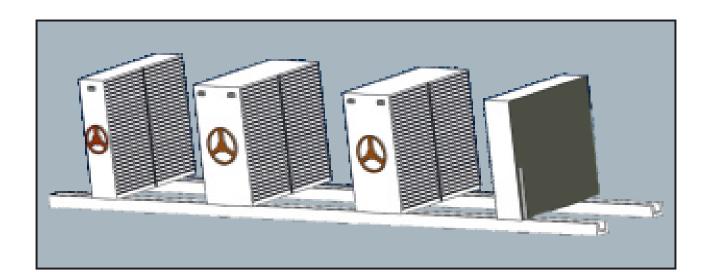
#### **INSECT STORAGE/ENTOMOLOGICAL EQUIPMENT**



#### **Versatile Insect Storage System**

Consists of four numbers of optimizers placed together. Anyone of the four can be moved to make space between two optimizers. Inside each optimizer, racks are provided for storing 40 numbers of insects showcases of size 53x45x9cm. or 45x45x7.5cm or 45x30x6.5cm. arranged in two vertical rows. In middle optimizers, storage space in back to back, i.e., middle optimizers are for 80 showcase each and side optimizers for 40 showcases each. Optimizer body is in rigid knock down construction. Made of CRCA sheet and powder coated with epoxy polyester powder. Provided with Sliding glass doors. Undercarriage is a welded frame of HR sheet. Bodies are bolted to undercarriages and these move on channels. Centralized all the units are brought together.

- 1. Showcase of MDF with plywood bottom and removable glass top in lined with 8mm thick EVA sheet and is glazed white from inside. Wooden batons with provision for insecticide fitted inside showcase. Glass top frame designed to make box air tight and pest proof. Fitted with index card holder and puller knobs.
- For Pinning of Insects on Bottom. White hardwood Teakwood with glass in wooden frame on top & MDF Sheet bottom
  is nicely polished. Bottom lined with 8 mm thick soft pinning, washable EVA Sheet. Inside glazed white. Raised wooden
  wall with holes for insecticide inside bottom to make box air tight and pest proof. Fitted with brass hinges, index card
  holder & clips.
- 3. For pinning of insects both inside top & bottom. White hardwood Teakwood frame with melamine lamination on top & MDF sheet bottom is nicely polished. Top & bottom lined with 8 mm thick soft pinning, washable EVA Sheet. Inside glazed white. Raised wall with holes for insecticide inside bottom to make box air tight and pest proof. Fitted with brass hinges, index card holder & clips.

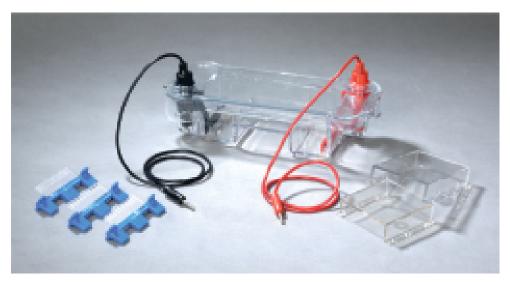


The above Versatile Insect Storage System is supplied by charter truck/viechle only. Please confirm freight charges before dispatch.



#### **ELECTROPHORESIS APPARATUS - Horizontal (Mini)**

### 7905 ELECTROPHORESIS HORIZONTAL MINI-GEL



In agarose gels under submerged conditions, is the most efficient way to separate nucleic acids (DNA/RNA) fragments. In this mechanism, the entire gel is submerged below the surface of the buffer. In order to make sample wells in gel, suitable lot formers (also known as 'Comb') is place in the gel platform during gel casting. After the gel is set, the comb is taken and rectangular wells are obtained.

- It is required for different application in Biotechnology & Molecular Biology in Colleges, Universities & Research institutes.
- It is meant for Nuclear Acid( DNA-RNA) characteristic.
- These are also calls Submarine (Agarose) electrophoresis (mini/ standard module).
- The unit is joint less, moulded of transparent polycarbonate to avoid leakage.
- It is fitted with 2 platinum Electrodes and supplied with transparent joint less safety lid which is also made of polycarbonate.
- Supplied with safety lid & connecting cord & instruction manual.

#### **Supplied With Following Accessories**

Comb 9 Walls - 10 Teeths	(Set of 2 pcs.)
Comb of 11 Walls - 12 Teeths	(Set of 2 Pcs.)
Comb of 11 Walls - 14 Teeths	(Set of 2 Pcs.)
Casting Tray, Size 10x7cm	(Set of 1 Pcs.)
Casting Tray, Size 7x7 cm	(Set of 1 Pcs.)
Red and Black Cable	(1 Each)





#### **ELECTROPHORESIS APPARATUS - Vertical (Mini)**



#### 7906

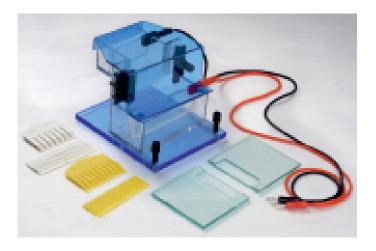
#### **ELECTROPHORESIS VERTICAL MINI-GEL**

It is very essential equipment to study proteins, enzymes & nucleotides. These gels are made as slabs as electrophoresis is accomplished vertically. This vertical slab Gel mechanism has cathode chamber at top & anode chamber at bottom. Polyacrylamide gel moulded in a glass sandwich & sample sells are made on top by using suitable well forming combs. The cathode chamber is notched so as to create buffer contact with the gel on top while the bottom of the gel is in contact with the anode reservoir.

- It is required in biotechnology, Molecular Biology application in colleges, Universities, Research institutes.
- It is meant for protein characterization. The buffer chamber is joint less, moulded of transparent polycarbonate to avoid leakage. The unit is based on acyclic sheet fitted with 3 leveling screws. Completed with acyclic cover.

#### TECHNICAL PARAMETERS

Dimensions (Outer) (LxWxH)	15x15x15 cm.
Gel Size ( cm)	8x7 (1 Gel)
Buffer Required (ml)	100 + 150
Platinum Electrodes	2 Nos.



#### Supplied with following accessories

- Wires black and red 1 each.
- Glass plate -1 and 1 notched rectangular Total 2 nos.
- One set spacers of 0.1mm, 1.5mm 4 pcs. each.
- 4 sets of Nylon moulded combs of 7 wells & 10 wells in 0.1mm and 1.5mm thickness.
- Silicon Gasket 1 No.



This instrument doesn't include buffer and power supply.



#### PAPER STRIP ELECTROPHORESIS APPARATUS

### 7907 Vertical Slab Gel Electrophoresis Mechanism - Universal Model

It looks like a mini/student gel system because it is double the size of it. This is a laboratory scale mechanism. The electrophoresis 16x20cm. & can accomplished 13 samples simultaneously. When a sample contain several proteins, electrophoresis in mini gels will not give sufficient resolution. In such cases, sample has to be electrophoresed for longer duration in larger gels. This type of regular model is most suitable for this purpose.

This elementary unit consists of detachable platinum electrode assembly (2), Glass plates Notched & Rectangular (1 Set), Teflon Clamps, Spacers Clamps with screw. **Supplied without power supply & buffer.** 



All ours Electrophoresis Apparatus are single moulded piece except cat. no. 7907 to avoid leakage.

# 7908 PAPER STRIP ELECTROPHORESIS APPARATUS Horizontal Model

- The buffer chamber is made out of single moulded piece to avoid leakage of buffers.
- It is made of transparent poly carbonate.
- The unit have 2 platinum electrodes, supplied with their banana sockets defined in black and red colour.
- Horizontal paper strip holder to adopt 3 pare strips is supplied with horizontal unit.
- Supply complete with respective protection cover, red and white cables.
- To work on 220 volts 50 Hz A.C.
- · Packed in corrugated box with instruction manual.

#### Supplied without power supply & without buffer.



# 7909 PAPER STRIP ELECTROPHORESIS APPARATUS Vertical Model

- The buffer chamber is made out of single moulded piece to avoid leakage of buffers.
- It is made of transparent poly carbonate.
- The unit have 2 platinum electrodes, supplied with their banana sockets defined in black and red colour.
- Vertical paper strip holder to adopt 3 pare strips is supplied with vertical unit.
- Supply complete with respective protection cover, red and white cables.
- To work on 220 volts 50 Hz A.C.
- · Packed in corrugated box with instruction manual.

#### Supplied without power supply & without buffer.



#### POWER SUPPLY FOR ELECTROPHORESIS APPARATUS



#### 7915 STABILIZED ANALOG D.C. POWER SUPPLY

This power supply is very simple to operate. It is very ideal for student practical classes & routine clinical work. It is designed to give 50, 100, 150, 200 or 250 volts constantly indicated by LED on each point. Its maximum current is up to 100 mA.

This new design, light weight & Compact model is suitable for almost all type of Electrophoresis Apparatus.

### 7916 DIGITAL STABILIZED POWER SUPPLY

Output-Variable 0-300 VDC

Maximum current - 100 mA

Constant Voltage / Constant Current Unit

Automatic cross over facility

Display - Digital, overload / short circuit protection

Light weight & Compact model for general purpose Electrophoresis Applications operates at constant voltage & constant current with automatic crossover.





#### **ACCESSORIES FOR BESTO ELECTROPHORESIS APPARATUS**

#### 7920 GEL SCOOP

Made of 3 mm UV transparent acrylic for easy transfer of polyacrylamide and agarose gels between electrophoresis unit stain or de-stain tray and transilluminator tapered edge for easy lifting of gel and guide on sides prevent gel from moving.

Cat. No.	Size
7920(a)	7.5 x 10 cm
7920(b)	14 x 20 cm
7920©	20 x 20 cm

#### 7921 GEL CASTER

For mini Horizontal Electrophoresis per piece.

#### 7922 FLOAT RACKS

Square Capacity 1.5ml, pkt. of 6 pcs.

#### 7923 ROUND RACKS

Square Capacity 1.5ml. pkt. of 6 pkts.

7924 GEL DEVELOPING TRAY



#### **UV TRANSILLUMINATOR - COLLEGE MODEL**

#### Model BTI-20 SPECIFICATION

Wavelength	365 nm with suitable filter
No. of U.V Tubes	8 imported
Wattage	8 watts
Detection limit	200ng
Blue Plate Area	210 x 210 mm approx.
Body	MS with powder coated
UV Protection Shield	Yes

#### 7925 UV- TRANSILLUMINATOR

An ultraviolet (UV) Transilluminator is a standard piece of equipment used in life science laboratories used for visualization of target DNA's and proteins . The UV Transilluminator works by existing high levels of UV radiation through the viewing surface . the key application for a UV transillumination is for Visualization of DNA and protein agrose and polyacrylomide gels after electrophoresis gels can be directly placed onto the UV transilluminator, wavelength will vary on your particular application.

Transilluminator Model BTI-20 is required in biotechnology, Molecular Biology applications in colleges, Universities, Research Institutes.

These are college model transilluminators having detection limit minimum 200ng. Specification is given on left hand side.



#### **UV TRANSILLUMINATOR - RESEARCH MODEL**





UV Transilluminator smart look, very accurate for research work. Body of this transilluminator is pressure die cast and furnished in black powder coting.

#### **Model BTI-40 SPECIFICATION**

Dual Intensity	302 & 365 nm
No. of U.V Tubes	6 imported
Wattage	8 watts
Detection limit	0.01 ngm. of stained DNA
View Area	210 x 260 cm approx.
Filter	Quartz UV Filter
UV Protection Shield	Yes

#### PROTECTION WHILE USING **UV TRANSILLUMINATOR**

The Perspex shied supplied should be closed while the UV light is one.

- All person in the room must cover all exposed skin.
- Face and eyes must be covered by wearing an approximately UV absolutely full face shielded.
- Heavy duty rubber gloves should be wear on the hands. Standard laboratory gloves are not suitable for hand protection from UV.



#### 7930 **ULTRA VIOLET FLUORESCENCE INSPECTION CABINET**

For visualization of test objects under UV tubes having long wavelength (365nm) and short wavelength (254nm) as desired. A flouorescent tube is fitted to the unit for day light visualization.

To work on 220/230Volts AC supply.

Cat. No.	Description
7930(a)	Single Tube, 365nm
7930(b)	Double Tube, 365nm
7930(c)	Double Tube, 365 & 254nm





#### **ANALYTICAL LABORATORY - Bunsen Burners**



A Bunsen burner is piece of **lab equipment** that is used to heat material for experiments. It is a burner which operates on gas. The flame of a Bunsen Burner can be adjusted by managing the inflow, outflow and mixing of gas and air. A Bunsen Burner is named after the inventor Robert Bunsen, a scientist working for the University of Heidelberg, in 1855.

The gas used for Bunsen Burners are either methane or LPG such as butane and propane. The Bunsen Burner is constructed in such a way that a stable flow of the gas being used is maintained. Usually the brass metal tube. This metal tube is fixed onto a broad base. There is an inlet for the gas flow on this broad base. This also has an adjustable valve to regulate the inflow of air and hence the flame.

All our Bunsen Burners are provided with LP Gas nipple only & individually packed in a corrugated box.

#### 8160 BUNSEN BURNER (Economy Model)

- Base made from sheet metal, powder coated.
- · Brass pipe chrome plated.



#### 8163 BUNSEN BURNER (Special Type)

- · Sheet metal base.
- Flame can be adjusted by the ring of lower part of burner.
- Produce a single open gas flame which is used for heating sterilization and combustion.



# 8164 BUNSEN BURNER (Cast Iron Heavy Base)

- Heavy cast iron base.
- Powder coated base.
- Brass pipe chrome plated.
- Flame adjusted by the ring.



- Same as Cat. No. 8164
- Fitted with superior quality Brass stop clock.

#### 8166 MECKER BURNER (Big Size)

- Made of heavy Brass pipe C.P
- Height of brass pipe is 180 mm & top diameter is 25mm
- · Heavy cast iron base.



- Same as Cat. No. 8166
- Fitted with superior quality Brass stop clock.









### **ANALYTICAL LABORATORY** - General Chemistry Lab Equipments



#### 8168 TRIPOD STANDS

Cast iron having black powder coated top zinc plated rod and plastic feet.

Cat. No.	Size
8168(a)	6" x 4"
8168(b)	7" x 4"
8168(c)	8" x 4"
8168(d)	8" x 5"



#### 8169 TRIPOD STANDS (Stainless Steel)

Manufactured from thick Stainless Steel Wire. These tripod stands are meant to be used in conjunction with wire gauge, triangles or a sand bath.

Cat. No.	Size
8169(a)	7" x 5"
8169(b)	8" x 5"



#### 8170 GAS TAPS

Best quality all brass chrome plated, Hexagonal Stop Cock.

Cat. No.	Description
8170(a)	One Way
8170(b)	Two Way
8170(c)	Three Way
8170(d)	Four Way



#### 8172 SPIRIT LAMP (Stainless Steel)

Spirit Lamp is like on ordinary Lamp but this lamp use ethanol i.e ethyl alcohol as a fuel. This lamp is used mostly in laboratories and mainly inside laminar air flow chamber which is a sterile cabin, whose most of the biotech and microbiology particals are hold. Ethanol is used as a fuel instead of other commercial fuel because this will easily evaporate and will not produce smoke and hence we can provide contaminations.

Made form superior quality S.S Sheet.



#### 8175 WIRE GAUGES

Manufactured from galvanised iron wire with circular ceramic centre.

Cat. No.	Gauge Dimension	Ceramic Centre Dia
8175(a)	150 x150 mm	90mm



#### 8176 CERAMIC TRIANGLES

Manufactured from ceramic cylinders around iron wire.

Cat. No.	Ceramic Cylinder Dimension
8176(a)	50 mm
8176(b)	60 mm



#### 8177 RETORT RING

Made of mild steel rod powder coated, fitted with T-type chrome plated screw.



Cat. No.	Size
8177(a)	2"
8177(b)	21/2"
8177(c)	3"
8177(d)	4"



### **ANALYTICAL LABORATORY - Rubber Tubings**

#### 8180 RUBBER TUBING (Extra Soft Quality)

Cat. No.	Bore mm (Approx)	Wall Thickness (mm)
8180(a)	5.0	1.5
8180(b)	6.0	1.5
8180(c)	7.0	1.5
8180(d)	8.0	1.5
8180(e)	9.0	2.0
8180(f)	10.0	2.0
8180(g)	12.0	2.5



8181 RUBBER TUBING (Ordinary Pressure)

Cat. No.	Bore mm (Approx)	Wall Thickness (mm)
8181(a)	3.0	3.0
8181(b)	4.5	3.0
8181(c)	6.0	3.0
8181(d)	8.0	3.0
8181(e)	9.0	3.0
8181(f)	10.0	3.5
8181(g)	12.0	4.5



8182 RUBBER TUBING (High Pressure)

Cat. No.	Bore mm (Approx)	Wall Thickness (mm)
8182(a)	3.0	4.5
8182(b)	4.5	4.5
8182(c)	6.0	4.5
8182(d)	8.0	4.5
8182(e)	9.0	4.5
8182(f)	12.0	6.5



#### 8183 HOFFMAN'S SCREW CLAMP

The flexible tubing clamp is a screw compressor form with swivel lower jaw. The clamp holds tubing from 1/4" to 1" outside Diameter and is constructed from brass wire & sheet.



#### 8184 PINCH CLIP

Pinch clip is used on tubing to control the flow of liquid through the tubing. Heavy type.



SPECIAL FEATURES

Our Rubber Tubings & corks are extremely soft & confirms to the Govt.

• In addition to softness, it is resistant to dilute acid, alkalis, ammonia etc.

The temp. stability for BESTO rubber tubing is between -25°C to 70°C.

#### **ANALYTICAL LABORATORY - Rubber & Silicon Corks**



8185 RUBBER CORKS

Cat. No.	No.	TOP (mm) Dia ±0.2	Bottom (mm) Dia ±0.2	Height ±0.2 (mm)
8185(a)	00	9.0	6.0	
8185(b)	0	13.0	9.0	15.5
8185(c)	1	14.0	11.0	18.5
8185(d)	2	16.5	13.0	20.0
8185(e)	3	19.0	14.0	21.0
8185(f)	4	21.0	15.0	22.0
8185(g)	5	22.5	17.5	23.0
8185(h)	6	24.5	20.0	24.0
8185(i)	7	26.0	20.0	27.5
8185(j)	8	26.5	21.0	27.5
8185(k)	9	28.0	21.5	31.0
8185(I)	10	30.0	26.0	33.0
8185(m)	11	33.0	29.0	32.0
8185(n)	12	34.5	30.0	34.5
8185(o)	13	38.5	31.0	37.0
8185(p)	14	41.5	32.0	42.5
8185(q)	15	42.0	38.0	40.5
8185(r)	16	45.0	35.0	36.5
8185(s)	17	49.5	40.0	40.5
8185(t)	18	53.5	48.0	33.5
8185(u)	19	58.0	44.0	45.0
8185(v)	20	60.0	51.0	56.5

Rubber stopper/ cork are manufactured from natural elastic rubber. The temperature stability for rubber stopper is between -25°C to +70°C.



Cat. No.	No.	TOP (mm) Dia ±0.2	Bottom (mm) Dia ±0.2	Height ±0.2 (mm)
8188(a)	9	9	11.5	20
8188(b)	11	11	14.0	24
8188(c)	13	13	16.0	24
8188(d)	15	15	18.0	24
8188(e)	17	17	20.0	26
8188(f)	18	18	21.0	26
8188(g)	19	19	22.5	28
8188(h)	23	23	25.5	28
8188(i)	25	25	28.5	28
8188(j)	27	27	31.0	32
8188(k)	29	29	33.0	32
8188(I)	31	31	36.0	35
8188(m)	33	33	38.5	38.5

Silicon rubber cork are produced from biologically inert silicon.

Temperature stability for silicon stopper is between -60°C to +70°C.



### 8186 RUBBER CORKS WITH HOLES

All types of rubber corks, mentioned under Cat. No. 8185 can be supplied with one hole & two holes at extra price. Please add following extra charges for single/double holes.

Cat. No.	Description
8186(a)	Charges for single hole
8186(b)	Charges for double holes



Cat. No. 8186







### ANALYTICAL LABORATORY - General Chemistry Lab Equipments

#### 8190 CORK BORER

These Cork Borers are of sharpened brass tubing with attached handles. A ramrod is supplied with each set.

Cat. No.	Description
8190(a)	Set of 3
8190(b)	Set of 6
8190(c)	Set of 12



#### 8192 WATCH GLASS

These watch glasses are moulded with same radius of curvature so that they will stack conveniently. The edges are ground and annealed to remove strain.

They are ideal to weigh different substances and chemicals.

Description
2"
2.5"
3"
4"



#### 8191 CORK BORER (German Type)

These Cork Borers have brass handles which are swedged and soldered onto the special hard brass cutting tube. The handles will not come off.

The special grade of hard brass used in the tubes of these borers enables them to retain their sharp cutting edges. The tubes have heavy walls and therefore retain their concentric shape. A ramrod is supplied with each set.

Cat. No.	Description
8191(a)	Set of 3
8191(b)	Set of 6
8191(c)	Set of 12



### 8193 WEIGHING BOTTLES

- With interchangeable stopper.
- Manufactured from borosilicate glass 3.3 grade with light weight construction enables practical use.
- They have interchangeable lids which fit the bodies perfectly. The white labelling area is suitable for writing notes.

Cat. No.	Capacity ml.	O.D.x Height mm.	Shape
8193(a)	15	25x60	Tall form
8193(b)	25	30x65	Tall Form
8193(c)	20	50x35	Squat Form
8193(d)	40	60x40	Squat Form



#### **ANALYTICAL LABORATORY - Water Taps & Jacks**



#### 8195 WATER TAPS

We manufacture and supply laboratory Taps in different specifications to suit varied requirements of clients. This is designed with the help of latest technology with dimensional accuracy, high performance & long functional life that made these a perfect choice in all kind of laboratories. These are manufactured using quality brass that provides an elegant look and can be fitted for laboratory bench and laboratory furniture.

We are supplying three types of swan neck water tap. These products are known in the market for their quality standards and salient features. Our range is

designed and produced as per the prescribed guidelines and are in conformation with International Quality norms. We source best raw materials for our production process for the authorized vendors of the market, who guarantee their supplies.

Cat. No.	Size
8195(a)	One way
8195(b)	Two way
8195(c)	Three way





SPECIAL FEATURES

• Competitively priced

• Cost-effective

• Easy maintenance.

• Easy to install

• Made from forging grade brass material.

Wooden base is not included.

#### 8196 LABORATORY JACKS Iron Steel / Stainless Steel

This laboratory scissors jack to elevate equipment for various lab setups. This scissors jack is made from either iron or high grade stainless steel sheet for durability & is sturdy enough to withstand heavy laboratory use. Following sizes are available.

Jack made from Iron sheet

Cat. No.	Top Size
8196(a)	6" x 6"
8196(b)	8" x 8"
8196(c)	10" x 10"

Jack made from high grade stainless steel

Stairliess steel		
Cat. No. Top Siz		
8196(d)	6" x 6"	
8196(e)	8" x 8"	
8196(f)	10" x 10"	





#### **ANALYTICAL LABORATORY - Test Tubes**





Test tubes are widely used by chemists to hold, mix, or heat small quantities of solid or liquid chemicals, especially for qualitative experiments and assays. Their round bottom and straight sides minimize mass loss when pouring, make them easier to clean, and allow convenient monitoring of the contents.

#### **ANALYTICAL LABORATORY - Test Tubes**



#### 8300 / 01 TEST TUBES

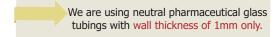
#### Neutral & Borosilicate Glass (3.3 grade)

A **test tube**, also known as a **sample tube**, is a common piece of laboratory glassware consisting of a finger-like length of glass tubing, open at the top, usually with a rounded U-shaped bottom. Large number of test tubes are also used for boiling liquids is also called boiling tubes.

We are manufacturing different types of test tubes (both in neutral & borosilicate glass 3.3 grade) in a multitude of length and width , typically from 10mm to 25mm wide and 75mm to 200mm long . All tubes are provided with rim or without rim ( as per customer's requirements).

8300 TEST TUBES - Neutral Glass (Plain Round Bottom)

Cat. No.	Outer Dia.xHt. (mm)	Wall Thickness (mm)	ېاد
8300(a)	10 x 75	1.0	pack of 100 pcs. only.
8300(b)	12 x 75	1.0	o bc
8300(c)	12 x 100	1.0	f 10
8300(d)	15x 125	1.0	상
8300(e)	15 x 150	1.0	a pa
8300(f)	18 x 150	1.0	.⊑
8300(g)	25 x 150	1.0	Supplied
8300(h)	25 x 200	1.0	Supl



8301 TEST TUBES - Borosilicate Glass 3.3 Clear Glass Tubing (Plain Round Bottom)

Cat. No.	Outer Dia.xHt. (mm)	Wall Thickness (mm)	only.
8301(a)	10 x 75	1.0	pcs. o
8301(b)	12 x 75	1.0	
8301(c)	12 x 100	1.0	of 100
8301(d)	15x 125	1.0	pack o
8301(e)	15 x 150	1.0	а ра
8301(f)	18 x 150	1.0	⊒.
8301(g)	25 x 150	1.2	Supplied
8301(h)	25 x 200	1.2	Sup

We are using borosilicate 3.3 grade clear glass tubing with wall thickness of 1mm for all types of tubes except two sizes 25x150mm & 25x200mm. These two sizes are manufactured from 1.2mm wall thickness.



#### 8302 SUBA SEAL RUBBER STOPPERS

Auto-clavable with turn over Flange Plain or Serration for Test Tube

Cat. No.	Size
8302(a)	12mm
8302(b)	15mm
8302(c)	18mm
8302(d)	25mm





### ANALYTICAL LABORATORY - Laboratory Stands & Clamps

#### 8305 LABORATORY STAND (Retort Stand Cast Metal)

This larger and heavier stand features a cast iron base with chemical resistant finish . These base sizes are approximately 8" x 5" & 9"x6". The rod is 24" long x 12mm in diameter. The larger size and heavy cast iron construction provides a very stable stand for most of the application.

Cat. No.	Base Size	Rod Size
8305(a)	8" x 5"	24" x ½"
8305(b)	9" x 6"	24" x ½"



#### 8306 LABORATORY STAND (Retort Stand Mild Steel Sheet)

Made of mild sheet with leveling screw and unbreakable glass jack feet. Supplied with steel rod.

Cat. No.	Base Size	Rod Size
8306(a)	8" x 5"	24" x ½"
8306(b)	9" x 6"	24" x ½"



#### 8307 DIE PRESSED BURETTE CLAMPS (Fisher Type)

Made of thick M.S. Sheet , all die pressed symmetrical non-breakable holds the burette straight in two jaws have V-Grooves in which burette rest and other presses it is due to spring force. Boss heads can accommodate upto 18mm dia rod. Totally Powder coated clamp.

Cat. No.	Description	
8307(a)	For Single Burette	
8307(b)	For Double Burette	





#### 8308 FISHER CLAMP (Sheet Metal)

Sheet made, die pressed, Spring controlled, Cork lined jaws to hold from 12mm to 50mm diameter articles. Light but sturdy, with BRASS wing nut. Supplied with sheet metal boss head. Powder coated clamp.



#### 8309 LABORATORY STAND (Plastic Retort Stand)

The non-corrosive, molded retort stand provide excellent replacement for the metal ones. Even the metallic rod has a polypropylene covering making it non corrosive screwed into the heavy base giving way to a perfectly stable retort stand.

Base Size	Rod Size
9" x 6"	24" x ½"



# 8310 UNIVERSAL BURETTE CLAMP (Plastic Retort Stand)

These clamps are moulded in polypropylene making it completely corrosion proof.



#### **ANALYTICAL LABORATORY - Clamps & Boss Heads**













#### 8315 THREE FINGER CLAMP

- Made of Aluminium alloy die casting.
- Two separately adjustable clamp enable perfect control of holding pressure and precise positioning of the objects.
- Clamps can be opened and closed accordingly with a gripped of 70mm.
- Supplied with solid stem of diameter 8 mm with length of 7"
- Jaws are powder coated which are rubber covered for gentle hold of the objects.
- Completed with boss head of Cat No. 8319.

#### 8316 FOUR FINGER CLAMP

- Specifications are exactly same as per Cat. No. 8315 only Clamps jaws are made of die casted aluminium four finger type.
- Completed with boss head of Cat No. 8319.

#### 8317 UNIVERSAL CLAMP

- Die casted, made of special aluminium alloy provided with 7" mild steel rod chrome plated and holds upto 70mm dia articles, jaws are cork lined, aluminium clamp is staple painted.
- Supplied with boss head of Cat No. 8319.

# 8318 CLAMP THREE PRONGS (Special type)

- Made of Al-alloy die casting.
- Two separately adjustable clamp enable perfect control of holding pressure and precise positioning of the objects.
- Clamps can be opened and closed accordingly with a gripped of 70mm
- Swivel mechanism which enables the object freely swivel 360° & lockable at any desired angle. Complete with an integral boss head usable for rods, maximum dia. of 16mm.

#### 8319 BOSS HEAD

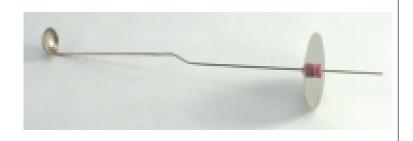
 Made of Aluminium alloy die casted with mild steel screws to hold upto 16mm diameter, powder coated finish.



### **ANALYTICAL LABORATORY** - **General Chemistry Lab Equipments**

# 8325 DEFLAGRATING SPOON (Stainless Steel)

A deflagration spoon is used in chemistry experiments when the burning of phosphorus, sulphur or another substance is required. It is capable of withstanding high temperatures and is equipped with features to facilitate working in this environment, such as a long handle angled to keep heat away from the hand.



#### 8326 SODIUM SPOON (All brass)

For handling sodium under water. Chrome plated wire stem and strong wire gauge cage to safety cage to safety enclose the sodium.

# 8327 PLATINUM LOOP HOLDER (Brass C.P.)

Made of brass with adjustable chuck, mounted in Bakellite handle.

#### 8328 PLATINUM WIRE (Flame Test)

Consists of a 2.5cm of SWG No. 34 platinum wire set into a 10cm glass handle.



#### 8329 FILTER PUMP

This modern type filter pump was designed and manufactured to fulfill the need for an efficient Air ejector. In addition to the customary filtering use, the filter pump can also be used in the urea nitrogen test employing the aeration method.

The BESTO filter pump is made entirely of brass and is chrome plated to resist corrosion and give a neat appearance.

• Diameter of pipe is 5/8" (approx. 16mm)



#### 8330 WATER BATH COPPER

It is made of heavy copper with a cover formed of concentric rings to provide various opening. There is a cover with knob in the center of each set. Each ring is recessed to take the next smaller ring.

Cat. No.	Size	
8330(a)	5"	
8330(b)	6"	



### **ANALYTICAL LABORATORY - Crucibles & Tongs**



### 8335 PORCELAIN CRUCIBLES

Manufactured from glazed porcelain both inside & outside. Crucibles are widely used for chemical analysis & for heating small quantity of solid to very high temperature. These crucibles can resist temperatures upto  $1150^{\circ}$ C.

Cat. No.	Size
8335(a)	15ml
8335(b)	25ml



### 8336 PLATINUM CRUCIBLES

Platinum crucible exhibits excellent resistant to chemical reaction & has a high melting point. Manufactured from 99.9% pure platinum.

These crucible does not include lids. Lids must be purchased separately.

- Can be used upto 1200°0C.
- Maintains strength at high temperature.
- High corrosion.
- Resistance against acids & melted salts.

Cat. No.	Capacity	Approx. Weight	
8336(a)	10ml	8.5gm	
8336(b)	15ml	11.0gm	
8336(c)	25ml	20.0gm	
8336(d)	30ml	25.0gm	
8336(e)	50ml	42.0gm	

These crucibles are without lid.

### 8337 LIDS FOR PLATINUM CRUCIBLES

Manufactured from 99.9% pure platinum.

Cat. No.	Description	Wt.
8337(a)	Lid for 10ml crucible	2.5gm
8337(b)	Lid for 15ml crucible	4.0gm
8337(c)	Lid for 25ml crucible	5.0gm
8337(d)	Lid for 30ml crucible	5.0gm
8337(e)	Lid for 50ml crucible	8.0gm

Spare lids are supplied with Platinum crucible only.



# 200

Stainless Steel crucible tongs.

#### 8338 CRUCIBLE TONGS

Crucible Tongs from Cat. No. (a) to (e) which are listed below are all of new improved styles. The tongs are made of a heavy material wire. The joints are flattened at the rivet to prevent the handles from shifting out of alignment. The tips are carefully formed. The finger grip are roomy to facilitate handling. These tongs are made from a variety of different material to meet every laboratory requirement.

Cat. No.	Length Material Numb	
8338(a)	6"	Mild steel painted
8338(b)	8"	Mild steel painted
8338(c)	6"	Stainless steel
8338(d)	8"	Stainless steel
8338(e)	10"	Stainless steel



#### **ANALYTICAL LABORATORY - Tongs & Spatulas**

#### 8340 FURNACE TONGS (Stainless Steel)

Manufactured from heavy wire of stainless steel. These tongs are very much similar to Cat. No. 8338. Because of its larger size it is called as Furnace Tongs.

Cat. No.	Size
8340(a)	12"
8340(b)	15"
8340(c)	18"
8340(d)	24"



#### 8341 FLASK TONG (Stainless Steel)

These tongs were designed to handle laboratory flasks containing hot or corrosive liquids. Neither the flask nor the tongs themselves can slip or get out of the grip. The tongs are made of stainless steel to resist corrosive fumes and to prevent rusting. Approximately size 12" long.



#### 8342 SPATULAS

Made from superior quality stainless steel sheet, which are corrosive resistant. The S.S. sheet used in flexible so that the spatula is especially convenient for handling materials which are to be weighed. One end spoon & other end flat.

Cat. No.	Size
8342(a)	4"
8342(b)	6"
8342(c)	8"
8342(d)	10"



8343 BEAKER TONG (Stainless Steel)

These tongs were designed to handle beakers containing hot or corrosive liquids. The tong are made of Stainless Steel which are tough, resist bending and does not rust. Jaws are covered with either asbestos or cork sheet. Size approx. 12" long.



8344 MICRO SPATULAS

Made of S.S. Wire -Spoon type (in form of wire only.)



Cat. No.	Size
8344(a)	4"
8344(b)	6"
8344(c)	8"

### **ANALYTICAL LABORATORY** - General Chemistry Lab Equipments



# 8345 PORCELAIN EVAPORATING DISH (Round Bottom)

- China dish round in bottom
- Externally and internally manufactured from glazed porcelain except the spout.
- A perfect product for heating or evaporating liquids.
- Not recommended to use with direct flame in order to prevent unexpected breakage.

Cat. No.	Size
8345(a)	3"
8345(b)	4"



#### 8346 SEALING FILM, PARAFILM

- Most common sealing film used in laboratories.
- Resistant to salt solution inorganic acid and alkaline solution upto 48 hours.
- Present leakage and split of liquids in a container in case of an accidental fall.
- Size 4" width,125 feet long.



#### 8347 LITMUS PAPER

Simple and completely impregnated indicator papers. They only indicates if the pH of a solution is above or below the point of colour change. The blue litmus paper has pH range 8.0-5.0 and the colour change from blue to red. The red litmus paper had pH range of 5.0-8.0 and the colour changes from red to blue.

Cat. No.	Colour	Width	Length
8347(a)	Red	7mm	70mm
8347(b)	Blue	7mm	70mm

#### 8348 FILTER PAPER (Handmade)

Dr. Watt make

Cat. No.	Size (cm)
8348(a)	11.0
8348(b)	12.5

#### 8349 FILTER PAPER (Machine made)

No. 1 in quality.

Cat. No.	Size (cm)
8349(a)	11.0
8349(b)	12.5



#### **MAGNETIC STIRRER WITH HOT PLATE**

# 8350 MAGNETIC STIRRER (With Hot Plate)

- Highly polished S.S. top plate for optimum heat transfer.
- PMDC motor for higher torque even at low speeds.
- Provided with electronic speed regulator.
- Temperature is controlled by energy regulator.
- Stirring is accomplished by a small Teflon coated magnetic peddle.
- All our magnetic stirrers are supplied with hot plate.

Cat. No.	Capacity
8350(a)	2 liters
8350(b)	5 liters



#### 8351 DIGITAL MAGNETIC STIRRER

Same as cat. no. 8350, but provided with digital display of Temperature & Speed (More accurate version).

Cat. No.	Capacity
8351(a)	2 liters
8351(b)	5 liters



#### 8352

### MAGNETIC STIRRER MULTIPLE STAGE (With Hot Plate)

Same as cat. no. 8350, but with multiple stage.

Cat. No.	Description	
8352(a)	Multiple Stage - 3 Stage	
8352(b)	Multiple Stage - 6 Stage	

### 8353 ROUND MAGNETIC STIRRER BAR

Small size round magnet coated in plastic such as PTFE approx. 50 x 9 mm.



# WORKING OF MAGNETIC STIRRER

A magnetic stirrer consists of a small Bar magnet (or stir bar), which is coated in a plastic such as PTFE and Top S.S. plate containing a rotating magnet. The S.S. plate is also heated. During operation of a liquid to be stirrer, the bar magnet (or flea) is placed in a vessel containing a liquid to be stirrer. The vessel is set on top of the stand, where the rapidly rotating magnetic field cause the bar magnet to rotate.

#### **MELTING POINT APPARATUS - Analog & Digital**



# WORKING OF MELTING POINT APPARATUS

Melting Point Apparatus are used to measure melting points of pure solid samples. Thus these melting point apparatus can be use to tentatively identify pure compounds in their solid states. The presence of even a small amount of impurity will lower a compound's melting point by a few degrees and broaden the melting point's temperature range. Because the impurity causes defects in the crystalline lattice, it is easier to overcome the intermolecular interactions between the molecules.

### 8355 MELTING POINT APPARATUS

- Useful in the determination of the melting point of any substance upto 300°C.
- Casted Al. housing with powder coated finish.
- Radial holes admits a thermometer capillary.
- Energy regulator is provided as heat controller.



# 8356 PRECISION DIGITAL MELTING POINT APPARATUS

- Designed for determination of melting point of solid samples & boiling point of liquid samples.
- Cylindrical silicon oil bath.
- In built magnetic stirrer with speed regulator.
- Glare free back light with adjustable light intensity.
- Provision for holding melting point display when sample melts.
- Provided with magnetic rotor set of capillaries & magnifier.
- Temp. range : 2 degree above room temp. to  $300^{\circ}\text{C}$ .
- Readability: 1°C.



### 8357 OPTIONAL FOR MELTING POINT APPARATUS

• Capillary (Pkt of 100) for Melting Point Apparatus.



#### **HEATING MANTLES**

#### 8361 **HEATING MANTLES**

- Used for Uniform Heating/Boiling of Glass Flask.
- Auto cut-off as the desired temperature reaches.
- Heat resistant Aluminium Body & Powder Coated paint.



**Better** than



#### **HEATING MANTLES & DISTILLATION APPARATUS**



#### 8361 HEATING MANTLES

- Thick head Knitted Fibre glass netting elements are made from cathode wire.
- Suitable for heating round bottom flasks.
- Provision of Fuse and Buffers for safe and smooth operation.
- Available in Capacities of 100 ml- 5000 ml.
- For picture, please refer to Left hand side of this page.

Cat. No.	Capacity	Wattage
8361(a)	100ml	60
8361(b)	250ml	150
8361(c)	500ml	200
8361(d)	1000ml	300
8361(e)	2000ml	450
8361(f)	3000ml	450
8361(g)	5000ml	600

#### 8362 SPARE MANTLES

Cat. No.	Capacity
8362(a)	100ml
8362(b)	250ml
8362(c)	500ml
8362(d)	1000ml
8362(e)	2000ml
8362(f)	3000ml
8362(g)	5000ml



#### WORKING OF HEATING MANTLE

In Heating mantle Apparatus, glassware containers are placed in direct contact with heating mantle without substantially increasing the risk of the glassware shattering, because the heating element of the heating mantle is insulated from the container so as to prevent exocrine temperature goblets. In our heating mantle electric wires are embedded within a strip of fabric that can be wrapped around a flask. The current supplied to the device, and hence the temperature achieved, is regulated by a rheostat.



Consists of Round Bottom Flask & Liebig Condenser.

Cat. No.	Flask Capacity	Condenser Effective Length
8363(a)	250ml	400
8363(b)	500ml	500





### 8364 DISTILLATION APPARATUS

Consists of Round Bottom Flask, Recovery Bend, Liebig Condenser & Recovery Adapter.

Cat. No.	Flask Capacity	Condenser Effective Length
8364(a)	250ml	200
8364(b)	500ml	300
8364(c)	1000ml	350





#### SOXHELT EXTRACTOR & EXTRACTION APP.

#### 8367 SOXHELT EXTRACTOR APPARATUS

Consists of Round / Flat Bottom Flask , Soxhelt Extractor & Allihn Condenser.

Manufactured from borosilicate glass 3.3 grade.

Cat. No.	Extractor Capacity	Extractor Socket	Extractor Cone	Flask Cap. R.B./F.B.
(a)	100ml	34/35	24/29	250ml
(b)	100ml	40/38	24/29	250ml
(c)	200ml	50/42	24/29	500ml
(d)	400ml	50/42	24/29	1000ml
(e)	1000ml	50/42	24/29	2000ml



#### 8368 SOXHELT EXTRACTOR

The siphoning type of Soxhelt Extractor finds the widest application in laboratory work. All BESTO brand Soxhelts have a concentric siphon tube which is protected by the vapour tube from accidental damage.

Manufactured from borosilicate glass 3.3 grade with interchangeable joints.

Cat. No.	Capacity	Socket	Cone
8368(a)	100ml	34/35	24/29
8368(b)	100ml	40/38	24/29
8368(c)	200ml	50/42	24/29
8368(d)	400ml	50/42	24/29
8368(e)	1000ml	50/42	24/29

#### 8369 SOXHELT EXTRACTION APPARATUS (MANTLE TYPE)

- Useful for quick heating which saves extraction time.
- Fibre glass hand knitted heating surface having kanthal heating elements.
- Housing made of M.S. Powder coated.
- Temp. is controlled by individual energy regulator.
- Provided with rods.

Cat. No.	Capacity	No. of Flasks
8369(a)	250ml	3
8369(b)	500ml	3
8369(c)	250ml	6
8369(d)	500ml	6



#### 8370 SOXHELT EXTRACTION APPARATUS (HOT PLATE TYPE)

Same as Cat. No. 8369 but with Hot Plate instead of Heating Mantle.

Cat. No.	Capacity	No. of Flasks
8370(a)	250ml	3
8370(b)	500ml	3
8370(c)	250ml	6
8370(d)	500ml	6



#### **ROTARY VACUUM EVAPORATOR**



# 8375 ROTARY VACUUM EVAPORATOR (Rapidvap Series Diagonal Condenser)

Rotary vaccum evaporater Rapidvap series diagonal condenser model Evaporated with supplied complete with geared dice non sparking motor offering speed control by analog knob upto 200 RPM jack arrangement is fitted on tapered from base for positioning glass assembly double walled water bath with Digital temperature controller. Diagonal glass condenser double coiled with three opening for vacuum and cooling , pear (Kjeldhal) shaped evaporating flask capacity 800 ml, receiver flask capacity one liter fitted with a ball joint feeding tube and vapor path tube provided with a seal, clips and spring a complete working unit.



# 8376 ACCESSORIES OF ROTARY VACUUM EVAPORATOR Rapidvap Series Diagonal Condenser

#### USE & PURPOSE OF ROTARY EVAPORATORS

Rotary Evaporators are used in chemical laboratories for the efficient and gentle removal of solvents from samples by evaporation.

The Rotary Evaporators is the method of choice for solvent removal in the modern organic laboratory. The solvents or low boiling compounds are removed by a simple distillation.

# 8377 ROTARY VACUUM EVAPORATOR (Rapid VAP Series Vertical Condenser PT-VDC . )

This model of evaporator is supplied complete with geared drive non sparkling noiseless motor offering smooth control by analog knob upto 200 RPM. Jack arrangement is fitted on tapered front base for positioning glass assembly double walled water bath with digital temperature controller, vertical glass condenser double coiled with three opening for vacuum and cooling, pear (kjedhal) shaped evaporating flast capacity 800ml, receiver flask capacity one litre fitted with a ball joint, feeding tube, vapour path tube, provided with a seal, clips & mp; spring ac complete working unti accessories: Rotary vacuum, Evaporated Rapidvap seriesVertical Condenser.



8378
ACCESSORIES OF
ROTARY VACUUM EVAPORATOR
Rapidvap Series Vertical Condenser



#### **HOT PLATES - Various Types**

#### 8380/81 LABORATORY HOT PLATE

- Body made of MS sheet duly stove painted.
- Heavy duty cast iron top or S.S. top for operating at high temperatures.
- Fibre blanket insulated with Kanthal heater and fire proof connection.
- All our Hot plates are fitted with energy regulator except Cat. No. 8380(e).
- Available in multiple sizes and shape (Round & Rectangle)
- Max. Temp. upto 300°C.
- Temp. controlled by energy regulator & 3 Heat Switch.

#### 8380 LABORATORY HOT PLATE (with Cast Iron Top)

Specifications are same as above but with heavy duty cast & top.

Cat. No.	Size of Plate	Wattage
8380(a)	8" round	1000W
8380(b)	10" x 12"	1000W
8380(c)	12" x 18"	2000W
8380(d)	18" x 24"	3000W
8380(e)	8" round	w/o energy
		regulator





8380(e) 8" round without energy regulator.

#### 8381 LABORATORY HOT PLATE (with Stainless Steel Top)

Specifications are same as above but with heavy duty Stainless Steel top.

Cat. No.	Size of Plate	Wattage
8380(a)	8" round	1000W
8380(b)	10" x 12"	1000W
8380(c)	12" x 18"	2000W



#### 8382 LABORATORY HOT PLATE (with Stainless Steel Top)

Specifications are same as per Cat No. 8381 fitted with heavy duty Stainless Steel top & Digital P.I.D. Temp. indicator cum controller.

Cat. No.	Size of Plate	Wattage
8382(a)	8" round	1000W
8382(b)	10" x 12"	1000W
8382(c)	12" x 18"	2000W



#### **BEAKERS** - Borosilicate Glass 3.3 & Polypropylene







#### 8385 LOW FORM BEAKERS (Borosilcate Glass 3.3 grade)

- Manufactured from borosilicate glass 3.3 grade resistant to heat & almost all chemicals.
- They meet the highest quality standards.
- These beakers have thick walls & heavy bases.
- Re-inforced rims & spouts to prevent breakage during washing & transportation.

Cat. No.	Capacity	Qty. in box
8385(b)	50ml	10
8385(c)	100ml	10
8385(d)	150ml	12
8385(e)	250ml	10
8385(f)	500ml	6
8385(g)	1000ml	6

#### 8386 LOW FORM BEAKERS (Polypropylene)

- Manufactured from ultra clear virgin polypropylene which provides thick walls with superior chemical resistance.
- They meet the highest quality standards.

Cat. No.	Capacity	Qty. in box
8386(a)	100ml	12
8386(b)	250ml	12
8386(c)	500ml	12

#### 8387 BEAKER TONG (Stainless Steel)

These Tongs were designed to handle beakers containing hot or corrosive liquids. These tongs are made of Stainless Steel which are tough, resist bending and does not rust. Jaws are covered with either asbestos or cork sheet. Size approx. 12" long.





#### SHAKERS -Vortex, V.D.R.L. & Rotary

#### 8388 VORTEX SHAKERS

- Variable speed mixer to eliminate hand mixing.
- Suitable for short time operation (Touch function) activated by pressing shaker attachment or continuous operation.
- Two way switch is provided for both operation-touch function & continuous function.
- Compact Design
- Stable at high speeds thanks to a sturdy MS base for vibration damping.
- Type of movement is Orbital
- Speed range: 0-2500RPM
- Optional Mode : Continuous operation
- Touch Function: Yes



#### 8399 BLOOD ROLLER MIXER

Blood Roller Mixer with 4 rollers.

#### 8391 V.D.R.L. SHAKER

- Compact shaker for mixing blood samples.
- Timer options 0-50min for accurate mixing time.
- Stable at high speed.
- Speed range 0-350RPM.
- Rotational type of movement.
- Continuous operation mode.
- Platform dimension 30x30 cm.
- PMDC motor.
- Supply 220V, 50Hz.



#### 8392

#### **OPTIONAL FOR V.D.R.L. SHAKER**

Please add extra for Digital Timer.

#### 8393

#### **HEAVY DUTY ROTARY SHAKERS**

It has a uniform circular motion in horizontal plane, rotation effect ranges from a gentle rise and fall of the liquid to a vigorous swirling. All positions on the platform receive identical agitation.

- Useful for continuous shaking of solution in flasks.
- Mounted on heavy angle iron frame.
- Speed is controlled by electronic speed regulator.

Cat. No.	Platform Size	e Holding Cap.
	I	
8393(a)	30x30cm	9 Flask of 250ml
0393(a)	SUXSUCIII	9 Flask Of 2501111
8393(b)	45x45cm	16 Flask of 250ml
(-)		
8393(c)	55x55cm	25 Flask of 250ml
(c) (c)	338330111	23 Flask Of 230111



8394
OPTIONAL FOR ROTARY SHAKER

Please add extra for Timer 0-60min

#### **HOMOGENISERS & MECHANICAL STIRRERS**



#### 8397 TISSUE HOMOGENISERS

It is a multipurpose unit, suitable for low speed homogenisation of tissue and also small volume low speed stirring applications. Pulley driven low speed operation provides high torque for grinding and homogenising of animal or vegetable tissues.

Type of Motor	AC/DC Universal
Horse Power	1/20
Maximum Speed	4000RPM
Capacity (Dependency of Viscosity)	6-8 Litres
Stirring Shaft Length	6mm
Stirring Shaft Length	300 mm
Propeller sweep & type	38mm, 3 Bladed
Stainless Steel for shaft & propeller	S.S. Grade 304
Shaft & motor coupling	Self centering Chuck
Height of retort stands	600mm

Cat. No.	Capacity
8397(a)	For 25ml vessel
8397(b)	For 50ml vessel





#### 8398 LABORATORY STIRRER

This Laboratory stirrer is designed to meet requirements of Laboratories demanding wide flexibility of stirring operations.

5	, , ,
Type of Motor	AC/DC Universal
Horse Power	1/20
Maximum Speed	4000RPM
Capacity (Dependency of Viscosity)	6-8 Litres
Stirring Shaft Length	6mm
Stirring Shaft Length	300 mm
Propeller sweep & type	38mm, 3 Bladed
Stainless Steel for shaft & propeller	S.S. Grade 304
Shaft & motor coupling	Self centering Chuck
Height of retort stands	600mm

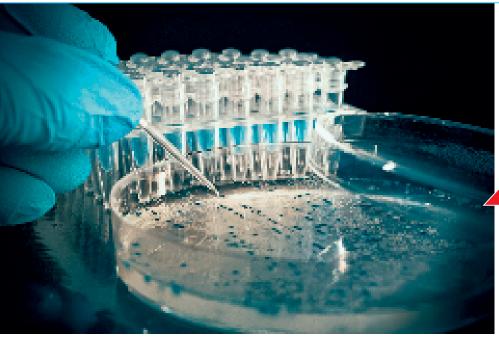


For Digital RPM, please add extra in cat. no. 8397 & 8398.





#### PETRI DISH & DIGITAL COLONY COUNTER



Strictly fabricated from BOROSILICATE GLASS (3.3 grade)

#### 8400 PETRI DISH (Borosilicate Glass 3.3 grade)

Petri dishes have a variety of uses, but most commonly used for culturing bacteria. Our Petri dishes are manufactured from borosilicate glass of 3.3 grade. These dishes can also securely contain animals or germinating seeds. A growth medium is often placed in the bottom of a petri dish, which provides a food source for the bacteria, enabling them to reproduce rapidly.

Cat. No.	Size
8400(a)	50 x 17 mm
8400(b)	80 x 17 mm
8400(c)	100 x 17 mm
8400(d)	150 x 20 mm

# USES OF PETRI DISHES

Round slopes of Petri dishes are most commonly used in microbiology because liquids are less likely to conglomerate around smooth surfaces than corners.

During sample testing, sample should be properly mixed and distributed in the media in petri dish for proper colony counting and if petri dish are round then you can easily swirl around liquids without having sample catch around the corners or agitating the liquid too much.

Another reason is that round petri dishes are easy to handle & clean.

#### 8401 DIGITAL COLONY COUNTER

- 110mm Dia Magnifying Glass.
- Audible Confirmation of each count.
- Uniform glare free illumination.
- Digital Readout from 0-9999.
- Auto Marker pen.
- Wolffhuegel glass grid with focusing facility.



DIGITAL DISPLAY	4 digit, 9999 Maximum Count
DISH SIZE	100 mm
MAGNIFICATION	x 1.7
DIMENSIONS	L 274 X B 320 X H 167 mm (Approx.)
WEIGHT	3 Kg.
POWER	230V 10% AC, 50Hz, 40W
STANDARD	Marking Pen - 1 No.
ACCESSORIES	Magnifier Lens - 1 No.

#### **ANAEROBIC CULTURE JAR - Polycarbonate & S.S.**



# 8401 ANAEROBIC CULTURE JAR (with Vacuum cum Pressure Gauge)

Transparent An aerobic culture jar of 3.5Lt. capacity which is made of polycarbonate. the lid of the jar is made of Aluminium pressure die casting fitted with pressure value vacuum value safety valve & compound pressure cum vacuum gauge three finger aluminium clamp and sealing "O" ring and air/gas chuck.

This is recommended only where inside air of jar is removed through vacuum pump and CO2 is filled in the jar through CO2 gas cylinder to generate anaerobic in the jar.

Also supplied with plain aluminium pressure die casted lid which can be fitted ready made gas packs are used to generate the anaerobic conditions inside the jar.

Supply as above completed with following accessories

- Petri plate carrier stainless steel for 10 petri Dishes.
- Test tube carrier stainless steel.

Fitted with Lid having vacuum cum pressure gauge and safety valve. This type of Lid is required when gases are used to generate anaerobic condition inside the jar. This Anaerobic Culture Jar is same as cat. no. 8403 only pressure gauge lid is replaced by plain aluminium pressure died cast lid. This lid is used where ready made gas packs are used to generate anaerobic conditions.



# 8402 OPTIONAL CONSUMABLES OF ANAEROBIC CULTURE JAR

- (a) Anaerobic Indicator, Box of 10 Tablets.
- (b) Anaerobic Gas Pack, Price per pkt. of 5 Sachets.

# 8405 ANAEROBIC CULTURE JAR (with vacuum cum pressure gauge)

- All metal construction consisting of a stainless steel jar with a top flange. Recessed for a torodial rubber sealing ring and cover held in place by a strong bridge clamp.
- This cover is fitted with two needle valves for evacuation and a sachet containing a catalyst.
- A side arm on the jar is provided for connecting to semi solid lucus indicator ( The jar is supplied without semi solid lucus indicator) with pressure cum vaccum gauge.







#### **WATER BATHS - Double wall & Serological**

#### 8410 WATER BATH - DOUBLE WALL (Thermostatic)

- Double walled inner made of stainless steel.
- Exterior of M.S. Sheet duly finished in epoxy powder coated shade.
- The gap of 25mm between the outer and inner walls iregulated with mineral wool.
- Selection of temperature controller; thermostatic or Digital temp. indicator cum controller ( optional)
- Concentric rings to use flask from 50ml to 500 ml capacity.
- Concentric rings are made from Stainless steel.
- Long lasting elements,
- Temp Range 5°C above ambient to 99°C.
- Operates on 230 Volts A.C.

Cat. No.	Inner Size	Lid	Сар. арргох
8410(a)	10"X 14"X 4"	6 Holes of 3" dia	8 liter
8410(b)	16"X 12"X 4"	12 Holes for 3" dia	15 liter

# 8414 WATER BATH - SEROLOGICAL (Thermostatic)

- Double wheel filled with high grade glass wool insulation between the walls.
- Exterior of M.S./G.I. duly finished in epoxy powder coated shade.
- Selection of controller-either thermostat or PID digital temperature indicator cum controller (optional).
- Inner chamber made of 304 S.S.
- Long-Lasting water Heater.
- Temperature Range:-5 Cabove ambient to 70 C.
- Operates on 230 volts.
- Control Panel is provided at the lower of the bath.
- Bath is completed with perforated and removable diffuse shelves.

Cat. No.	Inner Size	To Accomodate	Cap. approx
8414(a)	12"X 7"X 7"	1 Rack	12 liter
8414(b)	12"X10"X7"	2 Rack	14 liter
8414(b)	15"X12"X7"	4 Rack	18 liter
8414(b)	18"X12"X7"	6 Rack	25 liter





#### 8411 OPTIONAL FOR ABOVE WATER BATH DOUBLE WALL (Thermostatic)

- (a) Digital PID Temp indicator cum controller
- (b) Stirrer for Uniform Temp.

# 8415 OPTIONAL FOR ABOVE WATER BATH SEROLOGICAL (Thermostatic)

Digital PID Temp indicator cum controller.

#### **HIGH PRECISION & SHAKER WATER BATH**



#### 8416 HIGH PRECISION WATER BATH

This bath is suitable for all laboratory application requiring constant temperature to high degree of accuracy typical use include pysiochemical and botanical experiments, specific gravity determination and conductivity test.

The bath is constructed of double walled, internal made of Stainless Steel 304 Qlty, and external of mild Steel and painted in Epoxy Powder Coating. 25mm mineral wool insulation on sides and bottom. With perforated and removable diffuser shelf and brass drain plug. A sealed glass window of Size: 230 x 130mm is also provided on the front.

- Double walled inner made of S.S.
- Exterior of M.S. Sheet duly finished in Epoxy powder coated shade.
- · Highly insulated between two walls.
- · Glass windows for easy inside view.
- Stirring arrangement to ensure good Temp. Uniformity.
- Temp. is controlled by Digital Temp. Indicator Cum Controller.

Cat. No.	Size
8416(a)	425 x 250 x 225
8416(b)	450 x 375 x 375

#### 8417 SHAKER WATER BATH

- Double walled inner made of S.S. 304 & exterior made of M.S. Powder coated.
- Bath has Shaking Tray
- Speed of stroke is adjusted by speed controller
- Temp. is controlled by Thermostat / digital temp. controller.

Cat. No.	Size (mm)
8417(a)	275 x 275 x 50
8417(b)	450 x 300 x 150

### 8418 OPTIONAL FOR SHAKER WATER BATH

Please add extra for the following options:

- a) Digital PID Temp. Indicator Cum Controller.
- b) Digital RPM Indicator.

#### **SONICATOR**

#### 8418 ULTRA SONIC BATH (SONICATOR)

- Most useful for proving Rigorous Cleaning of laboratory Glassware and instruments.
- Tank made of S.S. 316 & Exterior made of S.S. Matt Finish.
- S.S. Cover lid.
- These Cleaners Function by means of Ultrasonic Energy.

Cat. No.	Tank Capacity
8418(a)	1.5 ltr
8418(b)	3.5 ltr
8418(c)	6.5 ltr

#### 8419 OPTIONAL FOR ULTRA SONIC BATH (SONICATOR)

HEATER





#### LABORATORY HOT AIR OVEN

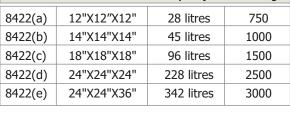
#### 8422 LABORATORY HOT AIR OVEN

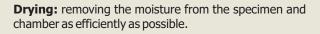
Laboratory ovens are convention appliances for general purpose in the scientific and manufacturing industries. Applications include sterilization, experiment management drying processing and testing.

- Double walled in construction- highly insulated between two walls by high quality glasswool.
- Interior of Al./Stainless steel having buffed-finish.
- Exterior of M.S. duly finished in powder coated shade.
- Selection of Temp. controller-Thermostatic or PID
- A fully insulated door with sturdy S.S. hinges.
- Temp. Range: 5°C above ambient to 250°C

Temp. Accuracy : $\pm 1^{\circ}$ C
------------------------------------

Cat. No.	Inner Size	Capacity	Wattage
8422(a)	12"X12"X12"	28 litres	750
8422(b)	14"X14"X14"	45 litres	1000
8422(c)	18"X18"X18"	96 litres	1500
8422(d)	24"X24"X24"	228 litres	2500
8422(e)	24"X24"X36"	342 litres	3000





Baking: heating a substrate without dehumidifying it.

**Curing:** the sample is physically or chemically altered by a slow baking and drying process.



Please add extra for the following options:

- a) Digital PID Controller indicator cum controller.
- b) Air Circulation Fan.
- c) Timer 0-24 Hours.



Standard Laboratory Hot Air Oven





Laboratory Hot Air Oven with Digital PID Controller cum indicator.

#### **BACTERIOLOGICAL INCUBATOR**



### 8425 BACTERIOLOGICAL INCUBATOR



Bacteriological incubators are insulated boxes with an adjustable heater, typically going up to  $60 \text{ to } 65^{\circ}\text{C}$  (140 to 140°F). The most commonly used temperature both for bacteria such as the frequently used E. coil as well as mammalian cells is approximately  $37^{\circ}\text{C}$  as these organisms grow well under such conditions. For other organisms used in biological experiments, such as the budding yeast Saccharomyces cerecisiae, a growth temperature of  $30^{\circ}\text{C}$  is optimal.

- Double walled in construction- highly insulated between two walls by high quality glasswool.
- Interior of Al./Stainless steel having buffed-finish.
- Exterior of M.S. duly finished in powder coated shade.
- Selection of Temp. controller-Thermostatic or PID controller.
- A fully insulated door with sturdy S.S. hinges.
- Temp. Range: 5°C above ambient to 250°C.

Cat. No.	Inner Size	Capacity	Wattage
8425(a)	12"X12"X12"	28 litres	110
8425(b)	14"X14"X14"	45 litres	125
8425(c)	18"X18"X18"	96 litres	150
8425(d)	24"X24"X24"	228 litres	200
8425(e)	24"X24"X36"	342 litres	300

DIFFERENCE
BETWEEN
BACTERIOLOGICAL
INCUBATOR
&
B.O.D. INCUBATOR

BACTERIOLOGICAL INCUBATOR works at ambient temperature and it contains only heating mechanism in these bacteriological incubators if set temperature is in range of 30-35°C then they can only maintain their set temperature if surrounding environment temperature is below or in a range 30-35°C if surrounding temperature is higher then the incubator set temperature then there would be rise in display temperature of incubator because of high temperature of surrounding air and that air is used for the circulation in the chamber in the chamber.

BACTERIOLOGICAL INCUBATOR has no cooling mechanism to lower the display temperature . But in case of BOD incubator they also use same air from surrounding environment for circulation in the chamber but they have heating as well as cooling mechanism and they work independent of surrounding. BOD incubators contains heating coils as we as compressor for cooling process if incubator set at temperature of 20-25°C and surrounding temperature is higher then this set temperature with the help of cooling mechanism and if surrounding temperature is low as compare to set temperature then heating would be generated with the help of heating coils.

## 8426 OPTIONAL FOR BACTERIOLOGICAL INCUBATOR

Please add extra for the following options:

- a) Digital PID Controller indicator cum controller.
- b) Air Circulation Fan.
- c) Timer 0-24 Hours.



#### **B.O.D INCUBATOR**

#### 8428 B.O.D. INCUBATOR

- Designed specially for Biological Oxygen demand (B.O.D.) determination and other applications like serum studies, enzyme assays and general incubation test.
- Chamber interior is of AL/S.S 304 and exterior finished with epoxy powder coated shade.
- Microprocessor based PID temp. indicator cum controller.
- Equipped with hermitically sealed compressor, fan cooled condenser and over load protected cooling system -CFC free cooling system.
- Circulating Fans ensures even air distribution within the chamber.
- High grade insulation between the chamber minimize the heat exchange.
- A full length inner acrylic door for easy visibility without disturbing temperature.
- A key lockable insulated door having door gasket seals door perfectly.
- Temperature Range: 5°C to 50°C. Accuracy: ±1°C
- 2 Nos. removable S.S. shelves available with all models as a standard
- Illumination lamp is fitted inside the chamber for easy visibility.

Cat. No.	Size	Capacity	Chamber Size
8428(a)	4 Cu.ft.	112 Ltrs.	20"X18"X32"
8428(b)	6 Cu.ft.	170 Ltrs.	24"X22"X36"
8428(c)	10 Cu.ft.	280 Ltrs.	24"X24"X36"

#### 8429 OPTIONAL FOR B.O.D. INCUBATOR

• Timer 0-24 Hours day and night cycle.



#### 8430 ORBITAL SHAKER INCUBATOR

- Useful for life sciences applications, fermentation studies, ageing, tests growth studies & biological cultures under various controlled temperature conditions.
- Chamber interior is of S.S 304 and exterior M.S finished with epoxy powder coated shade.
- Microprocessor based PID temp. indicator cum controller.
- Variable speed regulator.
- Size of shaking incubator 450x450x450mm.

  High grade insulation between the chamber minimize the heat exchange.
- Capacity of shaking tray: 16 flasks of 250ml.
- A key lockable insulated door having positive door gasket seals door perfectly.
- Temperature Range: 5°C above ambient to 70°C Accuracy ±1°C.

## 8431 OPTIONAL FOR ORBITAL SHAKER INCUBATOR

Please add extra for the following options

- a) Digital R.P.M Meter.
- b) Orbit Shaking Cum B.O.D Incubator.

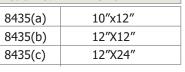
#### **VACUUM OVENS**



#### 8435 **VACUUM OVEN (ROUND)**

- Double walled in construction-highly insulated between two walls by high quality glasswool.
- Chamber made of heavy gauge stainless steel corrosion resistant.
- Exterior of M.S SHEET FINISHED IN POWDER COATED SHADE.
- Heat treated Glass window leaves clear content view.
- Rubber gasket tight seal at all vacuum levels.
- Selection of Temp controller-Thermostatic or PID Controller.
- Temp. Range  $50^{\circ}$ c above ambient to  $150^{\circ}$ c.

Cat. No.	Size
8435(a)	10"x12"
8435(b)	12"X12"
8435(c)	12"X24"



#### 8436 **VACUUM OVEN (RECTANGULAR)**

Same as above but rectangular Vacuum ovens are supplied instead of round.

Cat. No.	Size
8436(a)	10"X10"X10"
8436(b)	12"X12"X12"
8436(c)	14"X14"X14"



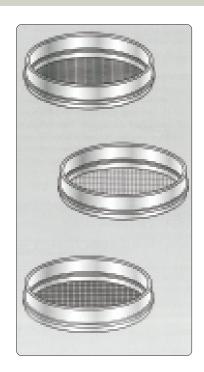
#### 8437 **OPTIONAL FOR VACUUM OVEN**

Please add extra for DIGITAL PID TEMPERATURE INDICATOR CUM CONTROLLER

#### **TEST SIEVES (BRASS)**

#### 8438 **TEST SIEVES (BRASS)**

Cat. No.	B.S.S. Mesh No.
8438(a)	6
8438(b)	22
8438(c)	30
8438(d)	44
8438(e)	52
8438(f)	60
8438(g)	72
8438(h)	85
8438(I)	100
8438(j)	120
8438(k)	150
8438(I)	200
8438(m)	240
8438(n)	300
8438(o)	325
8438(p)	350
8438(q)	400





#### **MUFFLE FURNACES**



#### 8440 MUFFLE FURNACE

- Newly designed Muffle Furnace has rapid heating & light weight construction.
- Special ceramic insulation makes furnace light weight.
- Exterior of heavy gauge M.S powder coated /S.S
- Selection of temperature control; Pyrometer or digital temperature indicator cum controller. (Optional) but in this Cat. No. selection of temperature control is by pyrometer.
- Uniform heat distribution through all 4 sides Kanthal A-1 elements.
- Chromel Alumel thermocouple is used as a sensor.

Maximum Temperature: 1000°C
Working Temperature: 900°C.

• Operates on 230Volts A.C

Cat. No.	Working Chamber	Rating
8440(a)	4" x 4" x 9"	1.5 K.W.
8440(b)	5" x 5" x 10"	2.0 K.W.
8440(c)	6" x 6" x 12"	3.0 K.W.
8440(d)	8" x 8" x 12"	3.5 K.W.

#### NOTE

It is clearly mentioned that working temperature of ordinary muffle furnace is 900°C whereas working temperature of industrial furnace is 1100°C.

Accordingly price difference is also there.

Please go through the specifications before placing the order.

### 8442 INDUSTRIAL MUFFLE FURNACE

- Groove type Muffle is used in construction.
- Most useful for industrial field.
- Exterior of heavy gauge M.S powder coated /S.S
- Selection of temperature control; Pyrometer or digital temperature indicator cum controller. (Optional) but in this Cat. No. selection of temperature control is by pyrometer.
- Uniform heat distribution through all 4 sides Kanthal A-1 elements.
- Chromel Alumel thermocouple is used as a sensor.

Maximum Temperature : 1200°C
 Working Temperature : 1100°C.

Operates on 230Volts A.C

Cat. No.	Working Chamber	Rating
8442(a)	4" x 4" x 9"	3.0 K.W.
8442(b)	5" x 5" x 10"	4.0 K.W.
8442(c)	6" x 6" x 12"	4.5 K.W.
8442(d)	8" x 8" x 12"	6.0 K.W.

### 8443 OPTIONAL FOR ABOVE MUFFLE FURNACES

Please add extra for DIGITAL PID TEMPERATURE INDICATOR CUM CONTROLLER in any type of Muffle furnaces.

#### DRY BATH INCUBATOR & C.O.D. DIGESTION APP.





#### HIGH PERFORMANCE HEATING BLOCK

While placing order please specify interchangeable aluminium blocks, we are having following 4 types of aluminium blocks.

No. of Holes	Diameter/Capacity
16	15mm
25	10mm
25	12mm
25	0.2ml

#### 8495A

• Single Block

#### 8495B

Double Block

#### 8495

#### DRY BATH INCUBATOR

- Designed for multi function dry bath heating of test tubes, micro centrifuge tube and cuvettes.
- Ideal for enzyme reaction, Inactivation and other lab procedures.
- Through of block, a wide variety of tube and vessels can be accommodates in a standard unit.
- Supplied completed with block extraction tool.
- Recessed well /cavity accommodate two interchangeable aluminum insert block.

#### TECHNICAL DATA

Temperature range : Ambient to 200°

Heater Load : 750WTemperature Accuracy :  $+1^{\circ}$ 

Controller : Microprocessor based

temperature indicator cum

controller

Display : Easy to read LED display

Block Dimension : 96x96x50mm

Block body : Anodized Aluminium

Sensor : Pt 100

External material : Powder Coated CRC steel
Power Supply : 230V, Single phase A/c, 50Hz

#### 8497

#### C.O.D. DIGESTION APPARATUS

These COD apparatus are used in various laboratories & pharmaceutical industries for waste water and industrial process water monitoring & checking.

#### FEATURES

- Sturdy design & Easy to use.
- Less maintenance
- Digestion of samples using potassium dichromate & sulphuric acid.
- Design for digestion of COD test samples & multifunction dry bath heating.
- Dry block made of aluminium with fifteen holes of 40mm dia.
- Digital PID temp. controller cum display.
- Temp. range upto 2500C.
- Timer upto 2 Hrs.
- Samples after being digested for 2 hours can be analysed using calorimeter or conventional titration method.



#### 8498

#### C.O.D. DIGESTION APPARATUS

Please add extra:

Glass parts for COD Digestion Apparatus.



#### **ALL QUARTZ DOUBLE DISTILLATION**

### 9001 ALL QUARTZ DOUBLE DISTILLATION

It has been designed keeping in view customer requirement and easy serviceability of the equipment. All quarts double distillation consists of demountable upper and lower boiler.

The lower boiler has a built in heater enclosed in a quartz boiler with a cup on top.

The upper boiler has a built in quartz coil and condensing unit which is mounted on the boiler with the help of ball and socket joint.

Double walled condenser ensured separate condensation of vapor coming from the two boiler using a single cooling circuit.

The unit is mounted on a specially designed powder coated stand and is also provided with safety control unit.

The new dual-safety cut off has been designed for better and accurate control of the distillation unit. It has been incorporated with advanced microprocessor based electronic circuitry.

The has been latest electronic technology that has been introduced by our company which gives as easy user machine interaction.

The alpha numeric LCD which has been used shows all messages that correspond to the running of the machine.

Also there is alarm system which beeps as and when user attention is requires.

#### Special Advantages of Demountable Model:-

- Easy cleaning of the first boiler since it can be dismantled from the assembly.
- Easy interchangeability as it is provided with ball and socket joint.
- Boiler and condenser have larger boiling space resulting in balanced boiling and improve quality of distillate.
- Compact and easy to install.



These units are supplied inclusive of safety cut-off device.

#### TECHNICAL DATA

Cat. No.	Output Capacity	Cooling Water Consumption
9001(a)	1.5 Ltr/hr	50 Ltr/hr
9001(b)	2.5 Ltr/ hr	70 Ltr/hr
9001 (c)	5.0 Ltr/hr	150 Ltr/hr

It is recommended to use water softener unit with all type of water distillations for desired output, good quality distillate and long life.

#### **DOUBLE DISTILLATE QUALITY:-**

Parameter	Values
Specific Conductivity	0.1 0.5 μs/cm
Biological Activity	
(Distillate quality)	Pyrogen free
Organic Matter	Nil
Total Solids	0.1 mg / ltr
Silica	<0.01mg / ltr

- All parameters are under standard test condition. Please test the distilled water before use.
- We recommend a quartz reservoir for storage of high purity water.

#### SINGLE STAGE QUARTZ DISTILLATION



#### 9002 SINGLE STAGE QUARTZ DISTILLATION

The apparatus consists of a boiler made from high purity quartz with built in heater and bottom discharge joint for easy cleaning of deposits. A spiral condenser is fitted on the boiler with receiving adapter. The unit comes with safety control unit (optional) to protect the glass parts in case of water failure or overheating.

Quartz can withstand very high temperature variation, thus it is thermal shock proof.

Conductivity	: 1.0-1.5µS/cm with Borosilicate Condenser
	: 0.5-0.8µS/cm with Quartz Condenser
Distilled water quality	: Pyrogen free
Distillate temperature	: 25-45 C

All parameter are under standard test conditions.

#### Advanced features:-

- Distillate is pyrogen free, also it is free of heavy metals.
- Switch on time is less than minute providing distilled water instantly.
- Low maintenance is required

#### **Advantages**

- Rust proof powder coated sturdy stand as base
- Replacable clamps are provided for better adjustments and alignment of the boiler and condenser.



#### TECHNICAL DATA

Following unit is having Borosilicate condenser with conductivity 1.0-1.5  $\mu$ /s/cm

Cat. No.	Output Capacity	<b>Cooling Water Consumption</b>
9002(a)	2.5 Ltr/hr	40 Ltr/hr
9002(b)	5.0 Ltr/ hr	65 Ltr/hr

### Following unit is having Quartz Condenser with conductivity 0.5-0.8 $\mu$ /s/cm

Cat. No.	Output Capacity	Cooling Water Consumption
9002(c)	2.5 Ltr/hr	40 Ltr/hr
9002(d)	5.0 Ltr/ hr	65 Ltr/hr

It is recommended to use water softener unit with all type of water distillations for desired output, good quality distillate and long life. These units are supplied without safety cut-off device.

If you want Digital safety control unit with alarm.

Please refer to Cat. No. 9003

#### 9003 SAFETY CUT-OFF DEVICE

Addition of safety cut-off device in above units. Please add extra

Cat. No.	Capacity	Description
9003(a)	2.5 Ltr/hr	Safety cut-off device with alarm
9003(b)	5.0 Ltr/ hr	Safety cut-off device with alarm



#### WATER STILL WITH SILICA SHEATHED HEATER

### 9005 WATER STILL WITH SILICA SHEATHED HEATER

Water still are carefully designed to produce high purity pyrogen free distilled water made from 3.3 grade borosilicate glass comprises of horizontal type boiler, condenser, constant level device, silica sheathed (Quartz) heater, along with stand and clamps.

#### TECHNICAL FEATURES

- Borosilicate condenser and boiler are fitted with a removable silica sheathed heater and screw threaded connector for ease of cleaning
- Distilled temperature is approx. between 25 to 45 C which is ensured by an efficient condenser.
- The stand is powder coated for rust free operations and lustrous appearances.
- The unit automatically switches off if water level in the boiler falls below heater.
- Cooling water form the condenser is re-circulated into the boiling chamber, hence saving energy.
- Electrical power: 220/240 V,50/60 Hz, single phase supply.

#### **Unique Features:**

These modes are equipped with in-built water level sensor to protect the glass parts in case of water failure or overheating buzzer is provided when user attention is required.

#### TECHNICAL DATA

Single still

Conductivity : 1 to 2.0 µs/cm Distillate quality : Pyrogen free

Cat. No.	Output Capacity	<b>Cooling Water Consumption</b>
9005(a)	2.0 Ltr/hr	60 Ltr/hr
9005(b)	4.0 Ltr/ hr	120 Ltr/hr

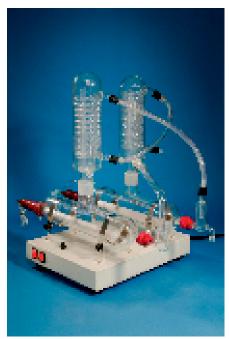
Double still

Conductivity : 0.8 to 1.0 µs/cm Distillate quality : Pyrogen free

Cat. No. Output Capacity		Cooling Water Consumption
9005(c)	2.0 Ltr/hr	120 Ltr/hr
9005(d)	8.0 Ltr/ hr	150 Ltr/hr







**DOUBLE STILL** 

#### **SPARE PARTS FOR QUARTZ & WATER DISTILLATION**



### 9010 SPARES FOR ALL QUARTZ DOUBLE DISTILLATION

Cat. No.	Description
9010(a)	Quartz lower cup for 1.5 Ltr/hr Distillation
9010(b)	Quartz lower cup for 2.5 Ltr/hr Distillation
9010(c)	All quartz double distillation side over flow
9010(d)	Safety cut-off Devices for 1.5 & 2.5 Ltr/hr Dist.
9010(e)	Safety cut-off Devices for 5.0 Ltr/hr Dist.

### 9011 SPARES FOR SINGLE STAGE QUARTZ DISTILLATION

Cat. No.	Description	
9011(a)	Quartz boiler for 2.5 ltr/hr Dist.	
9011(b)	Quartz boiler for 5 ltr/hr Dist.	
9011(c)	Borosilicate coil condenser for 2.5 ltr/hr Dist.	
9011(d)	Borosilicate coil condenser for 5 ltr/hr Dist.	
9011(e)	Quartz coil condenser for 2.5 ltr/hr Dist.	
9011(f)	Quartz Coil condenser for 5 ltr/hr Dist.	
9011(g)	Safety cut-off Devices for 2.5 ltr/hr Dist.	
9011(h)	Safety Cut-off Devices for 5 ltr/hr Dist.	

#### 9012 SPARES FOR WATER STILL WITH SILICA SHEATHED HEATER

Cat. No.	Description	
9012(a)	Constant level Devices	
9012(b)	Boiling Chamber for 2 ltr/hr Still	
9012(c)	Boiling chamber for 4 ltr/hr Still	
9012(d)	Coil condenser for 2 ltr/hr Still	
9012(e)	Coil condenser for 4 ltr/hr still	
9012(f)	Silica Sheathed (Quartz) Heater with Bakelite	
Сар		

#### 9015 WATER SOFTENER

It softens the water and provides good quality water for use in laboratories. It helps to remove all the calcium and magnesium ions in hard water and the soft water thus obtained has hardness less than 5ppm as CaCO<sub>3</sub>. It is specially designed for easy serviceability and recharging the resin with sodium chloride solution. The softened water can be used as feed water to the Distillation units.

The use of hard water in boiler, would leave the boiler with a lot of scaling and sedimentation, hence to improve the quality of the distillate and for longer life of the glass. Quartz boilers, it is recommended to use softened water.



Different sizes of Quartz tubing are also available.

Please ask for quotation.



#### **CONICAL & ROUND /FLAT BOTTOM FLASK**

#### 9020 **CONICAL FLASKS**



Cat. No.	Capacity (ml)
9020(a)	10
9020(b)	25
9020(c)	50
9020(d)	100
9020(e)	150

Cat. No.	Capacity (ml)
9020(f)	250
9020(g)	500
9020(h)	1000
9020(i)	2000

#### 9021 **CONICAL FLASKS WITH SOCKET**

Cat. No.	Capacity (ml)	Socket Size
9021(a)	100	24/29
9021(b)	250	24/29
9021(c)	500	24/29
9021(d)	1000	24/29
9021(e)	2000	24/29

#### 9022 **IODINE FLASKS**

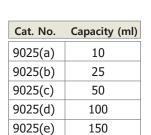
These flasks are blown specially for iodine value determination. With flaring, funnel shaped cup.



Cat. No.	Capacity (ml)	Interchangeable Joint
9022(a)	100	24/29
9022(b)	250	24/29
9022(c)	500	24/29
9022(d)	1000	24/29

#### 9025 **ROUND/FLAT BOTTOM FLASKS -LONG NECK**

Recommended for minimizing evaporation when boiling liquids. Made from quality Borosilicate glass, these flasks have very good resistant to breaking. The rim and neck have been reinforced for greater strength.





Cat. No.	Capacity (ml)
9025(f)	250
9025(g)	500
9025(h)	1000
9025(i)	2000

9026 **ROUND/FLAT BOTTOM FLASKS - SHORT NECK** WITH SOCKET SIZE 24/29

Cat. No.	Capacity (ml)	Socket Size
9026(a)	100	24/29
9026(b)	250	24/29
9026(c)	500	24/29
9026(d)	1000	24/29
9026(e)	2000	24/29



9027

These Quality Flasks are recommended for all types of distillation work, particularly for hazardous distillation involving flammable material. The side arm is placed approximately 3" below the top of neck at angle of 75°.



Cat. No.	Capacity (ml)	O.D.xHeight mm(Approx.)
9027(a)	100	60X200
9027(b)	250	85X200
9027(c)	500	105X240
9027(d)	1000	125X300

#### **VOLUMETRIC FLASKS & MEASURING CYLINDERS**



9030
VOLUMETRIC / MEASURING FLASKS



Made from high quality Borosilicate glass tubing. The heavy neck flange minimizes breading & chipping Graduation Ring on the neck is sharp & permanent. These flasks are supplied with standard tapered ground glass interchangeable stopper. Accuracy as per class B.

Cat. No.	Capacity (ml)	Socket Size
9030(a)	10	10/15
9030(b)	20	10/15
9030(c)	25	10/15
9030(d)	50	10/15
9030(e)	100	14/15
9030(f)	200	14/15
9030(g)	250	14/15
9030(h)	500	19/20
9030(i)	1000	19/20
9030(j)	2000	24/25

9031
MEASURING CYLINDER (ROUND BASE)

These superior shock resistance quality of a borosilicate glass make these cylinders excellent for student use. The graduation marks are permanent.

Cat. No.	Capacity (ml)
9031(a)	10
9031(b)	25
9031(c)	50
9031(d)	100
9031(e)	250
9031(f)	500
9031(g)	1000
	9031(a) 9031(b) 9031(c) 9031(d) 9031(e) 9031(f)

### 9032 MEASURING CYLINDER (HEXAGONAL BASE)

These superior shock resistance quality of a borosilicate glass make these cylinders excellent for student use. The graduation marks are permanent.

Cat. No	c. Capacity (ml)
9032(a	) 10
9032(b	) 25
9032(c	) 50
9032(d	100
9032(e	250
9032(f	) 500
9032(g	1000



### **REAGENT BOTTLES (Narrow & Wide Mouth)**

### 9035 REAGENT BOTTLES - NARROW MOUTH



Made from high quality Borosilicate glass tubing fitted with solid glass ground stopper.

Cat. No.	Capacity (ml)	Stopper Size
9035(a)	60	14/19
9035(b)	125	19/26
9035(c)	250	19/26
9035(d)	500	24/29
9035(e)	1000	29/32
9035(f)	2000	29/32

9036
REAGENT BOTTLES - WIDE MOUTH



Made from high quality Borosilicate glass tubing fitted with hollow glass stopper.

Cat. No.	Capacity (ml)	Stopper Size
9036(a)	60	24/29
9036(b)	125	29/32
9036(c)	250	29/32
9036(d)	500	34/35
9036(e)	1000	45/40
9036(f)	2000	50/44

## 9037 REAGENT BOTTLES / LAB BOTTLE WITH SCREW CAP

Made from high quality Borosilicate glass tubing. Each bottle is having GL-45 threading & fitted with blue PP cap.

Cat. No.	Capacity (ml)
9037(a)	100
9037(b)	250
9037(c)	500
9037(d)	1000
9037(e)	2000
9037(f)	5000



#### **SEPARATING & KEEPING FUNNELS**



## 9040 SEPARATING FUNNEL WITH SCREW TYPE WITH TEFLON KEY STOPCOCK

With interchangeable glass stopper fitted with teflon plug stopcock. Made from heavy walled, borosilicate glass tubing for maximum mechanical strength. All separating funnels are designed for precision work in separation & extractors. Supplied either in conical / pear shape or in Globe shape with plain stem.

Cat. No.	Capacity (ml)	Stopper Size
9040(a)	100	19/20
9040(b)	250	19/20
9040(c)	500	24/25
9040(d)	1000	29/25
9040(e)	2000	29/25



#### 9041 SEPARATING FUNNEL WITH STRAIGHT BORE GLASS KEY STOPCOCK

Same as above but with glass key stopcock.

Cat. No.	Capacity (ml)	Stopper Size
9041(a)	100	19/20
9041(b)	250	19/20
9041(c)	500	24/25
9041(d)	1000	29/25
9041(e)	2000	29/25

Custom Built Laboratory Glassware can be Manufactured.

#### 9042 SEPARATING FUNNEL WITH SCREW TYPE ROTA FLOW STOPCOCK

Same as above but with screw type rota flow stopcock.

Cat. No.	Capacity (ml)	Stopper Size
9042(a)	100	19/20
9042(b)	250	19/20
9042(c)	500	24/25
9042(d)	1000	29/25
9042(e)	2000	29/25

#### 9045 KEEPING FUNNELS

A rugged Borosilicate glass funnel with stem length approximately equal to funnel diameter. These Funnels have a  $60^{\circ}$  angle insuring close fit of filter paper for rapid filtration. The edge of bowl is beaded for increased strength. The stems are heavy walled.



Cat.	Diameter	Length
No.	(mm)	of Stem
9045(a)	25	25
9045(b)	50	50
9045(c)	65	65
9045(d)	75	75
9045(e)	100	100
9045(f)	125	125
9045(g)	125	Powder
9045(h)	150	Powder

All Laboratory Glassware products are manufactured from 3.3 Grade, low expansion, borosilicate glass. This glassware. by nature is resistant to attack from acids, salt solutions & organic solvents.

#### **BURETTES & PIPETTES**

#### 9050 BURETTE WITH STRAIGHT BORE GLASS KEY STOPCOCK

Accuracy as per class 'B', medium wall & having permanent marking (screen printing)

Cat.	Capacity	Sub
No.	(ml)	Division
9050(a)	10	0.05
9050(b)	25	0.10
9050(c)	50	0.10

#### 9051 BURETTE WITH SCREW TYPE ROTAFLOW STOPCOCK

Accuracy as per class 'B' medium wall & having permanent marking (screen printing)

Cat.	Capacity	Sub
No.	(ml)	Division
9051(a)	10	0.05
9051(b)	25	0.10
9051(c)	50	0.10

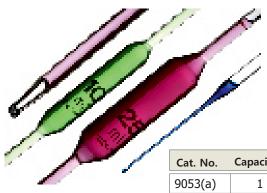
#### 9052 BURETTE WITH STRAIGHT BORE TEFLON PLUG STOPCOCK

Accuracy as per class 'B' medium wall & having permanent marking (screen printing)

Cat.	Capacity	Sub
No.	(ml)	Division
9052(a)	10	0.05
9052(b)	25	0.10
9052(c)	50	0.10







With one mark. Medium wall accuracy as per class 'B'.

Capacity (ml)
1
2
5
10
20
25
50

### 9054 GRADUATED PIPETTES

Accuracy as per class B. These pipettes are graduated for the delivery from zero mark at the top to any graduation line down to the shoulder color coded, medium wall.

Cat. No.	Capacity (ml)
9054(a)	0.1
9054(b)	0.2
9054(c)	1
9054(d)	2
9054(e)	5
9054(f)	10
9054(g)	25



#### **GENERAL LABORATORY GLASSWARES**



9060 LIEBIG CONDENSER WITH STANDARD JOINTS

Cat. No.	Socket Size	Cone Size	Length (App.) mm
9060(a)	24/29	24/29	200
9060(b)	24/29	24/29	300
9060(c)	24/29	24/29	400
9060(d)	24/29	24/29	500

9061 ALHIN CONDENSER WITH STANDARD JOINTS

Cat. No.	Socket Size	Cone Size	Length (App.) mm
9061(a)	24/29	24/29	200
9061(b)	24/29	24/29	300
9061(c)	24/29	24/29	400
9061(d)	24/29	24/29	500

9062 COIL CONDENSER WITH STANDARD JOINTS

Cat. No.	Socket Size	Cone Size	Length (App.) mm
9062(a)	24/29	24/29	200
9062(b)	24/29	24/29	300
9062(c)	24/29	24/29	400
9062(d)	24/29	24/29	500

All above type of condensers are also supplied with interchangeable joints of B19 & B29 at the same price.

9063 SPECIFIC GRAVITY BOTTLES

With interchangeable Glass Stopper.

Cat. No.	Capacity (ml)
9063(a)	10
9063(b)	25
9063(c)	50



9066 STALGANOMETER Straight Graduated



9064 THIEL'S MELTING POINT TUBES

Cat. No.	Capacity (ml)
9064(a)	150x18
9064(b)	150x25



9070 PYKNOMETER

- (A) Capacity 10ml.
- (B) Capacity 25ml.

9065 VISCOMETER OSTWALD

The relationship between intrinsic viscosity of a polymer solution and relative molecular mass of the polymer allows this apparatus to be used for quantitative determination of relative molecular mass comprises glass U-tube with two bulbs connected by a capillary tube.



9071
BOTTLE B.O.D.
WITH INTERCHANGEABLE STOPPER

Cat. No.	Capacity (ml)	O.D. x Height	
9071(a)	125	55x120	
9071(b)	300	70x143	

300ml is for determination of B.O.D. in industrial Effluents & wastes.





#### **DIGITAL PHOTO COLORIMETER**

#### 9101 DIGITAL PHOTO COLORIMETER



#### TECHNICAL DATA

Set Zero (Auto Zero): By Press Push Switch

with Audio response

Wavelength Range : 405 - 700 nm

Filters : Built-in 8 Digital Filters

>30,000 Hours Life

Filters Wavelength : 405nm, 450nm, 480nm, 520nm,

540nm, 578nm, 620nm, 700nm

Display Parameters : O.D., %T, Wavelength
Battery Indicator : Graphical Indication
Detector : Silicon Photo Diode

Accuracy :  $\pm$  0.01 O.D.

Stability : <u>+</u> 0.02 O.D. Per Hour Light Source : Highly Accurate LED Source

Volume : 1 ml Minimum

Dimension : 275 x 187 x 94mm (Approx.)

Weight : 1 Kgs (Approx.)

Power : 230 V <u>+</u> 10% AC, 50 Hz

Battery Backup : 7.2 V Li-ion Re-Chargeable Battery

Accessories : Set of Test Tube- 5 Nos.

Test Tube Holder 1 No. Operating Manual

#### SALIENT FEATURES







#### **SMART DIGITAL PHOTO COLORIMETER**



#### 9102 **SMART DIGITAL PHOTO COLORIMETER**

- This is our smart phone controlled digital photo calorimeter.
- Specification and technical data is same as Cat. No. 9101. The only difference is, we provide Android application software in CD along with above unit.
- We connect our mobile with the help of Bluetooth and save unlimited data.
- Later on the same data can be shared on Whatsapp or Gmail. (Mobile is not supplied along with the unit)





USER FRIENDLY INTERFACE MAKES THIS INSTRUMENT OF TECHNICIANS IN THE LABORATORIES

- Smart phone controlled new generation PHOTOCOLORIMETER.
- Unlimited sample storage in text file.
- Text file can be shared via Whats App & Gmail.
- Real Time Datalogger.
- Instruction manual can be directly downloaded from App.







#### **NEO BILIRUBIN METER**

#### 9105 NEO BILIRUBIN METER

#### SALIENT FEATURES

- User Friendly Graphical User Interface
- 3.5 Inch Coloured TFT LCD
- Measurement Time 4 -5 Seconds
- No Lamp Replacement
- Built in Thermal Printer
- Real Time Datalogger
- Dual Wavelength allows eliminating the haemoglobin interference factor





#### TECHNICAL DATA

Measuring Method : Dual Wavelength

455nm and 575nm wavelengths

Display : 3.5 Inch Coloured TFT LCD

Measuring Range : 0 to 30 mg/dl Unit : mg/dl, umol/l

Sample Container : Hematocrit Capillary Tubes

Detector : Silicon Photodiode

Light Source : LED

Thermal Printer : Thermal Serial Dot Method

Power : 220 Volt+10% AC

 $Dimensions \hspace{1.5cm} : \hspace{.1cm} 190x190x220mm (Approx.) \\$ 

Weight : 3.5 Kg. (Approx.)

#### STANDARD ACCESSORIES

**Description**Capillary Hepartinized Tubes
: 1 vial (100 pcs)

Clay Sealer (Wax Plate) : 1 pcs Operation Manual : 1 copy

#### NEONOTAL PHOTOTHERAPY UNIT & INCUBATOR



#### 9106 NEONOTAL PHOTOTHERAPY (Double Surface)

Phototherapy a treatment for hyperbilirubinemia and jaundice in the newborn that involves the exposure of an infant's bare skin to intense fluorescent light.

The blue range of light accelerates the excretion of bilirubin in the skin, decomposing it by photooxidation.

The infant is placed nude under the fluorescent lights with the eyes and genitalia covered. The baby is turned frequently, and the body temperature is monitored, using a skin thermistor. All vital signs are carefully noted, and details regarding position of the bulbs, time and duration of treatment, and the infant's response are charted.

Jaundice is yellow/green-yellow discoloration of the skin, mucous membranes, sclera and body fluids caused by increased levesl fo circulating bilirubin.

It usually becomes noticeable at levels of 85mmol/L. **About 60% of healthy babies** become clinically jaundiced in the 1st week of life (i.e. more than half of babies)

Sources of bilirubin

75% of bilirubin production heme from red cell breakdown.

25% of bilirubin production early labeled haemoglobin Risk of serum bilirubin above 340 umol/L is more than twice as high in Asian babies compared to Caucasian infants

Jaundice can be categorised into : physiological and pathological, unconjugated and conjugated

It is very important to recognise the characteristics of pathological jaundice

#### PRECAUTIONS

Patients with eye problems should see an ophthalmologist regularly, both before and during phototherapy. Because some ultraviolet rays are emitted by the light boxes used in phototherapy, patients taking photosensitizing medications (medications making the skin more sensitive to light) and those who have sun-sensitive skin should consult with their physician before beginning treatment. Patients with medical conditions that make them sensitive to ultraviolet rays should also be seen by a physician before starting phototherapy. Patients who have a history of mood swings or mania should be monitored closely, since phototherapy may cause excessive mood elevation in some individuals.

#### 9107 NEONOTAL INCUBATOR

**Incubators are used to maintain the body temperature of newborn infants.** This is best done so that the energy expended for metabolic heat production is minimized. The heat output of these devices is usually regulated by servocontrol to keep the skin temperature constant at a site on the abdomen where a thermistor probe is attached. In incubators, air temperature can also be controlled as an alternative to skin temperature servocontrol. Increased ambient humidity, heat shields and clothing have been used to decrease the evaporative or nonevaporative heat loss of infants in incubators under certain conditions. Double-walled incubators, by adding a second inner layer of Plexiglas, reduce radiant heat loss. They may also reduce total heat loss, but only if air temperature is controlled rather than skin temperature. The minimal oxygen consumption under a radiant warmer is the same or perhaps slightly higher than it is for the same infant in an incubator.

Compared with incubators, the partition of body heat loss is quite different under radiant warmers. Radiant warmers increase convective and evaporative heat loss and insensible water loss but eliminate radiant heat loss or change it to net gain. A heat shield of thin polyethylene film can be used with a radiant warmer to reduce heat loss by convection and evaporation. The major advantage of the radiant warmer is the easy access it provides to critically-ill infants without disturbing the thermal environment. Its major disadvantage is the increase in insensible water loss produced by the radiant warmer. **Most infants can be safely and adequately cared for in either incubator or radiant warmer bed.** 



#### pH METER, SPECTROPHOTOMETER & POTENTIOMETER

#### 9108 DIGITAL pH METER

A **pH Meter** is a scientific instrument that measures the hydrogen-ion activity in water-based solutions, indicating its acidity or alkalinity expressed as pH<sup>[2]</sup> The pH meter measures the difference in electrical potential between a pH electrode and a reference electrode, and so the pH meter is sometimes referred to as a "potentiometric pH meter".

The difference in electrical potential relates to the acidity or pH of the solution.



Microcontroller Based Three Point Calibration. Auto Temperature Correction Facility

Display: mv, Temperature, and Ph of Solution

Ph Range: 0 to 14 0.1 Ph Resolution

Readout: Alphanumeric Display USB Interface (Optional)



Range 340-960nm with facility for automatic concentration, % Transmission and absorbance measurements. 3½ digit data display, separate 3 digit LED display Wavelength in nm with 1nm wavelength resolution. Provision for 10mm & 50mm path length Cuvettes. Provided with set of 10mm & 50mm path length Cuvettes.

## 9111 ACCESSORIES FOR DIGITAL VISIBLE SPECTROPHOTOMETERS

- a) Set of 2 Cuvettes (50mm) Glass
- b) Set of 2 Cuvettes (10mm) Glass
- c) Spare Lamp 6V, 10W



### 9109 ACCESSORIES FOR DIGITAL pH METER

- a) pH Combination Electrode (0-14pH)
- b) Temperature Probe
- c) Electrode Stand (Rotational)

#### 9112 DIGITAL POTENTIOMETER

Digital Potentiometer for Redox Potential Measurement  $3\frac{1}{2}$  digit LED Display, Range 0 to  $\pm$  1999mV. Resolutions 1mV. Accuracy  $\pm 1\%$ . Power supply  $230V\pm10\%$  AC . Supplied with O.R.P. Electrodes, Electrode Stand & Dust Cover.

## 9113 ACCESSORIES FOR DIGITAL POTENTIOMETER

- a) Platinum Electrode
- b) Silver Electrode
- c) Reference Electrode
- d) Glass Electrode

#### **AUTO DIGITAL CONDUCTIVITY/TDS METERS**



### 9115 AUTO DIGITAL CONDUCTIVITY /TDS METER

We offer a huge variety of Digital Conductivity/TDS Meters to our customers. Highly accurate and  $\,$  stable, these are offered in field and lab models. These meters help to measure frequency and have adjustment facility in cell constant. We offer these meters in 5 ranges with model conductivity features. Our product has a weight of 1 kg.



#### SALIENT FEATURES

Display : Alphanumeric LCD
 Range : 0 to 1000 MOhms/c
 Temp Compensation : Automatic
 Cell Constant Adjustment : Adjustable
 Conductivity cell : Platinum Dip

Power : 230 V+-10%

9116
ACCESSORIES FOR a)
CONDUCTIVITY / TDS METER b)

- a) Conductivity Cell (cell constant 1.0)
  - Conductivity Cell (cell constant 0.5)
- c) Cell Stand (Rotational)

### **Digital Turbidity Meters**

#### 9117 DIGITAL TURBIDITY METERS

Item	Specification
Cat No.	9117
Range	0 to 200 JTU
	0 to 1000 JTU
	2 Ranges
Resolution	1 JTU
Accuracy	± 3% FS ± 1 digit
Sample System	30 mm clear glass tube
Light Source	6.8 V, Tungsten Lamp
Detector	Photo diode
Display	3½ digit LED display
Accessories	Test Tube Set, Operation Manual & Dust Cover.

#### SALIENT FEATURES

3½ digit LED Display Sewerage & Drinking Water Testing Measurement upto 1000 JTU



#### **DIGITAL HAEMOGLOBIN METER**

#### 9120 DIGITAL HAEMOGLOBIN METER



#### TECHNICAL DATA

Measurement Method : Cyanmethemoglobin Method (Optional Alkaline Hematin D also Available on Request)
Display : 16x2 Alphanumeric Display

Wavelength : 540 nm

Calibration : Automatic by Press CAL Key
Set Zero : Automatic by Push Switch

Measuring Range : 0.0 to 30.0 g/dl Photo Detector : Silicon Photodiode

Accuracy : <u>+</u> 4%

Light Source : 540 nm Green LED

Power : 220 Volt+- 10% AC

Frequency : 50 Hz

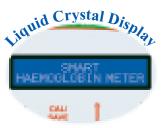
 $\begin{array}{lll} \mbox{Dimensions} & : & 275 \times 187 \times 94 \mbox{ mm (Approx)} \\ \mbox{Cuvette} & : & 12x65 \mbox{ mm Round Cuvette} \end{array}$ 

Weight : 0.8 Kg Approx.

Accessories : Operation Manual

Set of Round Cuvettes: 5 Nos. Test Tube Holder: 01 No.

#### SALIENT FEATURES







#### **SMART DIGITAL HAEMOGLOBIN METERS**



#### 9121 SMART DIGITAL HAEMOGLOBIN METER

Technical data is exactly same as per Cat. No. 9120 except with the following additions:

Interface : Bluetooth

Data Logger : Unlimited number of samples

Memory : Internal storage of Smart Phone

- This is our smart phone controlled digital haemoglobinmeter.
- We connect our mobile with the help of Bluetooth and save unlimited data.
- Later on the same data can be shared on Whatsapp or Gmail.

(Mobile is not supplied along with the unit)





MOBILE IS NOT SUPPLIED ALONG WITH THE UNIT

#### SALIENT FEATURES







- User Friendly Interface.
- No Lamp Replacement, Thanks to Latest LED Technology.
- Auto Calibration.
- Android Smart Phone Interface using Bluetooth.
- Option to add Patient's name.
- Unlimited Number of Samples along with the Patient's Name, Date & Time can be stored.



#### **PORTABLE AUTOCLAVES**

All portable autoclave are fixed with standard 2.5" Manometer gauge, Double safety valve, steam release valve and water outlet assembly.

#### 9201 PORTABLE AUTOCLAVE

#### TECHNICAL DATA

Auminum autoclave with nut type:

Specification: Deep down seamless aluminum base

with cast aluminum

Finish : Mirror finish

Electric load : 2KW, Kettle type.

Power source : 220,50Hz, single phase.

Optional : Electric/ Non electric



Cat. No.	Cat. No. Size Capacity	
9201(a)	12" x 12"	21Ltr.
9201(b)	12" x 15"	26Ltr.

#### 9202 STAINLESS STEEL AUTOCLAVE WING NUT TYPE

#### TECHNICAL DATA

Specification : Deep down seamless stainless steel

Base with heavy aluminum cast ring. Lid made of stainless steel and cast

aluminum.

Approx capacity: 21 Lts capacity
Finish: Mirror finish.

Electric load : 2 KW

Power source : 220v, 50 Hz, single phase
Optional : Electric/ Non electric

Size : 12" x 12"



#### 9203

#### STAINLESS STEEL AUTOCLAVE COOKER TYPE

#### TECHNICAL DATA

Specifications: Deep down seamless stainless steel

base and Lid

Finish : Mirror finish

Electric load : 2KW

Power source: 220v,50 Hz single phase.
Optional: Electric/ Non electric

Cat. No.	Size	Capacity
9203(a)	10" x 10"	10Ltr.
9203(b)	12" x 12" 20Ltr.	
9203(c)	14" x 12"	25Ltr.
9203(d)	12" x 20"	40Ltr.



#### **VERTICAL AUTOCLAVES (Economical & Plus Model)**



#### 9205

### VERTICAL AUTOCLAVE WING NUT TYPE (Economical Model)

Size: 300mm x 500mm (12"x20")

#### SALIENT FEATURES

The outer chamber and inner chamber are made of heavy gauge stainless steel (202 grade) dully polished.

Support ring is made of cast aluminum dully polished .

Unit is supplied with pressure gauge, Double safety valve ( spring loaded and dead weight type). Steam release valve and water out let.

All internal joints are argon arc welded and grinded to give crevice free internals.

Moulded joint less rubber gasket.

To work on 220V,50Hz, single phase.

Operating range upto 15 psi.

Electric load 2 KW.

Lid made of stainless steel and cast aluminum dully polished.

#### 9206 VERTICAL AUTOCLAVE (Economical Plus Model)

Size: 300mm x 500mm (12"x20")

Same as Cat No. 9205 but with addition of heavy duty stainless steel lid.

### 9208 VERTICAL AUTOCLAVE (BESTO PLUS)

#### SALIENT FEATURES

The outer chamber is made of heavy gauge stainless steel dully polished.

Inner chamber Lid, support ring and support legs are made of complete stainless steel 304 grade dully polished.

Unit is supplied with pressure gauge, Double safety valve (spring loaded and dead weight type), steam release valve and water out let.

All internal joints are argon arc welded and grinded to give crevice free internals.

Molded joint less EDPM gasket.

To work on 220 V/230 V, 50 Hz single phase.

Electric load 3KW

Operating range upto 15 psi-20 psi.

Cat. No.	S	ize
9208(a)	12" x 20"	Electrical
9208(b)	12" x 20"	Non Electrical

#### 9209

#### **OPTIONALS FOR VERTICAL AUTOCLAVE (BESTO PLUS)**

- a) Advanced control box (pressure control switch) low water cut off, timer, musical alarm.
- b) Digital temp indicator.



- c) Digital temp indicator-cum- controller.
- d) Water level indicator.
- e) Water inlet assembly.



#### **TRIPPLE & DOUBLE CHAMBER AUTOCLAVES**

## 9211 HIGH PRESSURE STEAM STERILIZER (TRIPPLE CHAMBER) (For Dry Sterlization)

#### SALIENT FEATURES

The outer chamber is made of heavy gauge stainless steel dully polished. Inner chamber, Lid, support ring and support legs are made of heavy gauge stainless steel 304 grade dully polished. Unit is supplied with pressure gauge. Double safety valve, water inlet, water outlet, steam release valve, water level indicator. All internal joints are argon welded and grinded to give crevice free internals. Moulded joint less silicon gasket. To work on 50V/230V,50 Hz, single phase operating range upto 20 psi.

Cat. No.	Size & Capacity		
9211(a)	12" x 20" 2 Drums (11" x 9")		
9211(b)	16" x 24" 2 Drums (15" x 12")		

#### 9212 HIGH PRESSURE STEAM STERILIZER (TRIPPLE CHAMBER) (Radial Locking)

Same as Cat. No. 9211 but provided with advance radial locking for durability & Safety.

Cat. No.	Size & Capacity		
9212(a)	12" x 20" 2 Drums (11" x 9")		
9212(b)	16" x 24" 2 Drums (15" x 12")		



## 9213 OPTIONALS FOR HIGH PRESSURE STEAM STERILIZER (TRIPPLE CHAMBER)

Please add extra for the following options in Cat. No. 9211 & Cat. No. 9212

- a) Dressing drums 11"x9" (for 12"x20" High Pressure)
- b) Dressing drums 15"x12" (for 16"x 24" High Pressure)
- c) Digital Temp indicator
- d) Digital temp indicator-cum-controller
- e) Digital temp indicator-cum-controller and digital timer.

## 9215 VERTICAL LABORATORY AUTOCLAVE (Radial Locking) - Double wall construction

SALIENT FEATURES

The outer chamber is made of heavy gauge stainless steel dully polished. Inner chamber, Lid, support ring and support legs are made of heavy gauge stainless steel 304 grade dully polished. Unit is supplied with pressure gauge. Double safety valve, water inlet, water outlet, steam release valve, water level indicator. All internal joints are argon are welded and grinded to give crevice free internals. Moulded joint less silicon gasket. To work on 550V/230V,50 Hz, single phase operating range upto 20 psi.

Cat. No.	Size	Capacity	
9215(a)	10" x 18"	22 Ltr.	
9215(b)	12" x 20"	45 Ltr.	
9215(c)	14" x 22"	75 Ltr.	
9215(d)	16" x 24"	90 Ltr.	

### 9216 OPTIONALS FOR VERTICAL LABORATORY AUTOCLAVE

- a) Digital Temp indicator
- b) Digital temp indicator-cum-controller
- c) Digital temp indicator-cum-controller and digital timer.
- d) Water Level Assembly



#### 9220 FOGGER ULV TYPE

AEROFOG is a liquid ULV fogger suited to the application of spraying water and oil based liquids in the fine practical form for disinfection, pest/germ/ odour control application etc. The fogger runs on a high speed FHP Motor that provides maximum thrust of spray, suitable for fogging. Entire body is made of Nylon and internal components are made of S,S, and engg. Plastic to resist corrosion and chemical attack. The storage tank ranges from 6.5 ltr (SS316L grade) To 7.5 Ltr. (HDPE grade), sufficient enough to dispense chemical combinations in various proportions, AEROFOG is thus is an ideal unit for all fogging applications.

#### TECHNICAL DATA

Design : Portable

Particle size : 1~40 + Microns (controlable from Dry

fog~wetfog)

Tank capacity : 6.5 litres (SS316L grade/ HDPF)
Power input : 230AC/ 5 Hz , single phase

Liquid flow rate : 1~18 ltrs. /Hr (adjustable) optional

1~5 ltrs /Hr (adjustable)

Particle throw: : visible upto 15 ~ 20 fts and more.

Area coverage : > 1000 cubic. Fts.

(uniformity with TURNSTAND)

Motor Speed : 20,000 rpm approx.

Dry weight : 6~7 kgs

Packing dimensions : 15x15x18 inches





Timer device is optional either mechanical or Electronic timer.

### 9221 MECHANICAL TIMER FOR ABOVE FOGGER

Please add extra for mechanical timer in Cat. 9220.



### 9222 ELECTRONIC TIMER FOR ABOVE FOGGER

Please add extra for electronic timer adjustable 5 to 60 minutes in Cat. 9220.





#### **POLARIMETERS - Half Shade & Bi-Quartz**

#### 9231 STUDENT POLARIMETER (LAURENT'S HALF SHADE)

Specially designed for easy to use, moderately priced, for colleges and research laboratories. Ideal for determining the specific rotation of optically active substances. Our Polarimeters are now extensively used in industrial laboratories as well. A corning glass tube is enclosed in a circular aluminum tube with top door for access and exclusion of external light. The circular scale is attached near the analyzer and the range of measurement is 0-360°. A movable Vernier on the scale enables reading of optical rotation to 60 seconds. Worm and gears combine rough and fine adjustment, provided with Half Wave Mica Plate, giving three parts field for easy setting, adjustable half shadow angles. This instrument can be used on monochromatic light only. When light passes through a polarized sheet and then through the solution, the emerging light is observed through rotatable polarized lens, analyzer which is used as eyepiece. The angle of light is rotated and read directly on the circular scale. Supplied on the adjustment stand, Packed in cardboard box with working manual.



#### 9232 STUDENT POLARIMETER (Bi-Quartz )

Same as Cat. No. 9231, fitted with Bi-Quartz in place of mica, giving colored distinction, accuracy check  $5^{\circ}$ .

#### 9233 RESEARCH POLARIMETER (Research Model Half Shade for 200mm Tube)

- Sensitive rotating half shade device.
- Having angular and sugar scale from 0° to 360° and +130° to -30° I.S.S. Sub divided into 0.10 micrometer drum enable to read upto 0.05° by estimate workable for use with polarimeter tube 200mm.
- Analyser: Glans Thompson Prism.
- Arrangement for 35W sodium lamp light source, input 220V±10% VAC.
- Borosil glass tube 200 mm.
- Plywood storage cabinet, instruction manual, dust cover supplied without Sodium Vapour Lamp & Transformer.



#### 9234 SPARE POLARIMETER TUBES

With bulb in the center, 200 mm in velvet lined case.



#### 9235 SPARE POLARIMETER TUBES

With Cup in the center, 200 mm in velvet lined case.



#### **RESEARCH POLARIMETER & REFRACTOMETER**



#### 9240

#### **RESEARCH POLARIMETER**

#### (Research Model Half Shade for 400mm tube)

Range of measurement :  $+130^{\circ}$  to  $-30^{\circ}$ Vernier Accuracy :  $0.1^{\circ}$  (I.S.S.) Telescopic Magnification : 4.5XLeast Count :  $0.05^{\circ}$ 

Analyser : Glans Thompson Prisms.

Polariser and Half shade : Prism System.
Polarising Aperture : 6 mm

Light Source : Metallic case for 35Watt Sodium

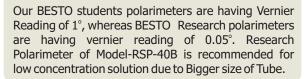
Vapour Lamp Light Source Input

220V+10% VAC.

Tube : Borosil Glass Tube 400mm cup type.

Cabinet : Plywood Storage Cabinet.

Supplied without Sodium bulb & transformer.





#### **ABBE'S REFRACTOMETER**

The body of the instrument is fixed, with a leaning of 60°. Correct Refractive Index and Sugar Percentage can be read directly in the field. It consists of Abbe's Double Prisms with the Thermostat, Compensator, Telescope Mirror, Limb, Graduated Sector, Reading Magnifier and Radical Arm which carriers a Vernier. Abbe's Double prisms leaves a narrow space (about 0.1 mm) between the adjoining faces of the prisms. Compensator consists of the Amici Prisms which serve for reading the line of Ach. Separation.

#### TECHNICAL DATA

Measuring : ND. 1.3000 to 1.7000

( Reflecting index)

Measuring Accuracy :  $\pm$  0.001 by direct reading,

<u>+</u> 0.0001 by estimation

Sugar % in solution : 0 to 95% ( $\pm$  0.5%)

Dispersion : ND. 0.0005%



The instrument is also ideal for practical demonstration and experiments in chemistry & Physics Laboratories of schools, college and Universities.

#### 9242

#### HAND REFRACTOMETER (ERMA JAPAN MAKE)

With accuracy 2%, Built in Amici prism and special light reflection system for colour elimination to obtain sharp critical boundary line and optimum contrast.

Hand Refractometer are available in three ranges.

	Ranges
a)	0 to 32 %
b)	28 to 62 %
c)	58 to 92 %





#### **VACUUM & SUCTION PUMPS**

### 9245 VACUUM PUMPS SINGLE STAGE

Vacuum pump single stage Oil sealed, air cooled, V-belt driven and mounted on base plate with belt guard etc., With motor 220 volts AC single phase.

Cat. No.	Cat. No. Displacement Motor Litre/Min Singl	
9245(a)	32	0.25
9245(b)	50	0.25
9245(c)	75	0.50
9245(d)	100	0.50



### 9246 VACUUM PUMPS DOUBLE STAGE

Same as above but with two stages to give better vacuum.

Cat. No.	Displacement Litre/Min	Motor H.P. AC Single Phase
9246(a)	32	0.25
9246(b)	50	0.25
9246(c)	75	0.50
9246(d)	100	0.50

### 9247 ACCESSORIES FOR SINGLE STAGE & DOUBLE STAGE PUMPS

- a) Vacuum gauge with regulator.
- b) Vacuum gauge with regulator and non-return valve and vacuum gauge with regulator combined.
- c) Moisture trap with non-return valve and vacuum gauge with regulator combined.

#### 9249 SUCTION PUMP

Cabinet made of MS Sheet, Powder coated. Top made of stainless sheet with vacuum gauge voltmeter & vacuum control unit. Oil sealed, air cooled, single phase motor (Crompton Motor) of 1/4 HP is used. Pressure upto 760mm.



#### 9250 VACUUM & PRESSURE PUMP

This vacuum pump is ideal vacuum filtration, vacuum distillation, vacuum drying, gel drying, chromatography applications and so on.



Cat. No.	Max. Flow Ltr./Min	Max. Vacuum	Max. (PSIG)	Motor H.P.
9250 (a)	15	22	25	1/20
9250 (b)	15	27	35	1/16
9250 (c)	45	22	40	1/8
9250(d)	45	27	60	1/4

#### **GOOCH CRUCIBLE & FILTER APPARATUS**



#### 9260

#### **GOOCH CRUCIBLE**

Gooch crucibles with sintered glass disc are manufactured from Borosilicate glass 3.3 Grade. They are ideal for filtering and drying precipitates easily since there is no requirement for any filter paper.

Goch crucible made from porcelain have perforated Bottoms. They need filter paper for filtering process.

Sintered disc of porosity G-0 or G-1 or G-2 or G-3 or G-4

Cat.	Cap. ml.
9260 (a)	15
9260 (b)	30
9260 (c)	30



#### 9261 TUBES, FILTER FOR GOOCH CRUCIBLES

Manufactured from borosilicate glass 3.3 grade.

Suitable for use with BESTO filtering crucibles Gooch Type with sintered disc.

Cat.	O.D. x L (mm)	
9261 (a)	27 X150	
9261 (b)	36 X160	
9261 (c)	56 X 170	



#### 9262 FILTER APPARATUS

Complete with filtering flask , Gooch crucible with sintered disc of porosity G-1 or G-2 or G-3 or G-4 , as per cat. no. 9260 & glass adapter as per cat. no. 9261 and rubber cone.

Cat.	Cap. ml.	Disc Dia.
9262 (a)	250	30mm
9262 (b)	500	30mm
9262 (c)	1000	50mm



#### 9263

#### **BUCHNER FUNNEL without Cone at Stem**

Gooch Funnel (Buchner) with sintered glass disc,

- With sintered glass of porosity G-0 or G-1 or G-2 or G-3 or G-4.
- Plain stem diameter is approximately 8mm.
- Manufactured from Borosilicate glass 3.3 grade, which is resistant to heat and almost all chemicals.
- Highly resistant to most of the corrosive reagents including acids.

Cat.	Cap. ml.	Disc Dia. mm
9263 (a)	35	30
9263 (b)	80	40
9263 (c)	200	65
9263 (d)	500	90

## 9264 BUCHNER FUNNEL with Cone at Stem

Buchner funnel with sintered disc of porosity G-1 or G-2 or G-3 or G-4, Cone at stem.

Cat.	Сар.	Disc Dia.	Joint
(a)	35	30	14/23 or19/26
(b)	80	40	14/23 or19/26
(c)	200	65	19/26 or 24/29
(d)	500	90	24/29 or 29/32



#### 9265 FILTER APPARATUS

Complete filter flask with Socket and Buchner Funnel with sintered disc of porosity G-1 or G-2 or G-3 or G-4 having cone at stem as per cat. no. 9264.

Cat	Flask Cap. ml.	Buchner Funnel	Joint
(a)	250	80	24/29
(b)	500	200	24/29
(c)	1000	500	29/32
(d)	2000	1000	29/32





#### **FILTRATION ASSEMBLY**

#### 9401/9403 FILTRATION ASSEMBLY



- HPLC Mobile Phase Filtration.
- Analysis of particulate/bacterial contamination & general laboratory micro-filtration.
- Units have G3 coarse porosit Frits & accomodate 47mm filters/25mm filters.
- All glass design ensures Chemical Compatibility with most of the organic solvents.

#### TECHNICAL DATA

- 100% Borosilicate Glass with fitted glass filter base. Base design has integral vacuum connection located above filtrate drip to prevent contamination of vacuum line with droplets.
- Anodized aluminium spring clamp.
- Filter size : 47mm
- Effective filtration area: 9.6cm<sup>2</sup>
- Funnel Capacity: 300ml
- Flask Capacity: 500ml/1Lts./2Ltr./5Ltr.

#### **FILTRATION ASSEMBLY**



## 9401 ALL GLASS FILTER HOLDER (47mm- Filtration Assembly)

- Made of borosilicate glass with fitted glass filter base.
- The base design has an integral vacuum connection located above the filtrate drip to prevent contamination of the vacuum line from droplets.
- Anodised aluminium spring clamp.
- The filter size is 47mm.
- The effective filtration area is 9.6cm<sup>2</sup>
- Used for the filtration of HPLC solvents and aqueous mobile phase solutions and buffers.
- The scaled funnels simplify dosing and analysis.

Cat. No.	Capacity ml	Filtration Base Size mm
9401(a)	500	47
9401(b)	1000	47
9401(c)	2000	47

# 3401(c) 2000 41

#### 9402 SPARES FOR ALL GLASS FILTER HOLDER (47mm- Filtration Assembly)

Cat. No.	Capacity ml.	Description
9402(a)	500	Flask for Filter Holder
9402(b)	1000	Flask for Filter Holder
9402(c)	2000	Flask for Filter Holder
9402(d)	300	Funnel for Filter Holder
9402(e)	47	Filter support base for Filter Holder
9402(f)	47	Aluminium clamp for Filter Holder

#### 9403 ALL GLASS FILTER HOLDER (90mm- Filtration Assembly)

Cat.	Capacity	Filtration Base
No.	ml	Size mm
9403	5000	90

#### 9404 SPARES FOR ALL GLASS FILTER HOLDER (90mm- Filtration Assembly)

Cat. No.	Capacity ml.	Description
9404(a)	5000	Flask for Filter Holder with B55 Cone
9404(b)	1000	Funnel for Filter Holder
9404(c)	90	Filter support base for Filter Holder
9404(d)	90	Aluminium clamp for Filter Holder

### 9405 VACUUM MANIFOLDS (Stainless Steel)

- Manufactured from highest grade stainless steel to filtrate upto three samples at the same time.
- This system is manufactured to be used with 47/50 mm diameter membranes. Supplied as a single unit without accessories.
- Individual PTFE control valves allow filtration through different branches with a single vacuum pump.

Cat. No.	Manifold model	
9505(a)	with 1 funnel holder	
9505(b)	with 3 funnel holder	





#### **CENTRIFUGE MACHINES - MINI & SERUM**

#### 9450 MINI CENTRIFUGE DIGITAL

Micro processor controlled, Micro Centrifuge machine (Mini Centrifuge)

Speed range from 1000 to 10000rpm in step of 1000.

#### TECHNICAL DATA

- Fitted with maintenance free motor (Brushless without carbon)
- Complete body made of ABS plastic, injection moulded
- Fitted with 0.15 minute digital timer
- Supply completed with 2 standard rotors as under:
- i. Angle rotor 6 micro centrifuge of 1.5 ml capacity
- ii. Angle rotor 12 micro centrifuge tubes of 0.5ml capacity.

Speed R.P.M	Weight RCF(x g)
1000	56
2000	223
3000	503
4000	894
5000	1396
6000	2011
7000	2737
8000	3575
9000	4524
10000	5585
	1

#### 9451 MINI CENTRIFUGE DIGITAL

Micro Centrifuge machine (Mini Centrifuge) Speed range 7000 rpm.

#### TECHNICAL DATA

- Fitted with high quality motor with carbon brushes.
- Complete body made of ABS plastic injection moulded.
- Supply completed with 2 standard rotors as under:
- i. Angle rotor 6 micro centrifuge of 1.5 ml capacity
- ii. Angle rotor 12 micro centrifuge tubes of 0.5ml capacity.





#### 9452 SERUM CENTRIFUGE

The best model for clinical, Pathological, Biochemistry and Pharmacy/Pharmaceutical Labs and to seperate blood serum.

#### TECHNICAL DATA

- Bench Top Clinical Centrifuge Machine.
- The body is made of CRC sheet, finished in powder coating
- See through acrylic lid.
- Fitted with mechanical Timer 0-99 minutes and a manual blind speed controller.
- Maximum speed 3000rpm (without load) and 2850 rpm on load.
- Equipped with maintenance free brushless (without carbon) motor.
- Supply is completed with 8x15ml Angle head.
- Dimensions: 325 x 375 x 270mm
- Weight: 16Kg Approx.



#### **SERUM & LABORATORY CENTRIFUGE**



## 9454 SERUM CENTRIFUGE-Microprocessor Based-Digital (without carbon-3000 rpm)

- The best model for clinical, Pathological, Biochemistry Labs to separate blood serum.
- It is also most suitable for I.V.F. labs where low speed is recommended.

#### TECHNICAL DATA

- Bench top Digital Microprocessor based Serum centrifuge Machine with LCD display
- The body is made of rust proof ABS injection moulding with metalic protection bowl.
- Fitted with microprocessor based pre programable speed controller to control sped from 500-3000 rpm in the interval of 250rpm.
- Digital Timer 0-99minutes.
- 2 lines of 16 character LCD display of rpm, R.e.f. set time and run time.
- Programme remains in memory and displays on LCD.
   Just push start button and the machine will run on programme time and speed.
- To work on 220volts 50Hz A.C.

The machine comes with only one rotor head which is to be selected by customer from below mentioned table.

	Туре	Nos. of Holes x Tube Volume
a)	Swing out	8x15ml
b)	Swing out	16 x vacuutainers
c)	Swing out	16 x 12 x 75mm / 12 x 100mm borosil tubes
d)	Angle	12 x 15ml.

#### 9455 LABORATORY CENTRIFUGE-Microprocessor Based Digital (General Purpose-4400 rpm)

- Compact Laboratory Centrifuge Machine, Microprocessor based, digital.
- Body made of rust proof ABS Plastic injection moulding with metallic protection bowl
- Lid lock for safe drive.
- Equipped with 0-99 minute timer.
- 2 lines of 16 character LCD display of rpm R.e.f. for set & run time.
- Programmable speed regulator from 500 to 4400rpm in interval of 100 rpm
- Last test parameter recall and displays automatically on LCD.

#### TECHNICAL DATA

Max. Speed: 4400rpm

Motor : Universal Motor (with carbon brushes)

1/8 H.P.

Dimensions : 395 x 360 x 280mm Net Weight : 12.5kg approx.

The machine comes with only one rotor head which is to be selected by customer from below mentioned table.

	Туре	Nos. of Holes x Tube Volume
a)	Swing out	8x15ml
b)	Swing out	16 x vacuutainers
c)	Swing out	16 x 12 x 75mm / 12 x 100mm borosil tubes
d)	Angle	12 x 15ml.



The above mentioned rotor heads are completed with S.S. tube carriers, suitable Glass/PVC centrifugal tubes, head puller, spanner and rubber cushions.



The above mentioned rotor heads are completed with S.S. tube carriers, suitable Glass/PVC centrifugal tubes, head puller, spanner and rubber cushions.



#### **CENTRIFUGE MACHINES & DESSICATORS**

### 9460 CENTRIFUGE MACHINES -Simple Handi Type

Supplied with speed regulator, used for separation of fluids in laboratory. General purpose, medium quality.

Cat. No.	Capacity	RPM
9460(a)	4 tubes	3000
9460(b)	6 tubes	2800
9460(c)	8 tubes	2500



#### 9461 CLINICAL CENTRIFUGE - Doctor Model

- Supplied with speed regulator.
- 8 tubes : 2800 RPM



9462 CENTRIFUGE TUBES - Plain

Manufactured from borosilicate glass 3.3 grade, conical shape.

Cat. No.	Capacity
9462(a)	10ml
9462(b)	15ml
9462(c)	50ml



#### 9463 CENTRIFUGE TUBES - Graduated

Manufactured from borosilicate glass 3.3 grade, conical shape.

Cat. No.	Capacity
9463(a)	10ml
9463(b)	15ml
9463(c)	50ml



### 9464 DESSICATOR -Plain (Neutral Glass)

Supplied with suitable porcelain plate.

Size mm	
160	
210	
240	
300	

#### 9466 DESSICATOR - Plain (Plastic)

Cat. No.	Size
9466(a)	6"
9466(b)	8"



### 9465 DESSICATOR -Vacuum (Neutral Glass)

Supplied with suitable porcelain plate & with stop cock.

Cat. No.	Size mm
9465(a)	160
9465(b)	210
9465(c)	240
9465(d)	300

#### 9467 DESSICATOR - Vacuum (Plastic)

Supplied with suitable stop cock.

Cat. No.	Size
9467(a)	6"
9467(b)	8"

