



Laboratory Instruments

for

- Microbiology Laboratories
- Water Treatment Plants
- Research & Development Institutes
- Chemical Industries
- Food & AGRO Industries



EIE INSTRUMENTS PVT. LTD.

EIE-104 Vacuum Oven

Specifications:

- Temp. Range : 50 to 200° C.
- Temp. Controller : By auto-tune PID Digital controller
- Control Accuracy : ±1.0° C
- Outer Body : MS Powder coated/S.S.304
- Inner Chamber : S.S.304/316 stainless steel
- Insulation : High Quality Glass Wool Insulation
- Door : Aluminum/S.S. door
- Observation : Toughened glass viewing window
- Maximum Vacuum : 760mm Hg with vacuum pump
- Vacuum Indication : 2" vacuum gauge
- Removable Trays : S.S.304 trays
- Power Consumption : 230V, 50Hz, Single Phase



Optional Accessories at extra cost

- 1 21-CFR PC Software With connectivity
- 2 Data logger
- 3 On site validation

Rectangular Working Chamber Size (L x W x H) (mm)

200	X	200	X	300
300	X	300	X	400
350	X	350	X	500
450	X	450	X	600
500	X	500	X	750

Round Working Chamber Size (Dia x Depth) (mm)

200x250	250x250	250x300	300x300
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EIE-109 Floculator (Jar Test Aparaturs)

Salient Features

- Strong resistance to chemical and mechanical corrosion
- Stirring rods adjustable in height without any tools
- Reliable and repeatable results from stirring quality
- Precise speed from an electronically controlled DC gear motor
- For uniform stirring up to 2/4/6 samples simultaneously
- Tactfully designed floculator cabinet
- Aesthetic outer appearance
- Supplied without glass beaker. (Can be procured at extra cost)

Technical Specifications

- Variable speed range : 20 to 200 RPM approx
- Electric Motor : DC electric motor with Reduction Gear
- Motor speed control : With DC drive
- RPM Indication : Digital RPM Indication
- RPM Display : LED Display
- Motor Make : Standard reputed make
- Motor Watt : 25 watt/40 watt
- Illumination : Fluorescent tube under acrylic cover
- Operation on : 230 Volts, 50 Hz, 1 Phase, AC Supply



Mode	EIE-109C			EIE-109I		
	EIE-109C2	EIE-109C4	EIE-109C6	EIE-109I2	EIE-109I4	EIE-109I6
No of DC Motors	1	1	1	2	4	6
No of Paddles	2	4	6	2	4	6
No of Drives	1	1	1	2	4	6
RPM Indicator	1	1	1	2	4	6
Speed Range	20-200 RPM					
Digital Timer (Opt.)	1	1	1	2	4	6

EIE-111 Laminar Air Flow (Horizontal/Vertical)



Specifications

- Direction of flow : Horizontal
- Velocity : 90 FPM ± 20%
- Particle retention : Above 0.3 micron.
- Blower Assembly : 1/6 HP, 1440 RPM
- Noise level : 65 decibel ± 5%
- Rate of air flow : 0.40 to 0.75 M/Seconds (90 FPM)
- Vibration level : < 2.5 micron
- HEPA Filter : MiniPleat HEPA Filter (H-14 Rating)
- Efficiency : 99.997%
- Ultra violet lamp : 3 feet, 30 watts
- Work table : S.S. 304/S.S. 316 Grade
- Exterior body : Powder coated 18 SWG CRC Sheet

Salient Features

- Cleanliness : ISO Class 5 as per ISO 14644-1
- S.S.304 work table
- Polycarbonate front door
- Mini Pleat HEPA Filter- separator less (H-14 rating)

Standard Accessories

Fitted with LED LIGHT FITTING, Gas cock, castor wheels, Inclined Manometer, additional 5 amp power point, side screens made of 4 mm polycarbonate.

Optional Fittings

- 1 Microprocessor Controller indicating down flow velocity, Hour counting of UV Lamp & Motor/ blower and alarm for safe mode door-opening height, Date of HEPA FILTER change etc
- 2 On site Validation and Calibration, IQ/OQ/OQ certification

Table Size (Ft)	Hepa Filter Size (Ft)	No of Pre-Filter	UV Tube Watts
2' x 2' x 2'	2' x 2' x 6' (1)	1	1 x 20
3' x 2' x 2'	3' x 2' x 6' (1)	1	2 x 20
4' x 2' x 2'	4' x 2' x 6' (1)	1	2 x 40
6' x 2' x 2'	3' x 2' x 6' (2)	2	2 x 40

EIE-202 BOD Incubator

Specifications

- Construction : Double walled
- Interior : S.S.-304/S.S.-316
- Exterior : Powder coated mild steel material
- Thermal Insulation : PUF insulation
- Insulation thickness : 70 mm
- Temperature Range : 5°C to 60°C
- Illumination : Fluorescent Tube light
- Fluorescent light : 11 Watts
- Heating source : U-shaped S.S. Tubular heaters
- Refrigeration : CFC free EMERSON compressor
- Refrigerant : R-134a eco friendly refrigerant
- Observation : Inner transparent acrylic door
- Door lock : Ergonomic & Secured door lock
- Feet on : Castor wheels (For easy mobility)
- Electrical : 230 Volt, 15A, 50 Hz, AC Supply



Optional Accessories at extra cost

- 1 21-CFR PC Software With connectivity
- 2 Data logger
- 3 On site validation

Working Size (H x W x D) (cm)	Liters	Trays
45 x 45 x 45	92	2
60 x 45 x 45	121	2
70 x 50 x 50	175	2
60 x 60 x 60	216	3
90 x 60 x 60	324	3

EIE-201 Bacteriological Incubator



Salient Features

- Outer chamber CRC-powder coated/S.S. matt finish
- Inner chamber of S.S.304/S.S.316-mirror polished
- Full length inner Glass door for test observation
- 65mm high density Glasswool insulation
- Sealed and enclosed heaters to working chamber
- Temp. range : 5°C above ambient to 70°C
- Temp. control : By auto-tune PID Digital controller
- Operation on : 220/230V AC single phase
- Control accuracy : $\pm 0.5^\circ\text{C}$ or better
- Special heavy duty Stainless steel lock and door hinges
- Stainless steel crimped wire mesh Shelves
- Adjustable air ventilation at top
- Forced air circulation

Optional Accessories at extra cost

- 21-CFR PC Software With connectivity
- Data logger
- On site validation

Working Size (H x W x D) (cm)	Liters	Trays
35 x 35 x 35	43	1
45 x 45 x 45	92	2
60 x 45 x 45	121	3
60 x 60 x 60	216	3
90 x 60 x 60	324	3

EIE-206 Vertical Autoclave (Fully Automatic)

Salient Features

- Working chamber & Exterior body fabricated from S.S.-304
- Lid, flange & bottom sheet also made of stainless steel.
- Fully Automatic operation
- Microprocessor based Digital Temperature Indicator cum Controller
- PID Controller Controls temperature/pressure precisely at set value
- User adjustable in-built digital timer
- Automatic steam exhaust at the end of test cycle
- Double safety high pressure release valve
- Triple safety manual high pressure release valve
- Low water level heater safeguard
- Safety high temperature cut off
- Pressure range : 15 to 22 PSI, factory set at 15 PSI
- Temperature Range : 121°C to 125 °C
- Lid fitting pressure gauge : 0-30 PSI
- Supplied with Calibration certificate with traceability

Optional Fittings

- 21-CFR PC Software with connectivity
- Basket made of thick S.S. Wire mesh rods
- LCD Smart programmable graphic controller



Working Size (Dia x Height) (cm)	Liters
30 x 50	35
35 x 55	53
45 x 60	95
45 x 75	119
55 x 75	178

EIE-207 Horizontal Rectangular Steam Sterilizer

Applications

Most crucial and versatile instrument for sterilization needs in Pharmaceutical industries, Medical, Hospitals & Clinical laboratories and in Dental laboratories.

Compliance regulations

CGMP, GAMP, FDA and EU regulations



Technical Specifications

Inner dimensions (mm)	450 x 450 x 900 mm	600 x 600 x 1200 mm	600 x 600 x 1500 mm	900 x 900 x 1500 mm
Inner dimensions (Inches)	18" x 18" x 36"	24" x 24" x 48"	24" x 24" x 60"	36" x 36" x 60"
Capacity (Liters)	180	432	540	810
Working load (kw)	12	18	18	27

EIE-210 Electric Hot Plates



Salient Features

- Body made of CRC sheet - powder coated/S.S.304
- Top plate of Heavy cast Iron/Stainless Steel (S.S.304)
- Unique design of Hot plate with Grooves-concealed heaters
- Sealed heaters in Grooves ensuring long life
- Uniform heating throughout the Hot Plate
- Max. surface temp. : 300 °C
- Temp. control : Energy regulator/PID controller
- Operation on : 230 V, 50 Hz, AC supply
- Fully air ventilated lower body for minimum heat even when the top plate is fully heated

- Supplied complete with pilot indicating lamps for MAINS and HEATER operation, power plug and 2 meter long cord wire to work on 220/230 AC, Single phase.

Round Hotplate		Rectangular Hotplate	
Top Plate Size (dia) (cm)	Rating Watts	Top Plate Size (cm)	Rating Watts
20	1000	25 x 30	1000
23	1500	30 x 45	2000
30	2000	45 x 60	3000

EIE-216 C.O.D. Digestion Apparatus (Digital Model)



Specifications

- Temp. Range : Above ambient to 180°C or higher
- Resolution : 0.1°C
- Dimension of holes : 40mm Dia x 80mm Depth
- Selectable timer : Up to 120min with alarm provision
- Display : Digital 12mm Red LED
- Control : Digital Electronic Temp. Controller
- Heater Rating : 750 Watts
- Sensor : PT-100
- Timer : Selectable 15, 30, 45, 60, 90 or 120 min with alarm
- Hole Size : 40mm Dia x 80mm Depth
- Glass Tube : 38mm. dia, 15 nos (5x3 rows)
- Sample Volume : 20ml. Each.

Note

COD Digestion Apparatus with six test sample available.

Construction Details

- Double walled construction
- Effective insulation for minimum heat loss
- Outer cabinet of mild steel material duly powder coated
- Aluminum Block with holes - used to hold 15 nos. COD test tubes
- Block is heated to maintain temperature up to 180°C
- After digestion of samples, the analysis can be carried out by manual titrimetric or colorimetric method

Optional Fittings (At Extra Cost)

- 1 Spare COD Tube
- 2 Spare Air condenser
- 3 COD Tube Stand
- 4 Air Condenser Stand
- 5 S. S. Bath

EIE-402 Double Walled Water Bath

Salient Features

- Double walled rectangular construction
- Outer Chamber GI sheet, power coated/S.S.304 matt finish
- Inner Chamber Stainless Steel (S.S.304/S.S.316)
- 50mm thick Glass wool insulation
- Specially designed full length S.S. immersion heaters
- Temp. Control : By auto-tune digital PID controller
- Temp. Range : Ambient + 5°C to 99°C
- Accuracy : ± 0.1°C at 37°C
- Uniformity : ± 0. 2°C at 37°C
- Operation on : 230 Volts, 50 Hz, A.C. Supply
- Lid : Stainless steel lid with 6/12 holes
- Dia. of Ring : 3"dia with concentric rings
- Supplied complete with pilot indicating lamps for MAINS and HEATER operation, power plug and 2 meter long cord



Working Size (L x W x D) (cm)			Liters	KW	Holes
35	x	25	10	9	1
40	x	30	15	18	1.5

EIE-405 Waterbath Incubator Shaker (Shaking Waterbath)

Specifications

- Construction : Double walled
- Inner chamber : S.S.-304/S.S.-316
- Exterior body : Mild steel material
- Paint : Powder coating
- Insulation : Glass wool insulation
- Temperature Range : 5 °C above ambient to 99 °C
- Heating : Open type Air heaters
- Temperature controller : Auto-Tune PID Digital controller
- Temperature Stability : ± 0.5 °C
- Temperature accuracy : ± 0.5 °C
- Shaking : PMDC Geared Motor
- Motor RPM : 40-150 RPM
- Motor speed display : Digital RPM Indicator (Optional)
- Speed control : By electronic Speed Regulator
- Shaking racks : 6 flasks of 100 ml/9 Flasks of 250 ml/12 flasks of 250 ml/18 flasks of 250 ml
- Shaking racks material : S.S.-304/S.S.-316



Working Size (W x D x H) (cm)					Liters
38	x	40	x	20	30
51	x	45	x	20	35

EIE-406 Constant Temperature Water Bath (High Precision)



Salient Features

- General Purpose Laboratory Water bath for many applications
- Gentle Stirring of bath media by continuous rated, self cooling constant speed stirrer with S.S. shaft and propeller
- Outer chamber GI Powder Coated/S.S. 304-matt finished
- Inner chamber of S.S.304/S.S.316
- 50mm thick Glass wool insulation
- Specially designed S.S. immersion Heater-U shaped
- Temp. Range : Ambient + 5°C to 99°C
- Accuracy : ± 0.1°C at 37°C
- Uniformity : ± 0. 2°C at 37°C
- Operation on : 230 Volts, 50 Hz, A.C. Supply
- Provided with plain S.S. Lid.

Optional Fittings

- 1 Low water level control device
- 2 Circulatory Pump to circulate the bath water to external apparatus like Abbe Refractometer or Coiled condenser etc.
- 3 Digital Controller with resolution of 0.01°C
- 4 Toughened Glass window for sample observation
- 5 Pyramidal Gabled Lid or S.S. Lid with concentric rings
- 6 S.S. Test Tube Rack/Kahn Rack

Note

We also manufacture Low Temp. Water bath for below ambient and sub zero applications

Working Size (H x W x D) (cm)					Liters	KW
30	x	15	x	15	7	0.75
25	x	20	x	20	10	1.0
30	x	25	x	20	15	1.5
37.5	x	30	x	25	28	2.0
45	x	35	x	30	47	2.5

Any other special size can be fabricated

EIE-PT-101 Bursting Strength Tester



Optional accessories

- 1 Pneumatic clamping mechanism
- 2 Thermal printer

Applicable standards

ISO 2758, 2759, 2559, 3303, 3689, BS 3424, 3137,
ASTM D3786, D774, D2738, T810, T403

Designed with precision in Mind

- Proven and reliable performance
- Scientifically calibrated through our in-house calibration laboratory
- Sturdy in construction
- Noise-less functioning
- Stepper motor with automatic fluid pump to achieve fluid flow rate as per TAPPI, ASTM & ISO Standards
- Logical detection of sample failure
- Capacity : 25kg/cm² or 50 Kg/cm²
- Display Resolution : 0.1 kg/cm²
- Unit selections : Kg/cm², Bar and PSI
- Stores data up to last ten readings
- Gives Average Value, Max. Value & Min. Value of the performed Tests.
- Reset function to start the new batch testing

EIE-PT-103 BOX Compression Tester

Compliance standards

- IS :7028 (PART VI), IS : 7028 (PART IX), ASTM D4577, ASTM D642, TAPPI : T804

Salient Features

- Digital Electro-mechanical model
- PLC & HMI Touch screen display
- Direct Display of Load / Collapsing Force
- No Calculations Required
- Auto-stop upon completion of Test
- Unlimited programmable memories
- Continuous rate of Loading
- 2/4 Load cells for highest accuracy
- Selectable compression units in N, kgf or lbf
- RS-232 data output
- PC Closed Loop Control

Technical Specifications

- Capacity : 1000 Kgf (10 KN)
- Least Count : 1 Kgf (0.01 KN)
- Testing Range of : 10 - 1000 Kgf
- Auto-Calibration facility : At 100 Kgf (1 KN)
- Speed : 10 ± 3 mm/min
- Power Supply : 230 Volts, 50 Hz, Single Phase, AC Supply



- Available platform sizes (mm)

450 x 450	600 x 600	1000 x 1000	2000 x 1000
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Data & Design are subject to change without notice. 15-Sep-2017 Paper: 300 GSM Siarmass Matt Qty:500



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