









#### WHAT WE DO?

Mehrotra Biotech Pvt Ltd has been established with an aim to contribute to the enhancement of medical-hospital, pharmaceutical, biotechnological, and general laboratory services through the provision of high-quality innovative solutions, ensuring an improved quality of life and well-being for society at large.

Our primary objective is to deliver customized solutions that precisely align with the unique requirements of our customers. To achieve this, our dedicated functions including engineering, R&D, manufacturing, and customer service are focused on each technology within Mehrotra Biotech's area of expertise:

- We offer solutions and equipment for clean air technology, encompassing both horizontal and vertical laminar flow cabinets, biological safety cabinets, and laminar flow systems.
- Our portfolio includes solutions and equipment for advanced sterilization utilizing Autoclaves, Ovens, and incubators.
- We specialize in solutions and equipment employing biological containment technology, such as containment isolators and sterile isolators.
- Additionally, we provide solutions and equipment utilizing freeze drying and vacuum drying technology, ranging from laboratory freeze dryers to GMP freeze dryers.

By offering these comprehensive solutions, we aim to continually improve and advance the various sectors we serve, ensuring the highest standards of quality, safety, and efficiency in medical and laboratory practices.

"Our aim is to provide tailor-made solutions in strict accordance to the needs of customers."



#### **OUR MISSION**

Our mission is to empower individuals and communities through innovative solutions and exceptional service. We are committed to providing high-quality products and services that address the needs of our customers and contribute to advancements in scientific and medical research. Guided by our core values of integrity, collaboration, and social responsibility, we strive to make a positive impact on society, while prioritizing environmental sustainability and community healthcare. Through our dedication to excellence and the expertise of our team, we aim to be a trusted partner in shaping a healthier and more prosperous future for all.

#### **OUR VISION**

Our vision is to be a leading innovator and catalyst for positive change, creating solutions that transform lives and shape a better future. With a commitment to excellence, creativity, and social impact, we strive to revolutionize Biomedical research & Pharmaceutical industry through cut-edge design, forward-thinking strategies, and meaningful collaborations.

### CO<sub>2</sub> INCUBATOR

OPTIMIZED CELL GROWTH
THROUGH ADVANCED DESIGN AND TECHNOLOGY

Elevate your cell culture results with the CO<sub>2</sub> Incubator by Mehrotra Biotech – designed to create a pristine, stable, and precisely controlled environment for reliable and reproducible growth. With advanced CO<sub>2</sub> regulation, uniform temperature distribution, and contamination-free performance, it's the trusted choice for modern research and biotechnology labs.



#### **Features**

#### LCD touch screen

 Easy to observe and operate

#### **Access port**

 Monitor the temperature, RH and CO2 concentration data in the chamber

# Intergrated humidity pan

Built-in design
 3L storage capacity

#### Inner glass door

 Convenient to observe the cell state during culturing activity in the chamber

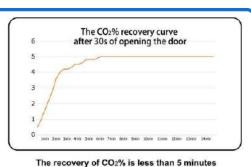
#### **HEPA** air filtration

 Provid ISO Class 5 clean room-like air quality conditions within only five minutes after a 30-second door opening

#### Rapid Recovery of CO<sub>2</sub>

Accurate & fast-response CO2 sensor, advanced microprocessor-controlled intake valve and independently controlled heating system to achieve no overshoot, ensuring rapid gas circulation after opening and closing the door, making the CO2 concentration recovered quickly and remained constant.

www.mehrotrabiotech.com





#### Shelves

- · Stainless steel
- · Anti-drop limit
- Push-pull design
- Perforated shelves for optimizing air flow

#### One-piece chamber

- · Polished stainless steel interiors
- · Easy-to-clean coved corners

#### **Built-in drain**

- · CPC type interface
- Fast drainage
- No need open the door while refilling water



#### Quick response CO<sub>2</sub> Sensor

- · IR CO<sub>2</sub> sensor
- No disassembly while sterilizing
- Reliable gas control
- No calibration required

#### Fan-assisted air circulation

- · Easy clean
- Rapid recovery
- Enhance the uniformity of temperature, gas exchange and humidity

#### Magnetic inner door latch

Ergonomic Design

#### Magnetic outer door latch

Easy open/close

#### Adjustable feet

· Enssure the incubator can be placed steadily

#### **Thrive Active Airflow**



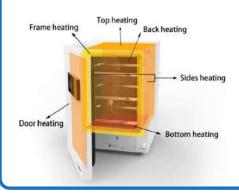
Automatic air volume regulation more efficient and accurate control of temperature, humity, CO<sub>2</sub> concentration, and cleanliness.

#### **Remote Monitoring & Data Logging**



Optional monitoring system for remote monitoring of events, alarms, incubator conditions and customized tasks.

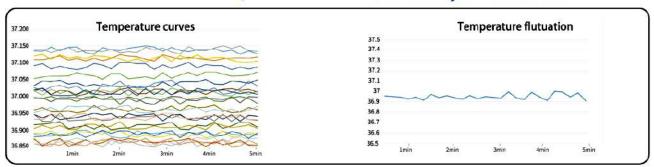
#### **Direct Heat & Air Jacketed**



- Rapid temperature recovery in the chamber and reduce ambient temperature interference.
- 9 heating units in 4 temperature control zones are intelligently controlled by microprocessors to ensure temperature uniformity and minimum fluctuation in the chamber.

#### **Precise Control**

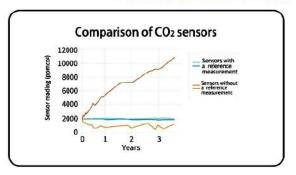
### Precise control of temperature — Uniformity & Fluctuation



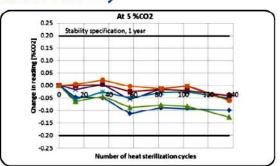
Test points uniformity<±0.3℃.</li>

Controlled within ±0.1℃

#### Precise control of CO<sub>2</sub>% —— Sensor stability



Single-beam dual-wavelength VS single-beam single-wavelength



CO2 sensor stability in High-Temperature Cycles

#### **Cleanliness Guaranteed**

#### **Complete contamination control**

- All gases entering the incubator are filtered through a 0.2  $\mu m$  filter to remove airborne biological and particulate contaminants.
- The gas filter is easily replaceable on site.

#### **HEPA** air filtration for air purity

- In-chamber HEPA airfow system filters entire chamber with ISO Class 5 (Class 100) clean-room air quality within five minutes after door opening.
- The particle retention efficiency of the HEPA filter is up 99.995%.

#### Cyclic high temperature sterilization

- 180°C dry heat cycle sterilization.
- The complete process of sterilization takes 12 hours only.
- No need to take out any accessories during sterilization except HEPA

### Safety Ensured

- Operation record
- Low water level alarm
- Ambient temp. alarm
- Door ajar alarm

- Chamber temp. alarm
- Shortage alarm
- CO2% alarm
- HEPA expiration alarm

## Technical Specification



Diotection Diotection			
Model			MBCI170
Туре			Air Jacket
Construc- tion	Chamber Volume		170(L)
	Interior Chamber		Stainless Steel
	Exterior Chamber		Cold-rolled Steel Powder Coated
	Access Port		35mm Diameter
	Data Outputs		Remote Alarm Port, RS485, USB
	Filter		HEPA Filter at 99.995%
Control	Display		7" LCD Touch Screen
	Controller		PID Microprocessor
	Rated Voltage Power Supply		220V/50Hz
Electrical	Nominal Consumption	kw/24h	1.01 /1.05
CO2	Control		±0.1%
	Range		0-20%
	Alarm Range		±0.5%
	Inlet Pressure		≤0.1mpa
	Gas Purity		Min 99.5% or Medical Quality
	Sensor Type		IR / TC
	Recovery Time at 5vol%CO2 for 30s door Opening		≤5min
	CO2 Inlet Filter		≤0.2µm
O2 (Optiona l Tri-gas Type)	Control		±1%
	Range		1-20.7%
	Alarm Range		±0.5%
	Inlet Pressure		≤0.1mpa
	Gas Purity		Min 99.5%
	Sensor Type		Zirconia
	Recovery Time at 5vol%CO2 for 30s door Opening		50mins at 1.0% O2, 25mims at 5.0% O2
	O2 Inlet Filter		≤0.2µm
Tempera- ture	Control/Display Ac- curancy	°C	±0.1
	Control Range	°C	Range 5°C Above Ambient to 55°C
	Uniformity	°C	≤0.3
	Ambient Range	°C	18~34
	Sensor		PT100
	Recovery Time at 37°C for 30s door Opening ( min)	min	≤10
Humidity	Relative Humidity		91% at Low RH mode, 94% at High RH mode
	Humidity Reservior		Max. 3L/Min. 0.5L
Alarms	High/Low Temperature		Υ
	Remote Alarm		Υ
	Excessive Co2/O2 Concentration		Υ
	Water Shortage		Υ
	Door Ajar		Υ

#### **OUR CLIENTS**

#### **Government Institutions**

- Central Drug Research Institute, Lucknow.
- Central Institute of Medicinal and Aromatic Plants. Lucknow.
- Indian Vetnary Research Institute, Bareilly.
- Indian Institute of Toxicology Research, Lucknow.
- Institute of Nuclear Medicine and Allied Sciences, Delhi.
- HPCL, Bangalore.
- King George Medical University, Lucknow.
- Sanjay Gandhi Post Graduate Institute of Medical Sciences, Bareilly.
- Post Graduate Institute of Medical and Research, Chandigarh.
- All India Institute of Medical Sciences
   New Delhi
- AIIMS RISHIKESH
- NBRI Lucknow

#### **Private Institutions**

- Dr, Reddy's Laboratories Hyderabad.
- NATCO Pharma, Hyderabad.
- Syngene International Bangalore
- FDC India Mumbai
- Bharat Serum
- CADILA
- CIPLA
- Sysmax Laboratories Mumbai
- Reliance Life Science Mumbai
- LVPEI Hyderabad
- MSN Laborotories Hyderabad
- Larsen and Toubro Limited
- Siemens Healthcare

- National Institute of Virology, Pune
- FIND Delhi
- Karnataka Medical Supplies Corporation
- Regional Forensic Science Lab New Delhi
- Institute Of Food Security, Food Corporation Of India, Haryana
- AIIMS Raipur
- CSIR- Bharteeya Petroleum Sansthan, Dehradun
- AIIMS Bhubneshwar
- AIIMS Raebareli
- Gujrat Forensic Science University
- IIT Ropar
- IIT BHU
- IIT Kanpur
- Banaras Hindu University
- HPCL-Mittal Energy Limited
- Maharashtra Pollution Control Board
- Darbanga Medical College
- Many More.....
- Avaca Pharma
- Glochem Industries
- Pinnacle Lifescience
- Raghav Lifecsiences Hyderabad
- Abro Pharma
- Sun Pharma
- Gland Pharma Hyderabad
- Macleods Pharma
- Pannacea
- Lupin Limited
- Meyer Organics
- Sucantis
- Many More.....







































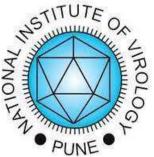




Pharmaceuticals Inc.

Dr. Reddy's







Scan this QR code to download pdf version



#### Mehrotra Biotech Pvt. Ltd.

#### M&M TOWER B-22 23, VIBHUTI KHAND, GOMTI NAGAR, LUCKNOW- 226010

Tel + 91 522- 2720663, 9838203524,9838203399,9839014323

E-mail: sales@mehrotrabiotech.com, service@mehrotrabiotech.com.

Website: www.mehrotrabiotech.com

#### **OUR BRANCH OFFICES**

LUCKNOW

DELHI

**MUMBAI** 

**HYDERABAD** 

**BANGALORE** 

**KOLKATA** 

AHMEDABAD











