Individually Ventilated Caging System (IVC)
Laboratory Animal Cages & Equipments
Laboratory Animal Anesthesia & Ventilator System
Instruments for Preclinical Research
Instruments for Teaching Physiology
Instruments for Pharmaceutical Research
All Maze Video Tracking Software & Mazes
Digitally Enhanced Thin Layer Chromatography (DE-TLC)
About Us
At Orchid Scientific one of our values is customer success, we are in constant contact with our customers working closely to ensure they are successful with our technology. We're always happy to discuss your needs. Our people come from different backgrounds: science, software, education, solutions, technology and more. What we all have in common is a passion for what we do and the field we work in.

Quality Policy
To manufacture and deliver quality products efficiently by performing the defect free correct tasks, on time, every time and surpass the expectations.

Manufacturing Facilities:

Laser Cutting Machine  Injection Molding Machine  CNC Router  Welding Area

Electronic Assembling Area  Mechanical Assembling Area  Quality Control  Sales Team

R & D
Orchid Scientific is continuously involved in the process of R & D and to achieve this we have our in house R & D centre. To test the developed products Orchid has signed M.O.U. with educational institutes like M.G.V. Pharmacy College, Sandip Institute of Pharmaceutical Sciences etc. to use laboratory animal house facilities for testing of developed products.
Individually Ventilated Caging System
*Technology built to protect animals and researchers*

Orchid’s IVC system not only ensures high biological safety for laboratory animals and scientists, but also matches the at par level of compliance for safety, animal welfare and ergonomics.

- Animal Welfare
- Ergonomics & Economics
- Efficacy and Efficiency
- Emission & Immision Protection Mode
Individually Ventilated Cage for Mice & Rat:

**Ergonomics:**
- Quick finger touch swing type locks enabling quick locking and unlocking at the same time giving safe locking.
- Card holder fitting on the edge gives visibility of animal inside the cage.
- External self centering water bottle enabling quick bottle change without removing cage.
- Snap fit filter holder enabling easy removal of filter.
- Excellent lid stacking without damaging cage locks.

**Animal Welfare:**
- No direct air drift at animal level, air inlet and outlet at the top level ensures less animal stress and heat loss.
- 0.2μ Passive filter on cage lid ensuring animal safety in power failure or cage is off the rack for long time without compromising the protection.

**Safety:**
- Air tight spring loaded air Inlet, air outlet and bottle inlet valves ensure no air leakage.
- Silicone compression seal in the lid ensuring complete seal around the cage.

**Air Handling Unit:**
- Touch Screen Display
- Mobile Messaging System
Ergonomics:
- Light weight easy to move system with Touch screen display at eye level.
- Separate indicators on the control panel for indication of Parameters out of range, Supply HEPA filter change and exhaust HEPA filter change.
- Easy access to pre filters for routine cleaning.

Animal Welfare:
- Stand alone separate Air Handling Unit gives less vibrations and noise level to cage level.
- Continuous monitoring of Temperature, % RH, Ammonia* and CO2 level* and provision to set limits.
- Emergency mode to protect the animals from higher level of Ammonia and CO2.
- Mobile messaging system for error logs enabling user to take immediate action to protect animals*. (*Optional)

Economics:
- Low power consumption and less maintenance blowers.
- Stand alone Air Supply Unit can connect to 4 racks.

Compliance:
- Two level password protected system ensuring restricted access.
- Auto data logging of parameters after every 2hrs.
- Error logs for parameters out of upper and lower limits set.

Racks for Individually Ventilated Cages:
Orchid’s IVC Racking offers complete flexibility to meet any laboratory design. Fully mobile racks are available in wide range of cage capacities and in addition to that further racks can be added at any time to the existing Air Supply Unit.

- Cage holding rails fitted with visual docking indicators to ensuring proper fitting of cage.
- Spring loaded non rupture air supply and exhaust valve.
- Press fit air supply and exhaust valve allows easy removal for cleaning purpose.

Efficacy and Efficiency:
Orchid’s IVC system is designed by taking into consideration air flow pattern, uniform air distribution air velocities at animal level and differential pressure. Cage design is optimized by CFD analysis for ensuring the uniform air distribution without any dead spot in the cage.

Further system is tested for various parameters ensuring that product delivered performs to the highest level of biological safety at the same time ensuring animal welfare.

1. Air velocity within the cage
2. Air velocity at animal level
3. Short circuit air flow
4. Inleakage
5. Sound level
6. Vibrations within the cage
7. Air leakage through silicon gasket using smoke test
8. Pressure holding capacity of cage with lock.
Laboratory Animal Cages & Equipments

Animal Cages For Small Rodents (Mice) Polypropylene Mice Cage (Model SMP 01)

Animal Cages For Small Rodents (Mice) Polycarbonate Mice Cage (Model SMC 01)

Animal Cages For Small Rodents (Rats) Polypropylene Rat Cage Type I (SRP01)

Animal Cages For Small Rodents (Rats) Polypropylene Rat Cage Type II (SRP02)

Animal Cages For Small Rodents (Rats) Polycarbonate Rat Cage Type II (SRC01)

Animal Cages For Small Rodents (Rats) Polypropylene Rat Cage Type III (SRP03)

Animal Water Feeding Bottles

Animal Restrainer For Small Rodents (Mouse & Rat) Broom Style (Tail Access Type)

Animal Restrainer For Small Rodents (Mouse & Rat) Flat Bottom Style (Head & Tail Adjustable Type)

Rabbit Cage Standard Type Model RBS-S-01

Rabbit Cage Breeding Type

Trolley With Inbuilt Polypropylene Rabbit Cages Model RBINT-PP-01

Trolley With Inbuilt Rabbit Cages (ADD On Type) Model RBAD-S-01

Animal Restrainer For Large Rodents (Rabbit) (Stainless Steel)

Animal Restrainer For Large Rodents (Rabbit)

Racks / Trolleys For Mice & Rat Cages Hanging Type and Sliding Type Racks
Operation Table
For Large & Small Rodents

Small Animal Operating Table
(Model: OTSH-S2)

Guinea Pig Cage
(Standard Type)
Model GPS-S-01

Polypropylene Guinea Pig Cage
(Raised Grill Type)
Model GPS-PP-01

Polypropylene Guinea Pig Cage
(Top Door Type)
Model GPS-PP-02

Rack/Trolley For Polypropylene Guinea Pig Cage

Trolley With Inbuilt Polypropylene Guinea Pig Cages
Model GINT-PP-01

Guinea Pig Pans
Model GPP-1

Metabolic Cages
For Small Rodents
(Mice & Rat)

Metabolic Cage For Large Rodents
(Diuresis Type)
Model: DUC-02

Rack For Metabolic Cages
Small Rodents
(Mice & Rat)

Diuresis Cage
For Small Rodents

Animal Enrichment Devices

Euthanasia Chamber

Animal Identification Devices

Animal Feeding & Dosing Needles
Instruments for Preclinical Research

Quil Cage

Chicken Cage

Honey Bee Cage

Inhalation Exposure Restrainer (Model: EXR Series)

Rotarod Apparatus with Acceleration Mode

Infrared Actimeter

Sherrington Recording Drum

Vogel Test Apparatus

Electroconvulsiometer

Automatic Organ Bath

Analgesia Meter Hot Plate Hot and Cold Plate

Digital Plethysmometer

Grip Strength Meter

Analgesia Meter Paw Pressure Tail Flick

Digital Telethermometer (Multichannel, PC Based)

Incapacitance Meter for Mouse and Rat
Digitally Enhanced Thin Layer Chromatography
Comprises of de-TLC Software and UV Cabinet fitted with camera device for image capturing. DE-TLC is an inexpensive system, specially designed for PC-based documentation and analysis of thin layer chromatography (TLC) plates. Scientist on a computer, using our exclusive de-TLC software, can quickly produce multi-spectral scans and calibration curves—output previously available only from more expensive equipment or complex procedures. de-TLC combines an exceptionally versatile software module with a robust and easy to use imaging system to give you an outstanding instrument for all TLC plate applications.

Features:
- Password protected system
- Multiple image comparisons for statistical reliance.
- Interactive graphical analysis
- Interact with results and find relevant information within seconds instead of days.
- Inbuilt Calibration mode for periodic calibration

UV Cabinet:
Fitted with Three light sources:
- UV Short wave 254nm, UV Long wave 365nm,
- Visible Light. Fixed with image capturing device with Still Image Sensor Resolution 5 megapixel.
RODENT ANESTHESIA SYSTEM:
Orchid's gas anesthesia system for rodent is one of the safest, user friendly and the most economical gas anesthesia system in the market. Our system successfully integrates efficient gas delivery at the same time minimizing excess gas exposure to lab personnel.

Features:
- Compact & modular
- TEC3 vaporizers with Key fill adaptors making lesser exposure to anesthetic agents
- Table top or trolley mounted options available
- Depth of anesthesia can be easily adjusted
- Suitable for different animals just by changing masks or induction chamber
- Suitable for multiple animals using multichannel manifold
- Options of oxygen concentrator or air pump available eliminating need of gas tank
- Every anesthesia procedure needs following components to conduct an induction phase and a maintenance phase:
  - Anesthetic Vaporizer with flow meter
  - Induction box and/or mask with breathing circuit
  - Scavenging system (for gas anesthetic removal)

Portable Trolley with Complete Anaesthesia System
**All Maze Video Tracking Software:**
All Maze is a video tracking software package for automated analysis of rodent behavioural research studies. All Maze is the most widely applied video tracking software that tracks and analyses the behaviour, movement and activity of any animal without use of sensor.

**All Maze system covers wide variety of applications:**
- Motor and Locomotor Activity
- Anxiety: Open Field, Plus Maze, O Maze, Black and White Box
- Depression, Forced Swimming, Tail Suspension Test
- Learning and Memory
- Water Maze, Radial Maze, T Maze, Y Maze
- Emergence test
- Conditioned Place Preference
- Novel Object Recognition
- Fear Conditioning

**Parameters Studied:**
- Distance Travelled
- Body Movement whilst Stationary
- Entering and Exiting Zones
- Time Spent in Zone
- Part of Body in Zone
- Rearing
- Head Orientation (degrees)

**Software Working Window**

**Elevated plus Maze**

**Radial Arm Maze**

**Zero Maze**

**Light & Dark box**

**Y Maze**

**T Maze**