

IVC Animal Cage and Rack system for Rats – 12Nos.
Doc. No: ST/12/IVC-Rat/2016-17/12

Individually Ventilated Caging System to house laboratory breeding and experimental rat including cages, Bottles, racks, air Handling Unit and other accessories.

I CAGES FEATURES:

1. IVC System should be as per the International Standards and Guidelines. AHU blower must be CE certified.
2. Cage top should be latch free and have half wire bar lid for easy cage changing, animal and supplementation of feed without complete removal of the cage lid.
3. The air supply inlet should be positioned above animal height to prevent the animal from being exposed to air drafts and consequently anxious behavior and stress.
4. Cage to possess a self-locking system onto the rack with a visual indicator for proper cage docking.
5. Cage bottom should be symmetric to save the time while cage changing and for easy stack ability.

SPECIFICATIONS:

1. Cage should provide airflow up to 80 changes per hour at maximum flow rate of 0.05m/sec.
2. Rat cage floor area should not be less than 900cm², and should be made up of Polysulfone (reautoclavable) recyclable plastic material, capable of withstanding (150 C) at least 150 autoclave cycles.
3. Cage should be fitted with efficient silicon gasket sealing with a slot in the lid for placement of external water bottle, and 0.3micron filter on the lid (to allow air entry in case of power failure). Suitable water bottle and caps in sufficient numbers, with proper seal.
4. Microbiological filter must be certified with a Virus Filtration Efficiency 99.999987% and a Bacteria Filtration Efficiency 99.9999937% in order to provide safety for both operators and animals. Third parties certification is a must.

II RACKS:- FEATURES:

1. Single sided rack as per the size of the animal rooms, capable to hold 35to 40 cages per single side of the rack-01 No..
2. The dimension of the rack wheel (at least 10cm) made up of Polyphenilsulfone, should be such that two persons can easily maneuver the same.
3. Rack with system of vertical plenums which feature air nozzles (easy demountable for sanitization) for the supply and exhaust of air individually to each cage, both positioned in the top of the cage in order not to stress the animals with a direct airstream.
4. The whole rack should be easy to clean, disinfect and sterilize. The rack should be fitted with lockable castors (wheels) with a tread that does not discolor or damage floor coverings.

SPECIFICATIONS:

1. The rack should be made up of SS 304.
2. The dimensions of the cage racks must be sufficient to hold 35-40 Rat Cages per side.

3. The rack must have plastic runners with Cage Self Locking System (CSS) and automatic visual indicators for cage properly docked.
4. Rack horizontal plenums must be cylindrical (Not Square) in shape to get the equal air distribution and easily demountable for sanitization and washing process, without the need of any tool.

III AIR HANDLING UNIT (AHU):- FEATURES:

1. AHU should be energy saving, eco-compatible, light and Ergonomic. It should be safe for animal, animal caretaker and Environment.
2. AHU should be fitted with HEPA filters,Pre-filters, supplying a maximum air flow of up to 200m³/hour.
3. Air Handling Unit (AHU) should be able to stand-alone and not resting on the top of the cage rack.
4. It should have the capacity to support four racks of single sided and two racks of double sided holding cage of same size.
5. AHU should be able to signal number of alarms, for minimum and maximum supply of airflow, exhaust airflow, air pressure, temperature and relative humidity.
6. There must be a provision for thimble connection to the top of the AHU to discharge the exhaust air into the building exhaust system and this should be provided by the supplier.

SPECIFICATIONS:

1. HEPA filters and pre filters should be fitted on both supply and exhaust systems of AHU and the efficiency level of the filter should be 99.999% to prevent the entry of particles of more than 0.3micron size. The ventilation of the rack should be of the re-circulating type i.e. room air should be filtered by AHU and delivered to the animal cages.
2. Accessibility to the system should be user friendly and on eye level and protected by password(s). Care should be taken to see that the noise generated from the cage rack fans not to exceed 50 dBA.
3. The manufacturing company with International standard must be independently audited and certified to comply with ISO 9001 (quality management system) and ISO 14001 (environmental management system) standards.
4. List of the users in India.
5. Third party Validation certificates should be attached.

Prospective bidders are requested to visit the site/vivarium and offer suitable bids in the required format along with literatures.