GENEVA SCIENTIFIC
LAB EQUIPMENT SOLUTIONS

SCHLYER MACHINE
AUTOMATIC BEDDING DISPENSER
MODEL: BD 30

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General Specifications

1.0 General Description:

1.1 The SMC Model BD30 Series Automatic Bedding Dispenser automatically dispenses bedding into cages simultaneously as the cages pass through the filling chamber on a powered conveyor. Cages may be manually placed onto the bedding dispenser conveyor topside up, or automatically transferred and inverted to the bedding dispenser conveyor directly from an SMC Tunnel Washer. The amount of bedding needed per cage is adjustable and will accommodate any type of bedding materials. Bedding can be fed into the feed hopper manually or by means of a vacuum feed system.

2.0 Application:

2.1 The Bedding Dispensing Unit shall be designed for use in animal research laboratories and facilities to automatically dispense a consistent amount of dry, solid bedding into animal cages.

3.0 Dimensions and Model Selection:

MODEL	Tunnel Washer Belt Width	BEDDING DISPENSER BELT WIDTH	EXTERNAL OVERALL SIZE(W" x H" x L")
BD3024	24"	30"	96" x 61" x 80"
BD3030	30"	36"	96" x 67" x 80"
BD3036	36"	42"	96" x 73" x 80"
BD3048	48"	54"	98" x 79" x 80"

4.0 Operation:

4.1 The unit shall be filled with bedding by dumping bedding material inside the storage hopper. Alternatively, the unit shall be devised such that it will interface with and be filled by a Vacuum Transfer System. The unit shall be used in conjunction with a tunnel washer and shall automatically fill cages as they are conveyed through the filling chamber. The fill level of the cages shall be adjustable by varying the speed of the bedding feed conveyor. Once filled, the cages shall exit the filling chamber for removal by the operator.

5.0 Standard Features:

5.1 STAINLESS STEEL CONSTRUCTION: The unit shall be constructed entirely from stainless steel with polymeric bearings, including conveyor rollers.

5.2 HOPPER CAPACITY: The bedding storage capacity shall be a minimum of 15 cubic feet.

5.3 BEDDING LOADING: The storage hopper located on the side of the unit shall be filled by dumping bedding into the stainless steel hopper. Alternatively, the hopper shall be filled by a Vacuum Bedding Feed System. The storage hopper

shall be equipped with a stainless steel lid and a stainless steel safety gate that shall also prevent large pieces of bedding from entering the hopper. If the safety gate is removed while the unit is in operation, the cycle shall stop until it is replaced. This safety feature shall protect the operator from any moving mechanisms within the dispensing unit.

5.4 AUTOMATIC DISPENSING: The unit shall be designed to be integrated with a tunnel washer. Clean and dry cages shall be conveyed through the filling chamber and bedding shall be automatically dispensed into the cages in a uniform manner. The level of the bedding in the cages shall be uniform regardless of the size or orientation of the cages being filled. The fill level of the cages shall be fully adjustable by varying the speed of the bedding dispenser conveyor.

5.5 OPERATOR CONTROL PANEL: A stainless steel operator control panel providing ON/OFF switches for bedding conveyor, main power, operation indication lights, and a conveyor dispensing filling rate switch to adjust cage filling to desired levels shall be provided on the front of the unit. At the discretion of the owner, these controls shall be fully integrated with the controls of the associated tunnel washer.

5.6 POWERED HOPPER: The bedding material shall be conveyed from the storage hopper to the upper dispensing sheet by a continuous paddle type conveyor, driven by a 1/3 HP motor equipped with a gear reducer and a safety clutch.

5.7 POWERED ROLLER CONVEYOR: Cages shall be transported through the automatic dispensing unit by powered stainless steel rollers. The chain-powered rollers shall be on 3" centers and shall be provided with stainless steel roller bearings. The roller system shall have no pinch points and shall not carry bedding out of the dispensing section.

5.8 WATER COLLECTION AREA WITH DEBRIS SCREEN: A stainless steel water collection pan shall be located under the cage conveyor in the cage entry area and shall drain any excess water from cages. The drain area shall be provided with a stainless steel removable drawer debris screen to collect any items that may have fallen onto the load area of the bedding dispenser.

5.9 CLEAN-OUT DOORS: Clean-out access panels shall be located at the bottom of the loading hopper and at the in-feed and discharge ends of the feeding area to facilitate clean up of the machine.

5.10 EXHAUST FILTER: A removable filter shall be located in the exhaust duct to trap dust in the exhaust stream. The filter shall be fabricated of aluminum shall be easily washed.

6.0 Optional Features:

6.1 DUST COLLECTION SYSTEM: The dispenser shall be provided with a dust collection system able to remove and filter dust generated by the filling operation to 50 microns and eliminate the need for connection to the building exhaust. The system shall consist of a 1.0 H.P. blower and 36-gallon container connected to the vent of the dispenser. The system shall be integrally wired with the bedding dispenser and an ON/OFF switch shall be mounted on the operator control panel.

6.2 KNOCKED-DOWN SHIPMENT: Machine shall be provided in knocked-down condition, all pieces to pass through a standard man-door, for reassembly at the customer's site. This option shall allow the machinery to be installed in a space otherwise inaccessible to large pieces of equipment. No special lifting equipment of any kind shall be required. SMC technical personnel shall re-assemble the machine.

6.3 RIGHT OR LEFT HAND SERVICE SIDE CONFIGURATION: The unit shall be installed with the service area and operating end control terminal to the right or left of the load end of the unit. Handedness shall be specified at time of order.

6.4 CONVEYOR FULL SENSOR: A photoelectric eye shall be mounted at the end of the discharge conveyor such that whenever a load blocks this photoeye for a selected period of time, the conveyor system shall be paused until the operator removes the item from the conveyor. This pause circuit shall be integrated with the control system of the associated tunnel washer.