



# Big Dutchman®



## UniVENT

Layer cage system



## Enjoy cost-effective production with the UniVENT Layer Cage System

The Big Dutchman UniVENT Layer Cage System is easy to assemble, can be stacked up to 12 tiers high, and provides an ideal environment for bird comfort and maximum egg production. Univent cages provide:

- Superior feeding system
- Efficient, automated manure removal
- Cleaner house environment

### Important advantages of this cage at a glance

An-Alu coated wire provides high corrosion resistance; wire partitions increase air flow for increased bird comfort.

Sliding door opens over the entire cage front, making it easy to move birds in and out.

Reliable Champion® Chain feeder is easy to maintain.

Integrated egg protector helps move eggs directly to the belt and encourages hens to lay eggs toward the cage front, for cleaner eggs and fewer cracks and checks.

Champion® Chain stimulates birds to eat; feed loss is minimized by the large-capacity trough with inner rim.

Trough-shaped manure belt bed provides maximum coverage. Extra heavy-duty belt available for long rows.

V-channel drip trough with two easy-to-reach drinking nipples per cage doubles the available nipples (Recommended for higher bird densities.)

Air duct supplies fresh air to the birds, assists with manure drying, and significantly reduces ammonia emission. The duct is collapsible for easy shipping.

Cage bottom is supported by heavy rods, improving egg quality (test data available).



Cascade feed column prevents feed bridging

### CHAMPION® CHAIN FEEDING SYSTEM

Big Dutchman's Champion Chain Feeding System is the most reliable and cost effective feeding system in the world. The Champion Chain presents feed at pre-set levels and allows birds easy access to feed.

- The large-capacity trough with inner rim minimizes feed loss
- The narrow feed column without legs saves space and permits easy cleaning

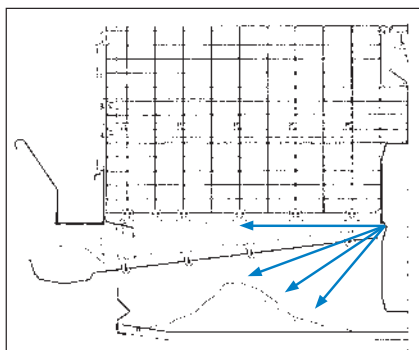
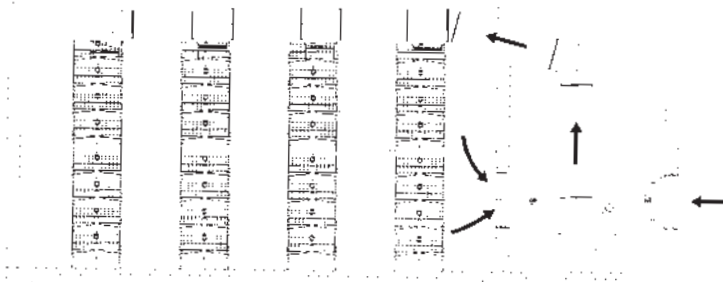


The chain safely conveys feed to the birds

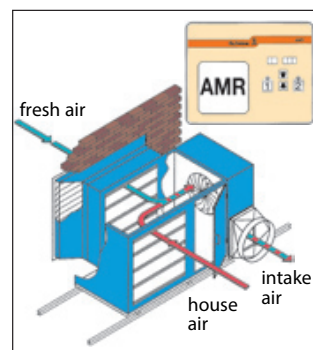
## The UniVENT system with air duct significantly reduces the ammonia levels compared to traditional manure installations.

UniVENT's air duct ventilates manure quickly and effectively, providing up to 60% dry matter (or 40% moisture) with low energy costs. Automated manure removal breaks the fly reproductive cycle and removes the source of ammonia from the building. In colder climates, incoming air is pre-heated using an air mixer or heat exchanger, maintaining the appropriate temperature and air quality. Even during extremely high temperatures, each hen is provided with sufficient oxygen to ensure optimum hen performance, year-round.

Before fresh air enters the house, it can be pre-heated in the air mixer. It is then channelled through air ducts and guided over the manure and into the bird area through strategically positioned air holes.



An air rate of approximately 0.4 cfm (0.7 m<sup>3</sup>/h) per bird is recommended, yielding energy consumption of only 2.0 kW per bird per year. This value can be reduced to 1.25 kW per bird per year by simply reducing the operating time to 12 hours per day in warm weather and 16 hours per day in cold weather. Maintaining high stocking density in the house, installing superior insulation, and providing optimum house ventilation all help to achieve efficient manure drying and contribute to the success of your operation.



Manure removal end set with manure chute

### ADVANTAGES OF THE UNIVENT SYSTEM:

- Optimal bird comfort is achieved by the increased air movement afforded by wire partitions and the optional air duct system
- Temperatures are uniform throughout the house, independent of outside temperature differences
- Ammonia and odor emissions are significantly reduced
- Fly population and the cost of its control are dramatically reduced
- Lower energy costs



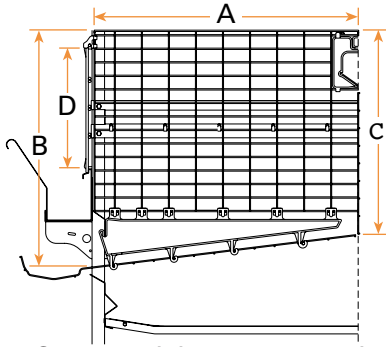
Dry manure store



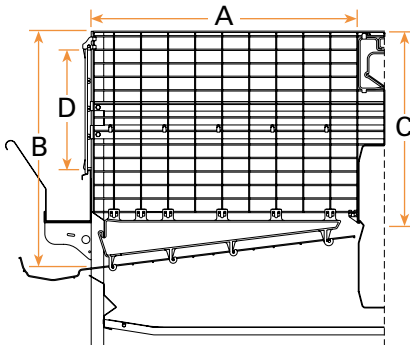
Manure is loaded directly on trucks

## Technical data

### CAGE DIMENSIONS



Cage models 500, 568 and 639 without air duct.



Cage model 500A and 568A with air duct.

Section length: 96" (2438mm)  
UV500/A also available with 94.96" (2412mm) length.

	Model	500	500A	568	568A	639	639A
Cage depth (A)	inches	19.69	19.69	22.39	22.36	25.16	25.16
	mm	500	500	568	568	639	639
Cage width	inches	24.00	24.00	24.00	24.00	24.00	24.00
	mm	610	610	610	610	610	610
Front height (B)	inches	17.51	17.53	17.52	17.52	17.52	17.52
	mm	445	445	445	445	445	445
Back height (C)	inches	15.24	15.48	14.89	14.89	14.60	14.60
	mm	387	393	378	378	371	371
Door height (D)	inches	9.05	9.05	9.05	9.05	9.05	9.05
	mm	230	230	230	230	230	230
Cage area	inches <sup>2</sup>	472.56	472.32	536.64	536.64	603.84	603.84
	cm <sup>2</sup>	3049	3047	3462	3462	3896	3896
Total row Width (G)	inches	52.76	56.69	58.1	62.1	63.7	67.6
	mm	1340	1440	1476	1576	1618	1718

#### Bottom wire dimensions\*

Mesh width	1 x 1.5"
Slope	7° = 12 %
Wire cross section	2.05 mm

\* same on all cage models

#### Tier dimensions\*

	tiers	3	4	5	6	7	8
total height (E)**	inches	77.17	100.40	123.63	154.73	177.96	201.19
	mm	1960	2550	3140	3930	4520	5110
opening below catwalk (F)**	inches	--	--	--	79.13	102.36	102.36
	mm	--	--	--	2010	2600	2600

\*\* adjustable ± 1.18"/30 mm



**Big Dutchman**

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Details are subject to change: 7/2017

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