



Big Dutchman®

LAYER

Management
Systems



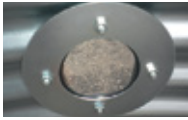
1 Silos The base for hygienic feed storage



1. Rubber cap



2. Plastic head screw



3. Inspection Window



4. Opening Lid



- | ZnAl-coating ~ corrosion resistant.
- | Mechanical and / or pneumatic filling systems.
- | Day silo from 2.67 ton (4.1m³) to 38.25 ton (51.00m³).

TECHNICAL DATA

A Diameter		B No. of rings	No. of legs	C Total height	Volume	Total feed weight
(m)	(feet)			(m)	(m ³)	(t)*
1.80	6	1	4	3.70	4.10	2.67
		2		4.58	6.30	4.10
		3		5.40	8.60	5.59
2.10	7	2	4	4.91	9.15	5.95
		3		5.79	12.30	8.00
		4		6.65	15.40	10.01
2.75	9	2	6	5.63	16.60	10.79
		3		6.53	21.80	14.17
		4		7.40	27.00	17.55
		5		8.07	32.20	20.93
		6		8.95	37.40	24.31
3.66	12	2	8	6.48	32.60	21.19
		3		7.36	41.80	27.17
		4		8.24	51.00	33.15

SILO WEIGHING

QuadScale

- | Can manage up to 04 silos
- | Easy installation and operation
- | Crane-less retrofitting: installation without lifting the silos



2 Feed Transport FlexVey



We offer the FlexVey conveyor systems in a variety of sizes.

- | Extremely flexible spring steel.
- | Bends up to 90 degrees.
- | Fast and easy assembly.

TECHNICAL DATA AND PLANNING DETAILS FOR FLEXVEY

Type	FlexVey 75	FlexVey 90	FlexVey 90HS
Conveying Capacity Horizontal* (t/h)	1.4	2.5	4
Max Conveying Length (m)	60	40	40
Outside Diameter of Spiral (mm)	60	70	70

* the conveying capacity decreases by 30 % at a pitch of 45 degrees •• speed of conveying system is 760 rpm

3 Cage Systems Manure belt battery for safe and efficient egg production



Important advantages of this cage at a glance

Zinc-aluminium-coating of all wire parts (cage fronts, bottom wires and lateral partitions) = ensure a significantly better corrosion protection and therefore a longer service life

Entire cage front is a sliding grate which opens easily = moving birds in and out becomes simple and more humane

Flat-shaped egg protector rail encourages egg-laying at the trough = short roll-away distances, hardly any cracked eggs and hens are prevented from eating eggs

Deep feed trough with inner rim = minimum feed losses

Trough-shaped manure belt = manure cannot drop into the installation, very clean transport during manure removal

Drinking nipple with V-channel = each hen can easily reach two nipples

Bottom wires are placed on tension wires = high flexibility of the bottom wire and, therefore, very high egg quality

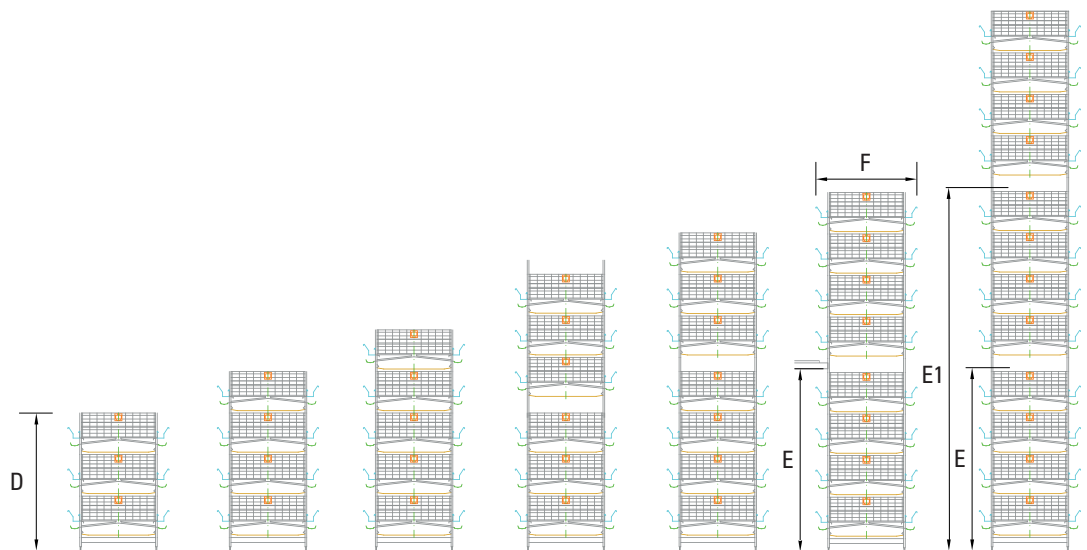
Air duct for fresh air supply to the birds and for the production of dry manure = significantly reduced ammonia emissions

TECHNICAL DATA AND PLANNING INSTRUCTIONS

Cage dimensions

Type	UV 600/600a	UV 600 A	UV 639	UV 639 A	UV 788
Cage depth (A) (mm)	600	600	639	639	787.4
Cage Width (mm)	603	603	610	610	742.5
Height Front (B) (mm)	445	445	445	445	540
Height Front (C) (mm)	375	375	371	371	442
Height Front Door (mm)	230	230	230	230	292
Cage Surface (cm ²)	3618	3618	3896	3896	5855
System Width (F) (mm)	1540	1640	1618	1718	1906

System dimensions



Number of tiers	3	4	5	6	7	8	12
Total height (D) (mm)	1960	2550	3140	3930	4520	5110	7670
Height catwalk (E&E1) (mm)	-	-	-	2010	2600	2600	2600 & 5160

4 Feeding System For modern poultry management

V-FEED CART



Energy-saving

- | Only one drive for up to 6 tiers

Optimal-feeding

- | Smooth and quiet run
- | Uniform feed distribution
- | Easy adjustment of the feed level for each feed trough

All-purpose

- | For all layer, rearing and breeder cages
- | For all row lengths

Easy handling

- | Feeding intervals are controlled via a timer
- | Low maintenance and service requirements
- | Manual operation in case of power failure

CHAIN FEEDING

A reliable and successful system



Advantages

- | Different conveying speeds of 12, 18 or 36m/min
- | High conveying capacity of 0.7 to 1.5kg/m
- | Cost effective

Easy Handling

- | Suitable for any type of feed; pellets, mash and crumbles
- | Possible for controlled or ad libitum feeding
- | Easy to clean
- | Low maintenance
- | Can be suspended or installed on legs (suitable for floor management)

Reliable

- | Feed is distributed uniformly
- | Birds receive the same amount of feed
- | Minimum feed losses

Durable

- | Robust system; long service life

5 Drinking System For a reliable supply of fresh and clean water

Automatic Flushing System

With the **Automatic Flushing System (AFS)**, the drinking system will be rinsed automatically to prevent build-up of slimy biofilm. With a quick and easy installation, the AFS can be retrofitted to existing system.

Sonic Cleaning is an ultrasound system which prevents the formation of biofilm in water supply. It has a very low energy consumption and is suitable for all water & nutrient transportation lines.

Water Connection Unit for Poultry Houses

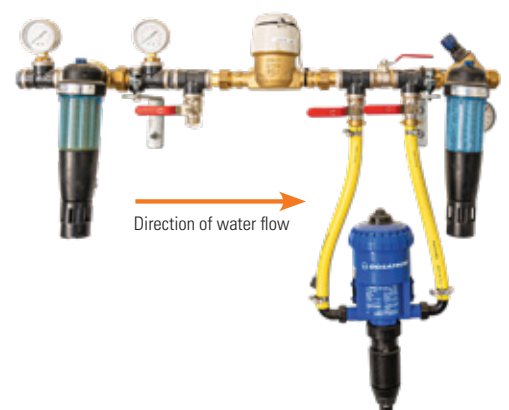
The water connection unit is installed between the main water supply and the house water line. Consists of filter, ball valve, water meter, bypass medicator and pressure reducer.

- | Compact design = problem-free installation even in small rooms.
- | Easy assembly and extension = all parts are screwed together.

- Filter with manometer to avoid blockage at the nipples.
- Valve for separate drawing off of water.
- Electronic water meter for connection to a controller.
- Mediator.
- Pressure reducer with filter and ball valve.
- Bypass with three ball valves - for connection of a medicator.

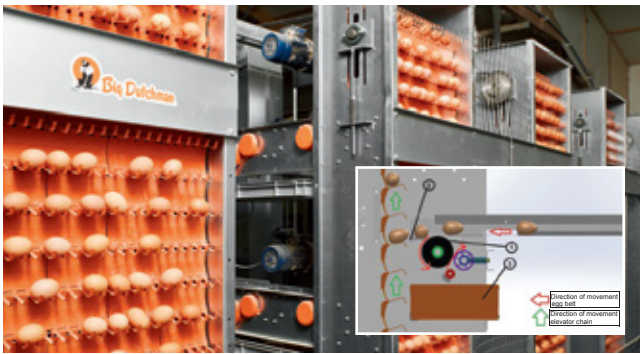


Sonic Clean



Direction of water flow

6 Egg Collection Systems An investment that pays off!



EggCellent (EC) & EggCellentDT (ECDT)

Collection systems that are suitable for large collection capacity that requires minimum maintenance.

EC is suitable for all cage types, transport up to **19,000 eggs p/hr**. Can collect eggs of up to 8 tiers, no dosing units required.

ECDT is suitable for Natura and A-frame systems; a cost-effective **NEW** generation system that enables **direct transfer** of eggs from belt to elevator.



EggSMART

Egg elevator that is able to transport eggs securely with little space in the end set area.

The system can collect up to **9,000 eggs p/hr** from up to **4 tiers**. Easily accessible to all cage rows and has a cleaning function.

Rod conveyor housing is made of **resistant to corrosion material**.



EggScan120

EggScan120 is an affordable egg counter. It works with BigFarmNet management system and via the ViperTouch; can connect up to 60 scanners. It can be retrofitted on egg belts and also the egg elevator.

Advantages

- | 99.8% accuracy
- | Effortless installation
- | Easy to operate & easy to clean
- | Smart; works with BigFarmNet



EggCam-3D

EggCam traces and counts eggs via a 3D camera. It is suitable for any kind of transport systems like plastic or textural belts, metal or plastic rod conveyors. It has a wide scanning area which is approximately 180 to 750mm. It is supported by ViperTouch, connected to BigFarmNet management system.

Advantages

- | 99.9+% accuracy
- | Effortless installation
- | Easy to clean
- | Can be connected to ViperTouch and AMACS (via LAN)



Curve Conveyors

Flexible egg transport

Advantages

- | Smooth transfer of the eggs to the grading / packing station;
- | No accumulation of eggs along the inner radius of the curve

Width	Conveying capacity	
	MultiTier	Elevator/Lift
350 mm (13.8")	34,000 eggs/h	
500 mm (19.7")	50,000 eggs/h	
750 mm (29.5")	80,000 eggs/h	

7 Manure Removal



Manure Removal Belt

Simple, Clean and Efficient.

Polypropylene (PP) manure belts collect the manure under the cages.

The end set is galvanized to ensure protection against corrosion. Single or double manure belt scrapers efficiently clean the polypropylene belts on each tier.



Manure Cross Conveyor

The manure cross conveyor is an automatic system that centrally collects the manure in the cross direction of the cage row.

It transports the manure sideways out of the house and drops to an elevating conveyor to be transported away.



AMBA

Permanent straight running of manure belts during removal of manure.

The automatic manure belt adjustment saves time and ensures smooth running of the belts.

Light sensors positioned on both sides monitor the belts. If belts are not straight, sensors will trigger the AMBA motor to automatically adjust the belts.

8 Ventilation Ensuring the best possible fresh air supply for your poultry house

WALL INLETS

Air Performance Rates (m³/h)

Type	CL 1911	CL 2400	CL 3000	CL 3400	CL 3800	CL 4600
10 Pa	1750	2400	3000	3400	3800	4600
20 Pa	2500	3350	4200	4800	5350	6500
30 Pa	3050	4150	5250	5950	6650	8000
40 Pa	3550	4800	6050	6900	7700	9300

CL 1911

- | Larger version of CL-1211 F
- | Stainless, stable and maintenance-free tension springs.
- | Inclined flap in order to guide the air towards the ceiling in case of minimum ventilation.
- | Can be opened with multi differentiation in order to produce stable air jets.
- | Insulated flap prevent condensation water and heat losses.



FlexInlet



The sophisticated geometry and the lateral guide plates make for a stable air jet and uniform air distribution. The flexible choice of inlet sizes makes it also possible to easily adapt the FlexInlet to different building requirements.

FANS

Big Dutchman fan series are cost effective, have high air performance with low power consumption. The fans are used by farmers all around Asia because they are a critical component to efficient ventilation systems. Important: they are made of high resistance to corrosion material; hence, they are long lasting & durable.



AirMaster EVO

- | Proven Performance.
- | Energy Efficiency; with inverter technology.
- | Variable Speed; optimised climate control.
- | Savings of up to 70%.
- | Stable performance.



Type	Air rate in m ² / h (output watt / 1000m ³ / h)						Current consumption (ampere)
	0 Pa	20 Pa	30 Pa	40 Pa	60 Pa	70 Pa	
VC140-6-2.0HP	47912(31.1)	45353(35.9)	44059(38.4)	42795(40.8)	39789(46.8)	38046(50)	3.1
VC140-6-Evo (variable speed)	47158(33.9)	44527(39.2)	43252(42)	41985(44.8)	39315(50.8)	37737(54.1)	2.6
BD-Blue 140C ON/OFF	68500(32.5)	62807(38.5)	60084(41.6)	57592(44.4)	52131(50.6)	49160(54)	4.93
BD-Blue 140C-6 (variable speed)	65800(27.3)	61113(32.1)	58933(34.6)	56779(37)	51729(42.3)	49031(45.3)	3.5

RAINMAKER

The ideal cooling system for poultry houses in hot climates. RainMaker is a cooling pad system developed by Big Dutchman featuring an innovative frame; comes in a choice of paper or plastic pads.



Water reservoir and centrifugal pump

- | Excess water collected at the reservoir is re-used.
- | Water reservoir is large enough so no additional water tank is needed.
- | Special perforation enables back flow of excess water and prevents rodents.



Plastic



Paper



The innovative frame system with top profile

The top-profile is the complete upper part of the frame designed as an open system

- | A special deflector ensures that water is evenly spread along the pads.
- | The deflector is snapped into the pre-mounted wall brackets to allow for a simple assembly.

Cooling Pad Washer

The machine cleans plastic cooling pads efficiently and effectively.



VIPER TOUCH ViperTouch is an all-in-one precision farming computer for your broiler climate and production system. It continuously measure, observe and response to the environment for providing your birds exactly what they need to gain optimum health and productivity.

- | Simple operation using large 10 inch touch screen with 32 languages support.
- | Flexible in supporting wide variety of setup and equipment in different environment.
- | Real-time recording of all important measurements.
- | Monitor real-time and alarm you of changes for swift corrective actions.
- | Easy complete overview of animal conditions and production results.



ALARMS

Alarm Unit AC Touch

- | 1 main station can connect up to 9 substations.
- | Available with SMS, GSM and land line call services.
- | Finger print scanner to prevent unauthorized access.

BigFarmNet Fusion

The game-changing cloud-based farming platform

Allows you to maximise efficiency on your farm.
BFN Fusion works with

- Our controllers in the farm
- BigFarmNet manager PC in the office
- BigFarmNet App anywhere you are



AMACS



ViperTouch



Laptop



iPad, Mobile



BigFarmNet Fusion (BFN Fusion)

It bundles all data generated by your farms and adds value to your production; using cloud computing and big data technology together to manage farms more efficiently and productively.

- | Eliminates human error and reduces staff workload.
- | Early identification of production risk.
- | Lower costs, increase efficiency, achieve predictable success.
- | Multiple farms; all locations at a single click from anytime anywhere.
- | Full control and maximum security at all times.
- | Integration with your entire value chain.



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