# **Poultry House Equipment**



## **Automatic Poultry House for Broilers**

- Automatic Feeding Line
- Automatic Drinking Line
- Silo
- Cooling System
- Heating System
- Climate Control

#### 1. Automatic Feeder

In the current competitive poultry industry, every poultry grower is looking to increase his production efficiency. AFEM pan feeding system helps to achieve excellent feed conversion, has a reliable operation and ensures more profits with its many advantages.

The main feed line is mainly used to deliver feed from the hopper to the feeding pan system. There is no feed sensor at the end of the main feed line, which can control the drive motor on and off to realize automatically feeding.

The system consists of:

- Feed hopper
- Head of the auger with ball bearing assembly
- Plastic feed pan
- Auger GI pipe for feed
- Suspension system with adjustable height winch
- Drive motor with gearbox
- Automatic proximity sensor
- Anti-roost wire with tension spring



## **Specifications:**

- Proven reliability
- High capacity
- Hopper capacity of 90kg ensures a full day of feed supply in manual mode usage
- The auger driven by the gearbox motor permit a conveying of feed up to 130m length
- The pans are filled one by one until the last pan with a proximity sensor to switch off the motor to the next
- The entire system can be adjusted to the height required by a suspension system and a winch
- Snap system easy for replacement and assembly
- Clip with soft lock and hinges let the pan bottom opened for cleaning

## **Technical Data of the Conveying System:**

- Feed hopper capacity approx. 90kg or 135L
- Max system length 130m
- Feed pipe length 3m with 4 feeding pans
- Drive unit 0.55/0.75kw, 230/400V with gear motor 50Hz, 3phases, and 400rpm
- Conveying capacity approx. 370kg/h
- Size of pellets up to max 5mm
- Suspension central ceiling manual winch







## 2. Nipple Drinker

Fresh and clean drinking water is the key to achieve the optimum performance from the bird. For healthy birds and successful growing, the nipple drinkers are the correct solution supply for drinking water. AFEM provide a wide range of drinking system for broiler, layers, and pullets, our product range includes:

- Nipple drinkers with cups
- Nipple drinkers without cups

## **Specifications:**

Nipple drinkers the hygienic system

The system can be composed of the following parts:

- Water pressure regulator with a precision control and 2 side supply for the long drinking lines
- A bypass valve for quick and easy line flush
- Level of water can be indicated through a transparent tube with a small red floating ball
- Plastic tube 22mmx22mm ensure enough water flow
- Nipple drinker with or without cup made from stainless steel with double closing valve
- End line level indicator
- End line flush gate valve

The nipple drinker made from stainless steel can move 360° for vertical and horizontal activation. The housing is made of synthetic material. The flow rate ensures of min 60ml/min providing proper water supply. The cup with a single arm can keep the litter dry.



#### 3. Silo

The base for hygienic feed storage made from galvanized sheet steel, all systems can be filled pneumatically or by the auger. The size of the silo required depends on daily feed consumption and required storage time. A silo must be set up on a concrete slab which should be reinforced, the slab will bear the weight of the silo.



## **Specifications:**

- Long service life due to high-quality galvanization of all steel parts
- Trouble free feed withdrawal due to optimum degree of slope in the silo funnel
- Auger box rigid or flexible, adjustable from 0 to 45 degrees ensure operational safety
- Roof shape ensures use of the entire volume
- High functional reliability
- Silo with standard ladder and guard reeling is safe and reliable
- Solid connection and good sealing

## **Technical Data:**

- Driver motor power 0.75kw, 380V, 50Hz and 3 phase
- Conveying pipe diameter 75x3.6mm
- Feeding ability 1400kg/h
- Maximum conveying length 60meters
- German IFM feed level sensor



MODEL	DIAMETER	HEIGHT	CAPACITY(VOLUME)
AFS-4	1.833M	4.9M	6.3M <sup>3</sup>
AFS-7.3	2.75M	4.5M	11.2M <sup>3</sup>
AFS-10.6	2.75M	4.9M	16.4M <sup>3</sup>
AFS-14	2.75M	6.8M	21.6M <sup>3</sup>

## 4. Cooling System:

#### **A. Ventilation Fans**

The most important thing that is needed in a poultry house is the ventilation system which supplies fresh air to a poultry farm and it is also very important to sustain life.

High level of temperature, humidity, and air contamination can be reduced to tolerable limits for confined the chickens with the help of it. The high density of populations of the livestock and poultry farm in confinement is made possible and improved ventilation system.

AFEM manufactures having a complete line galvanized and fiberglass exhaust fans.

## **Specification**

#### **Galvanized Exhaust Fan**

- Low cost, low noise, good ventilation effect, strong air flow, energy saving, reliable running, long lasting and high efficiency.
- Fan frame: made from high quality galvanized steel sheets in order to assure the highest strength and strong resistance to corrosion.
- Shutter: with a centrifugal system which can ensure the shutter open and close automatically, and make it dustproof and waterproof.
- Blade: is making of the high strength metal, the special shape blades are designed to ensure the strong airflow with low noise.
- Belt: automatic tensioned to prevent the belt losing and dropping off.
- Motor: with high quality, this makes it possible to work easily under high pressure surrounding and the voltage could be 380V and 50Hz supply.



#### **Technical Data:**

MODEL	IMPELLER	ROTATING	AIR FLOW	POWER	VOLTAGE	SIZE
	RANGE	SPEED				
AFGEX-13	1250MM	480RPM	44,500m³/h	1.1kw	380v	138X128X40c
						m
AFGEX-12	1110MM	480RPM	35,000m³/h	0.75kw	380v	122x122x40c
						m
AFGEX-10	950MM	56,480RPM	30,000m³/h	0.55kw	380v	106x106x40c
						m
AFGEX-9	850MM	600RPM	25,000m <sup>3</sup> /h	0.37kw	380v	90x90x40cm

#### Fiber Glass Exhaust Fan

- Industry-leading performance and efficiency.
- Totally enclosed, maintenance free, high-efficiency motors, three phase 380V, 50Hz.
- Extremely quiet operation on all speeds.
- Automatic opening and closing device wind break prevention rain and dust proof.
- High density galvanized mesh improve the safe operation of the system fan.
- Six pieces of fiberglass reinforced plastic fan blade



## **Technical Data:**

MODEL	AFFEX-14
Air Quantity (m <sup>3</sup> /h)	48,000
Power (kw)	0.75
Voltage Frequency (v/hz)	380/50
Impeller Diameter (mm)	1,250
Impeller Rotating Speed (rpm)	480
Overall Dimensions (mm)	1460x1460x580

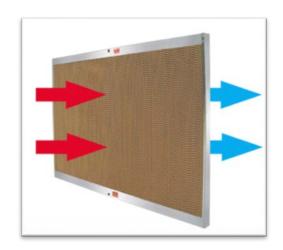


#### **B. Cooling Pads**

The evaporative cooling pad is used in the systems where high-efficiency cooling is required. AFEM cooling pad is made of special grade cellulose paper and is engineered from specially treated cross-sectional fluted media, capable of absorbing and retaining water to provide the maximum cooling efficiency.

## **Specification**

- High efficient: large evaporation surface area, excellent permeability can guarantee the water evenly wet the wall, cooling efficiency up to 85%.
- Low consumption: compared with the traditional air condition, it's electric consumption in only 1/10.
- High water absorption: natural water absorption is 60-70mm/min.
- High strength, fine corrosion resistance.
- The corrosion resistance cooling pad also has the function of ventilation and air cleaning. It is an excellent filter, nontoxic humidifier, oxygen cooling environmentally friendly materials. It also does air purification and filtration media.



#### **Technical Data:**

MODEL	L	В	Н	COLOUR
AFCP 1	150MM	60CM	10CM	Brown
AFCP 2	150MM	60CM	15CM	Brown
AFCP 3	100MM	60CM	10CM	Brown

## 5. Heating System:

Heating systems for ideal house temperatures have a substantial influence on bird health and performance. They are ideal for keeping your chickens and game birds safe and comfortable while improving productivity. The overall goal is to maximize the thermal yield and transfer it to the birds in the best possible way to keep energy costs as low as possible. AFEM offers several different heating systems powered by electricity, gas, diesel and infrared.

#### **Heater Models:**

#### **A. Infrared Heaters**

MODEL	BTU/HR INPUT	MIN MOUNTING	MAX MOUNTING	VENTILATION REQUIRED	GAS CONSUMPTION
	1111 01	HEIGHT	HEIGHT	MEQUINED	201130111111111
AFIGH-17	17,000	48 INCH	60 INCH	60 CFM	0.19GPH

## **Specification**

- Unique round design efficiently spreads more fuel saving radiant heat over a broad circular area.
- Stainless steel canopy adds extra strength especially helpful if brooders are to be relocated.
- Orifice holder is easy to clean and wash down.

•

- No electricity is required.
- Stainless steel burner system modulates from low burn to high burn as needed for increased fuel efficiency.
- No air filter needed. Brooder features a unique double gas burner system that combusts dust and carbon to help prevent build-up. (For ex-harsh environments, the air filter is available as an accessory).
- Accessories include: Individual thermostats (integral & remote) Manual shut off valves
- Nonelectric modulating.
- High/Low with remote thermostat.



#### **B. Electric Heater**

#### **Specification**

- Resistant to dust, water spray, and aggressive steam.
- Housing and heating element is made of stainless steel.
- Adjustable room thermostat with working range from 0-40c.
- Wall mounted low noise.
- Do not use oxygen
- Odorless



#### **Technical Data**

MODEL	AFEH-90
HEAT OUTPUT	9kw
AIR OUTPUT	1,000m³/h
ELECTRIC SUPPLY	220-240v, 50hz

#### 6. Climate Control:

The climate in poultry house influences the well-being and health of humans as well as the birds. Climate can be defined as the sum of environmental factors which influence the functioning of man and animal. The following factors must be measured at animal level.

- Temperature
- Relative Humidity
- Air composition
- Air speed and air movement
- Light

#### **Specification**

Our AFEM poultry climate control system that controls and improves poultry house environment. Through data collection and processing, the system automatically controls the temperature, humidity, vertical fan, horizontal fan, roof fan, small ventilation window, wetted pad, air inlet, light, static pressure, and more inside the poultry house.

The poultry climate control system can guarantee the best suitable temperature and humidity to meet the needs of poultry growth, maximizing the potential of poultry production, while reducing the stress of the flocks caused by untimely manual adjustment.

AFEM poultry climate control system is mainly composed of ventilation cooling system, heating and humidification system, lighting system and other poultry house controllers.

## **Technical Data:**

- Operating voltage 380-44vac 3 phase
- 7 stage fan and extendable fan output
- Single stage pump and extendable output
- Single stage heater and extendable output
- Accurate sensor PT100
- Alarm indicator
- User-Friendly



## **Poultry House:**

AFEM can offer the below poultry house sizes with full accessories

MODEL	SIZE
AFPH1	100MX12M
AFPH2	80MX12M
AFPH3	60MX12M
AFPH4	50MX12M
AFPH5	40MX9M
AFPH6	36MX6M



All photographs, measurements, and descriptions are provided without engagement. We reserve the right to make modifications at any time

Adham Farm Equipment Manufacturing
T +971 4 258 2125 - F +971 4 258 2124
info@adhamfarm.com - www.adhamfarm.com