# **AVIARIES**







# TECNO: THE SOLUTION AT HAND.

**Competence, flexibility and tangibility**: these are values that we believe in, the distinctive features that have made Tecno one of the most widely known firms at global level in the sector of poultry equipment.

A story that began more than 40 years ago and is evolving day by day, thanks to the collaboration of a strong unified work team but above all thanks to the results and objectives that we have been able to achieve. **All over the world**.

**Innovation** and **technical research** continue to show us the best way to overcome with success all the challenges presented to us by the market, but above all to give a precise reply to the various requests and following discussions with customers with whom we work side by side.

Because at Tecno, **consultation**, **helpfulness**, **professionalism** and **preparation** are not just promises. They are the strongest foundations for constructing a long-lasting relationship.

### **AVIARY**

Tecno alternative systems include a range of products in different sizes, for optimising the available space and volume of the poultry farm.

**Advantages:** the system allows a greater rearing density and facilitates the movement of the birds on the various levels. The aviary, equipped with cleaning belts, allows greater hygiene and bird well-being, ensuring a high production level and a lower cost.



#### **AVIARY 450**

The aviary system 450, developed from the concept of free-range rearing, is characterised by a symmetrical structure composed of overlapping and offset rearing levels; the particular feature of this system lies in the presence of continuous, overlapping nests, with a centralised bird ejection mechanism and a 40 cm perforated belt for collecting eggs.

The ease of movement of the laying hens within the aviary allows access to the feeding, drinking and laying areas, ensuring a uniform distribution of the birds in the system. The aviary has transverse and lengthwise closures for dividing the birds into small groups; it also has corridors for inspection and monitoring of the rearing areas.

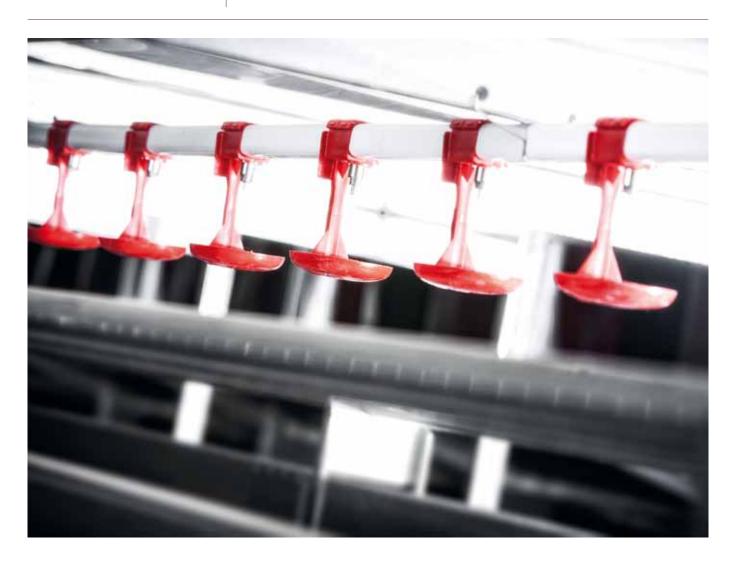
#### AVIARY 100 200 126+126

The aviaries 100 – 200 – 126+126 are derived from the Tecno experience with cage systems; the perogative of the aviaries, on overlapping levels, is to maintain the technical characteristics of the cage system, but to allow the laying hens to make use of the rows and tiers, including the floor, with total freedom of movement. The position of the nests facing the corridor facilitates inspection and egg collection. Each level is characterised by the presence of a feeding chain, drinking line, lengthwise perches, nests, egg collecting and cleaning belt.





### **Drinkers**

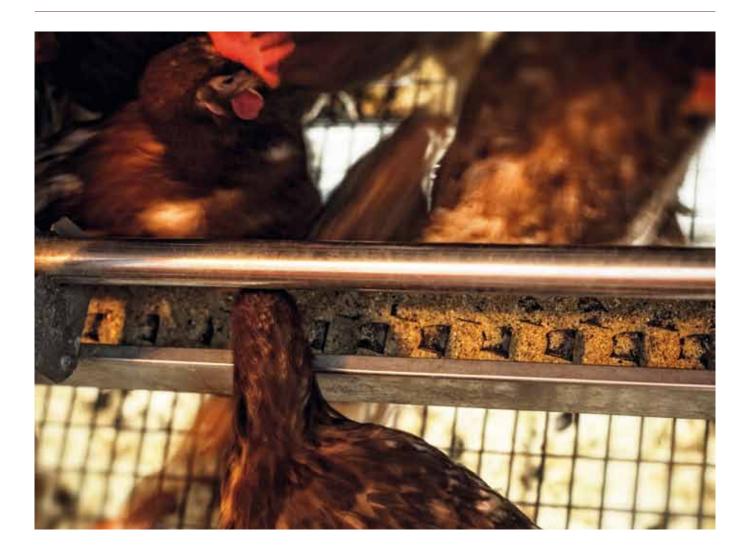


### NIPPLE

The drinking system is of the "Nipple" type, with drip-saving cup.
An adequate number is installed, depending on cell capacity.



# **Feeding**



### **FLAT CHAIN**

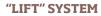
The feed is distributed by means of a flat chain with a return circuit. The system is driven by gear motors located at the head of the aviary, with tension and operation controlled by a MICROSWITCH.



### Egg Collection



> Egg Lift collection system - "Anaconda" chain



Egg collection by positioning the "ANACONDA" cross bar conveyor at each level. The speed of the belts can be adjusted according to the flow of eggs and the machine capacity.



>Niagara system with bars

### **NIAGARA SYSTEM WITH BARS**

Allows the eggs to be gathered from all levels simultaneously, optimising the times. The eggs arriving from the gathering belt pass to a drive transfer unit with bars, equipped with special conveyors that allow even distribution over the entire width of the Niagara belt. The drive transfer unit, equipped with a system of belt cleaning brushes allowing soft shell, broken or small eggs to fall between the bars and into collection boxes.

#### **NIAGARA SYSTEM WITH INTERMEDIATE STRIPS \***

Allows the eggs to be gathered from all levels simultaneously, optimising the times. The eggs arriving from the gathering belt pass to a drive unit with belts, equipped with special conveyors that allow even distribution over the entire width of the Niagara belt.





> Backside nest Aviary 450

>40 cm perforated belt for collecting eggs - Aviary 450

The belt speed of the various systems may be adjusted so as to adapt the flow of eggs to the capacity of the egg grader or packer.



### **Computerised** management







> Macronew

### **COMPUTERISED MANAGEMENT**

The following automations can be programmed by means of a computerised panel:

> cleaning manure belts (only when combined with Tds) > collecting eggs with the Anaconda, Lift or Niagara system > lighting > ventilation > gradual opening of windows > adjustment of the flow of feed and dosing of grit > constant weighing of feed (to measure daily consumption and the amount remaining in the silo) > measurement of water flow > alarm management.

It is also possible to record the quantity of eggs produced, for each tier and each shed.

Management and global control of the company, with graphs showing consumption, mortality and production



### **Climate control**



> Pad Cooling



Cellulose panels with high absorbency and evaporation efficiency. The panels can be installed against the wall or on the outside of the tunnel/non-wind hood structure. By means of windows installed in the bottom, this structure allows adjustment of summer and winter ventilation.

#### **TECNO FOG SYSTEM**

System of high pressure misting nozzles, located in the area inside the non-wind hood, with the effect of reducing the incoming temperature.



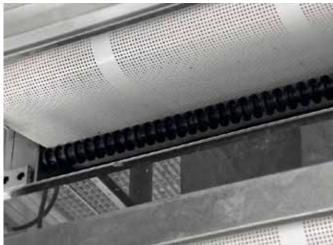
### **WINDOWS**

Rigid panels covered with pre-painted plate, insulated with self-extinguishing polyurethane foam. Available in different opening configurations, they allow uniform distribution of the air throughout the shed, ensuring animal well-being in every period of the year.



### Removal, drying and storage of chicken manure









>Storage on removal cart

### **REMOVING CHICKEN MANURE**

System of double polypropylene belts, motor-driven, with heads and counter-heads on 3-4 levels.

### TDS

System consisting of a tunnel on one side of the building, with conveyor belts arranged on several levels.

The manure is distributed in cascade mode onto the belts with micro-perforations, where it is dried by the hot air extracted from the shed which is conveyed into the "compression chamber" and directed uniformly onto the belts loaded with manure.

The manure removal times, belt operation and ventilation are controlled by a computerised system.





### **Sheds**



### **SHED STRUCTURE**

Sheds with a hot-galvanised, electro-welded and bolted metal bearing structure. Walls and roof made of MONOWALL rigid panels covered with a sheet of galvanised and painted plate, with insulation by means of self-extinguishing polyurethane foam; alternatively, covering with rock wool and a roofing sheet. The design follows the regulations in force regarding zone and height.









> 90° bends

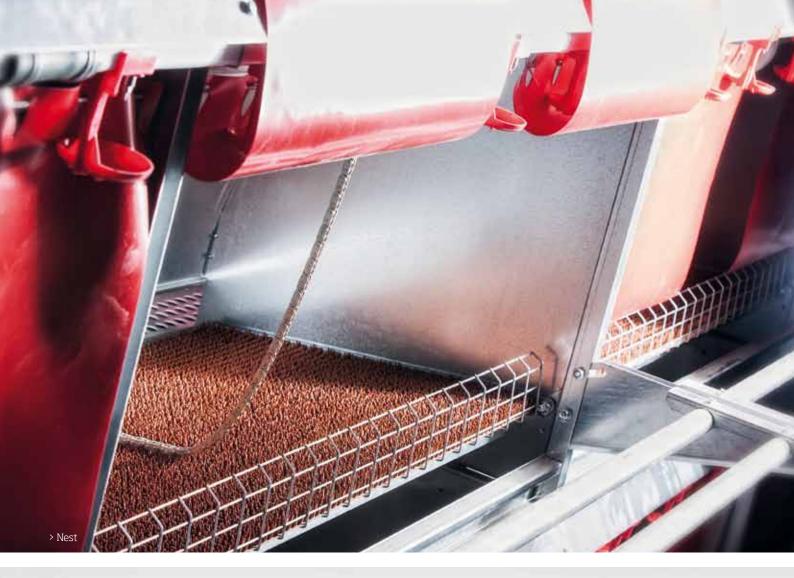
### **VENTILATION**

Self-cleaning high-capacity air extractors, made of galvanised steel plate. System of galvanised steel slide gates, completely hermetic when ventilation is off.

### **SILO**

Silo in galvanised plate with anti-corrosion treatment, with possibility of loading from the top, with a pneumatic external system, or with an auger and hopper on the ground. The silo may be provided with load cells having MODBUS outputs with impulse/kg for data centralisation. The feed distribution system from the silo to the housing may be accomplished with a spiral or a chain with disks.











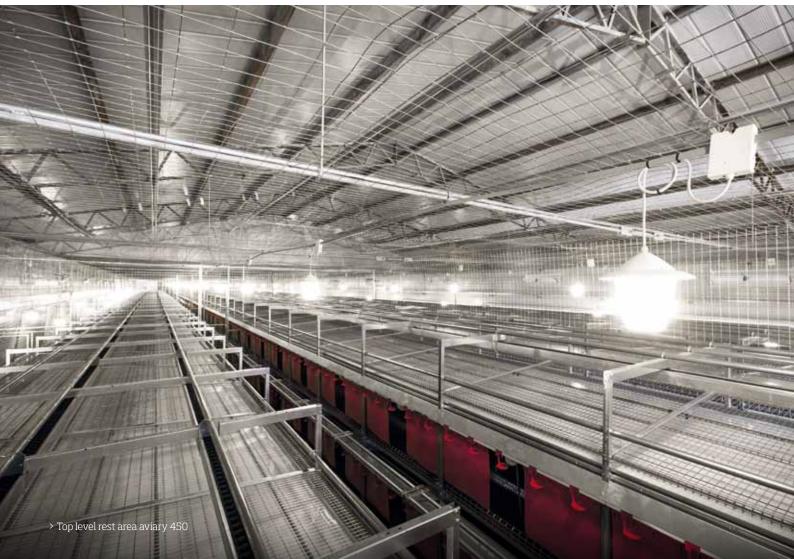












# BRAND STATEMENT

We know the importance of being able to read and write.

### Reading the market's signals,

to surprise it with solutions springing from the determination, ability and skilful far-sightedness that has urged us to have no limits. And to think big.

Writing the pages of a captivating story, filled with people, relationships and the desire to grow.

A story that makes us look to the future with the enthusiasm of the young and the experience of more mature generations.

But above all we know **the importance of listening to our heart,** to succeed in interpreting the desires of people like you, who have chosen us to share their values, views and objectives.

Because we know how to give a face to a commercial negotiation, a human voice to a project or a configuration, and because we want to earn your trust with results rather than with promises.

We can only be firm, sincere and direct. Like a handshake.



