



KAUSHIK AGRITECH (INDIA) PRIVATE LIMITED

### For floor breeding

Sperotto's high quality prefabricated poultry houses always grant the best environmental conditions for floor breeding. We can provide the clients with different solutions, from the simplest to the most complex ones. Our prefabricated sheds are very easy and fast to be assembled. A shed sizing m 14x120 for instance, can be completely mounted in about20 days, by a local team of 6 skilled workers leaded by a supervisor of ours.

Sperotto prefabricated poultry houses are made from steel structures, protected from corrosion as follows:

 IPE or ILS Columns and Beams: HOT DIP GALVANIZATED with average zinc deposition equal to 500 gr./m². Hot Dip galvanizing is the process of coating steel with a thin zinc layer, by passing the steel through a molten bath of zinc at a temperature of around 460 °C. With



Hot Dip Galvanizing every millimetre of the steel it touches is galvanized, which means the hot dip galvanizing process reaches areas inaccessible to other similar processes for preventing rusting and corrosion, protecting the steel below from the elements. Coating will be uniform and adherent at all places. The galvanized Coating of IPE or ILS columns and beams galvanized with Hot Dip Galvanizing Process will never shrink or crack because it is metallurgically bonded to the steel it protects. It also offers superior resistance to abrasion and water.

- Purlins: Sendzimir galvanisation with zinc deposition on the two faces equal to 275 gr./m².
- Windbracings and accessories: Zendzimir galvanisation with zinc deposition on the two faces equal to 275 gr./m².
- All bolts and nuts are electro-zinc galvanised.

Therefore SPEROTTO steel structures, being hot dip galvanized, are protected from rust for lifetime.

Our poultry houses are always featured by a great insulation against cold and hot temperatures, because we only supply the best quality of polyurethane sandwich panels or mineral wool. A perfect insulation is very important both for cold and hot climates: in cold climates its function is primarily to help keep birds warm, while in hot climates its valuable function is to protect birds from heat stress caused by solar heat gain through roof. These protections are absolutely needed and are 100% granted by SPEROTTO poultry houses. We have the right typology of poultry house for any type of climatic condition.

SPEROTTO poultry houses are manufactured with great attention to every detail, and, thus, also offer a perfectly sealed environment. This ensures that, for instance, when it takes to ventilate the house, air only enters the breeding through the inlets. Actually, one of the common problems in ventilating houses that are poorly sealed, is low static pressure. This causes the incoming air to travel too slowly, which means cold heavy incoming air (especially in winter time) drops to the floor, dumping water vapour in the litter as it does so. If the house is not sealed well, air will enter the shed footers, around doors: it will cause poor flock performance and may even cause mortalities. Using SPEROTTO poultry houses, the farmer will avoid such kind of common and serious problems.

By our standard steel structures for poultry, PF, PFT, TSM and AVIEXPORT (that is a light steel structure for hot and temperate climates), we can supply poultry houses featured by:

- widths from m 10,0 up to m 24,0;
- snow loads from 30 kg/m² up to 400 kg/m²;
- height at eave up to m 10.

Sperotto poultry houses for floor breeding can be customised to meet the specific client's requirements. We can supply prefabricated sheds for poultry with or without ceiling (made by sandwich panels or galvanized steel sheets). The wall panels can be installed on the external side of steel columns or on their internal side, in order to get a complete smooth surface inside the breeding with the presence of a ceiling.

## **For Floor Breeding**











## For cage breeding

Sperotto high quality prefabricated poultry houses always grant the best environmental conditions for cage breeding. We can provide the clients with different solutions, from the simplest to the most complex ones. Our prefabricated sheds are very easy and fast to be assembled. A shed sizing m 14x120 for instance, can be completely mounted in about20 days, by a local team of 6 skilled workers leaded by a supervisor of ours.

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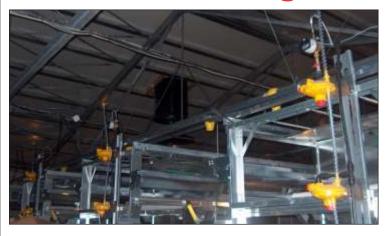
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# **For Floor Breeding**











## Free range and organic breeding

For free range and organic breeding, Sperotto offers its high quality prefabricated poultry houses for floor breeding. Free range and organic poultry production requires that the flock have access to the outside. Therefore our sheds are supplied with special outlets, which open at preset times, that allow the flock to go out, peck and scratch in external open spaces.

Moreover special air inlets are placed along the side walls, in order to let the system to work by natural ventilation as required by the international rules. An opening ridge helps the natural ventilation to be very effective.







## Rabbit housing for breeding

Rabbit housing, cages & equipment are an interesting field of work for Sperotto spa.

Rabbits are particularly sensitive to high temperatures. This is why Sperotto spa builds sheds & houses with high thermal insulation.

An efficient ventilation and cooling system guarantees the animal's wellbeing, leading to high productivity and low energy costs.

The cages are designed to accommodate the rabbit comfortably and are equipped with automated feeding adapted to their structure.







### Climate control systems for poultry

### **Ventilation systems**

Utmost attention is always given by SPEROTTO at ventilation systems (PHOTO GALLERY). When poultry shed ventilation is set up incorrectly, the systems can struggle to achieve the primary goals, and performance and health status of the flock will all suffer. So, ventilation systems in the Sperotto poultry houses are studied and designed to ensure a real wellness for the birds. Also considering the high flock density existing nowadays in the modern breedings, it is fundamental to provide the birds with the right ventilation, in order to get the highest productive levels from the breeding. Therefore the main purposes of our ventilation systems are:

- · removing the moisture produced by the birds;
- · cooling the animal's heat and providing them with the ideal temperatures and humidity levels;
- taking away the gas produced by the manure fermentation;
- oxygenating the breeding area ensuring an uniform air exchange;

TSPEROTTO ventilation system is managed by an electronic Climate Control Board, that grants anytime the needed temperatures, pressure and humidity levels to the breeding, by automatically operating the working of fans and air inlets' motoreducers. Sperotto offers state-of-the-art climate control boards, in cooperation with the best European manufacturers of these electronic components.

The design and set up of the ventilation system must take into account the external environment. Thus we offers different types of ventilation systems to our clients, according to the particular climatic conditions of their geographical regions:

#### **Tunnel ventilation**



#### **Cross ventilation**

With cross ventilation, the exhaust fans are located along one side wall, while the air inlets are placed along the opposite side wall. It is especially recommendable in poultry houses featured by a large width, and as alternative system and cheaper solution than chimney ventilation to get a good minimum ventilation in cold climates.



### **Chimney ventilation**

Particularly required in cold climates and during wintertime in the continental climates as a typology of minimum ventilation. This system is achieved by placing the chimney exhaust fans on the roof of shed; the air enters the breeding by the inlets located along both sides of the building. By a correct chimney ventilation, the cold air does not descend on the birds, with great benefit for their health and wellness.



#### **Combined ventilation**

It is a system where chimney ventilation (for minimum ventilation) and tunnel ventilation (for maximum ventilation) are combined together. It is indicated during transitional phase, when it is required a higher demand of air exchange than the one offered by chimney fans. It also permits to move from chimney ventilation to tunnel ventilation without considerable bad disturbs to the flock.



#### **Natural ventilation**

This economical system can be used in mild climates and it is required in free-range and organic poultry production. Sperotto prefabricated sheds suitable for natural ventilations have adjustable and fixed openings (air inlets, windows, opening ridge). A good air flow circulation is also achieved by using some hanging fans placed under the ceiling.

The cages are designed to accommodate the rabbit comfortably and are



### **Construction details**

### **Roof Covering**

Roof covering made by sandwich panels with polyurethane or mineral wool, with high thermal insulation, or by galvanised and painted steel sheet.



### **Ceiling**

Ceiling made by polyurethane sandwich panels, with high thermal insulation, or by galvanised and painted steel sheet.



## Ridge Opening

Ridge opening made in galvanised and painted steel sheet with insulating material inside. It is fixed in the main structure and it ensures an easy opening and closure of the ridge, for the natural ventilation of the house.



#### Walls

Walls made by sandwich panels with polyurethane or mineral wool to provide optimal thermal insulation.



#### **Construction details**

### **Windows**

Flap or sash windows made by transparent polycarbonate. Opening system can be automatic or manual.



## **Air Inlets**

Air inlets made from polyurethane sandwich panels, for maximum/summer ventilation. For minimum/winter ventilation, air inlets are made from polyurethane or PVC, with baffle for the adjustment of the air flow's direction, anti-bird net and accessories for the simultaneous opening.



#### **Doors**

Insulated doors with one or two leaves, made from sandwich panels and galvanized steel profiles or from aluminium profiles.

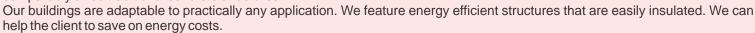


### Hatchery, slaughterhouse and feed mill

Being SPEROTTO able to manufacture prefabricated industrial buildings as well, our clients can also be supplied by us of any type of prefabricated building to be used as hatchery, slaughterhouse or even feed mill, of course

We can provide the clients with different solutions, from the simplest to the most complex ones. Every building is designed to meet the specific requirements of client project's location for rain, wind, snow and seismic coding. We provide each structure with stamped, engineer certified drawings. Additionally, our customers can rely on the expertise of our professional customer service department over the serviceable life of their building.

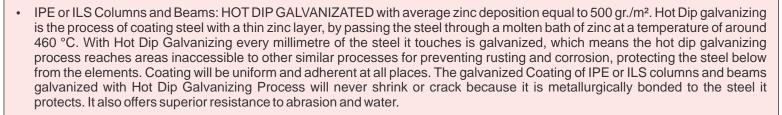
We can let the client to save time and money compared to a conventional structure of similar size. Our construction takes about half the time of comparably sized traditional concrete structures.



Sperotto prefabricated buildings are expandable. If client's business is going to grow in the near future we can help.

We will ship your building efficiently and with the utmost care. Our service department can handle any delivery...





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## Pan feeding system for broilers and pullets

Long experience gained in poultry farming equipment sector and close collaboration with poultry farmers has led to the creation of a wide range of feeding systems.

Strong and ergonomic, CIP allows easy access to feed right from the first days.

A revolutionary device run by a central winch, covered by a worldwide patent, permits to adjust the feed level simultaneously in all the feeders. This system ensures uniform distribution of fresh feed and prevents feed waste during the different stages of breeding process. The pan feeder is made of special non-toxic, shockproof and acid-resistant plastic.

Pan feeders are placed along the feed distribution pipe every cm 75 or 100 from each other. The maximum length for the feeding line is m 150.



The new CIP FLEX: surely the best feeding system for broilers in cage! Cip Flex includes all CIP features by also including the centralised device as well as our new special telescopic pan. Our telescope pan varies from a height of 50 mm in the "flat" at a height of 84.5 mm in the "high": thanks to the lift system of the line, it will be possible to adapt the depth of the plate at the age of the animal, so as to facilitate smooth feeding without feed waste!

The new FEEDY: our strong pan feeder with no. 12 feed adjustments (manual way) in order to get a better feeding control. The galvanised pipes 1,2 mm thickness and the hardened steel spiral guarantee the best performance. Available also with the telescopic pan.

The end pan feeder is supplied with n. 2 electric pressure switches: one placed under the pan to stop feed distribution when it has got to the required level, and one for emergency installed at the end of feed distribution pipe. The first pressure switch can also be substituted by a capacitive probe.









## Pan feeding system for broilers and pullets











## Pan feeding system for breeders and layers

In order to get a high percentage of egg deposition, it is very important that hens and breeders have a correct feeding, receiving all of them the required amount of feed.

BB14 is the Sperotto pan feeding system for female breeders and laying hens and let the farmer to achieve all those goals. Strong and ergonomic, BB14 allows easy access to hens after rearing phase.

The pan feeder BB14 is made of special non-toxic, shockproof and acid-resistant plastic. 14 feeding spaces per pan allows a high stocking density. Feed level can be adjusted manually in a very simple way. In the breeder houses, males cannot access the feed thanks to the proper grill installed on BB14. It can be installed both on pipes with spiral conveying system and pipes with disk chain conveying system. With this last mentioned system, pipes for feed distribution can be supplied with mm 60 diameter, in order to get a very fast feed distribution (45 m/min - 2.000 kg/h).







### Pan feeding system for male breeders

FE is the Sperotto pan feeding system for male breeders. It lets the males to have a separated feeding, providing all of them with the required quantity of feed. This means highest fertility rates. By pulling up the FE pan feeding line at the right height, female breeders are unable to access the feed into FE, so it is possible to use different feed mixes for hens and males.

The pan feeder FE is made of special non-toxic, shockproof and acidresistant plastic. It is equipped with a six-arm grill. Feed level can be adjusted manually in a very simple way. Males cannot access the fees thanks to a proper grill.



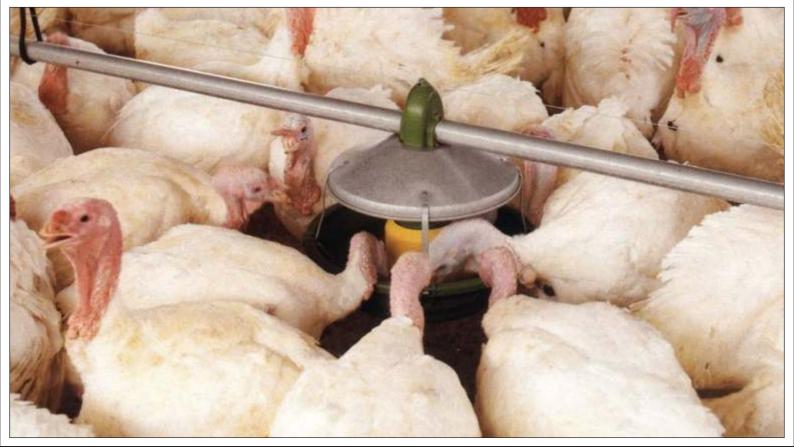
### Pan feeding system for turkeys

The automatic SPEROTTO turkey binds sound material with versatility in its usage. The pan feeder is made from stainless steel and special plastic, and is shock-resistant and detergent acid proof.

Thanks to a special hooking mechanism the lowered pan for young turkeys is easily replaceable with the larger pan for the fattening period.

An intelligent solution for perfecting modern breeding efficiency. Pan feeders are placed along the feed distribution pipe every cm 150, 200 or 250 from each other. The maximum length for the PINT 2000 feeding line is m 150.





## Flat chain feeding system

The NEW SPEROTTO "FLAT CHAIN" system is suitable for pullets, for female breeders and laying hens.

The feed hopper is available in different sizes and it is equipped with a feed return wheel preventing

#### spillage of feed.

The independent direct drive lets the system to be adapted to any location inside the poultry house.

Chain speed can be 18 or 36 m/min, so that this system is very useful when feed rationing is required.

The feed through is available in two variants: normal and no-waste (with higher sides).









## Collective nests with automatic egg collection

SPEROTTO high quality community nests are available with two side collecting belts or one central collective belt.

They are made up of modules. Each module's size is cm 230 x 160 and features 4 nests holes designed to host hens. Each nest hole features waterproof painted wooden partitions, translucent PVC internal walls, galvanised steel sheet roof with air intakes and anti-dwell upper profile, plastic sheet curtains, 7 watt bird-calling light bulb.

The first class wooden partitions - 18 mm thick - are far better than the steel ones because they give the bird the best environment for laying eggs. Wood is longer-lasting and rust-free. It doesn't get cold in winter and doesn't get warm in the summer, reducing to the minimum escapes from the nest-holes due to nasty conditions.



The nest bottom is completely swinging by means of racks, allowing for the complete closure of the automatic nests, this brings two main advantages: during the night, when the automatic nests are closed and the bottoms are in vertical position, the day's filth can pour down allowing for a cleaner overall environment.

The nest bottom is made of a galvanised and powder-coated steel wire mesh and covered with natural rubber or special plastic pad, that gives comfort, and moreover they can be cleaned and washed easily.

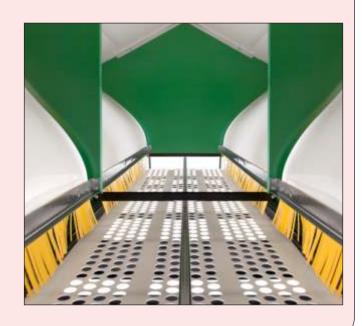
The bearing structure is made of a galvanised and powder-coated steel frame with stainless steel legs.

A galvanised steel wire-mesh is fixed under the plastic grating, in order to prevent the birds from getting under the nests. Once the eggs are laid, they gently roll out of the nest holes onto the lateral conveying belts (VIDEO), expressly perforated to allow proper cleanliness and ventilation to the eggs. From there, they are moved to the collecting table located in the service room.

The conveying action is ensured by an electric motoreducer complete with speed variator, so that the conveying speed can be adjusted to the number of eggs and to the operator's needs. The general switchboard, to be located adjacent to the collecting table in the service room, automatically controls all the operations.

By our collective automatic nests and by our breeding systems, we have been observing a percentage of undamaged and clean eggs (good hatching or table eggs) equal to 98%. The remaining 2% is due to: 0,7% of eggs brooded out of nests; 0,6% of broken eggs; 0,7% others reasons. Our clients know that this is a great result. Surely the breeder has a leading role to get this result, but our automatic collective nests can make a difference.

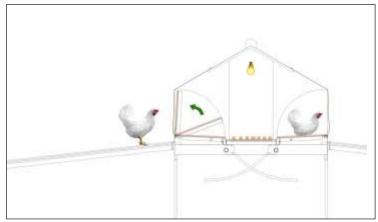




## Collective nests with automatic egg collection











## Nipple drinking systems

SPEROTTO supplies its clients the best quality of nipple drinking system. Easily adjustable in height, nipple drinking system ensures a continuous waste-free water supply according to the animal's needs.









### **Bell drinkers**

SPEROTTO manufactures its own lines of bell drinkers suitable for broilers, young turkeys, adult turkeys, ducks, guinea fowls. They are made from special non-toxic, shockproof and acid-resistant plastic.





#### PREFABRICATED SHEDS FOR LIVESTOCK

Sperotto can provide the clients with different types of prefabricated sheds for livestock, from the simplest to the most complex ones, of any dimension.

Our prefabricated sheds are manufactured with great attention to every detail and are very easy and fast to be assembled.

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## Cowsheds

Cowsheds builders, cattle stall and tie stalls for cows









## Pig sheds

Pig shelter plans, pig housing design systems

Sperotto spa pigs housing & sheds are built using state-ofthe-art farming technology so that it is possible to achieve exceptional productivity levels.

In the pig sector Sperotto spa manufactures sheds & houses with efficient environmental controls to suit the animals and simplify management.









## **Sheep sheds**

Goat housing plans, sheep housing, sheep sheds









## **Stables for horses**

Building stables for horses, Horse riding









### **Shelters**

warehouses for agricultural equipment shelters











## KAUSHIK AGRITECH (INDIA) PRIVATE LIMITED

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