PRODUCT CHTHLOG

FEEDING AND VENTILATION SYSTEMS



asserva AUTOMATISMES EN ÉLEVAGE

digital farm_



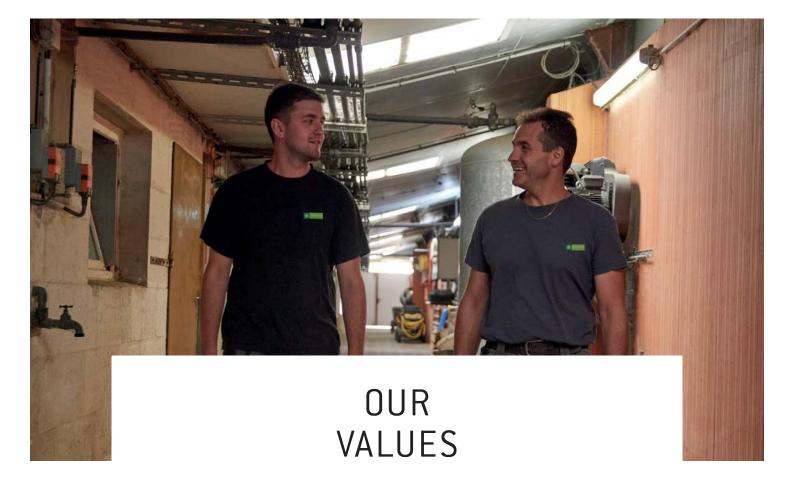


Our greatest satisfaction? Your confidence and loyalty!

Since 1978, Asserva designs, develops, manufactures, installs and provides after-sales services for innovative automatic systems, mainly for swine farms.

Two research and development departments - electronics and mechanics - allows Asserva to develop state-of-the-art equipments, that function efficiently and reliably. Asserva helps to improve your working conditions and your zootechnical performances, to strengthen your competitiveness.

Asserva is always working with you to understand, translate and anticipate you needs, and optimize the management of your farm.





Asserva's know-how is recognized by the industry, and makes it one of the major players in the developing sector of the digital farm.



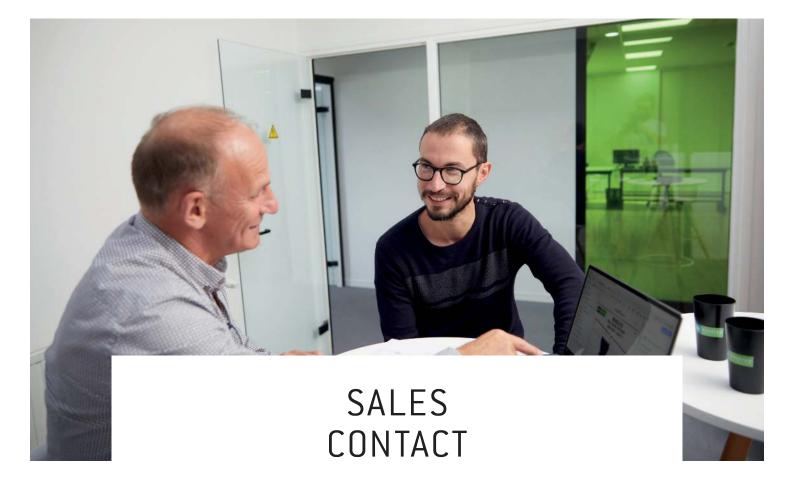
Our constant focus on ergonomy and efficiency allows us to manage all the technical data of your farm and contribute to adapt our technology to your specifications.



In your farm, the efficiency must be optimised at every level: technical, zootechnical, economic, financial and human. Offering efficiency to our customers is our priority.



Asserva had always invest all its energy in research, creation and development of innovative concepts. This is the expression of our commitment to our customers.



NORTH AMERICA

Xavier CORDON

Sales Director

Phone: +33 (0)6 07 63 78 64

xcordon@asserva.fr

SPAIN - LATINE AMERICA

Reynaldo BROUWER

Export sales manager

Phone: +34 666 533 271 rbrouwer@asserva.fr

EASTERN & WESTERN EUROPE - ASIA

Valentin BOUVIER

General Export manager

Phone: +33 (0)6 72 20 53 00

vbouvier@asserva.fr







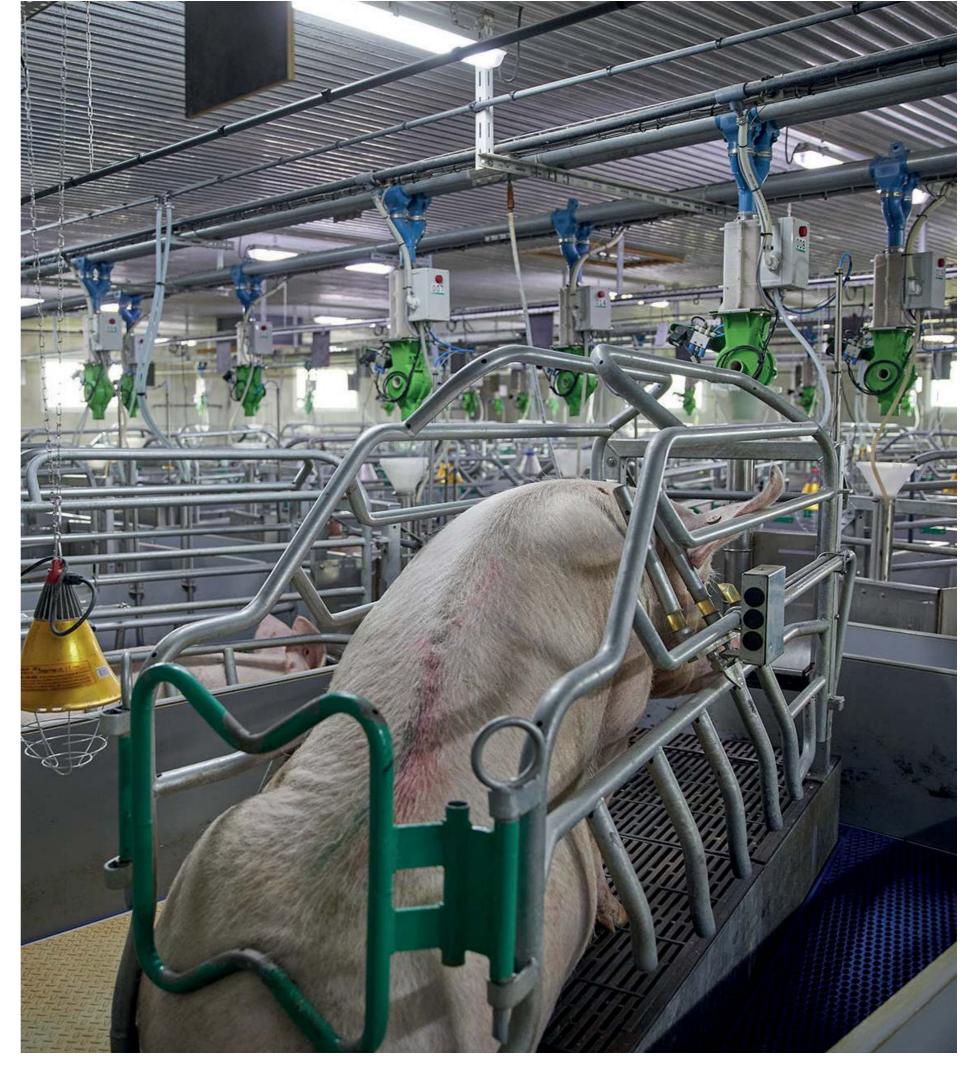
TABLE OF CONTENTS

Feeding and control systems

SMC - Sow Meal Control	8
Selfifeeder GES	10
Materneo	12
Pig Insight	14
Multifeeder	16
Optimat	18
On-farm feed mills	20
Pneumatic transfert	22
Ordisat	24
Standard dry feeding	26
Weighing systems	27
Selfifeeder DNA	28
Precision feeding system	29

Ventilation

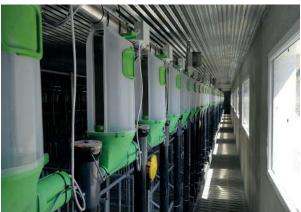
Digiclim NG	32
Centralized ventilation	34
Economic ventilation	3
Printalys	36
Filtranet	38



PRODUCT CATALOGUE asserva

SMC - SOW MEAL CONTROL







CONCEPT

Efficient and clever autonomous feeding system for sows in individual crate

The SMC - for Sow Meal Control - is a smart dispenser created to increase the sow's feed intake during insemination, gestation and farrowing time. Its connected stirrer and NFC box allows to follow individually the feed consumption, sow per sow.

The SMC smart dispenser allows to create feeding plans, distribution times and to modulatefeed quantities according to consumption. The sow requests the feed by itself, with the stirrer that distributes small doses, according to ith rhythm.

A proprietary Asserva smartphone app displays all the management and consumption historics, available directly in front of the sows by touching the dispenser, or remotely on the PC software.

In option : The SMC smart dispenser can be equipped with an unique patented system to improve the feed drop (meal, flour). The SMC smart dispenser can be install to distribute 2 type of feeds.





















INDIVIDUAL FEEDING SYSTEM



Manage and check individually the feed distribution.



asy to install and to use in any type of existing crate!



Easy control of the feed consumption, according to the sow needs.



Increase piglets number and weight at weaning!



Increase the body condition of the sow.



Centralization of the data and the control available on PC. Compatible with the main data management softwares.

asserva 9

SELFIFEEDER GES







CONCEPT

A feeding solution for gestating sows in group with controlled access and individualized feeding

In 2008, Asserva was the first company to develop an innovative and alternative solution to manage the feeding of the gestating sows in group.

Unlike the traditionnal ESF stations, the Selfifeeder GES comes with more feed stations available, reducing the number of sows per station. It reduces the waiting times, the stress and makes the sows easier to manage.

How does it work? A RFID antenna recognizes the sow eartag once it enters the station. Two automatic doors isolates the sow if it has the right to eat, after checking its feeding plan and consumption historic. Two unique sensors, at the bottom of the trough, manages the feed distribution, dispensing small doses at the sow rhythm, until the daily allowance has been reached. The distribution is adapted for each sow, without any feed stolen or wasted!







Feed wheel dispenser and Vitadose supplement dispenser

The wheel feed dispenser runs on compressed air. There is no motor, so very little maintenance. It has a 5 grams precision. The Vitadose dispenser can dispense supplementation in the trough, according to the sow individual parameters set on the computer. These dispensers mean precision and reliability!

Feeding control

The trough is fitted with TIT system (Trough Inspection Technology). It dispenses the next dose of feed only if the previous dose has been eaten: no waste, clean troughs and less frequent cleaning required.

Better management with highperformance data base

The system centralises all data from the central workstation, and shares information about the herd. Communication wit the system if fast, easy to understand and to manage. Selfifeeder GES can also be controlled with a smartphone and the Asserva app.



SOLUTION FOR GESTATING SOWS IN GROUP



The Selfifeeder GES manages individual sows.



Eliminates competition at feeding time.



Optimized usage of space (-20%).



The Selfifeeder GES is easy to install with few moving parts.



Lower installation costs.



It tailors portions to suit each sow



Full control and checking available on smartphone and tablet.

MATERNEO







CONCEPT

Smart feeding and watering system for farrowing sows

With a pneumatic dispenser which measure feed with a wheel, each portion is delivered in small doses (100 to 200g) according to the appetite and the ingestion rhythm of the animal. The TIT System (Trough Inspection Technology) in the bottom the trough allows to distribute the feed when the system detects that the trough is empty.

The sows eat at their own pace and appetite according to their feeding curve - with no wasted feed. Each dose is delivered with a water dose. Between the meals, water distribution curves are programmable.

The daily water portion is also delivered in small quantities. Thus, the sow has always fresh water in the trough. These elements encourage the sow consumption for a better lactation.

Global concept for farrowing management, Materneo can even be connected to the silos, to control the feed supply, and to special cameras that can detect the farrowing.







Better feeding management for farrowing sows

The wheeled feed dispenser with actuator guarantees precision and reduces maintenance. The warning light on each dispenser allows to easily identify the sows that have not eaten the amount of feed set by the farmer.

Feed and water control

The trough is fitted with TIT system (Trough Inspection Technology). It dispenses the next dose of feed only if the previous dose has been eaten: no waste, clean troughs and less frequent cleaning required.

Better management with high-performance data base

The entire Materneo system can be connected to a smartphone or tablet via Internet. The farrowing rooms can easily be monitored remotely. Thanks to the data from the other Asserva systems, the sow consumption can be followed during its whole life.



FARROWING FEEDING AND WATERING SYSTEM



Personalized feed and water distribution, with precise doses.



Individual and evolutive feeding plans following the needs of each sow.



No feed waste (ave until 800 gr per sow per day).



Programmable and evolutive dilution rate.



Individual water distribution between feed meals.



Materneo app available to control and to check the system via smartphone.

PIG INSIGHT







CONCEPT

A unique data-tracking system to record feed, water consumption and growth!

Pig Insight is an complete system to track data regarding the animal feed and water consumption, and their growth over the days. In option, two types of feed can be distributed according the the pig RFID eartag.

It is composed of connected feeders and drinkers, with a special weighing system adapted on the drinker. All the animals are identified with RFID eartags, and recognized when they go to eat or drink. The PC software centralizes all the data in real time.

Easy to install and to use, complete, Pig Insight is an excellent tool for experimental farms, or for test pens. All the data generated by the system is fully accessible by the user, on the software, or on XLS or SQL files.

Pig Insight is available for piglets in farrowing crates, weaning and finishing pigs, for a complete traceability during their whole life.







Individual tracking

Pig Insight allows to individually tracks the consumption data of the animals, and to create full data about it.

Individual control of feeding and watering consumption

An individual monitoring of the animal's consumption helps to control the splitting and the feed quantity distributed over the day, while maintaining and ad libitum distribution. Pig Insight allow to optimize the most important expense item during the post-weaning phase.

Database allow a complete animals traceability

The Pig Insight database contrains all the treatments done per animal. Meat of large number of animals can be guaranteed without antibiotics and even without any treatment, thanks to a traceability sheet.



INDIVIDUAL TRACKING OF FEED, WATER CONSUMPTION, AND GROWTH



Individual data-tracking of the animals from birth to slaughter



Medication profile available for the animals



Consumption of feed and water controlled for each pig



Full access to the raw database

asserva 15

MULTIFEEDER







CONCEPT

The liquid feeding system for all the physiological stages

Since 1978, Asserva designs and manufactures liquid feeding systems. Result of this long experience, the Multifeeder is a PLC whose base can be easily upgraded.

Compatible with satellites, elements are added to your installation to extend the Multifeeder according to the size or technical level of your breeding. Our engineers develop programs that combine advanced technology with great ease of use.

The different PLCs communicate with each other and can be controlled remotely, via tablet or smartphone with a Wi-Fi network.

Asserva offers several types of tanks to meet the specificities of your farm: stainless steel, polyester or rotomoulded to ensure the hygiene and quality of the feed. They are equipped with a slow stainless steel mixer and a frequency converter that takes into account the filling rate of the tank.



The formula separation tank

The formula separation tank manages different formula in a single pipeline. Water meals can be distributed between the feed distributions.



Distribution feed

This technique weighs the pushing water before preparing the amount of liquid feed to be distributed. At the end of the cycle, the distribution calls for pushing water and the flow is instantaneous.

Tank capacity Indicative table of tank capacities of liquid feed system. Rotomouled tank Polyester tank Stainless steel tank Total volume (L) 1200 to 3450 2400 to 3400 1500 to 32000 Usable Volume (L) 1100 to 3000 2000 to 2800 1200 to 28000

AUTOMATIC LIQUID FEEDING SYSTEM



Liquid feed distribution in the rooms, with sensors in option for better precision.



Evolutive feeding plan available and meal separation system.



Several type of tanks available (stainless steel, fiberglass, rotomolded).



The liquid feeding system adapts to the pig needs.



Network connectable controller (remote management). Data transfer on tablets or smartphone.

OPTIMAT





CONCEPT

The Asserva multiphase concept!

Mechanical or pneumatic, with or without mix, for dry or moist feed, multiphase dry feed concept can adapt to different needs of distribution and different pattern of your farm. The goal is to boost the growth performances and consumption's index of your animals and to optimize the feeding cost.

To summarize, Optimat distributed a personalized quantity of feed for each feeder, defined and weighed in accordance with the feeding plan.

The system prepares and personalizes the daily portion at the feeder in one or more meals. To do this, two tanks are installed with the multiphase system. The first tank weighs (and mixes in option) and the second tank distributes.

This process allows to save time compared to a classical distribution, to follow the needs of the animals, and to distribute fresh feed.

Pneumatic conveying



8-ways valves inside the rooms.



Mechanical conveying

Drive unit at the start of optimat automation.



Cyclone to dispense the feed in the troughs.



Actuaded valve on feeding chains.



Distribution valve with the AWI® injector (Automatic Water Injection).



Dry distribution in the rooms with chain disk.



CONTROL AND FEED PERFORMANCE



Feed quantity personnalized at the feeder



Quantities which oscillate From 5 to 50 kg per preparation



Effective management of multiphase feeding plan..



Daily portions can be sequenced in several meals.



Transition between several feeds



Adaptable to all types of farm buildings.

ON-FARM FEED MILLS







CONCEPT

The solution to store and use the cereals produced on your farm!

Since 1978, Asserva designs and installs on-farm feed mills. Systems that today allow breeders to better control their feed costs while adapting the diet of animals according to their specific needs.

The feed mill unit is offered in two versions, mechanical or pneumatic. The traditional mechanical version allows small structures to automatize their production at a lower cost.

The pneumatic version allows a flexibility and a very easy adaptation. The extensions are then scalable and efficient. The pneumatic version allows direct distribution on weaning and finishing units.



Hydrensil

Asserva designed the Hydrensil system for crushed and stored corn in corridor silo. A hydraulic network between the liquid feeding system and the Hydrensil conveys water laden with corn. A reserve allows to store the corn for the day. A nozzle installed at the base of the Hydrensil tank de-silicates the corn and sends it back to the liquid feeding tank that weighs the amount taken.



Pneumatic conveying

Pneumatic distribution to weaning or fattening sections can be used to transport granulated feed, meal, and damp corn-based formula. The pneumatic distribution system may be an extension to the feed production equipment, or a specialised independent facility. The system's flexibility means that dry feed can be distributed along very long buildings, or buildings located some distance away. The new switches with cylinder valves lower maintenance costs.



ON-FARM FEED MILLS



Feed autonomy on farm.



Mineral storage and indoor or outdoor storage.



Valuation of the feed produced on the farm.



Reduced impact of grain price volatility.



Production of 70 to 80% of the needs of the farm.



Daily production is programmed on a computer.

asserva 21

PNEUMATIC CONVEYING







CONCEPT

A convenient way for automatic feed conveying

Asserva developped the system to increase the sanitary conditions & to save time compare to manual transfer with truck. With main silos in front of the farm entry, the concept permits to deliver automatically each building silo avoiding the entry of external truck.

Pneumatic distribution to weaning or fattening pigs can be used to transport granulated feed, meal, and damp-corn-based formula.

The system may be an extension to the feed production equipment, or a specialised independent facility.

The system's flexibility means that dry feed can be distributed along very long buildings, or buildings located some distance away. The new switches with cylinder valves lower maintenance costs.





PNEUMATIC TRANSFER IN FARM



Keep your farm clean & in High sanitary conditions.



High flow and transfer efficiency.



Utilization of the same transfer circuit for different typ of feed without any mix or contamination possible.



No dust created.



System adapted in any type of silo in new or existing farm.



Completely automatic.

ORDISAT







CONCEPT

Sorting Station with animals weighing. Effective solution to manage fattening pigs in large group

Designed to manage fattening pigs in large group, the Ordisat system enables to measure the weight of the pigs each time they pass through the scale. The controller on the scale rapidly detects and stores the weight of each animal as it moves to the right feeding area.

The station will send the animal to the right feeding space (dry or wet) according to their weight (growers and finishers).

At the end of the batch, Ordisat automatically sorts the pigs that reached the weight requirements defined by slaughterhouse.

Exemple for 4000 fattening places	Cleaning time	Selection time	Control time
Traditionnal system	8h	4h	10h
Ordisat system	3 h	1 h	5 h
Ordisat system	5h per week save more than 50%	3h per week save more than 70%	5h per week save more than 50%



SORTING STATION FOR FATTENING PIGS



Sorts Automatically the animal's ready for slaughterhouse.



Daily growth monitoring.



Savings on time and labour (wash rooms).



Savings building area to 10% vs Traditional. (Streamline of living space.)



Increased and centralized surveillance of animal growth.

asserva 25

DRY FEEDING







CONCEPT

Asserva brings different solutions and effective equipment for dry feeding of pigs

Adapted to all stages of breeding (Insemination, gestation, farrowing, post-weaning, fattening), the range developed by Asserva in close partnership with different manufacturers to offer several options in terms of:

- Volumetric dispenser with ball release or pallet with access hatch.
- Chain 050 or 063.
- Flexible auger 050, 063 or 090.
- Stainless steel drive unit.
- Galvanized or plastic elbows.
- Box in galvanized or stainless steel silo.
- Galvanized, PVC or stainless steel tube.
- Manual or automatic valves.

WEIGHING SYSTEM







CONCEPT

Dynamic or static control of the animal weight

For several years, Asserva has an expertize in animal weighing system. In Fattening, Farrowing or in post weaning room, the company proposes solutions to measure the animal growth performance.

A dynamic version permits to weigh the animal without need to stop it. The static version makes the weighing of an entire pen easier.

The last system mobile, weight each animal in the pen. It's possible to add an ear tags reading system and to add the color marking system to individualize the information.

For specific experimentations, Asserva can design a weighing system according to a functional specification.

SELFIFEEDER DNA







CONCEPT

Automatic feeding system with pig growth and individual consumption control

The new Asserva test station, Selfifeeder DNA, is designed and conceived for farmers and genetic companies to analyze precisely the feed behaviour and growth of each animal. The Selfifeeder DNA is used for animals from 25 to 130 kg. Up to 15 animals can be fed by one station, in ad-libitum. Thanks to the RFID detection system, the animal is identified as soon as he enters inside the station. His weight, feed consumption and feed behaviour are precisely measured. The data of each visit of each animal are automatically transfered on the PC computer. In real time, the farmer can have access to the stations and their historics. All the files can be easily sent to an internal network or an external cloud.

For the farmer

- Easy learning time.
- Easy and quick daily management, on the PC software or through the smartphone app.
- Minimum maintenance: only 1 electric motor, no sensor, no pneumatic system required.
- Automatic weight calibration and update.

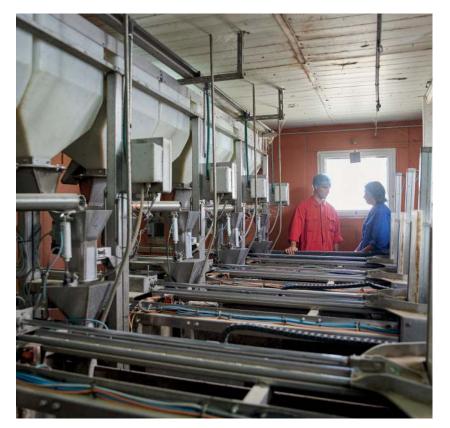
For The Data Manager

Direct remote access to the software installed on farm Daily tracking of results.

- number of visits, and time per visit
- daily consumption
- average daily weight & daily gain.

28

PRECISION FEEDING SYSTEM







CONCEPT

Dynamic or static control of the animal weight

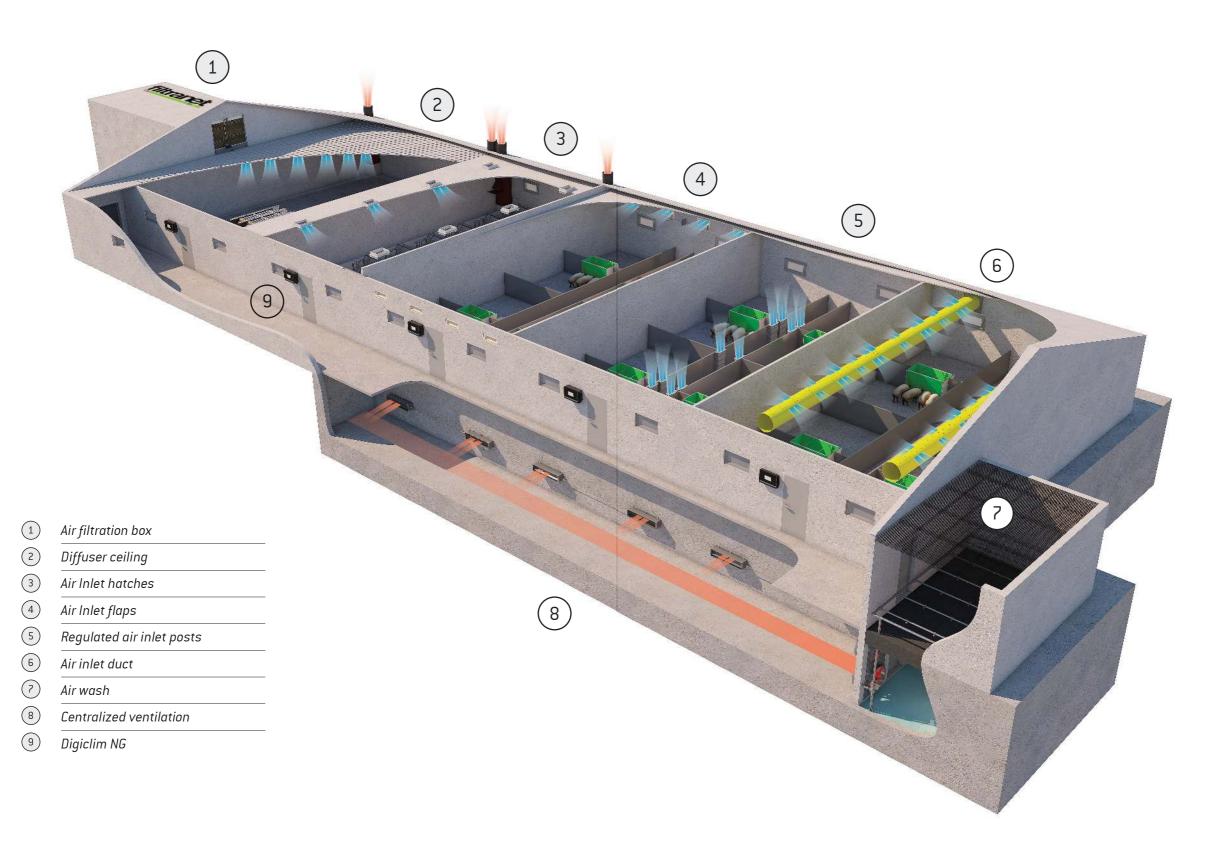
ASSERVA is the main player in accurate feeding system. With its knowledge to adapt according to the requests, ASSERVA is the partner of several experimental farms (public and private). The company designs feeding stations with individualized feeding plans and rationed with weighing system.

ASSERVA can answer specific requests due to:

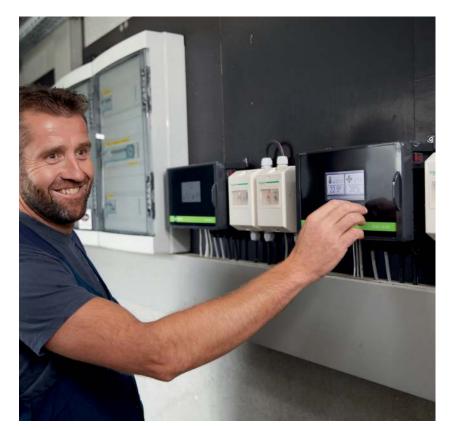
- R&D dept & innovation performing.
- A real experience and knowledge in experimental farm.
- Programs and report personalized according to the requests.
- Experimental equipment with high accuracy and high quality.
- Several options available : weighing system dosing, monitoring, camera.
- Maintenance service.

ASSERVA develops the connected farrowing crates with ear tags and piglets weighing (from the first week!). Experimental versions in liquid feed are in progress. ASSERVA can integrate the RFID Ear tag system in all the farm and can control the pig weight, the feed consumption, the water consumption, the movement, the individual treatment and vaccines. The performance of each animal can be link to their genetics and to their mother.

VENTILATION CONCEPT BY ASSERVA



DIGICLIM NG







CONCEPT

Management more effective and ergonomic of your farm ventilation!

Asserva specializes in managing the ambiance of livestock buildings.

The new DIGICLIM case and its various sensors allow precise control of ventilation, heating, and the quality of the atmosphere in which your animals evolve.

Temperature: Digiclim NG controls indoor and outdoor temperature in livestock buildings. The setpoint temperature is programmable and adaptable for every room.

Hygrometry probe: This sensor, installed in option, detect a decreases in atmosphere quality and immediatetly fix.

C02 probe : With the C02 sensor it is possible to measured the C02 volume in a room and fixes it immediately to keep an ideal ambient for the animals.

Ammoniac sensor.





MANAGEMENT OF LIVESTOCK VENTILATION



The new Digiclim NG has an entirely tactile interface, designed to be convenient.



Management of room and spot heating and alerts.



Digiclim NG can be managed on PC, smartphone and tablet. It is entirely compatible with the previous Digiclim.



New: Digiclim NG controls the electrical consumption, also manage the soaking system without any additional equipment and water consumption.

asserva 33

CENTRALIZED VENTILATION







CONCEPT

Easy regulation, multipurpose and technical!

The centralized ventilation uses a common exit of the air of the building. A gyro pressure controller regulates the exhaust turbines.

Each room climate is controlled according to its requirements. The air inlets and the air outlets are controlled automaticly with the Digiclim NG box.

A wash of air can be add to the exit, to reduce the nuisance odors and dust particles. It is thus possible to recover the calories from the air to heat the farrowing or postweaningrooms.

The Exhaust turbin regulated with frequency converter and without any fans inside the rooms, the centralized ventilation permits to reduce the electricity consumption and improve the climate conditions for the animals.

ECONOMIC VENTILATION







CONCEPT

The solution to ventilate your livestock while saving energy!

Involved with energy reductions in farms, Asserva offers three innovative solutions to reduce the electrical consumption of ventilation systems :

SAT 4: It is compatible with fans already installed and allows to do 71% of energy saving.

 $\pmb{\mathsf{IFD}}\ \pmb{\mathsf{regulation}}: \mathsf{lt}\ \mathsf{is}\ \mathsf{compatible}\ \mathsf{with}\ \mathsf{fans}\ \mathsf{already}\ \mathsf{installed}\ \mathsf{and}\ \mathsf{allows}\ \mathsf{to}\ \mathsf{do}\ \mathsf{72\%}\ \mathsf{of}\ \mathsf{energy}\ \mathsf{saving}.$

IFD fan: Coupled with two new ECPlus fans, it can do 85% of energy saving.

"LED" electricity

Asserva offers a full range of LED lightings products. We select for you robust products that can be used in aggressive atmospheres.

asserva 35

PRINTALYS







CONCEPT

The ideal solution to mask unpleasant odors of the farm!

Printalys equipment was designed to treat odors from livestock buildings, by diffusion in the form of dry vapor of odor neutralizers-masking. The automaton, which ensures the cyclical control of all the diffusers of the farm, exists in two versions:

Printalys Premium is programmable in depending on the time and calendar, but also temperature and hygrometry exterior. It also takes into account wind direction and speed, to distribute the product only when the wind is directed towards the houses neighbors. Optionally the pressure atmospheric can be taken into account.

Printalys Classical allows it to manage broadcasters according to a schedule cyclical depending on the calendar or time. The activation time of each diffuser is programmable separately. (Maternity needs are different needs in a fattening room for example).

For working conditions pleasant and better integration of livestock in its environment

Available in two flavors (red fruits and citrus), the products Printalys are formulated from neutralizing-masking ingredients odors, compliant with perfumery standards (IFRA-RIFM).

Disseminated in the form of dry vapor in the ambient air of buildings, the products Printalys bring a pleasant smell in the rooms, while reducing odors emitted outside the farm.





MASK UNPLEASANT ODORS



Completely automatic & cyclic control of the diffusers.



Odor mask and neutralizer and several kind of fragrance available.



Diffusion according to wind direction and diffusion according to hour..

FILTRANET







CONCEPT

Management more effective and ergonomic of your farm ventilation!

Result of analyzing the breeder's needs and constraints, Filtranet combines ease of use and maintenance.

Sanitary asset of your farm, Filtranet is also economical with its low electrical consumption. Reliable, Filtranet is set up on a double turbine, has a sliding G4 pre filter and enables to easily mount the filters. Its use and maintenance are easier, in the service of the breeders, thanks to a remote access and control by internet or wifi.

Filtranet has an insulated and soundproof box, to improve working conditions of breeders, and offer a quieter environment to Animals. Frequency converters are used to control regulation and limit the electrical consumption: Filtranet can provide from 20 to 35% of energy savings: over 10 years it represents the funding of a new filtration group.

- + Filtranet system push the air inside the building to create positive pressure.
- + All air come from the filtration system.
- (+) 100% sure that all air is filtrated beforegoing inside the building.
- Full protection of your pigs from the desease on the air.





FILTRATION 60 000 M3/H -15KW



Stainless steel frame and fixings.



Easy fixation and changing of filters.



Isolated and soundproof box to reduce energy waste.



Networking data. (ventilation historic, electrical consumption...).



Double turbine, for a safer ventilation, maintained at 50%.

IN THE NEXT CATALOGUE: YOUR FARM!



40 years of experience, at the service of the pig farmers!

« Year after year, Asserva is expanding its borders. We have a wide network of dealers to sell, install and maintain our systems.

Today, Asserva has more than 4 500 customers worldwide, from the traditional family farm to the big players of the industry and the state of the art experimental farms.

Our R&D efforts allows us to always bring innovations on the market, for more efficiency, better zootechnical results, and to make the work easier.

Join us in this great adventure, we are waiting for you!

In South Korea

In China

In Spain





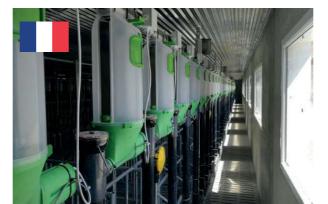
In Belgium

In Canada





In France



In Austria



In United Kingdom



In Poland



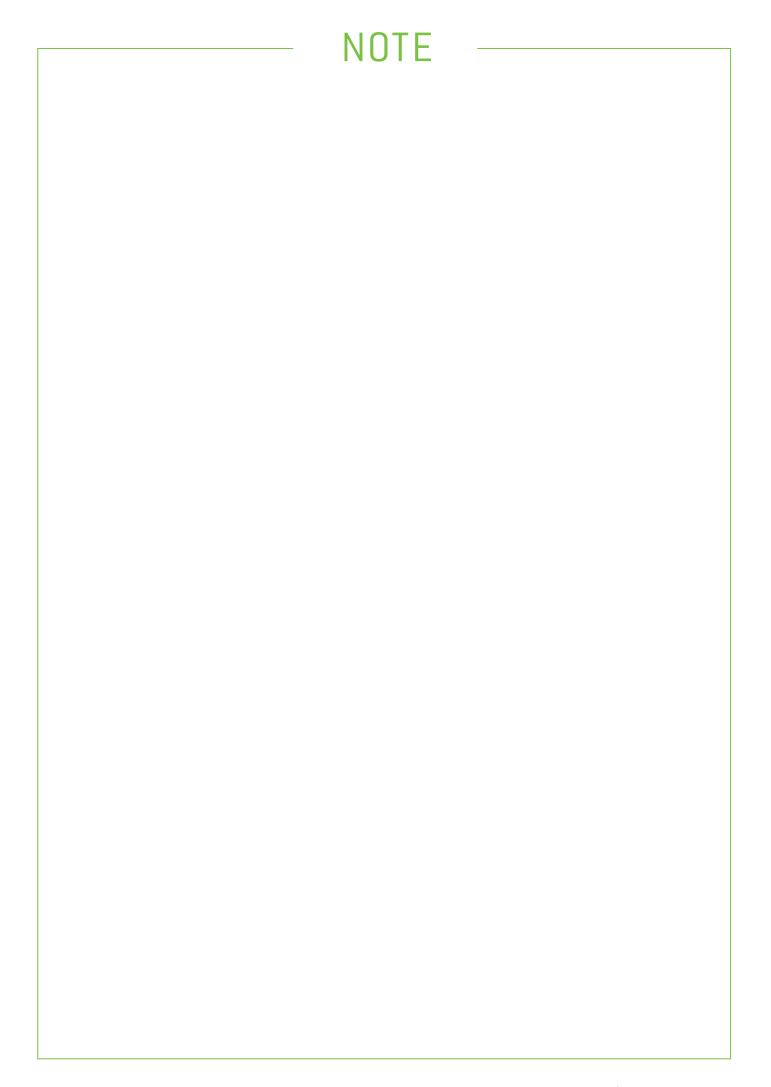
In Italia

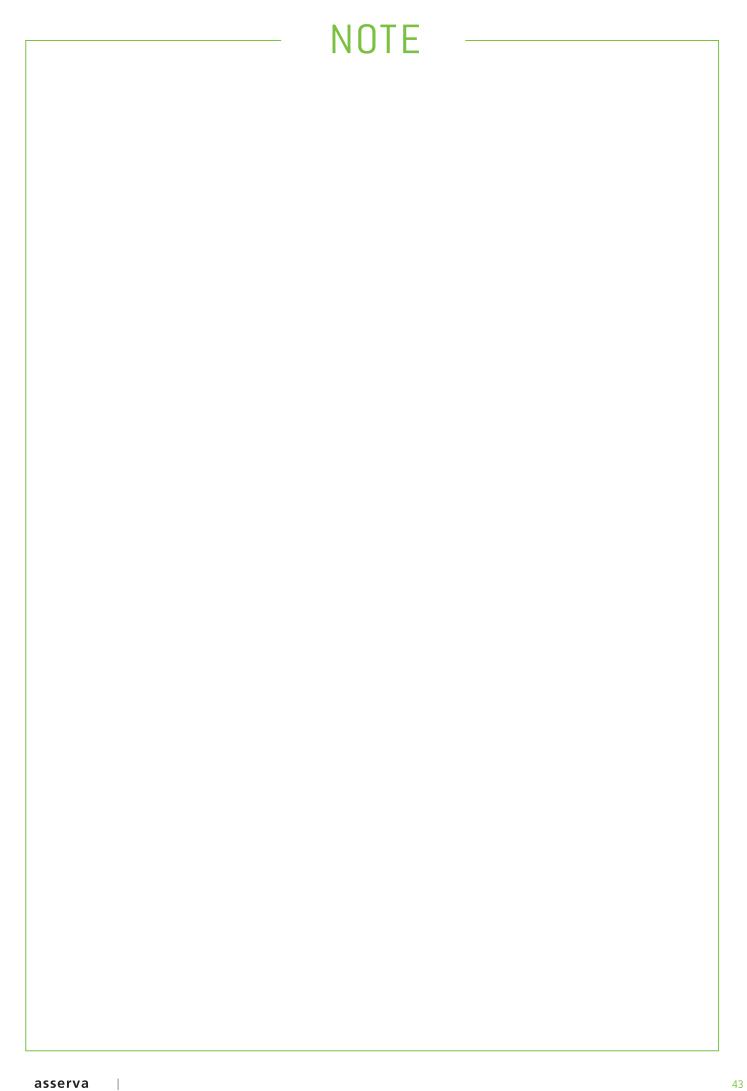


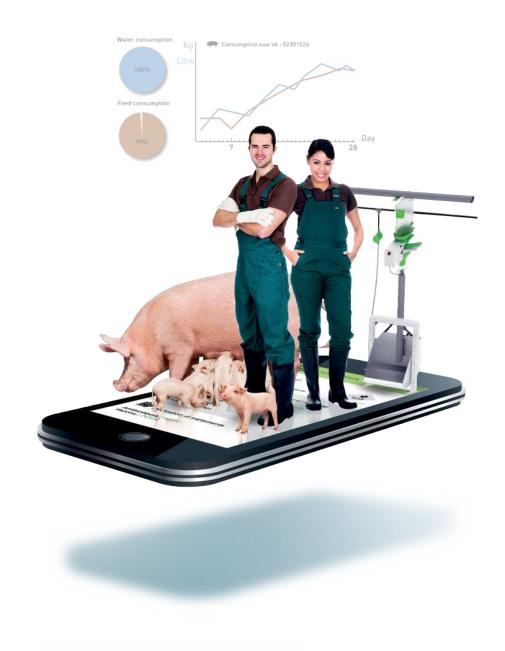
In New Zealand



40 PRODUCT CATALOGUE asserva









digital farm_

FOLLOW US:

