



MECANOVA



PIG SLAUGHTERHOUSES



www.mecanova.es

We make your facilities profitable





EXPERIENCE, VISION AND PROFESSIONALISM

Mecanova begins in 1985 with the aim of providing Navidul, the leading Spanish meat company at the time, with a maintenance service. From then, we began to build its five most representative factories. And that was just the beginning...

Over time we specialised in the design and manufacture of machinery for the meat industry, from the provision of machines for slaughterhouses, to cutting rooms and processing plants.

Today Mecanova is a company that designs and manufactures complete facilities with sophisticated automation and control machinery for pig, cattle and sheep slaughterhouses, as well as for cutting rooms. In addition, we develop meat rail systems, both for installations and for transportation. We have satisfied clients from the south of Chile to Oceania, and going through America, Europe and Africa.

For more than 35 years, Mecanova has been working for the main international and national meat industries. We have developed the most advanced technology in the slaughter and processing lines of industries in Latin America, the United States, and Europe. Today we keep growing by offering the best solutions.

Our values focus on complete attention and the creation of real solutions for our clients' installations. We are present during the whole process: from the moment we make contact with our sales representatives, until the set up of the machinery. Our principle is profitability for the client.

Our company structure is based on four basic pillars: commercial department, engineering, production centre and assembly team.

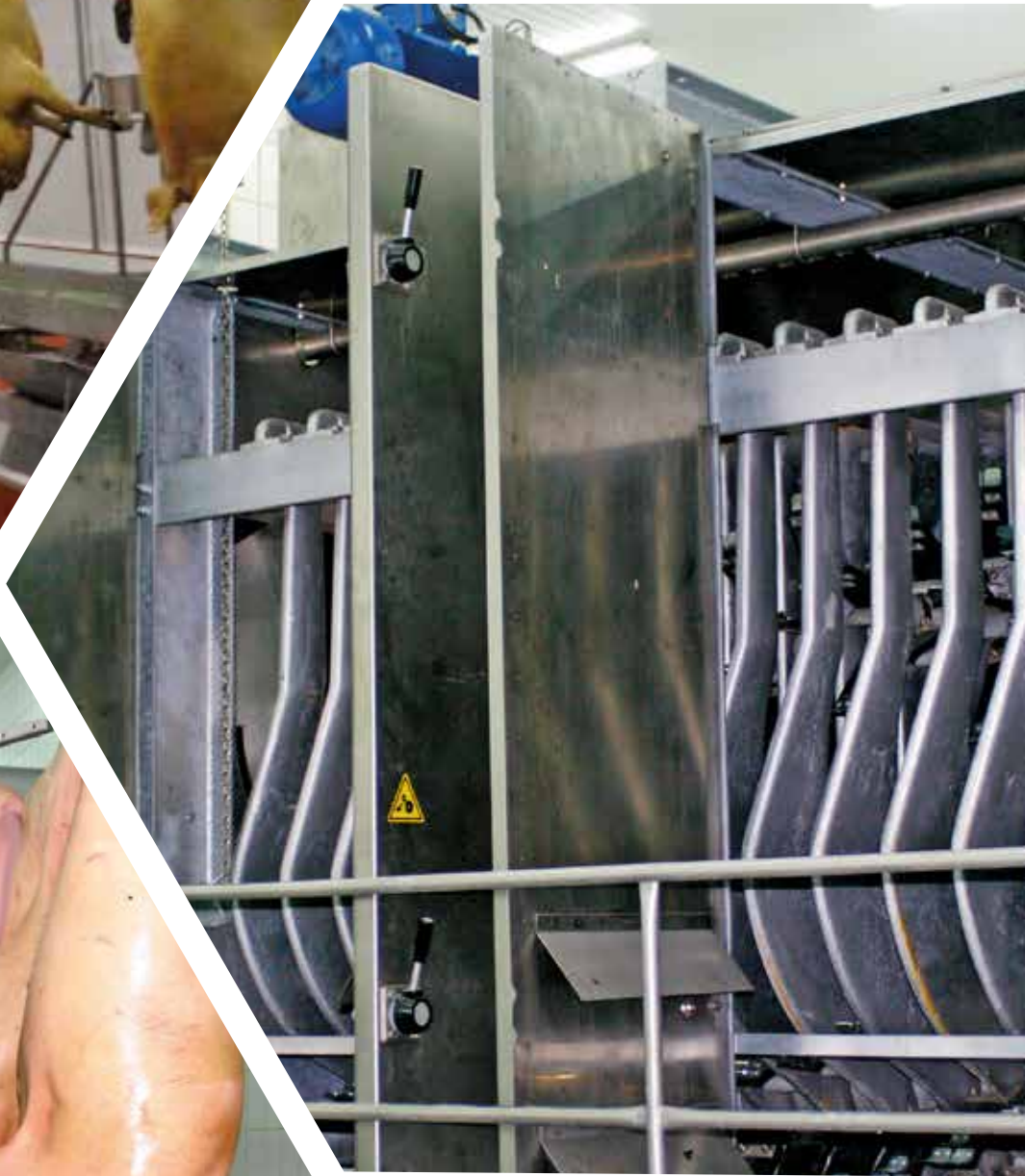
Our commercial and sales department goes beyond the sale of a product: we provide technological solutions adapted to the needs of the client. Our priority is to put all our experience and knowledge at your service.

Our engineering team is made up of qualified professionals with extensive experience and great professionalism. Our goal is the design and development of efficient and robust machinery. To perform a perfect project, the team puts its talent and experience to work, using the most cutting-edge and competent design programs to create the best machinery for our customers.

Our production centre is based in our 3,000 m² facility and includes five production branches: machinery, mass production, aluminium, iron and stainless steel. The priorities are quality and meeting deadlines during the process of manufacture. All our products are tested and subjected to the strictest quality controls.

Our assembly team's purpose is ensuring the perfect execution within the agreed deadlines. It is made up of talented and trained professionals, used to work under any circumstances. We put special attention on the after-sale service. We work for quality maintenance, which includes not only providing spare parts, but also to carry on modifications for improvement.

We make your facilities profitable



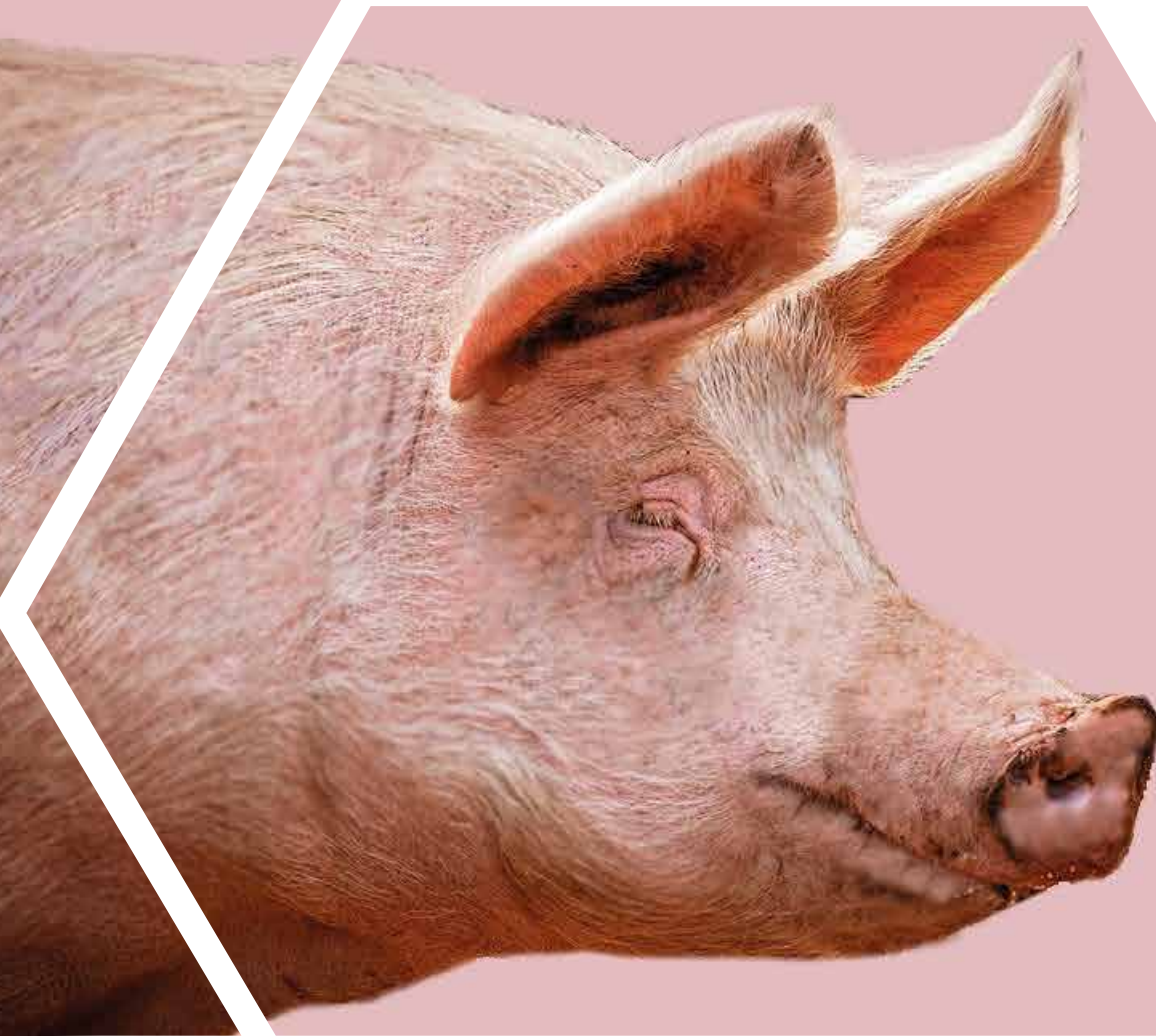
PIG SLAUGHTERHOUSE



Mecanova works with the most modern designs and technology, creating efficient and innovative machinery to meet the demands of a competitive market.

We keep building and developing facilities that meet the requirements of international regulations and the most demanding quality certificates, anticipating the expectations of the meat industry, and offering services to meet real needs.

Our pig slaughter and dressing line comprises reliable, economical, robust and ergonomic equipment. Our machinery is designed to reach any level of automation.





STUNNING

CO2 stunning systems for pigs are essential in any new line or renewal of pig line. The main reason is the quality of the meat that is achieved with this system, thanks to the lowering of the PH of the meat, which translates into an improvement in their PSE index.

STUNNING BY CO2 MECO WHEEL TYPE



Ferris wheel-type carbon dioxide stunning machine for pigs with side entry. It comprises 6 gondola baskets, distributed in the form of a Ferris wheel, which are driven by a single geared motor. The machine is designed to achieve maximum reliability in all its movements, and is equipped with electronic components, chains and bearings of the highest quality, all manufactured in Europe.

STUNNING BY CO2 MECO ELEVATOR TYPE



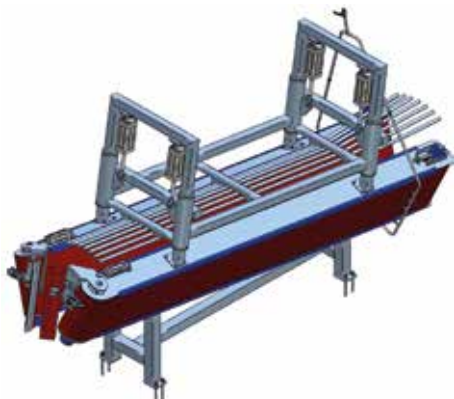
Machine designed for stunning pigs by carbon dioxide. The type of this machine is elevator with a side entry, with capacity for 120 pigs per hour (100 kg each animal). It incorporates a single basket, and it is filled laterally thanks to a conduction tunnel (it is recommended to purchase the Mecanova pig tunnel conduction for a better dosage and loading of each basket).

The machine complies with all safety requirements for handling with access door locks and a pump for rapid gas extraction.



STUNNING

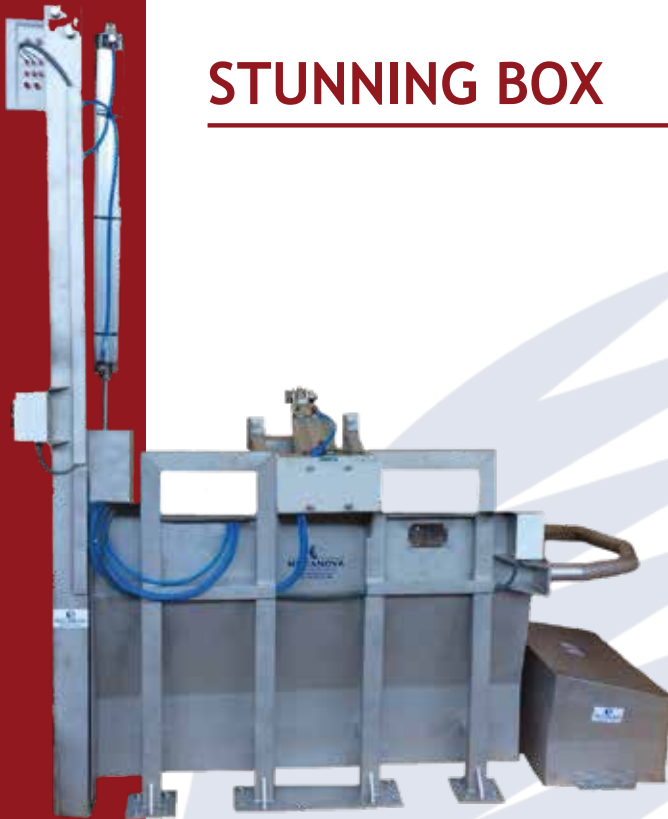
RESTRAINER



The restrainer is the ideal machine for driving and electrically stunning pigs (due to electronarcosis). The complicated task of driving the animals to the installations with electrodes is greatly facilitated with a restrainer, as it picks up the animals at ground level, and drives them automatically, raising it to a height of 1.1 metres. This equipment is ideal for stunning with tongs and subsequent unloading on a bleeding table.

The 'V' conveyor belts, besides driving it comfortably and with little stress, immobilize the animal, positioning it optimally at the stunning point. The restrainers are suitable for animals of very different weights and sizes, although they can be adjusted both in their separation and the height of the upper protection roof, a necessary element to prevent animals from trying to climb each other.

STUNNING BOX



Equipment designed for holding and stunning the animal, always complying with animal welfare regulations.

The animal accesses the box from the tunnel of conduction thanks to a gate or sectional door, which makes way to the box.

The design of the equipment allows the animal to be held by a pneumatic side door controlled by the operator, who presses on it, immobilizing the pig. The Mecanova box allows easy access to the stunning tongs points. The exit of the animal, once the electric shock has been carried out, is quick thanks to the same door, which previously was immobilizing it, rises, releasing the pig and letting it fall onto the bleeding table.

TUNNEL OF CONDUCTION



Driving the animals to the point of stunning requires tunnel of conduction or driving corridors that achieve the goal of allowing them to access the machine naturally (walking without coercion) and agilely, thus achieving the production for which the line is designed.

The entire development complies with animal welfare regulations, and with the minimum number of support pen operators at this stage. Mecanova pig tunnels of conduction have a hexagonal design, which meets these requirements.



BLEEDING

BLEEDING TABLE



Dynamic pig collection table at the exit of the stunning phase, for horizontal bleeding and subsequent hanging and hoisting to the dressing line. The table not only facilitates the reception and pricking of the animal, but also facilitates the work of hanging. This table improves the quality of the meat, complemented by an electrical stunning system in a box or restrainer.

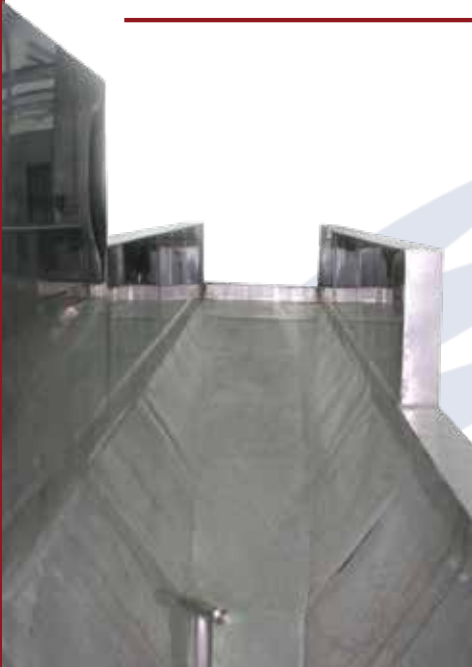
BLEEDING ELEVATOR



Machine designed to raise the pig to the bleeding conveyor for vertical bleeding. The machine is suitable for flat plate, twin track or tubular monorail.

It consists of a vertical return chain conveyor positioned at an angle to lift the animals from a lower position to a higher position. The elevator has a start-stop button panel installed so that the same operator can start it, depending on production needs.

BLEEDING TANK



Tank built in stainless steel designed for collecting the blood of the animal once the sacrifice has been made.

The tank has a drain and a 2" outlet prepared for the placement of a pump, so the blood can be transported to an blood tank for further treatment.

The element is designed and manufactured according to the production requirements and the layout of the line.

PERISTALTIC PUMP



Equipment designed for pumping blood from the bleeding area to the tanks or between tanks and blood cookers. It sucks and propels blood from a distance, even with clots.

It works continuously, even if when the flow rate is almost zero. It is also suitable for low production lines in which the rate of animals means times without blood. It is capable of pumping blood even with clots.



SCALDING

VERTICAL SPRAY SCALDING



The vertical pig scalding system is the most efficient and sanitarly cleanest scalding system for productions from 120 pigs per hour.

The machine comprises a tunnel of variable length and variable layout where the pig carcasses are showered with water for a time that ranges between 4.5 and 6.5 minutes at temperatures between 60 and 64°C. The carcasses are driven continuously and vertically through a conveyor throughout the tunnel, receiving a continuous shower of hot water.

The equipment has a tank of water in the lower part that serves to submerge the animal's head, to heat the water to the required temperature, and to suck and shower the carcasses with it. The scalding machine is made entirely of stainless steel, while the water tank is structurally made of tube and sheet metal, and the tunnel is made of sandwich-type insulating panels, also made of AISI 304 stainless steel.

PULL SCALDING



Mecanova's pull scalding allows it to be placed on any production line. It is recommended for productions of between 120 and 300 pigs per hour, although it can be designed for higher productions.

Scalding requires a conveyor, which drags the pigs through the tank, bridging the steep gap between bleeding and scalding. This scalding machine has a rectangular pool and side protections with an insulating panel, also made of stainless steel. The heating is carried out by steam throughout the entire machine.

Temperature control is achieved by a pneumatic modulating steam valve. The equipment incorporates a carcass conduction system to ensure that they are completely submerged throughout the process.



SCALDING

Mecanova offers compact water purification systems in all its scalding systems that improve scalding and reduce water consumption.

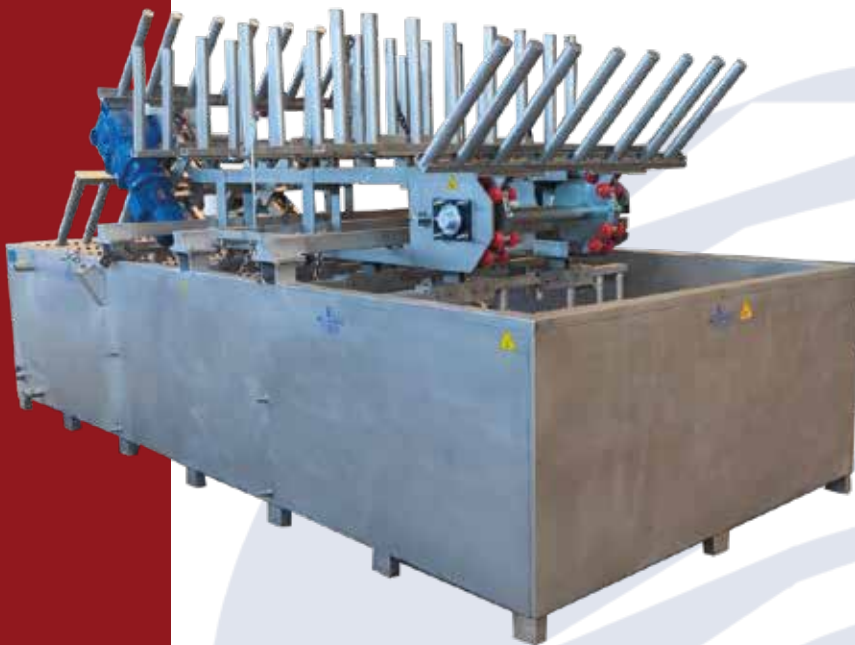
ROTATING SCALDING MECROT



The Mecanova MECROT scalding machine is an ideal scalding machine for automating production lines between 50 and 105 pigs per hour where there is also little space. The production will depend on the climatology of the area where the animals are raised and it can be used to automate the line and replace traditional tanks of scalding, reducing the line to one operator. The return on investment ranges between one and three years.



PUSH SCALDING MECPUSH



The MECPUSH scalding model is a scalding system for facilities with productions of between 80 and 180 pigs per hour, depending on the size, the breeding climate and the breed of the animals.

The scalding is a traditional tank with a conveyor with push combs driven by a double chain and a 2.2 kw geared motor is mounted. The heating system is by direct steam modulated by an ARI brand pneumatic valve.

TRADITIONAL SCALDING TANK



The scalding of pigs in small slaughterhouses with productions of between 20 and 100 pigs per hour, usually requires this type of traditional scalding by immersion.

This equipment requires operators to move the carcasses from the point of entry to the side next to the dehairing machine, where a comb will remove the pig from the scald, tipping it into the dehairer.



DEHAIRING

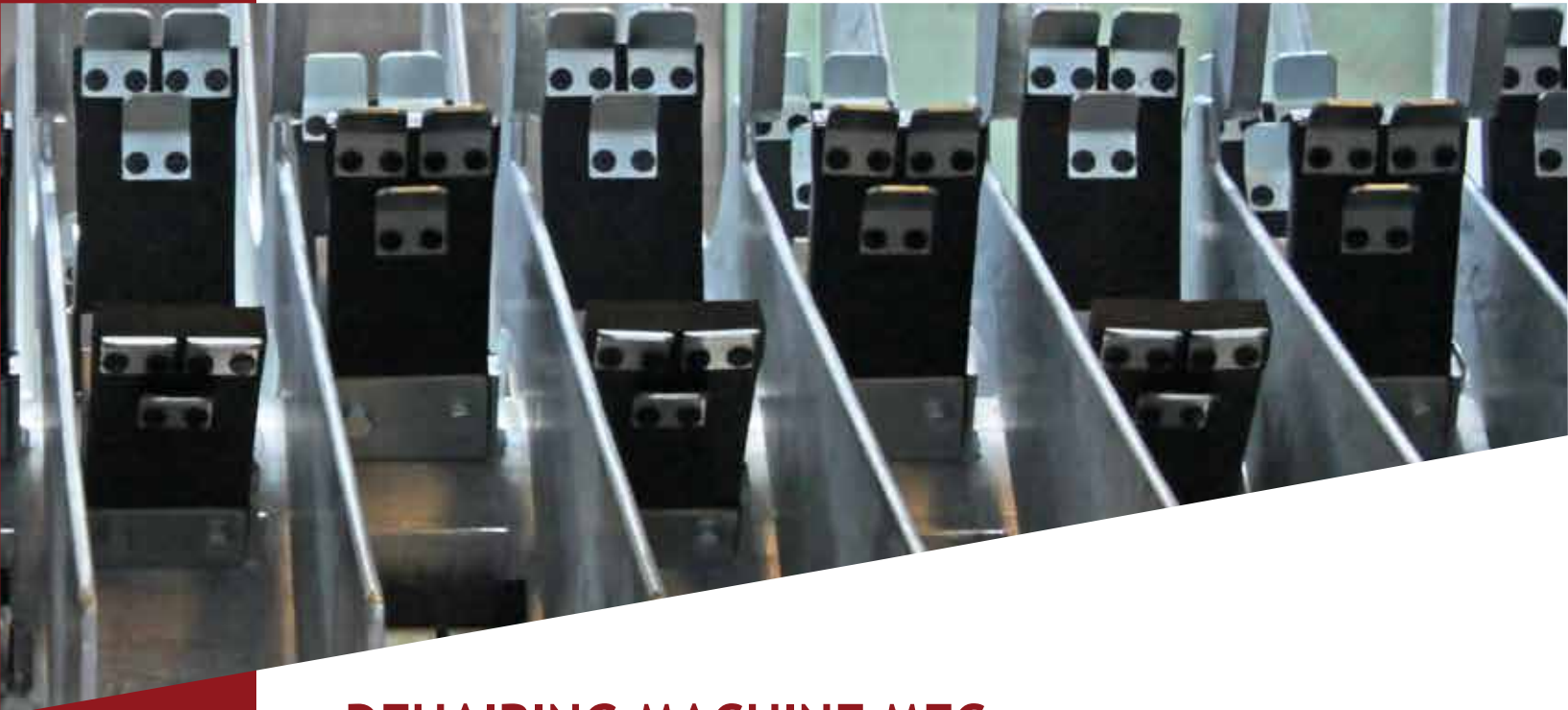


DEHAIRING MACHINE UBAR



Mecanova's continuous dehairing machines for pigs are the result of decades of experience in large pig lines throughout Europe.

Mecanova's continuous dehairing machines are equipped with two scraper shafts with helical shovel position, which achieve the highest quality of dehairing in pigs of all weights. The machine can be attached to hair collection tapes at the bottom. The water distribution system at the top of the depilation line achieves canals with a higher level of cleanliness.



DEHAIRING MACHINE MEC

The Mecanova MEC-type pig dehairing machine produces between 85 and 170 pigs per hour, with dehairing cycles of between 40 and 50 seconds.

This machine is very robust, and in its superior model of 4t it can depilate large animals such as hogs. Made of hot-dip galvanized steel, it has a scraper shaft that achieves a magnificent finish without breaking the legs. The flexible coupling between the scraper shaft and the geared motor prevents the gearbox from suffering the blows typical of hair removal, which implies less maintenance of the machine, and greater reliability of operation, as well as lengthening the useful life of the machine.





DEHAIRING

DINAMIC RECEPTION TABLE



The dynamic hanging or reception table for pigs is placed at the exit of the continuous dehairing machines for pigs, being the support on which the carcass is received and prepared for hanging on the gambrel. This machine makes operation easy for maximum productivity and reduces operator fatigue. It is a useful machine in productions of more than 200 pigs per hour.

STATIC RECEPTION TABLE



The static review table is a useful element in productions of less than 120 pigs per hour. This table allows the operator to carry out the tasks of reviewing and cleaning the carcass in an ergonomic way, such as the removal of hooves and the remains of hair that may have remained after shaving.





CARCASSES POSITIONER

The pig carcass positioner is a device that complements the dynamic reception table that receives the pig for review and placement for the dressing work. It is recommended for large productions, as it allows the optimal and quick dosage of the carcasses.

The device collects the carcasses after the dehairing machine, placing them on the table, all in the same position. It is equipped with a reception hopper, and it is manufactured entirely in stainless steel.





CARCASSES CLEANING



SINGER BURNER



The singer burner is a machine designed for flaming and sanitizing pig carcasses in pig slaughter lines as part of the carcass cleaning process, after dehairing. To achieve the maximum efficiency of the machine, it is also recommended to wash correctly after the dehairing and thoroughly dry the carcass with Mecanova vertical and horizontal whipping machines.

The singer burner is the best solution to definitively eliminate the risk of salmonella and legionella in veterinary analysis. The design of our fires achieves the best finish of the head.



DRYING AND CLEANING WHIPPING MACHINES



The whipping machine is designed for reviewing and cleaning pig carcasses. After the dehairing process, it is necessary to purge the carcasses from the remains of hair and other dirt that have remained attached to them. Mecanova whipping machines are a solution to the inconveniences that traditional (manual) carcass cleaning work may present, such as the high cost of labor, low production and the risk of contamination of carcasses by salmonella or legionella due to operation mistakes.

By automating the process thanks to the whipping machines, 100% cleanliness is achieved and food safety is significantly increased.



DRESSING

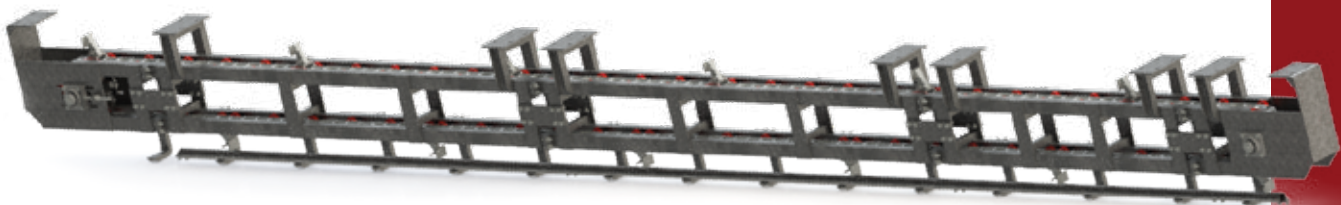
HORIZONTAL DRESSING CONVEYOR

The horizontal dressing conveyor for pigs is a equipment designed for the dressing of pigs in lines of more than 100 animals per hour. This equipment allows a linear layout or with curves, as its configuration through crowns or horizontal supports allows the transfer of carcasse in different directions.



VERTICAL DRESSING CONVEYOR

The vertical dressing conveyor for pigs is designed for the transport and dressing of pig carcasses in an exclusively linear way and is a machinery especially indicated for simpler slaughtering productions and for the transport and entry of cooling chambers.





OFFAL CONVEYOR

Pig offal conveyors are designed for the collection and transport of viscera from work platforms to veterinary inspection points. For a correct and coordinated execution of this process, it is needed an adequate and automated equipment.

The extraction of the offal is performed at a point the slaughter line and the veterinary inspection, and must be carried out in such a way that at the inspection point each viscera is identifiable and assignable with its carcass. For this reason, pig offal conveyors must meet a series of characteristics and their design must allow synchronization of the offal conveyor with the dressing.



Mecanova designs and manufactures offal conveyors according to their type, such as the red offal conveyor and the white offal conveyor, or it also develops the integral offal conveyor for both types.



PLATFORMS

DRESSING PLATFORMS

Workstations adapted to the pig dressing needs of each facility that can be individual, double or collective.

All the platforms are ergonomic elements, adjustable in height and easy to clean. The floor of the platforms can be made of polyester tramex or mortar and resin.



VISCERA BELT CONVEYOR

Belt designed for the ergonomic evacuation of white viscera and its subsequent transport synchronized with the carcass, guaranteeing traceability in veterinary inspection.

Traction is carried out by means of a drum motor, which provides significant energy savings, less maintenance and greater hygiene.



ELEVATORS

DRESSING ELEVATOR

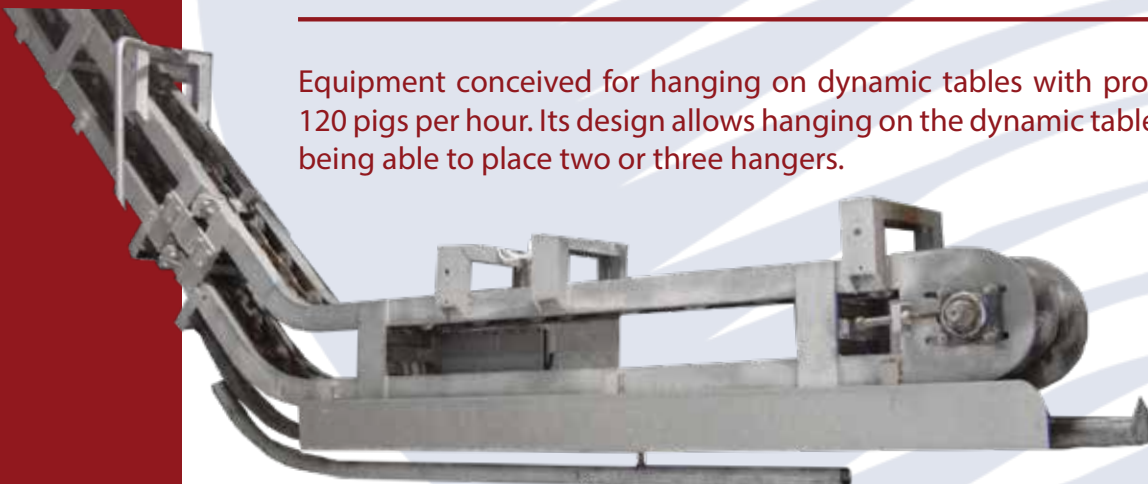
The pig dressing elevator is designed for hoisting carcasses on the slaughterhouse or beam in an ergonomic way and adapting to the required production. Mecanova offers two types of pig slaughter elevators depending on their production.

The conventional slaughter elevator is designed to hoist the animals on the reception and reviewing tables with productions of less than 120 pigs per hour.



HORIZONTAL DRESSING ELEVATOR

Equipment conceived for hanging on dynamic tables with productions greater than 120 pigs per hour. Its design allows hanging on the dynamic table in an ergonomic way, being able to place two or three hangers.





OTHER PRODUCTS

BUNG CUTTING GUN



Pig gun to cut and seal the rectum of the animal. It is a simple and easy to handle device, with a fast production of 1250 pigs per hour.

Its light weight makes it easy to maneuver and use, reaching maximum productivity.

HOOF REMOVER



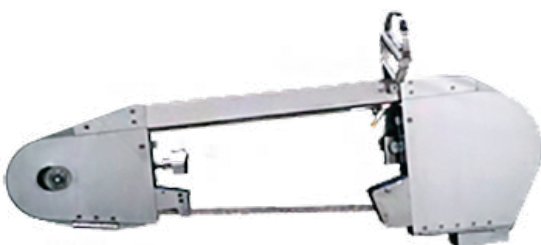
Pneumatic equipment to work manual in-line hoofing of pigs. Thanks to its stainless steel structure and its weight of 7 kg, this equipment can achieve high work output with a production of 360 pigs per hour.

BRISKET SAW



Powerful and light cutting equipment capable of processing 1200 pigs per hour. Features two adjustable starters and handle for operator comfort and protection. Its special design of the cover for the blade allows control of depth of cut.

SPLITTING SAW



Easy-to-handle, powerful and fast saw capable of cutting the back of 750 pigs per hour. Its motor is totally sealed for greater hygiene of the operation. It has an external electric or mechanical brake for greater safety in operation.

HEAD POLISHER

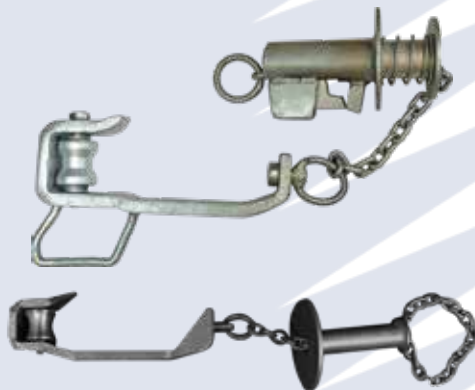


Machine designed for the review and refinement of pigs masks and jowls. Its design allows animals of different lengths to be worked continuously.

The rollers, made of nylon thread, clean the cheeks, removing remains of hair and dirt that may have remained after flaming and whipping. The finish is impeccable and allows to reduce to the maximum the veterinary confiscations of heads.

Its operation is continuous, but it cleans each cheek individually. For this, a minimum separation of 1200 mm between channels is a necessary condition. It includes a water diffusion system to achieve the best finish.

PIG BLEEDING TROLLEY



These elements are conceived for hoisting and subsequent bleeding of the animal. The key is its sling, which passes around the animal's leg, and the entrapment is produced by the effect of gravity. There are different types of trolleys: with sling, for pneumatic systems and vertical lowering or with spring, for manual and semi-lying lowering.

PIG DRESSING TROLLEY



The different cattle dressing trolleys are conceived to resist and support the carcass during the whole process.

Mecanova has several models available, which will vary depending on the type of track required by the producer: flat plate, twin track system and tubular monorail.



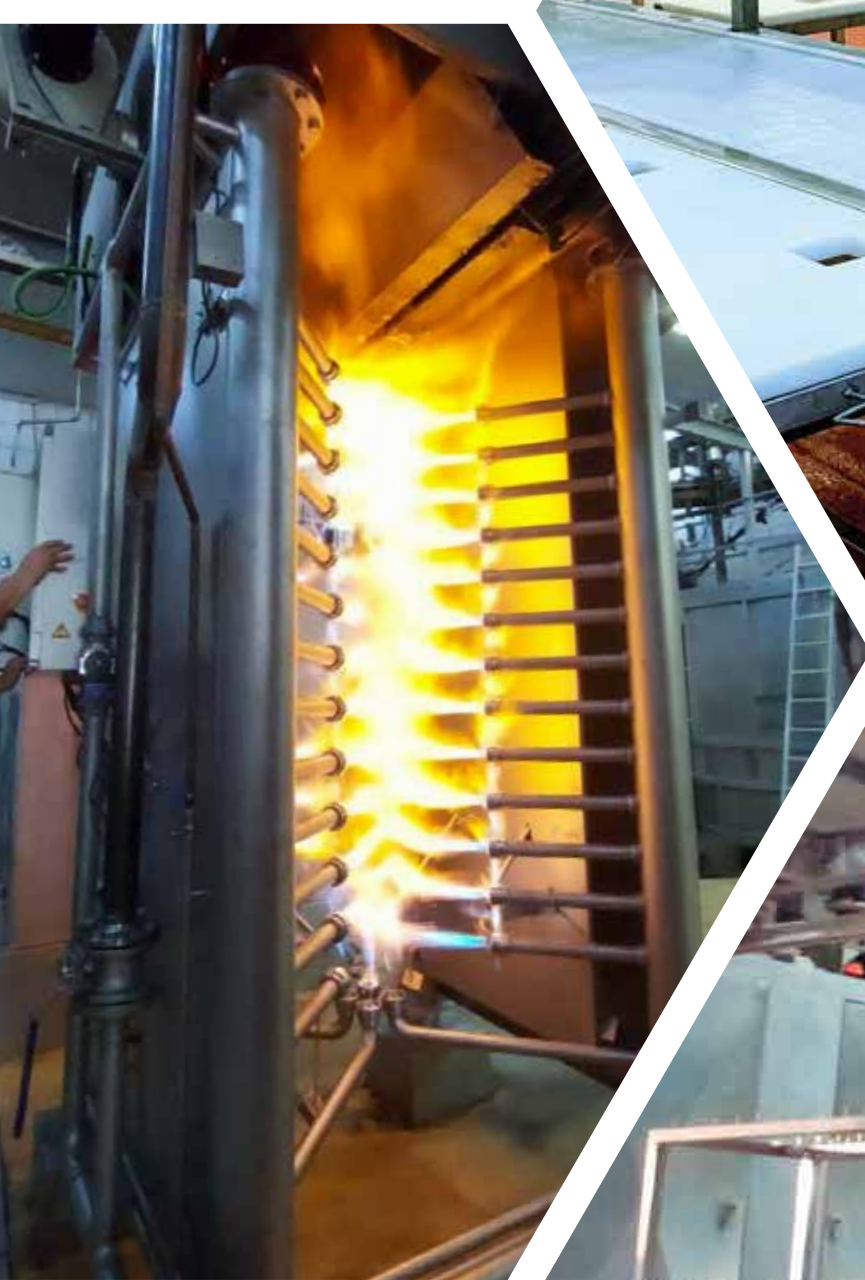
***PIG PROCESSING
SOLUTIONS ADAPTED TO
YOUR NEEDS***



LATEST LINE REFERENCES

- ◆ **LA MONREALENSE** (LINE IMPROVEMENT 120 P/H)
Teruel, Spain 2022
- ◆ **ORSHA SLAUGHTERHOUSE 120 P/H**
Belarus, 2022
- ◆ **CARTESA SLAUGHTERHOUSE** (CO2 STUNNING IMPROVEMENT 300 P/H)
Teruel, Spain 2021
- ◆ **BEJIS SLAUGHTERHOUSE** (LINE IMPROVEMENT 90 P/H)
Castellón, Spain 2020
- ◆ **SALAMANCA SLAUGHTERHOUSE** (SINGER BURNER IMPROVEMENT 300 P/H)
Salamanca, España 2019
- ◆ **MERCA MURCIA SLAUGHTERHOUSE** (SINGER BURNER IMPROVEMENT 200 P/H)
Murcia, España 2019
- ◆ **AGROPECUARIA LA UNIÓN 120 P/H**
Estelí, Nicaragua 2018
- ◆ **BÉJAR SLAUGHTERHOUSE 400 P/H**
Béjar, Spain 2011
- ◆ **JAMÓN SALAMANCA SLAUGHTERHOUSE 300 P/H**
Salamanca, Spain 2008









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