



MECANOVA



CATTLE 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.

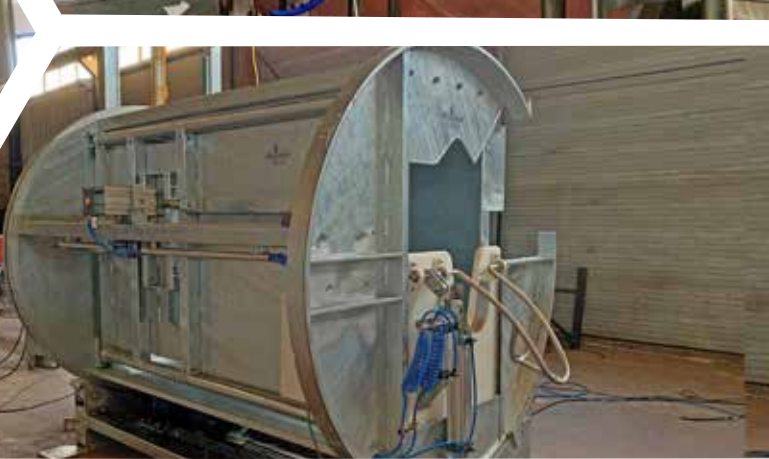
Our commercial and sales department goes beyond the sale of a product: we provide technological solutions adapted to the needs of the client. Our priority is to put all our experience and knowledge at your service.

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



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





STUNNING



The cattle Stunning is one of the most complex processes in the slaughter line. For a good operation, it is necessary to achieve several targets in order to guarantee the efficiency of the slaughter and compliance with Animal Welfare regulations. Those targets are: an efficient stunning, reaching the line production, a continuous process and the non suffering for the animal. In addition, if required, a slaughtering process carried out in accordance with the ritual conditions of sacrifice must be ensured.

RITUAL BOX

The cattle ritual box is a machine designed for the Halal or Kosher ritual slaughter of bovines and cattle of various sizes in high-production slaughterhouses. Mecanova has several models that give a production of between 35 and 50 animals per hour. We have models in galvanized steel and stainless steel.



STUNNING BOX

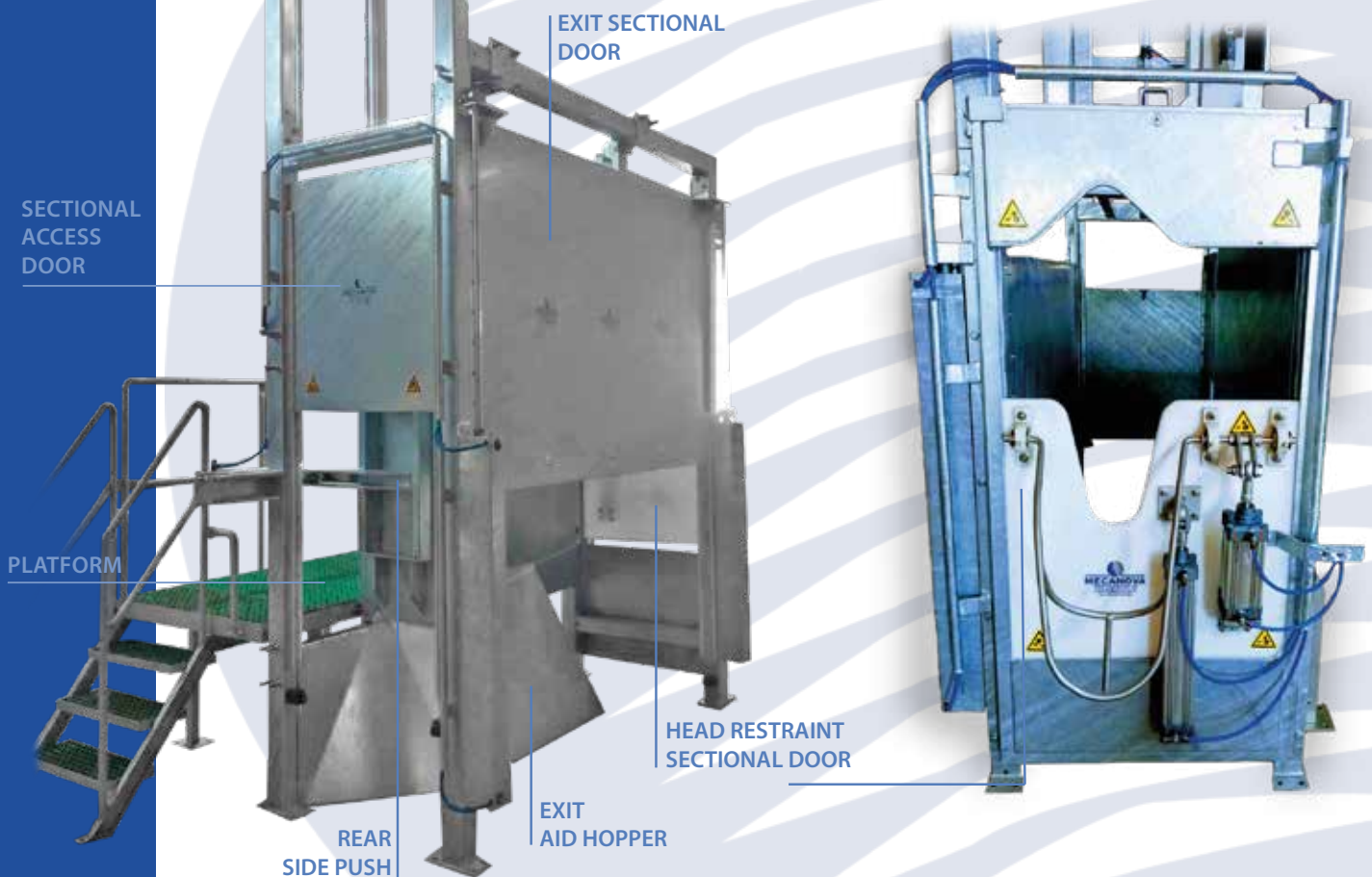


The goal of the Stunning Box is the quick entry of the animal, its immobilization inside the machine for an easy stunning, and its quick evacuation for hoisting and bleeding.

All gates are activated by the operator through a pneumatic or hydraulic device.

This machinery incorporates a head trapping system and, optionally, a neck display for ritual sacrifice. It also has a door for rear push of the animal.

We have models in galvanized steel or stainless steel. Also with pneumatic or hydraulic movement.





LIFTING AND HOISTING

RECEPTION TABLE



Table built in stainless steel for collecting the carcasses after stunning process. It is an addition that is placed at the base of the stunning box, which facilitates the process of receiving and hanging the animal.

BLEEDING ELEVATOR



Mecnova elevators are designed to facilitate the work of hoisting the animal and hanging it on the corresponding rail at the height required for the bleeding process.

It is a highly robust equipment and that works fast enough to speed up the stunning work, one of the most critical points that determines performance and online production.

Our equipment incorporates high power motors and high performance, with robust and corrosion resistant chains. Made of hot-dip galvanized steel, it meets the requirements of the most demanding plants.

BLEEDING HOIST



In some installations, due to space requirements or smaller productions, it is recommended to install cable or chain hoists to lift the carcasses.

Mecnova offers several types of hoists depending on the required production.

BLEEDING

BLEEDING TANK



Hopper for the collection of blood after the slaughter. It is designed according to the production and layout of the line. It can be built for embedding in civil works or to place legs on it. The size and length can vary depending on the needs of the client.

The funnel-shaped deposit has a drain prepared for the placement of a blood transfer pump, and thus be able to accumulate it for later treatment.

It includes an outlet for blood and a second outlet for water and cleaning. Mecanova recommends the installation of stainless steel plates for protection of splashes.

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.



TRANSFER



The transfer operation is decisive in any cattle slaughter line, as it conditions the production and safety of the line.

A correct transfer work needs to succeed specific targets: to achieve an operation in hygienic conditions, to reduce or eliminate the risk of contamination and mechanically facilitate the change of the leg without effort and with the speed required by the production of the line.





To carry out this task correctly and achieving the production goals, we offer fully automated systems with conveyors, trolleys elevators, pneumatic elevators, by-product evacuation hoppers, and the different cutting tools, such as shears for horns and hooves.

The base on which the transfer process is performed is the two heights platforms, designed for hind leg preparation and transfer of cattle.

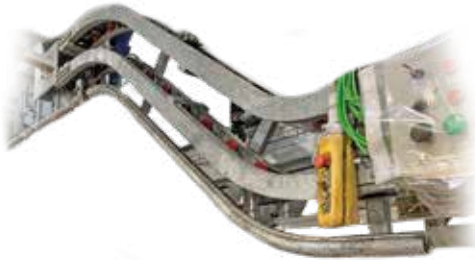




TRANSFER

For the cattle leg transfer or change operation, Mecanova offers different solutions and equipment depending on the required production of the line.

CHAIN ELEVATOR - DESCENDER



Manufactured using a UPN 80 profile. It is made up of 10 mm thick laser cut side plates. All material is S275 JR with hot dip galvanized finish.

PNEUMATIC ELEVATOR



The vertical pneumatic elevator is used to raise/lower the rolling height of the track in order to facilitate the work of hanging the clean leg.

It is an economical and reliable element for hanging both legs directly on the conveyor during the process of transfer.

CHAIN HOISTS



The transfer work in low production lines -of up to 25 cattle per hour- is usually carried out with electric hoists of up to 1500 kg capacity, to which a hook is attached in order to facilitate the work of hanging the clean leg on the trolley hook. Mecanova has several models, depending on the speed and production required by the client.

HOOVES AND WASTE EVACUATION HOPPER



During the cattle dressing, different by-products are eliminated, especially on the transfer platform, but also at other points in the process.

For its correct accumulation in Euro tub or cutter buggies at ground level or on lower floors, it is required tube pipes which are anchored in the platform at the height of the operators' work and with discharge at 900 mm from the ground or on a lower floor of the slaughterhouse.

TROLLEY ELEVATOR - DESCENDER



Machine designed to raise or lower empty trolleys to the transfer platform or workstation.

Its maximum production is 300 trolleys per hour, although this may vary depending on the height and type of trolley.

It is made of 50x50 tube in AISI – 304 stainless steel. It is equipped with a Φ 63 pneumatic cylinder with variable stroke depending on the production needs.

TWO-HEIGHTS FIXED PLATFORM



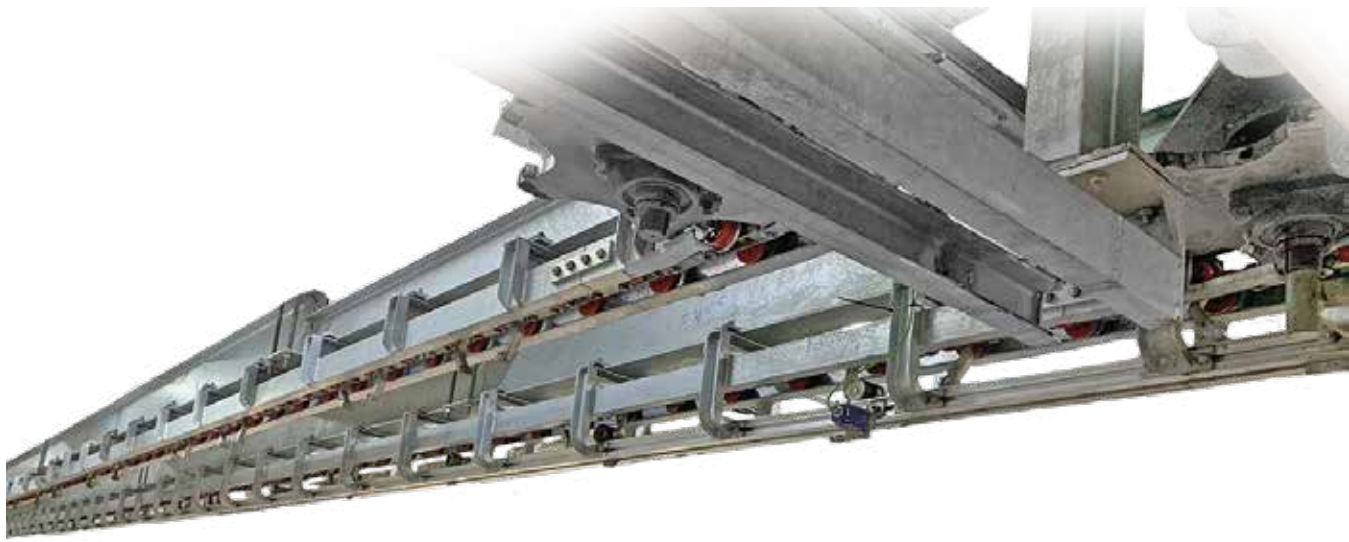
The two-heights transfer platform is designed for the preparation of hind legs and the transfer of the cattle.

Both platforms have adjustable legs to suit the ergonomic working height.



DRESSING

The work of cattle dressing must achieve the required production, guaranteeing the safety and hygiene of the meat. For such an operation, Mecanova offers solutions and equipment adapted to the needs of each client.



DRESSING CONVEYOR

Mecanova cattle dressing conveyors can work continuously or in step-by-step mode. They are robustly manufactured, with hot-dip galvanized steel structural profiles. They can be adapted to all types of rails: tubular, flat or twin track system in aluminum or stainless steel. They also include chains of the highest quality and robustness, with a zinc-plated finish.

We have options for all types of productions, always guaranteeing the safety. Mecanova also offers non-mechanized gravity drop slaughter lines for small productions.



RED VISCERA CONVEYOR

The red viscera conveyor is recommended for high production lines, as they require a perfect synchronization between transport and veterinary inspection.

Mecanova offers different designs that not only enable inspection, but also facilitate ergonomically hanging the viscera and their transferring them to the workstation. The hooks are enough resistant to use them for hanging heads. It is possible to add hanging hooks and trolleys according to the client requirements.

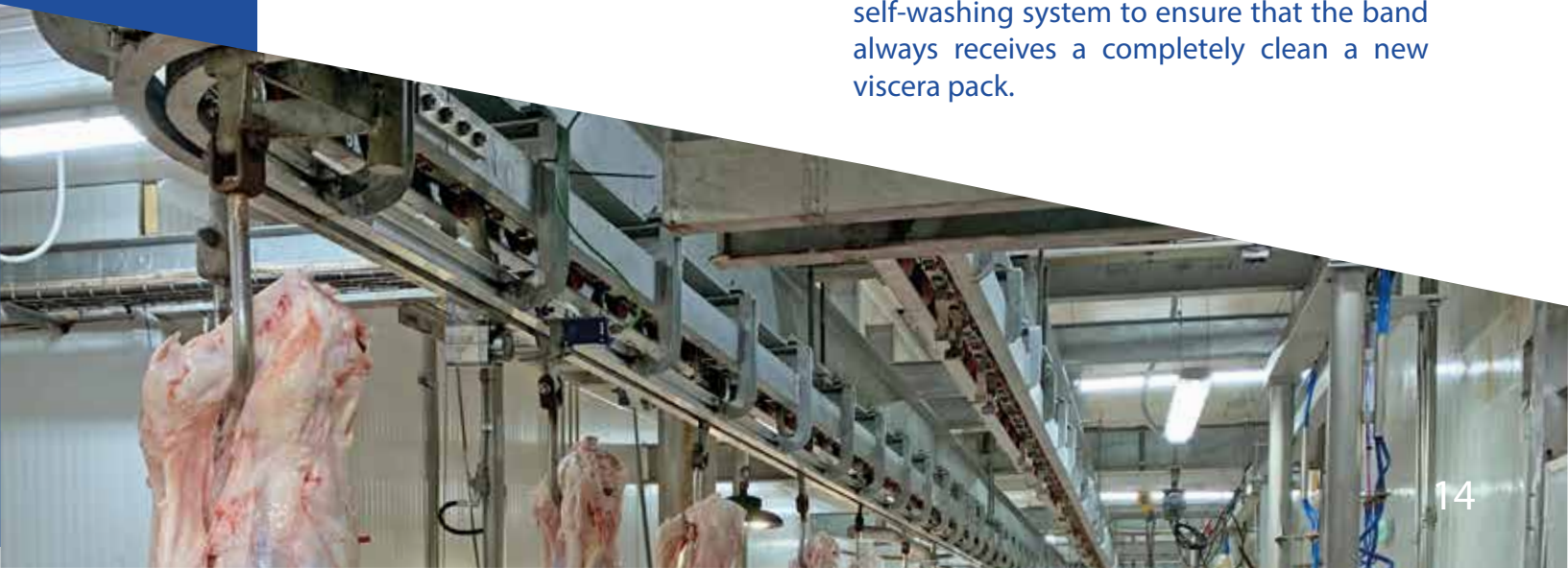
The conveyor is made of hot-dip galvanized structural steel, and includes zinc-plated chains with stainless steel hooks.



VISCERA BELT CONVEYOR

Mecanova's viscera belts are structurally made of stainless steel and completed with modulated polyethylene belts with separations for the viscera.

It includes sides integrated in the band in order to protect the casing and viscera to be snagged or ripped, becoming this way a waste. The viscera belt conveyor includes a self-washing system to ensure that the band always receives a completely clean a new viscera pack.





DEHIDING

Dehiding is the most important operation of the cattle slaughter, because it is the work that requires most human effort and it is the one that will most influence the cost of slaughter and the production of the line. If this task is not carried out correctly, it can lead to contamination of the carcass, which will affect the quality analysis and even the appearance of the carcass. For a correct dehiding, Mecanova offers different equipment adapted to production needs.

DEHIDER V30

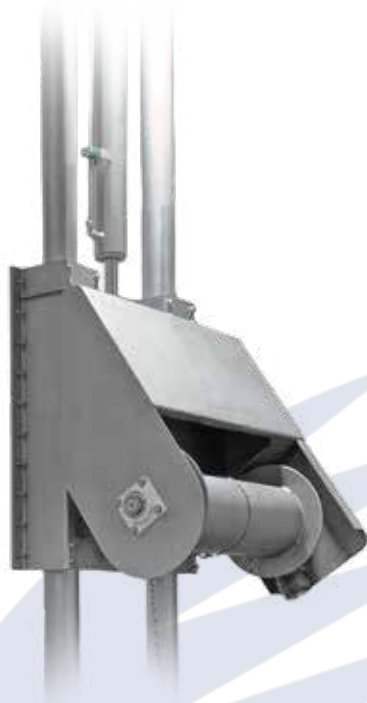


Machine designed for cattle dehiding for productions of up to **30 cattle** per hour in animals of more than 600 kg on foot. The equipment allows dehiding both from the top to down and from the bottom up.

The V30 dehider or skinner is an electrically driven equipment that extracts the skin, releasing it at the foot of the machine's columns. The equipment is ideal for small installations or lines renovations, and can work with rails from 3 to 6 meters high.



DEHIDER V40



The cattle dehider model V40 is a beef dehiding machine designed for productions of between **30 and 45 cattle** per hour with 600 kg animals. The dehiding with this equipment is performed from the top of the animal's legs to the head. The machine has a roller, driven by a hydraulic motor, that rolls up the skin.

The push is also hydraulic, with a stroke of 1800 mm. Its power is 15 HP.

It is recommended to complete the equipment with two hydraulic or pneumatic platforms on both sides to help the detachment of the skin.

DEHIDER V70



The dehider or skinner V70 is a machine designed for productions of between **30 and 75 animals** per hour, depending on weight and pre-skinning at the slaughterhouse.

The dehiding with this equipment is performed from the hind legs to the head. The advantage of this equipment over the V40 version, in addition to its greater power (30 HP), is that this machine incorporates a **telescopic thrust hydraulic cylinder** with a 2,800 mm stroke.

This allows the dehiding of large animals, working from the hindquarters to the head, reducing pre-skinning of the hindquarters. It can work in lines from 4 to 6 meters high.



PLATFORMS



For the dressing phase, as well as the dehiding process, it is necessary the use of platforms and workstations in order to facilitate the slaughtering tasks for the operators. The platforms manufactured by Mekanova are ergonomic, adaptable and resistant equipment that adapts to the production of the line and make the work of the operators easier.

PNEUMATIC PLATFORMS



Modern cattle slaughter lines incorporate pneumatic platforms to replace the fixed ones, as the vertical mobility makes it possible for the same operator to work the entire carcass from top to bottom.

This type of platform is recommended for use in operations such as pre-skining, evisceration, cut, marrow aspiration, revision, inspection of the carcass and washing.

With the pneumatic platform it is possible to carry out the operation with a single worker. Compared to fixed platforms, where several operators are needed at different heights, this system reduces the human effort.

WHITE VISCERA PLATFORMS



Machine designed to facilitate the extraction operations of the cattle entrails, and their evacuation to a conveyor, either belt or tray, for veterinary inspection. This operation can be carried out by a single operator, as it makes it possible to work at different heights.

The machine has a lower hopper to receive the guts and and evacuate it towards a viscera belt conveyor.

The equipment includes driving pedals for better comfort of operation, as well as guardrails and toeboards to assure the operator safety.

AUXILIARY PNEUMATIC PLATFORMS



This platform is particularly necessary during the dehiding tasks, as it works as a complement in the pulling of the skin by the roller of the skinning machine. It is also ideal for the veterinary inspection station.

This equipment has dimensions of 800x800 mm, and it is possible to add a small sink, and a knife sterilizer. Due to its small size and weight, it is activated by a single pneumatic cylinder, although, on clients request, it can be activated by an hydraulic cylinder too.

FIXED PLATFORMS



Workstation designed for cattle dressing tasks. It consists of a fixed stainless steel platform, prepared for the installation of a sink and knife sterilizer, as well as the necessary tools to carry out the operation.

The dimensions of the platforms can vary depending on the production needs. All our fixed platforms can be adapted to the required height.



OTHERS PRODUCTS

SKIN BELT CONVEYOR



Belt for the transport of skins, made of stainless steel, is the base on which sits an polyethylene modular belt, prepared for an easy cleaning process.

The equipment has a design that enables easy sanitization and cleaning after use.

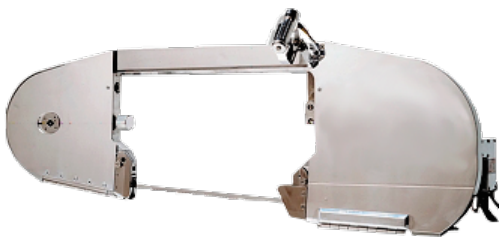
HORN A HOCK CUTTER



Cutting tool by guillotines system designed to cut of cattle horns and legs.

Easy to use, it is conceived for a fast and effective cut of the excess remains of the carcass. Thanks to the ergonomic design of its blade, the cut is clean, efficient and continuous.

SPLITTING SAW



The splitting saw is designed for carcass cutting. It is a powerful and fast machine to work continuously and optimise production.

It also complies with all safety and hygiene requirements.

BRISKET SAW



The brisket saw is designed for high productions. With a practical design that makes handling the machine easier, it is an efficient and fast tool. It also has easy maintenance.

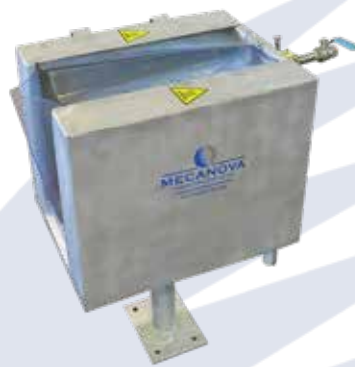
Its blade replicates the blow of the axe, with all the safety guarantees.

SAW STERILIZER



The Mecanova saws sterilizer is made of stainless steel and incorporates a hot water intake for sterilizing the saws after use and a double sheet with thermal insulation. There are several models available of different lengths, depending on the saw to be used: brisket saw or splitting saw.

SHEARS STERILIZER



Made of stainless steel, the Mecanova sterilizer is a machine designed to meet the highest standards of cleanliness in the leg cutting process.

The sterilizer is a support equipment placed on the work platforms. It is an essential instrument during the transfer work.

CATTLE BLEEDING TROLLEY



These elements are designed for hoisting and subsequent bleeding of the animal. The key is its sling, which passes around the animal's leg and traps it by the effect of gravity. There are different types of trolleys depending on the track they are supposed to run on: flat plate or tubular monorail.

CATTLE 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.



CATTLE PROCESSING SOLUTIONS ADAPTED TO YOUR NEEDS



LATEST LINE REFERENCES

- ◆ **ORSHA SLAUGHTERHOUSE 60 C/H**
Belarus, 2021
- ◆ **CORSICA SLAUGHTERHOUSE 20 C/H**
France, 2020
- ◆ **MURGACA SLAUGHTERHOUSE 40 C/H**
Murcia, Spain 2019
- ◆ **TANGIER SLAUGHTERHOUSE 50 C/H**
Morocco, 2019
- ◆ **SUCUA SLAUGHTERHOUSE 30 C/H**
Ecuador, 2016
- ◆ **AL - HOCEIMA SLAUGHTERHOUSE 30 C/H**
Morocco
- ◆ **CASABLANCA SLAUGHTERHOUSE 150 C/H**
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TECHNICAL OFFICES AND WORKSHOP

Ctra. Toledo - Ávila, km. 21.200
45524 Rielves (TOLEDO)
ESPAÑA

INTERNATIONAL COMMERCIAL DELEGATION

Príncipe de Vergara, 109
28002 MADRID
ESPAÑA

+34) 925 74 34 04

+34) 664 64 81 22

comercial@mecanova.es

CARIBBEAN COMMERCIAL DELEGATION

Torre Banistmo, Oficina 1030
Calle Aquilino de la Guardia, 10
CIUDAD DE PANAMÁ | PANAMÁ

CHILE COMMERCIAL DELEGATION

VITACURA 9800, OFICINA 320
SANTIAGO DE CHILE
CHILE