

KNOW ICE

PRODUCT CATALOG

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KNOW ICE

WE KNOW ICE DEEPLY AND WE PAMPER IT

We cover the entire supply chain and the value chain of the food ice sector. Our strategy is to offer vertical integration to achieve perfect ice: raw materials, factories, sale of ice-making equipment and machinery, comprehensive advice for a consumer ice start-up, distribution (RTM - Route to Market) – efficient distribution of the last mile, activation at the point of sale, varieties of ice with innovative formats, and consumer knowledge.



Only those who know the most can advise you on the latest ideas and trends in the food ice sector. And only those who have great experience are capable of optimizing your business.

www.knowice.eu

OUR EXPERIENCE WE ARE LEADERS IN THE CONSUMER ICE SECTOR IN EUROPE

Know Ice has more than 30 years of experience in the business of producing and marketing food ice. It belongs to the Hervaz Business Group (GEH), with businesses in multiple sectors and a human team of more than 200 people. Procubitos, business partner of Know Ice, is the leading European manufacturer of ice cubes, with export experience throughout Europe, and a supplier to national and multinational chains such as Mercadona, Carrefour, Día, Covirán, Repsol, El Corte Inglés, Makro, Edeka, Rewe... It has 7 production plants in Spain, Italy, Germany and Turkey, producing more than 400,000 kilos / day. Its plants are Know Ice's experimental platform for research and development of cutting-edge technology in the sector. We have developed the most advanced factory in Europe, the first in Europe certified in ISO 9001, ISO 14001, ISO 50001 and IFS.



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Together with Gonvarri Material Handling, we are one of the world's leading suppliers of industrial storage systems.

01

VOGT Ice
machines

VOGT TUBE ICE – Series

VOGT TUBE ICE – P118F/HFO5

Product description



The P118F/HFO5 Series has a maximum capacity of 5 tons of ice per day and is the preferred ice machine choice for thousands of start-up, industrial or foodservice packaged ice applications around the world. Heavy duty industrial construction, automatic operation, energy efficiency and the best warranty in the industry make the Vogt P118F/HFO5 Series the only “clear” choice for your ice making needs.

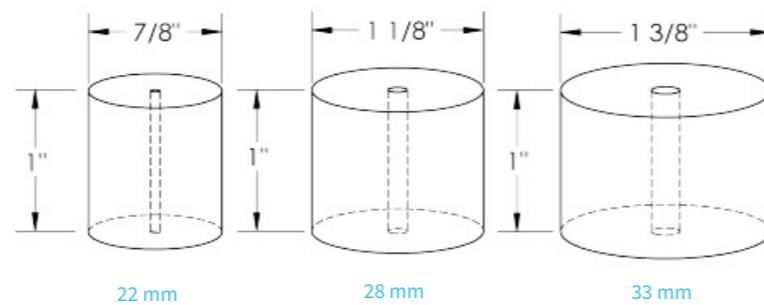
All surfaces in contact with water or ice are made of stainless steel or other rust-resistant materials. Units are factory tested and adjusted for cylinder ice only and can be manually converted to crushed ice in the field if required.

The P118F uses R404a as a refrigerant, which is increasingly in disuse in the refrigeration industry. Therefore, under the criteria of industry 4.0, Vogt has created the HFO5, which uses R513a as a refrigerant approved by all international organizations, and also with an internet connection to always be connected to our servers.

With all the guarantees of the most globally recognized manufacturer of ice generators.

The P118F/HFO5 series is available in a modular way, this means that it has the entire refrigeration installation and the evaporator in the same structure, only having to install the condenser outside. The available diameters are 22, 28 and 33 millimeters. Each diameter of ice has a corresponding height of cut.

- 25 year evaporator warranty
- Up to 5 tons of ice per day
- UL Listed Industrial Control Panel
- Impact cutting
- Standard ice length of 1” or 1 1/2”
- Remote water-cooled or air-cooled operation



[More info click here](#)

VOGT TUBE ICE – P18XT

Product description



The P18XT series with a maximum capacity of 10 tons of ice per day is the workhorse of Vogt’s medium size tube ice machine line. Available as a stand-alone water-cooled or remote air-cooled unit, the P18XT will provide years of reliable service.

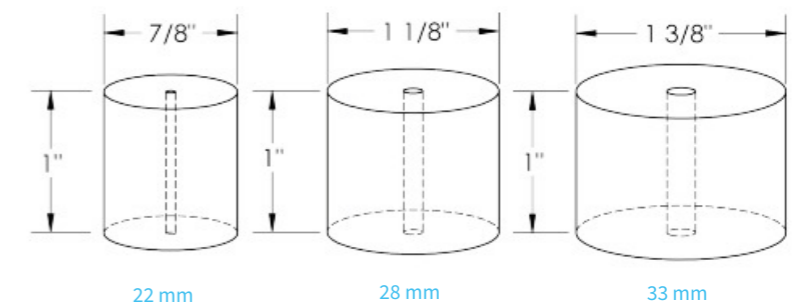
All surfaces in contact with water or ice are stainless steel or other rust resistant materials. Units are factory tested and adjusted for cylinder ice only and can be manually converted to crushed ice in the field if required.

The P18XT uses R404a refrigerant, which is increasingly out of use in the refrigeration industry. Following the criteria of Industry 4.0, Vogt has created the HFO10, which uses R513a refrigerant approved by all international bodies, and also has an internet connection so that it is always connected to our servers.

With all the guarantees of the most globally recognized manufacturer of ice generators.

The P18XT/HFO10 series is available in modular form, which means that the entire refrigeration system and evaporator are housed in the same structure, with only the condenser having to be installed externally. The available diameters are 22, 28 and 33 millimeters. Each ice diameter has a corresponding cutting height.

- 25 years evaporator warranty
- Up to 10 tons of ice per day
- UL industrial control panel
- Impact cutting
- Standard 1” or 1 1/2” ice lengths
- Water-cooled or remote air-cooled operation



[More info click here](#)

VOGT TUBE ICE – P24

Product description



The P24 series has a maximum capacity of 25 tn/day, this capacity is highly dependent on ambient and water temperature. Quality industrial construction, automatic operation, energy efficiency and the best warranty in the industry, 25 years, make Vogt machines the only “clear” choice for your ice making needs.

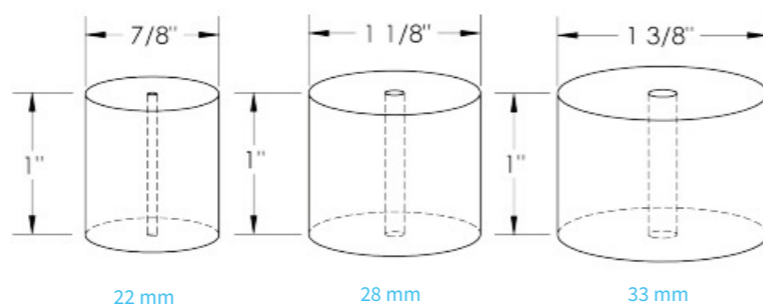
The P24 series is available in modular form, which means that the entire refrigeration system and evaporator are housed in the same structure, with only the condenser having to be installed externally. The P24 is also available without the refrigeration system. The complete refrigeration system must be installed separately and the Vogt must be connected as the evaporator.

The P24 can be adapted to make different ice diameters. The available diameters are 22, 28, 33, 41 and 44 millimetres. Each ice diameter has a corresponding cutting height.

With all the guarantees of the most globally recognized manufacturer of ice generators.

Available with ice solidification system and saw cutting system, providing a straight and homogeneous cut to the ice cubes. With all the guarantees of the most renowned ice maker manufacturer in the world.

- 25 years evaporator warranty
- Up to 25 tons of ice per day
- UL industrial control panel
- Impact and saw cutting
- Water-cooled or remote air-cooled operation
- Ammonia/R404A operation
- Available with solid ice production system



[More info click here](#)

VOGT TUBE ICE – P34AL/AXL

Product description



The P34AL/AXL series has a maximum capacity of 50 tn/day (P34AL) and 80 tn/day (P34AXL), this capacity is highly dependent on ambient and water temperature. Quality industrial construction, automatic operation, energy efficiency and the best warranty in the industry, 25 years, make Vogt machines the only “clear” choice for your ice making needs.

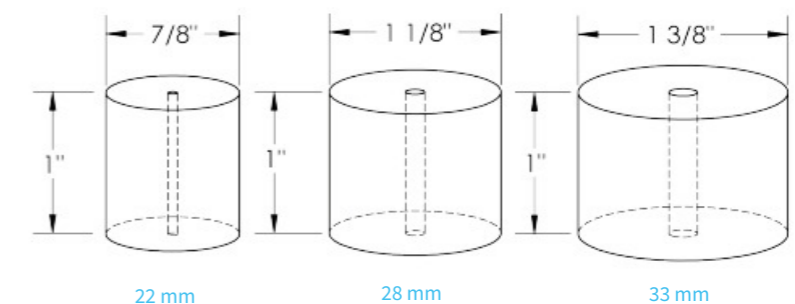
The P34AL/AXL series is available in modular form, which means that the entire refrigeration system and evaporator are housed in the same structure, with only the condenser being installed externally. The P34AL/AXL is also available without the refrigeration system. The complete refrigeration system must be installed separately and the Vogt must be connected as the evaporator.

The P34AL/AXL can be adapted to make different ice diameters. The available diameters are 22, 28, 33, 41 and 44 millimetres. Each ice diameter has a corresponding cutting height.

With all the guarantees of the most globally recognized manufacturer of ice generators.

Available with ice solidification system and saw cutting system, providing a straight and homogeneous cut to the ice cubes. With all the guarantees of the most renowned ice maker manufacturer in the world.

- 25 years evaporator warranty
- Up to 25 tons of ice per day
- UL industrial control panel
- Impact and saw cutting
- Water-cooled or remote air-cooled operation
- Ammonia/R404A operation
- Available with solid ice production system



[More info,click here](#)

VOGT TUBE ICE – SOLID ICE P24/P34

Product description

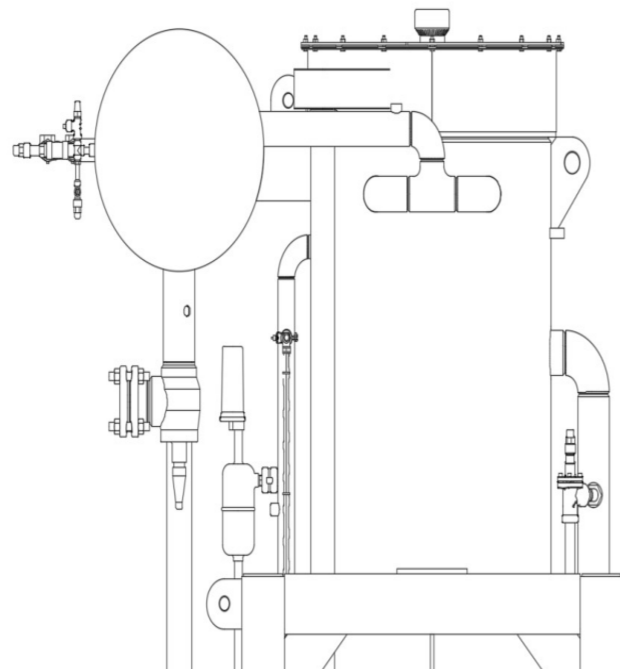


At Know Ice we have developed a system that allows us to solidify the ice in Vogt ammonia machines. Know Ice has the worldwide exclusivity for the sale of Vogt machines with the system to solidify the ice.

By eliminating the central hole and having less contact surface between the ice and the liquid, we are able to increase the durability of the ice and keep the drinks colder for longer and with better quality. Know Ice has developed control software that allows us to control the solidification of the ice so that we ensure that in all production cycles the ice comes out solidified.

With all the guarantees of the most globally recognized manufacturer of ice generators.

With this solid ice production system, the production capacity of the Vogt machines is affected, so that the output of the machine would have to be recalculated depending on its refrigeration system.



[More info, click here](#)

VOGT TUBE ICE – SAW CUTTER P24/P34

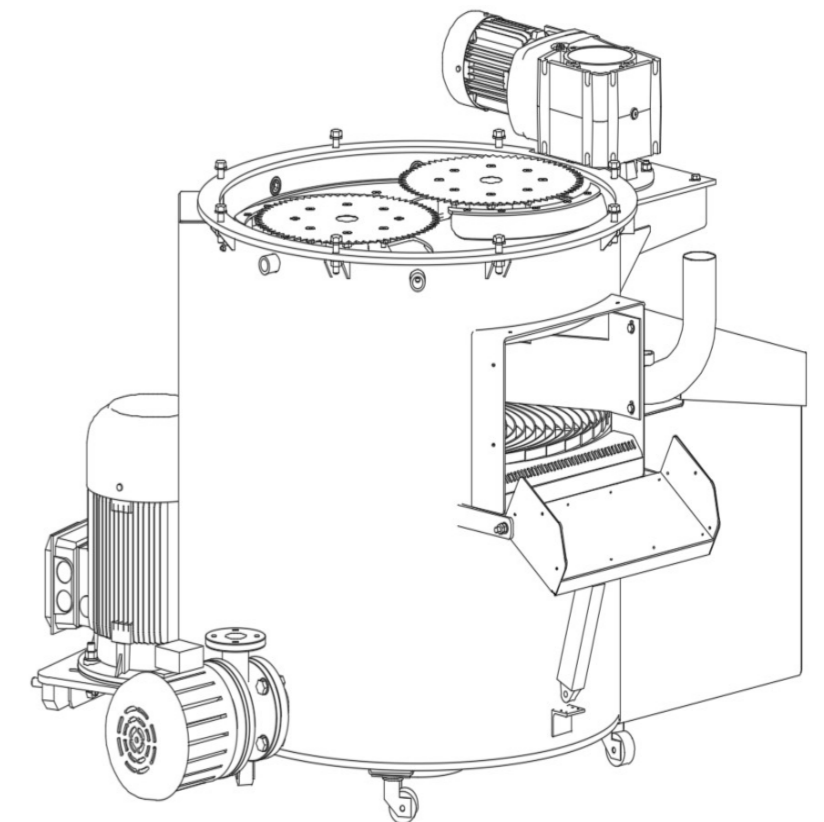
Product description



Know Ice has developed a special saw cutter for P24 and P34 machines to cut ice precisely and make perfect ice cylinders.

This cutter prevents the ice from cracking and splitting, thus making better use of the ice produced. The cutting time per cycle is increased and the production capacity of the machine is reduced. The cutting speed can be adjusted depending on the quality of the final ice desired by the customer.

With all the guarantees of the most globally recognized manufacturer of ice generators.



[More info, click here](#)

02

Packaging
machinery

PACKERS IMC
PACKERS COALZA



AC-650/AC-800

Product description



The AC-1200 model is a vertical bagging machine designed for the creation of bags made from ice packs or other types of products. Additionally, the AC-1200 bagging machine is integrated with a series of accessories that are incorporated according to the need of the product to be packaged by the client, thus facilitating the most perfect solution that the client needs.

- Extractor belt
- Thermal transfer coder for dates, batches or barcodes.
- Elevator to feed the packaging machine
- Vibrating table.
- Machine prepared to make bags containing ice bags that come out of an AC-650 RV4 packaging machine.
- Top brand components.
- Quick coil change by air pressure.
- Bag exit position, adapted to the customer.



AC-1200

Product description



The AC-1200 model is a vertical bagging machine designed for the creation of bags made from ice packs or other types of products. Additionally, the AC-1200 bagging machine is integrated with a series of accessories that are incorporated according to the need of the product to be packaged by the client, thus facilitating the most perfect solution that the client needs.

- Extractor belt
- Thermal transfer coder for dates, batches or barcodes.
- Elevator to feed the packaging machine
- Vibrating table.
- Machine prepared to make bags containing ice bags that come out of an AC-650 RV4 packaging machine.
- Top brand components.
- Quick coil change by air pressure.
- Bag exit position, adapted to the customer.



RS300-DH y RS400-DH

Product description



The Coalza RS model DH series vertical packaging machine is specially designed for dosing and packaging ice cubes. RS series intermittent vertical packaging machines. Manufactured to guarantee reliability and robustness in high productivity processes. RS series intermittent vertical packaging machines.

- Manufactured to guarantee reliability and robustness in high productivity processes.
- Optimum relationship between investment and packaging capacity.
- Maximum versatility in terms of product types to be packaged, formats and accessories to incorporate.
- Configuration of vertical packaging machine and packaging process from software with touch screen.
- Communication and control of peripherals integrated in the control system of the packaging machine.



RS400EP

Product description



A double belt tunnel system ensures that the distribution of the product inside the bag is homogeneous and that the position inside the bag will be perfect. Especially relevant in the ice industry, since the most common distribution format for bags of ice is by grouping bags of 1 or 2 kilos into bags of 4 or 5 bags.

- Manufactured to guarantee reliability and robustness in high productivity processes.
- Optimum relationship between investment and packaging capacity.
- Maximum versatility in terms of product types to be packaged, formats and accessories to incorporate.
- Configuration of vertical packaging machine and packaging process from software with touch screen.
- Communication and control of peripherals integrated in the control system of the packaging machine.





AC-1500 BOXES

Product description



The AC-1500 box model is a vertical bagging machine designed for packaging frozen foods in bags that are unloaded into ready-made boxes. It is governed from a touch screen that is easy to use and intuitive due to its icons and integrated menus where all the functions of the machine are handled.

- Knife system for cutting bags and puncturing the bag to prevent it from opening the bag when it is inserted into the box.
- Top brand components.
- Box elevator belt to facilitate the unloading of the bag inside the box.
- Box opening system when raising the box when unloading the bag, to facilitate the fall of the bag inside the box.
- Sheet union by electrical system by pressure or manual.
- Film alignment system.
- Polyethylene and complex welding jaws for high performance.



AC-1500

Product description



The AC-1500 flake model is a vertical bagging machine designed for the creation of bags made with flake ice.

- Jaw movements through state-of-the-art servomotors.
- System of knives for cutting bags and later puncturing the bag to prevent the bag from opening when it lies down. Maximum versatility in terms of types of product to be packaged, formats and accessories to be incorporated.
- Warnings of jaw sealing stoppage, lack of air pressure, protection doors, product levels, bag counter, etc. Peripheral communication and control integrated in the packaging control system
- Bags of up to 20 kilos can be made.
- Quick coil change by air pressure.
- Ethernet LAN connection.
- Bag exit position, adapted to the customer.



MULTIHEAD OF 10 WEIGHERS

Product description



The 10-weigher multihead model is a circular multi-weighing system made up of 10 weighing buckets that are responsible for making combinations between them, to reach the weight that we have indicated, approaching it as close as possible and minimizing the weight scale, thus achieving Very accurate weighing.

The 10-weight multihead is made of stainless steel and consists of a funnel that feeds the multihead, then it has a cone that is responsible for feeding the product to the vibrating blades of each of the weights, these blades are responsible for unloading the product in the weighing bowls, when the weighing bowls contain the product, the multihead process performs weighing combinations to get the exact weight of the weighing. When it is ready, the multihead downloads to the waiting bowl, for when the signal arrives, it downloads the combination.

The 10-weight multihead can be mounted on packaging machines, thermoformers, on belts with blisters, rotary tables with blisters or for manual unloading, adapting the most perfect solution that the customer needs.



MULTIHEAD OF 14 WEIGHTS

Product description



The 14-weigher multihead model is a circular multi-weighing system made up of 14 weighing buckets that are responsible for making combinations between them, to reach the weight that we have indicated, approaching it as closely as possible and minimizing the weight scale, thus achieving Very accurate weighing.

Its design has been aimed at creating a stable, durable, easy-to-handle and high-performance machine. It is governed from a touch screen that is easy to use and intuitive due to its icons and integrated menus where all the functions of the machine are managed.

The 14-weight multihead is made of stainless steel and consists of a funnel that feeds the multihead, then it has a cone that is responsible for feeding the product to the vibrating blades of each of the weights, these blades are responsible for unloading the product in the weighing bowls, when the weighing bowls contain the product, the multihead process performs weighing combinations to get the exact weight of the weighing. When it is ready, the multihead downloads to the waiting bowl, for when the signal arrives, it downloads the combination.



03

Accessories

Tunnel freezers

Screening machine

Elevator

Hoppers

Software

Weighing lines

SIEVER

Product description



The sieving machine is a very convenient and easy to use machine. It is a machine that is installed in the ice packing line.

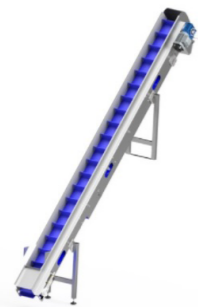
The machine's mission is to sieve the ice cubes, the broken cubes or pieces of cubes are the ones that fall through the sieve. In this way, the cubes that are whole are the ones that are packaged.

Stainless steel chassis. Outlet belt to remove the remains of the cubes, being able to remove the remains to the left or to the right.



ICE ELEVATOR

Product description



The ice elevator is very convenient and easy to use. It is a machine that is installed in the ice packing lines.

The mission of the ice elevator is to facilitate the feeding of ice to the multihead for ice or for the 4-cup ice revolver.

Adjustable inclination of the legs.

Removable bottom protection to prevent the product from falling and to increase cleanliness.

Modular plastic belt with pushers to facilitate product movement product.



METAL DETECTOR

Product description



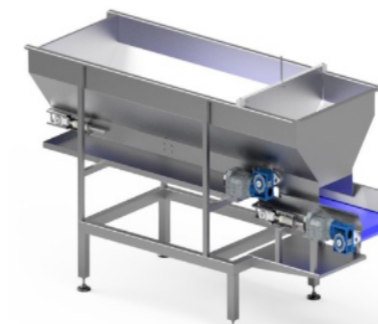
The electronic metal detector with conveyor belt is a tunnel type unit that is usually installed in conveyor systems. It allows continuous inspection of any non-metallic or non-conductive material. The unit is used for the detection of iron and manganese steels, where their presence would be detrimental to a customer's processing equipment or end product.

- Reliable protection against damage to machinery.
- Detection of iron and manganese steel sheaths, including non-magnetic digging teeth.
- Simplicity of operation and fully adjustable sensitivity / detection levels.



ICE TOLL

Product description



The hopper is used to feed the ice elevator for the ice packing machine (model ac-650 rv4).

It has been designed to create a stable, durable, easy-to-operate and high-performance machine. It is operated by means of the control screen from the ice packing machine.

The hopper is lined with polyethylene plastic to prevent the ice from sticking to the stainless steel of the hopper.

- Aisi 304 stainless steel chassis.
- Top brand components.



STORAGE HOPPER

Product description



Supply hopper. Machinery approved by the EC, through a certified company. Made entirely of stainless steel. According to food regulations.

Structure in lacquered steel. With rubber belt and transmission driven by motor reducer. Its main function is to receive the product and supply the line for the different processing times. Achieving a perfect autonomy of the line.



Tunnel freezer

Product description



Know Ice's freezing tunnels are designed with the latest knowledge in the industry. The tunnels are designed depending on the desired ice production so that they are powerful enough to dry all the ice that enters the tunnel.

Freezing tunnels are very important in high quality ice factories because they prevent the bagged ice from sticking inside the bag. If we have solid, well-cut ice, we must have a freezing tunnel to maintain the quality of the ice all the way through. It is a pity to have high quality ice and it ends up sticking inside the bag making a block because we do not have a freezing tunnel,

The freezing tunnel is made to measure for each client so that we can adapt to the space and organisation needs of our clients.



SEMI-AUTOMATIC PACKAGING LINE

Product description



The semi-automatic belt weigher is a weighing line that performs individual weighing inside a bucket, the weighing system works by means of a weighing bowl that is fed by 2 vibrating paddles, one wider than the other one. The dosing mode works by vibrating the two paddles and feeding the bowl until it approaches the desired weight. When it is approximately 10% short of the desired weight, the wider vibrating paddle stops discharging product and it is the thinner one that discharges product until it reaches the weight we have indicated, getting as close as possible and minimising the weight scale, thus achieving accurate weighing.

The weigher is mounted on a stainless steel chassis and consists of vibrating blades that move the product feeding the bowl, then it has flags that, when the blades stop, are responsible for retaining the product so that there is no possibility of more product falling than necessary. When the product is unloaded, it is deposited on a bag or box, which is held by an operator. This operator is the one who gives permission to unload the bucket.



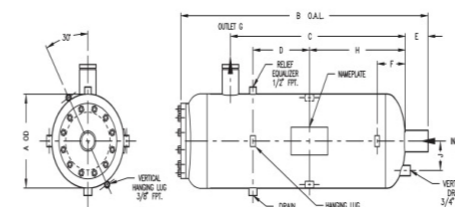
AMMONIA FILTER

Product description



Know Ice has developed together with US companies (Harley Refrigeration) a microparticle ammonia filter. This filter increases the energy efficiency of the plant, because after filtering the ammonia remains in its purest state.

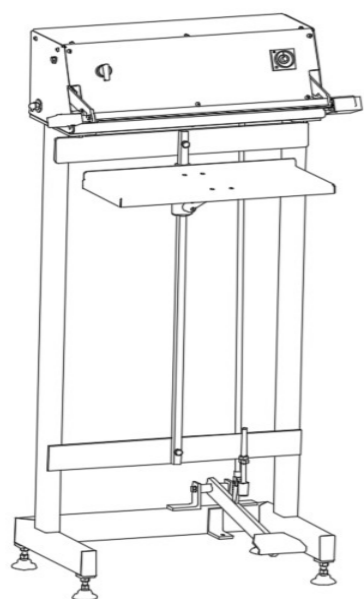
The ammonia filter is something of a pioneer in the industry and its benefits are not yet fully understood, but it has a lot of potential. For example, with this filter we aim to minimise compressor maintenance by preventing oil from entering the compressors, we aim to minimise oil purges in the evaporators by minimising the amount of oil in the ammonia.



- Constructed of durable carbon steel
- Designed specifically for all reciprocating refrigeration compressors
- Provides 10 times the oil removal rate of conventional oil separators
- 5 models to choose from covering the full range of compressors
- 400 PSI high pressure design
- Oil float valve assembly with shut-off valve available as an optional accessory

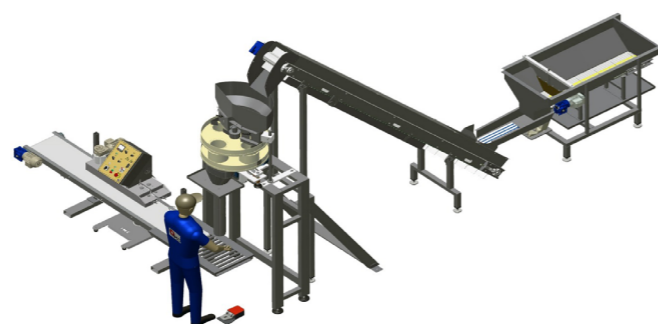
BAG SEALER

Product description



If the semi-automatic bagging system is used, an operator is required to seal the bags. The sealing of the bags can be carried out in two different ways, depending on the sealing speed required:

- Pedal Sealer: The operator has to place the bags on the machine and press a foot pedal to seal.
- Continuous sealing: The operator places the bag on a conveyor belt and stops by a continuous sealing machine which seals the bag in motion. The bag would exit at the end of the conveyor belt fully sealed.



SOFTWARE KNOW ICE

Product description



Know Ice has developed its own control software as well as its own electrical panels. This allows us to have full control of the installations and to be able to adapt to the customer's needs.

Our software can control the complete ice plant, for example, evaporators, condensers, compressors, water treatment, solar panels, conveyors, sieving machines, bagging machines, metal detectors, bagging machines, palletising robots, intelligent shelves, temperature chambers, etc.

Thanks to the software, but always with the customer's permission, Know Ice can control, from Spain, the customer's factories and see all the sensors, in order to make a diagnosis of the situation and be able to see possible problems.

The client will be able to see from his mobile device the situation of the factory and see if there is any problem. If there is a problem, a message is automatically sent to the customer and to Know Ice, so that it can be solved as soon as possible.



04

Palletising systems Palletising and Automated Warehousing

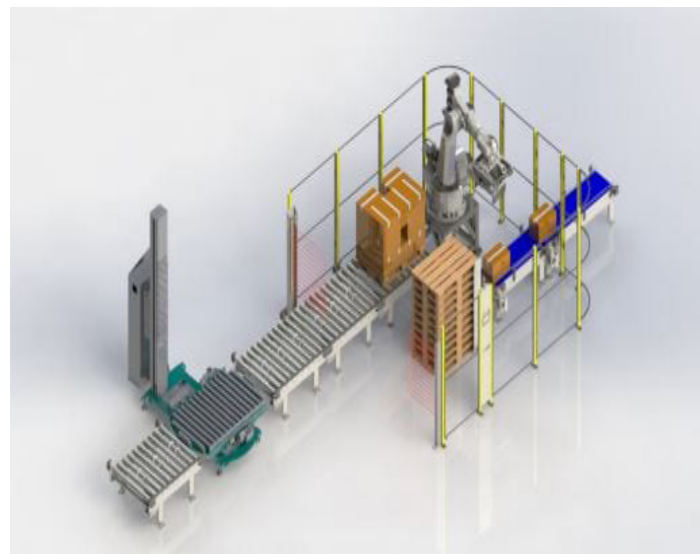
Robotic palletizing

Storage systems

Robotized Palletizing

Together with our industrial partners INSER ROBÓTICA we are capable of designing and building automated palletizing systems, both for sacks/bags and boxes. Thus providing the most advanced technology throughout the manufacturing chain of your plant.

Ensuring in this way not only the maximum organization of the ice pallets when they leave your factory, but also a much higher rhythm and speed of work, as well as the constancy of work that only a robot can guarantee. In addition, these systems are installed in refrigerated chambers/rooms, adding this to all of the above, an increase in the final quality of your product.



[Watch video clickig here](#)

After filling the containers and inserting them into boxes or trays, our solutions also take care of palletizing precisely according to the specified mosaic. Automated palletizing is the end of the production line.

We design our pallet racking solutions tailored to your needs.

Compact palletizing solutions with a single robot, pneumatically operated shovel clamp, whose strong point is the low investment and the little space occupied in the plant.

Large multirobot systems that include options such as layer preparation prior to full layer palletizing, capable of taking on the most ambitious productions.s.



Pallet racks

Storing goods on pallets is the most common method of managing warehouse stock.

Our systems can be easily configured in a variety of ways depending on your needs and pallet load, ensuring a functional and logical storage solution for you.

Whatever the industry, there is a range of storage systems that can provide optimal storage economics. From Drive-in Racking or Mobile Racking (MOVO) for frozen and cold-stored products; to first-in, first-out (FIFO) pallet flow systems for bulk products, such as those that need to be consumed by a certain date..



Warehouse robotic palletizing

Gonvarri Material Handling is one of the world's leading suppliers of industrial storage systems, from pallet racking and picking, to complete storage solutions. In addition to world-leading storage solutions comes world-class racking inspection and installation and warehouse security consulting and installation.

Complementing our extensive product portfolio of customer-focused storage solutions is our comprehensive package of rack security and inspection services from our qualified inspectors and engineers. Our systems can be easily configured in a variety of ways depending on your needs, to ensure you have a functional and logical warehouse storage solution.

So whether you choose from our core range of services or require something more bespoke, it's a comprehensive offering designed to meet your most demanding needs.

Shelving system

Our small parts storage and handling products provide a unique combination of performance, safety and economy.

With a wide selection of racking options and systems, we can offer comprehensive solutions for any small parts collection or storage area; multi-level shelving, mobile shelving, cash flow or signaling and marking systems.

Know Ice offers something for everyone, making it a world-class combination of performance, safety and economy, while adhering to safe working practices and local requirements and regulations.



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