



icesilo

S T O R A G E F O R F L A K E I C E

Friostar has been specialized for over 40 years in the design and installation of plant and machinery for production, storage and packaging of ice, in all its forms.

The consolidated experience in the international arena, reliability and a high degree of technical skills allow us to offer an efficient and precise design, using the most cutting-edge tools and materials.

icesilo

is an innovative system for the storage and distribution of flake ice, suitable for fishing centers, process industries and wherever there is a need for large quantities of ice.

SYSTEM OPERATION

ICE SILO is composed of a self-supporting structure with a square plan on the bottom of which a series of worm screws are positioned in parallel.

When you want to collect ice, the operator presses a button and the worm screws rotate, extracting the ice from the bottom of the deposit and dosing it into a bin placed under the outlet hopper. In this way, the ice produced first is extracted first (First IN First OUT system).

APPLICATIONS

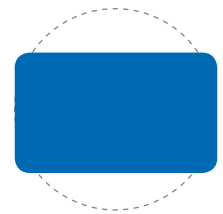
- Fish centers
- Fishing companies
- Mushrooms process industry
- Bakery
- Food and process industries
- Ice factories
- 24/7 vending machines

BENEFITS



Energy savings of 50% compared to the orbital system

Rectangular section plan for greater storage capacity compared to circular plan systems with an area saving of 30%



CONFIGURATIONS

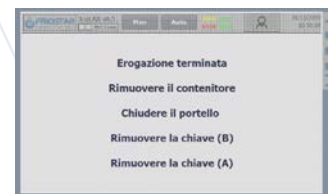
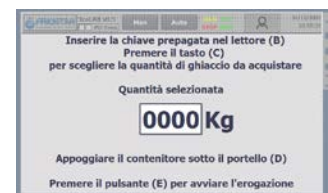
- Monobloc system including insulation.
- System without insulation for installation in existing storage cells.
- Direct connection to conveyor belts, doser, scale, packaging machine, end of line.



FEATURES

- Stainless steel self-supporting structure
- Polyethylene walls suitable for contact with food
- Independent motorization to divide mechanical stresses
- Absence of fifth wheel and orbital transmission components
- Absence of contact with operator and perfectly hygienic storage
- Suitable for any ice maker, even existing
- Suitable for outdoor installations
- Perfect washability of all surfaces
- Simple mechanics with parallel screw conveyors rotating on fixed supports, significantly reducing any mechanical loads
- Suitable for installation in existing cold rooms
- Reduced consumption thanks to the partialization of the electric power
- Reduced maintenance
- PLC and touch panel control during all the supply phases
- Anti-blocking protection
- Quick installation in a few days
- Selection of summer-winter configuration.
- Designed to minimize deformation and breakage of ice flakes

SCREENSHOTS DISPENSING



OPTIONAL

- 24/7 withdrawal with prepaid key
- ICE 4.0 kit allowing digital connection to Industry 4.0 technologies with access to the related state incentives. Ice 4.0 allows to control the operation and performance of the system at any time, even remotely
- Integrated refrigeration system
- Automatic packaging with batch and expiry date
- Precise dosing system
- Self-supporting structure to support ice makers
- Recovery of waste ice to pre-cool the water to reduce the temperature difference of the ice producer and increase productivity. The water is pre-cooled to reduce the temperature difference of the generator
- Ice level control sensor
- Volume dispenser allowing to speed up packaging
- Instant reading of the dosed quantity of ice
- Adjusting of ice output

COMPLEMENTARY EQUIPMENT

- Bag lifter
- Continuous welding machine
- Dater for production lot and expiry date



24/7 automatic distribution system with prepaid key



Rechargeable prepaid key for efficient management at any time



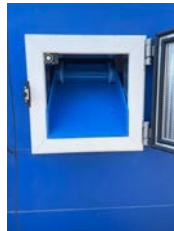
Instructions for the automatic ice distribution displayed on the panel



Easy check of the remaining credit on prepaid key



Pre-paid key recharge without operator



Ice exit chute



Siemens technology automation supporting INDUSTRY 4.0 technologies



Siemens touch panel for the control and adjustment of all operating parameters



Conveyor belt for ice extraction



Rear view - transmission unit



Variable pitch helical screw conveyors to avoid the compression of the ice



Inside view during ice production



Carpentry made of AISI 034 stainless steel



ICESILO version with stainless steel insulation



Touch panel for machine functions control



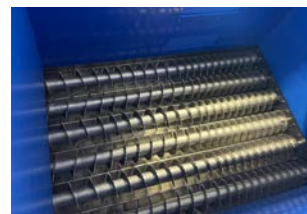
Simple and intuitive operator panel. Status of the system and instructions for the operator constantly displayed on the screen



Fixed and independent motor groups



Inspection hatch



Worm screws



Ice transport on conveyor belt



Inspection hatches



COMPLEMENTARY EQUIPMENT
Manipulator for bags lifting



Screw conveyor operation: - button - remote control - external PLC - scale or dispenser impulse - magnetic card