

# MNS MINTZAS S.A.

MACHINERY CONSTRUCTION

Ice Factory Equipment



## **Our Company**

The company was founded in 1991 by Nikolaos and Stella Mintza as a sole proprietorship based in Patras. In 2003 it relocated to the Industrial Area of Patras. In 2005, it was transformed into MNS MINTZAS S.A.

The company MNS MINTZAS SA is located in the Industrial Area of Patras, established on a privately owned area of 4000 m2 with building facilities of 1500 m2. It is a modern unit engaged in the manufacture of machinery. The long-term experience combined with the specialized know-how of MNS MINTZAS SA ensures it the ability to design and manufacture machines according to the needs of each industry. For the last 8 years, it has been engaged in the manufacture of ice cube handling, storage and packaging machinery.

Through continuous research and development, MNS MINTZAS SA succeeds in being a pioneer in the solutions required for the packaging of ice cubes.

## **Executives & Staff**

MNS MINTZAS S.A. employs a valuable, experienced and responsible workforce of University and Technological education. Properly handles the study, design and construction of machines.

In our company, the manufacturing of all machines is done entirely in our factory, including all the required work (mechanical, electrical, plc programming, etc.).

The many years of experience in the field of special constructions of MNS MINTZAS SA enables it to solve difficult problems in the production process of every company.



### Bases of the ice machines

The bases are manufactured according to the type of ice machines that will be placed on them. They are used for the mass collection and transport of the ice cubes to the temporary storage tank (buffer). The bases are usually either 1-level or 2-level with a plastic conveyor belt in the center. They can be adapted to any space.

#### **Construction materials:**

- Stainless steel 304L
- Plastic food conveyor belt

# Transport lines and Elevators

Transport Lines can be straight, turning and sloping. They are used to transport the ice cubes as well as the ready packed bags.

Elevators are needed to transport the ice cubes to the temporary storage tanks and to the automatic packing machine. The height is defined according to the needs of the construction and is of type "Z".

- Stainless steel 304L
- Plastic food conveyor belt or food conveyor belt



# Ice cube temporary storage tanks.

Buffer tanks are used to store ice cubes before the packaging process. The interior is made of stainless steel. Externally, they have 60-80mm thick lateral insulation made of sprayed polyurethane and a coating of stainless steel. The sky insulation is 40mm of stainless steel panel. An auger conveyor or a conveyor belt is used to extract the ice cubes. The tank has a leveling mechanism for ice cubes to make full use of the internal space of the tank. The capacity varies depending on the daily production.

Their dimension is according to the location of the installation and the desired capacity.

Usually it is from 1t to 3t.



#### **Construction materials:**

- Stainless steel 304L
- External polyurethane insulation 60-100 mm thick.



### Base - Small capacity tank.

The tank is made of stainless steel and has 50mm insulation. Its compound is made of polyurethane and is made by the injection process. The capacity is about 400kg. An ice machine model can be fixed on top by putting the corresponding cap.

The operation proceeds with pedal. Its dimension is:

(L) 1844mm X (W) 1515mm X (Y) 1310mm

- Stainless steel 304L
- 50mm polyurethane insulation



# Semi-automatic volumetric packaging machine.

The semi-automatic volumetric packaging machine is used to pack the ice cubes into ready bags. It is designed to be very easily adjusted using two screws.

#### Characteristics:

- Package weight: 2kg to 5kg
- Packaging material: Ready bag
- Function: Petal

#### **Construction materials:**

- Stainless steel 304L
- Plastic food conveyor belt



## Ice cube sorting machine

The Ice Cube Sorting Machine is used to remove melted or broken ice cubes before bagging them, resulting in a high quality end product.

#### **Construction materials:**

- Stainless steel 304L



# Automatic vertical packaging machine with volumetric system.

The Vertical automatic packaging machine with volumetric system is used to pack in specific kilograms per bag. The volumetric system has the ability to adjust from 2kg to 4kg.

#### **Characteristics:**

- Bag width: 250mm -> 500mm.
- Bag length: 100mm -> 800mm
- Type of bag: pillow with handle
- Production speed: Up to 18 bags/minute
- Weighing type: 4-container volumetric system
- Package weight: 2kg to 4kg
- Packaging material: FILM
- Automatic film centering system
- Inflatable film holding shaft
- PLC remote control system
- Welding method: Impulse

- Stainless steel 304L
- Anodized aluminum



# Automatic inclined packaging machine with volumetric system

The automatic inclined packaging machine with volumetric system is used to pack ice cubes in specific kilograms per bag.

The volumetric system has the ability to adjust from 2kg to 5kg.

#### **Characteristics:**

- Bag width: 250mm -> 500mm.
- Bag length: 100mm -> 800mm
- Type of bag: pillow with handle
- Production speed: Up to 18 bags/minute
- Weighing type: 4-container volumetric system
- Packaging Kilos: 2.5kg to 10kg
- Packaging material: FILM
- Automatic film centering system
- Inflatable film holding shaft
- PLC remote control system
- Welding method: Impulse

- Stainless steel 304L
- Anodized aluminum

## **MNS MINTZAS S.A.**

MACHINERY CONSTRUCTION

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