# O.M.T. TRIACA srl

The Triaca family has a long tradition of working iron in Chiavenna, Italy since 1600 to the present day.

EVEREST Spa was born in the 20's out of Ameto Triaca's intuition: one of the first three factories involved in the manufacturing of industrial refrigeration systems in Italy.

In the 60's, Arnaldo Triaca, after having relaunched the EVEREST Spa, which was now in difficulty, founded the OMT (Officina Meccanica Triaca) in 1970. In 2000, it was transformed into OMT Triaca Srl, under the management of his sons Lorenzo and Francesco.

We have always been dedicated to the design, construction, testing and installation of industrial refrigeration systems for all types of applications.

We were the first in Europe to produce the artificial snow (Bormio in 1983), artificial ice skating rinks, large and small systems and special application machines, especially, for food, dairy, chemical and pharmaceutical sectors etc.

During the last years, we have specialized in the creation of complete machines including testing, especially in the food category: dairy food, ice cream industry and wherever liquids need cooling (wine, beer, fruit juices...)

What sets us apart is the fact that everything that leaves our company has been designed and built by us. This includes all parts: whether mechanical, refrigeration or electrical.

Everything from the frame to the electrical cabinet, from the programmable logic controller (PLC) to performance and testing, the entire system is envisioned and created in our company to guarantee the utmost of quality and reliability at an affordable price.

### **STANDARD PRODUCTION:**

- CHILLED WATER TANK WITH ICE ACCUMULATION
- PC TANKS FOR CONTINUOUS PRODUCTION OF CHILLED WATER
- CHILLED WATER FOR BREAD-MAKING
- STATIC ALUMINIUM STEEL EVAPORATORS FOR LARGE SYSTEMS (DIRECT AND/OR GLYCOL EXPANSION)
- MOBILE WASHING CIP UNIT WITH ELECTRONIC CONTROL OF THE CONCENTRATION NEW WITH DISINFECTANT INJECTION
- AUTOMATIC / MANUAL CIP
- FALLING FILM EVAPORATOR BAUDELOT COOLER
- PLATE CHILLER (TANK WITH BATTERY PLATES WITH DIRECT AND/OR GLYCOL EXPANSION IMMERSION) ICE STORAGE TANKS WITHOUT DIRECT EXPANSION REFRIGERATION UNIT
- COMPONENTS FOR INDUSTRIAL REFRIGERATION SYSTEMS



# INDUSTRIAL REFRIGERATING PLANTS CONSTRUCTOR

FOR FOOD AND DAIRY INDUSTRIES



O.M.T. TRIACA srl

**Distribuidor España/Portugal** 



# CHILLED WATER TANK WITH ICE ACCUMULATION

The need to have a large cooling capacity available to be used in a few hours without having to install large power plants, has led to the development and distribution of a CHILLED WATER TANK WITH ICE ACCUMULATION. This is based on the principle that latent heat of fusion of 1 kg of ice is equivalent to 80 Kcal at a constant melting temperature of 0°C, and it is therefore possible to accumulate large amounts of chilled water supply in relatively small volumes. Our CHILLED WATER systems are an application of this principle: Perfectly insulated tanks containing water in which smooth tube coils are immersed where a refrigerant circulates (freon, glycol, ammonia) outside of which forms a sleeve of ice with a predetermined thickness and controlled by the state of the ice. Subsequently, water is drawn from the tank at a temperature of 0.5°C (ice melting is assured by a stirring blower system) and sent to the system by means of the pump, back into the tank and distributed over the coils.

Application fields: Dairy, beer, meat, fish, vegetables and food in general.



The tanks of the PC series are suitable to produce chilled water with continuous production at a temperature close to 0°C without the risk of freezing. In many applications The system entirely in stainless steel provides you the confidence that the chilled water is always in contact with parties in AISI 304 stainless steel and can be used directly for food applications (bakery, confectionery, vegetables washing, fish etc.).



Water chillers for bread-making machines are suitable for producing chilled water at a temperatures close to 0°C. The system entirely in AISI 304 stainless steel provides you the confidence that chilled water can be used directly for food applications (Bakery, Confectionery, etc.). Accurate execution, simplicity with the unit combined with robust construction and using of the best components and materials, ensures that the water chillers are very reliable and safe as required in the construction of industrial plants where refrigerant systems are an important step in the production process. The production range allows you to choose the most suitable machine for every application. Each machine is equipped with a tank that holds a fixed amount of chilled water, 100 Lt or 200 Lt. allowing models with a stirrer, even allowing ice accumulation.

# STATIC ALUMINIUM STEEL EVAPORATORS FOR LARGE SYSTEMS (DIRECT EXPANSION AND/OR GLYCOL)





The STAINLESS STEEL STATIC EVAPORATORS OMT Triaca are particularly suitable for large systems, especially where a high moisture content is required, low weight drop of the product stored and energy savings. Such batteries can be supplied with chilled liquids (+1°C in chilled water, anti-freeze solutions: e.g. glycol) or direct expansion of gas (freon, ammonia, etc.)

# MOBILE WASHING CIP UNIT WITH ELECTRONIC CONTROL OF THE CONCENTRATION - NEW WITH DISINFECTANT INJECTION



The mobile CIP washing unit OMT was designed to wash in a continuous cycle programmed with machines and food tanks. In the food industry, the easiest and cheapest way to wash and sanitize equipment is the CIP. (Clean-In-Place).

# AUTOMATIC CIP



Automatic 2×500 CIP

The CIP washing unit was designed to wash in a continuous cycle programmed with machines and food tanks.

### FALLING FILM EVAPORATOR - BAUDELOT COOLER



This type of cooler is usually used to cool the water of process close to freezing (+ 1 ° C) when the involved powers are high.

The system consists of inflated stainless steel plates assembled in batteries with a special tray that distributes the water mist on the surface of the plates – where inside circulates the cooling fluid – and forms a continuous film on the outside of the plate.

The distribution tray is fundamental and should ensure the uniformity of the water film, which must have a constant flow rate and ends in the lower tank where there is the pump attachment. In this way, given the high descent speed, you get very high K transmission coefficients.

An opening system facilitates inspection and periodic cleaning to maintain high efficiency of the system. To maintain a constant flow there are additional attachments to connect one or more recycling pumps between the collecting tank and the distribution tray.

# PLATE CHILLER TANK WITH PLATES WITH DIRECT EXPANSION AND/OR GLYCOL





The tanks of the PLATE CHILLER series are suitable to produce chilled water at a temperature close to 0  $^{\circ}$ C without the risk of freezing.

In many applications it is therefore possible to avoid anti-freezers (glycol etc.) excluding possible contamination of treated products.

The system entirely in stainless steel provides you the confidence that the chilled water is always in contact with parties in AISI 304 stainless steel and can be used directly for food applications (bakery, confectionery, etc.). In many applications, the PLATE CHILLER with the addition of antifreeze chillers are used for temperatures below 0°C (for such applications, please consult our Technical Department).

## COMPONENTS FOR INDUSTRIAL REFRIGERATION SYSTEMS



Battery plates with direct and/or glycol expansion immersion

Ice storage tanks for glycol suppl



Ice storage tanks without direct expansion refrigeration unit

Plate Chiller (tank with battery plates with direct and/or glycol expansion immersion) Ice storage tanks without direct expansion refrigeration unit

