



Travaglini

**EQUIPMENT FOR MATURING,
DRYING AND CONDITIONING
CHEESE PRODUCTS**



Travaglini S.p.A., a leader in the meat industry, also produces equipment for the aging and maturing of cheese products.

Through our professional experience acquired over years of technological development, with the help of our customers all around the world, we can satisfy the production requests of the companies in dairy industry. Specifically:

Maturing room

The maturing phase is very important for the production of fresh and semi-fresh foods; its purpose is to allow the development of aroma and the taste of the cheese. Maturing rooms are composed by Sani-system in stainless steel with rounded corners, in order to allow for adequate sanitation.

Travaglini systems are designed to guarantee correct thermo hygrometer readings in each part of the cell, controlled gas creation (ammonia and carbon dioxide), and uniform air distribution through textile ducts in order to avoid excessive drying of the product's surface.

Ageing room

Depending on the duration of this phase, it's possible to talk about medium (3–6 months) or long (more than 6 months) seasoning. Travaglini aging equipment maintain temperature and relative humidity so that they fall within such values in order to allow the development of the product's characteristic aroma.

Air is distributed into the room through ducts, which allow to achieve an uniform air flow on the product, controlled in function of the desired shrinkage.

Depending on the type of cheese or loading, it is possible to offer different solutions: equipment with round textile ducts, blowing walls or static exchangers. Normally cheeses are placed on special stackable racks or hung.



Conditioning rooms

Travaglini S.p.A. has always focused on respecting ideal thermo hygrometric parameters in production, manufacturing and packaging areas. The need to sanitise these areas can also be considered with this goal. An example might be air treatment units, developed with technical specifications, such as circular angles, inclined planes, or washable materials, which allow for easy cleaning of the various components to remove dirt and residues.

Computerized system

Our computerized control and management system, in addition to monitoring temperature and relative humidity, allows:

- to set predefined programmes;
- to control the fluid and the environmental temperature;
- to record the graphical trending of different variables and display on a single screen (temperature, relative humidity, etc.);
- to verify the exact progression of the entire maturing process.

Furthermore, to allow for various functions to be centrally supervised, we have designed a software program for this purpose that allows to monitor and manage system alarms, to collect and graphically displayed the rooms' individual data, remote programming, remote support, and automatic centralised control for better management of energy consumption.





Energy savings

Our equipment are designed to create the best possible result for the product, optimizing the consumption of cold and heat, and sensibly decreasing energy costs. Among our solutions we mention:

Heat recovery:

our system allows to recover the total condensation heat transferred during the refrigeration cycle. Therefore, when the post-heating demand coincides with requirement for cold, there is hardly any need to use external heating sources.

Furthermore, hot water around 40–45°C can be produced with a desuperheater (optionally available) which can be used for other processing systems as well as other plant needs.

Enthalpy:

the enthalpy system utilizes the dehumidifying power of outside air for as long as possible. Our system is based on algorithms that allow to use outside air even when one of the specific values (temperature and relative humidity) seems far from the required values.

Economizer:

in systems with an independent refrigeration unit, there is a sub-cooling system that guarantees a refrigeration capacity that is 15–18% greater than the absorbed electrical potential.

High efficiency motors (IE2–IE3):

increase the system's output, reducing electrical consumption.

Inverter:

frequency regulators, installed on the motor of centrifugal fans and/or compressors, that increase or reduce their rpm in order to improve their efficiency if process and loading conditions change.

Direct coupling motor/fan:

this particular technical solution, combined with the use of an inverter, allows for a reduction in the system's electrical consumption, optimizing its regulation.

Modulation of cooling and heating valves:

to improve system performance in relation to the actual needs of the product during the various phases of maturation maturing.

Hot gas defrost system:

allows to defrost the cooling coil better and more quickly, which consequently saves energy.

