HARD CHEESES





Lactic cultures reinforcing the natural whey

Lyoto, Lyofast, Cryostart, Cryofast SHL and SH

Every good cheesemaker knows the value of using freshly recovered high quality whey loaded with active bacteria for the scope of applying the correct cheesemaking technology. Sacco's solution ensures that every hard cheese factory continues to reproduce its own natural whey every day, but with regular supplemenation using Lyofast, Cryofast SHL, and/or SH cultures.

We can improve hard cheese production by adding this selected biomass of concentrated and carefully controlled strains to the typical bacterial flora of every cheese factory. With the precise removal of the whey from the curd, and depending on the correct fermentation activity, this allows the cheesemaker to obtain the optimal rheological characteristics of the cheese, which is ideal to achieve the desired shapes and ensure that the correct amount of sugar reduction has taken place.

Lyofast, Cryofast SHL and/or SH strains are added directly to the milk in the cheese vat, thus exerting a decisive supportive action in combination with the typical whey starter, thereby ensuring a complex contribution from millions of natural bacteria.

This ensures that optimal conditions are reached to obtain the correct drop in the Ph of the hard cheese. In practise, this energetic action of the lactic flora is achieved without reaching high acidity levels that compromise the structure of the curd.

In addition, we also have the option of other reinforcing milk enzymes such as **Lyoto, Lyofast, Cryofast and Cryostart SH** to be added as fermention enhancers to the natural whey.





HARD CHEESES



Bioenhancers: Nutramin - Reavist T

Our highly experienced **Research** and **Development** team has studied and developed new and unique **Bio-enhancing** ingredient blends that can be used in various dairy products to improve their performance, speed, and production costs of the semi-direct bulk starter systems. We know that the milk varies in composition and quality depending on the season, animal health, and nutrition, and also from one producer to another.

The essential elements for the growth of lactic acid bacteria are therefore often not found at a sufficient level or are not well balanced at strain level among one another. For this reason, the development of Lactic cultures often takes place incorrectly, not uniformly, and results in fluctuating performances.

Thanks to the optimised and standardised growing and nutritional conditions provided by the **Nutramin** and **Reavist T** bioenhancers, optimal growth of the strains in the whey can now be achieved, ensuring that the fermentation process is both accurate and capable of improving the characteristics of the final product.

The culture growth is stimulated and optimised thanks to the selected nutritional and specific growth factors for the primary development of lactobacilli and, more generally, for the other strains that occur naturally in cheese whey.

Nutramin and Reavist T is available in packages of 10 kg.



Powder rennet and liquid rennet

The perfect products for the making of Grana and other hard cheeses are Clerici's powder and/or Clerici's liquid rennet. The attentive selection of specific raw materials guarantees a unique enzymatic richness, a uniform granular structure, and an optimal solubility.

CLERICI POWDER RENNET

Lines	Chimosine-Pepsine %	IMCU
TYPE E	96-4	860-1620
TYPE P	90-10	870-1170
TYPE G	70-30	410-1200

Clerici rennet contributes to obtaining a repeatable and exact clotting and coagulation time, optimal removal of the whey from the curd, and a compact cheese curd structure in the mold. The Clerici rennet is 100% natural, free of preservatives, and is available in **Halaal** and **Kosher** versions

CLERICI LIQUID RENNET

Lines	Chimosine-Pepsine %	IMCU
SPECIAL	92-8	153-580
RED	75-25	110-235
GREEN	50-50	120-242
YELLOW	20-80	51-250

Sacco System is the international biotech centre applied to the food, nutraceutical and pharmaceutical industry. Sacco System provides its customers with healthy, natural and functional products.

