

GEA supports SERUM ITALIA SPA entrepreneurship in Italian Dairy Market

GEA has successfully delivered to Serum Italia SPA a turnkey facility for the production and processing of Sweet Whey for the Italian dairy market. An evaporation process type COMBIVAPORATOR™, a set of crystallization tanks, truck filling station and CIP kitchen are included in the section of the Serum plant used for the whey concentration.

The project had some significant challenges for the evaporation plant which GEA successfully managed:

- A building height limited to 7.5 m. GEA's proposal involved a partial outdoor implementation of COMBIVAPORATOR™. The key hygienic components are maintained on the inside and are preliminary conceptualized during the sales phase by 3D drawing in order to visualize and agree on the lay-out.
- A 60 dBA maximum outside noise emission to protect the nearby neighborhood. GEA applied an insulation of the outside part of COMBIVAPORATOR™, both in order to mitigate the noise, and also limit calorific energy losses.
- Minimum energy consumption as well as effluent discharge. Plant compactness, as well as network volume reduction, contributed to minimizing the effluent load. The integration of Mechanical Vapour Recompensors minimized the consumption.
- GEA proposed Baby Food design, as part of our standard, without any extra cost.



The COMBIVAPORATOR™ technology is one that combines two bodies into one single evaporator body. The advantages of this system are numerous:

- The technology offers a very advanced and economical configuration, offering the optimum Total Cost of Ownership for the client.
- It also allows saving of up to 15% on floor space compared to conventional set-up, as well as reducing operating cost by the sole use of Mechanical Vapor Recompression covering the entire evaporation range, and distributed in an optimal way.
- With this technology, the lowest specific consumption is also achieved: 17,2 kW/T of water evaporation for the duty of concentrating whey from 18%TS to 62%TS. As a result of this low consumption, the Client became eligible for Energy Efficiency Credits State funds with a further reduction of its investment costs.

A strong international network enables GEA to offer quality project management which is governed by one underlying principle:

For each contract, there is a both local GEA entity with close customer contact to facilitate local coordination, and a core technology center, highly specialized in its field of competency, bringing the most advanced and customized process solution to the client.

GEA secured the project with Serum Italia, thanks to this project management organization. Each project milestone was achieved and time schedule and local legislation respected. GEA also guided and provided full training to the customer's young and reduced project team right up until take-over of the equipment.

The customer was therefore able to focus on its B2B whey transport business.

Contacts:

GEA Process Engineering France

Couderc, Jérôme

Jerome.couderc@gea.com

GEA Process Engineering Italy

De Lorenzi, Lucio

Lucio.delorenzi@gea.com

SERUM ITALIA SpA

Fontana, Vincenzo

vincenzo.fontana@serumitalia.it

About GEA Group

GEA Group Aktiengesellschaft is one of the largest suppliers for the food processing industry and a wide range of other process industries. As an international technology group, the Company focuses on process technology and components for sophisticated production processes. In 2013, GEA generated consolidated revenues in excess of EUR 4.3 billion, more than 70 percent of which came from the food sector, which is a long-term growth industry. The group employed about 18,000 people worldwide as of December 31, 2013. GEA Group is a market and technology leader in its business areas. It is listed in Germany's MDAX stock index (G1A, WKN 660 200) and the STOXX® Europe 600 Index. Further information is available on the Internet at: www.gea.com.

About SERUM ITALIA SpA

SERUM ITALIA SpA was founded in 2007 and has its main production facility in Cazzago San Marino, in the lush and green Franciacorta countryside. The company production includes WPC permeate concentrate and whey concentrate always increasing the productive capacity thanks to new supply contracts and the widening of the production structures. Product origin has always been fundamental for SERUM and since the beginning it established long term relationships with its suppliers, ensuring a constantly high level of quality, improved through the insertion of new suppliers of raw materials. 80% of the whey supplied to SERUM comes from regional dairies with which the company has stipulated contracts on annual basis, the remaining 20% derives from traders with whom the company establishes long term collaboration relationships based on annual contract.