

ROUSSAS S.A. artisan cheese maker.

Tradition and technology



CHALLENGE

The drastic capacity upgrade and the automation of the entire production plant while in full operation (minimum downtime)

SOLUTION

- New: Reception line, CIP station and Pasteurizer of ewe milk
- Modernization of existing units: CIP station, ewe milk pasteurizer
- Central automation SCADA system installation and interconnection with plant ERP system

RESULT

A modern, fully automated facility, with significantly increased capacity and easy future upgrades

PROJECT DESCRIPTION

ROUSSAS Dairy was founded in 1952 by the Roussas Family and has remained solely dedicated to the feta cheese production ever since. The family has adhered to the traditional methods of production for a truly authentic product.

Recently, the company upgraded its plant in Almyros Magnesia and installed new production lines. Its annual capacity, after three expansions, is over 10,000 tons of cheese and its processing capacity for sheep's milk is 80,000 lt. per shift. **AS Automation System Hellas** was commissioned to deliver a big part of this upgrading and expansion, with the plant in full operation!

The project entailed

- The supply and installation of a new automatic reception line.
- The supply and installation of automatic raw milk storage.
- The supply and installation of a new pasteurizer for ewe milk.
- The supply and installation of a new central CIP unit for raw milk products.
- The modernization of existing CIP unit for pasteurized products
- The modernization of the old ewe milk pasteurizer unit.



- The installation of the central automation SCADA system and the interconnection with the plant's ERP system.

TECHNICAL SOLUTION

CENTRASIP & GALAXIAS

Our flagship CIP station CENTRASIP and pasteurizer GALAXIAS were manufactured with the best quality components from top suppliers

CIP station

We supplied and installed a CENTRASIP CIP station with components from Alfa Laval, Endress+Hauser, Festo, Samson, Siemens and many others. The CENTRASIP station is fully automated by our software and controlled by the central SCADA. All the parameters are adjustable separately for each circuit by the operator. Our vast experience in CIP systems and the unit's automation system guarantee optimal use of chemicals, low water consumption and reduction of waste. The use of regenerated water greatly reduces water consumption by at least 30%.



At the same time, we modernized the existing CIP station, replacing old sensors, instruments, valves and the control panel. A new regeneration water tank was added and the modernized CIP unit was integrated to the central automation and SCADA.

Pasteurizer

We supplied and installed our skid-mounted GALAXIAS pasteurizer unit with Alfa Laval heat exchanger with a capacity of 12.000 Lt/h. It is equipped with components from Alfa Laval, Endress+Hauser, Festo, Samson and Siemens among others.



The fully automated GALAXIAS, has a power and automation panel with SIEMENS equipment (PLC series S7-1500) with a 12” touch screen. The pasteurizer is cleaned through its own cleaning circuit, optimizing uptime. The use of the equipment is continuously monitored through the central SCADA with corresponding maintenance alarms.

Upgrading the existing pasteurizer

Alongside, AS Hellas upgraded the existing pasteurizer and integrated it to the central SCADA, making optimal use of the existing equipment. The upgrading is adding new functionality to the pasteurizer and proves that the smart factory of the future with connected devices doesn't necessarily mean huge investments, but it could be realized in small and well planned steps.

Central SCADA system

The new central SCADA system is controlling the whole operation and guarantees product quality, traceability and productivity. It is comprised of two redundancy servers. The servers run the Siemens WinCC V7.3 operating system that supports access via smartphone or tablet. The central SCADA system integrates the reception, pasteurization, cleaning, refrigeration and storing functions and it is capable of integrating the full spectrum of the plant's processes.

The full configuration of the SCADA system:

- Siemens CPU S7-1500
- Two DELL servers PowerEdge
- Two SCADA WinCC V7.3
- Siemens WEBUX for access via Smartphone or tablet

The system is scalable and new functions for future needs can be added easily.

STAYING AHEAD

ROUSSAS Dairy was the pioneer of organic feta production in Greece and remains the leader producer.



The new facility is enabling ROUSSAS S.A. to secure seamless product quality, traceability and safety, while at the same time is cutting waste and downtime.

ROUSSAS Dairy exports over 90% of its annual production worldwide to USA, Canada, Europe, Africa, Asia, Australia, Middle and Far East.

Feta is well recognized for its astounding quality and is present in the market under the name “Roussas” (Europe, Australia) or under the brand “Mt. Vikos” (USA, Canada) and “Mt. Athos” (Australia, Asia).

The artisan cheese maker is embracing the future, doing what he knows best: **Making authentic products, with unrivalled taste and consistent quality.**

“ROUSSAS Dairy exports over 90% of its annual production worldwide”
