CASE HISTORY

Controlling production costs

Cama Paper Mill and Marchigiana Paper Mill

Introduction

The project stems from the need to integrate production, consumption, and management data to achieve increasingly precise control of the costs and resources used in the production process.

The goal is to transform data collected from company plants and systems into useful information for understanding production costs, monitoring consumption, and supporting efficiency decisions.

Cartiera Cama
Cartiera Marchigiana

Two Italian paper mills specializing in the production of recycled single-layer cardboard for the Italian and European markets, with over 50 years of experience in the sector.

Context and challenges

Cardboard production is a continuous process involving various resources: secondary raw materials, water, chemicals, electricity, thermal energy, and labor. It was therefore important for management to more accurately determine the cost of the finished product, correlating the resources employed with the quantity produced and, where possible, with individual orders.

- **Control production costs:** more accurately determine the cost per kg or ton of cardboard produced.
- **Energy monitoring:** understand the energy produced, purchased, and consumed, distinguishing between electrical and thermal energy.
- **Resource Traceability:** integrate information on raw materials, water, chemicals, labor hours, and energy.
- **Data integration:** connect information from ERP, manufacturing, and energy systems.
- **Decision support:** have up-to-date data to identify inefficiencies and optimization opportunities.



SMC
A DGS COMPANY

Project by SMC, a DGS Company.
Developed with the support and solutions of QuickLink Solutions.

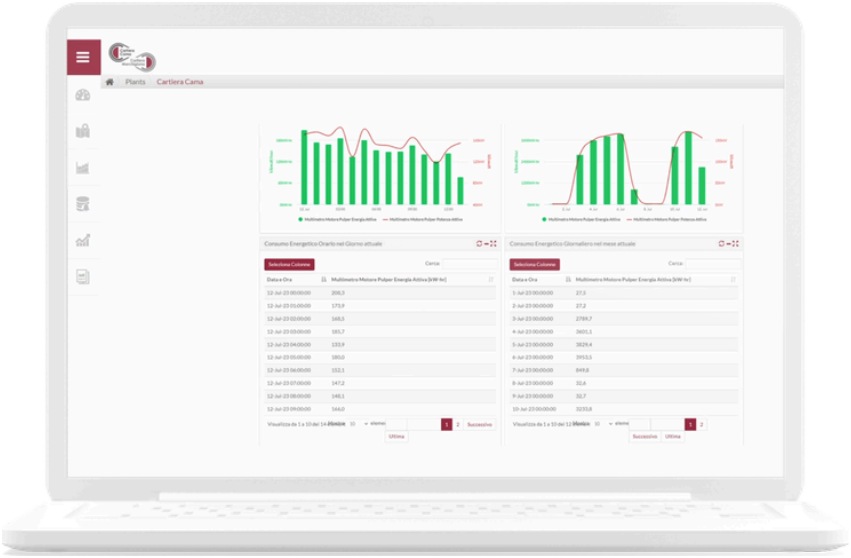
Since 1983, SMC has been a leader in digital transformation with six national offices and over 170 IT professionals. Specializing in advanced solutions based on open source technologies, they focus on optimizing the user experience and seamless solution integration to improve their clients' business efficiency.

QuickLink SOLUTIONS

Solution implemented

The project integrates ERP, manufacturing, and energy systems using QuickLink Solutions' Niagara-based technologies. Easylink, the native supervisor on Tridium's Niagara platform, provides the integration and supervision layer for data from different systems and sources, creating a unified view of the process.

- **Energy monitoring:** integration of data on electrical energy produced by the cogenerator and drawn from the grid, in addition to the thermal energy used in the process.
- **Energy-production correlation:** energy data is correlated with production data, down to the individual order for subsequent cardboard processing.
- **Multi-site integration:** one MAC36 controller and one Profinet driver for each of the 2 plants, with data exchange via SOAP Client/Server towards the management system.
- **Management control:** energy and production information flows into management control, overcoming the separation between technical and economic data.



easyLink

energyLink

powered by niagara framework®

SoapClient

SoapServer

ProfinetDriver

Benefits and results

The integration achieved through Niagara and Easylink allows Cartiera Cama and Cartiera Marchigiana to gain greater visibility over the entire production process, now spread across **2 factories** with **59 monitored points** in total (50 in Cama, 9 in Marchigiana) and **6 integrated production machines** (5 in Cama, 1 in Marchigiana).

- **Cost control:** greater precision in determining the impact of different resources on production costs.
- **Energy monitoring:** integrated view of the electrical (cogenerator + grid) and thermal energy used in the process.
- **Traceability:** availability of information on the main resources used in production, including the integration of the purifier and cogenerator in Cama.
- **Efficiency and sustainability:** the ability to identify inefficiencies, reduce consumption and waste, and support actions to reduce environmental impact.

Testimonials

END CUSTOMER

> **The goal is to ensure traceability of the order throughout all its phases: from the hours of labor required for production, to the consumption of raw materials, water, and chemicals, to the energy costs required to produce the finished product.**
>
> Davide Bettanti, CEO, Cartiera Cama / Cartiera Marchigiana

THE ROLE OF QUICLINK SOLUTIONS

QuickLink Solutions contributed to the project with its Niagara-based solutions, providing the technologies needed to integrate, monitor, and correlate data from various company systems. Integration with company systems allows technical data to be transformed into useful information for production and cost control.

- **Niagara Framework:** constitutes the technological layer for the integration of systems and information
- **Easylink:** allows you to centralize and make process and energy data available in a single supervision environment.

Cartiera Cama and Cartiera Marchigiana, as end customers, directly benefited from the systems integration, while SMC managed the project using the support and solutions offered by QuickLink Solutions.

WHO WE ARE - QUICKLINK SOLUTIONS

Since 2008, QuickLink Solutions has stood out for its cutting-edge energy management solutions for buildings and industry. Our solutions, based on Tridium's Niagara framework, make it quick and easy to configure, deploy, and maintain energy management systems. We operate as a Solutions Partner, providing innovative technologies through a network of certified System Integrators.