

# Power and Energy Management Solutions for the Food Industry

## Case in Point

### Industry Client:

Cheese Manufacturer

### Objective:

Reduce cost of energy

### Results:

Introduced Rockwell Automation Power and Energy Management.

Annual cost savings: \$70 K

ROI: 70%

Payback time: 18 month



Rockwell Automation is the partner of choice for food processing, and manufacturing companies who want to meet their cost, quality, flexibility and regulatory challenges - from raw materials through final shipment.

Our Food Manufacturing Optimization solutions focus on the business issues facing the food industry and address every phase of food manufacturing operations.

Rockwell Automation's manufacturing experience, breadth of product offerings, and technical services help companies optimize their utilization of valuable and limited human, physical and financial assets, while minimizing waste and satisfying demanding consumers and retailers.

## Reduce Energy Costs By:

- Limiting Energy Consumption With Demand Management Solutions
- Monitoring Energy Consumption With Cost Allocation/Load Profiling Systems
- Identifying And Correcting Power Quality Problems With Power Quality & Monitoring Systems
- Avoiding Power Outages With Emergency Load Shedding/ Distribution System Monitoring Solutions

*Application Note*

**Rockwell  
Automation**

## Challenges

With the pressures that manufacturers in the food industry are facing today - constant changes in consumer preferences, government regulation, brand equity, power retailers, global consistency, and consumer packaging - managers are constantly challenged to find flexible solutions to their manufacturing issues while controlling the bottom line.

From reducing the total amount of energy used to managing peak demand, the challenges are complex.

## Solution

Rockwell Automation can help you meet the growing challenges in the food industry, with power and energy management solutions that can help you reduce energy costs and reduce exposure to energy price fluctuations. Additionally, our power and energy management solutions allow you to track energy costs per unit of production, meet regulatory and quality requirements, monitor environmental performance and reduce overall downtime.

### Rockwell Automation offerings include:

#### Energy monitoring and analysis

- Collect energy data from all WAGES (Water, Air, Gas, Electric, and Steam meters):
  - ◆ Power monitors including 3rd party meters
  - ◆ Water, Air, Gas steam meters from 3rd party meters
  - ◆ PLCs
  - ◆ Drives
  - ◆ Process flow meters
- Data storage in energy management databases
  - ◆ Reliable information
  - ◆ Multi-level password protection and privileges
- Provide web-based energy management analysis tools
  - ◆ Charting
  - ◆ Reporting & billing
  - ◆ Cost allocation
  - ◆ Targeting
  - ◆ What if analysis
- Consulting Services
  - ◆ Identify energy saving opportunities and define scope of projects
  - ◆ Focus on projects with measurable results and IRR/NPV that meets or exceeds customer's financial targets

## Central plant control and optimization

Control and optimize:

- Refrigeration
  - ◆ Chillers
  - ◆ Compressors
  - ◆ Cooling Towers
- Compressed air
- Vacuum pumps
- Steam and hot water generation

## Central plant efficiency improvement

- Integrate multiple 3rd party systems with open PLC architecture.
- Optimize and coordinate HVAC scheduling
- Apply drives on HVAC and process pumps
- Evaluate options to reduce process heating and cooling demand

## Demand management and load curtailment

- Limit electrical demand
  - ◆ Load interlocking
  - ◆ Load shedding
  - ◆ Load trimming
- Curtail loads to reduce demand charges
- Manage real time power purchases

In all these wide areas and associated sub-areas, Rockwell Automation has demonstrated industry-leading capabilities to its clients.

Rockwell Automation is the partner of choice for many food-industry leading companies, from local producers to global groups. Let us introduce you to the world of automation products and services we offer, as well as our global network of services experts. Together we're there when and where you need us.

## Summary

In the end, manufacturing optimization is all about making decisions; the right decisions to create a sustainable competitive advantage in the food producing area. With nearly 100 years of experience in the automation industry, choosing Rockwell Automation is the right decision for your Power and Energy management needs. Rockwell Automation understands food production, and we can help you succeed.

## [www.ab.com/pems](http://www.ab.com/pems)

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