

# CHEESE PRODUCER SLICES COSTS, ADDS \$1 MILLION TO ITS BOTTOM LINE

MORE EFFICIENT OPERATION THROUGH DATA SCIENCE

## Key Results:

- Real-time monitoring of automated and manual cleaning processes
- No-hassle installation
- Transition to paperless compliance in < 2 weeks
- PMO validation
- FDA certification
- Utility benchmarking
- Reduced 'off spec' product by 40%, adding \$1 million to the bottom line.

## Reducing Product Defects and Increasing Yield through Improved CIP Process Management

### Challenge: Reduce Defects, Improve Yield

A large Cheese Producer wanted to improve the yield of "on spec" product, and believed roughly one-third of their quality defects were associated with inadequate CIP quality. The producer also wanted to achieve paperless compliance of state and federal regulations, and put systems in place to further support the organizational strategy for quality, team and process. The customer requires a flexible data collection process that can evolve to meet emerging regulatory requirements, and changes in plant automation, equipment and operating systems.

### Solution: Production Management Software

A Vigilistics CIP management system was deployed to achieve paperless compliance with 21 CFR Part 11 and the 2009 PMO, and included Vigilistics' advanced CIP detail reporting to address the full need for wash quality and optimization reporting. The solution was inspected and certified by the state agency in one day.

Baseline measures indicated that 30% of the producer's quality issues were associated with CIP processes. In the first year following deployment of Vigilistics these issues were reduced by 40%, adding \$1 million to the company's bottom line.



## Results

### Vigilistics reduces:

- Electricity cost
- Water consumption
- Chemical consumption
- Downtime for cleaning
- Maintenance time
- Wash validation time
- Compliance risk
- Operator idle time
- Verification & review time
- Manual report generation
- Retraining time

### Vigilistics increases:

- Availability for production
- Employee productivity
- Production equipment life
- Quality and consistency
- Process optimization
- Paperless compliance
- Employee training and certification
- Audit support
- Visibility for workforce management
- Visibility of issues and corrective actions

**No-Hassle Installation.** Vigilistics software was installed without interrupting normal plant operations or systems, and is 100% compatible with existing automation and control systems at the most sophisticated plant in the enterprise.

**Best Practice Digital Records that Scale.** The data collection engine at the heart of Vigilistics software solution is highly repeatable and can be installed identically at other plants, providing a highly scalable solution.

**PLC and MES System Independence.** The transition to digital records enables full support of inspections using existing staff, and is easily maintained independent of changes in the PLC and MES systems.

**PMO Validation.** The data collection installation was validated following a seven-day performance period in accordance with the 2009 PMO.

**FDA Certification.** The installation was certified by the FDA following inspection as being fully compliant with 21 CFR Part 11. The inspection was completed in less than one day.

**Real-Time Variance Reporting and Collaboration.** Real-time variance reporting that highlight variations from key performance metrics are available. Operators are alerted to issues before they expand to become major problems. The leadership team collaborates to review information by shift, by day, by week and by month, and prioritize a list of actions based on information in the variance reports.

**Forward Looking Evolution.** If adjustments are made to the plant, production processes, or equipment, or new product lines added, the solution can be updated in a matter of hours.