



Service/Product Provider

Sebesta Blomberg

2381 Rosegate
Roseville, MN 55113

Business: Consulting Engineering
John Carlson, Vice President
Phone: 651-634-0775
Email: jcarlson@sebesta.com

Industrial Partner

3M

900 Bush Ave.
St. Paul, MN 55106

Business: Manufacturing
Steven Schultz, Energy Program Mgr.
Phone: 651-778-7108
Email: scschultz@mmm.com

Sebesta Blomberg's Chilled water system energy cost reduction strategy results in annual energy savings of \$72,000 for 3M.

Project Scope

Identified changes in equipment configuration, control sequences and operational parameters to reduce energy consumption and upgrade the reliability and performance of the critical cooling system at 3M's Northridge pharmaceutical plant.

Project Summary

Sebesta Blomberg's services included the initial assessment of plant systems and sufficient preliminary design to provide economic justification for project funding. After funding, effort included preparation of design documents, procurement, and system startup/commissioning. Project highlights included variable flow pumping, control valve modifications, meter/instrumentation installation and revised control sequences.

- **Energy Savings**
25% reduction in chilled water system energy consumption - \$72,000 per year
- **Investment**
\$185,000 initial investment; no recurring costs
- **Financial Return**
2.6-year payback exceeded the corporate target of a 3-year payback for capital projects
- **Other Benefits**
Project has improved system reliability, reduced maintenance cost, expanded system automation and provided a more stable chilled water service to the pharmaceutical processing functions.

Monitoring & Verifying Energy Savings

Additional metering was added in this project to complement the existing metering 3M had in place to trend critical utility functions, establish a baseline of energy usage, and verify project results.

Distinguishing Value

This provider works seamlessly as an extension of 3M's staff as a result of our long-term relationship and an understanding of 3M standards, procedures and personnel.