

LOGISTICS FACILITY IN SUBURB OF CHICAGO

Energy Saving Incentives & System Upgrades



PROJECT REQUIREMENTS

- Replacement of old condenser
- Insufficient budget to complete project without incentives
- Replacement of condenser with energy efficient option

SITE INFORMATION

Client: Logistics Facility

Location: Aurora, Illinois

OUR SOLUTION

- Comprehensive system study, detailed analysis on the facility's refrigeration system performance
- Recommended quick wins for system optimization through no cost/low cost operational changes
- Identified low cost capital upgrades
- Estimated energy savings, project costs for each action to receive cash incentives via ComEd's energy saving program
- Assisted our customer in combining zero cost operation improvements & updated condenser efficiency to get higher ComEd incentives for project

SITE IMPROVEMENTS

- Condenser replacement
- Installation of VFDs on condenser fans
- Reduction of minimum condensing pressure
- Increased suction pressure

PROJECT SUMMARY

| | |
|---|-------------------|
| Total Project Cost (\$) | \$ 312,272 |
| Estimated annual energy savings (kWh/yr.) | 385,768 |
| Estimated annual cost savings (\$) | \$ 26,618 |
| Incentive received (\$) | \$ 46,292 |
| Est. payback period (no incentive) (yr.) | 11.7 |
| Est. payback period (with incentive) (yr.) | 10 |

PROJECT BENEFITS

- Our customer now has a better understanding of its ammonia refrigeration system and identified improvement opportunities that have led to a measurable reduction in energy usage.
- They received incentives totaling \$46,292 from the ComEd Energy Efficiency Program after implementing our recommendations.
- The business now uses less electrical energy and benefits from an estimated \$26,618 in annual energy cost savings, without adversely impacting the performance of its operations.
- Installation of new efficient condenser gives our customer more flexibility to control the condensing temperature.