

Savings with HVACs

A team of students and faculty at the University of Wisconsin Milwaukee IAC performed an assessment for Schawk Inc. The assessment was sponsored by the Department of Energy and was led by Center Director Dr. Chris Yuan, a faculty member in the department of Mechanical Engineering at the University of Wisconsin Milwaukee in March of 2013.

Summary

The Department of Energy's Industrial Assessment Center located at the University of Wisconsin Milwaukee was able to provide a brand production company a way to save energy and reduce utility costs. Through the recommended changes to the lighting, environmental temperature control, the cooling tower, and air compressors, the company was quoted for a potential savings of \$9,003 annually.

Applications

The UW-Milwaukee IAC team found ways to reduce energy usage while enhancing the comfort of employees. The Industrial Assessment Center was able to provide these recommendations after performing an efficient and comprehensive evaluation of the company's process and utility data.

Company Background

Schawk Inc. is located in New Berlin, Wisconsin and is a member of the Schawk family of companies.



Anthem, an SGK Brand Development Agency created the brand strategy and design for this Safeway private brand. Schawk, SGK's Brand Deployment group, managed the pre-media process through print management. *Photo from The Snack Artist.*

Their services, including pre-media, photography, and e-content management, ensure brand consistency by verifying that each brand is in compliance with packing regulations.

For this site in New Berlin, Schawk manufactures engraved rotogravure cylinders for mass printing. Rotogravure cylinders have a wide range of applications including: flexible package printing, printing decors, wallpaper, gift papers, textiles, and special foils for furniture.

The two main areas of the plant, the office area and the manufacturing area, occupied a combined area of 43,000 ft². The plant currently employs 35 people who work 8 hours in 3 shifts per day.

Implementation

Schawk Inc. decided to implement four out of a possible six recommendations by the IAC team. They were able to save a total of 110,803 kWh in annual

Assessment at a Glance

- Over 66% of the recommendations were implemented saving Schawk an estimated \$8,220 annually.
- Optimizing temperature settings at the plant offered the highest implemented annual cost savings of \$6,156.

energy usage. The company was also able to save an estimated \$8,220. The largest savings, 83,474 kWh, was realized by temperature setting optimization. This savings in temperature comes from reducing unnecessary use of HVAC units. Workspace temperature controls are often an oversight but have a potential for large energy and cost savings, usually without any capital costs associated with implementation.