

# Retrofit Case Study

Cambridge Space Heaters vs. Hot Water Boiler

## Manufacturing Plant



### Building Specifications

- 78,000 ft<sup>2</sup>
- Over 50 year old building
- 18' Ceilings – Lots of Glass
- Located in Broadview, IL



## Before – Hot Water Boiler

### Performance

- Uneven temperatures
- Cold draft areas
- High Maintenance Cost (\$15,000)
- High Energy Bills



### Operating Costs

Based on:  
89,822 therms for 2005-06 heating season  
Normalized to 30 year averages

**\$0.87/ft<sup>2</sup> Gas cost @ \$0.75/therm**

## After - Cambridge Space Heaters

### Performance

- More even temperatures
- Reduce Maintenance Cost
- Reduced Energy Bills

### Operating Costs

Based on:  
43,376 therms for 2006-07 heating season  
Normalized to 30 year averages

**\$0.36/ft<sup>2</sup> Gas cost @ \$0.75/therm**

*"I expected the energy savings by upgrading to the Cambridge system. I overlooked the \$15,000 in annual Boiler maintenance cost."*

**- Wayne Mackey  
Plant Manager**

## Summary

The Cambridge system used **52% less** gas.

The Cambridge system saved approximately **\$34,835/year** in gas cost operating at \$0.36/ft<sup>2</sup> vs. \$0.87/ft<sup>2</sup>.



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