Retrofit Case Study
Cambridge Space Heaters vs. Steam Boiler

Grand Rapids Manufacturing Plant

Building Specifications
- 231,000 ft²
- Over 90 year old building
- Located in Grand Rapids, MI

Note:
Paint Drying Oven (heat gain) no longer used

“The new System provides much better temperatures and has greatly improved our indoor air quality. In fact, the negative conditions have been eliminated.”

Harry Huston
Facilities Manager

Before – Steam Boiler

Performance
- Uneven temperatures
- Cold dock areas
- High maintenance costs
- Negative pressure in building

Operating Costs
Based on:
304,000 therms for 2003
Normalized to 30 year averages

$1.31/ft² Gas cost @ $1.00/therm

After - Cambridge Space Heaters

Performance
- More even temperatures
- Eliminated negative pressure problems

Operating Costs
Based on:
194,000 therms for 2005-06 heating season
Normalized to 30 year averages

$0.84/ft² Gas cost @ $1.00/therm

Summary
The Cambridge system used 36% less gas.
The Cambridge system saved approximately $109,000/year operating at $0.84/ft² vs. $1.31/ft².