# **COMPARATIVE CASE STUDY**

Cambridge Space Heaters vs. Air Turnover Paper Products Distributor

## **Cambridge Space Heaters**



#### **Operating Costs**

Based on 7,086 Heating Degree Days @ 65°

\$0.11/ft<sup>2</sup> Gas cost @ \$1.00/therm \$0.02/ft<sup>2</sup> Electric cost @ \$0.08/kWh

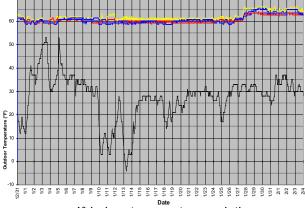
\$0.13/ft<sup>2</sup> Total cost

### **Building Specifications**

- 215,040 ft<sup>2</sup> x 30' high
- R-19 Roof / R-11 Walls
- · 33 active doors
- Located in Milwaukee, WI

#### **Heating System**

- (3) Cambridge Space Heaters
- · Thru wall mounting
- 3,615 MBH total
- 20,820 CFM total
- 15 HP total intermittent



± 4° indoor temperature variation from 60°/63° setpoint

## **Air Turnover**



## **Operating Costs**

Based on 6,485 Heating Degree Days @ 65°

\$0.31/ft<sup>2</sup> Gas cost @ \$1.00/therm \$0.07/ft<sup>2</sup> Electric cost @ \$0.08/kWh

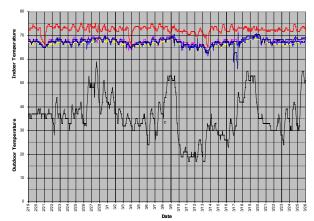
\$0.38/ft<sup>2</sup> Total cost

### **Building Specifications**

- 228,000 ft<sup>2</sup> x 27' high
- R-19 Roof / R-10 Walls
- · 23 active doors
- · Located in Chicago, IL

#### **Heating System**

- (2) Air Turnover Heaters
- Floor mounting
- 6,250 MBH total
- 200,000 CFM total
- 40 HP total continuous



± 9° indoor temperature variation from 65° setpoint

## **Summary**

The Cambridge system used 66% less total energy in a colder climate.

If the 228,000 ft<sup>2</sup> facility had installed a Cambridge system they could have saved approximately **\$57,000/year** operating at \$0.13/ft<sup>2</sup> vs. \$0.38/ft<sup>2</sup>.

