# **COMPARATIVE CASE STUDY**

Cambridge Space Heaters vs. Air Turnover Side-By-Side Warehouses

## **Cambridge Space Heaters**



#### **Operating Costs**

Based on 5,441 Heating Degree Days

\$0.19/ft<sup>2</sup> Gas cost @ \$1.00/therm \$0.02/ft<sup>2</sup> Electric cost @ \$0.08/Kwh

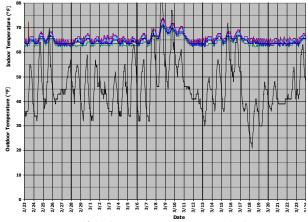
\$0.21/ft<sup>2</sup> Total cost

### **Building Specifications**

- 62,000 ft<sup>2</sup> x 34' high
- R-19 Roof / R-3 Walls

#### **Heating System**

- (2) Cambridge Space Heaters
- · Roof top mounting
- 1.800 MBH total
- 11,400 CFM total
- 6 HP total intermittent



± 4° indoor temperature variation from 65° setpoint

### **Air Turnover**



## **Operating Costs**

Based on 5,441 Heating Degree Days

\$0.33/ft<sup>2</sup> Gas cost @ \$1.00/therm \$0.05/ft<sup>2</sup> Electric cost @ \$0.08/Kwh

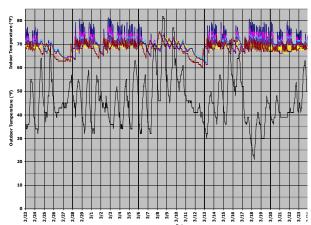
\$0.38/ft<sup>2</sup> Total cost

### **Building Specifications**

- 24,000 ft<sup>2</sup> x 34' high
- R-19 Roof / R-3 Walls

#### **Heating System**

- (1) Air Turnover Heater
- Floor mounting
- 1,250 MBH total
- Unknown CFM
- 6 HP total intermittent (turned off due to noise)



± 12° indoor temperatture variation from 70° setpoint

## **Summary**

The Cambridge system used over 45% less total energy.

If the 24,000 ft<sup>2</sup> facility had installed a Cambridge system they could have saved approximately **\$4,000/year** operating at \$0.21/ft<sup>2</sup> vs. \$0.38/ft<sup>2</sup>.

