# **Retrofit Case Study**

Cambridge Space Heaters vs. Indirect Fired Air Turnover

## **Parts Distribution Facility**



## **Before** - Indirect Fired Air Turnover

#### **Performance**

- Uneven temperatures
- Cold dock areas
- High maintenance costs
- High operating costs

### **Operating Costs**

Based on:

209,935 therms for 2003-04 calendar year @ 60 Normalized to 30 year averages



**\$0.70/ft**<sup>2</sup> **Gas cost** @ \$1.00/therm

#### **Building Specifications**

- 301,000 ft<sup>2</sup>
- Over 30 year old building
- Located in Tappan, NY

### **Operating Note:**

If the Cambridge System had been operated @ 60°, the savings would have been \$88,000/year or 42%.

## **After - Cambridge Space Heaters**

#### **Performance**

- More even temperatures
- Provides summer ventilation
- Lower Operating costs
- Reduced maintenance cost

#### **Operating Costs**

Based on:

159,841 therms for 2008 calendar year @ 65 Normalized to 30 year averages

**\$0.53/ft**<sup>2</sup> **Gas cost** @ \$1.00/therm



#### **Summary**

The Cambridge system used 24% less natural gas.

The Cambridge system saved approximately \$50,000/year operating at \$0.53/ft<sup>2</sup> vs. \$0.70/ft<sup>2</sup>.

The Cambridge system saved 24%, while providing 5° higher temperatures.

