



How Industrial Heaters Reduce Carbon Emissions by 410 Metric Tons of CO² per year

The Difference of an Energy Efficient Cambridge System

42% Less Energy

Carbon Emissions Reduction:

The Cambridge system used less total energy, resulting in a 42% reduction in carbon emissions. The Cambridge system used 410 fewer metric tons CO² per year

\$77k Annual Savings

Annual Operational Cost:

The Cambridge system saved approximately \$77,000/year operating at \$0.65/ft² vs. \$1.12/ft².

\$1.54M Saved Over 20 Years

Lifetime Cost:

As Cambridge units are built to last, owners rely on durable equipment with low maintenance needs. Over a 20 year span a \$1.54M difference in operating costs could be expected.

Retrofitting Direct Fired Recirculation with Cambridge HTHV Space Heaters

Originally, this manufacturer used direct-fired recirculation units to heat their 163,555 ft² building. They sought to explore the potential of HTHV (High Temperature Heating and Ventilation) space heaters to reduce the building's total energy consumption. This transition aimed to lower carbon emissions and achieve significant savings in annual operational costs.



Building Specifications

163,555 ft²
Building height - 24'
Metal w/ 1" insulation in walls
Metal w/ 3" insulation in roof
Over 40 year old building
Manufacturing
Located in Fairmont, WV

Before

Direct Fired Recirculation

Performance

Uneven temperatures
High operating cost
Cold dock areas
High maintenance cost

Operating Costs

\$0.96/ft² Gas cost @ \$1.00/therm
\$0.16/ft² Electric cost @ \$0.08/kWh

Total

\$1.12/ft² Total cost
974 metric tons CO² per year

After

Cambridge Space Heaters

Performance

More even temperatures
Lower operating cost
Warmer dock areas
Lower maintenance cost

Operating Costs

\$0.62/ft² Gas cost @ \$1.00/therm
\$0.03/ft² Electric cost @ \$0.08/kWh

Total

\$0.65/ft² Total cost
564 metric tons CO² per year