CASE STUDY DISTRIBUTION COMPANY



DISTRIBUTION COMPANY HEATS TWICE THE SPACE WHILE CUTTING ORIGINAL FUEL COSTS

APPLICATION:

DISTRIBUTION COMPANY SPECIALIZING IN GROCERY PRODUCTS

MARKET:

Wisconsin

BUILDING INFO:

130,000 sq. ft. | 2,921,600 cubic ft. | 13 Dock Doors

DESIGN

- Company growth resulted in the need for nearly doubling the facility to approximately 245,000 square feet with an average ceiling height of 32 feet.
- The existing 130,000 square foot facility was heated with gas unit heaters.

SOLUTION

- Johnson worked with the distribution company and a local engineering firm to have the old gas unit heaters removed.
- Those were replaced with three Johnson Air-Rotation Systems to heat the newly expanded 245,000 square foot space.

RESULTS

- The Gas Company provided a fuel usage analysis, which calculates gas use for the year prior to the addition of the Air-Rotation Systems and for the year after.
- To make before and after comparisons accurate, all figures
 have been adjusted for degree-days to reflect the difference in
 the daily temperatures between the winters before and after
 adding Johnson Air-Rotation Systems.
- The distribution company nearly doubled the building size
 while cutting fuel costs by over 30%! Johnson Air-Rotation
 Systems are heating nearly twice the space with less gas than
 the distribution company used before the addition.
- With a conservative cost per therm of \$1.06, this equals more than \$50,000 in savings in one heating season alone!
- This savings results in a return on investment in as little as 2-3 years.



TOTAL THERMS USED:

Before @ 130,000 sq. ft 131,277 After @ 245,000 sq. ft 84,054 Change -36%

BTU'S PER CUBIC FT. PER DEGREE-DAY:

 Before
 56

 After
 17

 Change
 -70%





Johnson Air Rotation.com