

Case Study Report



Project Identification

Customer: Hachette
Location: Lebanon, IN

Design Specifications

Facility Warehouse 420,000' x 40' High
Winter Operation 70° – 0°



Project Challenge:

Hachette purchased an existing facility in Lebanon's Industrial Park. The building was being heated by (4) King Makeup Air Units and could only maintain 55°- 0°. Hachette wanted the HVAC system to maintain 70°- 0° and provide summer ventilation.

Equipment Solution:

Air Energy designed a system that utilized (2) of the existing King MAUs and (9) ER-242-800 Rack Units. The (2) MAUs meet ASHRAE 62.1 fresh air requirement and turn off during unoccupied operation. The (9) Racks carry the heat load during the unoccupied operation, aide in heating during occupied and provide one air turnover per hour. **This combination of Racks Units and MAUs to ASHRAE 62.1 is the most energy efficient system to heat Big Box Warehouses.**



Results of Rack System:

Hachette experienced Annual Savings totaling **\$100,620**:

- Electrical – 352,400 kW at \$.10/kW
- Natural Gas – 81,725 therms at \$.80/therm

Hachette received verified Vectren Gas Rebate:

- Vectren – Natural Gas– **\$50,000**

