

Case Study Report



Project Identification

Customer: Casey's General Store
Location: Terre Haute, Indiana

Design Specifications

Facility Warehouse 240,000' x 30' High
Winter Operation 70° – 0° + Summer Ventilation



Project Challenge:

Casey's General Store built a Distribution Warehouse with a large staging area and multiple smaller storage areas. Casey's wanted the ability to heat the separate areas independently based upon the product they were storing. Additionally, Casey's requested 2 Air Changes/hour for Summer Ventilation, instead of installing Air Conditioning.

Equipment Solution:

Air Energy Designed a system that utilized (6) ER-242-800 to heat the large staging area and (5) ER-130-200 to heat the smaller storage areas. All (11) The Rack Units utilized fresh air intake kits to meet ASHRAE 62.1 during the heating season. The intake kits coupled with (11) Supply and (11) Exhaust fans provided the 2 Air Changes/hour for Summer Ventilation.



Results of Rack System:

Casey's experienced Annual Savings totaling **\$36,845**:

- Electrical – 143,771 kW at \$.10/kW
- Natural Gas – 28,085 therms at \$.80/therm

Casey's General received verified Vectren Gas Rebate:

- Vectren – Natural Gas– **\$20,154**

