

# Case Study Report



## Project Identification

Customer: DOW North America  
Location: Plaquemine, Louisiana



## Design Specifications

Facility Warehouse 800,000' x 36' High  
Summer Operation 70° – 94° Winter Operation 70°-50°

### Project Challenge:

DOW Chemical invested \$1.3 billion dollars into their Louisiana Operations, Dow North America. This included an 800,000' distribution center dedicated to manufacturing and distributing Dow's high-performance polyethylene.

### Equipment Solution:

Air Energy provided (15) ER-242 rated at 42,000 cfm. The (15) Racks were incorporated with (15) 50 Ton Roof Top Units to distribute 750 Tons of cooling throughout the space. The Energy Rotation units will also dispense heat in the warehouse to maintain 70° during winter operation.



### Results of Rack System:

The (15) Energy Rotation Units incorporated with (15) 50 Ton Roof Top Units were able to maintain 70° from ceiling to floor, eliminating all stratification. The Rack system greatly reduced Dow's electric consumption, **saving 620,000 kWh or \$62,000 annually.**

