



Sarasota Bradenton International serves over one million passengers a year as a gateway to the southwest Gulf coast of Florida

## CASE STUDY

### Airport Facility

#### Facility at a glance

##### Name

Sarasota Bradenton International Airport

##### Location

Sarasota, FL USA

##### Facility size

245,000 ft<sup>2</sup> facility

##### Issue

Chillers operating at the airport since its 1989 opening were nearing the end of their normal economic and operating life

##### Solution

Daikin Magnitude<sup>®</sup> magnetic bearing chiller, two 500-ton units provide chilled water

## Airport chiller replacement yields reduced operating costs, enhanced customer comfort and sustainability for the community

### Issues

Chillers operating at the airport since its 1989 opening were nearing the end of their normal economic and operating life. Replacing those original chillers provided an opportunity to improve the efficiency, reliability and sustainability of the airport's HVAC system.

### Solution

Two 500-ton Daikin Magnitude magnetic bearing chillers replaced the aging chillers. These chillers deliver industry-leading efficiency and sustainability. The reliability of these magnetic bearing chillers has been proven in more than 1,000 installations worldwide.

### Outcome

The energy efficiency of the Magnitude chillers reduced the terminal building's annual HVAC electrical consumption by 28%. The efficient performance of the chiller is sustainable over the life of the chiller because there is no oil contamination to degrade the refrigerant. Its performance also contributes to possible LEED<sup>®</sup> points. In addition, the Magnitude chillers use HFC-134a refrigerant which has no ozone depleting potential.

### Energy Savings Summary



Annual HVAC Energy Savings  
**28%, ROI = 5.2 years**

Annual Maintenance Costs  
**72% reduction**

Reduced Cooling Tower Chemicals  
and Water Consumption



One of two 500-ton Magnitude Chillers installed at the Sarasota Bradenton International Airport