

## Tower Makes a Cool Move to Install Efficient Chiller

**Overview/Purpose:** The Tower Companies wanted to upgrade its 1828 L St. building's chiller to help reduce energy use and therefore utility costs.

**Challenge:** Tower considered using a number of different systems that would provide savings, but decided that the Daikin McQuay Magnitude frictionless centrifugal chiller would be the best fit.

**Solution:** The frictionless chiller reduced energy use significantly without requiring an oil lubricant. By avoiding this lubricant the chiller does not experience oil



Frictionless centrifugal chiller installation



Chiller inside Tower's 1828 L St. Building

Frictionless centrifugal chiller installation entrapment. This occurs when the tubes become coated with oil, it can reduce capacity of the tubes by up to 15 percent in just a few years. The Tower Companies 1828 L Street building is expected to have significant financial savings from the chiller installation. Tower expects payback on their investment in approximately 10 years.

### Results:

- Maintenance costs reduced by 50%.
- Saved \$73,000 per year in utility costs.
- Reduced carbon emissions by up to 400 tons per year.

*"The Federal government needs to offer tax incentives so that all buildings in America can quickly change out their antiquated mechanical systems, the way Tower has, which continue to waste energy. That would create US energy independence, prevent diseases, improve our health, and at the same time, spurring an industrial revolution in this country that would create a bigger job explosion than the IT industry," stated Jeffrey S. Abramson, Partner, The Tower Companies.*