

Driving Sustainability and Efficiency for Premium Hospitality in Vietnam



Challenge

A luxury hotel in Vietnam struggled with a legacy cooling system suffering from poor energy efficiency, unstable controls, and high maintenance. This unreliability threatened the continuous, premium comfort expected by guests. The challenge was to quickly implement a highly efficient, reliable, and smartly controlled cooling solution to meet the exacting standards of luxury hospitality.

Solution

Rather than a simple equipment swap, we provided a comprehensive turnkey upgrade of the entire chilled water system to deliver long-term value. The integrated solution included:

- Installation of two 700RT Centrifugal Chillers, upgraded water pumps, and an auto tube system.
- Adoption of R-514a, a next-generation HFO refrigerant featuring an ultra-low Global Warming Potential (GWP < 2) and Zero Ozone Depletion Potential (ODP).
- Deployment of an advanced Chiller Plant Control (CPC) and comprehensive performance monitoring systems.

Result

The turnkey project delivered a highly efficient cooling system engineered for a 20+ year lifespan, achieving:

- 34.9% Annual Energy Savings: Improved system efficiency from 1.03 to 0.67 kW/RT, saving approximately 5,879 kW/day.
- Automated real-time load-based optimization, performance tracking, and early issue detection.
- Supported LEED Platinum certification and 2050 net-zero goals.

Project Highlights

- 📍 **Market: Vietnam**
- 🏢 **Segment: Commercial**
- ⚙️ **Products & Services used:**
 - 2 X CVHG CenTraVac™ water-cooled chiller
 - 2 X Chilled water pump
 - 2 X Condensing water pump
 - Chiller Plant Controls

Featured Solutions



Product name: CVHG CenTraVac Water-Cooled Chiller

At a glance:

- Capacity range: 325 – 1,300 Ton
- 50Hz/60Hz
- Compressor type: Centrifugal compressor
- Heating and cooling capable
- R-514A refrigerant
- Best full load efficiency: 0.48kW/RT
- Low pressure
- Rapid restart after power outage



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