Broad Exhaust Fired Absorption Chiller

The Honeywell CHP System Team

Benefits of Packaged CHP Systems

Capital Cost Reduction

Packaged integrated energy systems are anticipated to cut CHP system capital costs by 15% to 30%.

Shorter & Less Expensive Installation

IES can reduce CHP system installation time by as much as two-thirds, and provide corresponding installation cost savings.

Replicability

System designs are suitable for multiple applications in facilities around the country.

Optimize Facility Energy Use

Packaged systems allow facility operators to manage power generation, cooling and heating to optimize energy use as well as reduce electricity use during peak periods.

Simplified Systems

The use of exhaust-fired absorption chillers eliminates the need for steam/hot water generation equipment.

Optimized Benefits

The packaged CHP system with supervisory controls can be a key component in maximizing the cost effectiveness of your entire site's energy choices.

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http://www.eere.energy.gov/de/

Project Overview

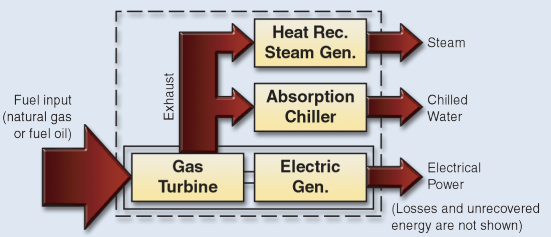
Honeywell Labs has teamed with Broad USA, Chelsea Group and I.C. Thomasson to fill technology voids for Integrated Energy Systems (IES). The team is developing a set of reference designs to improve economics and simplify installation, and developing supervisory control systems with on-line optimization. In collaboration with Honeywell Energy Services and the Federal Energy Management Program, the team is installing a prototype system at the Ft. Bragg Army Base in North Carolina. The prototype features a 5-MW turbine generator supplying electricity to the base and a 1,000-ton Broad USA absorption chiller with advanced waste heat-fired or direct gas-fired design to meet air conditioning needs. Turbine exhaust can also be used to produce steam.

Honeywell · ICT I.C. Thomasson · Broad USA · CHELSEA GROUP LIMITED

Objectives

Optimize the integration of power generation and thermally activated cooling technologies for large (2-to 5-MW) IES, and field test a prototype design

- Develop a set of reference computer-based modular system designs
- Develop a supervisory control system with on-line optimization
- Install and monitor the performance of a prototype modular CHP system



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