



**For Immediate Release**

Contact:  
Christine Hiney  
Carrier Corporation  
315-432-7176  
[Christine.hiney@carrier.utc.com](mailto:Christine.hiney@carrier.utc.com)

**Carrier Moves the Frontier on Efficiency**

CHARLOTTE, N.C., Jan. 22, 2008 — Carrier Corp., a unit of United Technologies Corp. (NYSE:UTX), reached another frontier by recently demonstrating that it has improved chiller plant efficiency by more than 10 percent compared with high efficiency variable speed centrifugal alternatives. Already the lowest life cycle cost chiller, the Evergreen<sup>®</sup> 23XRV with Foxfire<sup>™</sup> compression technology and HFC 134a in series counter flow also provides the highest efficiency as measured by Air-Conditioning and Refrigeration Institute (ARI) test standards.

Carrier demonstrated the efficiency breakthrough in Charlotte, N.C., at a customer event focused on chiller fundamentals and chilled water system design. The theories presented were modeled with Carrier's Hourly Analysis Program (HAP) energy simulation tool and put to the test in Carrier's ARI-certified test laboratory. Consulting engineers, building owners and contractors representing nine countries witnessed two Evergreen<sup>®</sup> 23XRV chillers with Foxfire<sup>™</sup> compression technology operating in a series counter flow arrangement at full

load efficiency of 0.488 kW/Ton. Three part-load conditions were also tested and an NPLV of 0.294 kW/Ton was demonstrated. Conditions were 44°/60° chilled water with variable evaporator flow and 85°/3.0 gpm per ton for the condenser. After the fourth NPLV point was recorded, the condenser water temperature was raised to 95°F at the 25 percent load point so customers could observe the wide, flexible operating range of the 23XRV chiller.

“The 23XRV was already the lowest life cycle cost chiller,” said Scott McDonough, product manager, Carrier. “Now the new series counter flow system design leverages the inherent advantages of the 23XRV variable speed screw chiller for even greater efficiency. On top of this, we were thrilled to demonstrate that the same chillers that operated at 0.488 / 0.294 could also be operated at extremely demanding conditions (95°F entering condenser water temperature). This is well beyond the capabilities of most other chillers and is truly a ‘no compromises’ solution for owners.”

The lab simulation session made it clear that Carrier was moving the frontier on efficiency. “The Evergreen 23XRV chillers with Foxfire compression technology in series counter flow improved the chiller plant efficiency (chillers, pumps and towers) by 11 percent over high efficiency variable speed centrifugal alternatives. “We are pleased that we achieved rock solid operation with extreme flexibility without compromising efficiency,” stated Tom Franaszek, product business manager. “And, this application of the Evergreen 23XRV with Foxfire compression technology supports LEED® certification.”

**About Carrier Corp.**

Carrier Corp., headquartered in Farmington, Conn., is the world's largest provider of heating, air-conditioning and refrigeration solutions. With 2006 revenues of \$13.5 billion, Carrier has approximately 41,000 employees worldwide and operations in more than 170 countries. Carrier is part of United Technologies Corp., a Hartford, Connecticut-based provider of products and services to the aerospace and building systems industries worldwide. Visit [www.carrier.com](http://www.carrier.com) for more information.

###