

Supreme comfort through optimum control.

COMFORT*TRAC*[™]
TOTALLY VARIABLE FAN COIL



Innovation with Merit

Every so often a concept or innovation comes along that significantly improves the performance and benefits of an established HVAC product or system. When considering hydronic fan coils - already one of the most cost-efficient means for heating and cooling available - that innovation has just arrived.



Introducing the ComforTRAC™ variable fan coil from Williams.

With its customized components and innovative digital control, the ComforTRAC™ variable fan coil performs like no other traditional building comfort system on the market today. With the ability to recognize changing room conditions and adjust automatically, the ComforTRAC™ variable fan coil matches real time variable load in virtually any indoor environment for the ultimate in comfort conditioning. And since moving BTUs in water is a superior method to moving them in air, the result is continuous comfort control with lower system costs and greater energy efficiency than ever before.

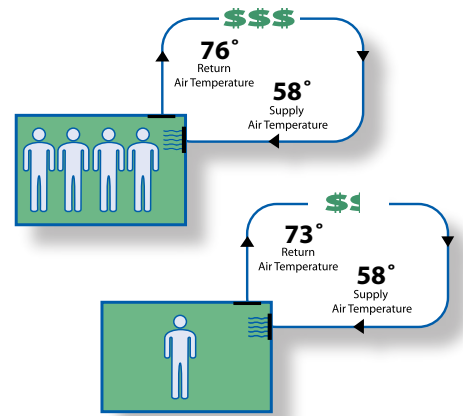


The ComforTRAC™ variable fan coil is the *demand-controlled* fan coil, offering variable CFM, GPM, LAT and dehumidification.



The ComforTRAC™ Concept

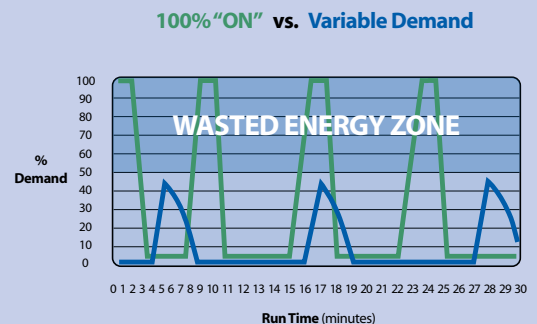
While a conventional hydronic system utilizing standard fan coils represents an excellent solution to the demands of many environments, the ComforTRAC™ variable fan coil incorporates real time variable load control for the ultimate in comfort and cost-efficient operation. Through the use of fully-modulating valves, BDC blowers, a high latent low flow coil design and innovative digital control, the ComforTRAC™ variable fan coil recognizes even the slightest changes in variable load and adjusts accordingly to maintain the desired temperature and humidity level at all times.



The ComforTRAC™ variable fan coil incorporates real time variable load control for the ultimate in comfort and cost-efficient operation.

Superior Operational Efficiency

By tracking variable load continuously and holding room temperature in real time, desired room comfort levels are more efficiently maintained. The result is superior comfort with a significant improvement in energy use and operational efficiency. With longer equipment run time and less cyclical demand, equipment operation – including the requirement placed on the central plant – is demand-controlled with less fluctuation.



Comfort-driven Energy Efficiency

Since the ComforTRAC™ variable fan coil utilizes a high latent low flow coil design, energy use is minimized at all times during both the heating and cooling cycles. In addition, each ComforTRAC™ unit develops the ability to recognize the amount of energy needed to satisfy space requirements, thereby avoiding overheating and overcooling and providing unrivaled energy efficiency with increased comfort.



ComforTRAC™ Features

1 Digital Controller - ComforTRAC™ Logic

Programmed variable capacity based on setpoint difference to actual room temperature and humidity combined with how quickly the space is being conditioned. Greatest comfort at the lowest cost.

NetSensor

- Temperature
- Setpoint
- Humidity



2 TRACvalve™

- Proportional 2-way control valve
- Characterized-port ball type
- Integral LAT sensor
- Infinitely variable 20-100%
- Self-balancing
- Self-cleaning
- Maintains Delta T

3 IAQ

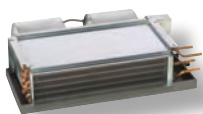
- Individual control
- Temperature and humidity
- Reduced drafts and stratification
- Less "ON-OFF" cycling
- Multiple air changes
- Increased efficiency options to MERV 13

4 BDC Motor / Blower

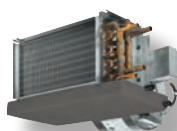
- Infinitely variable 25-100%
- Slow ramp rate
- Low RPM wheel
- Required CFM at variable ESP
- 50% reduction in motor watts
- Quieter operation

5 Williams Custom Coil Design

- Totally variable capacity
- Low Flow
 - Smaller pumps and pipe required
 - Reduced demand 30-40%
 - Pump HP reduction to 80%
- Higher latent means humidity control
- Positive dehumidification
- Greater comfort and control



Horizontal Series



High Performance Horizontal Series



High Performance Vertical Series



Vertical Stack Series

ComforTRAC™ Applications

The ComforTRAC™ variable fan coil is specifically designed for virtually any indoor environment in which tracking and adjusting to real time variable load is critical. Ideal applications include classrooms, conference and meeting rooms, dorms, suites, common areas or any space where occupant demand for comfort is required.



ComforTRAC™ utilizes a high latent low flow coil design that minimizes energy use at all times during both the heating and cooling cycles.

ComforTRAC™ Advantages

- **Performance is demand-controlled** and matches heating and cooling load in any climate.
- **Energy consumption is also demand-controlled** as the load is continuously monitored and matched as needed. This allows the ComforTRAC™ unit to “sip” capacity from the main chiller system or boiler far more efficiently than conventional systems.
- **Open Protocol-compatible.** ComforTRAC™ can easily be incorporated into building automation systems (BAS). BTL certified BACNet.
- **Coil design minimizes flow requirements and increases design Delta T** which reduces pipe size and the associated sizing of mains and central system components.
- **Leaving air temperature control (LAT)** delivers comfort and quick response at the unit. The unit is continuously re-commissioning itself to space and system variations.
- **Self-balancing and self-cleaning capabilities** eliminate flow control devices, strainers, and test ports saving capital and operating costs.



*To learn more about Williams and how we're re-engineering comfort for the
21st century, give us a call or visit us at williamsapplied.com.*

APPLIED PRODUCTS GROUP

510 E. Memorial Rd., Suite C-4
Oklahoma City, OK 73114
405.286.4407 Fax: 405.286.4469

CORPORATE OFFICE

250 W. Laurel Street
Colton, CA 92324
909.825.0993 Fax: 909.824.8009



williamsapplied.com

© 2010 Williams Furnace Company, Inc.

WA-92-001 06.09