

HVAC/R business owner: Wireless test tools boost efficiency and accuracy

Professional Review

Name: Steve Wright Sr., Owner

Company: Wright Brothers Inc.,
Griffin, Georgia, USA

Tools: Fluke Connect™ App,
Fluke t3000 FC Wireless K-Type
Temperature Module, Fluke a3000
FC Wireless AC Current Clamp
Module, Fluke 3000 FC Series
Wireless Multimeter with the
Fluke Connect™

Applications: Installing and
servicing commercial and
industrial HVAC/R systems

“The Fluke Connect™ tools will allow you to data log remotely and store into a historical file. Saving the data of course also helps reduce paperwork, but more importantly you can validate proper services.”

Background

We’re located 14-15 miles south of the Atlanta airport as the crow flies. So we cover a radius about 80-90 miles on our refrigeration, and on commercial/industrial HVAC/R about 15-20 miles.

We have been in business since 1976. We do primarily supermarket refrigeration and industrial/commercial HVAC, and process HVAC which involves chillers, rooftop units and things like that.

We have about 35 employees and all but seven of those are what I call producers or people who work out in the field. These are direct service technicians or clean-and-check techs or installation technicians. We do a lot of retrofit work in our market area.

Review

We used the amp and volt meter and the contact thermometer with Fluke Connect™. It is relatively new to us but I can see where this is going.

When you’re looking at a thermometer or thermostat or any other measuring device, often you can’t stay in the process area. With Fluke Connect™ you’re able to connect a thermocouple probe and connect to your process, then you put your panels back on and step away. You can get a more accurate reading right there on your phone while the process is happening.



To get started using the world’s largest system of wireless connectable test tools, download the free Fluke Connect™ app on Google or iTunes.



Let's say you have an ice machine where you don't want the panel off while you're taking making the reading. An outside heat source might affect the accuracy of the reading, so you'll want to put your instrument on there and then reconnect. That's really important. Or if you're taking a fan amperage or a temperature reading you got to have the panels back in place for accuracy, so that's one place we've used it. It's accurate and helps out a lot.

You would never get to see these kinds of readings in real time before unless you had a high-end data logger. Even with most data loggers you have to download to another device.

To monitor temperature drop across the evaporator on a roof top unit is easy. You shut off the unit and remove the panels, place one temperature probe in the leaving air of the evaporator and place one temperature probe in the entering air if the evaporator then put panels back on. When ready you start the unit and begin measurements. If you don't put the panels back on you'd have air that is bypassing so you don't get an accurate reading.

You also don't want to leave the system running with the panel off because you might damage something. You might create a flood-back condition where refrigerant actually leaves the evaporator core and makes its way to the compressor. With the panel off air is blowing out and bypassing the coil and a portion of the refrigerant isn't being evaporated. That's where you run the risk of damage to the system.

The Fluke Connect™ tools will allow you to data log remotely and store into a historical file.

Saving the data of course also helps reduce paperwork, but more importantly you can validate proper services. You can validate a problem with data, and show someone, "Here's my observation." For example, a temperature drop across the unit. And after you've installed a piece of equipment, you can check to make sure it was commissioned properly.



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