



FLUKE®

Testimonial

CNX™ Wireless Test Tools

Name: Leigh Copp

Company: Linamar
Advanced Systems Group

Industry: Metallic
Component Manufacturing

“The CNX made it a one-man job. It was not only easier; it was safer as well.”

“The great thing about the Fluke CNX system is one mechanic can do the work of two or more and do it safely.”

Background

I've worked at a commercial airline for more than 29 years, starting as a I joined Linamar in 1995 and am now the Engineering and Business Unit Manager for the Linamar Advanced Systems Group. I manage a design/build team through design, build, and complete product lifecycle management of a wide variety of mechatronic systems, including automated assembly, robotic material handling, advanced special purpose machining equipment, and induction heating equipment. ground equipment manager and moving to building maintenance. I am currently the Manager of Electrical Infrastructure and Support, primarily supporting our data center.

Monitoring multiple live readings

I needed a quick validation of what the voltage and current were doing when I started a motor. I hooked up the CNX v3000 ac voltage module and watched the variables as I manipulated the controls. You cannot monitor two meters simultaneously no matter what people say, but with the CNX system I can watch up to four parameters on the same display simultaneously with no problem. It took seconds to set up — and I've never read the manual.

Validating performance

I used the Fluke CNX system to instrument various parameters on the drive panel of a 1,500 ton cooling tower to validate the performance and track down some elusive problems that we couldn't catch by standing and watching traditional meters. I put PPE on and placed i3000 iFlex ac current modules to monitor current on the 500 A feed. Normally a feed this size would have required a high degree of safety, however In this case we had fed the system from a fast response circuit breaker, so less PPE was required. I simultaneously monitored the line-to-line voltage with a v3000 ac volt module. Then I added a couple a3000 ac current clamp modules on one of the variable speed drives to monitor its performance. I closed the doors and went to my laptop where I could monitor all seven devices on one screen.

The key advantage of the CNX system is I can install the instrumentation, close the cabinet, and work safely without the encumbrance of PPE. In a few minutes I get an accurate picture of what all the instrumentation is doing so I know it's installed correctly. I can leave it in place for days or weeks, collect the data, then download and correlate it using common spreadsheet tools. It's an incredible time saver and a great enhancement to safety in the workplace.

Monitoring temperature on moving equipment

We had reports that the gearbox on a five-axis material handling robot was running a little rough and potentially overheating. I installed a CNX t3000 temperature module on the gearbox so we could monitor it from outside the robot cage while it was actually operating. Normally, we'd either have to stop the robot mid-cycle and take spot temperature measurements on regular intervals or try to get a line-of-sight measurement with an IR camera, which is pretty challenging because the line-of-sight to the gearbox is obscured during regular operations. With the CNX system, we could attach the module and let it collect data over a period of time.

Troubleshooting safely without PPE

We are very cognizant of arc flash hazards and what PPE is necessary. The CNX system eliminates a lot of that need. With the CNX system, we can de-energize the panel, put the modules on, power it back up, and monitor the readings safely. The CNX remote instrumentation can do it at a reasonable price point and it's easy to configure, set up, and use.

The Fluke CNX system allows any member of our crew to easily troubleshoot challenging automation and electrical problems by remotely accessing measurements in hazardous areas, be they live electrical panels or manufacturing cells. You can find it, fix it fast, and keep production running. It makes our jobs simpler and safer.

