

Get On The Bus

How you can get maximum value from advanced fieldbus technology

INTERSTATES

Like so many new technologies, fieldbus control systems promise potentially important advantages in lower costs, ease of installation, improved diagnostics and more. To David Krahlung, Director of Business Development for the Interstates Companies, the key is seeing that those promises are kept. This takes the combination of experience, expertise and in-depth understanding of fieldbus that Interstates can provide, from both a design and installation standpoint.

“A lot of companies have been pushing fieldbus very aggressively,” Krahlung said. “And there’s no question that it can offer a lot of pluses. But, it may not be right for every customer and every application. As we see it, it’s our role to evaluate a customer’s operations, and make sure that fieldbus will really perform for them.”

“Fieldbus” is a generic term for a system that connects multiple field devices using a digital signal that is carried over a pair or pairs of conductors. Bus systems need to match the type of signal being carried. Some fieldbus systems are more suited for discrete signals, while analog signals require a different approach.

Because signals are shared by a single pair of wires, rather than bundles of wires, a fieldbus system can require less wiring than a conventional system. This would offer savings on both materials and installation time. A fieldbus system also can require a smaller control cabinet, which would reduce the cabinetry footprint in a crowded control room and may make it easier to add new equipment to a system.

However, Krahlung said the fieldbus approach may carry certain disadvantages, depending on the demands of a particular application.

“Even as recently as a year ago, we weren’t quite as eager as some to jump on the fieldbus bandwagon,” he said. “The technology is still developing, and a fieldbus may be more complex to maintain. They’re complex systems and getting the proper balance between design and installation is crucial.”

Recently, Interstates installed a fieldbus system in a soybean processing plant for a long-time customer. The installation was part of an expansion at a plant that Interstates had built in 1995.

“This particular customer is always interested in being on the leading edge in terms of technology,” said Randy Stander, Senior Electrical Designer, Interstates Engineering. “While it’s not formally a ‘pilot project’ for them, they were interested in seeing if fieldbus could offer the kind of installation savings and operational efficiency that are being promoted in some of the trade journals. We worked with them to develop and install a system that would provide benefits for their operation.”

Because the Interstates Companies combine both control system design and electrical construction expertise, Krahlung believes they can offer their customers the best approach to incorporating fieldbus technology or, perhaps, electing not to utilize it.

