

Why Consider a Modular Conveyor Control System Retrofit? You'll Save Time, gain control and eliminate the spaghetti mess of wires in your facility.

Every project engineer in the distribution industry is familiar with the time-consuming, work intensive hassle involved in making changes to a conveyor system. With conventional centralized controls systems, simple modifications are definitely not simple. You'll spend a good deal of engineering and installation time weeding your way through the maze of wires that wind throughout your facility. Combine all these factors, and a retrofit designed to improve system productivity can become a nightmare.

There is a demand in the materials handling industry for more efficient control methods that offer faster implementation and commissioning. As a result, there are now products available to meet the dual need for simplicity and intelligence in conveyor control. Companies such as Insight Automation, Schneider Electric and Rockwell Automation now offer options based on preengineered modules. You'll find these products differ in complexity and cost, however they allow for an easier retrofit while providing a networked, distributed modular conveyor control system to maximize productivity. These modular conveyor control systems offer numerous advantages which include:

- Elimination of complex maze of wires from a central panel to each device
- Reduction in engineering time
- Faster and simpler installation process
- Flexibility and scalability
- Testing of segments prior to completion of an entire system
- Use on new or existing equipment



Whether you're installing a modular conveyor control system for the first time, or if you just need to make a simple system alteration, what once would have taken weeks to accomplish can now be done in a matter of days. These modular, distributed conveyor control systems offer significant savings in installation when compared to typical central panel control methods. But the big advantage is that you gain control over a once cumbersome system—and control over your future productivity.

How do these systems work? Although each product varies, there is generally a PLC that connects to a group of pre-engineered modules placed near a conveyor motor or other device. A single daisy-chained cable connects the modules allowing system intelligence to be distributed along the communication network. With this arrangement, you simply wire devices to the nearest module and let the network communicate to the PLC to distribute I/O, motor control, and other functionalities along the entire conveyor system.

With these types of systems it's easy to add a new conveyor section whenever you need to reconfigure. You simply install an additional off-the-shelf control module near the new conveyor motor and make the necessary connections. These systems usually control most types of conveyors, from belt and roller types to tabletop chain and specialty transfer conveyors. Several also support common network protocols including DeviceNet, Modbus Plus and more.

Some day, all conveyors will operate with these types of modular conveyor control systems. But since you can easily retrofit an existing conveyor system now, why wait? If you know you'll eventually be making updates to improve productivity, the time may be right to save money and gain more control over your system. Most importantly, this kind of retrofit friendly product may just give your company the competitive edge it needs to grow in this tough economy.

About the Author

David Sellers has 10+ years experience in automated materials handling, most of which has been "on the factory floor" designing and implementing conveyor control systems. He is currently the Production Manager for Insight Automation; the proven leader in innovative control system solutions for materials handling applications. Dave can be reached by email at dsellers@insightautomation.cc or by phone at 1-800-764-6356 Insight Automation, Inc.
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