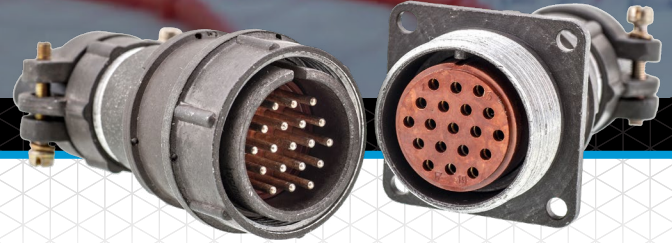


Customer Story

INVISTA



The line that can't pause: Inside Invista's 24/7 nylon packaging operation in Kingston

Milton Lywood leads automated material movement at INVISTA's Kingston, Ontario plant. The line he runs never stops, because the line downstream has already assumed it won't.

"You're delivering into a supply chain that's already in motion," he says. "The quality has to be there."

Nine-kilogram industrial bobbins of nylon yarn come off the spinning department and move through a system that sorts them, inspects them, buffers them long enough to assemble the right mix, and sends them out the door. A significant share becomes airbag fabric. By the time a bobbin leaves the building, it's already accounted for somewhere else in an inventory forecast, on a production schedule, or inside a vehicle that hasn't been built yet. INVISTA is a global producer of polymers and fibers, with materials that end up in automotive components

and durable fabrics like CORDURA®. Its operations span everything from upstream chemical production to downstream nylon spinning. Kingston is unusual in that it brings both ends of that process together on one site. Material is produced, spun, and packaged there, then moves out into a wider network of customers and sister facilities.

"We share best practices with all of our sister sites," Milton says, "trying to make ourselves as efficient and competitive as possible."

Expectations for global consistency and deep integration shape how the line is run. It has to be precise, and it has to keep moving.



Nine-kilogram industrial bobbins of nylon yarn come off the spinning department



Global producer of polymers and fibers



Expectations for global consistency and deep integration shape how the line is run

Built once, worked on constantly

The packaging system in Kingston was designed and built with Eclipse in 2015, including the controls and data systems that coordinate how material moves, is tracked, and is verified across the line. A decade on, Eclipse is still embedded in how it operates. The relationship didn't end at commissioning. It became the operating condition.

Milton's role reflects how central that system is. He's responsible for automated packaging, warehousing, and physical testing labs. The packaging line sits at the center of that work where product becomes shipment, and where traceability is locked in.

Robots unload bobbins onto the conveying line. They pass through automatic cut-and-weigh, inspection, and three large buffer cells that together hold thousands of bobbins. That's enough of any given type to assemble a full pack of forty-eight. Vision systems verify alignment at the unload, and barcode readers verify labels at the pack-out. That redundancy is how the plant is certain that the customer is getting what the customer thinks they're getting.

Solving problems in real time

Each step depends on the last. When something goes wrong, material backs up quickly and the rest of the operation feels it. A call goes out, and an Eclipse controls engineer connects into the system remotely, at any hour, any day.

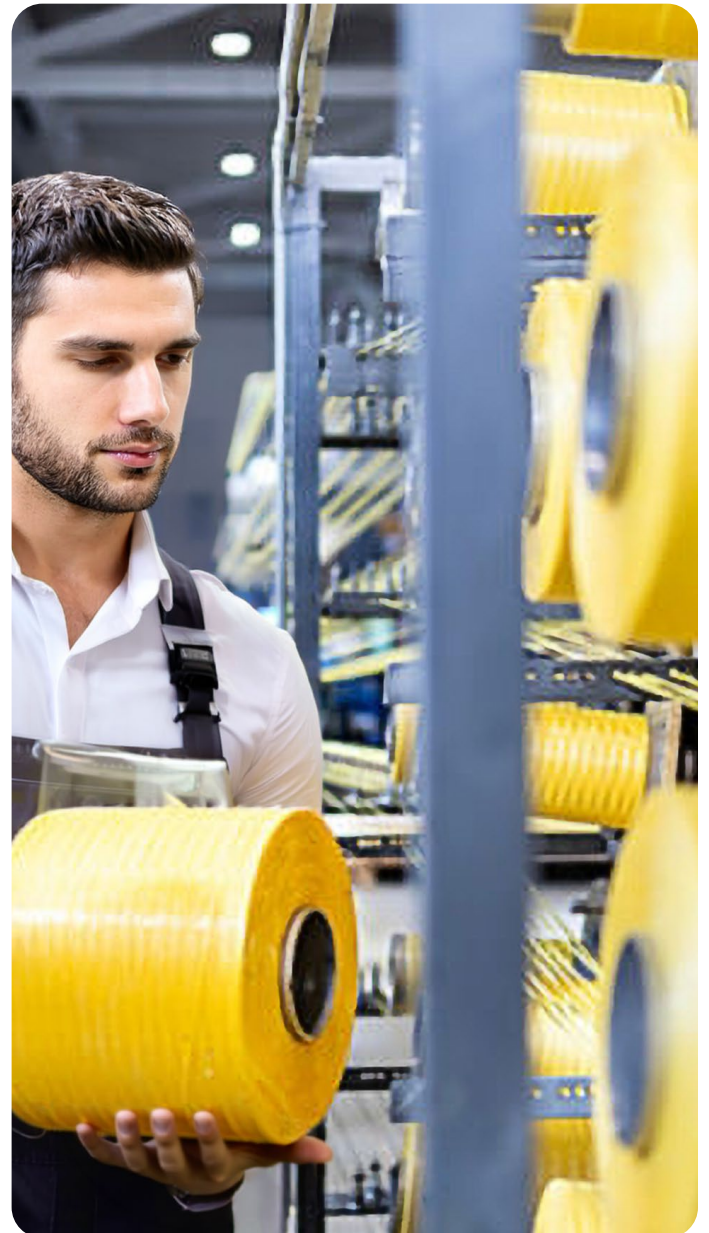
"There's a hotline we call and we get connected," Milton says. "Any time of day or night. They'll jump on remotely and connect into our system and support our own technicians here on site."

Most sessions resolve in minutes. Occasionally they don't. Milton recalls a case when one of the unload robots started rejecting incoming material. "First you start looking at the controls and the vision system," he says. This time it wasn't software. The end-of-arm tooling had cracked and bent. Eclipse came on site to work the problem through with the team.

"It's invaluable to have that support," Milton says. "We wouldn't be able to operate without it."

What's grown up around the contract is the part that doesn't appear in the contract. Eclipse engineers spend time on site walking the system with INVISTA's team, building familiarity with how it actually runs. Invista's technicians, in turn, deepen their grasp of the controls and logic behind it. The automation does the heavy lifting. The relationship does everything the automation can't.

"There is no protection of knowledge. Everything they learn, they're trying to help us build that capacity in our team as well."



A system that continues to evolve

The line has changed over the years. It was designed with enough flexibility to accommodate that, and the operation has made use of it.

“It is built such that it’s meant to be somewhat modular,” Milton says. “You can integrate new technology and new equipment.”

Automatic cut-and-weigh went in around 2019. A set of new quality safeguards on the pack-outs followed a few years later, with Eclipse handling the code upgrades and commissioning. Currently under evaluation: a full replacement of the automated guided vehicle (AGV) fleet that moves finished product through the facility. This is a change that would touch the final stages of the process and open the door to what Milton is most interested in.



“I’m always thinking through what could be next,” he says. “What is out there? What could we do?”

Advances in vision systems are one of the areas he’s watching. The question isn’t whether the technology exists. It’s how it fits. “How could we either integrate that into what we have today,” he says, “or maybe truly transform what we have?”

Whether it’s the latest AGVs or technologies even further down the line, that’s the real work of running a system like this one: deciding what changes are worth making, what they unlock, and how to introduce them into a line that still has to run every hour of every day.



Keeping everything moving

“We have a really valued partnership,” Milton says. “When we succeed, when you succeed — we all succeed.”

In a plant that runs around the clock, that kind of relationship is a big the reason the line is still moving.

Ready to get started?



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519-620-1906 | contact@eclipseautomation.com
www.eclipseautomation.com

