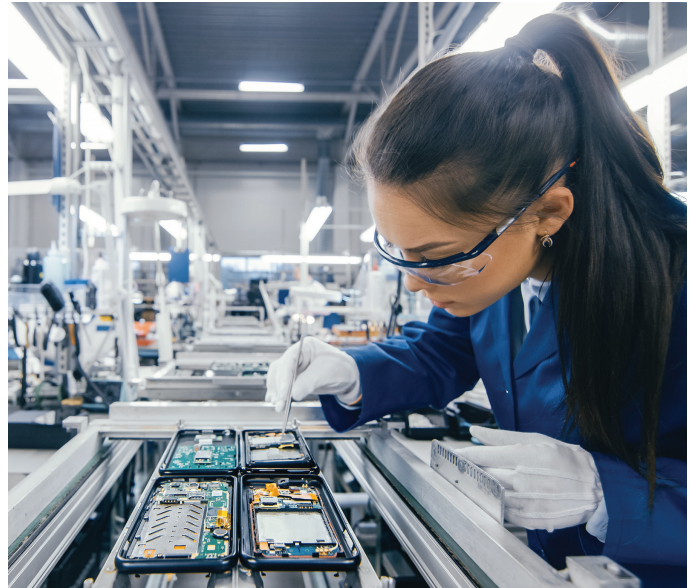## Lexmark Optra IoT Solutions

Manufacturing Quality Control

Ensure product quality in manufacturing with accurate insights

Put an extra set of non-human eyes on your manufacturing line

Your customers expect outstanding quality. But how can you ensure you're truly delivering the best products with your current operations? By minimizing manufacturing errors, increasing production output and reducing waste to outpace your competitors.

With the rising costs of raw materials and transportation, manufacturers need continuous improvement in the manufacturing processes and the products they create to remain competitive. They also need to enforce safety standards to ensure employees wear PPE (Personal Protective Equipment), use equipment properly, and avoid hazardous areas or forklift collisions. However, many manufacturers rely on staff to perform a visual or manual inspection to identify anomalies, defects and sub-optimal conditions on the manufacturing line. This approach is error-prone, costly and difficult to scale.

What if you could:

▶ Move human-led tasks to AI, allowing your team to focus on more high-value work
▶ Lower defect rate
▶ Reduce the cost of inspection
▶ Enhance productivity with real-time insight for instant evaluation and decision making
▶ Trigger instant alerts for safety compliance issues
▶ Improve manufacturing and quality assurance processes

Optra IoT Solutions for Manufacturing Quality Control is a turnkey solution that enables you to do all of this.

Grow your business and gain a competitive advantage

The solution can work within your existing infrastructure and cameras to collect real-time data from the manufacturing line. The data is processed locally using **Optra Edge vision hardware**, avoiding the cost, latency and security concerns associated with sending data to the cloud. **A low code/no code cloud-based management portal** enables you to remotely provision and monitor your Optra Edge hardware, update the firmware and deploy AI software apps across your entire fleet with a single click of a button. **AI/ML applications/software skills** can be chained together to create custom workflows – prebuilt, custom built by Lexmark, or you can build your own—so you can analyze and interpret specific variables and generate real time alerts. The solution also features **APIs** to connect to your systems of record and the Optra IoT Platform, giving you the ability to perform time series analysis of the refined data.

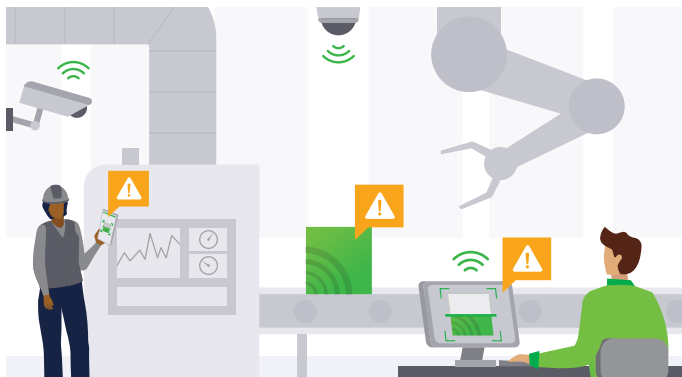## Fast results with a return on investment in less than a few months

▶ Issues are flagged and operators are alerted in real time, saving on annual defect cost avoidance per production line.
▶ Gain up to 40% improvement in inspection speed - there's no need for human inspection of every item, only when a defect is detected.
▶ Achieve up to 99% identification accuracy and up to 99% improvement in traceability.

Get results with a proven solution

How do we know it works? Because we were the first customer. Lexmark has proven results using the solution to avoid manufacturing errors on our own production lines, where we manufacture print devices for many commercial brands, besides ourselves. The manufacturing is done globally in multiple locations in the U.S., Asia and Latin America.

How it works

1. Monitors the production line to determine:
   - The product is being assembled correctly
   - The manufacturing chain is working correctly
   - Operators are wearing PPE correctly and performing at speed
2. Information is relayed to the Manufacturing Control System
3. Manufacturing Control System flags the issue
4. If an issue is detected, a re-work process or maintenance request is initiated

Getting started is easier than you may think

Expert consulting

Meet your goals with a solution tailored by our experts to address your exact outcomes.

Fast implementation

Get up and running in weeks, not months. Our AI/ML-based low code/no code solution is easy to set up, integrate and manage.

Ongoing support

There is no limit to the business and operational transformations you can achieve. We're here to enable your strategic vision and long-term journey.

Now, you can use Optra solutions to grow your business and gain a competitive advantage.

Lexmark is uniquely positioned to help

As a manufacturer and early adopter of edge enabled IoT solutions, we understand the complexity of edge computing and the benefits manufacturers can harvest from them.

With 7 million printers deployed at the edge at the biggest enterprises in the world, we have leveraged the technology from our print devices to build edge enabled IoT solutions that are scalable, secure, fast to deploy and easy to manage. These solutions deliver the outcomes you need and utilize existing cameras and network infrastructure to lower costs and accelerate your business objectives.

lexmark.com