

Where Does Actionable Intelligence Begin in Your Labeling Process?

How AI print validation and real-time data capture close a critical gap in production labeling.

Intelligent Validation at the Point of Print with PortalTrack Print InSpec

PortalTrack Print InSpec turns Zebra Technologies' vprinters into high-speed inspection stations. By utilizing Zebra FS Series fixed scanners with a dedicated Neural Processing Unit (NPU), the system applies deep-learning AI to every label. This allows for instant anomaly detection and "no-train" OCR without slowing down production.

Why Validation Matters

Sampling labels or relying on downstream scanning leaves significant gaps. Intermittent failures caused by worn printheads, media shifts, or incorrect data often go undetected until errors ripple through operations. Early visibility makes prevention possible vs. managing them downstream.

How it Works

AI-Powered
Uses deep learning to catch defects traditional scanners miss.

Real-Time
Validates and records data at the exact moment of creation.

Zero-Training
High-accuracy OCR for text fields with no complex setup.

Validate. Capture. Analyze.

Actionable Intelligence and Integration

Real-Time AI Validation at the Printer Level

MSM Solutions' print-time validation solution scans every barcode as it is printed using Zebra FS Series fixed scanners mounted directly to the front of the printer. If a barcode is unreadable, printing stops immediately, preventing poorly printed labels from entering operations or reaching customers.

Flexible Integration with Existing Systems

PortalTrack Print InSpec is designed to integrate with real-world manufacturing environments, including those with legacy systems.

- PortalTrack Print InSpec dashboards and reporting.
- Flexible API-based integration with ERP, WMS, and custom systems.
- Support for data visualization tools such as Power BI and SQL-based analytics.

Integration approaches can be tailored based on customer requirements and system architecture, without forcing disruptive system replacements.

Purpose-Built for Demanding Operations

This solution integrates seamlessly with existing Zebra printing environments and Zebra FS Series fixed scanners.

Ideal for Manufacturing, Retail CPG, Pharma & Life Sciences, Logistics & Distribution, and Healthcare & Labs.

Contact MSM Solutions today to schedule a barcode validation assessment.

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Validated at the point of print, recorded at the source.

This closed-loop workflow enables manufacturers to validate label quality, capture structured data, and support evolving compliance and traceability requirements.

1. Zebra Barcode Printer

Generates 1D and 2D barcode labels containing product, lot, serial, and compliance data.

2. Zebra FS Series Fixed Scanner

Supports high-speed, print-time capture in production environments.

3. PortalTrack Print InSpec

Performs print-time barcode readability validation and OCR validation while capturing structured label data.

4. Validated 2D Barcode / EPC Data

Validated barcode output capable of carrying expanded datasets required for GS1 Sunrise 2027 and EPC/RFID workflows.

5. Digital Validation Record

Time-stamped, auditable record linking barcode data, printer source, and validation results.

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