



# Automating Traceability with Fixed Scanning

*Hands-free data capture designed for speed, accuracy, and reliability*



Manufacturers and logistics-driven organizations are under constant pressure to move faster while maintaining accuracy, traceability, and compliance. Despite this, many operations still depend solely on manual barcode scanning and data entry, which can introduce inefficiencies and constrain scalability.

## Common Challenges with Manual Scanning



Higher error rates from missed scans or manual data entry



Slower production and fulfillment speeds



Limited visibility into real-time operations



Difficulty scaling as volume and complexity increase

Incorrect or missing details on product labels and packaging can further magnify these issues.

## Why Fixed Scanning Matters

Fixed scanning offers a proven way to address these challenges. Unlike handheld scanners, fixed industrial scanners automatically and consistently capture data as items move through production lines, packaging stations, conveyors, or inspection points.

MSM Solutions partners with Zebra Technologies to deliver fixed scanning solutions that align with each organization's workflows, systems, and business rules. With decades of experience supporting manufacturing and warehouse environments, MSM takes a practical, outcome-driven approach which includes assessment, integration, deployment, and ongoing support.

Manual scanning works—until volume, speed, and accuracy expectations increase.

**Fixed scanning is built to scale.**

## With fixed scanning, organizations gain:

- ✓ Faster, uninterrupted throughput
- ✓ Improved accuracy and data integrity
- ✓ Real-time visibility into operations
- ✓ Reduced reliance on manual intervention



## Core Benefits of Fixed Scanning



### Increased Throughput and Speed

Fixed scanners automatically read barcodes as products, cartons, or pallets move past the scan point. This enables 20–50% throughput improvements, especially in high-volume or conveyor-based workflows.



### Improved Accuracy and Data Integrity

Hand scanning and manual data entry introduce variability and human error. Fixed scanning delivers consistent reads, reducing error rates to near-zero when implemented.



### Real-Time Data Capture and Visibility

Fixed scanners integrate directly with existing host systems. This allows access to real-time data for tracking, traceability, and performance reporting.



### Cost Savings and Efficiency Gains

By reducing rework, shipping errors, returns, and labor-intensive scanning tasks, fixed scanning solutions often pay for themselves quickly and enable greater productivity without proportionally increasing labor costs.

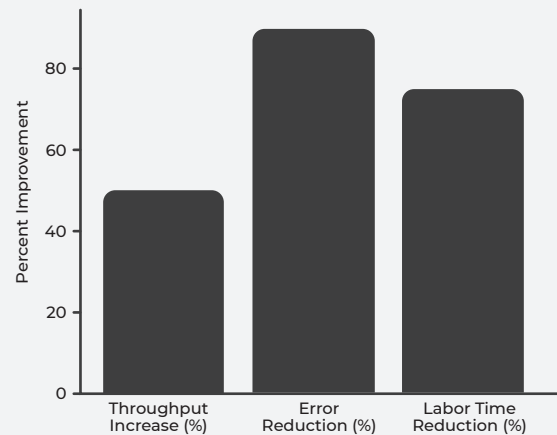


### Scalability and Simplified Management

With Zebra Aurora Focus™, teams can operate and manage Zebra fixed industrial scanners from a single, unified platform. This simplifies setup, reduces training requirements, and allows organizations to scale scanning capabilities as business needs evolve.

## Impact of Fixed Scanning

Operational Improvement with Fixed Scanning vs. Manual Scanning



*Typical industry improvements when replacing manual barcode scanning with fixed, automated scanning. Actual results vary by workflow and environment.*

## Manual vs Fixed Scanning at a Glance



### Manual Scanning

### Fixed Scanning

Requires operator action

Hands-free, continuous scanning

Slows workflows at scale

Maintains speed at high volumes

Prone to missed scans

Near-zero missed reads

Inconsistent accuracy

Consistent, automated performance

Labor-dependent

Automation-ready and scalable

## Use Case 1 | Manufacturing

# Inspecting Parts, Verifying Labels, Ensuring Quality



### The Challenge

A manufacturer needs to verify that the correct parts, labels, and packaging are applied every time. Manual inspection and handheld scanning slow production, making it difficult to ensure consistent quality and can result in rework, scrap, regulatory risk, or customer dissatisfaction.

### Operational Benefits

- Faster, uninterrupted production flow
- Consistent verification without relying on manual checks
- Improved traceability for parts and finished goods
- Reduced risk of recalls and quality issues

### Fixed Scanning in Action

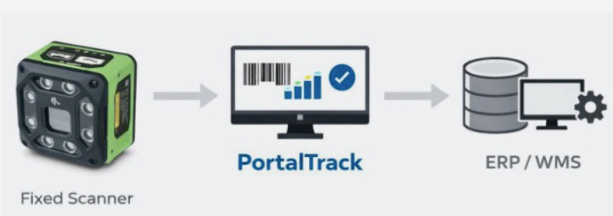
By installing fixed scanners at critical inspection points (final assembly, packaging stations, and label application areas), they are able to automatically scan 1D and 2D barcodes, verify part IDs, and validate batch or lot information in real time.

### Recommended Solutions

- **Zebra Technologies FS10:** Compact scanner ideal for workstation-level scanning at pack stations and small parts areas
- **Zebra Technologies FS42:** Designed for medium-throughput applications requiring flexibility in sensor options and illumination
- **Zebra Technologies FS80:** Built for demanding environments where high resolution, advanced lighting, and challenging codes are common

### PortalTrack Integration

For manufacturers that need deeper visibility and reporting, MSM Solutions can integrate fixed scanning with PortalTrack, MSM's inventory and traceability software.



### When paired with fixed scanning, PortalTrack can help:

- Centralize scan data across production and packaging workflows
- Improve traceability for parts, WIP, and finished goods
- Align scanning data with internal business rules and reporting requirements



## Use Case 2 | Warehouse & Logistics

### High-Speed Tracking on Conveyors and at Dock Doors



#### The Challenge

Hand scanning can create workflow bottlenecks, contributing to mis-shipments and limited visibility into inventory movement. As order volumes increase, these inefficiencies become more costly.

#### Fixed Scanning in Action

Fixed scanners mounted along conveyor belts, at sortation points, and dock doors automatically capture barcode data as packages and pallets move through the facility, supporting high-speed tracking without disrupting flow.

#### Operational Benefits

- Continuous scanning at conveyor speeds
- Reduced mis-shipments and inventory inaccuracies
- Improved labor efficiency and throughput

#### Recommended Solutions

- **FS10:** Smaller-scale conveyor or workstation verification
- **FS42:** High-throughput carton and parcel scanning
- **FS80:** Complex codes or varied package sizes
- **GS20:** Useful in mixed workflows where fixed scanners alone may not provide full coverage

## Use Case 3 | Healthcare

### Accuracy, Compliance, and Patient Safety



#### The Challenge

Healthcare environments often experience errors in specimen/lab tracking which can have serious compliance and safety implications.

#### Fixed Scanning in Action

Fixed scanners placed at specimen drop-off and lab control points automatically capture barcode data to validate patient IDs, test orders and specimen types.





#### Operational Benefits

- Improved patient and specimen matching
- Improved chain of custody and traceability across lab workflows
- Stronger adherence to laboratory compliance and quality protocols
- Lower rework and redraw rates, improving clinician and patient experience

#### Recommended Solutions

- **FS10:** Compact scanning at small stations
- **FS42 / FS80:** Higher code complexity or varied symbologies

# Zebra Fixed Scanning Portfolio: Quick Comparison

Model	Best Fit Applications	Key Strengths
 FS10	Workstations, small pack areas	Compact, easy deployment
 FS42	Medium-throughput production and conveyors	Flexible configuration, strong connectivity
 FS80	High-complexity and demanding environments	High resolution, advanced lighting
 GS20	Mixed or hybrid workflows	Flexible gateway support

## Why Partner with MSM Solutions

Zebra delivers proven fixed scanning technology trusted across industries. MSM provides hands-on support throughout the process; assessing workflows, integrating with existing systems, customizing configurations, and supporting deployments long after go-live. With decades of experience in warehousing and manufacturing environments, MSM focuses on measurable outcomes and continuous improvement.

## Discover where fixed scanning can improve your operation.

Schedule a consultation with MSM today.

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