

# PACKAGING SOLUTIONS

Track, Trace & Control



## MICROSCAN®

Precision Data Acquisition  
and Control Solutions

# MACHINE VISION & BARCODE SOLUTIONS FOR PACKAGING

## Track, Trace and Control

Packaging systems are under strong demands to ensure the quality of the primary, secondary, and final packaging while at the same time maximizing production flow. Microscan's barcode and machine vision products are commonly used throughout automated packaging applications to monitor, track, and trace critical data to ensure quality while maximizing productivity.



### Industries Served:

- Food
- Beverage
- Cosmetics
- Pharmaceuticals
- Personal Hygiene
- Healthcare
- Household Goods
- Chemical
- Consumer Electronics
- Medical Devices

## Date/Lot Verification



Use 1D/2D barcodes or human readable text for identification and tracking of similar groups of packaged items:

- Lot tracking
- Time/date stamping
- Verification of print quality and correctness
- Optical Character Recognition (OCR)
- Optical Character Verification (OCV)

## Unique Item Identification



Use 1D/2D barcodes or human readable text for product serialization or to verify component identification:

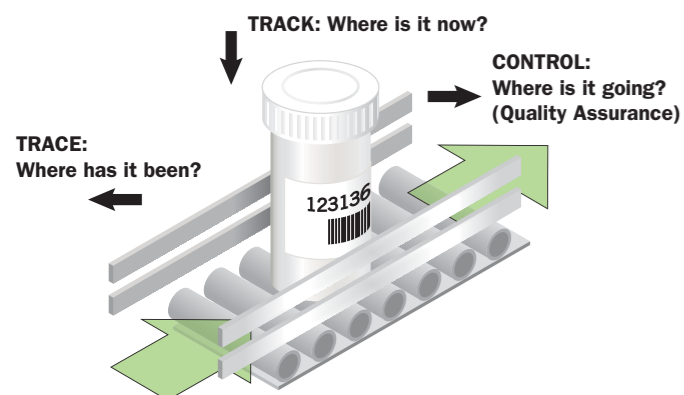
- Match packaging to labels, boxes or inserts
- WIP tracking
- Item traceability
- Identification of cartons, inserts, outserts
- Verification of proper sequence

## Product Inspection



Use machine vision inspection to ensure quality:

- Label presence/position
- Cap presence/position
- Safety seal inspection
- Fill level
- Crimp inspection
- Color matching
- Defect detection



### TRACK (Present)

Auto ID and machine vision are used to track parts that are work-in-process, or "WIP".

### TRACE (Past)

Traceability is the ability to recreate or "trace" the manufacturing steps, processes, or location of a part before it becomes a completed assembly.

### CONTROL (Future)

Control is used to decide what step or future process a part must undergo, or to ensure quality and verify packaging.

## MANUFACTURING



Raw Materials

### APPLICATIONS

- Inventory control
- Quality inspection
- Receiving confirmation
- WIP tracking
- Material verification
- Code/mark verification

TRACE: Track materials entering facility and materials usage

TRACE: Initiate traceability of product

CONTROL: Inspection of vendor-supplied product

## PRIMARY PACKAGING

Ensure quality product, initial package



Filling, Sealing, Labeling

### APPLICATIONS

- Cap presence/position
- Label presence/position
- Crimp inspection
- Product serialization
- Pick and place
- Fill levels
- Safety seal inspection
- 2D code reading
- WIP tracking
- Date/lot tracking
- Product inspection
- Validate completeness of blister packs, boxes, etc.

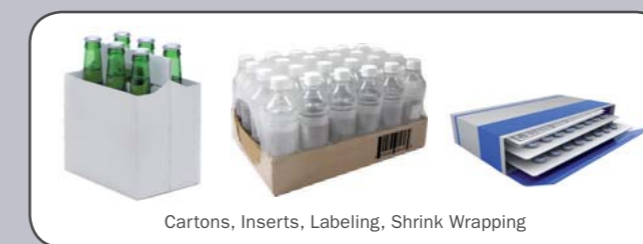
TRACE: Efficiency of filling systems and quantity produced

TRACE: Applying unique identification to primary packaging

CONTROL: Verifying raw materials placed in correct package

## SECONDARY PACKAGING

Accurate packaging of product



Cartons, Inserts, Labeling, Shrink Wrapping

### APPLICATIONS

- Lot tracking and verification
- OCR/OCV for printed batch numbers
- Verification of correct insert/outsert
- Sortation for distribution
- Match inserts to packaging
- Completeness check
- Confirm accurate code printing

TRACE: Lot tracking and validation

TRACE: Recording time/date stamping, lot level identification

CONTROL: Match product to leaflets and outer packaging

## FINAL PACK/SHIPPING



Inventory, QA, Shipping

### APPLICATIONS

- Sortation and routing
- Packing list verification
- Outbound documentation
- WIP tracking
- Sorting and ID matching

TRACE: Overall factory input productivity

TRACE: Unique pallet identification, traceability of finished goods to raw materials

CONTROL: Match pallet to case code; verify/match customers orders to shipments

# COMPANY & PRODUCTS

Microscan is a manufacturer and global technology leader for track, trace, and control solutions. Our barcode and machine vision products help companies around the world to drive down cost and waste, automate critical manufacturing processes, and increase yields through precision data acquisition. As an ISO 9001 certified company recognized for quality leadership, Microscan is known and trusted by customers worldwide as a provider of quality, high precision products.

## AUTO ID Barcode Readers & Verifiers

- Microscan offers fast, reliable barcode readers for all standard linear barcodes and 2D symbols. Features include small size, high speed reading, wide field of view, symbol reconstruction, and aggressive decoding technology.



Code 128



UPC



GS1 Databar



Data Matrix



Optical Character Recognition (OCR)



Direct Part Marks



Code 93



Pharmacode



PDF417

## MACHINE VISION Software, Hardware & Lighting

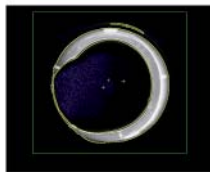
- Microscan holds one of the world's most robust patent portfolios for machine vision technology. Our products include machine vision software, smart cameras, and lighting for applications such as identification, inspection, and measurement.



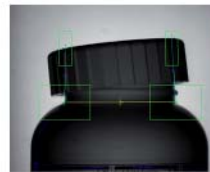
Optical Character Verification (OCV)



Date/Lot Tracking



Seal Inspection



Cap Presence/Position



Item Traceability

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