AUTOMATED BOTTLE INSPECTIONS
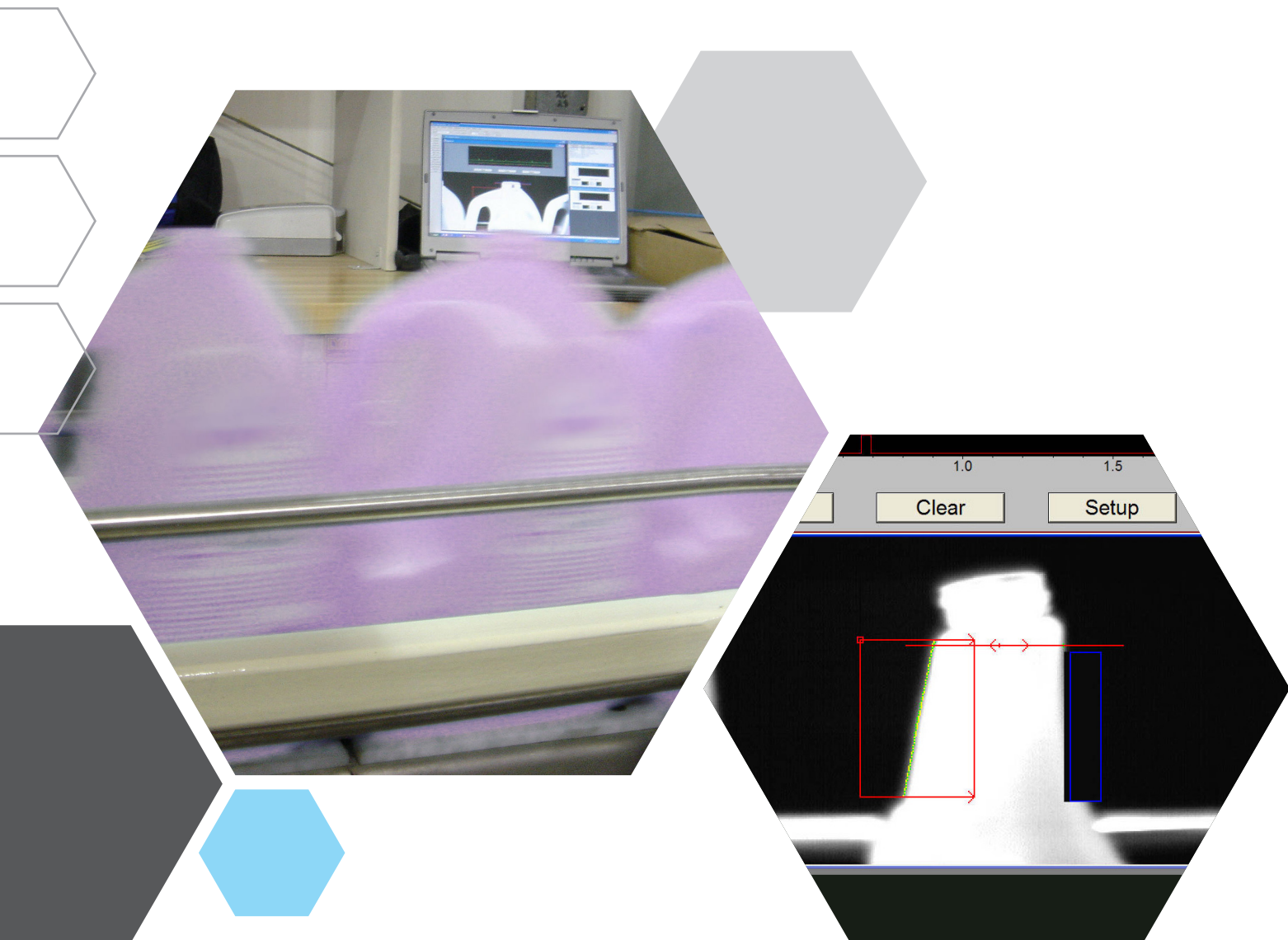
Prevent Leakage & Filler Stoppage

⚡EPIC

BOTTLE ORIENTATION VERIFICATION

Backwards or mis-oriented bottles in the filler can cause filler crashes, jams or spilled product. Prevent downtime and unnecessary maintenance caused miss-fills and jams. Inspecting bottles before filling can also prevent safety hazards from spills such as wet floors, flammable chemical splashes, etc.

With an EPIC vision system, incorrectly orientated bottles are rejected prior to filling or re-oriented automatically (optional upgrade). Our system offers the most reliable and accurate solution available, with 99.9% accuracy at lines speeds up to 600 bottles per minute. An EPIC solution also minimizes line stops helping you meet your OEE goals.

System Features

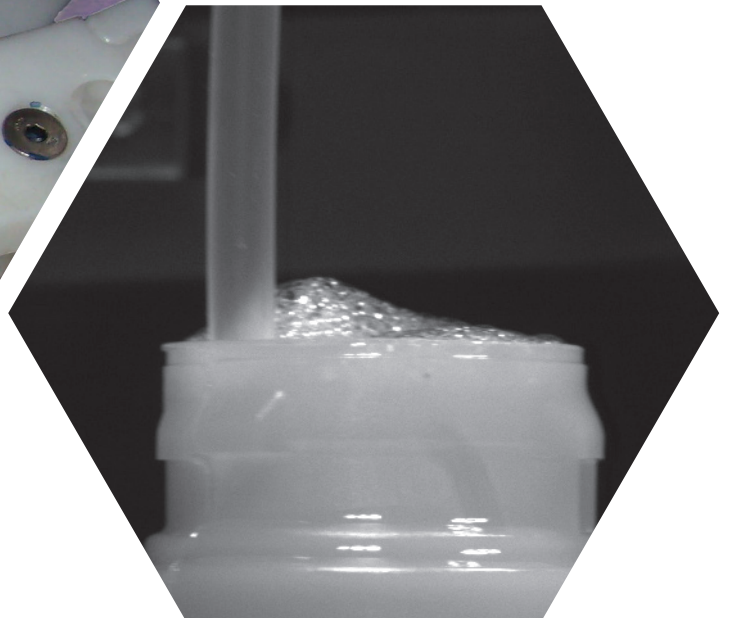|	
SUITABLE FOR	High speed filling applications involving bottles ranging from sample size to bulk refill (consumer sized)
LINE SPEEDS	Up to 600 parts-per-minute with standard configuration. 900-1,000 parts per minute achievable with some upgrades
SYSTEM HIGHLIGHTS	- Ensures bottles are oriented correctly before filling to prevent spills and filler downtime from jams - Inspects for: - Bottle presence before filling (skip fill if not bottle) - Backwards or turned bottles to ensure filler spout will line up correctly with the bottle - OPTIONAL: Spray trigger or cap orientation 99.9+% accuracy with a maximum of 1 false fails/false pass in 1,000 products
OPTIONAL UPGRADES	- Can be combined with the other inspections in this brochure for a complete bottle inspection package - Height adjustments for multiple sized bottles on the same line - Higher or lower part rates - Suitable for food manufacturing - Additional inspections including; - Foaming and overfill detection - Leakage detection after the filler - Before and after capping inspections to detect: - High cap & cocked caps likely to leak - Backwards sprayers and other capping defects

Technical Specifications

CAMERA	Cognex InSight Camera
SOFTWARE	Cognex
MOUNTING METHOD	Floor stands or mounting brackets, depending on location
PHYSICAL HARDWARE	- Control Panel - Touchscreen HMI - Light(s) and lens for high contrast imaging—multiple configurations available

SPRAY TRIGGER
INSERTION INSPECTIONS

Stop letting trigger sprayers wreak havoc on your filler and packaging line. Mis-oriented and mis-inserted triggers are a common issue that can jam fillers, spill product and lead to defective bottle function.

Make sure spray triggers are properly inserted every time with an EPIC Spray Trigger Inspection System. In addition to correct insertion, we can ensure tubes go in straight to enable proper product function for consumers. Missing tubes and other package defects are also detectable with this solution, making sure your spray-trigger bottles work correctly for consumers.
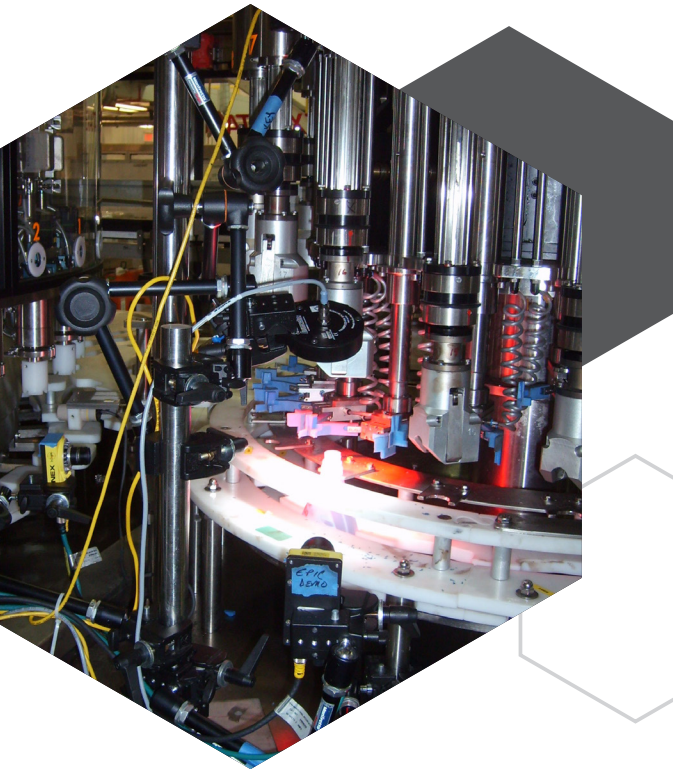
System Features

SUITABLE FOR	Any bottle that uses a trigger sprayer cap with a dip tube. Can also be used for fragrance sticks or similar applications
LINE SPEEDS	Up to 600 parts-per-minute with standard configuration. 900-1,000 parts per minute achievable with some upgrades
SYSTEM HIGHLIGHTS	- Detects damaged, bent, or missing spray triggers - Inspection location options include: - Inside the filler at moment of insertion/mating - On the conveyor preceding the filler for orientation and presence - On the conveyor following the filler for trigger presence and dip tubes outside bottle - Tube angle of insertion and bends can also be detected up to +/- 2 millimeters accuracy to ensure proper product function 99.9+% inspection accuracy rate with a maximum of 1 false fails/false pass every 1,000 products
OPTIONAL UPGRADES	**Can be combined with the other inspections in this brochure for a complete bottle inspection package** - Damaged caps, damaged or missing trigger or cap can also be detected - Additional upgrades: - Height adjustments for various product sizes - Higher or lower part-per-minute rates - Additional inspection angles including: - Complete 360 degree inspection of bottles - Overhead view of triggers, caps and bottles - Additional before and after capping inspections to detect: - High cap & cocked caps likely to leak - Backwards sprayers and other capping defects

Technical Specifications

CAMERA	Cognex InSight Cameras
SOFTWARE	Cognex
MOUNTING METHOD	Depends on location. Mounting brackets to OEM equipment is most common, but floor stands may be used
PHYSICAL HARDWARE	- Control Panel - Touchscreen HMI - Light(s) and lens for high contrast imaging—multiple configurations available

GET EPIC RESULTS

Supporting Lean Production Lines with Improved Results

Product Holds Eliminated & Scrap Reduced with Automated Defect Inspection

A custom EPIC defect inspection system identifies critical defects as small as 30 microns on two-inch long parts. Correctly identifying these defects at a highly repeatable rate for line speeds up to 600ppm allows the manufacturer to eliminate a mandatory three-day product hold for all products, drastically reduces product scrap, and improves the facilities predictive maintenance capabilities.

Automated Ingredient Verification Prevents Mislabeling, Packaging & Product Waste

An automated ingredient verification system designed by EPIC reads the text on labels and containers as they pass by at high speeds and alerts line operators if allergen information is missing, cut-off, or unreadable. This system catches mislabeling within 10 products, significantly reducing packaging and labeling waste and protecting both the brand and customers by ensuring all products are correctly labeled before leaving the facility.

The EPIC Advantage

Fully tested before install

Electrical, mechanical, programming design

Integrated HMI/UI displays

Seamlessly integrated controls

Actionable data insights

High velocity (900+ ppm)

High accuracy (99%+)

High precision (30 microns+)

Stop defects in 10 products or less

Backed by 25 years experience

Trusted Partners in Lean Improvement

TESTIMONIALS

"EPIC Vision is an awesome team to work with. They hear my requirements and provide robust working solutions. They deliver when expected and these installations end up being the lowest maintenance equipment in our factory."

Manufacturing Execution System Manager | Multinational Food & Beverage Client

"The innovative solutions built and automated by EPIC far surpass industry and market standards for accuracy, saving us time, money and future redesign. They are a trusted partner for the most innovative and efficient solutions for our manufacturing processes."
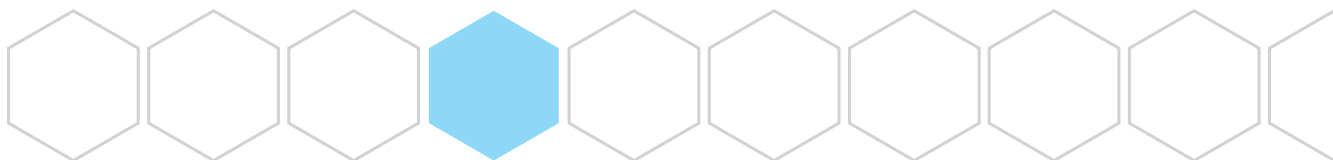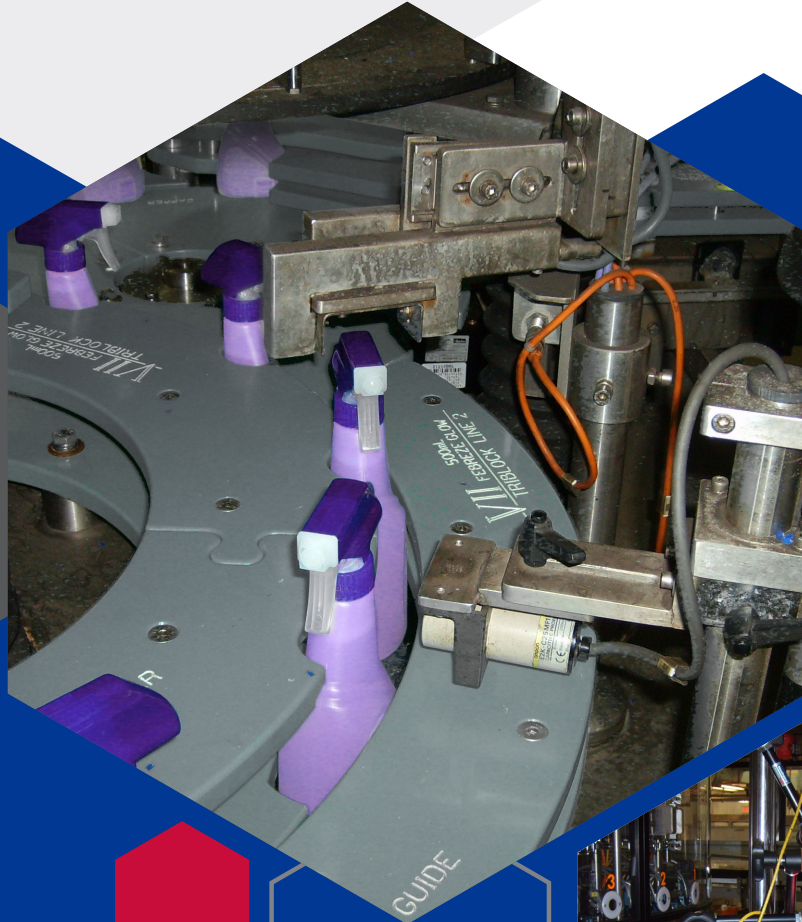
Senior Project Engineer | Fortune 500 Manufacturer

EPIC

314-501-6534

sales@epicsysinc.com

EPIC Vision Systems
4142 Meramec Bottom Road
St. Louis, MO 63129, US