



# 600 PPM Inspection & Servo-Driven High-Speed Diverter System

Technical Specifications

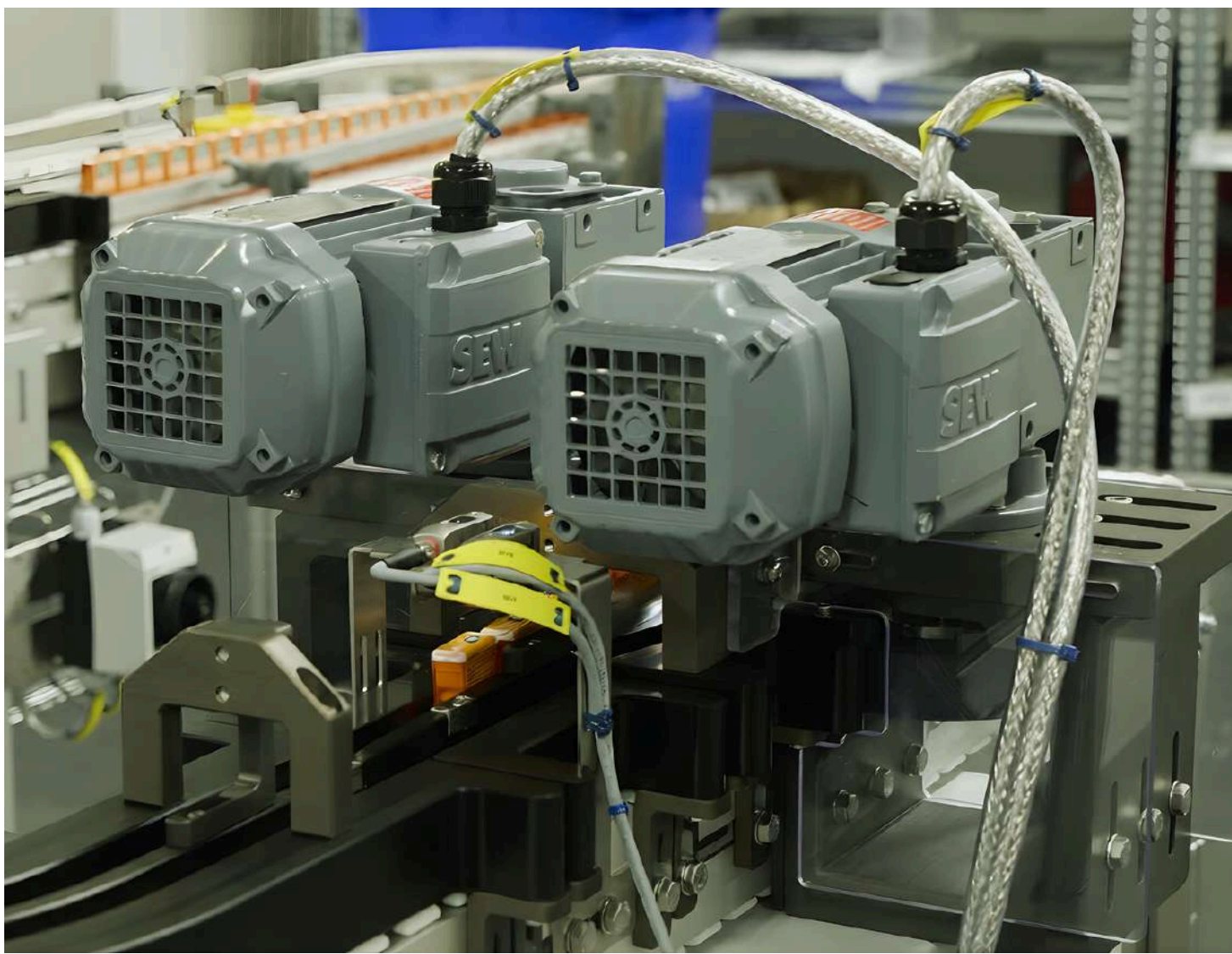
Video

Real-World Benefits

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## About

The Curti Line is a high-speed packaging inspection and servo-driven diverter system engineered by Machinelab to operate at up to 600 parts per minute (PPM). Designed for high-throughput packaging environments, the system performs inline inspection, precision rejection, and controlled lane separation using advanced servo motion architecture. It ensures accurate product segregation, controlled flow distribution, and zero-compromise rejection handling within automated packaging lines.

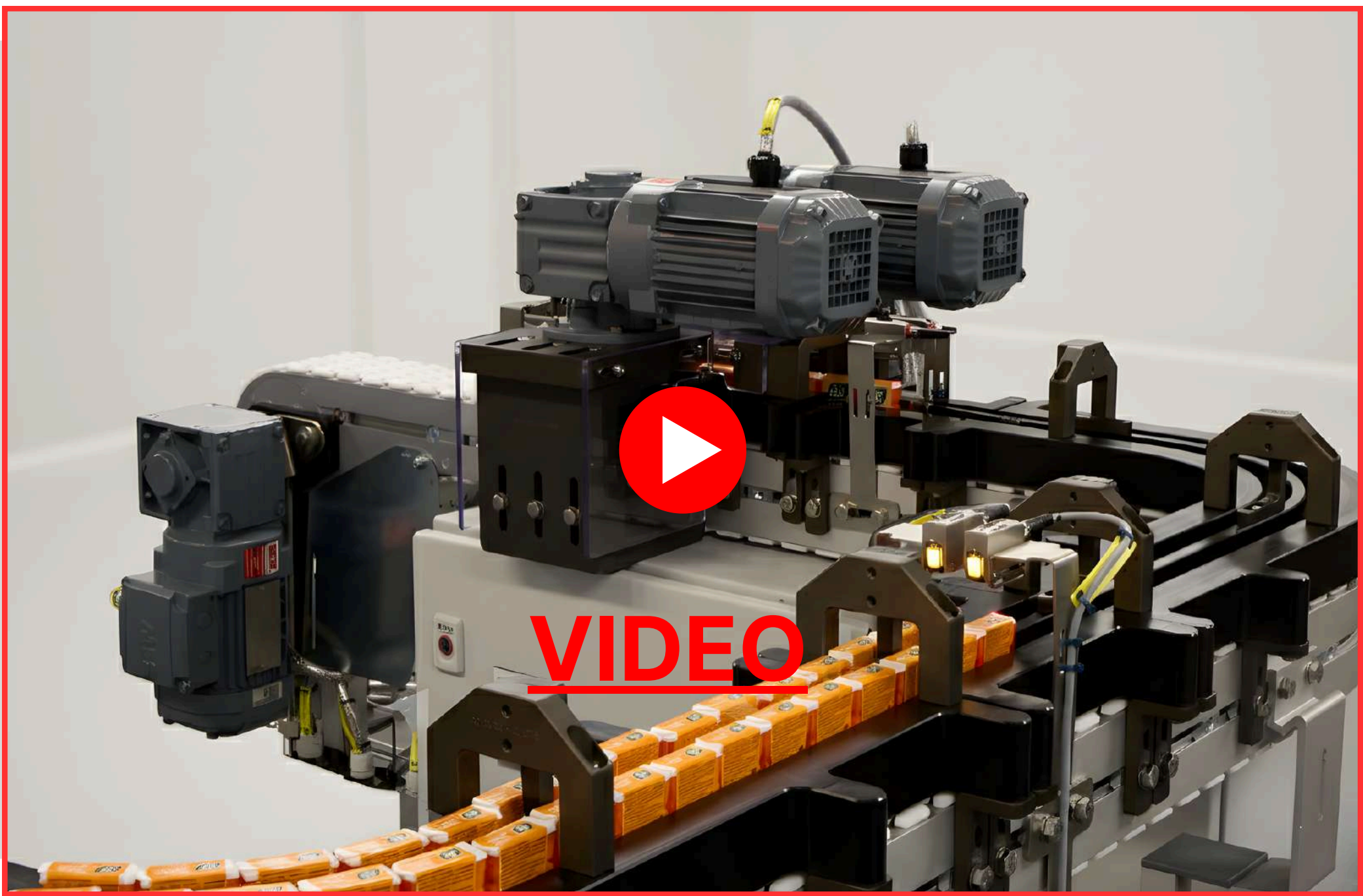


## Key Features

- **600 PPM High-Speed Operation** – Engineered for sustained high-throughput performance while maintaining inspection accuracy and controlled product flow.
- **Servo-Driven Diverter Architecture** – Provides precise, programmable motion control for accurate and repeatable product diversion at high speeds.
- **Precision Lane Separation System** – Ensures controlled distribution of compliant products into designated lanes without disrupting line stability.
- **High-Accuracy Reject Handling Mechanism** – Removes non-conforming units with precise timing to protect adjacent product and maintain throughput.
- **Real-Time Inspection Integration** – Interfaces seamlessly with vision and sensor systems to trigger immediate diversion or rejection decisions.
- **Zero-Disruption Product Flow Control** – Maintains smooth, stable product transfer during high-speed separation and sorting operations.
- **Modular Line Integration** – Designed for flexible installation within new or existing packaging lines with configurable lane layouts.
- **PLC & HMI Recipe Management** – Enables format changeover, parameter control, and diagnostic monitoring through an intuitive operator interface.

## Technical Specifications

Parameter	Specification
Maximum Throughput:	Up to 600 PPM
Motion Control:	Full servo-driven actuation
Inspection Interface:	Compatible with vision and sensor-based systems
Reject Accuracy:	Deterministic servo timing for precise removal
Lane Configuration:	Configurable multi-lane output
Control System:	Industrial PLC with advanced diagnostics
Construction:	Industrial-grade stainless steel and precision-machined components
Safety:	Integrated safety interlocks and guarded motion zones



## Real-World Benefits

High-speed packaging lines often struggle with:

- Inconsistent rejection at high throughput
- Mechanical diverters causing product instability
- Bottlenecks during lane separation
- Product collisions during high-speed transfer
- Reduced OEE due to mis-sorting

The Curti Line eliminates these risks through intelligent servo control and engineered product handling geometry, ensuring stable product flow and precise segregation even at maximum output.

## Engineering & Manufacturing Excellence

Manufactured at Machinelab's facility in Ireland, the Curti Line benefits from:

- In-house precision machining and toolroom capability
- Full servo motion expertise
- Mechanical and electrical integration engineering
- Controlled component traceability
- Long-term serviceability and spares support

The system reflects Machinelab's focus on robust mechanical design, intelligent automation architecture, and performance reliability in high-speed environments.