

The Körber Visicon Parcel Sorting System



CLIENT

Körber

Multiple End-Users

INDUSTRY Parcel Handling

Installation

PROJECT SCOPE Mechanical & Electrical

> LOCATIONS National Program

(Click here to see a video featuring the Visicon solution.)

Powerful singulating technology with the smallest footprint possible

With years of experience, SilMan Industries provides expert installation, maintenance, and project management services for leading supply chain companies across the United States. During this time, we have developed a strong partnership with Körber Supply Chain and currently install their <u>Visicon</u> intelligent parcel singulation systems in facilities for organizations including USPS and FedEx.

Introducing Visicon: Revolutionizing Parcel Sortation

Singulation is the process of manipulating a bulk flow of parcels into a single-file lineup with space between each piece. The Visicon system actively singulates parcels into a single file prior to sortation using a combination of variable-speed rollers and sophisticated machine vision technology. This organized stream is crucial for efficiently feeding parcels into downstream equipment that relies on processing individual pieces rather than piles for processes like scanning, weighing, and sorting.



Visicon Models

Visicon's versatile range includes two distinct models, each of which caters to different parcel sizes with unmatched efficiency. As a trusted Körber partner, SilMan has successfully installed over 200 Visicon Polaris and Capella models that are optimized for large and small parcels respectively. We handle complete turnkey installation of these models, including mechanical, electrical, and integration services to get these space-saving singulators up and running quickly.

Polaris for Large Packages

The Polaris model is specifically engineered to handle larger packages. Its robust design and sophisticated technology are tailor-made to ensure that even the most substantial parcels are sorted with the utmost precision and care.

Capella for Smaller Packages

On the other hand, the Capella model is adept at managing smaller packages. It is designed to be nimble yet powerful, providing an optimal sorting solution for small-sized parcels that demand careful handling and quick processing.

Both systems utilize a high-resolution camera vision system to constantly photograph and analyze passing parcels. Custom variable-speed conveyor belts then dynamically adjust parcel spacing and alignment under software control to achieve a perfect single-file product stream. This intelligent automation allows Visicon models to singulate piles of random parcels rapidly and accurately, regardless of material, size, or shape.





Key Features and Benefits of the Visicon Singulator

Unmatched Speed and Throughput

With adjustable processing capacities up to a blazing fast 18,000 pieces per hour, Visicon enables the highest velocity parcel singulation available on the market. Seamless high-volume preparation gets your sortation off to the races.

Space Savings Through Compact Footprints

Thanks to an ingeniously compact and consolidated design, the self-contained Visicon system maximizes throughput while minimizing footprint. This small operational singulator fits easily into cramped spaces without costly facility expansions.

AI "Vision" For Precision

Onboard cameras act as the system's eyes, allowing powerful machine learning software to control each parcel's spacing and alignment on the fly. The end result? Precise handling of parcels of all shapes and sizes. This artificial intelligence even works for problematic parcels, perfectly orienting them with ease.

Flexibility and Future-Proofing

Fully adjustable components gently singulate packages ranging from lightweight envelopes to heavy 120-lb boxes—all without jamming or stopping. Interchangeable parts self-adapt for boxes, polybags, tubes, irregular shapes, and anything in between. The Visicon system readily evolves to intake future parcel types as well.

Simplified Infrastructure Integration

Visicon operates efficiently on its own, but it also integrates with legacy conveyor setups via universal communication protocols to maximize existing infrastructure investments. Each system qualifies for energy efficiency tax credits, making this upgrade not just a smart one, but a green one as well.

Dynamic Efficiency at Scale

Fast, reliable high-volume singulation gets vastly more parcels scanned, weighed, stamped, and sorted per hour. This compound impact on total pieces processed translates to giant leaps in hourly output. More throughput with far less labor equals efficiency at scale.



VarioDetect Feature

The VarioDetect feature represents a significant technological advancement in the Visicon Singulator. This feature automatically detects exceptions, such as incompatible shipments, which are crucial for maintaining the smooth operation of the sorting process. Through the integration of intelligent algorithms, VarioDetect makes real-time sorting adjustments, further enhancing the system's efficiency and reliability.



Installation and Support for the Visicon Singulator

National Installation Program

With advanced automation solutions like Visicon, true optimization requires more than just dropping in equipment. Seamlessly integrating the technology with your existing infrastructure and processes ensures maximum ROI.

SilMan Industries, in close collaboration with Körber, has been at the forefront of the national installation program for the Visicon. This initiative underscores SilMan Industries' significant role in the mechanical and electrical installation of Visicon's advanced parcel sorting systems. With a number of key project numbers to their credit, SilMan Industries has demonstrated a consistent track record of successful installations across various locations.



Project Scope and Execution

Installing a Visicon Singulator involves a meticulous and well-orchestrated plan. The timeline for each installation project is carefully mapped out to ensure minimal disruption and optimal integration into existing systems. SilMan Industries' teams, composed of seasoned mechanical and electrical experts, are deployed to handle the various stages of installation. Each team member brings a unique set of skills and experience, thereby ensuring that the installation process is smooth and efficient.

Project management and site leadership are key components of the installation process. SilMan Industries employs a strategic approach to project management, with an emphasis on clear communication, precise planning, and agile response to on-site challenges. The site leadership teams are equipped to handle the complexities of installation, ensuring adherence to timelines and quality standards.



Experience Visicon's Parcel Singulation Revolution

After seeing Visicon's unique combination of processing velocity, efficiency, and intelligent flexibility, you may be ready to transform your parcel sortation. If that's the case, don't settle for outdated workflows, manually intensive singulation, and lagging productivity.

Bring Körber-SilMan's team of Visicon specialists to your facility for an in-depth site evaluation and proprietary throughput impact analysis. We'll construct a data-driven business case that shows how Visicon implementation could transform your operations.

Get your parcel sorting unstuck and accelerate into the future!



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