

Visicon Compact

Efficient and ultra-compact parcel singulation



The challenge

With rising parcel volumes, there is no getting around the automation of parcel bulk streams for efficient handling and transport. Downstream processing devices, such as scales, scanners and sorters, require that parcels are singulated fast and reliably. Singulation is a crucial step in the process chain to maximize performance.

Our solution

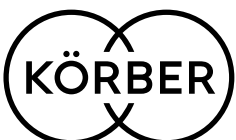
Visicon Compact, an innovative singulator from Körber, generates a continuous flow of singulated parcels ready for down-stream processing. It converts a nonlayered parcel bulk flow into a stream of singulated parcels with a predefined gap. In the process, it monitors and controls the conveying speed of each item.

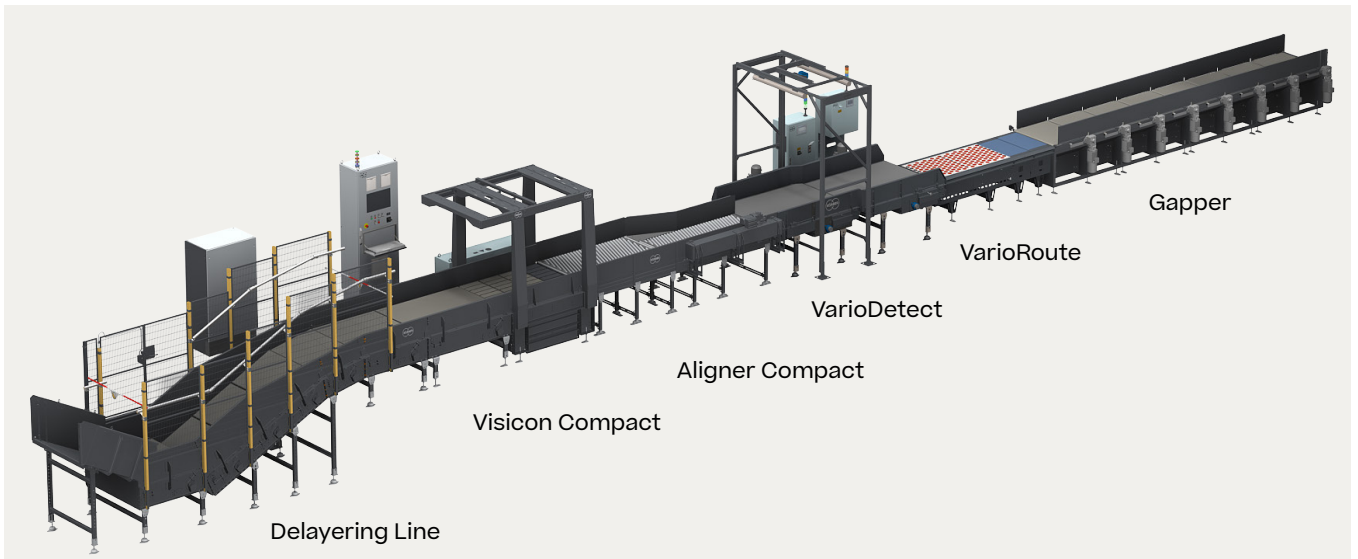
Visicon Compact is a smaller version of Visicon which has been operated successfully in several countries. It boasts a very small footprint, which allows for more flexibility when it comes to integration into existing systems. The artificial intelligence-based vision system detects and records the shape, size and relative position of each parcel on the transition belt. Furthermore, it continually

tracks the position of the items during the singulation process. With this real-time data, the control system can flexibly stipulate important singulation parameters such as gapping, orientation and take-away direction.

Customer benefits

- Extremely small footprint for layout flexibility and seamless system upgradability
- High system throughput thanks to reliable, smooth, efficient and accurate singulation
- Software-based control to flexibly specify key singulation parameters for the range of formats being processed
- Quick and easy, cost-effective installation with preassembled components
- Artificial intelligence-based vision system for high system efficiency
- Ready for Predictive Maintenance with Singulator 360





Technical data - metric

Nominal throughput	small items up to 7,000 pph, regular-sized parcels up to 6,000 pph
Footprint	less than 7 m ²
Noise level	~68 dB (A)
Length	~3,300 mm
Width	~2,100 mm (with side cabinets)
Height	2,430 mm
Conveying width	~1,370 mm
Output speed	1.1 m/s - 2.0 m/s (variable)
Temperature range	0 °C - 40 °C
Relative humidity range	10% - 90%
Target gap/pitch quality	+/-150 mm

Parcel spectrum

Length	120 mm - 1,200 mm
Width	100 mm - 900 mm
Height	3 mm - 900 mm
Weight	0.05 kg - 50 kg

Up- and downstream modules

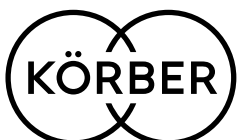
Optimized, compact up- and downstream modules complement the functionality of Visicon Compact.

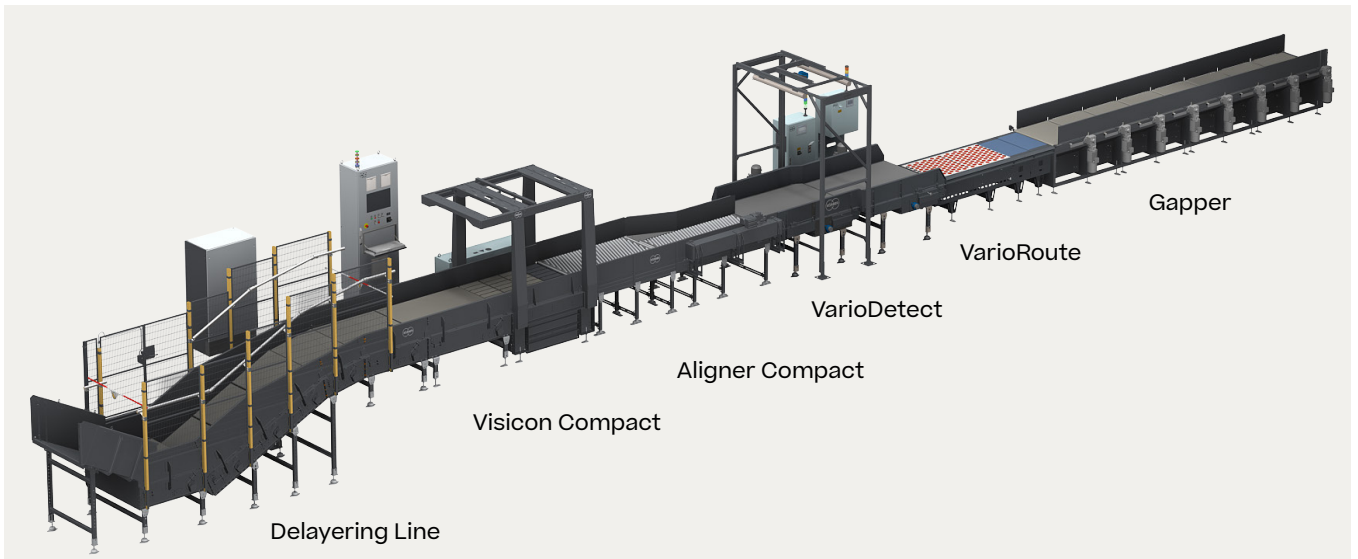
Upstream

Delayering Line Compact to prepare item flow for Visicon, turning a 3D bulk flow (items still on top of each other) into a 2D flow (shipments side by side).

Downstream

- Aligner Compact to put the consignments in a row of singulated items
- VarioDetect to automatically identify exceptions
- VarioRoute to remove identified exceptions
- Gapper Line to realize pre-defined gaps between singulated parcels





Technical data - imperial

Nominal throughput	small items up to 7,000 pph, regular-sized parcels up to 6,000 pph
Footprint	less than 75.4 ft ²
Noise level	~68 dB (A)
Length	~129.9 in
Width	~82.7 in (with side cabinets)
Height	95.7 in
Conveying width	~53.9 in
Output speed	3.6 ft/s - 6.6 ft/s (variable)
Temperature range	32 °F - 104 °F
Relative humidity range	10% - 90%
Target gap/pitch quality	+/- 5.9 in

Parcel spectrum

Length	4.7 in - 47.2 in
Width	3.9 in - 35.4 in
Height	0.1 in - 35.4 in
Weight	0.1 lb - 110.2 lb

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