K.Handle

RUBUS

Remote under belt unloading system

High-Speed automatic unloading system

The RUBUS® represents a high speed automatic unloading solution for cartons and similar items from trailers and bed loaded containers in the market place. For the common spectrum of cartons/package sizes, RUBUS is capable of sustained throughput from 6,500 to upward of 15,000 items per hour (depending on the size of the cartons, the output of the system desired). This rate is controllable and can be throttled dynamically to match available system capacity.
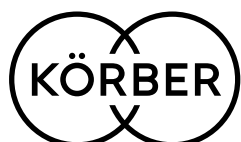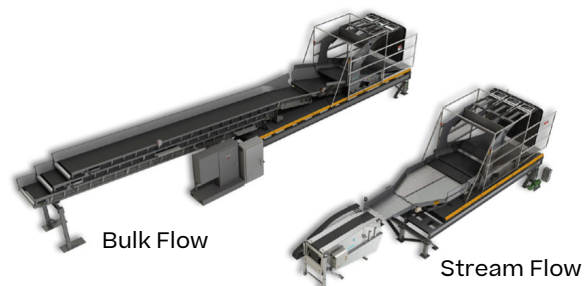
RUBUS takes the human out of the unloading environment, moving an operator to a control panel outside of the container, and increasing that operator's productivity by up to 20 times. For trailers or containers to be compatible with RUBUS, they require the installation of a fixed belt in the bed.

The RUBUS' patented wedge/sled profile is drawn from the back to the front of the container being unloaded along a belt, one of the ends of which is fixed to the front of the container. This belt is spooled on a motorized pulley within the RUBUS wedge/sled. The speed at which the RUBUS sled is drawn into the container along the base belt, "V1," defines the time required to unload a container

completely. When the RUBUS sled reaches the front of the container, the container is unloaded, and the system will automatically retract and return back to the home position.

As the cartons and other materials loaded onto the surface of the belt inside the container are pulled onto the surface of the RUBUS sled, it reaches the feeder belt running faster ("V2") than the Rubus is advancing. This increase in speed of the feeder belt causes a controlled collapse of the stack of cartons supported by the feeder belt.

The RUBUS can be configured for Bulk or Stream output package flow depending on the downstream process monitors.

Bulk Flow

Stream Flow

RUBUS® Stream Flow

Unload rate	6,500 – 7,500 parcels an hour
Package Type	General Automation Spec up to 80lbs
Trailer Total Cycle Time	Less than 25 minutes
Operators	1-2
Control System	State of the Art Controls
Package Flow Type	Semi-Singulated
Building Type	Brown & Green Field options available
Dock Door Type	Dock High or Floor High compatible
Power	480V, 2-30AMP

Features

- Cartons are loaded onto a low-cost RUBUS belt fixed to the front of the trailer or container.

- RUBUS quickly unloads cartons, bags, and other loose loaded parcels as it pulls itself along the trailer belt into the trailer.

- The RUBUS operator monitors & controls the unload process from a control panel/driver station located outside of the trailer using simple controls.

- Unloading throughput is variable, and can be controlled to match downstream processes.

RUBUS® Bulk Flow

Unload rate	12,500 – 15,000 parcels an hour
Package Type	General Automation Spec up to 80lbs
Trailer Total Cycle Time	Less than 15 minutes
Operators	1-2
Control System	State of the Art Controls
Package Flow Type	Bulk Unload
Building Type	Brown & Green Field options available
Dock Door Type	Dock High or Floor High compatible
Power	480V, 2-30AMP