

Automatically de-stacks and delivers retail crates at high speed to single or multiple food production lines.



The Crate DESTAKer automatically destacks 250 nested crates onto production lines.

As well as keeping pace with high volume packing lines, the system can dispense 1, 2, or 3 crates at a time to one or many lines depending on your situation. The system is available in 2 formats; single magazine which dispenses 10 crates a minute and dual magazine which dispenses 16 crates per minute. The Crate DESTAKer will accumulate a pallet load of 5 full stacks of 600mm x 400mm crates or 10 full stacks of 300mm x 400mm crates, meaning minimal operator intervention in its use.

- Reduces labour cost
- Delivery of crates to one or many production lines
- Flexible in operation
- Simple and safe to operate with minimal intervention
- Robust separation of crates minimises chance of crate jams

Consistent delivery of crates to one or many production lines.

www.brillopak.co.uk

Crate DESTAKER Layout Options

Available as single or dual magazine machines.

Single Magazine

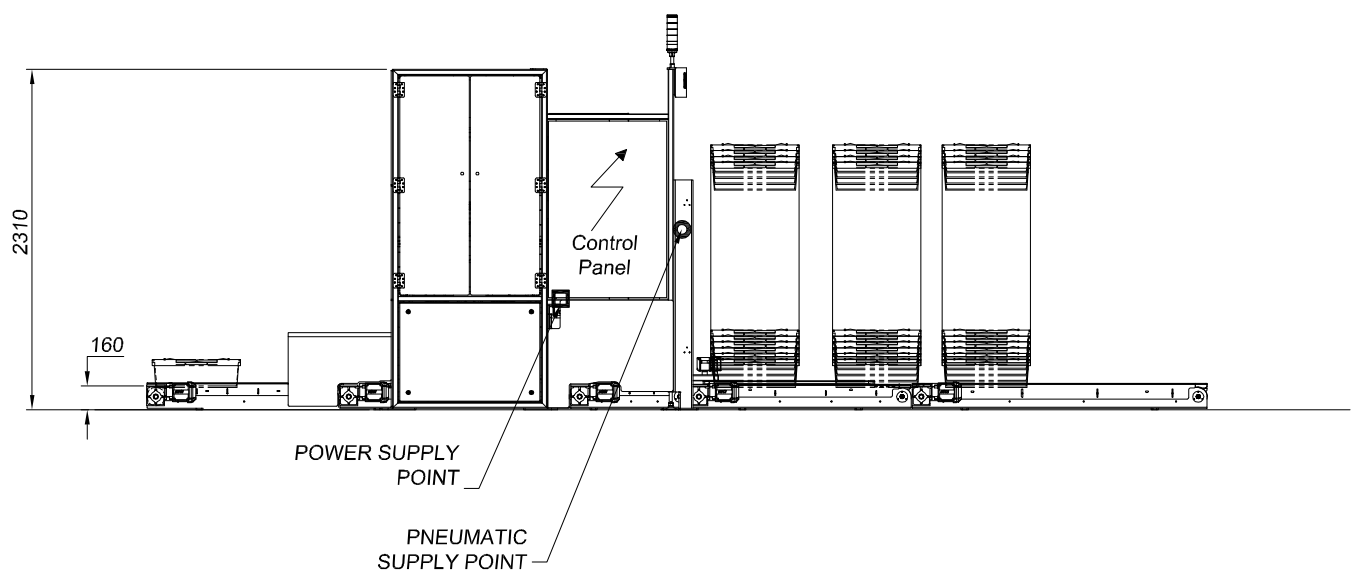
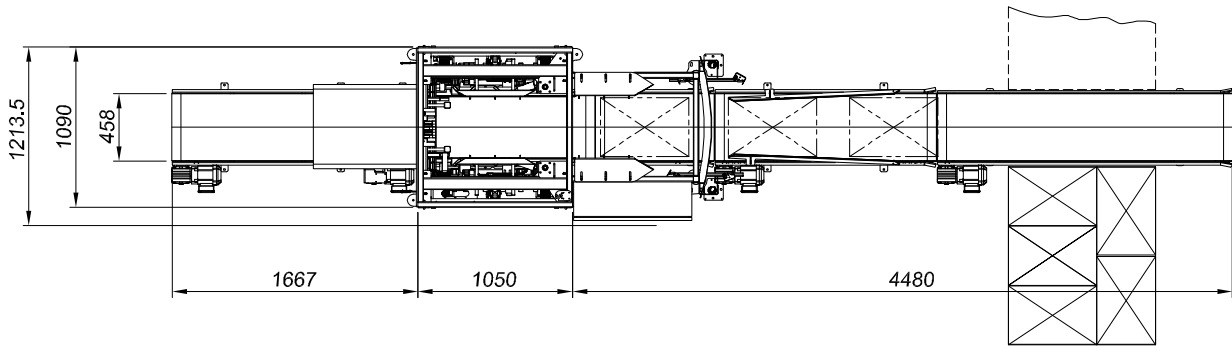
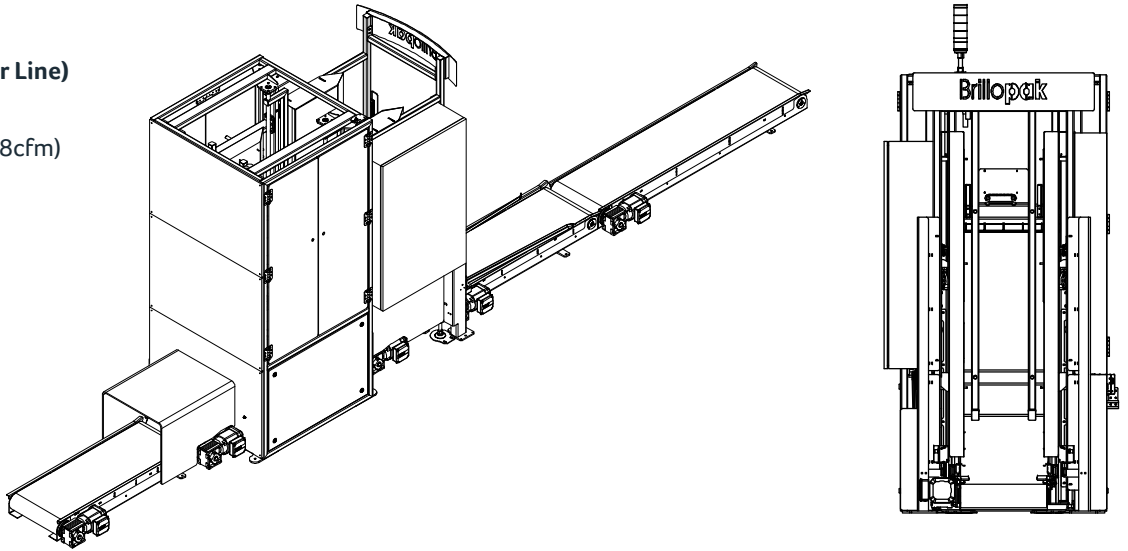
Power: 3 phase + N

+ PE. 16A supply

Pneumatic Supply: (Per Line)

Pressure: 6 Bar

Volume: 510 nL/min. (18cfm)



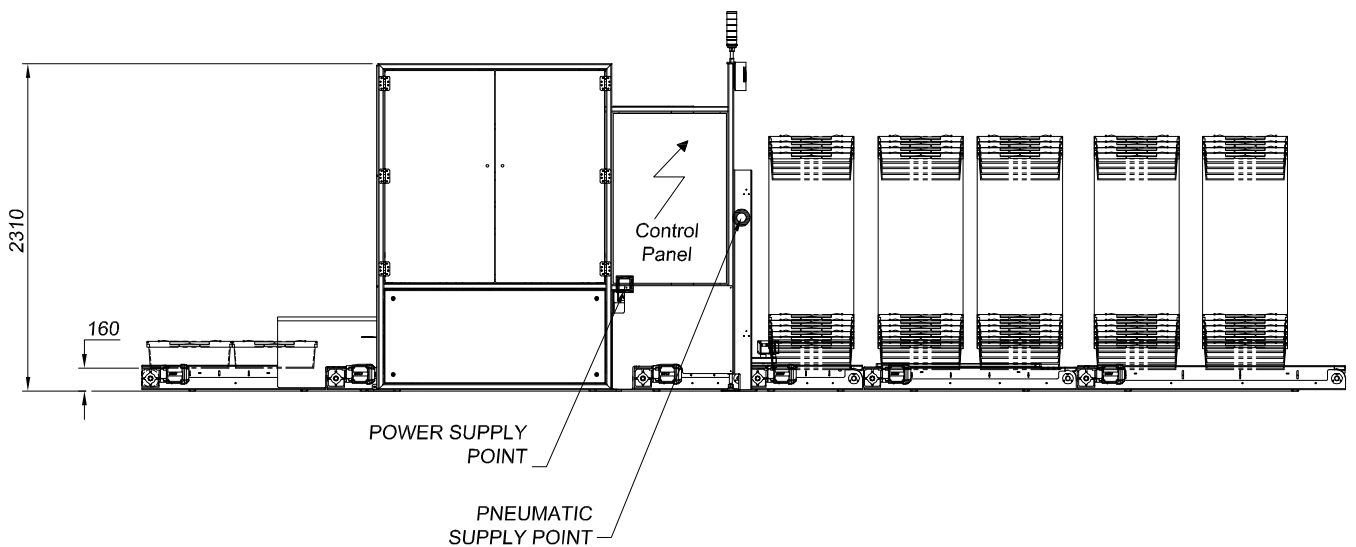
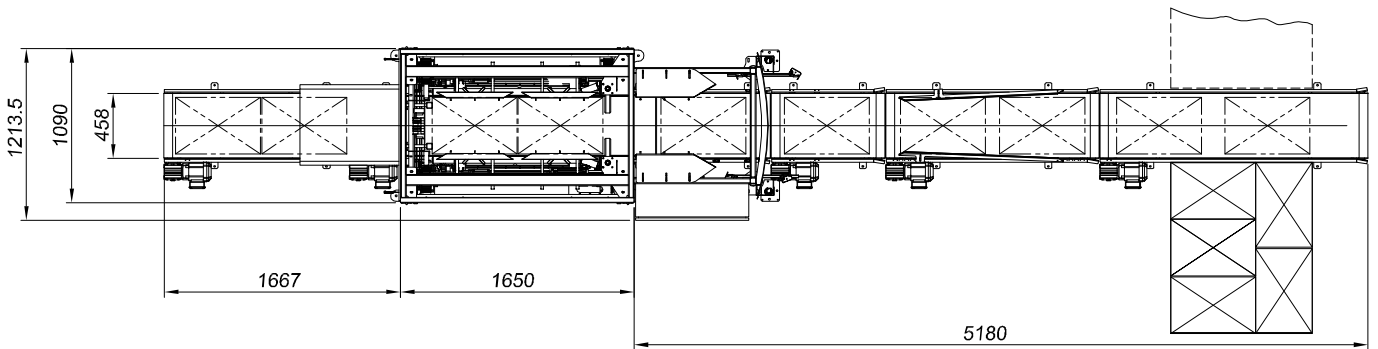
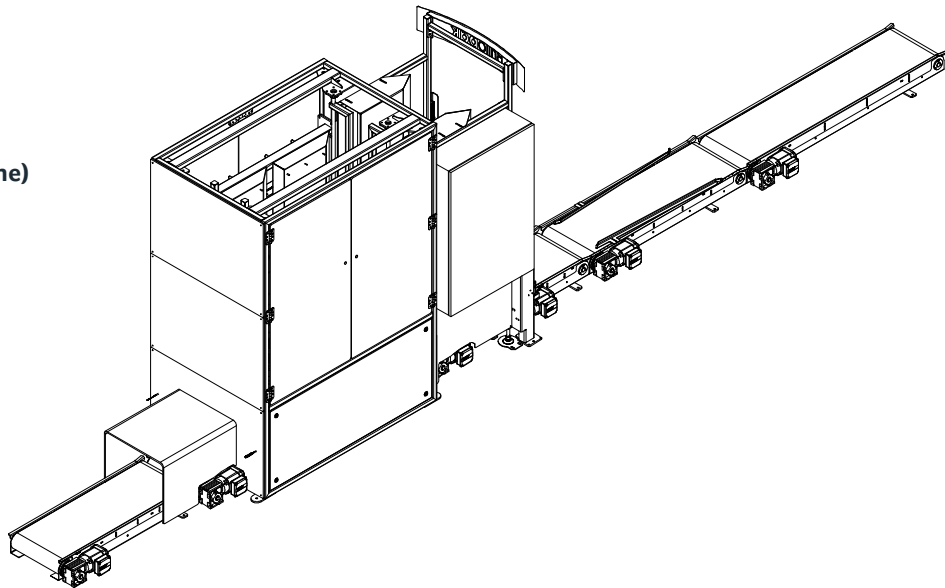
Crate DESTAKer Layout Options

Available as single or dual magazine machines.

Dual Magazine

Power: 3 phase + N
+ PE. 16A supply

Pneumatic Supply: (Per Line)
Pressure: 6 Bar



Crate DESTAKER Technical Data

Suitable for	600mm x 400mm and 300mm x 400mm rigid tapered nesting crates.
Build	Stainless steel frame. Contact points stainless steel.
Max. Stack height	1.8m
Conveyor height	Outfeed 155mm, infeed 155mm
Speed	8 - 18 crates per minute.
Pneumatic supply	Compressed air at 6 bar min.
Geared drives:	SEW Eurodrive geared motors, Z axis motion via servo motors
Control System	Machine automation controller with HMI touch screen, with EtherCAT devices and motion control using Omron NX controller
Electrical & Pneumatic Components	Enclosure/Motor Specification: Minimum IP55 dust, splash proof. ISO/DIN standard.
Electrical	3ph+N+E x 400/440 Vac, 50 Hz, 16amp supply Control Circuit 24v DC.
Safety	Machine guarding via Safety light curtains linked to safety controller
CE Marking	CE marked. From January 1st 2021 UKCA (UK Conformity Assessed)
Dimensions	Base machine dimensions for transport: Single 1440mm x 1180mm x Height 2310mm Dual 2040mm x 1180mm x Height 2310mm

Crates supported by machine

Line speed is partially dictated by the crate delivery mechanism selected.

Crate sizes supported by system

600mm x 400mm x multiple heights up to 250mm

300mm x 400mm x multiple heights up to 250mm

Requirements for system to operate consistently:

Crates must be in reasonable condition and not twisted out of shape or with broken parts.

Crate de-stack line speed per minute

Line speed is partially dictated by the crate delivery mechanism selected.

Max crate dispensing speed per minute	Crate DESTAKER single	Crate DESTAKER dual
600mm x 400mm x multiple heights up to 250mm	10	18
300mm x 400mm x multiple heights up to 250mm	18	32

Machine Options

Description	Purpose	3D image of Option
Stack Accumulation Feed System complete pallet load	To allow removal of a complete pallet load of empty crate stacks onto the low level conveyors for automatic feed into the packing lines. Includes footswitch to control conveyor whilst loading first to positions to ensure stability of stack	
Stack Accumulation Feed System reduced pallet load	To allow removal of 3 stacks of empty crate stacks onto the low-level conveyors for automatic feed into the packing lines.	
Destack 2 or 3 high unit	To enable the destacker to dispense multiple crates at a time. Typically used for main conveyor tracks feeding multiple manual packing lines	

Technical Benefits

Physical separation of the crates by clamping bottom crate and then lifting entire stack, using servo powered motor. This ensures that wet crates or sticky labels do not cause jams.

Ability to accumulate a pallet load of crates i.e., 5x Stacks of 600x400 crates or 10x stacks of 300x400mm crates. This can give around 40 minutes packing time, dependant packing speed.

Polyurethane rubber blocks applied to crates to eliminate metal contact with crate which can cause marking and potential damage.

Safety

- Light guards with muting sensors to allow stacks into system but not a person.
- Safety gate automatically closes behind the stack to stop from falling over backwards and out of the system.
- Foot Switch to power the first optional crate stack accumulation system so that it cannot move while stacks are being loaded.

HMI

- Intuitive for use by operators for whom English may not be the first language.
- Graphical display for key information such as IO/Sensor location and status.
- 3 level password.

About Brillopak

Founded in 1999, Brillopak is an Award Winning British manufacturer of highly flexible robotic packing and palletising systems.

Using the latest proven technologies our automation solutions are designed to raise the bar in packing efficiency. All machines are small footprint and simple to operate by unskilled staff. We have an uncompromising approach to machine safety and prioritise our design process towards minimal maintenance requirement to maximise machine uptime.

All of our machines are designed and built at our UK factory by our team of experienced engineers and designers.

Contact Us

T: +44 (0)1622 872907

F: +44 (0)1622 871436

Email: info@brillopak.co.uk

www.brillopak.co.uk

Brillopak Ltd, 9 Archers Park,
Branbridges Road, East Peckham,
Tonbridge TN12 5HP United Kingdom