

Case Study -B1 Cartoner & Case Packer for confectionary products



Installation Elements

- Langen B1-A; continuous motion cartoner.
- Langen B1-C; intermittent motion case packer.
- Two-stage speed up belt leading into an overhead Linear Servopak®.
- Hot Melt Glue system.
- · Check weigher.

Product

· Chocolate sticks.

Product Configuration

 A trapezoid carton holds 9 chocolate stick, and larger square carton holds 100 chocolate sticks and has a hinged dispenser; 12 of the 9-stick cartons are packed into a corrugated cases.

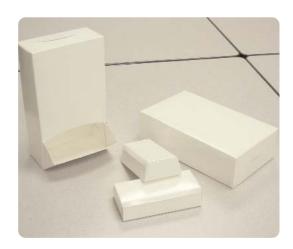
Key Features

Flexibility

- Handles trapezoid and square cartons on a single bucket platform that is easily modified.
- Unique carton closing procedure whereby the bottom major flap is closed before the minor flaps to maintain product loading control.

Speed

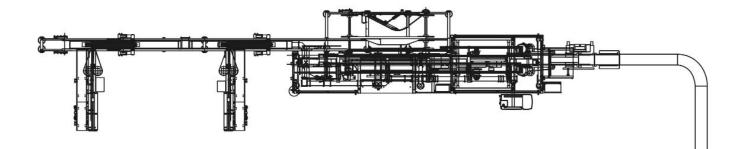
 Capable of running up to 140 cartons per minute.







Case Study -B1 Cartoner & Case Packer for confectionary products



Functional Description

- Product is carried on a two-stage speed-up belt infeed and is collated by an overhead Linear Servopak®; there are two independent infeeds.
- The product load is placed by synchronized drop-gates into the adjustable autoload buckets.
- In order to accommodate the two different product loads (9 or 100 count) the dimensions of the product buckets are adjusted by snapping the leading bucket wall into pre-determined slots.
- The product is transferred to the B1-Autoloader where carton blanks are picked from the extended horizontal magazine by the vacuum of a continuous motion 2-head rotary feeder. The carton is then placed in the carton conveyor flights and the flaps held open with guide rails. Handling of the trapezoid carton profile is facilitated by snap-on lugs.
- An overhead confiner helps to control the collation of product while it is automatically inserted into the carton horizontally via barrel-cam pushers.
- The minor end flaps are closed after loading and the major flaps are ploughed down after hot
 melt adhesive is applied. The sealed cartons pass through an open flap detect/reject station
 prior to being side transferred to a check weighing system.
- From here the 9-count cartons travel to the B1-C case packer along a flexible conveyor belt; 100-count cartons are diverted to a hand pack station.
- Case blanks are picked from the extended horizontal magazine by the vacuum of a reciprocating feeder. The case is placed in the case conveyor flights and the flaps held open with guide rails ready to receive product.
- The cartons are accumulated and collated into the desired case packing pattern via a downstacker and transferred into the open case by a pneumatic pusher.
- The minor end flaps are closed after loading and the major flaps are ploughed down and hot melt adhesive is applied.

