

Cartoning of infant cereals with spoons

MAESTRO™ cartoner for bag in box



Requirements summarized

- Bag counts single pack (350g)
- Bag of milk powder L 205 mm / 8.07"
W 160 mm / 6.30"
H 35mm / 1.38"
- Accessories One unwrapped spoon
per carton (as shown below)

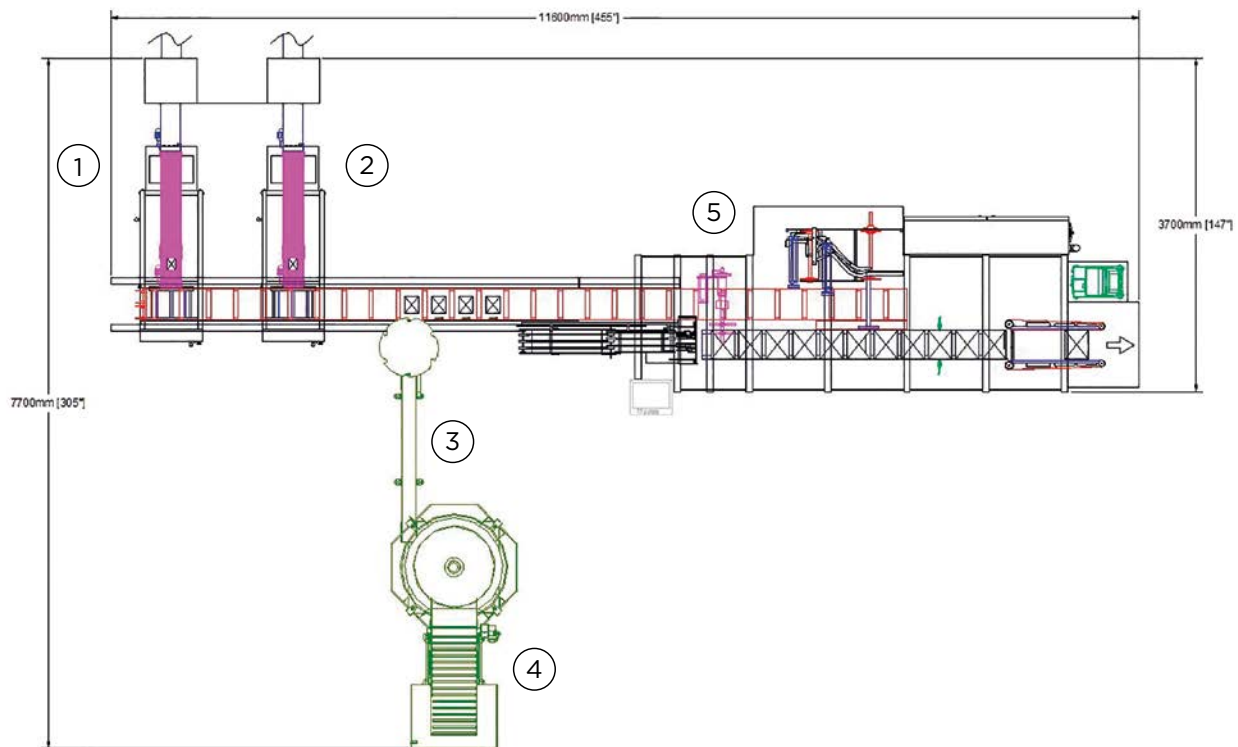


- Carton dimensions L 155 mm / 6.10"
W 45 mm / 1.77"
D 190 mm / 7.48"
- Carton counts One bag per carton
- Infeed speed Two baggers
producing 70 bags/min each
- Carton output 140 cartons/min

Challenges summarized

- Handling two VFFS bagger outputs into a single cartoner
- Ability to feed unwrapped spoons from bulk and synchronize with the cartoner pitch in order to load a spoon in each carton
- Food application with corresponding requirements

MACHINE LAYOUT



Solution Highlights

- Combined 2 vertical form fill seal (VFFS) machines with a 3 level Bomb bay infeed for each in order to load into one cartoner. The baggers were independently running unsynchronized directly into the bomb bay infeeds.
- Incorporated the ability to feed unwrapped spoons from bulk and synchronize them with the cartoner pitch in order to load each carton with a spoon and bag. Utilized a bulk hopper with a bowl feeder to orient the spoon into a single conveyor which then synchronized electronically with the cartoner pitch using a servo driven rotary wheel to deliver the spoon.
- Specially designed cartoner bucket transport for the bags and spoons to provide an efficient loading system into the cartons along with the overhead compression unit.

1. Infeed 1
2. Infeed 2
3. Spoon Feeder
4. Bowl Feeder and Bulk Hopper
5. MAESTRO™

All information given in this document is dependent upon final machine specification, infeed arrangement, product type and carton specification.

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