

# Fully-automated Carton Liner/Bag in Box Line (for Semi-Liquids)

MODEL NO.: LBIB700



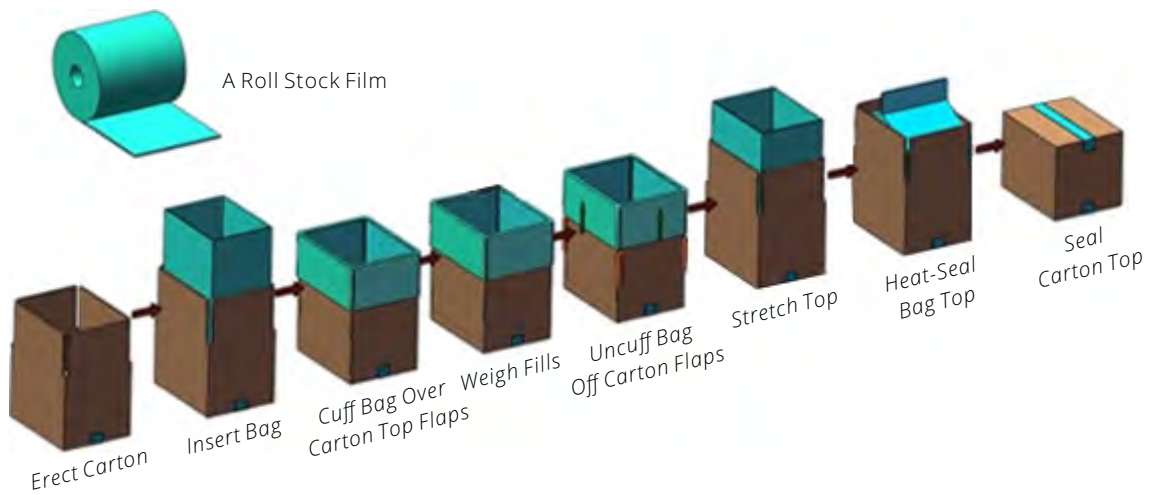
Ideal for bulk packaging of semi-liquid products like margarine, butter and shortening, with bag-in-box. Unlike standard bag-in-box packaging, which includes a spout and a fitment, this system produces spoutless bag-in-box packages. The line erects cartons and seals bottoms, inserts and lines bags in cartons by one each from a roll stock film to form bag-in-box packaging (lined cartons), weigh fills with hot-melt margarine/butter /shortening, applies a slight vacuum and heat -seals the bag tops, and finally seals the carton tops.

This **bag in box line** includes a carton erector, a **poly bag inserter** (box lining machine), a weigh filler, a **bag uncuffer and sealer**, a carton sealer and conveyors. The cartons can be sealed with tape or hot melt glue.



**Calmus**  
MACHINERY

## FLOWCHART



The poly bag inserter, also known as a box lining machine or case liner placer, feeds film from a roll stock into a carton, cuts and seals it to a bag, opens and cuffs the bag over the carton flaps, and blows air to expand the bag for a snug fit against the box internal walls.

The bag uncuffer sealer, also called a bag decuffer sealer, uncuffs the bag from the carton top flaps, stretches the bag openings, applies a light vacuum to prevent ballooning, heat-seals the bags, and then flattens them within the carton.

# 1 CARTON ERECTOR

ERECTING CARTONS AND SEALING BOTTOMS WITH ADHESIVE TAPE



It is a vertical carton erector or case former. This machine erects flat-fold cartons and seals bottoms with tape as boxes.

## FEATURES

- 1) Simple and reliable, easy to operate and maintain.
- 2) Low consumption of power and compressed air.
- 3) Alert when no carton blanks or adhesive tape.

## SPECIFICATIONS

Erecting type: vertical

Sealing media: adhesive tape

Erecting speed: Up to 10 cartons per minute (varies with carton size)

Applicable carton dims:  $410\text{mm} < L+W < 910\text{mm}$ ,  $W180-390\text{mm}$ ,  $620\text{mm} > W/2+H > 310\text{mm}$

Applicable tape width: 4.8-7.2cm

Power supply: single phase, 400 W

Compressed air: 6 bar

Air consumption: 200 NL/min

Carton blank storage capacity:

– Standard storage shelf: 50 blanks

– Optional 2-metre motorized conveyor: Up to 100 blanks



## 2 POLY BAG INSERTER (CARTON LINING MACHINE)

MAKING BAGS AND INSERTING THEM INTO CARTONS AS LINERS



This bag inserter machine feeds film from a roll stock into a formed box, cuts and seals it into a bag, opens and cuffs the bag over the carton flaps, and blows air to extend the bag for a snug fit against the box internal walls.

### SPECIFICATIONS

Inserting capacity: 6-7 cartons/min

Film width: 460-840mm

Applicable carton dims: L250-550\*W200-400\*H150-400mm, also can be customized

Power supply: single or 3 phase, 4.5 kW

Compressed air: 6-8 bar, 300 NL/min

Machine dims: L2,500\*W1,600\*H2,300mm (for reference only)

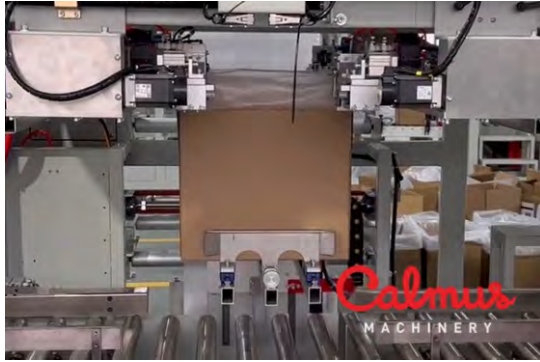
### PROCEDURE



Inserting and Making Bags



Opening Bags



Cuffing Bags Over Carton Tops



Blowing Air to Extend Bags

This poly bag inserter is CE-certified and complies with machinery standards EN 12100, EN 415-10, EN 60204-1:2018, and EN 415-3.

## 3 WEIGH FILLER

WEIGH FILLING LINED CARTONS WITH SEMI-LIQUID LIKE HOT-MELTED MARGARINE/  
BUTTER/SHORTENING



This is a double-head weigh filling machine. Grade 304 stainless steel frame and 316L stainless steel product-contact parts.

# 4 BAG UNCUFFER & SEALER

UNCUFFING AND HEAT-SEALING BAG TOPS, FLATTENING FILLED BAGS



This poly bag uncuffer and sealer machine is designed for heat-sealing bags inside boxes after they are loaded or filled with products. The uncuffing and sealing machine uncuffs the bag from the carton top flaps, stretches the bag opening, applies a light vacuum to prevent ballooning, seals the bag, and then flattens it within the carton.

## SPECIFICATIONS

Sealing capacity: 3-5 cartons/min

Film width: 460-840mm

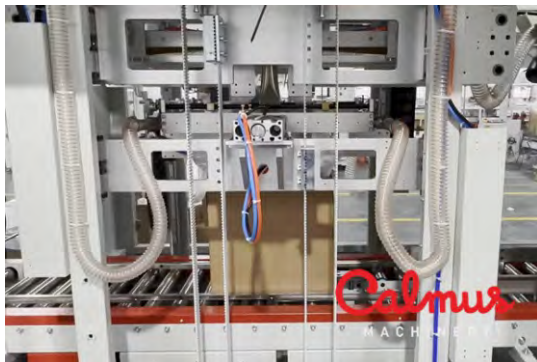
Applicable carton dims: L250-550\*W200-400\*H150-400mm, also can be customized

Power supply: single or 3 phase, 7 kW

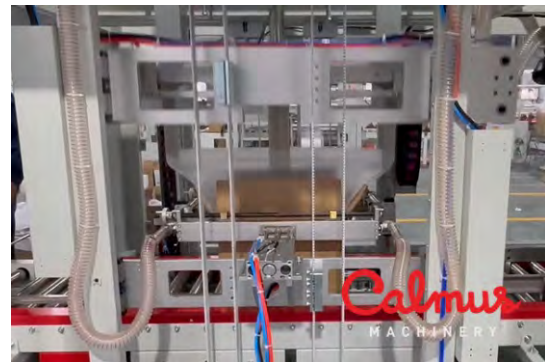
Compressed air: 6-8 bar, 250 NL/min

Machine dims: L2,800\*W1,800\*H2,800 (for reference only)

## PROCEDURE



Uncuffing Bags



Stretching Top Openings





Heat-Sealing Tops



Flattening Tops

## 5 CARTON SEALER

CLOSING AND SEALING CARTON TOP WITH ADHESIVE TAPE



This carton sealer, also called a box or case sealer, is a packaging machine designed to seal the top of corrugated boxes with adhesive tape after products are loaded.

### FEATURES

1. Fold top flaps automatically.
2. Width and height adjustable for different cartons.

### SPECIFICATIONS

Sealing type: vertical

Sealing media: adhesive tape

Applicable carton dimensions: L200 \* W150 \* H120mm ~ L465 \* W400 \* H350mm

Applicable tape width: 48mm, 60mm, or 75mm (choose one)

Sealing capacity: max. 20 metres/min

Power supply: single phase, 0.3 kW

Compressed air: 6-8 bar, 100 NL/min

Machine dimensions: L2,100 \* W1,100 \* H1,600mm



**Calmus Machinery**

3/F, Building 6, Sangtai Industrial Park, Liuxiandong, Xili  
Nanshan District, Shenzhen 518055, CHINA

T: (+86-755) 2803 3527

F: (+86-755) 2803 3601

E: [info@brentorma.com](mailto:info@brentorma.com)

[www.CalmusBaginBox.com](http://www.CalmusBaginBox.com)

[www.CalmusMachinery.com](http://www.CalmusMachinery.com)