

Sal-Tech Easy Packaging Packaging Solutions

Filling & Capping
Powder/Granulates/Liquids/Creams



WE KEEP THINGS TOGETHER

Machines,
Tools and
Materials

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EASY PACKAGING

Filling machines are also known as **Fillers**; and are used to fill different kinds of products such as liquids, powders, granules, etc. in suitable containers such as; bottle, can, vial, drum, pouch, bag, jar, ampoule, cup, tube, glass, etc. For Different Packaging Solutions in Food & Beverages, Pharmaceutical, Cosmetic, Toiletries, Oil etc.

Used for 3 Main Areas:

- Powder filling
- Granulate filling
- Liquid filling

This often combined with on scramblers and cap sealing units

- On scrambler
- Sealing units
- Capping units

Powder Filling

These machines are for applications on packing powder, small granule dosing and filling and other related applications.

Example: Sugar, salt, flour, starch, powdered milk, coffee powder, dextrose, powder additives etc.
Applicable Containers: Jar can, barrel or bottles, vacuum tray, personalized cups etc.

Liquid Filling

These are special type of machines where bottles or pouches are automatically filled and sealed/capped by machines. They have wide application in food and beverages, medical sector, cosmetics etc.

Example: Oral Medicines, Beverages, Detergent, Dairy products, Personal care products etc.
Applicable Containers: Jar, can, barrel or bottles, vacuum tray, personalized cups etc.

STEP Rotary Coffee Capsule Filling Line

Multifunctional high – speed automatic rotary filling line, using discharge conveyors for sorting, horizontal cup magazine and mechanical driven rotating cup for filling and self-adapting sealing device all for a reliable, secure and to ensure freshness and preserve the fragrance and flavor of coffee and related products. The machine is equipped with less pneumatic components, mechanically driven design, more reliable, well synchronized, faster, accurate and the simplicity of operation typical of mechanical machines.

Features:

- All the parts that are in contact with product are made of 304 stainless steel
- High strength aluminum frame constructed protection shield
- High strength anodized aluminum rotating plate
- Frequency converting motorized indexing device for main driven
- Mechanical cup clamping instead of vacuum sucking
- Mechanical lid sucking and positioning
- Servo motorized auger with centrifuge disk
- Discharge conveyor convenient for downstream sorting, bagging or boxing

Options:

- Mass cup unscrambling and sorting device
- Nitrogen flushing with transparent gassing chamber
- Other type of cup fill and seal, like K-cup, Dolce Gusto
- Servo motorized Lid punching from film roll and/or logo embossing
- Vacuum loading device



SPECIFICATIONS:	
Model	4M-R1
Filling Heads	1
Filling Range	0-20 gram, adjustable
Filling Accuracy	$\leq \pm 0.05g$
Filling Speed -cups/hour	2700-3600
Compress Air Required-Mpa	0.6-0.8
Compress Air Consumption-m ³ /min	0.1
Approximate Weight -kg	850
Dimension (mm)	1600 x 900 x 2000
Power Requirement	AC 230V 50Hz with Siemens Plug or Request for Other Voltage Version
Power Consumption-KW	1.5
STEP Item No.	48371010



STEP Premade Spout Pouch Filling & Capping Machine

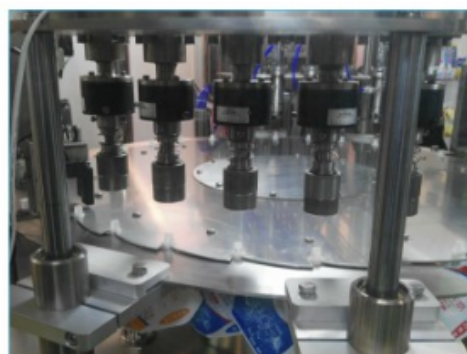
This machine is applicable for filling liquid in premade spout pouch and capping, applies various type spout pouches, regular or irregular, flat ,stand up pouch or gusset pouch etc. which include processes of premade spout pouch feeding, liquid dosing, filling, spout capping



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Issue	Application Description
Applicable Pouches	Spout Position: Top center spouted pouch, or corner spouted pouch Pouch: Flat pouch, stand up pouch, special shaped pouch
Applicable Products	<p>Normal liquid or viscous liquid such as</p> <p>Food Industry:</p> <ul style="list-style-type: none"> • Edible Oil • Dressings – Ketchup, Mayonnaise, Mustard • Water • Liquid eggs • Sauce • Drinks -Juice, soybean milk <p>Non-Food Industry:</p> <ul style="list-style-type: none"> • Synthetic oil • Industrial soap • Paint • Shampoo, lotion • Liquid Detergent



Reference photo of caps:**Multiple filling heads:****Standard Features**

- Stainless steel 304 and duralumin for structure and surface
- Product touching part constructed by stainless steel 304
- PLC & HMI Control Integrated, easy for operation and troubleshooting
- Equipped with frequency converting motorized system to enable excellent performance of driving
- Wide range of pouch size adaption
- Premade spout pouch feeding, liquid dosing, filling, spout capping
- Include the automatic devices of cap sorting , pre-capping and capping
- It is applicable for filling liquid in premade spout pouch and capping, applies various type spout pouches, regular or irregular, flat or stand up pouch etc.
- Automatic spout cleaning after filling enable clean appearance of packed products

Optional Features

- Stainless steel 304 and plexiglass protection shield
- Door open and machine stop interlock
- Air purification device
- Cap transport device
- CIP connectable tanks and nozzles
- Stainless steel 316 for product touching parts
- Cap UV sterilization before capping
- Servo motorized filling pumps

Specifications:

STEP 1U-2000	STEP 1U-II
1)Packaging Range(ml): 1,000-3,000	1)Packaging Range(ml): 1,00-500
2)Filling Heads: 8	2)Filling Heads: 5
3)Capping Heads: 4	3)Capping Heads: 5
4)Packing Speed (Pouches/min): 30-45	4)Packing Speed (Pouches/min): 50-80
5)Filling Accuracy: +/-0.5%	5)Filling Accuracy: +/-0.5%
6)Power Consumption(kW): 2.5	6)Power Consumption(kW): 2.0
7)Power Requirement: 380V 50/60HZ	7)Power Requirement: 380V 50/60HZ
8)Compress Air Requirement(Mpa) : 0.65	8)Compress Air Requirement(Mpa) : 0.65
9)Compress Air Consumption(m3/min): 2.0	9)Compress Air Consumption(m3/min): 1.0
10)Buffering Tank(L): 200	10)Buffering Tank(L): 100
11)Liquid Level Control Device(set): 1	11)Liquid Level Control Device(set): 1
12)Capping and Pre-capping device(set): 1	12)Capping and Pre-capping device(set): 1
13)Pouch Feeding Device(set): 1	13)Pouch Feeding Device(set): 1
14)Approximate Net Weight(kg): 1500	14)Approximate Net Weight(kg): 1500
15)Dimension(mm)-Length of Pouch Feeder: 1700	15)Dimension(mm)-Length of Pouch Feeder: 1700
16)Dimension(mm)-main machine: 3900*2100*2200	16)Dimension(mm)-main machine: 2300*1680*1950



Spout Pouch Filling Line

Horizontal Filling and Sealing Machine for Premade Pouches (One station, Third generation)

Model: STEP AP-1BT

Features:

1. Complete manufacture in stainless steel for food industry.
2. “Panasonic” PLC combined with “Kinco” touch screen
3. PID temperature controller
4. Statistic production overview and recording
5. Integration in existing packaging line Working

Procedure:

1. Bag pick up from bag feeding conveyor
2. Position the bag to filling station
3. Open the bag (Zipper opening device is option)
4. Product filling (filling device is an option)
5. Bag sealing
6. Bag feed out (with belt conveyor)

Technical specification:

- Bag Type: Standup-Pouches, Flat Pouches, Zipper pouches, Spout Pouches
- Bag width: 100-250mm
- Bag length: 150-330mm
- Fill weight: Max. 2000g
- Capacity: 5- 15 packs per minute
- Voltage: 220V, 1 Phase, 60 Hz, 2Kw.
- Air Consumption: 300l/min
- Dimensions: 2185 x 740 x 1560mm

Optional Parts:

Modification of feeding conveyor and sealing jaw for side spout pouch

Optional:

A.: Filling device Rotary Lobe Pump Filler for salad sauce filling

Model: STEP ZB3A-20

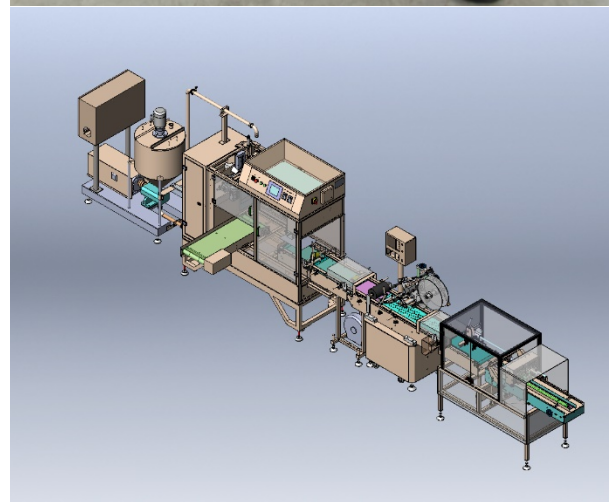
Capacity: 20L/100r
 Filling range: 1-5L adjustable
 Capacity: 10-25 bags/min.

The Lobe pump is driven by a “Schneider” servo motor Filling volume and speed could be easily set and changed on touch screen of the main machine, Tank, Pump and Pipe made of 304 stainless steel except the gear box

- Include the filling pipe to main machine
- Normal temperature filling
- Include the diving type filling nozzle to bag bottom, with cylinder block device to prevent leakage
- Installed under the materials tank on floor with movable carriage
- With standard liquid tank 80L

B.: Pouch Feeding conveyor with gripper

- To feed the pouch and transfer to labeling machine (For both zipper bag and flat bag)
- Designed as attached layout and showed in movie



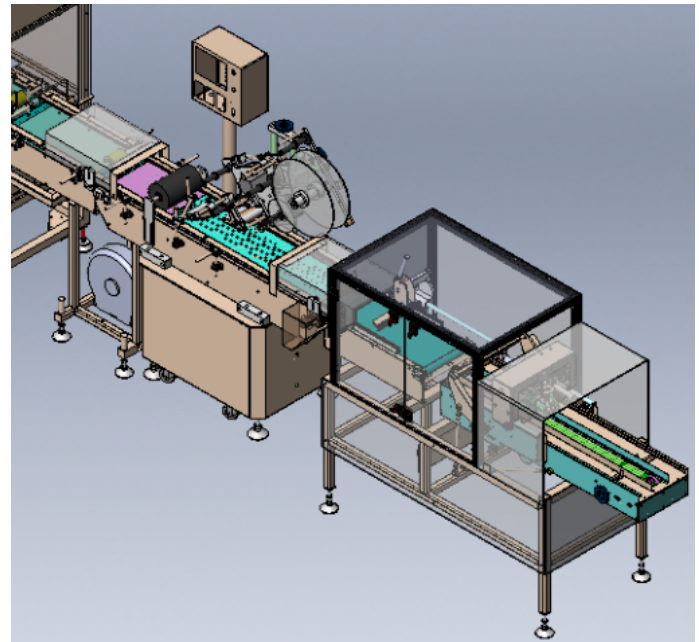
C.: Automatic top labeling Machine

Model: STEP ALB-210A

Product: Soft bag labeling
 Label width: 20-110mm
 Label length: 20-300mm
 Product width: 30-160mm
 Labeling speed: 5-30m/min.
 Power: 230V/1ph, 50 Hz.

Standard Features:

- 1) Product automatically running and labeling on the conveyor.
- 2) "Panasonic" PLC control system, "kinco" colorful touch screen operation interface
- 3) Servo motor control labeling head
- 4) "Sick" label sensor, only for normal paper label, not for transparent plastic label
- 5) With standard belt conveyor length 1400mm, width 160mm
- 6) Steel and aluminum parts machine construction



Optional parts for STEP ALB-210A

Vacuum belt, with blowing sucking to let soft bag running same speed with conveying belt for accuracy labeling

Full system, layout to follow:



All images are advisory.

Linear Type Premade Pouch Fill Seal Machine

Model: STEP 1R-300

- | | |
|--|---|
| <ul style="list-style-type: none"> 1)Work Stations: 1 2)Pouch Size-Length(mm): 100-300 3)Pouch Size-Width(mm): 80-300 4)Packing Speed (pouches/min): 0-15 5)Reference Filling Range(g/pouch): 5-1500 6)Power Requirement: AC220V 50/60HZ 7)Power Consumption(kW): 1.2 8)Compress Air Required (Mpa): 0.65 9)Compress Air Consumption(m3/min): 0.35 10)Dimension(mm): 1750*510*1250 | <ul style="list-style-type: none"> 1)Non-zipper pre-closed type flat or stand up pouch fill and seal 2)Durable stainless steel 304 construction for frame and surface 3)Stainless steel 304 for product touching parts 4)Electrical and pneumatic driven, simple operation and maintenance 5)Program Logic Controller and touch screen HMI Control 6)Complete trouble shooting program with sound and light alarm 7)Simple and quick pouch format changeover 8)Separate Temperature Controller configuration, ensure reliable sealing quality 9)No bag no fill and seal 10)Pouch not open completely, no fill and seal 11)Door open machine stop interlock |
|--|---|



STEP Item no.:

High Class Semi-Automatic Liquid Filling Machine

Model: STEP 3B-GY-5000K-1

- | | |
|--|---|
| <ul style="list-style-type: none"> 1)Filling heads: 1 heads 2)Filling Range: 500-5000ml 3)Ideal Filling Range: 2000-5000ml 4)Filling Accuracy: 1% 5)Filling Speed : 0-15 BPM 6)Compressing air requirement: 0.4-0.6Mpa 7)Volume of Hopper : Not Applicable 8)Layers of Hopper: Not Applicable 9)Dimension : 1289×373×480 mm, 10)Packed Dimension: 1450*660*420mm 11)Weight -Net: 53kg | <ul style="list-style-type: none"> 1)Apply for normal liquid filling 2)Type: Desktop 3)Type of Pump : Piston Pump 4)Products touching parts: stainless steel 316 5)Structure and surface : stainless steel 304 6)Driving Method : Pneumatic 7)Easy assembly design, convenient for cleaning 8)Filling nozzle height is adjustable 9)Periodical filling / pedal control modes 10)Filling speed is adjustable |
|--|---|



STEP Item no.:

Integration of units:

Include

-signal for electronic synchronization between sealer and liquid filler.

-movable axis where the liquid filler nozzle will be fixed to introduce it into the pouch