

KEFAI®



科辉机械

About KEFAI

It is a research and development packaging machine manufacturer with completely independent brand, the company focuses on the development and production of intelligent packaging equipment and industrial automation control system. With the leading technology level in China, we have the top R&D and production technology and excellent sales and service team, and have obtained many patents one after another.



Our products include packaging machines, filling machines, labeling machines, capping machines, and production lines. Our products are widely used in food, pharmaceutical, daily chemical and other industries. Our products have passed CE certification and ISO9001 quality system certification, covering 35 provinces in China and exported to more than 100 countries and regions worldwide.



100 Cases

KEFAI has completed a hundred cases in various industries including wine, milk, oil, sauces, etc.

Sterilization Way

1. Classes 100 cleanroom(FS209E)
2. Steam sterilization
3. Germicidal UVC

2 Packing Method

1. Roll Film Bag
2. Pre-made Pouch

Multiple valves

Our machines can use a variety of valves



Bag-in-Box



Products Content

Roll Film Bag

Automatic large bagcream
liquid with lid packing machine

01

Pre-made Pouch

Automatic Bag-in-Box
Aseptic Filling Machine
5-10L

03

Automatic aseptic
filling machine
3-25L

04

Semi-automatic aseptic
filling machine
1-30L

05

Automatic aseptic
filling machine
1-30L

Double head/multiple
head bag-in-box
1-30L

06

Aseptic Big Bag Filling
Machine
5-220L

07

Ton container aseptic big
bag filling machine
5-1000L

08

KF02-L BIB

Product introduction:

The machine is a fully automatic packaging machine developed and developed for packaging spouted (lidded) large-capacity flexible packaging products, encapsulating a large spout (large lid) with a screwed anti-theft cap on the flexible packaging bag. The machine adopts an advanced flow meter metering method, and the filling can be adjusted for products of different sizes and capacities from 3 to 10L or 5 to 15L liters. The machine is sterilized by the hydroxyl and ultraviolet irradiation from the high mercury quartz UV lamp to the packaging material used.



Automatic Bag-in-Box Aseptic Filling Machine

Pictures :



Application :

This machine is suitable for the packaging of various liquid or viscous material products with fluidity, such as: fruit juice, jam, egg liquid, ice cream liquid, dairy products, palm oil, soy sauce, yellow wine, sweet pasta sauce, hot pot base, adhesive, paint, pesticide, lubricant, detergent, biological fertilizer, etc.

Technical specification:

Model	KF02-L BIB
Production capacity	3-8bags/min/2-5bags/min
Filling accuracy	±0.2%
Air Pressure	0.65 Mpa
Material inlet flow	5000kg/ h
Width of packaging film	770-810mm
Power	3KW
Weight	850kg
Filling volume	12.5-5L/15-5L
Controllable bag length	200-580mm
Air consumption	0.45 m ³ /min(0.8MPa)
Material inlet pressure	inlet pressure:0.1-0.2Mpa
Permissible temperature	2℃~85℃
Supply voltage	AC220±10% V 50Hz
Dimensions	2210×1550×2830(mm)
Aseptic requirements	Germicidal UV lamp and UV irradiation

Working Flow:



KF01-L BIB AS^(5-10L)

Automatic Bag-in-Box Aseptic Filling Machine

■ Performance Introduction:

The BIB filling machine and automatic production line includes: a pre-made bag BIB 100-grade clean high-capacity automatic filling machine and a bagged water conveyor belt. it adopts the high-precision flowmeter metering method, with high filling accuracy and easy to set and adjust the filling volume; it is widely applied to the automatic filling of BIB bags in boxes of mineral water, wine, juice drinks and other materials. The machine is controlled by a high-precision flow meter for precise measurement.



■ Technical specification:

Aseptic requirements	Classes 100 cleanroom(FS209E)	Chamber Cleanliness	0.3 micron particle count ≤ 100 particles per cubic foot
Bag type	BIB pre-made continuous bags	Working air pressure	0.65MPa
Filling accuracy	±0.2%	Air consumption	0.45m ³ /min(0.8MPa)
Capacity	3300bags/hour	Power	3KW
Voltage	AC380±10% V50Hz	Filling nozzle	single
Material inlet pressure	0.1-0.3MPa	Filling Volume	5L-10L/bag
Material inlet flow	>8000kg/h	Dimensions	2450*1100*2500MM

■ Working Flow:

1. Positioning the first continuous BIB preformed bag
2. automatic bag feeding by the machine
3. bag tap elimination
4. to the cap pulling station

5. automatic cap pulling
6. automatic filling
7. automatic cap pressing
8. automatic bag cutting
9. conveying out of the bag

KF01-L BIB ZA^(3-25L)

Automatic Bag-in-Box Aseptic Filling Machine

■ Machine description:

The machine is sterilised by saturated steam, the aseptic protection and barrier design of the whole filling system is scientific and reasonable, the product measurement method adopts weighing measurement, the filling accuracy is high. The whole machine is controlled by PLC with touch screen, easy to operate. It is widely used for filling and capping of soft bags such as milk, juice drinks, seasoning sauces, syrups, oils and liquors.



■ Technical specification:

Power	AC220V、50HZ	Aseptic requirements	Steam sterilization
Voltage	≤0.2KW	Model	KF01-L BIB ZA
Capacity	80-120bags/hour	Steam Consumption	30Kg/h
Filling Accuracy	≤±0.05% (in 10L/bag)	Weight	350kG
Liquid Inlet Pressure	0.3-0.35MPa	Filling material	Liquid
Air Pressure	0.6-0.8MPa	Filling Range	3Kg-25Kg
		Dimensions	1100*1100*1860MM

■ Working Flow:

1. Manual positioning pouch
2. Start switch
3. Steam sterilisation
4. Automatic lid extraction
5. Automatic vacuum extraction (optional)

6. Automatic weighing and filling
7. Automatic lid pressing
8. Manual bag dispensing
9. Manual cartoning

KF01-L BIB-Z

Single Head Bag-in-Box Filling Machine



Fully automatic and hands-free

1

KF01-L BIB-S

Semi-auto Bag-in-Box Filling Machine



Need to manually press yourself

2

KF01-L BIB-ZII

Double Head Bag-in-Box Filling Machine

Can be changed to a different number of heads



3

■ Technical Parameters:

Working Principle	Flow Meter To Control
Filling Precision	±0.2-1%
Material Inlet Pressure	0.3-0.35MPa
Filling Range	1-30L
Power	0.38KW
Air Consumption	0.2m ³ /min
Operating Pressure	0.4-0.6MPa
Supply Voltage	220/110V 50/60Hz
Material	Stainless steel 304/316

■ Performance Introduction:

This filling machine can realize the automatic filling of liquid, using flowmeter to control the amount of material discharged each time, with high filling accuracy. The whole equipment has stable performance, good reliability and durable.

Bag-in-box is a disposable packaging with convenient storage and transportation, low packaging cost, good anti-counterfeiting effect, avoiding secondary filling and recyclable packaging material in the form of liquid packaging.

It can be widely used for bag-in-box filling application of liquid materials such as wine, edible oil, juice, additives, milk, syrup, alcoholic beverages and condiment concentrates.

■ Working Flow:

The First And Third Pictures:

1. Automatically place the bag in place.
2. Automatically pulling out the tap.
3. Automatic metering and filling .
4. Automatically pressing the tap in place.

Second Set Of Pictures:

1. Manually putting the bag in place.
2. Automatically pulling out the tap.
3. Automatic metering and filling .
4. Manual Press Cap.



KF01-L BIB-D (5-220L)

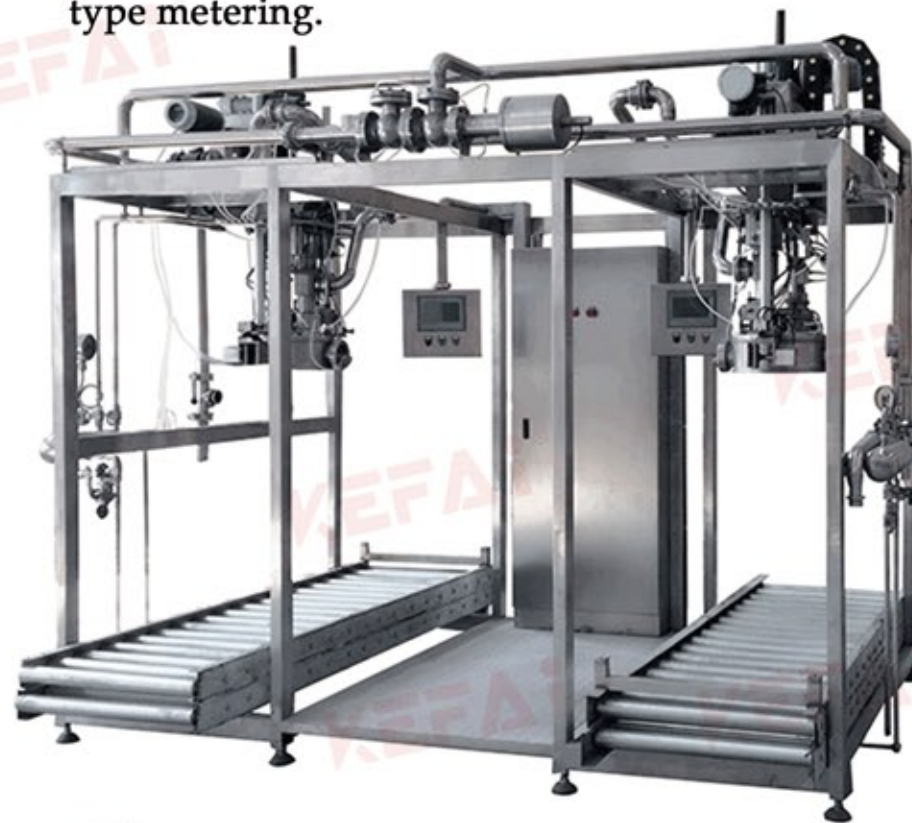
Aseptic Large Bag-in-box Filling Machine

■ Performance Introduction:

The aseptic bag in box filling machine mainly consists of aseptic filling system, flow (mass) metering system, roller (engineering plastic) conveying system, computer PLC control system and operating platform. The packaging bags are made of aluminium-plastic composite aseptic bags (5L-220L). The bag opening and filling chamber are sterilised using the steam injection method to ensure that the filling chamber is always aseptic. Sterilisation of the aseptic bag opening, opening, filling and sealing are all done in a sterile environment. The filling error is $\leq 0.5\%$ with flow meter or weighing type metering.



A steriliser can also be customised according to customer requirements with a multi-head aseptic filling machine to facilitate the use with a large capacity steriliser. (e.g. one machine with 1/2/4 heads).



■ Technical specification:

Model	KF01-L BIB-D-1	KF01-L BIB-D-2	KF01-L BIB-D-3
Filling Volume	5-220L	5-220L	5-220L
Filling Capacity	5000L/H	8000L/H	14000L/H
Power	1.5KW/380V/50HZ	2.5KW/380V/50HZ	4KW/380V/50HZ
Steam consumption	0.5Mpa 50KG/H	0.5Mpa 50KG/H	0.5Mpa 50KG/H
Compression Air	0.7Mpa 10M3/H	0.7Mpa 10M3/H	0.7Mpa 10M3/H
Filling Accuracy	$\pm 0.5\%$	$\pm 0.5\%$	$\pm 0.5\%$
Dimension	3000*1600*2600mm	3300*3300*2600mm	5000*1600*2600mm
Aseptic requirements	Steam Sterilization	Steam Sterilization	Steam Sterilization

KF01-L BIB-T (5-1000L)

Ton Container Aseptic Big Bag Filling Machine

■ Technical specification:

Model	KF01-L BIB-T
Voltage	5KW
Filling Volume	5-1000L
Filling Nozzles	2
Filling Nozzles	99.5%
Dimension	5000*3500*2600mm
Aseptic requirements	Steam Sterilization

■ Working Flow:

1. Manual Positioning Bag
2. Bag Clamping
3. Bag Filling
4. Bag Transported Out Of The Drum.
(5L-30L aseptic bag filling no need bag clamping process)



■ Performance Introduction:

This equipment uses steam injection to sterilise the bag and filling chamber, ensuring that the filling chamber is always sterile, and that sterile bag opening, filling and sealing are all completed in a sterile environment. The equipment comes with CIP cleaning and SIP sterilisation action flow, which can be linked with the front-end steriliser, eliminating the need for separate cleaning and sterilisation. The whole machine is made of high quality stainless steel 304 except for the electrical configuration, motor and soft connections, the circulating steam and compressed air are discharged outside the aseptic filling workshop through the corresponding piping. The filling volume can be set at will from 5 to 1000L.