

**DF1000-A**

# Fully Auto Flat Shape Vacuum Packing Machine Introduction Manual

# Application scope



Coarse Grains



Nuts, Seeds



Pet feeds, Cat litter



Chemical Granulars

Packaging application scope: It is suitable for vacuum packaging of granular materials in fields such as grain, cat litter, and pet feeds, etc.

# Performance characteristics

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(1) With an ultra-large-capacity bag storage that can hold over 600 packaging bags at once, it significantly reduces the frequency of bag replacement during operations, thereby enhancing continuous working capability and production efficiency.

(2) It employs one-step sealing and forming technology, suitable for conventional flat handle bags, flat bags without handles, M-shaped pseudo brick handle bags available in the market.

(3) Highly intelligent, the Fully Auto Flat Vacuum Shape Packaging Machine is equipped with the function to automatically reject abnormal bags, including those with stuck openings, ruptured openings, or failed opening attempts.

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# Performance characteristics

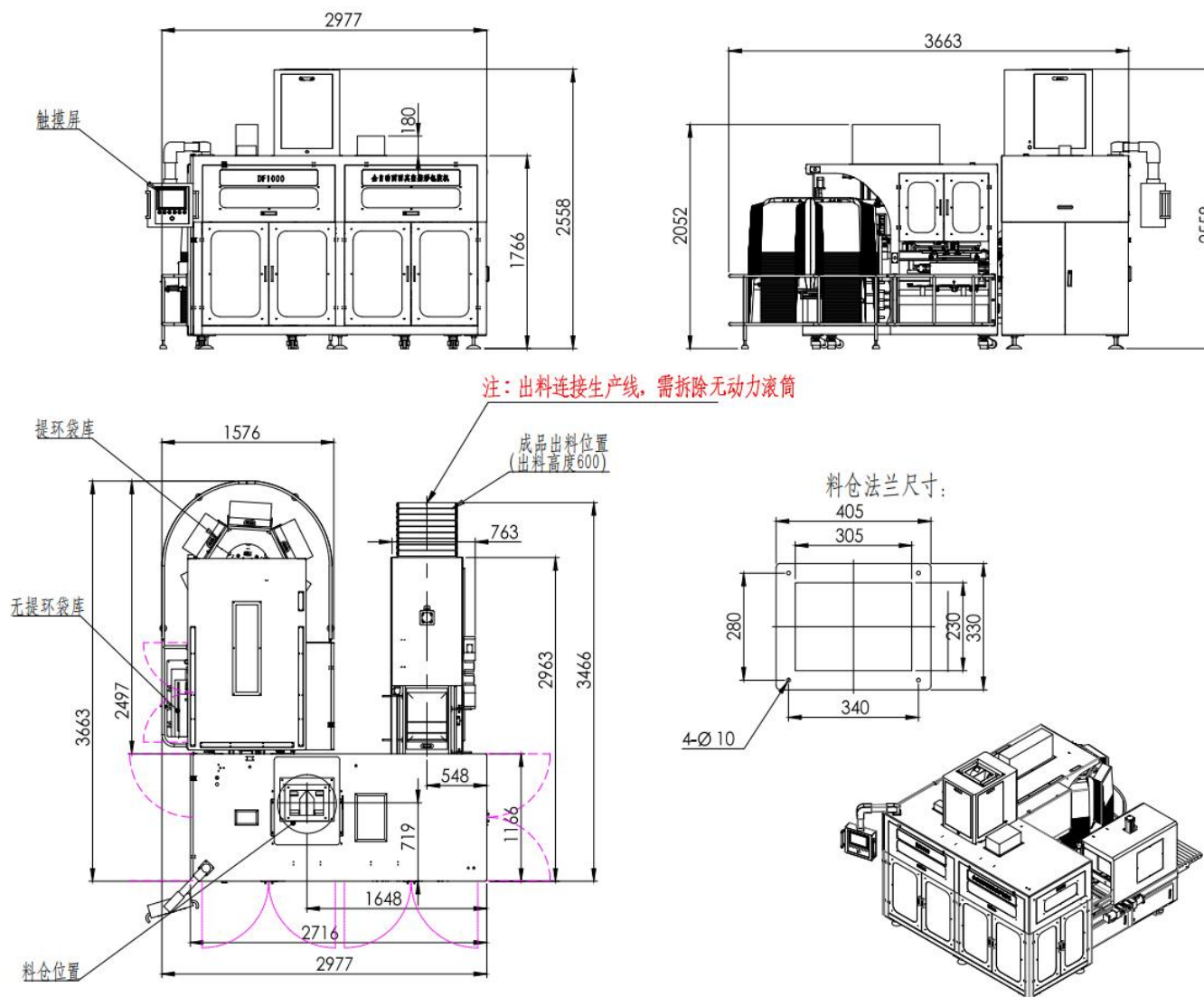
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(4) When changing production to different specifications of rice bricks with the Fully Auto Flat Vacuum Packing Machine, selecting and switching to the corresponding specification recipe enables quick and convenient product changeover. (Manual adjustment of the bag storage width is required for handleless bag storage.)

(5) The equipment can be equipped with an internal coder: fiber laser coder or ultraviolet laser coder.

(6) Based on market demands and transportation requirements, preservation can be achieved through vacuum mode, or nitrogen-filling or carbon dioxide-filling preservation can be selected.

# Equipment sample drawing



# Equipment parameters

Number	Name	Technical Parameters	
1	Packing Range	2.5kg-10kg flat bags and pseudo brick bags weighing	
2	Bag size range	Front width 240 - 380mm, length 390 - 620mm; (For pseudo brick bags) The inner width of pre-sealing is greater than 190mm.	
3	Packing Capacity	Approximately 600 - 900 bags/hour (Note: about 600 bags/hour for 10kg bags, and about 800-850 bags/hour for 2.5 - 5kg bags)	
4	Bag storage capacity	The loop-handle bag storage	Approximately 700 bags
		The handleless bag storage	Approximately 600 bags
5	Power Supply	AC380 Three-phase-five-wire system, 6.5KW	
6	Air Consumption	0.6MPa, 1m <sup>3</sup> /min	
7	Working Temperature	0-40°C, Relative Humidity: <90%	
8	Equipment Dimensions(LxWxH)	2977 × 3663 × 2558mm	

# Finished product rendering

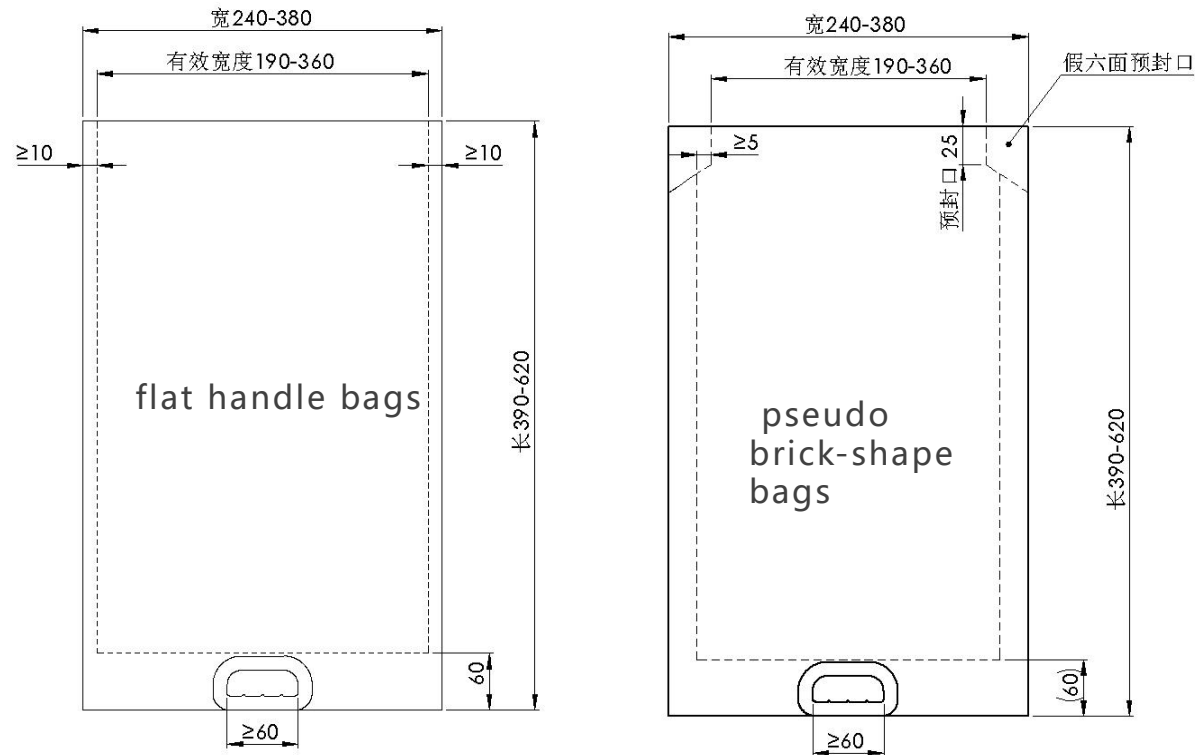


# Color diagram of the equipment (subject to the actual product)

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# Size range of packaging bags



1.1 Packaging scope: 2.5kg-10kg, flat plastic handle bags, flat bags without handles, and M-shaped pseudo brick-shape bags.

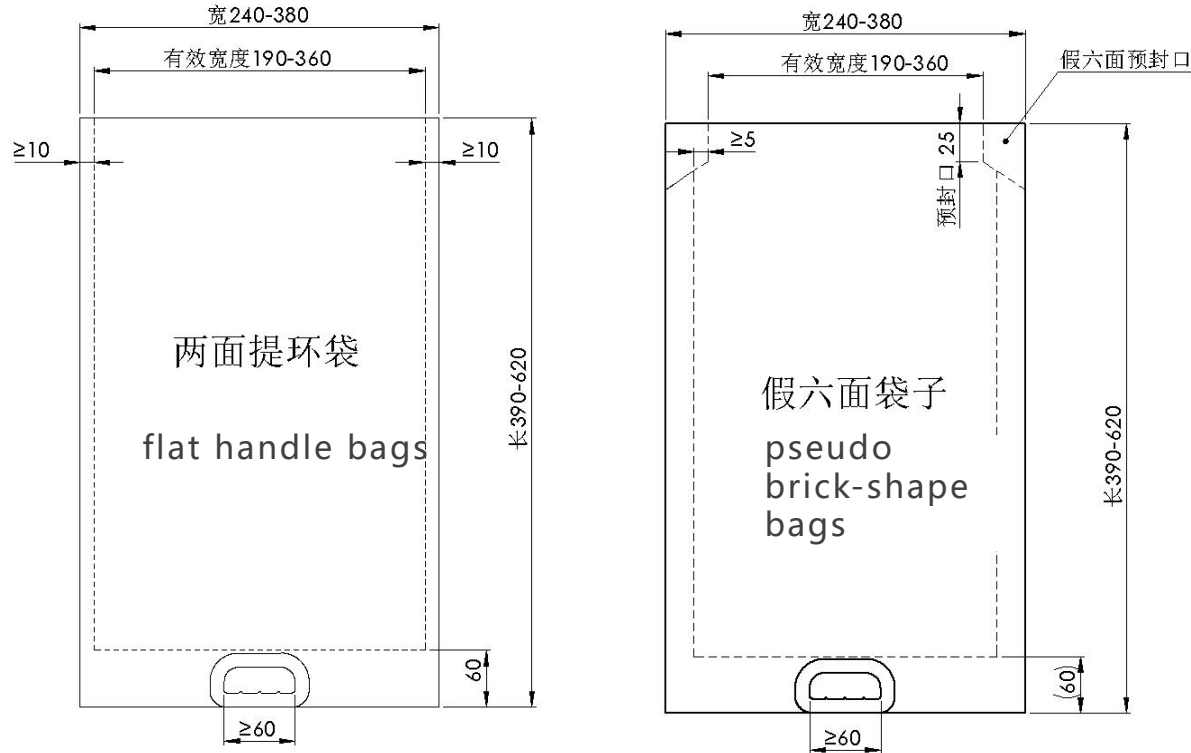
1.2 Whether they are actually applicable needs to be determined by providing sample bags for actual testing.

2. Packaging bag parameter specifications:

2.1 Material requirements: The packaging bag should be made of composite film with a thickness greater than 0.13mm, and the inner layer should be made of high-pressure polyethylene (PE) material that meets the requirements of food packaging hygiene standards and has good heat-sealing properties.

Note that the material should have good strength, airtightness, and heat-sealing performance.

# Size range of packaging bags



## 2.2 Packaging bag requirements:

- ① When laid flat in a carton, there should be no bending or folding.
- ② Plastic packaging bags should not have static electricity, and there should be no adhesion inside the bag or at the bag opening.
- ③ The plastic handles of the packaging bags should not have irregular shapes, and one plastic handle should not be pressed against two bags at the same time.

# Suggested dimensions for flat bags

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Bag Type	Specification	Size (LxWxH)
Common Flat Handle Bag	2.5kg	420*275 Thickness ≥ 13 wires
	5kg	515*320 Thickness ≥ 14 wires
	10kg	610*380 Thickness ≥ 16 wires
Pseudo Brick-Shaped Handle Bag (Pre-sealed Length of Pseudo Brick-Shaped Portion)	2.5kg	415*260*40 Thickness ≥ 13 wires
	5kg	495*290*50 Thickness ≥ 14 wires
	10kg	605*340*65 Thickness ≥ 16 wires

# Configuration list

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<b>Number</b>	<b>Name</b>	<b>Brand</b>
1	PLC	Germany - Siemens
2	Contactor	France - Schneider
3	Temperature Controller	Japan - Fuji
4	Vacuum Pump	Shanghai - ZD
5	Cylinder	Taiwan - AirTAC
6	Solenoid Valve	Taiwan - Mindman
7	Negative Pressure Gauge	Taiwan - KITA
8	Motor	JSCC
9	Slide rail and slider	Taiwan - TBI
10	Terminals	Weidmuller
11	Solid State Relay	Japan - Omron
12	Push Button	France - Schneider
13	Photoelectric Switch	Japan - Omron/South Korea-Autonics
14	Servo Motor	Inovance
15	Fiber Optic Sensor	Japan - Omron
16	Miniature Relay	France - Schneider Electric
17	Load Cell	Keli

# List of Vulnerable/Consumable Parts

Serial No.	Name	Model	Quantity
1	Fuse Element	6A	2 pcs/year
2	Pipeline Filter Cartridge	ZFC200 Series	10pcs/year
3	Relay	RXM2LB2BD	1 pc/year
4	Solid-State Relay	G3NB-210D-1	2 pcs/year
5	Electric Heating Rod	∅ 12x420	1 pc/year
6	Thermocouple	K-type (0.6m)	2 pcs/year
7	Sealing Wing-shaped Rubber Strip	Wing-shaped Strip - Length 450	1 pc/year
8	Discharge Bag Clamping Wing-shaped Silicone Strip	Self-made Wing-shaped Silicone Strip with Holes - Length 80mm	8 pcs/year
9	Bag Opening (Straightening) Clamping Silicone Block	Self-made (Yellow Clamping Silicone Strip L60)	8 pcs/year
10	Bag Picking Suction Cup for Bag Loading Machine	Blue Suction Cup GBLP-30S	2 pcs/year
11	Bag Opening Suction Cup	Piab Suction Cup F33	4 pcs/year
12	Upper and Lower Sealing Clamp Rubber Strip	Imported Silicone Strip 8*10 (Length 430mm)	2 pcs/year
13	Vacuum Chamber Sealing Rubber Strip	Silicone Strip 10*18 (2.5m)	2 pcs/year
14	Needle Extraction Tube	Self-made	1pc/2years
15	Sealing Ring	TCM40	2 sets/year

# List of Vulnerable/Consumable Parts

16	Sealing Ring	SAI32	2 sets/year
17	Sealing Ring	AOQ40	2 sets/year
18	Sealing Ring	AOQ32	2 sets/year
19	V140A Vacuum Pump Exhaust Filter	7180021	1 pc/year
20	V140A Vacuum Pump Air Filter	7101003	1 pc/year
21	V140A Vacuum Pump Oil Filter	7201001	1 pc/year
22	Vacuum Tube	4-inch Vacuum Tube - Length 1150	2 tubes/year
23	U-shaped Photoelectric Sensor	Panasonic PM-T45-C3	1 pc/year
24	Solenoid Valve	MVSC-220-4E1-DC24	1 pc/year
25	704 Silicone Sealant	704	2 bottles/year
26	Drag Chain	18x25	1 pc/year
27	Adjustable Air Nozzle	PTL4M5	2 pcs/year
28	Adjustable Air Nozzle	PTL601	2 pieces/year
29	Elbow Air Nozzle	PL601	2 pieces/year
30	Elbow Air Nozzle	PL602	2 pieces/year

# Random Item List

Accessory	Quantity/Specification	
A set of random tool	Each type one piece	Solid wrench 5-7mm, 8-10mm, 12-14mm, 13-15mm, 17-19mm
		Box wrench 13-15mm
		Combination Screwdriver
		Adjustable Wrench
		2mm Flathead Screwdriver, 3mm Flathead Screwdriver
		Internal Circlip Pliers, External Circlip Pliers
	A set of Allen Wrenches	
Fuse Inserts 6A	2 pieces	
704 Silicone Sealant	2 bottles	
Paper Filter Element	1 piece	
Stainless Steel Filter Element	1 piece	
Pipeline Filter Element	3 pieces	
Straight Air Nipple PC1604	1 piece	
Elbow Air Nipple 6M5	2 pieces	

# Random Item List

Accessory	Quantity/Specification
Adjustable Air Nozzle 4M5	2 pieces
Adjustable Air Nozzle 6M5	2 pieces
Electric Heating Rod	1 rod(12*420)
Thermocouple	1 strip (0.6 meters)
Wing-shaped Rubber Strip	2 strips (450mm)
Wing-shaped Silicone Strip for Bag Releasing (with Holes)	4 pieces
Resin Yellow Bag Clamping Block	8 pieces
Genie Blue Suction Cup (GBLP-30-5)	2 pieces
Parka Suction Cup (BK33X)	4 pieces
Item Description	Quantity/Specification
Air Tube Set	16 5meters
Imported Silicone Strip 8*10 (From Workshop)	1 meter
Imported Silicone Strip 10*18 (From Workshop)	2.3 meters

**Thank you!**