



Make Food Production
Simpler and Safer

Garlic

Processing Solution

GELGOOG—Fruit & Vegetable Processing Solutions Expert



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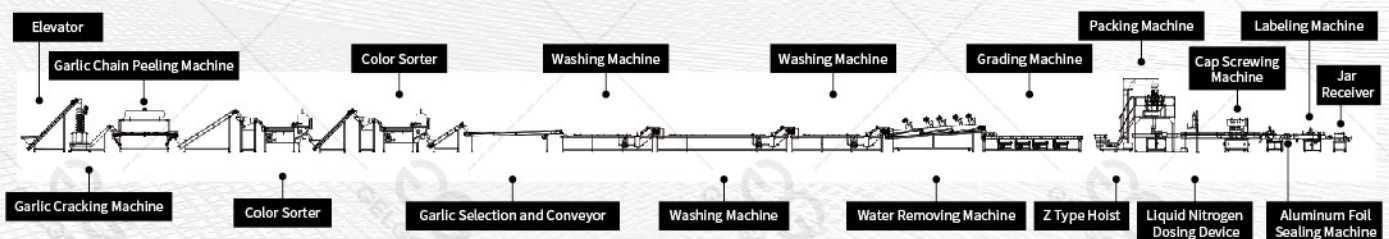
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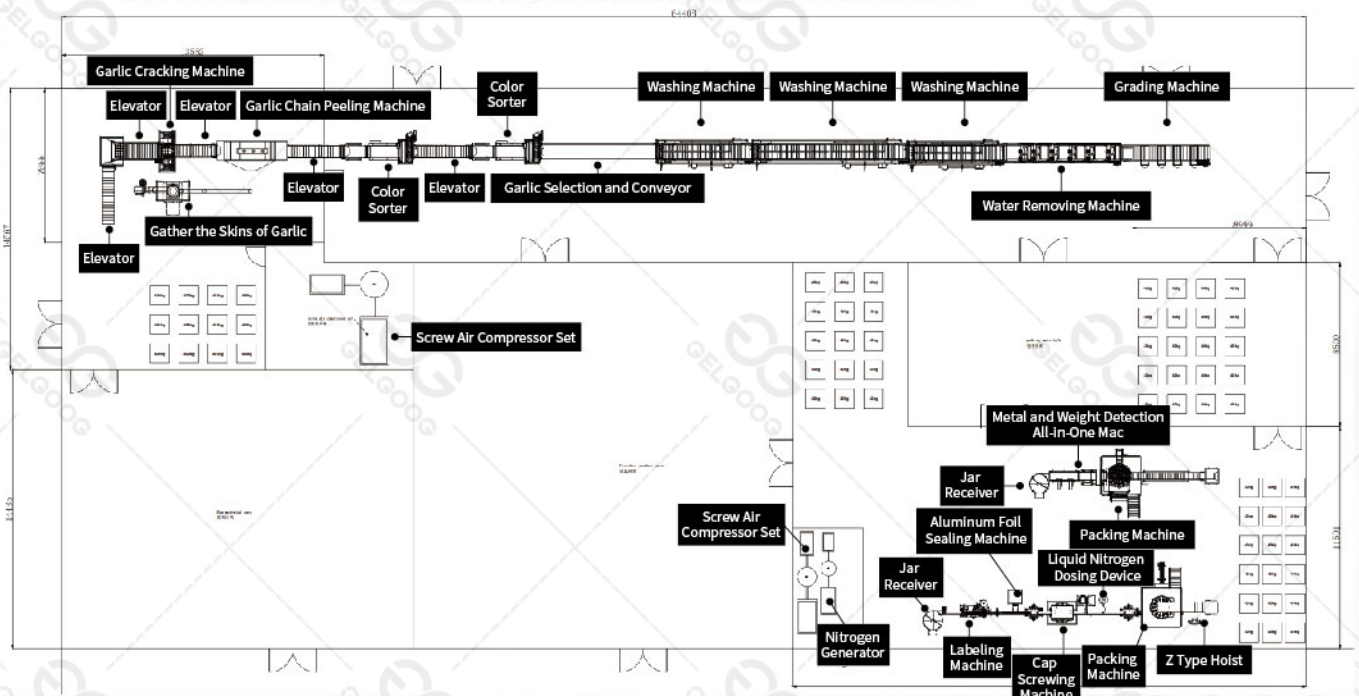
Introduction of The Solution



Select clean and dry garlic. The garlic undergoes a series of operations including separating into cloves, peeling, color sorting, picking, washing, disinfecting, air drying, grading, and packaging, resulting in peeled, low-bacteria garlic cloves.

Garlic production line can customize different skin collection systems, color sorting methods, cleaning processes, air-drying modes, and grading forms at the front end; in the packaging process, a variety of packaging forms can be selected with the different customer needs, such as nitrogen-filled cans, nitrogen-filled bags, and vacuum packaging. This garlic production line also has the advantage of rich configurations and compatibility, and customers can freely match equipment according to various application scenarios.





02 Advantages

01

Two types of Garlic clove breaking machines are available: disk type and roller type.

02

You can choose a color sorter or a multi-person picking belt, according to different labor costs and factory layouts.

03

Equipped with a garlic skin collector, it can minimize garlic skin pollution at the production site and protect the environment of the production workshop.

04

The whole line PLC control system can be customized to realize rapid switching of different color protection formulas.

05

The material contact of the entire line is made of 304 stainless steel to ensure hygiene and safety.

03

Processing Scope

Suitable for peeling whole garlic heads whose size is larger than 10mm. Before the garlic heads are put into the production line, it should be ensured that the roots of the garlic heads have been cut off and the surface of the garlic heads is relatively dry.

Applicable to: large chain catering enterprises, central kitchens, vegetable wholesale markets, clean vegetable distribution centers, etc.



04

Core Technology



The unique cleaning structure can filter out garlic skin and residue and reduce the impurity rate of the production line.

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A unique air-drying structure can prevent small garlic rice from getting stuck in the mesh.

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The color protection process has been strictly tested and will not affect the output of the production line while ensuring the color protection time.

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The peeling machine has various structures and can be adapted to a wide range of production capacity requirements.

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Introduction to Single Machine



❁ Disc Garlic Clove Breaking Machine

Reference size	740x960x1300mm
Power	1.8kW
Material	SUS304 stainless steel bracket

Equipment advantages:

1. The rotating plate is made of food-grade silica gel, which is softer and causes less damage to garlic.
2. The distance between the static plate and the moving plate is adjustable and can adapt to garlic heads of different diameters.
3. Due to the existence of springs during exercise, the crushing of garlic is reduced.



❁ Roller Garlic Clove Breaking Machine

Reference size	2200x1100x2200mm
Motor power of each group	3kW
Material	SUS304 stainless steel bracket

The flexible roller divides the garlic into pieces without damaging the garlic.

Equipment advantages:

1. The diameter of the silicone roller is small, the garlic rice passes through it at a low speed, and the damage rate is lower.
2. The pressure and distance between the two rollers are adjustable and can adapt to garlic heads of different diameters.
3. You can increase the quantity by group to increase the output of the production line.



❁ Chain Type Continuous Garlic Peeling Machine

Reference size	3500*960*2000mm
Power	4.45kW
Reference weight	350kg
Material	SUS304 stainless steel bracket
The supporting air compressor power	132kW

Equipment advantages:

1. The conveying motor is controlled by a frequency converter and can adjust the peeling time.
2. Equipped with 2 rotating disks to improve the peeling rate of garlic
3. Equipped with pressure display meter, which can display the dynamic value of pressure during the peeling process.



Color Sorting Machine

Reference size	3450x1500x2000mm
Power	3.5kW
Air source pressure	0.6~0.8MPa
Air consumption	1.2m ³ /min
Number of spray valves	126

Equipment advantages:

1. AI algorithm :can match the best strike method based on the material' s trajectory, posture, spatial position, speed, three-dimensional force center, edge characteristics and other information.
2. Japan's Toshiba S-class professional vision system: using customized ultra-high transmittance optical lenses
3. Shadowless cold light LED light source: customized high-end high-brightness, high-penetration light source. The light source intelligent control system intelligently matches the material selection requirements and environmental changes. The penetration ability of dark light and dark-color light-absorbing parts is comprehensively improved. Ultra-long life: greater than 50,000 hours; customized BIN value, stable and no light change
4. American Intel fifth-generation FPGA chip.



Bubble Washing Machine

Reference size	6218×1514×1350mm
Transmission power	1.1kW
Air pump power	5.5kW
Water tank volume	2035 (L)

Equipment advantages:

1. The side baffles can be removed for easy cleaning
2. Conveying speed is adjustable with frequency conversion
3. Various conveying forms such as mesh belts and chain plates are optional.



Air Drying Machine

Reference size	5112×1138×1692mm
Number of fans	10 Sets
Power	8.25kW

Equipment advantages:

1. The side baffles can be removed for easy cleaning
2. The conveying speed is adjustable with variable frequency, and the drying time can be controlled
3. The mesh is encrypted, which can prevent small garlic rice from getting stuck in the mesh belt.



Size Sorting Machine

Reference size	3300×1400×900mm
Material	SUS 304
Power	1.1 kW

Equipment advantages:

1. The distance between rollers can be customized to meet different grading requirements.
2. Roller conveyor can avoid garlic damage during the grading process.
3. The graded garlic can be lifted out through the conveyor belt.

Weighing and Measuring Machine

Reference size	1620*1100*1300mm
Weighing range	10-2500g
Weighing accuracy	±1g
Weighing speed	0-60p/min

Equipment advantages:

1. Safe and clean, IP64 waterproof and dustproof design, 304 stainless steel material ensures food hygiene and safety;
2. Equipped with a touch screen human-machine interface control system, which is simple and convenient;
3. The perfect combination of high precision and high speed, using computer calculation to instantly optimize and select the best combination from a variety of combinations;
4. Powerful data statistics function, automatically record the total weight, total number of packages, pass rate and other indicators of each batch of production.



Turntable Material Receiving Machine

Reference size	2370*1970*1700mm
Power	1.5kW
Material receiving speed	2.40-60p/min
Applicable bottle neck	50-130mm
Applicable bottle height	55-200mm

Equipment advantages:

1. PLC and touch screen human-machine interface control;
2. The turntable type has accurate positioning and high efficiency;
3. High production capacity and automation, saving labor costs.





⚙️ Liquid Nitrogen Filling Machine

Filling amount	0.01to14g/time
Filling time	10-1000ms
Liquid nitrogen evaporation loss	0.15L/h
Liquid nitrogen pressure	<0.8MPa

Equipment advantages:

1. Nitrogen positive pressure protection and vacuum insulation technology avoid the cooling of liquid nitrogen.
2. Adaptive control technology, adaptive production speed.



⚙️ Capping Machine

Reference size	2000*800*1500mm
Speed	40-100p/min
Applicable to cover	15-120
Applicable bottle diameter	4.35-140

Equipment advantages:

1. Automatic capping system reduces manual intensity and ensures accurate capping.
2. Use four pairs of wheels to rub the cap and automatically guide and screw the cap
3. The capping wheel adopts the rubber coating process, and the flexible cap is used to contact the cap without damaging the cap.
4. The model change is simple, no need to replace complex parts, just simply adjust the equipment.



⚙️ Electromagnetic Sealing Machine

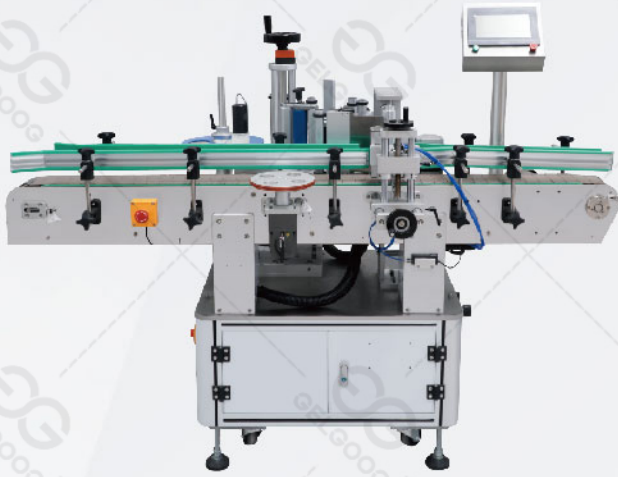
Reference size	680*570*1400mm
Bottle mouth diameter	15-120mm

Equipment advantages:

1. Safe to use, with overheating protection and water shortage protection
2. Using a high-power condenser and water pump, the water cooling effect is more efficient
3. The water tank is made of 304 stainless steel to avoid cooling water pollution.

⚙️ Labeling Machine

Labeling accuracy	±1mm
Applicable product dimensions	Diameter: $\phi 25\text{mm} \sim \phi 80\text{mm}$ Height: 25mm~300mm
Applicable label sizes	Length: 20mm~290mm Width (width of bottom paper): 20mm~100mm



Equipment advantages:

1. The whole machine is made of stainless steel 304 and high-grade aluminum alloy
2. Simple operation, controlled by PLC and human-machine interface.
3. Easy to adjust, labeling position, height, and angle can be adjusted.

06 Parameters of The Solution

Dimensions (length x width x height)	64*15*6m
Feeding port height	800mm
Whole line Power is about	104kW
Total water storage capacity of equipment	13.5 tons
Equipment water consumption	1 tons/h
Air consumption	30 cubic meters/minute

07 Physical Pictures





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