

Factory area	Production equipment	Warehouse stock	Regular stock
30000 m ²	more than 200 units	5000 t	300 pcs

Woven bag

Woven Bag Overview: Revolution in Materials and Uses



Material and process: mostly polypropylene (PP), a few polyethylene (PE). Production process: plastic particles → melt extrusion → stretching into flat wire → weaving into cloth → cutting and sewing into bags.

Lightweight and durable: light weight but strong load-bearing. Low cost: low price of raw materials, suitable for large-scale use, suitable for chemical and agricultural environments.

Size: common width 30-130 cm, customizable. Load-bearing: ranging from 10 kg to 50 kg, industrial bags are stronger. Type: divided into ordinary bags, moisture-proof bags, and UV-resistant bags according to function.

Woven bag is a common packaging container, which is mainly made of plastic flat yarn. It is widely used because of its durability, portability and economy. Woven bags are plastic products with polypropylene (PP) or polyethylene (PE) as the main raw materials. They are woven into cloth after being stretched into flat yarns, and then sewn or glued into bags. Because its surface texture is similar to braided fabric, it is called "woven bag" or "woven bag".



90%+
Decomposition rate



≥35MPa
Tensile strength

Common uses:

Agriculture: packaging and transportation of food, vegetables, and fertilizers.

Industry: storage of building materials (such as cement, sand) and chemical raw materials.
Logistics: Replace cartons for transporting large items.

Daily life: moving, storing waste items, and even temporary flood prevention sandbags.



> Analysis of the seam bottom process: millimeter-level industrial aesthetics

Single fold at the bottom, double fold at the bottom, single fold double seam at the bottom, double fold double seam at the bottom (to meet different load-bearing requirements, the bottom cover is firm and will not fall off)

■ Hot-melt seamless technology:

high-temperature welding, the seam strength reaches 95% of the base material, and the leakage rate is $\leq 0.001\%$.

■ Green manufacturing:

biodegradable suture materials to achieve full-chain environmental protection.

■ Double chain stitching:

main stitch + insurance line double reinforcement, breaking force redundant design ≥ 3 times the load.

■ Intelligent upgrade:

Machine vision monitors welding quality in real time, automatically removes defective products, and reduces trial and error costs.



> Circular weaving technology: the art of weaving with precise control



The cutting and sealing of woven bags are key process links in their production and use, which directly affect the functionality and durability of the bags. By properly selecting the cutting and sealing processes, the performance and cost of woven bags can be optimized to meet the needs of different industries. The cutting may affect the convenience and appearance of the bag, while the sealing is directly related to the sealing and safety.

Cut design

Flat cutting: laser precision cutting, burr $\leq 0.2\text{mm}$ (suitable for automated filling line)

V-shaped tearing edge: pre-made tearing line, opening force $\leq 5\text{N}$

Sealing solution

Heat-sealed sealing: PE inner layer fusion technology, high sealing strength

Drawstring: high-strength nylon rope

> Printing technology display : The power of brand

Series	Normal printing	Color printing	Roller printing
Definition	Single color or multi-color printing	CMYK four-color overlay full-color printing technology	Rolled materials are printed between rollers
Technical principle	Gravure printing Color printing Single ink printing	Inkjet printing	Rotary offset printing/flexographic printing Multiple rollers to complete multi-color printing
Applicable scenarios	Low-cost, large-volume basic printing	Printing bags that require high color reproduction	Ultra-large-volume production of printed bags

■ The core role of woven bag printing

Brand recognition and promotion:

Increase brand exposure and strengthen consumer memory through corporate logo, slogan and other designs.

Messaging and Compliance:

Label product name, ingredients, weight, production date and other information required by regulations to ensure compliance (e.g. food packaging, chemical product bags).

Functional identification:

Anti-counterfeiting marks (such as QR codes, laser anti-counterfeiting) to prevent counterfeiting;

Warning signs (such as "flammable" and "fragile") indicate safety risks.

Increase product added value:

Exquisite printing design can enhance the packaging quality and attract consumers.

Durability and protection:

Post-processing processes such as lamination, pearlescent film color printing, and matte film color printing enhance the wear resistance and waterproof performance of the printing layer and extend its service life.

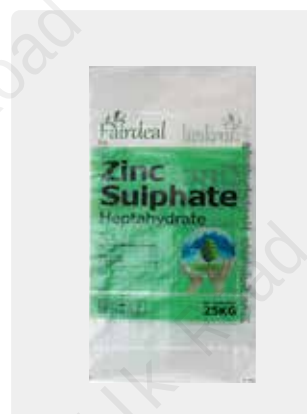
Process selection recommendations

For mass production: gravure printing (cost dilution) or flexographic printing (environmental protection requirements) are preferred.

Small batch customization: screen printing or digital printing (high flexibility).

High precision requirements: gravure or flexographic printing (precise color registration).

Environmentally friendly scenarios: flexographic printing (water-based ink) or digital printing (solvent-free).



> Additional functional design: Beyond the wisdom of packaging

Multiple specifications of woven bags can be customized, including imitation paper film, aluminum foil film, filling mouth sewing mouth, bottom sealing, handle sewing, matte film ultrasonic sealing, sewing bottom, open edge drawstring, perforation, pearl film, kraft paper strips, etc.

Imitation paper film technology

Technical principle: PP substrate surface micron-level embossing treatment to simulate paper texture
Core parameters: air permeability $\geq 1500\text{g/m}^2 \cdot 24\text{h}$, printing adhesion increased by 40%
Application scenario: high-end agricultural product packaging (coffee beans/organic rice)



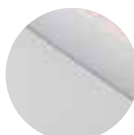
Aluminum foil film composite

Technical principle: vacuum aluminum layer (thickness 20-50nm) + PE heat seal layer
Typical application: light-proof and moisture-proof packaging for pharmaceutical intermediates



Pearlescent film/matte film

Optical design
Pearlescent film: Pearlescent pigment is added, diffuse reflectivity is increased by 60% (luxury product anti-counterfeiting)
Matte film: Surface roughness $Ra 1.2-2.5 \mu\text{m}$, eliminates reflection interference (military product transportation)



Precision design of filling port

Sewing process: ultrasonic seamless heat sealing, suitable for automatic filling machine
Open edge drawstring system: high-strength nylon rope (breaking force $\geq 300\text{N}$) + anti-slip positioning beads
Quick opening and closing design (sealing in 3 seconds)



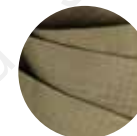
Bottom Reinforcement Program

Bottom Seal Technology: 4-layer hot melt overlay with optional leak-proof barrier (PE/EVOH composite film)
Bottom Sewing Innovation: Double helical seam path for 80% more resistance to side pressure.



Intelligent sealing system

Ultrasonic + matte film sealing: 20kHz high-frequency sealing, matte surface treatment
Self-inductive sealing strip: temperature-variable ink indicates sealing status ($\geq 80^\circ\text{C}$ color-coded alarm)



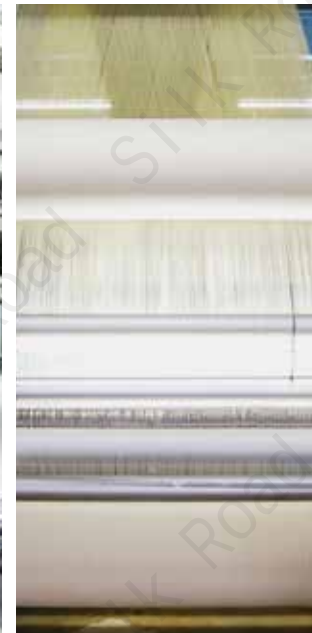
Breathable protection balance

Microporous perforation technology: laser array perforation, hole distance error $\leq \pm 0.05\text{mm}$
Precise control of breathability: 500-3000 $\text{g/m}^2 \cdot 24\text{h}$ adjustable
Intelligent respiratory valve: air pressure sensing opening and closing, balanced internal and external pressure difference.



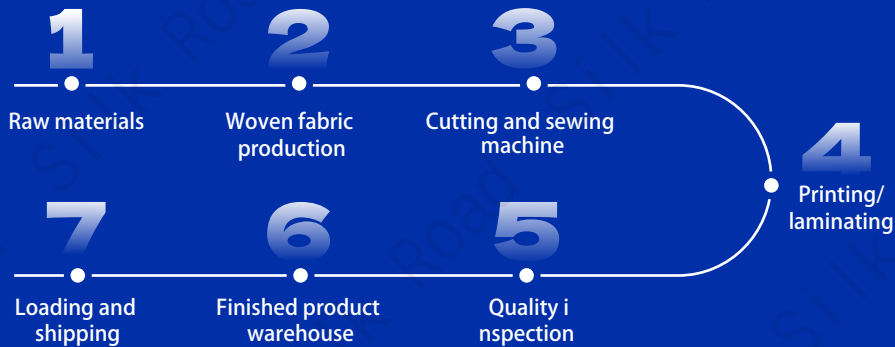
Special reinforced design

Kraft paper strip composite: used for sharp materials such as glass fiber/metal waste
Anti-static grid: 5cm interval conductive wire weaving



> The entire production process: the precise dance of Industry 4.0

The factory of Linyi Silk Road International Trade Co., Ltd. covers a total area of 30,000 square meters, including raw material workshop, woven fabric production workshop, cutting workshop, printing workshop, quality inspection workshop, finished product warehouse, and a complete plastic weaving industry chain to ensure the final production quality of the product!



> Equipment close-up



> Customization process

10 years of industry production experience, on-demand design, more worry-free customization.

