

# Environmentally Friendly and Efficient Packing Airbags for Logistic Transport

## Detail Introduction :

### Problems in Logistics Packaging Airbags

With the popularization of the Internet and the development of Internet shopping, the express delivery industry has risen rapidly. The safety, environmental protection, and high resource consumption problems of express packaging that are closely related to it have become increasingly prominent and have not only been recognized by people of insight in society. Attention and attention have also triggered continuous exploration in the design community.

Based on the current problems of express packaging, while better protecting the contents, it realizes a design that can be recycled and reused and has no apparent harm to the environment. Redesign the express package based on convenient and fast packaging and the principle of reducing material waste.

**Keywords:** intelligent design, express packaging, airbag packaging

## Problems in Logistics Packaging Airbags

The problem of logistics packaging airbags is the waste of resources and environmental pollution. With the massive growth of the logistics packaging industry, the loss and destruction of natural resources are inevitably caused, including many non-renewable natural resources, and many of them are generated. Rubbish. The most critical reason for these problems is that the recycling measures for logistics packaging are not unified. Packaging waste that is not recycled wastes resources correctly and hurts the natural environment. The unsustainable development trend in the development process of logistics packaging has caused the opposition between resource consumption and the natural environment. Reducing the damage of logistics packaging to the natural environment through effective recycling of logistics packaging is a significant issue in today's logistics industry.



**Packaging Airbags Positioning and Ideas**

**Applicable products:** The packaging airbags are mainly anti-vibration as the starting point and are intended to package and protect fragile products so that fragile products can be safely and completely delivered to customers during express transportation. The main applicable product is the protection of fragile products. This design is intended to protect high-end brand fragile products, such as expensive skincare fragile products and perfumes.

**Product features:** The packaging airbags are characterized by structural improvements through anti-vibration airbag materials, eliminating unnecessary packaging steps, and airbags are packaging.

**Market positioning**

**Sales target:** The main consumer groups are companies and individual distributors selling fragile packaging products, as well as express delivery companies. Because the packaging cost is higher than that of ordinary express bags on the market, the packaging airbags are designed for sale in two markets.

**1.** Adopt the form of cooperation with courier companies. If the customer needs to take the courier bag away after the delivery of the customer's things, they need to pay a certain amount of RMB to take it away. Because the packaging material is made of PVC plastic material and has a thick texture, it can be used for secondary use. Consumers can use it for shopping and can be used as a drowning rescue in an emergency. If the consumer does not purchase the express package, the express company can use it for a second time.

**2.** Cooperate with well-known high-end brands to create joint models and tailor their products. Packaging airbags are sent as a bonus. This application method can better enhance the brand value of partners and give consumers a better buying experience and impression.



**Packaging positioning**

**(1) Packaging form and structure**

Packaging airbags are made of PVC plastic and formed by printing. The structure is divided into two layers, inside and outside. The inner layer is placed to send fragile products, and the outer layer forms an airbag through the input of gas to protect the fragile products of the inner layer.

**(2) Expression technique and expression style**

Mainly use simple and atmospheric letters, or use vivid symbols as auxiliary graphics.

**(3) Quality and use value**

On the premise of protecting fragile products from squeezing and breaking, Packaging airbags can be reused after use, adding attractiveness and added value to the product, making the packaging go beyond its original basic functions and have sustainable use Function.

#### (4) Materials, technology, and technology

The material of Packaging airbags is PVC plastic, which has heat resistance, low-temperature resistance, elegant appearance, noble, non-toxic, and odorless, and has good airtightness and moisture resistance. Its production technology such as packaging creasing technology, packaging cutting technology, hand-made technology, lithographic printing technology, packaging bag sealing technology. By using hydraulic technology, it is very important to seal the airbag package with a hydraulic machine so that the gas is not leaked. The most important part of the technology is the inflator. First of all, it is necessary to design an inflator, a gas cylinder, and an anti-leakage inflation port, and then pull the inflator manually to achieve the shock resistance of the packaging. At the same time, the structure design adopts the form of air venting. Each vent has an independent air column. If one air column accidentally leaks, the remaining three can protect fragile products.

#### **Packaging Airbags Design Ideas**

For the purpose of anti-vibration packaging, reduce the damage of fragile products in logistics transportation. Mainly by changing the original express transportation packaging structure, reducing express packaging and packaging links, saving labor costs and reducing labor intensity, and improving the protection performance of express packaging for fragile products; using integrated packaging design ideas, packaging airbags are packaging, And consider the design issues related to the sustainable development of society from production to consumption and after consumption.