

Straw Fiber Plastic Use Guide

Straw plastic is one of the "bio-environmental protection resin material" products of Jiangsu Jinhe Hi-tech co., LTD., which is composed of crop straw and high performance resin (HDPE) by special method. It is a thermoplastic resin from renewable resources.

I. Mechanical properties of bottle-blown straw plastics (master batch) are shown in the following table:

Indicators	Property
colour	Dark brown
density	1.06~1.1g/cm ³
tensile strength	≥14Mpa
elongation at break	≥50
melt index	2 g/10Min
modified straw	≥35%
moisture	≤0.6%
melting temperature	125~135℃
softening point of microcard	115~125℃

II. Application

Processing guide: Extrusion bottle blowing process can be used in the traditional HDPE bottle blowing machine to produce products with ideal mechanical and operational properties. This material is especially suitable for making small hollow containers.

Typical ratio: hotel disposable shampoo bottle: HDPE: 50~70%

straw plastic: 30~50%

adsorbent: 2-3%

III.Processing parameters

1. Temperature

Extrusion blow bottle processing temperature

Area	Temperature (°C)
Zone 1	150~160
Zone 2	160~170
Zone 3	170~180
Die head	170~185

note:

- 1) The above temperature is only a reference temperature. In actual production, appropriate adjustment shall be made according to the actual processing conditions.
- 2) processing machinery shall be equipped with cooling and cooling system to ensure accuracy of temperature control;
- 3) higher length-diameter ratio of processing machinery screw will have better effect, which will be conducive to material plasticization, and improve product quality and output.

IV. Processing process

1. Before adding materials, the whole processing system, including all feeding, conveying and receiving systems, shall be cleaned up to ensure that there are no other polymer particles and dust residues. Because if there are other polymer particles with higher melting point in the system, it may not melt under the processing condition of blowing bottle, which will affect the extrusion quality of the die mouth of the equipment.

2. LDPE can be used for cleaning. As long as the extruded LDPE is transparent and free of impurities, cleaning will be completed. If the equipment is too dirty, it is necessary to remove the die head and screw so as to use the material.

3. After cleaning, the temperature should be adjusted to the molding temperature of the material, and then start processing.

4. After processing materials, LDPE can be used to clean up the system to avoid the negative impact of material residue in the next processing.

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