



Molded Fiber

FREQUENTLY ASKED QUESTION



FAQ

1. What is Molded Fiber?

Molded Fiber (also called molded pulp) is a packaging material made by shaping a slurry of recycled paper or natural fibers (such as bamboo, sugarcane, hardwood, and softwood) into specific forms using molds. After shaping, it is dried and sometimes pressed to create rigid or semi-rigid packaging components.

2. What are the uses of Molded Fiber?

Molded Fiber is primarily used for food packaging and serving products like trays, plates, and bowls. Additionally, molded fiber products serve as eco-friendly alternatives to plastic, foam, and Styrofoam in various packaging applications.

3. What types of products can be manufactured using Molded Fiber?

Molded fiber is highly versatile, enabling production of eco-friendly, functional, and protective products across multiple industries including food, electronics, healthcare, agriculture, and retail.



4. What raw materials are used in Molded Fiber manufacturing?

The most commonly used raw material is Bagasse pulp sheets. Alternatives include bamboo pulp sheets, hardwood, and softwood pulp sheets.



Belched Pulp Sheet (White)



Unbleached Pulp Sheet (Natural Brown)



FAQ

5. How are Molded Fiber products manufactured?

Manufacturing requires a facility equipped with a stock preparation system and molding machines to shape and dry the fiber slurry into final products and trimming machine for trimming.

6. Are Molded Fiber products leak-proof?

Yes. Molded fiber products can hold hot and cold food, dry and gravy, oily food for 25-30 minutes

7. Are Molded Fiber products safe for human health?

Yes. These products do not leach harmful substances and are safe for human use.

8. Are Molded Fiber products environmentally friendly?



Yes. Molded fiber products are biodegradable and decompose naturally in soil within 90 days after use.



FAQ

9. Are Molded Fiber healthy alternative over plastic?

Yes, molded fiber products totally decompose in the soil within 90 days after usage and they also do not have any harmful additives like Styrofoam.

10. What is the market demand for Molded Fiber products?

Molded fiber products are used globally, especially in quick service restaurants due to bans on plastic and Styrofoam products. In India, adoption is growing among major restaurants and international airports.

11. How can one access the market for Molded Fiber products?

Participating in exhibitions and spreading brand awareness are effective ways to enter and expand in the market. Contract manufacturing is also an option.

12. What machinery is required for manufacturing Molded Fiber products?

- Pulp Preparation System: Converts dry pulp sheets into a slurry and open the fibres, then the fibres are processed in special equipment to develop mechanical properties which contributes to improve strength and performance of products. Also some additives are added for waterproofing and oil-proofing
- Forming and Drying Machine: Shapes products using molds and dries them using hot press mold drying.
- Trimming, Quality Control, and Packaging: Removes excess edges, ensures product quality, and packages the finished goods.

13. Can rice straw, wheat straw, or rice husk be used in Molded Fiber products manufacturing?

Yes, but these materials lack sufficient fibres and strength, making them unsuitable for water and oil-proof products.



Project Related FAQ

1. What is the minimum viable production capacity for a Molded Fiber project in India?

A minimum viable project capacity is 6 TPD (tons per day).

2. How much space is required to set up a Molded Fiber manufacturing project?

A basic project requires approximately 27,000 - 30,000 sq.ft of shade area.

3. Is there any wastage of water or raw materials in the manufacturing process?

No. Reject products from quality check are recycled within the plant, and there is no water discharge in manufacturing process.

4. Are any additives added during manufacturing?

Yes. Food-grade additives certified by American standards—namely OGR and AKD—are added for oil-proofing and water-proofing to prevent leakage.

5. How much capital investment is required for establishing Molded Fiber products manufacturing Unit?

The capital investment required to establish a molded fibre products manufacturing unit is dependent of the machine types and the project capacity.

6. Is there any government subsidies for the Molded Fiber products manufacturing unit establishment?

Yes, there are several subsidies available from government for various projects depending on the regions to regions, Industrial and non-industrial states.

7. How much manpower is required for basic Molded Fiber products manufacturing unit?

The manpower requirement is totally dependent on the project capacity and the machineries used for the manufacturing of products. However the average 50 labours are required for a basic molded fiber products for 24 hrs running.



Project Related FAQ

8. How much amount of water is required for the basic Molded Fiber products manufacturing unit?

Water requirement for the project is directly proportional to the project capacity, for producing 1 kg of products 3 litres of water is essential.

9. What is the power requirement for running a basic Molded Fiber products manufacturing unit?

The power requirement is totally dependent on the project capacity and machineries used in the project. However for a basic project with basic machineries the average power require is 250-300 kWh.





Project Related FAQ

10. What are the test and certification required for the manufacturing and selling of molded fiber products products?

The test and certification required for the molded fiber products typically depends on the application of those products. However following are some test and certification required for the molded fiber products.

TEST REQUESTED	
1.	MICROWAVE RESISTANCE TEST
2.	EFFECTS OF HUMIDITY
3.	EFFECTS OF HOT WATER
4.	EFFECTS OF EXTREME TEMPERATURE
5.	FREEZER SAFE TEST
6.	FLUORINE CONTENT
7.	EFFECTS OF HEAT
8.	GERMAN FOOD, ARTICLES OF DAILY USE AND FEED CODE OF SEPTEMBER 1, 2005 (LFGB), SECTION 30 & 31 WITH AMENDMENTS
	SENSORY EXAMINATION - ODOUR AND TASTE TEST
9.	EDQM GUIDELINE "PAPER AND BOARD USED IN FOOD CONTACT MATERIALS & ARTICLES"
	PRESERVING EFFECT
10.	TESTING AS PER COMMISSION REGULATION (EU) NO. 10/2011
	a) OVERALL MIGRATION
	b) SPECIFIC MIGRATION OF BISPHENOL A
	c) SPECIFIC MIGRATION OF HEAVY METALS
	d) SPECIFIC MIGRATION OF BENZOPHENONE
11.	PENTA CHLORO PHENOL (PCP) AS PER US 21 CFR FDA 178.3800
12.	US FDA 21 CFR 176.170 (PAPER AND PAPERBOARD)-DETERMINATION OF AMOUNT OF NET CHLOROFORM SOLUBLE EXTRACTIVES
13.	TWO HUNDRED AND NINETEEN (219) SUBSTANCES IN THE CANDIDATE LIST OF SUBSTANCES OF VERY HIGH CONCERN (SVHC) FOR AUTHORIZATION PUBLISHED BY EUROPEAN CHEMICALS AGENCY (ECHA) ON AND BEFORE JULY 8, 2021 REGARDING REGULATION (EC) NO 1907/2006 CONCERNING THE REACH
	ACCORDING TO THE SPECIFIED SCOPE AND ANALYTICAL TECHNIQUES, CONCENTRATIONS OF TESTED SVHC ARE ≤ 0.1% (W/W) IN THE SUBMITTED SAMPLE.