



# **Consolidated FAQ: Ecosure Pulpmolding Technologies**

**Document Version: 1.0**

**Date: 18/03/26**



# 1. Why is replacing single-use plastic packaging becoming critical for industries today?

## **Answer:**

Single-use plastics are increasingly being restricted due to environmental concerns, regulatory bans, and growing consumer awareness. Industries are facing pressure to shift toward sustainable alternatives that are biodegradable, recyclable, and compliant with evolving regulations. Additionally, plastic waste management challenges and rising ESG expectations are pushing companies to adopt eco-friendly packaging solutions. Molded fiber packaging offers a viable, scalable, and sustainable replacement for many single-use plastic applications.

## 2. What is Ecosure Pulpmolding Technologies Ltd., and what is its core mission?

**Ans.**

Ecosure Pulpmolding Technologies Ltd. is India's first and leading manufacturer of Fibre Pulpmolding machinery. Our core mission is to design, manufacture, and supply state-of-the-art machines that produce sustainable, moulded pulp packaging and products & replace Single use Plastics.



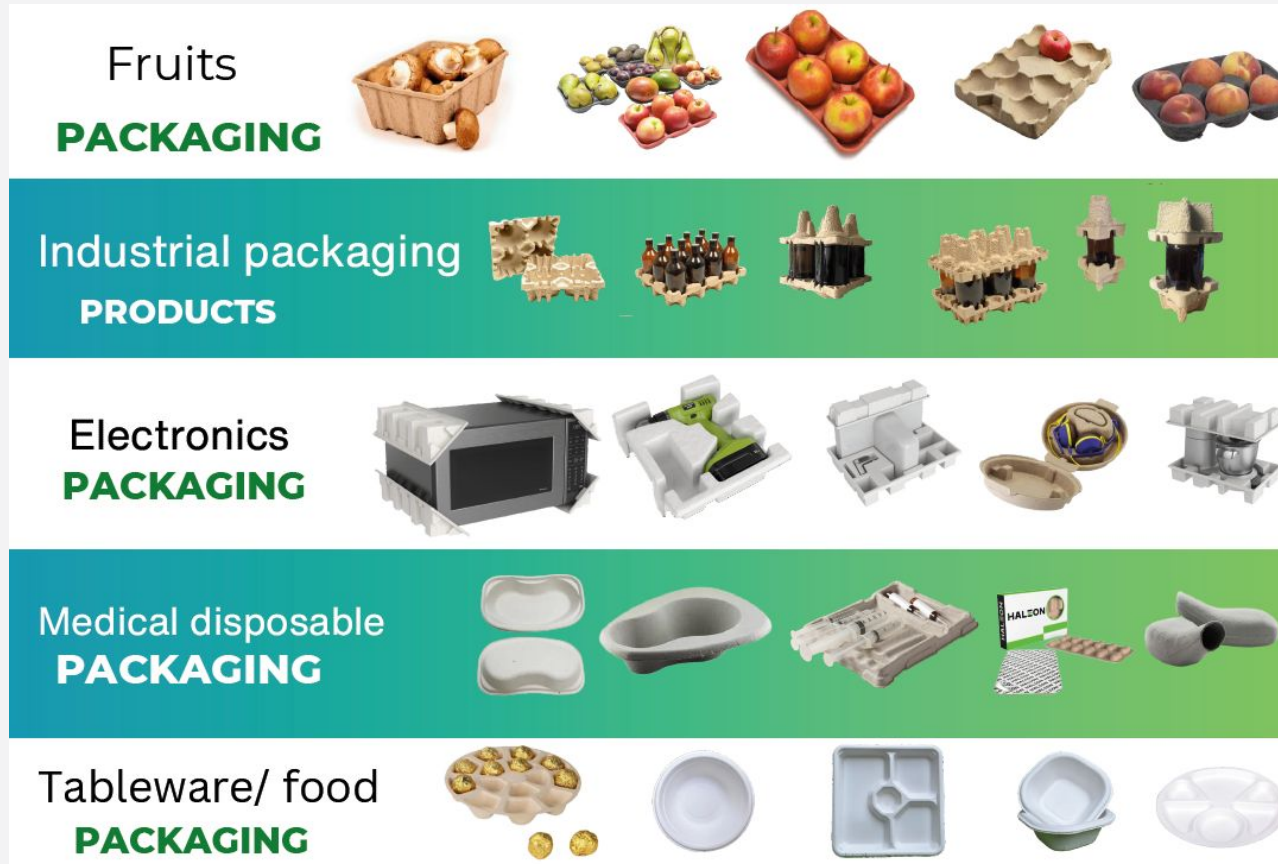
### 3. What raw materials are used in the pulpmolding process?

**Ans.**

The main raw materials are pulp from agricultural residues. Examples include bagasse, bamboo, wheat straw, (virgin fibre pulp), as well as Reclaimed Fibre from Used carton bottles. These fibres are natural, renewable, and completely biodegradable.



## 4. What types of products can be manufactured using Ecosure Pulpmolding machines?



**Ans.**

Ecosure Pulpmolding machines are designed to manufacture a wide range of biodegradable and compostable fiber-based products, including tableware such as plates, bowls, trays, and clamshell boxes;

Industrial and protective packaging like bottle holders, corner guards, and electronic inserts; fruit and agricultural trays for apples, avocados, and tomatoes; and medical disposables such as kidney trays and bedpan liners.

The machines can process various Pulp raw materials like sugarcane bagasse pulp, bamboo pulp, wheat straw pulp, recycled paper, and reclaimed fiber from tetra packs to produce both thin-gauge and thick-gauge molded pulp products. all aligned with global sustainability goals to replace single-use plastics.

## 5. How eco-friendly are pulp-moulded products compared to plastic?

Ans.

Pulp-moulded products are 100% biodegradable and compostable, naturally decomposing within 60–90 days depending on different weather conditions without leaving toxic residues. This is a vast improvement over plastics, which take hundreds of years to degrade, helping to reduce landfill waste, ocean pollution, and carbon footprint. The products are also recyclable up to 7 times.

## 6. What quality and safety standards do the final products meet?

Ans.

The products are strong, lightweight, and food-grade. They comply with international compostability standards and are safe for direct contact with hot and cold foods. The binding agents used are also food-grade. We provide support for obtaining ISO, compostability, and food-contact safety certifications.



100% BIODEGRADABLE  
• COMPOSTABLE



PLASTIC: CENTURIES  
TO DEGRADE



COMPOSTABLE • RECYCLABLE  
UP TO 7 TIMES

## II. Machine Specifications & Production



## 7. What types of pulpmolding machines does Ecosure offer?

Ans.

EPTL offers a complete range of pulp molding machines designed to suit different production scales and automation needs. The lineup includes **Semi-Automatic Machines** ideal for startups and medium-scale producers, featuring hydropneumatic operation with trimming machines for edge finishing and **Fully Automatic Machines**, which are servo-operated with automatic transfer systems for high-speed, precision molding.

### Semi-Automatic (ECOSA SERIES)



### Fully Automatic (ECOFA SERIES)



## 8. What are the specifications for the SEMI AUTOMATIC ECOSA-10095 model?

Ans.

- **Dimensions:** 3900 mm (L) x 2000 mm (W) x 3400 mm (H)
- **Weight:** Approximately 7.5 tons
- **Cycle Time:** Approximately 55 seconds per drop/cycle
- **Heating Power:** Maximum of 90 KW (Electrical Heating) or 0.3 KW (Thermic Oil Heating)



## 9. What are the specifications for the ECOFA-9570 Fully Automatic model?

Ans.

- **Dimensions:** 6500 mm (L) x 1850 mm (W) x 2800 mm (H)
- **Weight:** Approximately 10 tons
- **Cycle Time:** Approximately 35-45 seconds per drop/cycle
- **Heating Power:** Maximum of 120 KW (Electrical Heating) or 10 KW (Thermic Oil Heating)



## **10. Can the machines be customized?**

**Ans.**

Yes, we offer customisation in machine capacity, moulds, and automation levels to perfectly suit your specific business requirements.

## **11. What is the typical production capacity?**

**Ans.**

Production capacity varies based on the model and product. E.g A single machine with a capacity of 500 kg per day can produce approximately 20,833 pieces of a 24g product. Overall, daily production can range from 2,000 to over 50,000 pieces.

## **12. What is the efficiency of the production process?**

**Ans.**

The conversion efficiency of raw pulp into the final product is effectively 100%. Any rejected material (approx. 10%) during production is fully recycled in the next cycle, ensuring no wastage of raw material.

### 13. What is the expected lifespan of the machinery?

**Ans.**

Our machines are built with high-grade materials and precision engineering. Average life: 12–15 years

With proper preventive maintenance and periodic refurbishing: up to 18–20 years.

### 14. How long can the machines run continuously?

**Ans.**

Ecosure pulp molding machines are designed for continuous operation of 20–22 hours per day, typically running in 2–3 shifts, with short maintenance or cooling breaks between cycles to ensure optimal performance and durability.

### 15. How much wastage/scrap should I expect?

**Ans.**

Approximately 10-15% of material is rejected during production, but it is fully recycled in the next cycle, resulting in zero raw material wastage.

### 16. What is the specific consumption of utilities per ton of product?

**Ans.**

- **Electricity:** 80 to 90 KW per Ton Connected load (consumption will be 60%)
- **Water:** 100 litres per hour per ton (TDS should be 300 mg/litre)
- **Compressed Air:** 50 CFM Per Ton
- **Thermic Fluid Heater:** 2,00,000 kilocalories per ton

### III. Molds & Tooling

## 17. Do you provide molds, and can they be customised?

Ans.

Yes, we design and manufacture high-quality molds customised for different products. This includes a complete set (Forming, Hot Pressing, and Trimming) based on your unique product requirements.

## 18. What are the technical details of the molds?

Ans.

- **Platen Size:** Depending on machine eg. ECOSA10095 will have 1000 x 950 mm
- **Material:** High-grade aluminium alloy 6061
- **Product Limits:** Maximum depth < 100 mm, maximum thickness < 3 mm
- **Cost:** Approximately ₹11 Lacs per complete set



**19. Can molds be changed, and how long does it take?**

**Ans.**

Yes, molds on Ecosure pulp molding machines can be changed and it typically takes about 2 to 4 hours, depending on whether the machine is hot or cold.

**20. What is the expected lifespan of the molds?**

**Ans.**

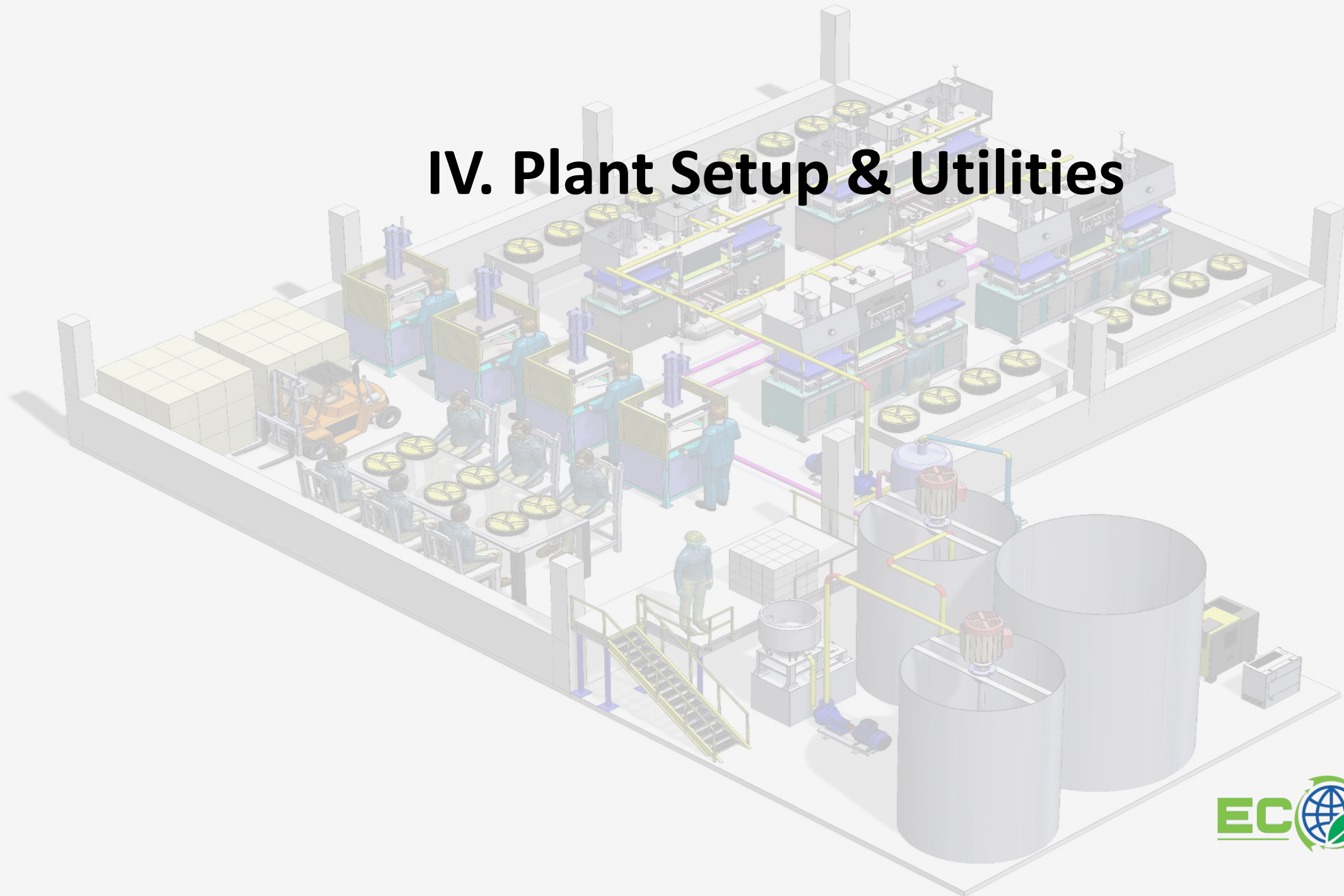
10 years (Depending on how you maintain them)

**21. What is the typical cost for replacement or for developing a new custom mold?**

**Ans.**

Approximately 8-11 Lacs for Semi Automatic, 20-25 Lacs for Fully Automatic per complete set.

## IV. Plant Setup & Utilities



## 22. What is the estimated investment required to set up a plant?

**Ans.**

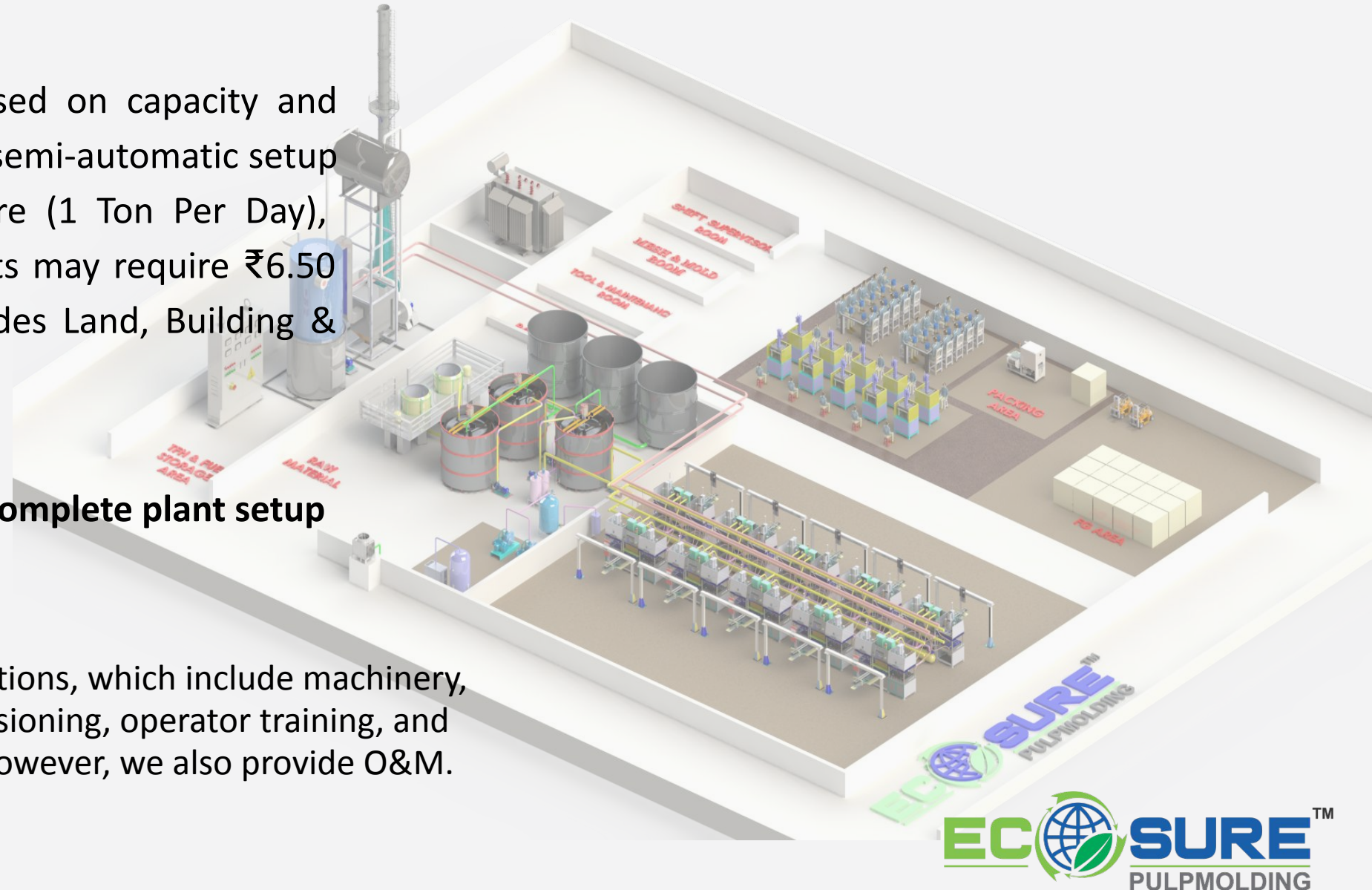
The investment varies based on capacity and automation. A small-scale semi-automatic setup can start from ₹3.50 Crore (1 Ton Per Day), while fully automatic plants may require ₹6.50 crore or more. (this excludes Land, Building & working Capital)

## 23. Does Ecosure provide complete plant setup (Turnkey) solutions?

**Ans.**

Yes, we provide Turnkey solutions, which include machinery, moulds, installation, commissioning, operator training, and ongoing technical support; however, we also provide O&M.

(Explained on next page)



### Step 1: Project Consultation & Feasibility Study

- Understand client's business goals, end product (tableware, packaging, trays, etc.), and raw material availability.
- Assess site conditions area, power, water, steam, and manpower.
- Conduct ROI analysis to determine project feasibility.
- Recommend suitable capacity (e.g., 3 TPD, 6 TPD, 10 TPD, etc.) based on demand and investment.

### Step 2: Custom Design & Engineering

- Develop **2D and 3D plant layout designs** as per available land and workflow.
- Engineer **mass balance and water balance calculations**.
- Prepare utility list (power, air, steam, and water requirements).
- Design **piping, civil foundation drawings**, and production flow planning.

### Step 3: Equipment Manufacturing

- Manufacture all **core machines** pulp preparation system, forming machine, hot press, trimming, and packaging lines.
- Fabricate molds (custom shapes, trays, or tableware designs).
- Conduct in-house testing for quality, precision, and performance.
- Obtain necessary **certifications and quality control approvals (ISO, CE, etc.)**.

### Step 4: Shipping & Installation

- Pack and export equipment safely with detailed labeling.
- Supervise **mechanical, electrical, and pneumatic installation** at client site.
- Connect utilities power, water, and air systems.
- Ensure complete line alignment and leveling.

### Step 5: Commissioning & Training

- Perform **dry and wet run trials** of the system.
- Optimize process parameters pulp consistency, temperature, pressure, and vacuum.
- Train client's operators and engineers on full plant operation, maintenance, and troubleshooting.
- Deliver **operational manuals, SOPs, and maintenance guidelines**.

### Step 6: After-Sales Support & Optimization

- Offer **remote technical assistance** and regular performance checks.
- Supply **spare parts, molds, and consumables**.
- Provide **Annual Maintenance Contracts (AMC)**.
- Support continuous improvement productivity, yield, and cost optimization.

### Step 7: Sustainability & Growth Support

- Assist clients in obtaining **eco-certifications** (compostability, biodegradability).
- Guide in **product diversification** tableware, fruit trays, industrial packaging, etc.
- Help connect with local buyers or government eco-initiatives.

## 24. What are the space and utility requirements?

Ans.

- **Area:** Approximately 15,000 sq. ft. for a 3 TPD plant, scaling up with capacity
- **Power:** Varies with capacity (e.g., 3 TPD requires ~237 kW). A detailed specification is provided based on the chosen model
- **Utilities:** All machines require electricity, water, an air compressor, Vacuum system and a Thermic Fluid Heater (TFH)

## 25. What is the delivery timeline for machines and complete plant setups?

Ans.

- **Single Machine Dispatch:** Individual ECOSA-10095 machines are typically manufactured 16 semi-automatic and 4 Fully Automatic every month.
- **Complete Plant Setup:** Requires approximately 6 months after advance payment, followed by 2 months for installation and commissioning

**26. What are the requirements for the Thermic Fluid Heater (TFH)?**

**Ans.**

Each machine requires a TFH with a capacity of approximately 1,00,000 Kcal. Compatible fuels include biofuel, wooden briquettes, gas, and oil.



## 27. Is a Zero Liquid Discharge (ZLD) system included in the standard fully automatic Partner Factory package?

Ans.

In Ecosure's standard Fully Automatic Partner Factory package,

### ◆ For the BOP (IntelliFib) Stock Preparation System

- The entire system is engineered to recycle and reuse process water continuously.
- Water from pulp refining, forming, and vacuum recovery stages is collected, filtered, and returned to the preparation tanks.
- Only a small percentage of water loss occurs through evaporation or carry-over with the finished product.
- As a result, no wastewater is released outside the system, ensuring ZLD operation.
- This not only conserves water but also stabilizes pulp consistency and reduces chemical and utility consumption.

### ◆ For Integrated Pulp Mill Plants

- While our BOP system ensures internal water reuse, in large pulp mills that handle raw fiber digestion and washing, we recommend an ETP (Effluent Treatment Plant).
- The ETP ensures that all washing and bleaching effluents are treated, clarified, and reused, achieving full compliance with ZLD environmental norms.
- Ecosure supports clients with mass balance and water balance designs to help integrate ZLD principles from day one.

## V. Operations & Maintenance

## **28. What level of skilled labour is required?**

**Ans.**

Operating the machine primarily requires semi-skilled labour for loading and monitoring after initial training. However, maintenance and mould-changing require at least one or two highly skilled technicians (electrician/mechanical fitter) per shift.

## **29. Do you handle installation and provide training?**

**Ans.**

Yes. Our engineers handle complete installation and commissioning. We also provide thorough operator training to ensure smooth and efficient operation.

## **30. What maintenance is required and how often?**

**Ans.**

General maintenance is advised once per week and does not require special equipment.

**31. What kind of after-sales service and support is provided?**

**Ans.**

We offer comprehensive after-sales service, including 24/7 technical support, periodic maintenance, spare parts supply, and service agreements. **Toll Free 1800 202 3353**

**32. What warranty is provided with the machines?**

**Ans.**

We offer a 12-month warranty against manufacturing defects, backed by reliable after-sales service and guaranteed spare part availability.

**33. What is the guaranteed response time for a major technical breakdown?**

**Ans.**

Details are provided in the service agreement; typically, we aim for a swift response to minimise downtime.

## FRUIT & EGG PACKAGING



# VI. Product Quality & Characteristics

## INDUSTRIAL PACKAGING



## ELECTRONICS PACKAGING

## MEDICAL DISPOSABLE TABLEWARE / FOOD PACKAGING



**34. Are the products waterproof and oil-proof?**

**Ans.**

Yes, with the addition of specific food-grade binding agents

**35. Are the products microwave and refrigerator-safe?**

**Ans.**

Yes, they are suitable for use in microwaves and refrigerators.

**36. How does Ecosure ensure product quality and a competitive edge?**

**Ans.**

Ecosure maintains strict oversight of the entire manufacturing process and implements rigorous quality assurance protocols to ensure superior wet strength, surface smoothness, and precise trimming.

**37. What is the water and oil holding capacity?**

**Ans.**

Products have been tested for 1 hour; however, a safe commercial commitment of 3–4 hours is maintained, as these are designed as disposable products.

**38. Can colored or printed products be made?**

**Ans.**

Yes, vegetable-based dyes can be used for colouring, and printing is possible on the finished products.

# VII. Business, Financial & Partner Factory Model

**39. Can I scale my production as my business grows?**

**Ans.**

Scaling is possible and best achieved by **designing modular equipment and utilities for future growth**. If you plan to reach **15 TPD** later, install equipment sized for 15 TPD (or modular units that sum to 15 TPD). You can start production at a fraction of the installed capacity (commonly **~20–30%** of installed capacity) and ramp up, but operating continuously at very low load can reduce efficiency and may require additional controls.

**40. What are the financing or marketing assistance options available?**

**Ans.**

We guide investors with flexible financing options. For larger plants (e.g., 6 TPD minimum), a buy-back policy for the manufactured products is available in select cases. A dealership and distributor-based network model is suggested for effective market reach.

#### 41. Where is Ecosure located, and which markets do you serve?

**Ans.**

We are headquartered in Noida, India, with a Manufacturing Unit in Indore & installations across the country and a growing international presence, exporting machines to support the global shift towards sustainable packaging.

#### 42. What are the terms for financing and buy-back guarantees?

**Ans.**

- **Financing:** Flexible options are available through affiliated partners; terms vary.
- **Buy-Back Guarantee:** Applicable for plants with  $\geq 6$  TPD capacity. Pricing is based on cost-plus-margin, covering 50–100% of monthly production based on mutual agreement.

#### 43. What specific sales and marketing support is provided to Partner Factory?

**Ans.**

Ecosure provides support in lead generation, national contracts, and optional buy-back agreements. Marketing, packaging, and branding guidance are also available.

**44. Does the Partner Factory agreement include exclusive territory?**

**Ans.**

Yes, exclusive operating territories (e.g., city or district) are defined in the Partner Factory agreement.

**45. What is the duration of the Partner Factory agreement?**

**Ans.**

Minimum 3 years, with renewal options.

**46. Can Ecosure connect me with existing Partner Factory owners?**

**Ans.**

Yes, we facilitate references for prospective investors.

**47. Do you help you get a subsidy?**

**Ans.**

Yes, we will guide the investor.

# VIII. Certifications, Compliance & Export Support

#### **48. How does Ecosure assist with certifications?**

**Ans.**

We provide guidance for obtaining ISO, compostability, and food-contact safety certifications, including testing and approval guidance.

#### **49. Who bears the cost of certifications?**

**Ans.**

The partner factory typically bears the costs, but Ecosure assists in the process.

#### **50. Does Ecosure provide guidance on the export market or buyer contacts?**

**Ans.**

Yes, we offer guidance and can connect Partner Factory with export buyers.

# IX. Risk, Insurance & Legal

**51. Do I need insurance for the plant?**

**Ans.**

Yes, insurance for fire, machinery breakdown, and product liability is recommended.

**52. Who is responsible if products fail quality checks?**

**Ans.**

The Partner Factory is responsible for maintaining production quality as per Ecosure standards.

**53. What happens if the market slows down or sales are low?**

**Ans.**

The buy-back guarantee (for eligible plants) and ongoing sales support help mitigate this risk.

# X. References & Trials

**54. Can I run a trial or pilot production before full installation?**

**Ans.**

Pilot production options are available upon request and subject to discussion.



Address :

**Ecosure Pulpmolding Technologies Ltd**  
**Regd. Office: 27, Block B, Sector 132, Noida,**  
**Shahpur Govardhanpur Bangar, Uttar Pradesh**  
**201304, India.**

## CONTACT US

[www.ecosurepulpmolding.com](http://www.ecosurepulpmolding.com)

[info@ecosurepulpmolding.com](mailto:info@ecosurepulpmolding.com)

**+91-9643762650**

**+91-9873003226**



 **JOIN US.**  
**SAVE OUR**  
**PLANET!**

**AS THERE IS NO**  
**"PLANET-B"**