

# **ECO PACKAGING SOLUTIONS** *Manufacturers of Paper Pulp Molded Trays*

Mob.: +91-8699900300 | +91-8262999976 Email: info@insigniaprojects.in Web.: www.insigniaprojects.co.in | www.insigniaprojects.in Address: NH105, Village Tahliwala, Tehsil Baddi, Distt. Solan, Himachal Pradesh 174101, INDIA **Save money and save the environment** Our purpose is to support, help, design and promote packaging, through dedication and a passion to remove plastic but also understand the commercial needs.

# **The Marvels of Pulp**

There is no question that in today's market that both consumers and retailers are more aware of how their decisions are affecting our planet when it comes to packaging.
Few would argue that there is a great benefit in developing products and packaging that are biodegradable.



#### Pulp

Unlike some newer eco-friendly materials, molded pulp is proven. It has been used for decades and its technology and supply base are very mature and reliable. Notwithstanding this the product itself is extremely strong and versatile providing packaging solutions for a vast variety of products.



# **Clampshells**

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Many packaging designers don't give any consideration to molded pulp when looking for a clamshell or other enclosed retail packaging containers but hinged molded pulp containers have been used for decades as egg cartons. Through our customer partnerships, we have created several clamshell designs that are now being used through major online retail suppliers.



# **End Caps**

Designed properly, molded pulp end caps can provide the shock and vibration resistance required for many packaging applications. We have supplied several furniture manufacturers with molded cornets and channels to support their products in transit.



#### Trays

Anyone who has ever had to carry a few drinks from the concession stand to their seat at a sporting event is familiar with molded pulp trays. These trays are designed specifically to house products/components that need to be held secure, many goods are delivered with tray molding supporting the product, i.e. your new computer.

# Why us?

At **INSIGNIA PROJECTS** we have watched, listened and been appalled by what plastic is doing to the environment, we are proud that we can source and create alternatives to a vast percentage of packaging solutions. We believe that we can support you through the process to make a change to create a greener approach to how you package your products. We would work with you – our team is your team. We are humbled to be asked to work through any packaging request, large or small.

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# **Removing Plastic**

Global companies are working towards using 100% reusable, recyclable or compostable packaging by 2025.

Packaging is very much a hot topic, but some of the solutions being voiced make very little environmental sense. Business should use this time to make 'meaningful changes' with real long-term benefits for the environment.

The race is on to find sustainable solutions. A success story and a disaster!

Plastic is both a success story and a 'global disaster', at the same time! The rise of single use plastics has been a result of its super-flexibility and suitability for a wide range of packaging applications.

Changing consumption patterns globally, has resulted in the increase of this lightweight packaging, which allegedly, not only protects, but in the case of some food items, enhance product shelf life. But guess what, so does Paper .....?

There is no denying that the failure to address the littering, mainly caused by irresponsible consume behaviour, along with the challenges faced with recycling some polymer types has certainly had wide reaching impacts on our land and marine environments globally. As you will see from the statement below the clean up in our oceans alone is immense and there no quick fixes.

Ocean currents concentrate plastic in five areas in the world: the subtropical gyres, also known as the world's "ocean garbage patches". Once in these patches, the plastic will not go away by itself. The challenge of cleaning up the gyres is the plastic pollution spreads across millions of square kilometres and travels in all directions. Covering this area using vessels and nets would take thousands of years and cost billions of dollars to complete. How can we use these ocean currents to our advantage?

There are many innovative studies and ideas to support the use of paper and biodegradable products, bottles made from paper, bags made from seaweed to name a couple, there are always solutions to be found. Sometimes they are the unusually and other times they are more conventional. Either way there are environmentally friendly solutions to be sourced, this is what we strive to work towards, looking at both the short and longer terms.

Sadly, the failure to address the waste and pollution issues coupled with the challenges faced with recycling some polymer types, it has certainly had wide reaching impacts on our land and marine environments globally.

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So where do we fit in, apart from the fact that we are passionate about innovate solutions for your packaging needs, we absolutely want to work in a 'trusted partnership' to support our customers on their journey from plastic to paper packaging.

Finding the path to real packaging solutions

Luckily, the packaging we create is typically quite innovative and is used to responding to environmental legislation, as well as requirements from leading manufacturers and retailers to increase recyclability of materials or to replace substances of concern.

To understand the full picture, we would happily engage with you to look at the challenges that are faced by business. We have a very much consultative approach to what we do, we are sympathetic to the challenges and understand that there may be limitations but also opportunities to provide sustainable solutions for various packaging needs, no packaging requirement is too small we are happy to talk. Advice costs nothing ...

Please feel free to contact us direct we are only an email and a phone call away.

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#### **Molded Fiber:**

# **Different Types and 7 Unique Applications You Need to Know Of**

The environmental impact of polyurethane foam, plastic products and the rising pollution levels across the globe are the main reasons why moulded fibre products have gained rapid commercial importance in the recent years. According to Goldstein Research, the global green packaging market valued USD at 139.09 billion in 2016. It is expected to reach USD 230.19 billion in 2024, growing at a CAGR of 6.50% over the forecast period.

**Molded fiber**, also known as molded pulp, is usually composed of biodegradable raw material such as recycled paper, newsprint, cardboard and other natural fibers like sugarcane, bamboo, and wheat straw. Molded pulp products can later be recycled as well. Thus, molded fiber can reduce environmental waste and save trees.



picture source: http://inhabitat.com/modern-paper-pulp-furniture-looks-like-giant-egg-cartons/

Though molded fiber is often associated with egg trays, it has become a sustainable resource for various primary and secondary applications across industries. The applications are getting increasingly sophisticated as the molding technology continues to evolve.

Before looking into the various applications, however, let's learn about the various types of molded pulp first.

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# **Types of Molded Pulp**

Based on the manufacturing process, the types of raw materials used, and the application, molded pulp is classified into the following four types.

#### **1. Thick-Walled Pulp**

Thick-walled pulp is the thickest molded pulp used for manufacturing packaging products for shipping and transportation. It is primarily composed of scrap and kraft paper and cardboard. The products usually have an unfinished surface on one side, with a moderately finished one on the other. The thick and rustic profile makes it the ideal application for making edge protectors for heavy equipment.

#### 2. Transfer Molded Pulp

Transfer molded pulp is slightly thinner compared to the thick-walled variety. As the pulp is transferred from one mold to another during the manufacturing process, it is called transfer molded pulp. As a result, both sides are finished properly, which renders them a polished look and texture. It is perhaps the most popular type of molded pulp out there. The most common applications include egg trays, fruit and vegetable trays, slipper pans, wine shippers, and end caps.

# 3. Thermoformed Fiber Pulp

The manufacturing process for thermoformed fiber involves the use of heated molds. They are used to make the material denser and create precisely shaped products. Due to their super finished look, they are often used for refined molded tableware such as dinner trays, plates, cups, and soup bowls.

# 4. Processed Pulp

As the name suggests, processed pulp undergoes secondary processing such as coating, printing, hot pressing, trimming, and an addition of special slurry additives. As the finished products possess similar properties to expanded polystyrene, processed pulp makes an excellent cushioning material.

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# **Applications**

Now that you have a fair idea of the different types of molded fibers and their features, let's review their various applications.

# 1. Egg Trays

The invention of molded fiber egg trays has been no less than a miracle for the poultry industry. As, Plastic, polystyrene, and folded papers have been used for packaging, but without much success. Throughout history, the industry had struggled to find an affordable, reliable, and ecofriendly way to transport eggs until the invention of the molded paper pulp tray.



However, the predecessor to modern egg trays has been around for more than a century, the first ever egg carton design was patented in 1969 by United Industrial Syndicate in Maine. Earlier, people used metal boxes with cardboard inserts to transport eggs by rail and road. However, the arduous manufacturing process and the limited cushioning ability were the discouraging factors. Nevertheless, things changed for good with the introduction of molded egg trays. The porous fiber material of molded fiber provides better ventilation. The shock absorption properties can protect eggs from breaking during rough handling. They also help keep the eggs free from infections. As a result, the count of broken eggs has reduced significantly over time. The smallest egg cartons can hold six to twelve eggs, making it easier for end buyers to carry them home safely.

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# 2. Fruit and Vegetable Trays

When the molded pulp egg trays became popular, the agriculture industry started experimenting with molded pulp trays to transport fruits and vegetables around the same time. Just like egg cartons, fruit and vegetable trays also became popular over the years. Apart from providing continuous ventilation through the micro pores, the porous nature of the molded fiber absorbs moisture from fruits and vegetables. Thus, molded pulp trays can keep their freshness intact for longer.



As no other packaging material can meet these hallmarks, molded fiber trays are usually used to transport several types of fruits including apple, peach, orange, and mangoes. In the era of supermarkets, attractive packaging is necessary even for fruits and vegetables. Colored and printed molded pulp trays have been found advantageous to package the goods in the most presentable manner possible.

#### **3.Compostable Plant Holders**

Any gardener worth his salt knows that growing seedlings in plant holders is the best way to grow plants. However, transferring delicate plantlets from plastic or polyethylene containers into the soil is a daunting process. Even the slightest mistake can cause the transferred seedlings to weather eventually. That's why most people use biodegradable seed starting pots to start their gardens.

Though eco-friendly greenhouse and nursery containers made from peat and coconut coir have been around for years, the popularity of compostable molded fiber pots has risen recently. Watering them initially can be a bit harder, but they can hold more water compared to peat and coconut coir pots, making them a better option for seed starting. In addition, they are durable and inexpensive.



#### 4. Wine Shipper

There is no better packaging material than, molded fiber bottle holders, whether storing wine in a warehouse or shipping it across the country. These holders can readily absorb the shock during transportation, preventing any damage to the delicate glass bottles. The nesting design also helps save space, reducing shipping costs significantly.



#### 5. Edge Cone or Corner Cap

Molded pulp edge cones and corner caps can serve as ideal packaging solutions for consumer electronics, ceramics, and furniture. Unlike wine bottles and eggs, these products are comparatively sturdy. However, their edges and surfaces are prone to damage. Molded fiber corner caps can readily absorb shocks during transit, protecting these appliances and goods from damage. The caps are almost as sturdy as foam and plastic packaging materials, but relatively cheaper and recyclable. Packaging materials are also available as trays, clamshells, and cushions.

#### 6. Pulp Molded Bubble Wrap & Pack

Moulded Fibre Bubble Sheet may be a very eco-friendly option for the voids fillers and substitute for bubble wrap. Many people are always on the hunt for greener options and ways to reduce our tread upon the earth. This describes the delight of bringing this fantastic product to the marketplace: thrilled beyond belief to share with you our green alternative to bubble wrap and foam!



#### 7. Customized Applications

Apart from the various applications mentioned above, most molded fiber product manufacturers also provide customized products tailored to meet their client's requirements. You can get customized packaging products for both, heavy and delicate items at relatively affordable rates.



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#### **Conclusion**

The demand for green packaging is going up as people are becoming increasingly aware of the environmental impact of the products they purchase. Molded fiber products are not only eco-friendly, but also an affordable alternative to foam and plastic products. This post explains in detail the various types and applications of moulded fibre products, from egg cartons to customized packaging for other products. Tell us about the products you are using to engage in sustainable practices while answering directly to consumer needs in the comments section below.

#### Why Use Molded Pulp Packaging?

- Molded Pulp is tough and resilient
- Molded Pulp products can be reused
- · Molded Pulp Packaging Products protect against shipping damage
- Molded Pulp products are economical
- · Molded Pulp interior forms are the best value for shipping damage protection
- · Molded Pulp packaging products are easy and ready use
- · Molded Pulp packaging resists repeated shocks
- Molded Pulp is appreciated by users customers because of easy disposal
- Molded Pulp packaging products have been tested in the laboratory and in use.
- · Molded Pulp packaging can be designed to reduce inventory of packaging materials
- · Molded Pulp packaging has thousands of satisfied customers
- Molded Pulp can be contoured to fit many products.
- Molded Pulp products are environmentally compatible
- · Molded Pulp packaging is used by a number of high tech companies
- · Molded Pulp products can use many types of waste paper materials keeping them from landfills
- · Molded Pulp products consume less space in trucks for shipment
- Molded Pulp can be thermoformed to produce a high quality appearance
- Molded Pulp products are produced without the use of toxic materials
- · Molded Pulp Products produce no toxic materials when incinerated
- Molded Pulp Products are used for point-of-purchase packaging
- Molded Pulp is cost effective, high performance packaging
- Molded Pulp products consume less space in land fills by weight
- Molded Pulp products can be used in automated packaging processes
- · Molded Pulp can be shaped in almost an infinite number of configurations
- Molded Pulp is a true Green packaging material.
- Molded Pulp can be molded into complex shapes
- · Molded Pulp packaging products can be printed and embossed
- · Molded Pulp can provide competitively priced environmentally responsible packaging
- Molded Pulp can provide blocking and bracing as well as cushioning
- · Molded Pulp designed interior packaging products can reduce packing labor costs
- · Molded Pulp is the global solution for environmental packaging material
- Molded Pulp products are approved for furniture shipment by the National Motor Freight Assoc.
- · Molded Pulp can be used to protect large heavy items as well as small delicate products
- Molded Pulp disposal costs are minimal
- · Molded Pulp is neutral electrically and produces no static electrical discharges
- · Molded Pulp product manufacturing produces no waste or toxic materials
- · Molded Pulp packaging is not subject to ridged global environmental restrictions
- Molded Pulp uses renewable raw materials
- Molded Pulp interior packaging stabilizes and cushions packed products
- Molded Pulp packaging designs can reduce the number of packaging components
- Molded Pulp medical product packaging is acceptable for radiation and ETO gas sterilization
- Molded Pulp provides consistent durable high quality protective packaging
- Molded Pulp as interior packaging can aid in reducing corrugated box costs