

# THE MICRO-PAK PLASTIC RECYCLING FACTORY

Making a Genuine and Measurable Impact in Recycling









A core part of Micro-Pak's sustainability commitment is the establishment of our own thin-film plastic recycling factory in China which began operations in April 2023 and has the capacity to recycle over 10 metric tonnes per day. The factory is GRS (Global Recycled Standard) and ISO-certified.

By combining the recycling program with our sustainable range of products, Micro-Pak is uniquely positioned to help our customers achieve their own sustainability goals.

We offer a practical solution for brands to transition to 100% recycled packaging.





# **Exceed Plastic-Neutrality**

Remove at least <u>5 times</u> as much plastic from the waste stream every year than the amount of plastic created by our business.

Plastic neutral refers to a company that recovers and recycles the same amount of plastic that it uses.

# Supply High Quality Recycled Resin

Transform plastic waste into the highest quality 100% post-consumer recycled resin that will be used in the production of our own products, as well as sold to other manufacturers.

Your existing packaging suppliers can use our resin to make 100% recycled polybags and other packaging materials without changing their production.



## Offer Plastic Off-Set Credits

When a customer purchases any of our plastic-based products we will calculate the total weight of plastic used in those products and then deduct this from the total volume of plastic that we have recycled. This enables our customers to offset their plastic usage which makes their use of Micro-Pak products plastic neutral.

We will work with a third party auditor to ensure credits are measurable, traceable and verifiable.



- ✓ Your existing packaging suppliers can use our resin to make 100% post-consumer recycled polybags and other packaging materials without changing their production.
- ✓ High quality resin means high quality end products (clear polybags).
- ✓ Our resin is manufactured in the most environmentally friendly way possible: GRS 4.0, ISO 14001, ISO 9001, ISO 50001, SMETA 4-Pillar, ZDHC Supplier to Zero Level 1.
- ✓ Full Traceability: Transaction Certificates via GRS means we can trace the plastic to ensure your packaging is made from genuine recycled material.





## **Shredding Line**

The shredding line reduces the material to flakes in preparation for the washing line.

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## Raw Materials

All raw material is post-consumer waste that is pre-sorted to eliminate as many contaminants as possible.



## Washing Lines

The shredded flakes undergo a three-stage washing process to remove any remaining contaminants before pelletizing. Most recycling factories skip this step, resulting in contaminated and dirty finished product.





#### **Finished Product**

The finished product will be tested to ensure proper technical quality and compliance with all relevant restricted substance policies.

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The pelletizing process will turn the shredded and cleaned material into reusable plastic pellets.



#### Reuse

Micro-Pak will use the 100% post-consumer recycled resin in our own products and also sell it to other manufacturers.





#### ISO 14001 and 50001



#### Water Treatment

The three stage washing process requires a significant amount of water. We have added a water treatment facility that allows us to reuse 95% of required water. The 5% loss is from evaporation and final waste "sludge" that will be dried and disposed off properly.

#### Air Emissions Treatment

We have installed advanced air-emissions equipment to treat all emissions from the pelletizing process.

#### Future Enhancements

- Install solar panels for electricity generation.
- Use electric vehicles.

# FACTORY SNAPSHOT

- Name: Rolling Star (Hubei) New Material Co, Ltd.
- Location: Hubei, China.
- Certifications: GRS 4.0, ISO 14001, ISO 9001, ISO 50001, SMETA 4-Pillar, ZDHC Supplier to Zero Level 1.
- Current Recycling Capacity: 10+ metric tonnes per day.

- Sustainability: Equipped with water treatment (95% of water is re-used) and air emissions treatment equipment to minimize the environmental impact from operations.
- **Finished Product:** High quality 100% post-consumer recycled resin that will be tested for technical quality and for compliance with all relevant restricted substance policies.



We aim to contribute to alleviating the global plastic pollution problem in a measurable and meaningful way by:

- Removing initially 5X more plastic from the waste stream than we put in.
- Transforming plastic waste into high quality, GRS-certified 100% post-consumer recycled resin.
- Using the recycled resin in our own products to close the loop.
- Making high quality recycled resin more widely available to other suppliers so that brands can transition to 100% recycled packaging materials.
- Offering plastic offset credits to our customers.

## IMPACT FOR OUR CUSTOMERS





# Achieve Your Sustainable Packaging Goals with Micro-Pak's Plastic-Neutral Products and Offset Credits

- Anti-mold polybags with 100% recycled material.
- Anti-mold PE sheets with 50% recycled material.
- Anti-mold stickers with 30% recycled material.
- Plastic-free, biodegradable desiccants.
- Container desiccants with 100% recycled materials.

# Encourage Your Existing Suppliers to Source our Recycled Resin

High quality 100% post-consumer recycled resin is difficult to source. Your packaging suppliers can use our resin to make 100% recycled versions of their existing products (polybags, wraps, films etc.), without the need to modify their production lines.

