

Sustainable and Advanced Recycling Process for Recycled Down



SFRESH™ RECYCLED DOWN PROCESS



1. RECYCLED DOWN RAW MATERIAL

Our raw materials come from down products powered by DownPlus for recycling, reducing resource waste, and preventing harm to the environment caused by textile waste.

2. EXTRACTING

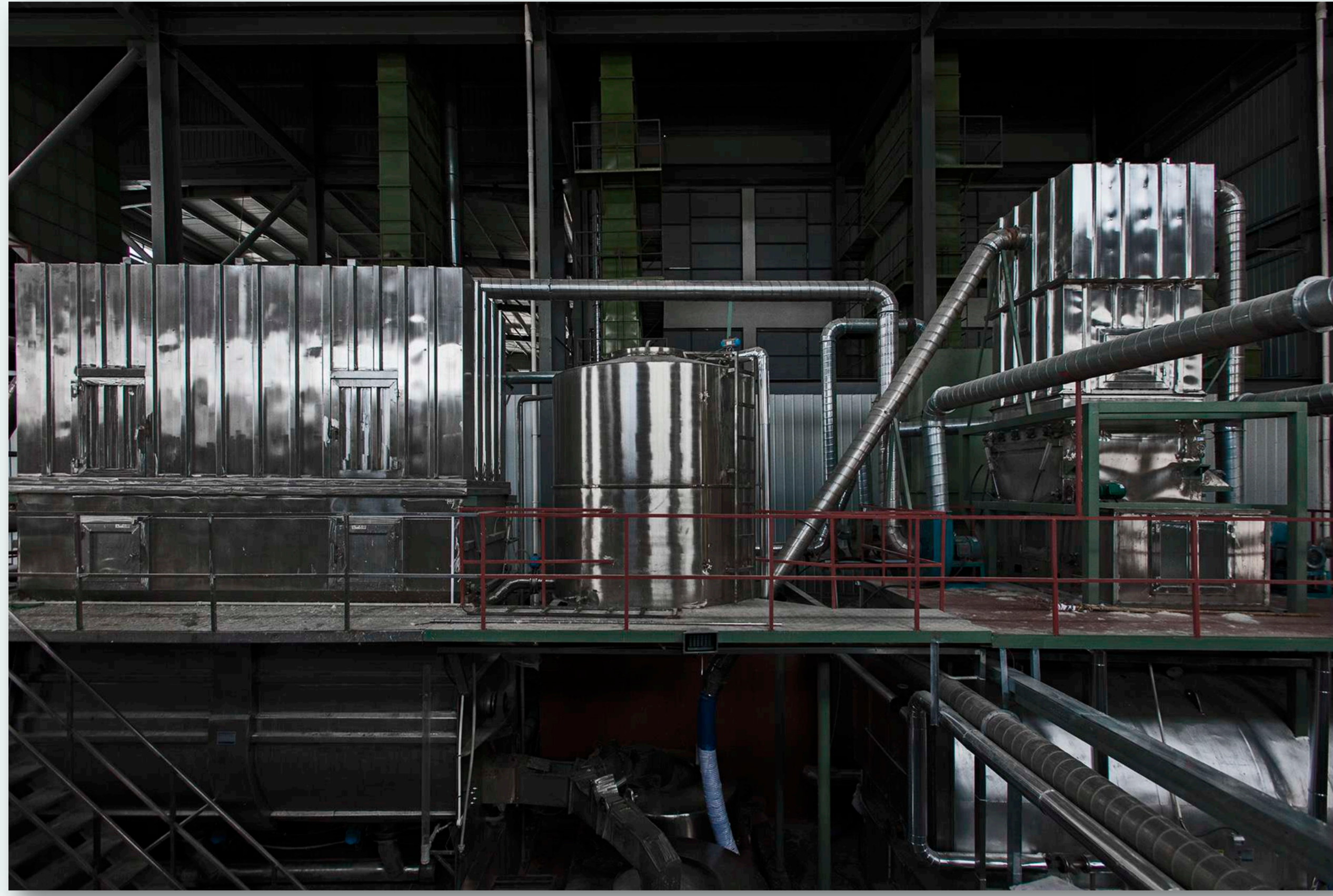
By scanning the DownPlus label information, we categorize recycled down products. Then we employ a two-step process involving manual and automated procedures to separate the down from the products.



3. 1ST DEDUSTING & SORTING

By utilizing gravity separation, we employ a three-chamber sorting machine to process the raw materials. Conducting the first dedusting process to eliminate dust and impurities from the materials.

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4. PREWASHING & 2nd Dedusting

Initiate the first wash of down using eco-friendly detergent.

Conduct the second round of dedusting, transporting the down through pipes to the rinsing machine.

5. WASHING & RINSING

Rinse with eco-friendly detergent and deodorizer for 15 cycles, each lasting 55 minutes, using recycled water. All production-generated wastewater undergoes eco-friendly treatment with a recycling rate over 90%, and a COD index around 25.



6. SPINNING

Spin dry using a high-speed centrifuge to remove most of the water after rinsing.

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7. DRYING & STERILIZING

Dry and sterilize the down at 135 degrees Celsius for 35 minutes to ensure the elimination of residual microorganisms and bacteria.

8. COOLING & 3RD DEDUSTING

Cool the down in the cooling chamber for 20 minutes.
Conducting the third round of dedusting.



9. SORTING

Gravity-separate the down in the six-chamber sorting machine to obtain different grades of down. The higher the cluster content, the higher the quality of the down, and the better its overall performance.

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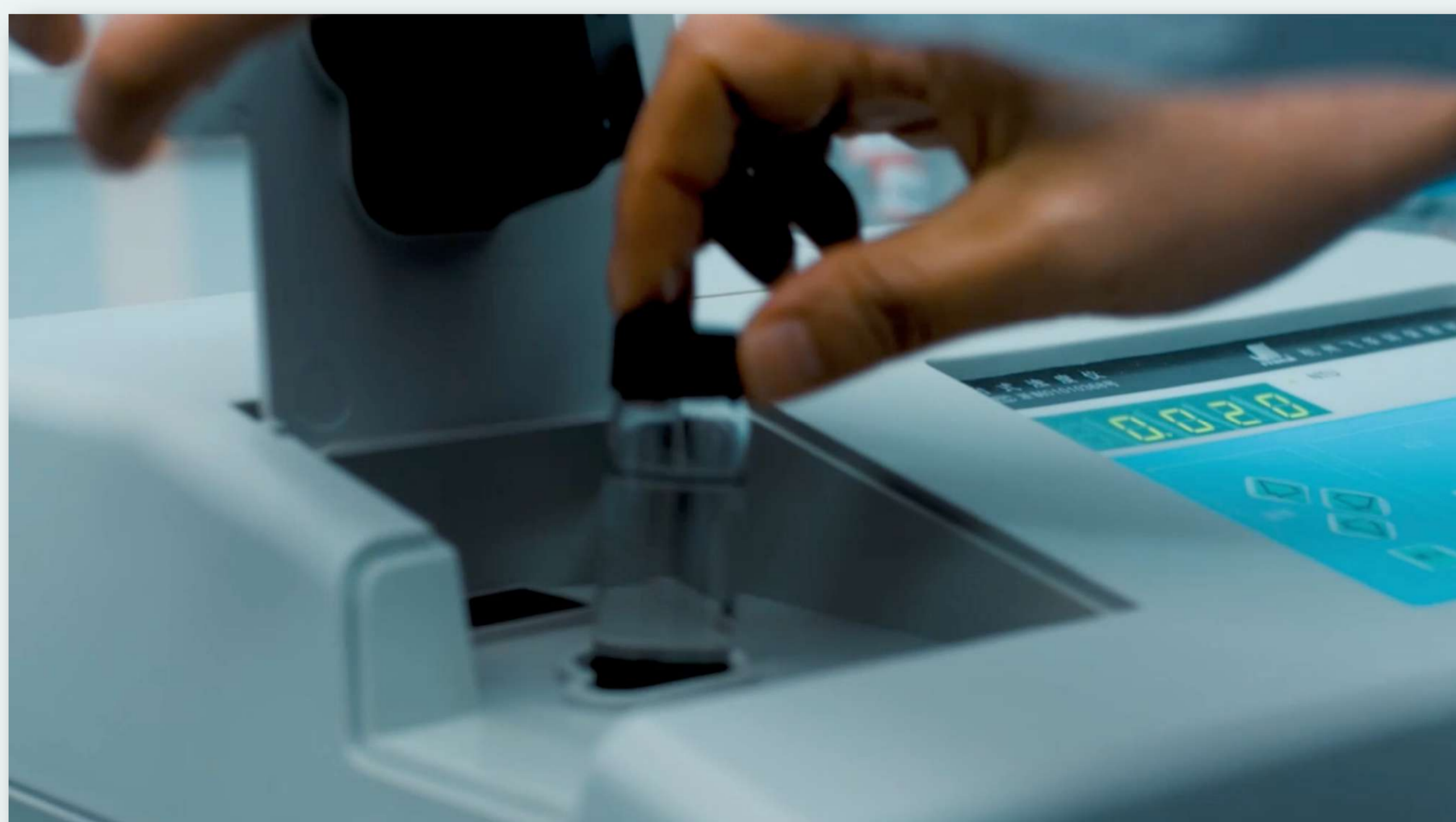
10. 3 TIMES METAL REMOVING

Remove iron powder, iron shavings, and other metal substances from down through a high-magnetic iron removal machine 3 times, preventing the deterioration of down, reducing unnecessary weight, and ensuring safe use.

11. MIXING & PACKING

Assembling down according to customer and product requirements to ensure it meets the specified content.

We use materials certified by FSC for packaging our products, ensuring that every step aligns with sustainable standards.



12. INSPECTION & TESTING

Utilizing advanced testing equipment, we conduct quality, cleanliness, and safety tests on the down at each production step, following all GRS and IDFL standards.



GREEN ENERGY

SOLAR ENERGY

Approximately 30% of our electricity used during production is generated from solar energy, with the aim of reducing carbon emissions. Furthermore, we have plans to enhance this percentage by implementing advanced solar equipment.



WATER RECYCLING

Our water recycling system allows us to minimize water wastage by reusing water resources, achieving an impressive 90% recycling rate.

WE GO EXTRA MILE IN SUSTAINABILITY

Recycling Down: We're proud to achieve impressive down and feather recovery rates, ranging from 80% to 90%. Each recoverable cluster and feather undergoes meticulous screening and processing to ensure we select only the highest quality down.

Upcycled Damaged Down: When clusters and feathers can't be recovered, we utilize innovative methods to repurpose them into organic resources. Given their origin as animal fibers, these damaged feathers are transformed into organic fertilizers, contributing to environmental protection and supporting sustainable agriculture.

Fabric Regeneration: Fabric processing is a crucial aspect of our recycling efforts, demanding precise handling. We collaborate with advanced fabric factories dedicated to fabric recovery and repurposing, transforming textiles into new, valuable materials and products while minimizing environmental burden.

Accessory Reutilization: No detail is too small for us to overlook, including product accessories like zippers and buttons. We ensure no component goes to waste by redirecting surplus metal and plastic parts to suitable material factories, where these accessories are reprocessed into innovative new products.

