

AERODRY CONNECT

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Know about us!

Dear Team, Partners, and Valued Clients,

Welcome to the first edition of Aerodry Connect, the monthly newsletter by Aerodry Plastics Automation Pvt. Ltd. Our objective is to bring you closer to the heart of our operations, from our latest product innovations to how our advanced Plastics Auxiliary equipment and Automation Solutions can assist you, this newsletter is designed to keep you informed of the ever-evolving world of plastics processing in various industry segments.

Whether you're a client, partner, or part of our extended community, we hope this newsletter becomes your go-to resource for everything related to Aerodry. Stay tuned for updates, insights, and stories that highlight the people, solutions, and values that drive our success.



This issue:

PAGE 01

Know about us!

PAGE 02

Trends in Polymer industry recycling?

India's Plastics Crisis

Pitfalls in Polymer Recycling

Government support for polymer recycling

PAGE 03

Plastic Recycling: A Crucial Step for a Sustainable Future

Aerodry's CHD Series Crystallisers for Efficient PET Recycling

PAGE 04

Technical Specifications
Salient Features

Trends in the Polymer Industry Recycling

- Market size value in 2025 is USD 5.07 billion
- The polymer waste management market is forecasted to hit USD 6 billion by 2030, growing at a 2.7% CAGR from 2025.
- The Asia Pacific region led the market in 2024, accounting for 36.9% of global revenue.
- 90% of PET produced is now being recycled
- In textiles, many known brands are leading the way by using recycled PET fibres in their garments.
- The global recycled polyester market is expected to grow by approximately 80.7% by 2030, with a CAGR of 7.6%.
- In packaging, recycled PET is widely used for producing bottles, jars, films, and tapes.
- Rigid plastics are being repurposed in automotive, houseware, and construction industries



India's Plastic Crisis

- In India, 26,000 tons of plastic waste are generated daily, and 3.5 million tonnes annually.
- Waste management is a critical issue.
- 60-70% of plastic waste doesn't get collected or processed
- The primary sources are: packaging plastics, white goods, construction sector, electronic waste, automotive plastics, and medical waste.
- In India, many plastic recycling centers operate without proper infrastructure or technology, leading to inefficient recycling processes.



Pitfalls in Polymer Recycling

- Inconsistent Crystal Quality
- Higher Impurity Levels
- Inefficient Separation
- Uncontrolled Growth
- Suboptimal Yield
- Scaling Up Issue
- Longer Production Times
- Higher operational costs due to inefficiency.
- Hard to process delicate or complex materials effectively
- Quality Control Issues

In India, Government support for polymer recycling includes:

- The Plastic Waste Management Rules (2016, amended in 2021) - Require stakeholders to handle plastic waste via EPR.
- National Clean Energy Fund: Grants for eco-friendly recycling R&D. Funding for advanced plastic-to-fuel technologies.
- Plastic Waste Management Fund: Supports recycling infrastructure.
- Tax Incentives: Rebates for using recycled materials.
- State Schemes: Subsidies, Grants, tax exemptions, & funding for new recycling technologies for waste management.
- The DST in India offers grants for polymer recycling R&D and supports recycling projects under the National Mission on Clean Ganga.



Plastic Recycling: A Crucial Step for a Sustainable Future

At Aerodry, we believe that for a sustainable future it is important to do efficient plastics recycling. To streamline this process as a leading manufacturer of advanced plastics auxiliary equipment, we offer cutting-edge equipment and automation solutions thus making this process easier and efficient. Our aim is to minimise waste and conserve resources thus supporting circular economy. With the use of our advance equipment and automations solutions you can turn plastic waste into superior quality recycled material having its application across various industries, ensuring a cleaner, greener tomorrow.

Let's drive a positive change with excellence in plastic recycling technology.



Aerodry's CHD Series Crystallisers for Efficient PET Recycling

Aerodry's CHD series crystallisers are designed for efficient PET recycling, providing continuous crystallisation of amorphous PET. This advanced technology quickly turns PET into a stable crystalline form, ensuring a smooth and fast recycling process. A key feature of the CHD series is its ability to speed up start up times, reducing downtime and boosting productivity.

By preventing issues like lumping that can disrupt material flow, the crystallisers help maintain consistent quality throughout the recycling process. Additionally, the continuous crystallisation process reduces energy consumption, making the system cost-effective. The CHD Series is ideal for PET recyclers who utilise large volumes of recycled PET material and to optimise their operations and achieve better results with less energy.

Aerodry's innovation leads the way in sustainable PET recycling, offering a reliable solution to meet the growing demand for recycled materials.





CHD Series Crystallizer - Technical Specifications

Model		CHD-400	CHD-500	CHD-800	CHD-1000	CHD-1500	CHD-2000	CHD-3000
Specification								
* Throughput (Kg./h) PET		125	175	250	325	500	650	1000
Agitator bin volume (Ltr.)400			500	800	1000	1500	2000	3000
Connected load (KW)		9	12	15	18	28	36	56
Power supply (V/Hz)		3ø +N, 415VAC, 50 Hz						
Dimensions (mm)	L	1750	1750	1750	1750	1750	1750	1750
	B	1000	1000	1150	1150	1400	1400	2000
	H	3900	3900	3900	3900	4500	4500	6000
Weight approx. (K.g.)		300	450	800	1000	1300	1500	2100

* Bulk density is considered 0.8 Kg./m³
For further details, contact our technical team

All specifications are subject to change without notice.

Salient Features of the Crystallizer

- SS-304 material of construction.
- Start - up program for auto or manual mode.
- Extra strong agitator arm to ensure long life.
- Sensors to ensure even crystallization.
- Removable section of cone thus easy maintenance.
- Inbuilt primary and secondary conveying for direct use.
- Energy savings options built in the system
- User friendly PLC controls.
- Dust separator in built.
- Open / close loop system as per application.
- Can be used as stand alone or with processing machine.
- Can be offered with Dehumidifier as per application.

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