

Three-in-One Plastic Dehumidifying Dryer

This all-in-one dryer integrates dehumidification, drying, and two-stage feeding into a single compact machine. It is widely used for various plastic materials, especially hygroscopic engineering plastics like PA, PC, PBT, and PET.



ADDITIONAL IMAGES



Product Overview

PRODUCTS DESCRIPTION

THREE-IN-ONE DEHUMIDIFIER
DEHUMIDIFICATION, DRYING, FEEDING



Compact, all-in-one system design for space-efficient factory integration.

Integrated Material Processing

This three-in-one dehumidifying dryer combines dehumidification, drying, and two-stage material conveying into a single, compact unit. Engineered for high-performance processing, it is specifically designed to handle hygroscopic engineering plastics like PA, PC, PBT, and PET. The system utilizes a closed-loop configuration to prevent moisture re-absorption and heat loss, ensuring consistent material quality and improved energy efficiency for your production line.

Key Features

FEATURES:

- 1 Integrate three functions: dehumidification, drying, and two-stage feeding.
- 2 The dehumidification part is equipped with a runner device, which can provide stable and low dew point air.
- 3 The stainless steel heat-preserving drying barrel is designed with a lower blowing pipe to dry the raw materials evenly and effectively prevent heat loss.
- 4 The closed loop delivery system can prevent raw materials from being contaminated or re-moisture.
- 5 Optional PLC control with LCD touch man-machine interface, centralized and convenient operation, can control the automatic operation of the whole machine.
- 5 Optional dew point detection device.

Workflow diagram highlighting the integration of dehumidification, drying, and feeding.

Suitable Materials

- PA (Polyamide)
- PC (Polycarbonate)
- PBT (Polybutylene Terephthalate)
- PET (Polyethylene Terephthalate)
- Engineering Plastics

Core Functionality

Dehumidification, Material Drying, Two-stage Feeding, Closed-loop Conveying

Performance Specifications

Performance Metrics

-40 °C
Dew Point

Design and Build



Detailed view of the insulated stainless steel barrel and air duct design.

Construction Details

- All-stainless steel insulated drying barrel
- Lower-blowing air duct design
- Compact, semi-open European design
- Cyclone exhaust device for heat efficiency
- Double cooler structure for stable dehumidification

Operational Details

Industry Applications

Injection Molding, Food Industry, Pharmaceuticals, Chemical Industry