

# Industrial Cylinder Dryer for Material Processing

The cylinder dryer utilizes radiation, convection, and conduction for efficient heat exchange. Its thermal efficiency is significantly higher than traditional dryers, offering substantial energy savings.



## ADDITIONAL IMAGES



## Overview

### High-Efficiency Industrial Drying Solution

This industrial cylinder dryer is a high-efficiency energy-saving solution designed for diverse material processing needs. Utilizing a three-cylinder design, it maximizes thermal efficiency by up to 50% compared to traditional single-cylinder dryers through advanced radiation, convection, and conduction heat exchange. It is engineered for stable operation in demanding environments, making it ideal for construction, chemical engineering, and foundry industries.

## Performance

### Thermal Efficiency Improvement

**50 %**

Higher than traditional dryers

### Heat Exchange Methods

Radiation, Convection, Conduction

## Applications

### Compatible Materials

- Coal slag
- Clay
- Iron ore
- Mixed materials
- Dry-mixed mortar
- Sand
- Chemical raw materials

### Target Industries

Construction • Chemical Engineering • Foundry Industry • Mining

## Technical Design



The robust internal structure and multi-layer design facilitate efficient heat exchange for various industrial materials.

### Multi-Layer Drying Path

Materials enter an inner layer for downstream drying via spiral movement, transition to a middle layer for counterflow drying to maximize heat absorption, and finally enter an outer layer featuring a rectangular multi-loop path. This extended contact time ensures thorough drying before the material is discharged by hot air flow.

### Mechanical Features

- Three-cylinder concentric structure
- Horizontal arrangement
- Supporting wheel drive (no bearings)
- Rectangular lifting boards
- Integrated pre-drying stage

### Stable Operation

Yes

### Maintenance

Easy maintenance due to compact structure