

# Cement Rotary Kiln

The cement rotary kiln is a large-scale cylindrical vessel used for high-temperature processing. It facilitates the transformation of raw materials into cement clinker through controlled rotation and heating.



## Overview

### High-Capacity Cement Rotary Kiln

This large-scale rotary kiln is a central component in modern cement production, designed to facilitate the chemical transformation of raw materials into high-quality cement clinker. The cylindrical kiln is engineered for slow, continuous rotation on heavy-duty rollers to ensure uniform heating and processing. Constructed from high-temperature resistant steel, it is built to withstand the extreme thermal demands of industrial cement plants.

## Technical Dimensions

### Kiln Size

**4.2 m**  
Diameter

**50 m**  
Length

## Mechanical Design

### Support Mechanism

- Multiple sets of support rollers
- Slow-rotation drive system
- Thermal expansion accommodation

|                |                                  |
|----------------|----------------------------------|
| Kiln Geometry  | Cylindrical                      |
| Shell Material | High-temperature resistant steel |

## Process Integration

|                    |  |
|--------------------|--|
| Integrated Systems | Preheaters, Dust Collection Systems, Clinker Cooling                     |
| Primary Function   | Heating and chemical transformation of raw materials into cement clinker |