

# Rapid Dryer



## The quick drying solution

### Proven design – highest efficiency – low investment costs

The Rapid Dryer is a paddle dryer for short-term drying. It is used for **short thermal treatments** of various materials at temperatures of **up to approx. 800 C.**

The key components of the Rapid Dryer are a compact stationary housing in welded design, a paddle-shaft unit (consisting of one or two paddle shafts which are integrated in the dryer bottom), special dryer internals for the hot gas and material conveyance, as well as connections for the hot gas and material supply. The product is discharged either through a gate valve for solids in the bottom of the Rapid Dryer or together with the stream of hot gas.

The moist and lumpy or fine-grained raw material is fed into the Rapid Dryer and dried in the housing in the parallel flow due to continuous supply of hot gas. The material is swirled

up by the paddle shafts which are integrated into the bottom of the dryer and provide the conditions for fast and very intensive vaporisation of the hot gas owing to convection. Depending on the material properties, the material can simultaneously be disagglomerated and subsequently, the product quality can be increased.

The retention time of the material can also be influenced by the design of the special internals; the material is transported within the dryer both by the paddle shafts and pneumatically by the hot gases.

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## Fields of application

Drying of materials, such as:

- Limestone, clay, bentonite, fluorite, chalk
- Blast furnace slag, pyrite, aluminium hydroxide
- Natural and synthetic gypsum, gypsum from flue gas desulphurisation
- Quartz sands, foundry sands, anode quarry
- Slurries,  $Mg(OH)_2$  flotation concentrate

## Main features

Highest variability and versatility of application

High heat efficiency in spite of reduced material heating

Modest space requirements

Lightweight design

Suitable for liquid and gaseous fuels (for external hot gas source)

Low maintenance and operating costs

## Design parameters

Overall length: approx. 3.5 to 11 m

Overall height: 1.4 to 8 m

Throughput: up to 250 tph (depending on the application)

## Contact

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Sales Agent

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