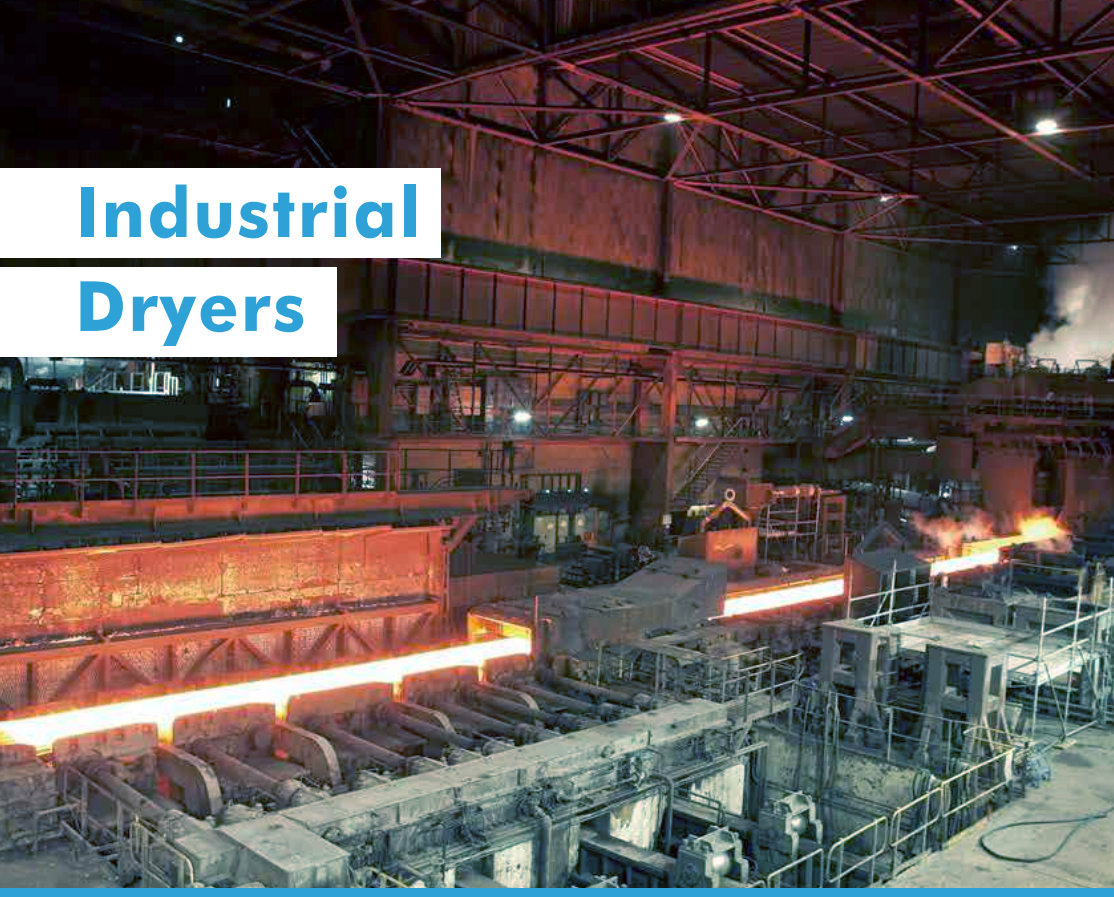
Industrial Dryers



India's Premier Engineering Solutions Company

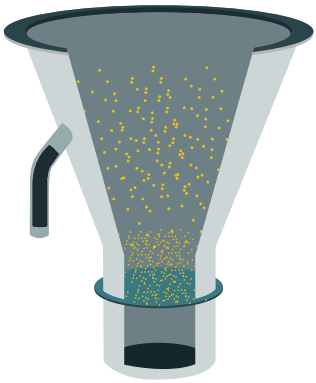
Involved In Design And Manufacturing
Of Customised Engineering Solution

KERONE

www.kerone.com

Industrial Dryers

Dryers also popularly known as Industrial dryers in the industries are very common and finds its application where it's needed to reduce or remove moisture or water content large chuck of material under the process of manufacturing, hence its always needed to provide as efficient, effective and controllable dryers with quick and controlled response time for removing of water/moisture content from the material with affecting any physical, chemical or biological property of material.



Industries Catered

- Pharmaceutical
- Food processing
- Plastic
- Rubber
- Chemical
- Automobile
- Textile
- Paper
- Ceramics
- Printing

Industrial Dryer Selection

- Physical form of feed
- Average throughput
- Expected variation in throughput (turndown ratio)
- Fuel choice
- Pre-and Post-drying operations (if any)
- Size of the material to be fed
- Physical construction of material
- Moisture content in material
- Particle density
- Level of moisture at output level
- Chemical / biochemical
- Microbiological activity
- Sensitivity isotherms (equilibrium moisture content)
- Construction material required
- Corrosion and Toxicity
- Space availability for dryer

Types of Dryers

• Drum Dryers

The drum dryer is very flexible in nature, its operation depends on the pressure of steam within the drum, speed of drum rotation, width of applicator and the ratio of drum speed rotations.

• Pneumatic / Flash Dryers

Flash dryers are direct drying units and are known as convective dryers. In pneumatic flash drying system particulate solids to be dried travels through the drying duct along with hot air and it get dried during transport in a hot gas stream.

• Rotary Dryer

Rotary dryers are one of the most common types of industrial dryer, utilised for large quantities of material with particles of size 10 mm or larger

• Spray Dryers

Spray drying is method of dehydrating fluids, solutions and thin slurries, it converts the fluids or slurries to powder form. Liquid or slurry material to be dehydrated is sprayed in the form of a fine droplet dispersion into hot airstream.

• Tunnel Dryers

Tunnel dryer commonly used to get manufactured with the hot air for drying of material, however the advancement in the heating technology has enabled the tunnel dryer with advanced and faster drying techniques such as microwave/ RF/ Infrared.

• Microwave Heating Dryer

Microwave is not a type of heat, rather it's a form of energy that are exhibited as heat by the means if their interaction with the material. It results in material to heat themselves, the mechanism of energy conversion used is dipole rotation.

• Fluidized Bed Dryers

Fluidized bed dryer provided the good solid mixing, high rate of heat and mass transfer and transportation of material. Fluidized bed dryer are more suitable for the drying of fine powder particle sizing from 10 to 2000 mm as compared to other conventional drying methods.

• Conventional Heating Dryers

The conventional dryers manufactured by KERONE of high quality. We manufacture various type of conventional dryer :

- Batch type
- Conveyorised type

• Radio Frequency Heating Dryer

The heat is generated within the material hence there is no losses in terms of conduction of heat in surrounding, radio frequency (RF) industrial dryers are highly controllable as the rate of heat production is proportion of radio frequency energy supplied to the materials.

• Infrared Dryers

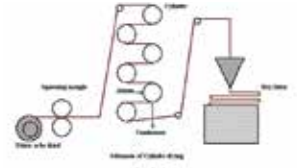
Infrared (IR) dryers are modern day industrial drying solutions for material surface, Infrared (IR) dryer uses the infrared radiations, and Infrared radiations are invisible electromagnetic radiation whose wavelength is longer than the visible light wave range between 0.78 and 1000 μm.

• Hot Air Dryer- Stenter

We hold upper hand in customizing the hot air dryers based on the heat exchanger such as Condenser, Vent Condenser, Re-Boiler and Sub-cooler based on the suitability of Clients process need.

• Contact Drying- Steam Cylinders/Cans

Contact Drying- Steam Cylinders/Cans are primarily employed for transitional drying rather than final drying and for predrying prior to stentering. Fabric/drying material is passed around a series of steam heated cylinders using steam at pressures varying from 35 psi to 65 psi.



Features

- Highly controllable design and technology
- Accurately calculated processing time
- Minimum handling
- Low cost of operation
- Controlled noise level
- Compact construction
- Minimum Maintenance
- Accurately calibrated
- Uniform drying temperature is assured
- Energy saving
- Less fuel consumption