

A large, horizontal, cylindrical industrial machine, likely a fluid bed dryer, with a metallic finish and numerous bolts around its circumference. It is situated in an industrial setting with structural beams and other equipment visible in the background.

Fluid bed dryer

Customised fluid bed dryers accommodating a wide range of feed rates

IHC Mining joined forces with Pyromak to become a leading global service provider and supplier of Fluid Bed Dryers (FBD). With a unique mix of world-class expertise and surety in delivery, we provide customised FBD solutions for a diverse range of commodities, tailored to suit your specific operational requirements.

Advantages

- ✓ various capacities and size ranges
- ✓ significant reduction in fuel and power consumption
- ✓ applications suitable for different industries and commodities
- ✓ minimised loss of fine materials.

Optimal design

FBDs are designed to remove moisture content from any fluidisable bulk material. Designs of the dryers, coolers and heaters are based on the Fluidised Bed principle.

Material in a fluidised state behaves as a liquid. It flows over and under weirs, maintains a level surface and exerts a hydrostatic head proportional to the bed depth.

The IHC Mining – Pyromak FBDs have minimum rotating parts allowing very low installation and maintenance costs. Fluidising, combustion, and exhaust fan have no contact with the fluidised material which reduces consumables and wearable parts.

Using minimal electric power and generating low emissions

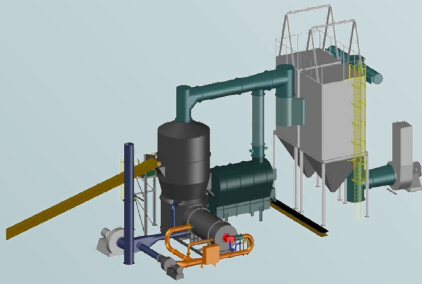
Compact with maximum heat transfer capacities

Fluid Bed Dryers are extremely compact compared to other drying/heating equipment, thereby minimising the plant floor space requirements and maximising the heat transfer efficiencies.

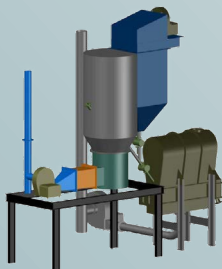
Features

- throughput capacities from 1.0tph to 400tph of solids
- FBD sizes ranging from 0.5m to 5m floor plate diameter.

These features also allow significant reduction on the overall fuel and power consumption required to achieve the desired moisture content after the drying process.



Fluid bed dryer and cooler system



Electric dryer and cooler with integrated baghouse

FBD solutions in different configurations

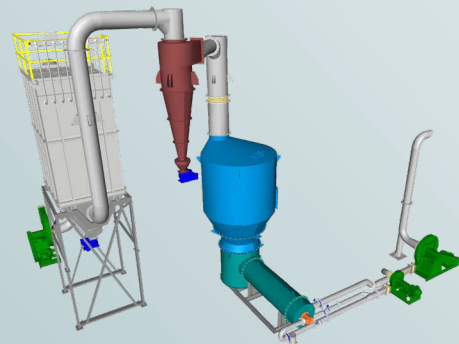
The FBD comes in different configurations to fit the needs of the operation or plant layout. These configurations are designed to minimise the capital expenditure and physical footprint.

IHC Mining's FBDs can be supplied with an integrated cooling system to optimise the product temperatures for the process conditions required by the rest of the plant.

Electrically driven to lower emissions

FBDs can be electrically powered, instead of the more traditional fuel sources such as natural gas, diesel or LPG, resulting in less CO₂ emissions and meeting industry sustainability requirements.

IHC Mining can also retrofit existing FBDs to make them electrically driven. In situations where sufficient electricity isn't available, FBDs can be powered by a hybrid combination of electricity and their existing fuel source.



Fluid bed dryer with cyclone and baghouse

Want to know what the opportunities are for your operation?

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