



Lime Kiln

Used to produce quicklime by the calcination of limestone (calcium carbonate)

The chemical equation for this reaction is: $\text{CaCO}_3 + \text{heat} \rightarrow \text{CaO} + \text{CO}_2$

This reaction takes place at 900°C (at which temperature the partial pressure of CO₂ is 1 atmosphere), but a temperature around 1000°C (at which temperature the partial pressure of CO₂ is 3.8 atmospheres) is usually used to make the reaction proceed quickly

Excessive temperature is avoided because it produces unreactive, dead-burned lime

Rotary kilns started to be used for lime manufacture at the start of the 20th century and now account for a large proportion of new installations

The early use of simple rotary kilns had the advantages that a much wider range of limestone size could be used, from fines upwards, and undesirable elements such as sulfur can be removed

Our lime kiln features in, convenient and reliable control of the production process, less wearing parts, high rates of operation, the Lime kiln also has strong structure, stable operation, low energy consumption, high-quality products, large capability from the kiln and so on advantages, we can also offer advanced efficient shaft preheater, five grade cyclone preheater

Technical features:

Take the 300T/d kiln as example, it can be regulated within 180 to 300T/d range without influencing quality and consumption targets

Chalk size: 400mm to 80mm

Size range ratio: 1:2

Kinds of fuel: natural gas, oil, cola dust, coke oven gas, coal gas of low heat value, and mixed fuel of all kinds of fuel (gas and gas, gas and liquid, gas and solid, liquid and solid, and more)

Lime products: fine lime and high activity (reaching 360mL, 4N HCL 10 minutes)

The ratio of lime stone under-firing and over-baking is 5 to 8%

Low heat wastage: they can make full use of heat energy when primary air passes, fuel gas is

preheated when secondary air passes, cooled lime is preheated, fuel is burned completely