

Discussion on Denitrification Technology of Ceramic Furnace

At present, the most widely used kilns in ceramic industry are open flame kiln car tunnel kiln, roller kiln and shuttle kiln, while the traditional coal-carbon kiln and electric heating kiln are seldom used.

[high temperature ceramic furnace](#)

Shuttle kiln: It is a kiln with intermittent firing.

[Microwave drying machinery and equipment](#)

It is similar to the structure of matchbox. The kiln car pushes the kiln into firing. After firing, it pulls out and unloads the fired ceramics. Kiln car is like shuttle, so it is called shuttle kiln.

2. Tunnel kiln: It is generally a long straight-line tunnel, with fixed walls and vaults on both sides and top, and kiln car running on the track laid at the bottom.

Combustion equipment is located on both sides of the middle of tunnel kiln, which constitutes a fixed high temperature zone and firing zone. Under the action of the chimney or induced draft fan at the front end of tunnel kiln, the high temperature smoke generated by combustion flows along the tunnel towards the kiln head, while gradually preheating the products entering the kiln.

This section constitutes the pre-tropical zone of tunnel kiln. In the end of the tunnel kiln, cold air is blown into the kiln to cool the products in the latter part of the tunnel kiln. After the products are heated by the cold air flow, it is pumped out and fed into the dryer as the heat source for drying green billets. This section constitutes the cooling zone of the tunnel kiln.

Roller kiln: Roller kiln is a continuous firing kiln, with rotating rollers as the carrier of the body of the tunnel kiln. Ceramic products are placed on a number of closely spaced horizontal refractory rollers.

The rotation of the rollers enables ceramics to be transferred from the kiln head to the kiln tail, so they are called roller kilns. With the implementation of environmental protection work in our country, environmental protection ceramic kilns will have greater use and promotion. Denitrification technology has become a necessary environmental protection measure for the operation of ceramic kilns.

It has become an important development direction of ceramic industry to select denitrification technology with many advantages such as short construction period, small transformation difficulty, saving investment and wide adaptability of reducing agent.

