

# ZIBO JINGGAN REFRACTORY IMPORT AND EXPORT CO.,LTD

Address:NO. 3, Yanhe Road, Boshan, Zibo, Shandong, China  
Email:wp@cnjingganrefractory.com/sdwenping@163.com  
Contact:Rose Tel/Wechat:+86-13275332819  
Tel:86-533-4188518 Fax:86-533-4188518

## Spinel Brick For Lime Kiln



### 1,Characteristics:

A,Good thermal shock resistance.the main mineral phases of the products are periclase ( $MgO$ ) and magnesia-alumina spinel ( $MgAl_2O_4$ ).the expansion coefficients of the two are different,solid state reaction at high temperature,a small crack and a pore are formed between the two,these tiny cracks and micro-pore can absorb energy and prevent the damage of the product when they are subject to stress and temperature changes in the use process. Therefore, the thermal shock resistance of the product is good.

B,Good volume stability.there is no iron in the product, and it does not react with carbon monoxide produced by fuel, resulting in volume shrinkage or expansion.therefore,there is no volume change effect in the product.

C,High temperature resistance.the product has low  $SiO_2$  content, so there are few silicate minerals with low melting point.they are all composed of minerals with high melting point, so they have good high temperature resistance.

D,Strong resistance to erosion.the main components of the product are periclase and magnesia-alumina spinel, and the silicate phase is very few, so the alkali corrosion resistance is strong.

E,There is no chromium in the product.it is an environmental protection product.

**2,Application:** Cement kiln, lime kiln, glass kiln, hot air kiln and other industrial kiln equipment.

### 3,Index:

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Item	JMA-5	JMA-10	JMA-15
MgO % $\geq$	85	80	80
Al <sub>2</sub> O <sub>3</sub> %	5-7	8-10	15-17
Apparent Porosity % $\leq$	18	18	17
Cold Crushing Strength Mpa $\geq$	40	40	40
Refractoriness Under Load(T0.6℃) $\geq$	1620	1650	1650
Thermal Shock Resistance $\geq$	6	8	10
Bulk Density (kg/m <sup>3</sup> ) $\geq$	2900	2900	2900

#### 4, (1),Production process

A,Mixing:select various granularity raw materials,carry out rational grading and proportioning,put the coarse and medium materials into the mixing machine and stir for 3-5 minutes,put in the binder and stir for 5-8 minutes,finally, add the fine powder and stir for 20-30 minutes.

B,Forming:select of reasonable brick press moulding,the unit weight of brick is  $\leq$ 5 kg,choose a brick machine of less than 300 tons,the unit weight of brick is  $>$ 5 kg,select 400-630tons brick machine,the unit weight of brick is  $>$ 30kg,select the 1000tons brick machine.

C,Dry:Pushing the formed green brick into the drying hole,orderly drying is carried out, so that the moisture content of the green brick is controlled below 1.0%.

D,Firing:The dried qualified products should be installed in accordance with the kiln loading method and reasonably matched,brick billet is sintered in the control of reasonable firing curve.

E,Picking, packaging, shipping:After the product is out of the kiln, the products are picking according to the product quality requirements, the qualified products are packaged reasonably, and the packaged products are stored in the warehouse, waiting for shipment.

(2),Storage:Spinel brick for lime kiln stored in ventilated, dry and rainproof environment for more than 12 months.

(3),Provide samples free of charge for user inspection

9.Good feedback of product use effect,the products have been exported to Australia, Oman, the United States.

10.We are a professional supplier, who can provide customers with free product technology, use and other issues.

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**Do you want to find a professional supplier of refractory products?**

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**Contact me:**

**Email:wp@cnjingganrefractory.com/sdwenping@163.com**

**TEL: 86-0533-4188518 / FAX: 86-0533-4188518**

**Rose:+86-13275332819(wechat/whatsapp number)**