

**The statement on the question of ‘the Contained Waste Energy per unit clinker production’**

To Tangshan Jidong Cement Co., Ltd.:

Regarding to your question whether the contained waste energy per unit clinker is the same or similar in the different condition of production capacity and raw material in the clinker production lines, the responses are indicated as below:

1. The energy consumption is different with the different processing technologies of clinker production lines. Two technologies, wet process and dry process, could be defined for the clinker production lines. The energy consumption is extremely different with the different technology of clinker production under the same production capacity. From the technical theory, however, the same technology of clinker production has the same theoretical energy consumption, which is not determined by the production capacity.
2. With the same clinker production technology, the raw materials have an influence for the energy consumption for the clinker production. This influence is mainly presented in the energy (heat) absorption (consumption) from the raw material to the clinker through a chemical reaction. The energy consumption difference, however, does not have an influence for such parameters as the temperature of kiln or the temperature of produced clinker.

As stated above, the main factor of influencing the sensible heat contained by per unit clinker is the processing technology, the difference of the raw materials and the production line scales can be ignored.

Hereby explained!

Hebei Building Materials Industry Design&Research Institute

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## 关于熟料携带废热量问题的说明

唐山冀东水泥股份有限公司：

就贵公司了解的“不同生产能力、原料条件下的水泥生产线吨熟料携带热量是否相同”一事，现回复如下：

- 1、不同的工艺方法的熟料生产线的能耗是不相同的，以工艺方法来分熟料生产线可分为湿法和干法两种，两条采用不同烧成工艺的生产线在相同产量的前提下能源消耗差别很大。但是相同工艺的生产线从工艺角度来说能耗是相同的与规模大小无关。
- 2、在相同的生产工艺下，原材料对熟料生产线的能耗是有一定影响的，这种影响主要在生料通过化学反应生成熟料时需要吸收的热方面（即熟料形成热），但能耗差异对炉膛温度、出窑熟料的温度等参数没有影响。

综上所述，影响单位熟料所携带热量的因素主要是工艺方法，原材料差别和生产线规模的影响可以忽略不计。

特此说明！

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