

## **Loesche hands over world's largest slag mill – LM 63.3+3**

**As a technological pioneer LOESCHE is following on from the success of the largest coal mill LM 43.4 in India and the world's largest raw meal mill LM 69.6 in Nigeria. This latest triumph involves the largest slag mill in the world, which already produces 255 t/h blast-furnace slag meal in Taiyuan, northern China.**

**Taiyuan** - In September 2011, LOESCHE was delighted by the order from the Taigang Group International Trade Co., Ltd. (China), which commissioned a LOESCHE vertical mill of the type LM 63.3+3 for grinding granulated blastfurnace slag for its customers. This was to be the largest slag mill in the world. In March 2014, the plant went into operation in the steelworks of TISCO, Shanxi Taigang Stainless Steel Co. Ltd in Taiyuan, China and attained a new record product rate with 255 t/h blast-furnace slag meal after only a short time.

In the steelworks of TISCO, the LM 63.3+3 has now been used for the pure grinding of granulated blast-furnace slag for the first time. The mill is driven by a motor with an output of 7400 kW, the most powerful motor to have been installed so far by LOESCHE in a mill. The projected guarantee values of 255 t/h granulated blast-furnace slag at a fineness of 4400 Blaine are reliably attained here. This is also ensured by the newly developed LOESCHE LDC classifier, used in the grinding plant and ideally customized to the LOESCHE mills.

*LM 63.3+3 in Taiyuan, China*

### **The LOESCHE Mill Type LM 63.3+3 – proven technology for cement grinding**

The first LOESCHE mill of the type LM 63.3+3 commenced production back in 2009 in Nallalingayapalli, India and has meanwhile proven its merit as a reliable mill for OPC + PPC cement. This was a technological challenge for LOESCHE at the time. After examining the feed material and diverse tests in the LOESCHE pilot grinding plant, LOESCHE recommended one large mill with a grinding table diameter of 6.3 instead of two smaller mills to the customer for his cement works in Nallalingayapalli. This was to achieve the planned product capacity of 360 t/h OPC or 355 t/h PPC. The advantage of one LM 63.3+3 instead of two smaller mills lies in the lower investment costs, as well as lower maintenance expense. The customer decided for this solution and was not disappointed at all. Up to date, the LM 63.3+3 in Nallalingayapalli works reliably and even attains a peak value of 367 t/h OPC at 3000 Blaine or 371 t/h PPC at 3.400 Blaine.

### **Background information: LOESCHE vertical roller grinding mill 2+2 and 3+3 system**

LOESCHE has developed the 2+2/3+3 system to improve grinding bed stability. Here upstream support rollers with up to 20% of the M-roller grinding pressure lie on the grinding bed to ventilate this. The process significantly improves the internal friction of the grinding stock on the table and results in much more efficient crushing. Using this technology, which LOESCHE launched on the market in 1994, it is possible to produce OPC with a fineness of up to 6000 Blaine and blast-furnace slag meal with a fineness of over 7000 Blaine. 300 mills of this type have already been sold throughout the world for the production of a wide spectrum of cement and slag types. The advantages of cement grinding with a LOESCHE vertical mill lie in the low specific energy consumption and in the option of attaining high throughputs with an individual machine, amongst other benefits.