MODULAR SYSTEM FOR IMMEDIATE MARKET ENTRY

Scan and watch animation!
Maximum flexibility with Pfeiffer’s ready2grind

Pfeiffer’s modular mill solution enables flexible use in any place, bringing cement producers closer to their customers. This compact system is suited to producing all types of cement – perfect for local cement producers and market entrants as well as for large construction companies aiming to expand their position by manufacturing cement on the spot. The ingenious design allows the ready2grind plant to be transported and mounted fast and efficiently with manageable costs – making it the perfect concept to respond rapidly to the changing needs of the local cement markets.

The advantages at a glance:
» highest reliability, proven concept
» modules in standard container sizes for cost-efficient transportation
» rapid delivery, installation and commissioning
» highest operational availability with moderate investment
» immediate market entry, short amortization, reduced investment risk
» maximum flexibility, to react to changing market requirements at short notice

Features:
» cement of any desired type
» energy-efficient grinding system
» different plant sizes available
» compact modular design
» flexible feed system
» pre-assembled modules in standard container sizes
» perfect for small-scale production
» also available for other materials such as limestone, gypsum, coal or similar
The ready2grind system is extraordinarily compact. The modules in standard container sizes are delivered preassembled. The grinding process is the same as that of bigger Pfeiffer grinding plants. The above flow sheet shows the process of cement grinding as an example. Clinker and additives are ground, dried, and classified in the Pfeiffer vertical mill. Product quality and fineness can be set within wide limits (up to 6000 cm²/g Blaine). The ground and dried product is separated from the process gas in a filter for entire dust collection which is followed by a fan. Downstream of the fan, the volume flow is divided: part of it is returned to the mill while the remainder is evacuated through the exhaust gas chimney.
The design of the ready2grind system is based on the Pfeiffer vertical roller mill technology approved across the globe and on the decade-long experience in developing innovative mill technologies. The Pfeiffer vertical roller mill at the core of the ready2grind solution guarantees the highest level of operational reliability.

Benefits of Pfeiffer vertical roller mills:

- lower electrical power consumption: up to 40% compared to ball mills
- few ancillaries required, in principle no mill building necessary
- maximum availability: minimum maintenance downtime
- very quick product change-over
- low vibration level
- grinding, drying and classifying, all in one machine

Standardized ready2grind systems for different throughput rates

<table>
<thead>
<tr>
<th>Product</th>
<th>Portland Cement CEM I</th>
<th>Limestone Cement CEM II / B - L</th>
<th>Ground granulated blast-furnace slag (GGBFS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fineness acc. to Blaine</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grindability kWh/t</td>
<td>18</td>
<td>22</td>
<td>15</td>
</tr>
<tr>
<td>Production rate t/h</td>
<td>28 / 65 / 74</td>
<td>23 / 53 / 60</td>
<td>33 / 77 / 87</td>
</tr>
<tr>
<td>Max feed grain size mm</td>
<td></td>
<td>40 / 60 / 60</td>
<td></td>
</tr>
<tr>
<td>Approx. yearly production rate t/a</td>
<td>up to 250,000 / up to 580,000 / up to 660,000</td>
<td>20 / 47 / 53</td>
<td>23 / 55 / 62 / 60</td>
</tr>
<tr>
<td>Installed mill motor power kW</td>
<td></td>
<td>630 / 1450 / 1640</td>
<td></td>
</tr>
<tr>
<td>Total installed power kW</td>
<td></td>
<td>about 1400 / about 2750 / about 3200</td>
<td></td>
</tr>
</tbody>
</table>
The world’s first modular system with a vertical cement mill - operating in Kenya since February 2017

Construction progress of R2G 1800 C-4

Client has prepared the site

Decoration and small issues

Starting

Growing

Nearly ready

End of installation procedure after 2 months
### SCOPE OF PLANT AND SERVICES

#### A. BASE PLANT MODULES

| A. 1 | Feed material dosing and feed hoppers |
| A. 2 | Material feeding to mill |
| A. 3 | Mill, classifier and ancillaries |
| A. 4 | Plant filter, hot gas generator and fan |
| A. 5 | Control system and drives |

#### B. OPTIONAL EQUIPMENT MODULES

| B. 1 | Product transport and storage silos |
| B. 2 | Packing and truck loading |
| B. 3 | Palletizing |
| B. 4 | Bulk loading |
| B. 5 | Big bag loading |
| B. 6 | Laboratory |
| B. 7 | Pre-feeding |
| B. 8 | Transformer station |

#### C. OPTIONAL SERVICE MODULES

| C. 1 | Operator training |
| C. 2 | Maintenance training |
| C. 3 | Service contracts |

---

**Gebr. Pfeiffer SE**
Barbarossastr. 50-54
67655 Kaiserslautern, Germany
Tel.: +49 631 4161 0
Fax: +49 631 4161 290
info@gebr-pfeiffer.com

**Gebr. Pfeiffer USA**
Tel.: +1 954 668 2008
info@gebrpfeifferinc.com

**Gebr. Pfeiffer India**
Tel.: +91 120 618 8900
info@pfeifferindia.com

**Gebr. Pfeiffer China**
Tel.: +86 10 65 907 006
info@pfeiffer-china.com

**Gebr. Pfeiffer Brasil**
Tel.: +55 11 3255 2681
brasil@gebr-pfeiffer.com

**Gebr. Pfeiffer Egypt**
Tel.: +20 103 333 9581
mena@gebr-pfeiffer.com

**Gebr. Pfeiffer Malaysia**
Tel.: +60 376 224 252
seasia@gebr-pfeiffer.com

**Gebr. Pfeiffer Russia**
Tel.: +7 495 136 65 98
cis@gebr-pfeiffer.com

www.gebr-pfeiffer.com