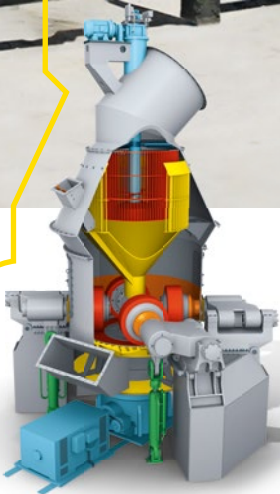




GEBR. PFEIFFER



ready2grind[®]

MODULAR SYSTEM

Maximum flexibility with Pfeiffer's unique 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.

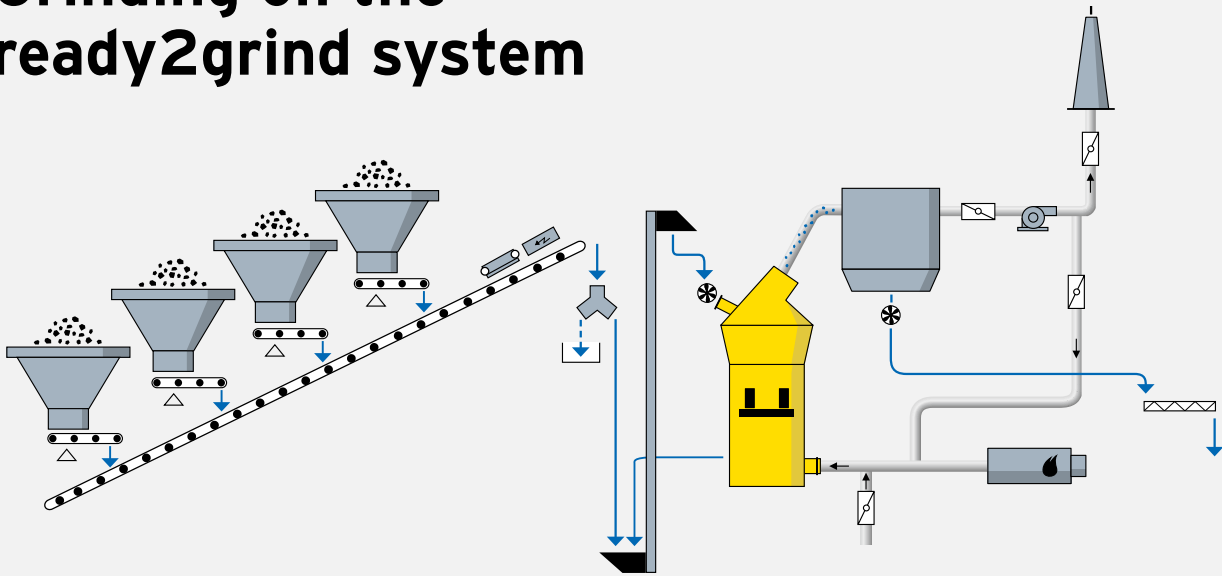
The advantages at one view:

- » highest reliability, proven concept
- » cost-efficient transportation in standard container dimensions
- » 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
- » efficient VRM operation
- » different plant sizes available
- » compact modular design
- » flexible feed system
- » pre-assembled in standardized container dimensions
- » perfect for small-scale production
- » also available for other material such as limestone, gypsum, coal or similar

Grinding on the ready2grind system



// With its extraordinarily compact and modular design, the ready2grind system is preassembled for transportation in standard container dimensions. 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 6,000 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 world's first modular system with a vertical cement mill operating in Africa



Proven mill technology for ambitious tasks

// 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, little to no building volume compared to other systems
- » 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

GEBR. PFEIFFER ready2grind - performance table

■ R2G 1800 C-4 / ■ R2G 2500 C-4

Product		Portland Cement CEM I		Limestone Cement CEM II / B - L		Ground granulated blast-furnace slag (GGBFS)	
		3300	4000	4000	5000	3800	4500
Fineness acc. to Blaine		3300	4000	4000	5000	3800	4500
Grindability	kWh/t	18	22	15	19	23	27
Production rate	t/h	25 / 60	20 / 50	30 / 72	23 / 57	21 / 47	18 / 44
Max feed grain size	mm	35 / 50					
Approx. yearly production rate	t/a	up to 200,000 / up to 450,000					
Installed mill motor power	kW	560 / 1260					
Total installed power	kW	about 1200 / about 2300					



The world's first modular system with a vertical cement mill has been operating since Feb. 2017.

Installation procedure



Client has prepared the site



Starting



Growing



Nearly ready



Decoration and small issues



End of installation procedure after 2 months



SCOPE OF EQUIPMENT AND SERVICE SUPPLY

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 Process filter, hot gas generator and fan
- A. 5 Electrical controls and drives

B. OPTIONAL EQUIPMENT MODULES

- B. 1 Product transport and storage silos
- B. 2 Packing and truck loading
- B. 3 Bulk loading equipment
- B. 4 Laboratory equipment
- B. 5 Fuel storage
- B. 6 Intermediate storage silos
- B. 7 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 Inc., USA
Tel.: +1 954 668 2008
coesch@gebrpfeifferinc.com

Gebr. Pfeiffer do Brasil
Tel.: +55 11 3255 2681
acruz@gebrpfeifferinc.com

Gebr. Pfeiffer (India) Private Ltd.
Tel.: +91 120 618 8900
ssvason@pfeifferindia.com

Gebr. Pfeiffer Egypt LLC
Tel.: +20 224 194 575
nagui.fam@teg-eg.com

**Gebr. Pfeiffer Grinding Technology
(Beijing) Co., Ltd, China**
Tel.: +86 106 590 7008
xudeyu@pfeiffer-china.com

**Regional Office Gebr. Pfeiffer SE,
Malaysia**
Tel.: +60 12 777 644 1
timothy.burden@gebr-pfeiffer.com