



GEBR. PFEIFFER

**GETTING IT
DONE**





Groundbreaking drive power 11,500 kW: MVR 6700 C-6 with **MultiDrive®** operating in Brazil

PFEIFFER. SETTING THE PACE. SINCE 1864.



Jacob Pfeiffer

1864

Jacob and Karl Pfeiffer found the machine building factory and iron foundry Pfeiffer

1894

First cement grinding in a Pfeiffer mill

1925

Biggest cement mill worldwide

1956

First MPS mills for raw meal and coal grinding

1979

First vertical mill for cement grinding



Gebr. Pfeiffer arising from a vision.

// In 1864, company founder Jacob Pfeiffer had a vision of grinding mineral raw materials on a large scale. This idea became reality. Today the company looks back on a long-time success story of developing the most modern mill technologies.

Behind the name of Gebr. Pfeiffer more than 500 employees are all united in the endeavor to carry Jacob Pfeiffer's passion and drive from generation to generation. As a family company rich in tradition, this is how we are giving new impetus. We have ever since been focusing on the development of our company on the long term rather than seeking any shorted-lived success. In fact this is how we have been able to present technological innovations on the market and make them secure their positions - like the development of the first vertical mill for cement grinding.

Another mainstay of Gebr. Pfeiffer's success is the striving for high quality - both with regard to our products and to ourselves. This principle along with our consequent orientation to our customers' individual requirements and our international presence make us one of the leading companies in the industrial sector. //

1994

More power for MPS mills by introducing the B-series

2006

First MVR mill for cement grinding

2007


First vertical mill with MultiDrive®

2016

Biggest cement mill in the world in operation

2017

ready2grind - World's first modular system with a vertical cement mill



"We are very proud of our competence in consulting and problem solving. In fact we believe customer oriented consulting already starts way before plant designing. This is how we guarantee you get exactly the machinery you need."

Dr. Caroline Woywadt, Director - Process Technology

Your particular requirements Our individual solutions

// As a provider of complete solutions, Gebr. Pfeiffer offers innovative, market oriented systems. With decades of experience and excellent consulting competence, we are in a position to design the ideal plant to suit any customer's requirement. Good advice right from the start - no matter whether it's about raw material characterization, practical tests

on special pilot plants, conception and planning of individual plants or wear analysis for mills in operation - we at Pfeiffer assist you with our expert advice at any moment in time.

The result: individual overall solutions from one source perfectly suiting your requirement.



Determination of all important parameters at the test station



Characterization of products at the lab



TECHNOLOGICAL LEADER



MVR mill for the highest throughput rates

We set milestones in technology.

// Ever new superlatives are wanted by the market. Therefore Gebr. Pfeiffer places significant investments in design and development. Our engineers work continuously on technological innovations and further developments to adapt not only to today's requirements but also to those of the future. Employing this

principle of thinking ahead, we have long become one of the technological leaders in the sector: for example, with innovations like the MPS vertical roller mill or the installation of the biggest vertical mill in the world, type MVR. And we are going to stick to this course of success.



MultiDrive®: a common development by Gebr. Pfeiffer and Flender/Siemens



Optimized plant conception to suit individual requirements



Erection of the MPS mill - high skills for many industrial sectors

Revolutionizing mill technology: Pfeiffer MVR mill with MultiDrive®

The MultiDrive® has 3 to 6 identical drive modules which drive the grinding table with a total power of up to 18,000 kW. Throughput rates of more than 1,000 t/h can be reached. Moreover, the active redundancy of drives and grinding rollers ensures the highest availability of the mill. For the first time, throughput rates are achieved on a single MVR mill which so far had to be produced on 2 vertical mills operating in parallel.



Manufacture: tailor made and accurate to dimension

// Quality and reliability are most important to our customers. Therefore clients all over the world have confidence in the outstanding engineering performance of Pfeiffer and premium quality made in Germany.

Each of our mills is a unique product: individually optimized and tailor-made to suit the customer's requests. Unlike many other manufacturers, we at Gebr. Pfeiffer have an inhouse production for the most important mill components - from the smallest cast part up to the complete machine.

"We do our own manufacturing. Our inhouse production depth ensures quality in the first place and moreover, we can react to any given circumstance, thus winning a decisive gain in time our customers may profit from."

Alexander Grill, Director - Manufacturing



GERMAN ENGINEERING



Individual manufacturing of machines at our workshops



Casting of wear parts in our inhouse foundry



Utmost precision of most modern CNC manufacturing at our mechanical workshop



Largely dimensioned assembly shop (volume 17,000 cbm) with 100 tons crane capacity

**Our customers
place high demands
in terms of quality.
So do we.**



// Pfeiffer products are the sum of best engineering performance and comprehensive quality management. Accurate planning of all phases of product development along with systematic control of product quality ensures results appreciated for their premium level by our customers.

Moreover, Pfeiffer plants are not only designed for performance but also for minimum wear and long lifetime. Hence our customers profit from highest reliability and optimum plant availability. //

"All of our processes are integrated into a certified management system. This is how we make sure the high quality requirements of our customers are fulfilled at any time - from planning to takeover and even beyond."

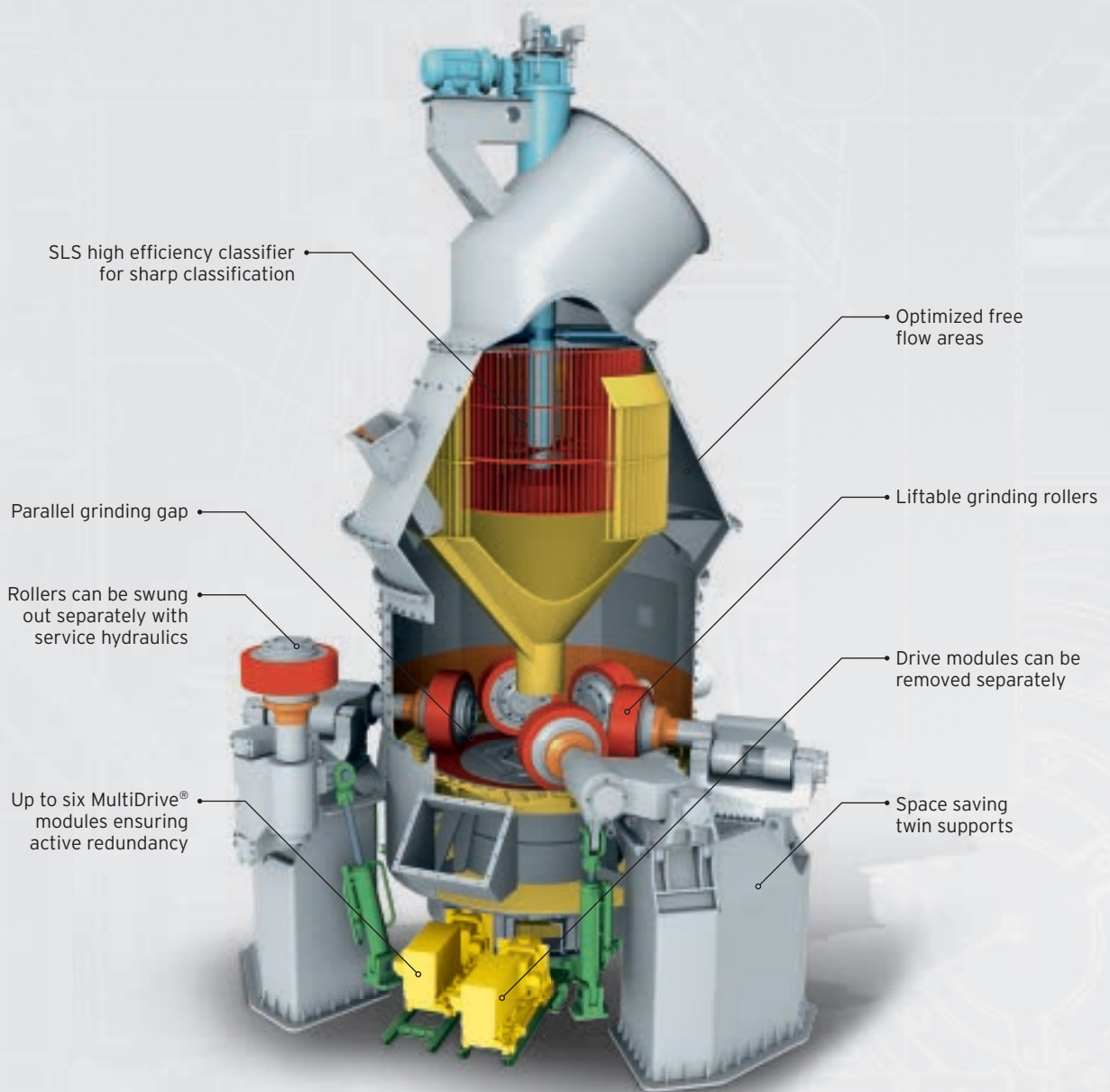
Martin Lorinser, Head of Quality Management



Our products. The perfect solution to any requirement.

// There is probably no one who could tell us something new about modern preparation of materials. In fact we do not only offer our innovative mills type MPS and MVR but also a wide portfolio of machinery for separating, drying, slaking and calcining. For any of your applications, we have the perfect solution from one source. And of course with the quality you expect from Pfeiffer. //

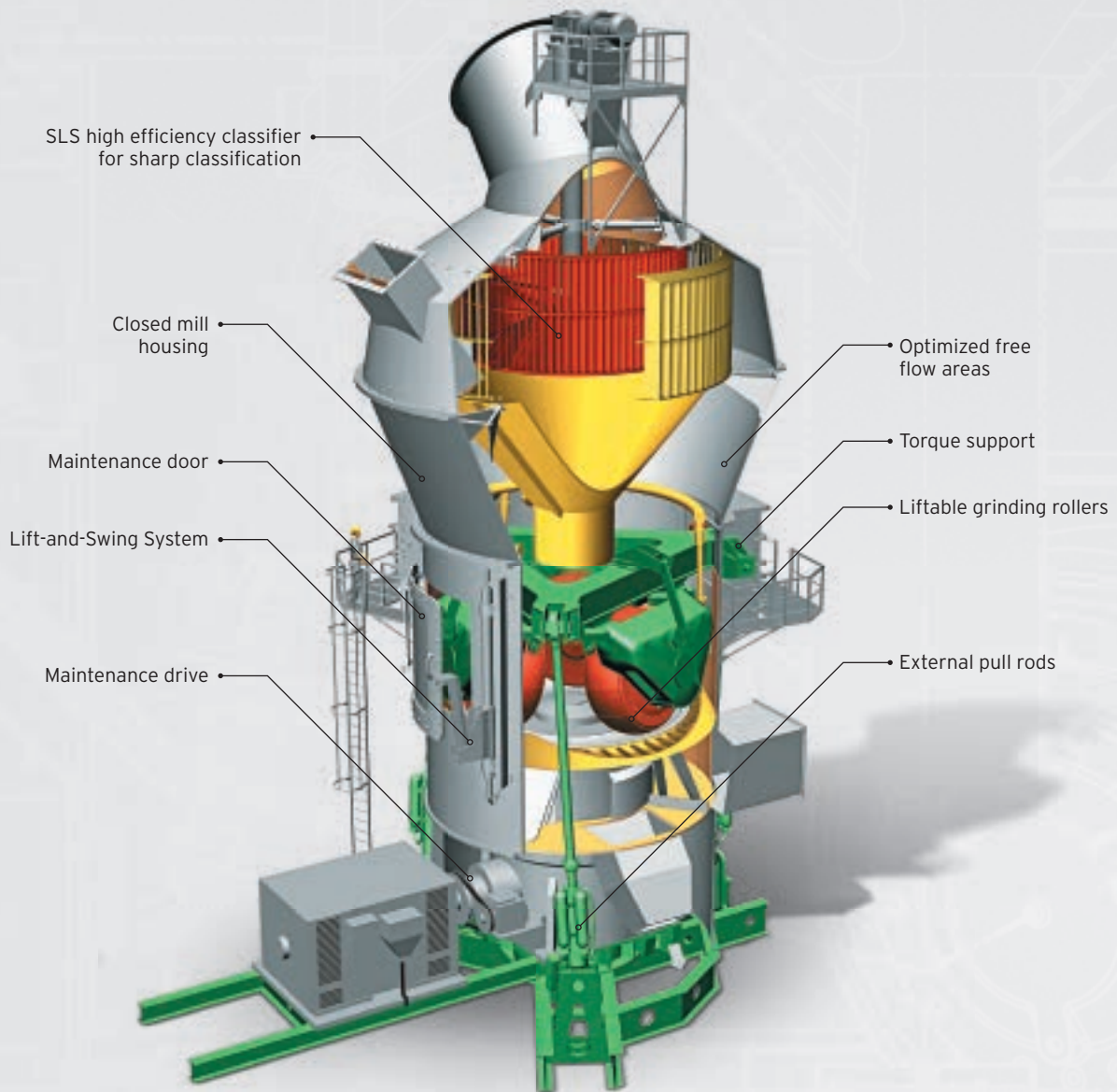
MVR vertical mill



The MVR mill is the optimum solution for large throughput rates due to its very high availability with the active redundancy of rollers and drive system (**MultiDrive®**), low wear rates, and best maintenance friendliness.

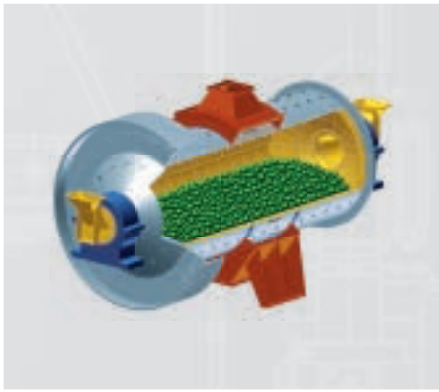
Industry	Grinding material
Cement industry	Cement Granulated blast-furnace slag Raw material

MPS vertical mill



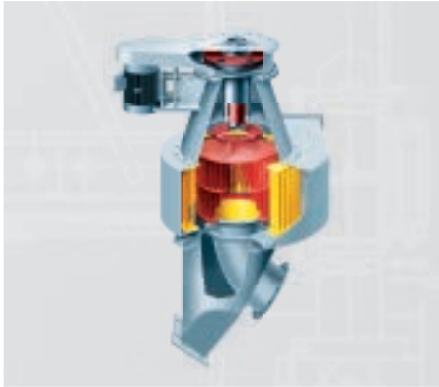
This proven mill type can be used for very different applications. Low capital investment, reduced energy consumption, low wear rates, and modern maintenance concepts make the MPS mill an economic solution for various industrial sectors.

Industry		Grinding material		
Cement industry	Chemical industry	Coal	Basalt	Pozzolana
Gypsum industry	Refractory industry	Petcoke	Quicklime	Kaolin
Lime industry	Power plant industry	Gypsum	Clay	and many others
Ceramic industry	Zinc industry	Limestone	Talcum	
Steel industry	and a lot more			



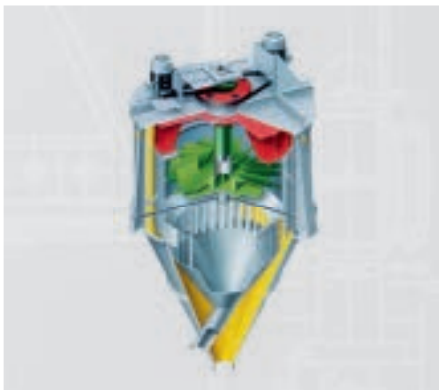
Ball mills type MRE and MRD

Special mills designed for the specific application. Various materials are used for the liners and grinding balls.



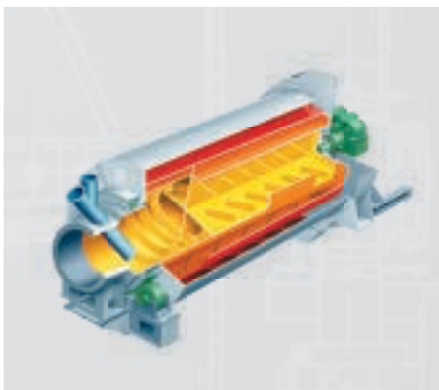
High efficiency separators SLV

High efficiency separator for medium and small grain sizes down to the fineness range below 10 μm .



Separators type SUT and SUV

Separators ensuring very high precision cuts along with high throughput rates for cut sizes into the 30 μm range. These separators are perfectly suited for dust collection.



TRT Triplex dryers

Gentle and efficient material drying with minimum energy consumption, low space requirement, and short starting and stopping times.



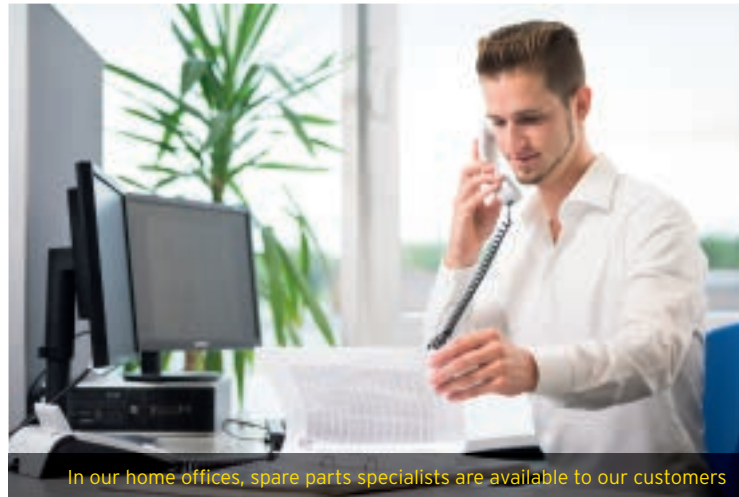
Lime hydrators KLE, KLD, and KLV

Processing of all quicklime qualities with the most different feed sizes, producing non-expanding hydrates with guaranteed residual moisture rates of less than 1%.

SERVICE COMPETENCE



Our supervisors coordinate all the necessary activities on the construction sites worldwide



In our home offices, spare parts specialists are available to our customers



Adequate training by practically experienced engineers

"Good service has become more important than ever. What we want actually is to accompany the customer from the very first meeting throughout the entire lifetime of his machinery and also keep plants that have been operating for many years fit for any requirements that will come up in the future."

Rainer Krüper, Director - After Sales Service



Service without any compromise.

// We will stand by our customer's side giving him advice any time he needs it and throughout the lifetime of his plant. Our service portfolio includes the conception and planning of new plants and rebuilds, supervision of erection and commissioning as well as retrofitting, maintenance and modernization of

existing plants. To enable you to tap the full potential of your machinery, we offer training sessions for your qualified staff, focusing on field application. And not to forget our comprehensive spare parts service ensuring the economy of your Pfeiffer plant for many years following your investment decision.

Gebr. Pfeiffer: Your partner for process-optimized overall grinding plants.

// It's only a small step from a Pfeiffer mill to an overall grinding plant. With our competence based on decades of experience in mill technology, we take the Pfeiffer vision to the next level: the supply of the overall package - the complete grinding plant. Gebr. Pfeiffer takes care of the entire project handling which is detailed planning and supervision, procurement and supply as well as execution of construction work and

plant erection, both for new projects and for the modernization of existing plants.

With our ready2grind modular system ensuring a prompt market entry, we were able to launch another innovation: the production of small output rates at short notice.



TURNKEY PLANTS



Pfeiffer. Successful in many industrial sectors.



Cement grinding in Brazil - MVR 6700 C-6



Coal grinding in Ukraine - MPS 200 BK



Limestone grinding in China - MPS 3350 B



REFERENCES ALL OVER THE WORLD



Cement grinding in India - MVR 5600 C-4



Raw material grinding in Canada - MVR 5000 R-4



Cement grinding in Australia - MVR 6000 C-6



Raw material grinding in Algeria - MVR 6000 R-6



Gypsum grinding including calcining in Croatia - MPS 180 GC



Quicklime grinding in Poland - MPS 250 B

Pfeiffer. Renowned all over the world.

// With our main offices and central manufacturing facilities in Germany and our subsidiaries in India, China, Brazil, Egypt, Russia, Malaysia, and the U.S. plus representations and agencies all over the world, we will be there whenever and wherever you need us. Our claim to be a leading company in the sector is substantiated by more than 2,800 Pfeiffer vertical mills installed worldwide.

"The numerous reference objects worldwide prove that Pfeiffer products are appreciated. Especially the many follow-up orders speak for themselves and confirm our work and philosophy."

Patrick Heyd, Executive Director - Sales and Project Engineering





First vertical mill with MultiDrive®

First vertical mill in the world for cement grinding 1979 MPS 3750 C

Grinding-drying of raw material with a feed moisture of 26% MPS 5300 B

Coal grinding with subsequent injection of pulverized coal into blast furnace MPS 3350 BK

First MVR mills in Africa MVR 6700 C-6 and MVR 6000 R-6

Lime grinding in the chemical industry MPS 200 B

Coal grinding in the zinc industry MPS 250 BK

100th Pfeiffer vertical mill in India MVR 6000 R-6

First MVR mills in Cambodia MVR 6000 C-6 and MVR 5000 R-4

First ready2grind R2G 1800 C-4

Biggest vertical mill of the world for coal grinding MPS 4500 BK

First MVR mill in South Africa MVR 3750 C-4

Biggest vertical mill in Australia MVR 6000 C-6

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