

COMPLETE PROJECT SOLUTIONS

Your strong, solid and reliable partner for
EP, EPC, and EPC (M) project executions.



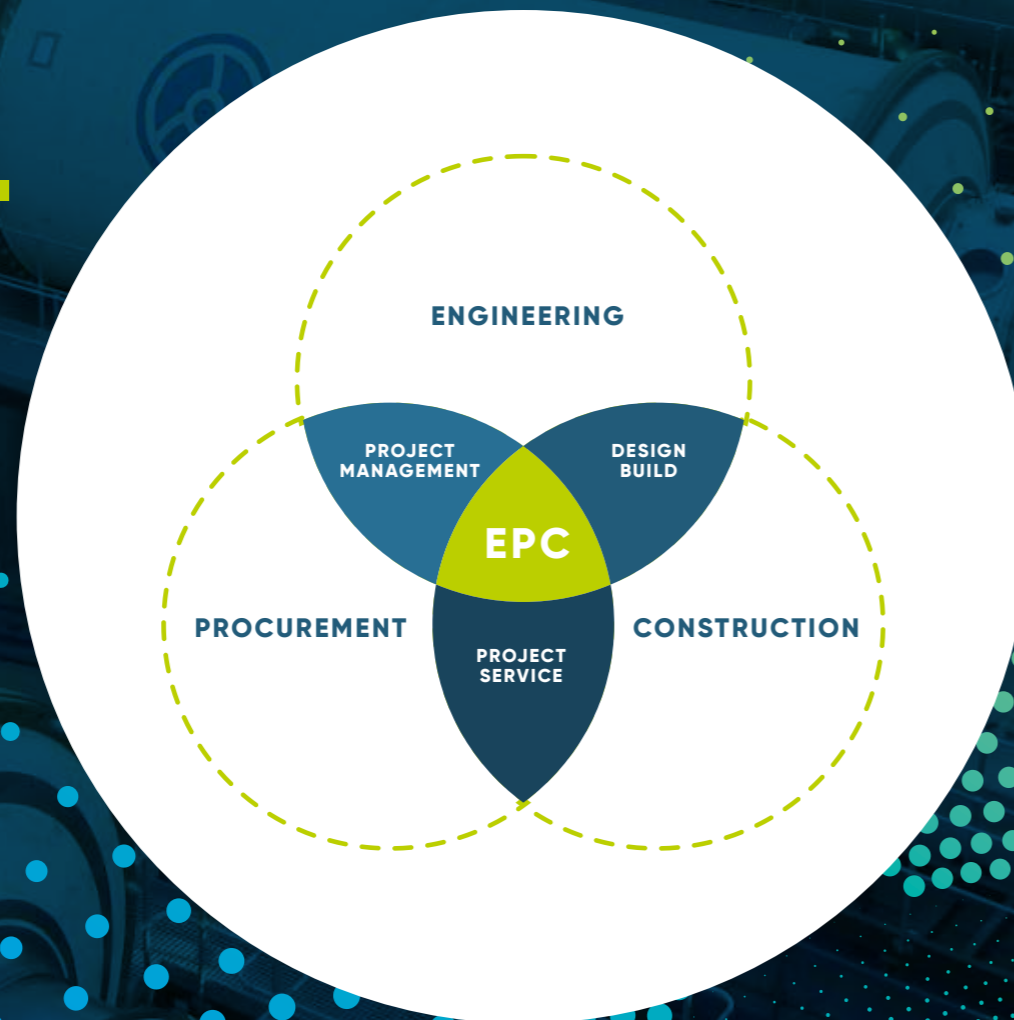
**CHRISTIAN
PFEIFFER**

MISSION

The mission of Christian Pfeiffer is to satisfy the wide range of requirements of project scopes and executions in view of cost, quality, safety but with special focus on the delivery and execution times. The time frames and schedules of each EP & EPC (-M) project are an important success factor and one of the main crucial constraints to comply.

EPC OR EPC-M PROJECT?

What is covered in the different project phases?



Complete plant solutions

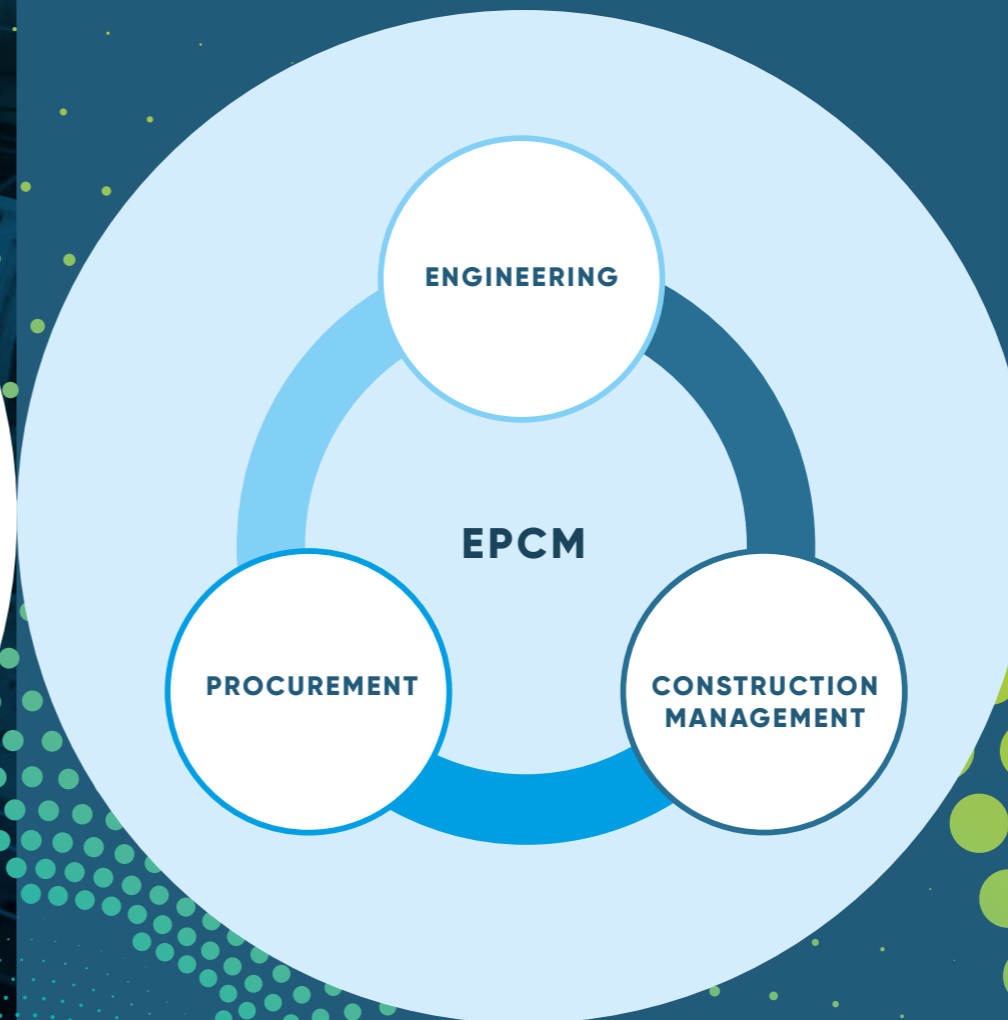
Christian Pfeiffer has been at the forefront of grinding technology since its inception in 1925.

The company's journey began with a focus on design and delivery of cement production equipment worldwide.

But its expertise soon extended to cover the need to develop and supply complete turn-key solutions and EPC projects for the customers around the world.

Christian Pfeiffer strength is to customize the projects according

to the different needs of each customer in each country and circumstances they will have and challenges they might face.



EPC M

ENGINEERING

In EPC contracts, there are a significant amount of specialist engineering processes which need to be scoped, strategized, organized, planned, coordinated and executed. This is the case right from the outset upon receiving the project brief from the client, all the way through to project completion. The engineering phase covers all the necessary and required disciplines, like:

- Process
- Layout & Plant Design
- Mechanical
- Electrical & Automation
- Civil & Structural

It provides clients with full transparency and involvement in engineering decisions and cost implications. This is especially valuable in cement, mining, and minerals projects, where Christian Pfeiffer's engineering expertise helps clients achieve optimal outcomes.

PROCUREMENT

Christian Pfeiffer's Purchasing Department plays a pivotal role in the successful execution of every EPC project. We meticulously manage the entire procurement process, ensuring optimal outcomes for our clients.

Our responsibilities encompass technical quotation requests, meticulous tender organization, and rigorous vendor pre-qualification. We conduct thorough technical evaluations and recommend the most suitable contractors based on a comprehensive assessment.

Transparent negotiations are at the heart of our approach, ensuring fair and mutually beneficial agreements. Through this collaborative process, we empower our clients to achieve the most reliable and cost-effective installations tailored to their specific needs.

CONSTRUCTION

A critical phase of every EPC project is the physical construction. Christian Pfeiffer's EPC partners provide comprehensive construction management, ensuring seamless execution from start to finish.

This includes meticulous planning encompassing construction elements, costs, logistics, and the assembly of a skilled construction team. On-site, our partners manage all aspects, overseeing contractors, individual workers, equipment, services, and office facilities.

While the actual construction may be carried out by subcontracted local or international firms, Christian Pfeiffer's EPC partner maintains strict oversight, guaranteeing quality and adherence to project specifications. This collaborative approach ensures the successful and timely completion of each project.

MANAGEMENT

EPC-M projects offer a unique blend of expert guidance and client control. Christian Pfeiffer provides comprehensive project management, leveraging our specialized engineering expertise to achieve excellence. However, unlike traditional EPC projects where all contracts are managed by the contractor, EPC-M allows clients to retain direct control over all third-party relationships.

In an EPC-M model, clients retain ownership of all contracts with construction contractors, suppliers, and vendors. Our engineering consultants meticulously identify, vet, and recommend suitable third parties, and may even assist in drafting contracts. However, the client ultimately signs all agreements, ensuring full responsibility and control. This approach offers a valuable alternative to traditional EPC, minimizing client involvement and associated risks.



Greenfield projects



COMPREHENSIVE DESIGN AND ENGINEERING:

We provide end-to-end engineering services, including process design, equipment selection, and detailed engineering.



STATE-OF-THE-ART CONSTRUCTION

Our experienced construction teams deliver projects on time and within budget, adhering to the highest quality standards.



EFFICIENT PROCUREMENT

Our global sourcing network ensures the procurement of high-quality materials and equipment at competitive prices.



SEAMLESS COMMISSIONING

Our experts ensure smooth commissioning and startup, minimizing downtime and optimizing plant performance.

Brownfield expansions



CAPACITY EXPANSION

We provide end-to-end engineering services, including process design, equipment selection, and detailed engineering.



PROCESS OPTIMIZATION

Our experienced construction teams deliver projects on time and within budget, adhering to the highest quality standards.



EQUIPMENT UPGRADES

Our global sourcing network ensures the procurement of high-quality materials and equipment at competitive prices.



DIGITALIZATION SOLUTIONS

Our experts ensure smooth commissioning and startup, minimizing downtime and optimizing plant performance.

Our experienced team of engineers and project managers is dedicated to delivering innovative and sustainable solutions, from Greenfield projects to Brownfield expansions and modernizations.



Service scope

for complete turn-key or EPC projects

Process engineering

Plant layout design

Basic engineering, including all disciplines

Detailed engineering, including all disciplines

- Civil engineering
- Mechanical engineering
- Electrical & automation engineering

- Civil engineering
- Mechanical engineering
- Structural engineering
- E&A engineering
- Utility engineering
- Electrical & automation engineering

Project management

Civil construction

Mechanical and steel structure erection

Electrical erection

Commissioning (cold and hot)

Handover of the installation

Installation and integration of automation and control

Health & safety supervision



ADVANTAGES WITH EP & EPC PROJECTS

- Only one strong and solid Partner for the complete project execution. All scope and project handling in one hand and only one contact for the customer to manage
- Benefits of an international experienced project manager team
- Less resources and know-how of project management are required on client side
- Best and optimized technical and economical solution for the project
- Projects on EPC or "Turn-Key" basis gives opportunities for external international financing or for public and private subsidies
- Full project responsibility on the main EPC contractor, less risks for the client.
- Standardization of the quality of all equipment supply and complete project execution
- Optimization of the overall project schedule
- Unification of the process and performance warranties
- Logistic handling, planning and responsibility managed by the main EPC contractor

A STRONG AND RELIABLE PARTNER

Christian Pfeiffer is a strong and reliable partner during all the stages of your EPC & EPC projects from the Feasibility Study to the Commissioning and Handover of the complete installation.

FEASIBILITY STUDY

ENGINEERING & DESIGN

PROCUREMENT

CONSTRUCTION

TESTING & COMMISSIONING

HANDOVER & OPERATION

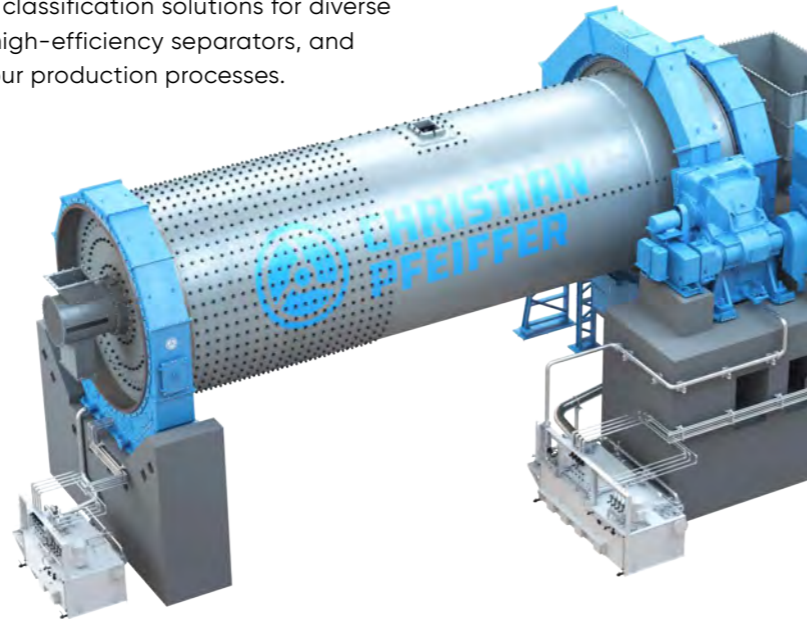


Our product portfolio

Christian Pfeiffer delivers comprehensive grinding and classification solutions for diverse industries. Our portfolio includes advanced ball mills, high-efficiency separators, and complete plant engineering, all tailored to optimize your production processes.

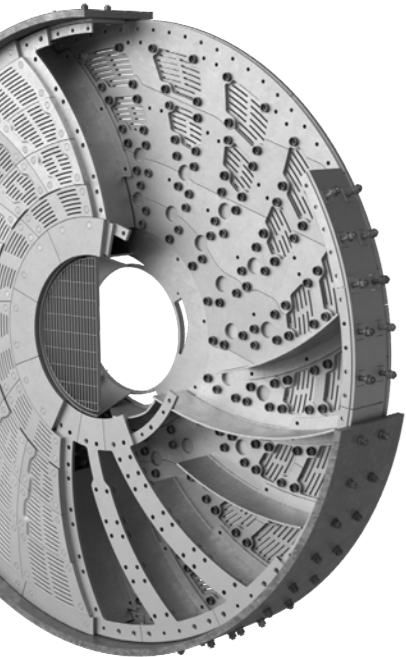
Process optimized mills

Energy efficient and reliable, for a variety of different feed materials.



High quality mill internals

Energy efficient and reliable, for a variety of different feed materials.



Precise separators

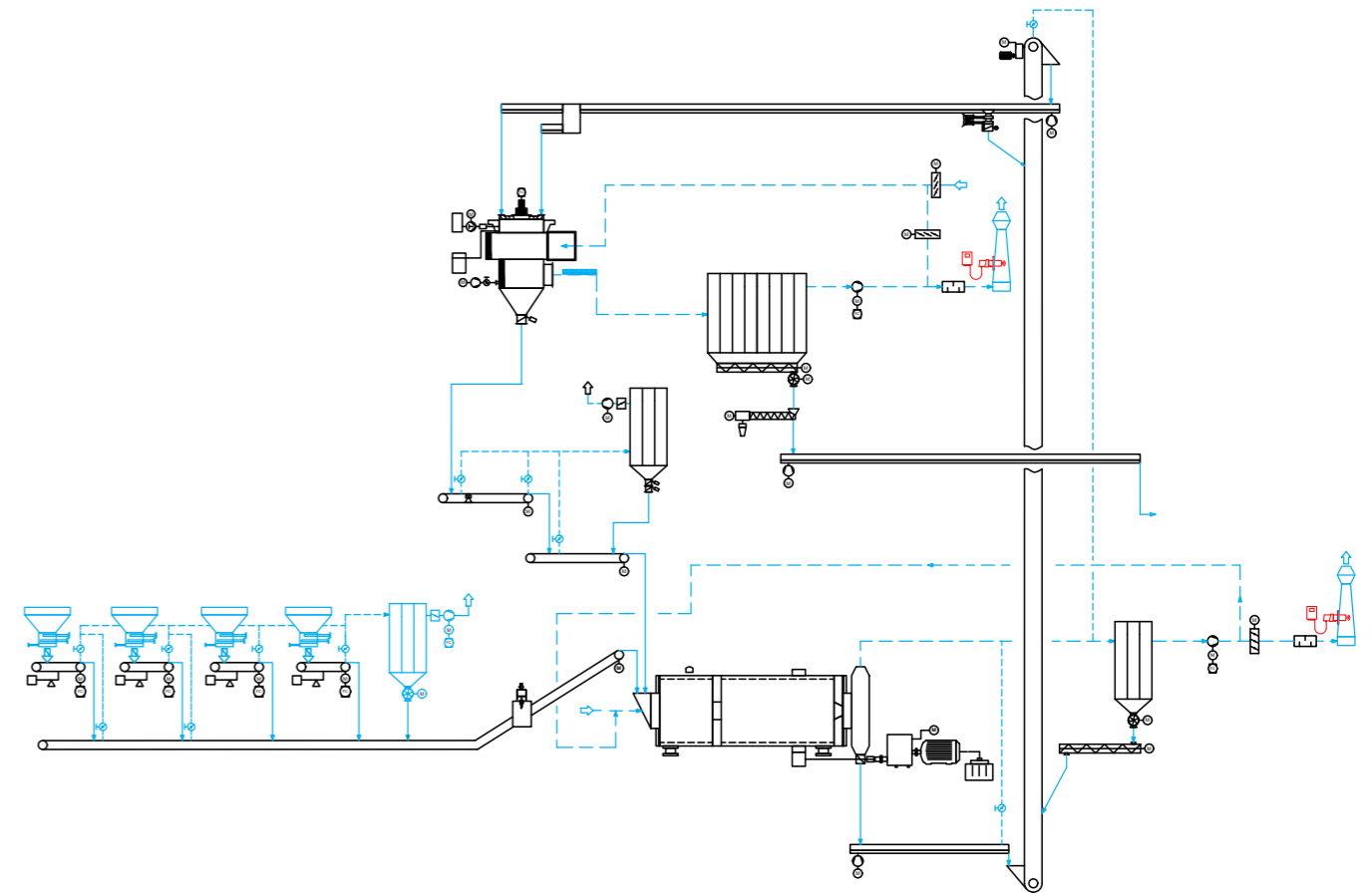
Less mill energy consumption by higher top cuts and increased product quality.



Complementary products

For even more customized, efficient processes.

Your Partner in Cement Excellence



Christian Pfeiffer specializes in delivering tailored cement grinding plant solutions, optimizing every stage from material feed to finished product. We design and engineer high-performance systems, focusing on energy efficiency and consistent product quality. Our expertise covers both ball mill and roller press technologies, ensuring solutions suited to diverse production requirements.

We provide comprehensive services, from plant layout and process design to installation and commissioning. Our automation and control systems offer real-time monitoring and data analysis, enabling proactive maintenance and optimized performance. Our commitment to sustainability drives us to develop solutions that minimize environmental impact while maximizing productivity.

Our advanced separators, guarantee precise particle size distribution, maximizing product performance. We incorporate innovative grinding media, such as CeraBlu, to enhance grinding efficiency and reduce energy consumption.

Partner with Christian Pfeiffer for cement grinding plant solutions that deliver reliability, efficiency, and superior product quality, ensuring a competitive edge in the global market.



For more information

Ultrafine Grinding: Industrial Minerals Processing

Christian Pfeiffer delivers specialized grinding plant solutions for the diverse needs of the industrial minerals sector. We understand the unique challenges of processing materials like limestone, gypsum, barite, and more, and offer customized systems to achieve precise particle size distributions and high product purity.

Our solutions encompass a range of grinding technologies, including our robust BAM ball mills, designed for efficient ultrafine grinding. We complement these with our high-efficiency classifiers, the ROC and

U-ROC series, ensuring accurate particle separation and consistent product quality.

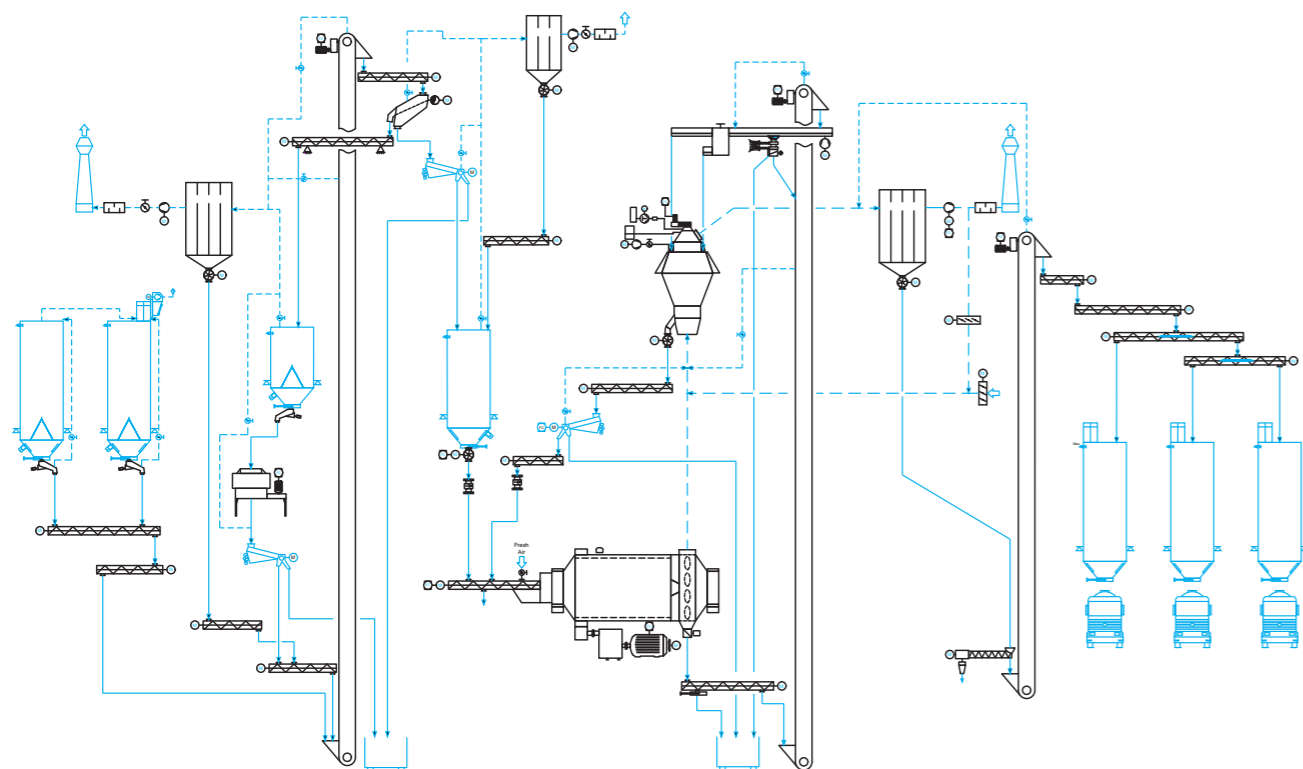
We provide comprehensive services from initial process design to plant commissioning, ensuring seamless integration and optimized performance. Our expertise extends to drying and calcination processes, offering complete solutions for complex mineral applications.

Our focus on innovation and sustainability drives us to develop energy-efficient systems that minimize environmental

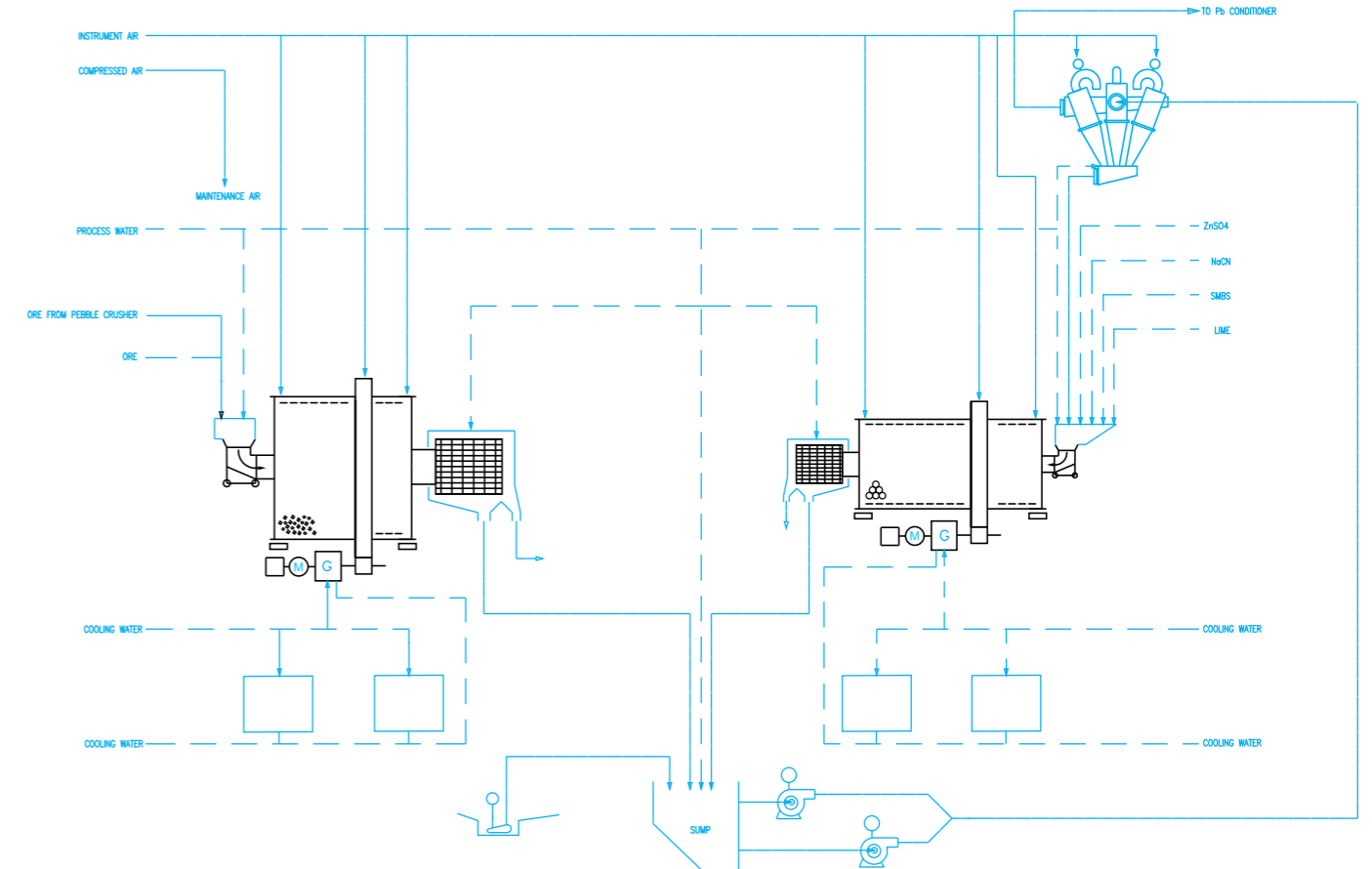
impact. We work closely with our clients to understand their specific requirements, delivering tailored solutions that maximize productivity and enhance product value. Partner with Christian Pfeiffer to achieve superior grinding results in your industrial minerals operations.



For more information



Robust Mining Solutions: Reliable Processing



Christian Pfeiffer delivers comprehensive mining solutions, focusing on robust and reliable mineral processing and material handling. We understand the demanding conditions of the mining industry and provide tailored solutions to maximize productivity and ensure operational efficiency.

Our expertise spans crushing, grinding, and classification, offering heavy-duty equipment designed to withstand harsh environments. We provide SAM mills, ball mills, and hydrocyclones for efficient mineral liberation, alongside robust

crushers and screening systems for optimal material preparation.

We offer complete material handling solutions, including heavy-duty conveyors, stackers, and reclaimers, ensuring seamless transport and storage of mined materials. Our tailings management systems, featuring thickeners and filters, address environmental concerns and promote sustainable mining practices.

Our commitment to innovation and reliability drives us to deliver solutions that enhance productivity and minimize downtime. We

provide comprehensive services, from plant design and engineering to installation and commissioning, ensuring seamless project execution. Partner with Christian Pfeiffer for robust and reliable mining solutions that deliver long-term operational success.



For more information





EGYPT: EPC PROJECT IN RECORD TIME

Efficiency Defined: 13-Month Erection of Two Coal Grinding Plants

Christian Pfeiffer successfully delivered two coal grinding plants to Amreyah Cement in Egypt within a tight 13-month timeframe. This EPC project included design, supply, installation, and commissioning of air-swept ball mill circuits, process filters, and auxiliary systems for coal and petcoke use.

The project adhered to ATEX safety standards and exceeded performance guarantees. Close collaboration with AMCC and local companies, alongside efficient project management, ensured successful and timely completion.



Our Success Stories

Christian Pfeiffer EPC project in Malaysia increases production capacity by almost 60%

Christian Pfeiffer Maschinenfabrik GmbH successfully commissioned a modern cement grinding plant in East Malaysia for Cahya Mata Sarawak (CMS). Completed in 18 months as a turnkey project, the fully automated facility includes transport, silo systems, and packaging equipment for loose and bagged cement. The plant is located alongside CMS's rotary kiln line in Mambong, Kuching.

The core equipment is a \varnothing 4.8 m x 15.0 m two-compartment ball mill on slide shoe bearings, powered by a 5,600 kW two-pinion lateral drive unit. Operating in a closed circuit with a Christian Pfeiffer QDZ 248-Z High Efficiency Separator, the mill features self-sorting liner plates and Allmax grinding balls, with a filling ratio of approximately 28%. Material flow between compartments is controlled by an intermediate diaphragm with flow control.

The separator ensures precise separation and supports production of three cement types, stored in two silos (10,000 t each). A rotation packing machine handles up to 3,000 sacks/hour for 50 kg bags. During performance tests, the plant achieved a throughput of 155.8 t/h, exceeding the guaranteed 150 t/h. Grinding fineness of 3,500 cm^2/g (Blaine) was maintained while achieving specific energy consumption of 38.8 kWh/t, below the guaranteed 40 kWh/t.



DELIVERED CUTTING-EDGE GRINDING PLANT TO SPENNER

Christian Pfeiffer has successfully delivered a complete grinding plant to Spenner, a leading building materials manufacturer in Germany. This EPC project features a state-of-the-art ball mill and high-performance QDK separator, designed to optimize cement production.

Beyond equipment supply, Christian Pfeiffer provided comprehensive support, from design and engineering to commissioning. Key features include a tailored plant design, advanced technology, efficient material handling, and ongoing after-sales support. This collaboration empowers Spenner to enhance production and meet market demands.



Born in Germany.
Grinding and separation
across the world.

CHRISTIAN PFEIFFER WORLDWIDE

Christian Pfeiffer, a global leader in grinding technology, provides innovative solutions for the cement, mining, and minerals industries. With a strong international presence, we deliver cutting-edge equipment and comprehensive services worldwide.

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