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Since its founding in 1906, Claudius Peters has become one of the world's most respected engineering houses and an innovative world leader. Its German engineering excellence continues to set benchmarks for the design, manufacture and commissioning of materials handling and processing systems for the gypsum, cement, coal, alumina and bulk-handling industries.

From conception and installation through to commissioning and after-sales support, Claudius Peters provides world-class service to the world's biggest bulk materials producers.

The Claudius Peters Group GmbH is headquartered in Buxtehude near Hamburg, Germany, with regional offices in the Americas, Asia and Europe.





Claudius Peters' headquarters, Buxtehude, Germany.



Aerospace

In addition to its materials and processing solutions Claudius Peters also has a distinguished background in aerospace technology. For more than two decades, it has provided vital components for every Airbus in service, from the early days of the A300 through to the age of the Airbus A380 Super Jumbo, including the development and manufacture of specially profiled metal 'stringers' fabricated into the skin of every Airbus aircraft.

Technikum

At its Technikum (Technical Center), Claudius Peters conducts an exhaustive program of ongoing research and development which keeps it at the cutting edge of industry technology.

In this facility, widely regarded as one of the most comprehensive of its kind anywhere in the world, state-of-the-art testing procedures ensure that every new application is thoroughly evaluated before proceeding to full scale plant.

After Sales Support

Claudius Peters retains responsibility for all the equipment it delivers, with the promise that the technology will keep performing as well through its entire life as it did on its very first day of installation.

The Claudius Peters aftermarket division provides long-term global support, offering an optimum maintenance regime throughout the life of a plant, backed by comprehensive spare parts provision. This can be conveniently accessed either directly from Claudius Peters technology centers or via its regional offices worldwide.

Committed to innovation and quality for over 100 years



Claudius Peters workshop, Buxtehude, Germany.



The Claudius Peters Technikum works closely with universities, engineers and scientists.



business areas

Innovative solutions that combine high production capacities with low operating costs

With a wealth of experience and expertise spanning a range of industries, Claudius Peters' techniks are trusted by leading organizations and industries worldwide.

Cement

Cement is the industry where Claudius Peters started, and where it is still a world leader today. In all areas of cement manufacturing, Claudius Peters offers innovative solutions combining high production capacity with lower operating costs.

Today, our stockyard, silo, pneumatic conveying, clinker cooling, grinding, packing and dispatch techniks can be found in hundreds of installations around the world.



Gips AD gypsum processing plant, Bulgaria.



Claudius Peters packing solution installed in cement plant, Vietnam.



Cement granules magnified x100.

© Claudius Peters

Building Materials

With a proven track record in bulk materials processing, Claudius Peters can develop a solution for any requirement, from grinding in its famous EM mill to pneumatic conveying, storage, mixing and packaging.

In recent years Claudius Peters has developed cutting-edge solutions for the optimum processing of bulk building materials, developed in collaboration with clients and proven in the Claudius Peters Technikum (Technical Center).

Gypsum

Maximum reliability and efficient operating costs make Claudius Peters the ideal partner for gypsum producers, with a complete range of solutions, from stockyards and materials handling systems, calcining mills, flash calciners and kettle calcining systems to pneumatic conveying, storage mixing, packing and dispatch systems.

Claudius Peters also provides feasibility studies, complete process systems and expert advice on plant modernization for any specific need.



Alumina & Aluminium

Through profound ecological awareness and products that are as competitive as they are reliable, Claudius Peters continues to develop innovative solutions that are redefining what is possible within the industry.

These include Claudius Peters FLUIDCON, the Claudius Peters Alumina Distribution System and the Claudius Peters ASS (Anti-Segregation System) with its special mixing chambers that ensure continuous grain size distribution and optimum silo discharge.

Power Plants

Claudius Peters is renowned for its development of advanced coal and fly ash handling systems for power plants which combine high availability with low maintenance costs and optimum reliability. These enable clients to stay one step ahead of the competition and remain compliant with ever-changing legislative measures.

Claudius Peters' solutions, incorporating the latest in safety technology, include stockyard systems, direct firing mills, dosing and injection systems, pneumatic conveying, dry blending, ash conditioning and storage.

Alumina granules magnified x100. © Claudius Peters

Iron & Steel

With systems including Claudius Peters coal mills and PHB Someral stockyards, we are a global market leader in the design and supply of complete materials handling and injection systems for solid fuels in the iron and steel industries.

Claudius Peters recently installed the world's largest pulverized coal injection plant, with five injection stations supplying 6,000 tonnes of pulverised coal into four blast furnaces daily.



Aeroslide transport system



Power plant with fly ash silo.

Customized solutions delivering a one-stop capability



Potroom feeding.

techniks

Expert knowledge and project management at every stage By bringing together a variety of related techniks, Claudius Peters is able to offer clients the convenience of a single contract, providing knowledge and project management at every stage of plant development – from initial design, through supply, installation, and commissioning to ongoing maintenance and support. Vast industry know-how, along with, for example, Claudius Peters stockyard, pneumatic conveying and packing and dispatch systems, presents clients with a true 'one-stop' capability.

Stockyard

Claudius Peters offers reliable, state-of-the-art bulk handling systems for stacking and reclaiming a wide range of dry bulk materials, including cement raw materials, coal, wood-chip and fertilizer.

Incorporating the experience of PHB Someral, Claudius Peters has developed significant expertise in stockyard solutions through more than a hundred installations worldwide and across a wide range of bulk materials, capacities and configurations.



Circular blending bed for cement raw mix.



Limestone bridge reclaimer.



Pneumatic Conveying

Continuous technological innovation at the Technikum in Germany has enabled Claudius Peters to become one of the world's leading names in the supply of systems and equipment for pneumatic conveying of bulk materials.

FLUIDCON, the conveyor pipe combining all the advantages of pneumatic conveying with considerably lower energy consumption, along with the famous Claudius Peters 'X-Pump' and 'Aeroslide' solutions, have served to revolutionize global pneumatic conveying technology.

Claudius Peters' Pneumatic Conveying Technik now encompasses a broad spectrum of industry areas as the company continues to evolve and push the boundaries of what is possible from its systems.



Pressure vessel transport system.

Leading the world in pneumatic conveying systems



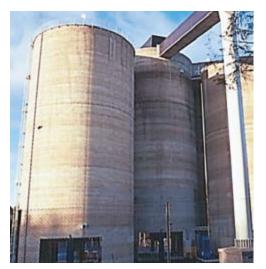
Fluidcon pipe.

Silo

Claudius Peters' groundbreaking technology in high capacity bulk storage and mixing silos has ensured its place as an industry leader. For higher capacity requirements in particular (up to 80,000 tonnes for free flowing bulk solids materials), Claudius Peters' technology excels.

Claudius Peters develops and supplies a wide spectrum of silo types for materials such as cement, lime, gypsum and alumina, with specific consideration to flow, storage and handling characteristics of the materials.

Whatever the specification, Claudius Peters is able to draw upon its vast knowledge of bulk materials and silo designs to ensure delivery of the optimum solution.



EC storage silo, Kantvik, Finland.



Silo aeration bottom.

techniks

Reliable solutions for even the most extreme challenges

Grinding

Claudius Peters is universally acknowledged as one of the foremost authorities on coal and mineral grinding technology. Designed without bearings or lubrication points in the grinding section, the famous Claudius Peters EM ball ring mill remains the simplest, most reliable method for grinding fine coal and other minerals.

With knowledge gained in over hundreds of applications of the EM Mill, Claudius Peters can offer reliable solutions for even the most extreme processing challenges, achieving up to 40,000 service hours from a single set of grinding elements. Claudius Peters can also combine grinding and calcining processes in a single modified version of the EM mill.

Coal grinding plant.

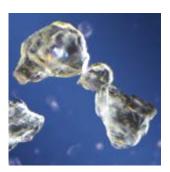
Calcining

Claudius Peters supply complete, customized gypsum processing systems, with its EM Mill combining the functions of grinding, drying, calcining and classifying into one single unit. For fine raw materials such as synthetic gypsum, the Horizontal Impact Calciner allows direct calcining without grinding. The Claudius Peters Homogenizer provides superior plaster quality, while the Claudius Peters Rotary Drum Cooler offers maximum efficiency in bringing calcining temperatures down to required product temperatures for further processing.

Claudius Peters can also accommodate separate calcining operations for high temperature applications, producing anhydrite gypsum with its flash calcining system.



EM Mill at Fassa, Calliano, Italy.



Gypsum granules magnified x100.
© Claudius Peters



Clinker Cooling

With hundreds of Claudius Peters Clinker Coolers commissioned around the world and more than 60 years' experience in this field, Claudius Peters' reputation as outright industry leader in a rapidly evolving cement industry speaks for itself.

Where Claudius Peters' very first cooler had a capacity of 500 tonnes per day, today it builds systems with capacities of up to 13,000 tonnes per day. The Claudius Peters ETA Cooler encapsulates the evolution of clinker cooling in one complete system. With its unique transport system based on the proved 'moving floor' model, this cooler is quick to install and gives users lower operating costs and extremely high reliability.

PCI

With its Pulverized Coal Injection or 'PCI' technology, Claudius Peters combines peerless knowledge of grinding and long distance pneumatic conveying with precise measuring, silo storage expertise and coal dosing technology to offer a comprehensive turnkey system.

In the steel making process, this PCI technology replaces up to 50% of the coke charge used for smelting, utilizing the far less expensive fuel, coal, to provide a more efficient, more environmentally friendly system at a lower cost.

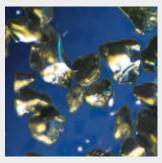
Efficient, environmentallyfriendly systems at a lower cost



ETA cooler inlet.



Static distributor PCI.



Coal granules magnified x100. © Claudius Peters.

techniks

Knowledge and expertise to deliver the optimum solution for any challenge

Dry Mortar & Mixing

The high number of new or modernized plants supplied by Claudius Peters to the dry building materials industry underlines its role as one of this sector's leaders. At its Technikum, continual research into the demands placed on a vast range of dry materials has enabled Claudius Peters to find optimum solutions for many highly specific challenges in dry mortar and mixing.

Claudius Peters technology includes packing machines, mechanical and pneumatic mixers, gravity mixers, silos, dosing systems and bulk loading plants.

Packing & Dispatch

Claudius Peters supplies some of the highest capacity bagging systems available in the world today. In conjunction with its clients, it has developed systems capable of packing up to 4,800 x 50 kilogram bags per hour on a single line, amounting to over 240 tonnes per hour.

Typical systems include feed and storage equipment to the packer, rotary packers with empty bag applicators, bag handling equipment and bag palletizers. Claudius Peters also provides bulk and bagged dispatch automation systems, offering a high degree of accuracy and allowing for fully or semi-automatic product loading.



Ultra sonic bag sealing system.



Storage silo with bulk loading.



8-spout rotary packer.



Marine

For pulverized bulk material transport across water, Claudius Peters designs equipment for self-unloading carriers with panel aeration and special pneumatic discharge equipment such as the X-Pump or HP-Contank. This 'all-in-one' approach provides complete equipment integration, enabling appreciable reductions in power consumption.

Applications include; new-build self-unloading carriers for river and sea, offshore supply vessels for platforms, rigs and other projects, plus the conversion of normal bulk carriers to self-unloading carriers. In addition, Claudius Peters FLUIDCON is proven technology for ship and shore applications as well as floating and shore-based terminals.



 $\label{eq:continuous} \textit{Jurong Port, Singapore, silo, packer and palletizer.}$

All-in-one solutions for complete equipment integration

Turnkey



Pneumatic conveying systems.



Packing machines.



Silo technology.



Stockyard systems.

Claudius Peters brings its broad industry expertise to bear in offering clients complete packages and a one-stop capability, with customized turnkey solutions including any combination of stockyard and materials handling systems, calcining and pneumatic conveying, storage, mixing, package and dispatch.

A focus on quality and care pervades everything Claudius Peters does, from feasibility studies covering plant and raw material evaluation to the design and production of complete process systems (including instrumentation and control), as well as complete plant modernisation.



Claudius Peters Projects GmbH

Schanzenstraße 40 DE-21614 Buxtehude, **Germany** T: +49 4161 706-0

E: projects@claudiuspeters.com

Claudius Peters Technologies SAS

34 Avenue de Suisse F-68316 Illzach, **France** T: +33 3 89 31 33 00

E: technologiesSAS@claudiuspeters.com



CALCINING

COOLING

DISPATCH

DOSING

DRY BLENDING

DRYING

GRINDING

PACKING

PNEUMATIC CONVEYING
PULVERIZED FUEL SUPPLY

SILO SYSTEMS

STOCKYARD SYSTEMS

ALUMINA HANDLING SYSTEMS

MARINE POWDER HANDLING

TURNKEY PROJECTS

Claudius Peters (do Brasil) Ltda.

Rua das Figueiras, 474 - 3 º andar - Edifício Eiffel - Bairro Jardim - 09080-300 - Santo

André / SP, **Brazil**

T: +55 (11) 4903 9230

E: brasil@claudiuspeters.com

Claudius Peters (China) Ltd.

Unit 1706-1706,

17/F Laws Commercial Plaza, 788 Cheung Sha Wan Road, Lai Chi Kok, Kowloon, **Hong Kong**

T: +852 2544 1848

E: hongkong@claudiuspeters.com

Branch Office:

7/F, Office Block, Hong Kong Macau Centre,

No. 2 Chaoyangmen Bei Da Jie, Beijing 100027, **P. R. China**

T: +86 10 6501 3831

E: beijing@claudiuspeters.com

Claudius Peters (India) Pvt. Ltd.

Unit 408, 4th Floor, Peninsula Plaza, A/16 Fun Republic Lane, Off Link Road, Andheri West, Mumbai 400 053, **India**

T: +91 (22) 2674 0045

E: india@claudiuspeters.com

Claudius Peters (Italiana) srl

Via Verdi 2, I-24121 Bergamo, Italy

T: +39 0 35 237 196

E: italiana@claudiuspeters.com

Claudius Peters (România) S.R.L.

Str. Oituz Nr. 25C, et 2, 550337 Sibiu,

România

T: +40 (0) 369 407 036

E: romania@claudiuspeters.com

Claudius Peters (Asia Pacific) Pte. Ltd.

25 International Business Park,

#01-65/66 German Centre,

Singapore 609916

T: +65 6562 9100

E: asiapacific@claudiuspeters.com

Claudius Peters (Ibérica) S.A.

Paseo de la Habana, 202 Bis Bi,

E-28036 Madrid, **Spain**

T: +34 91 413 36 16

E: iberica@claudiuspeters.com

Claudius Peters (UK) Ltd.

Unit 10, Thatcham Business Village,

Colthrop Way, Thatcham, Berkshire,

RG19 4LW, United Kingdom

T: +44 (0) 1635 872139

E: uk@claudiuspeters.com

Claudius Peters (Americas) Inc.

445 West Bush Turnpike, Richardson,

Texas 75080, **USA**

T: +1 972 386 4451

E: usa@claudiuspeters.com



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