



SYSTRA (ZIBO) INDUSTRIAL TECHNOLOGY CO.,LTD

COMPANY PROFILE & PRODUCT CATALOG

CEMENT & MINERAL PROCESSING



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Systra Technologies is a distinguished engineering and consulting firm headquartered in Qingdao, China. Our core expertise lies in delivering top-tier industrial solutions across a spectrum of industries, including Renewable Energy, Automotive, Cement, Mineral Processing, and more.

Our state-of-the-art infrastructure and a highly skilled engineering team are at the forefront of innovation and excellence. We proudly hold a global leadership position in our respective fields and are committed to providing our clients with the very best.

We firmly believe that, with the right strategies in place, our company has the capability to eliminate challenges associated with products and projects, ensuring the utmost satisfaction for our clients.



ABOUT COMPANY

Systra Technologies stands out as a premier provider of engineering, equipment, and customized services tailored to the cement and mining industries. Our extensive industry expertise, innovative spirit, and unwavering commitment to customer satisfaction enable us to offer a diverse array of products, spare parts, consumables, and meticulous services to a broad clientele within both the cement and mining sectors.

We are dedicated to assisting you in enhancing and optimizing your equipment, boosting productivity, lowering operational expenditures, and minimizing the environmental footprint of your operations. We understand the multifaceted challenges you encounter, such as yield, downtime, wear and tear, and overall efficiency. Rest assured, our proficient team is prepared to furnish you with precise, tailored advice, bespoke solutions, and top-tier products and components renowned for their reliability and durability.

Our products have undergone rigorous testing in diverse environments and have been deployed successfully at various customer sites, affirming their trustworthiness and endurance. As your trusted service provider, we pledge to cater to your specific needs. Our service team leverages its professional technical prowess to deliver swift and comprehensive support. Drawing upon our extensive industry experience and a steadfast supply chain, we ensure you have prompt access to the most suitable products and components, ensuring the seamless operation of your equipment. At Systra Technologies, your sustainability and long-term prosperity are central to our service ethos, serving as the impetus behind our own growth. For more information, please visit our website at www.systra-tech.com.





VALUE OF PREDICTIVE MAINTENANCE

1-3 months' warning in advance

Predict the operating status of the equipment Real-time monitoring of the operating status of the equipment, analysis and calculation of state anomalies or failure trends.

Save an average of USD 80,000

Reduces service losses for abnormal equipment Take the 5000-ton production line as an example, an unplanned shutdown, the average loss of at least USD 80,000

30% increase

Improved maintenance efficiency Intelligently locate faults based on monitoring results, Prepare spare parts in advance and carry out repairs according to plan.





MANUFACTURING WORKSHOP





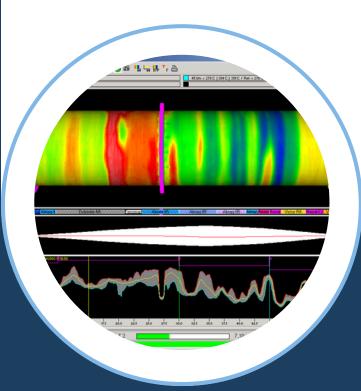












CEMENT ONSITE SERVICE

DYNAMIC MEASUREMENT AND ON-LINE ADJUSTMENT OF ROTARY KILN















CEMENT ONSITE SERVICE

REVERSE ENGINEERING - 3D SCAN







CEMENT - WEIGHING & FEEDING & DOSING

Fuel consumption. Clinker quality. Operational profits. Inconsistent fuel dosing has a broad impact across your business.

The rotor weighfeeder uses advanced weighing technology to guarantee consistent and highly accurate dosing of pulverized fuels to achieve optimal combustion.

Accurate fuel dosing can be the difference between your process burning too fast and just right. Between fuel economy and high fuel costs.

Between optimum production levels and failing to meet your targets. The rotor weighfeeder is designed for the utmost accuracy.





"

Inconsistent fuel dosing has a broad impact across your business.







CEMENT - CLINKER CRUSHER

Crusher is a kind of machinery that is widely used in the cement production industry.

It is mainly used in the material preparation process to crush the raw materials into proper size particles. And also the following clinker crushing process.

Systra to provide both entire crushing equipment and the related spare parts for difference production capacity and operation environment

Feature:

- 1. Can be applied for various types of materials;
- 2. Fine product particle size;
- 3. Simple mechanical structure, compact and light;
- 4. Easy to repair and replace parts, low maintenance fee.







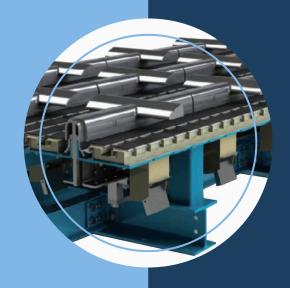


CEMENT -CLINKER COOLER

The clinker cooler, also known as a grate cooler or cement cooler, is a necessary equipment for cement clinker production.

The clinker cooler is mainly used to cool and transport the cement clinker. At the same time, cement cooler also provide hotair for rotary kiln and calciner, it is the main equipment of heat recovery for burning system.

The cooler will make a sufficient heat exchange between the clinker r (1000-1200°C) from the rotary kiln and air by cooler rotating, so that the material can be cooled to (below 200°C), and improve the clinker quality and grindability





The clinker cooler is mainly used to cool and transport the cement clinker.



KILN COOLER TO FIT FLS MIDTH SFC COOLER, CB COOLER MODULAR

MECHANICAL PARTS, INCLUDING BUT NOT LIMITED TO:

- Drive Plate
- C-Profile Plate & U-Profile Plate
- Discharge Device
- Cross Bar
- Grate Plate

- Wave Grate for the SFC and Multi-Moveable CB cooler
- Cooling Radiator
- Roller Assembly
- MFR Tower
- Inspection Hatch
- Retainer Bracket





CEMENT -ROTARY KILN

The kiln is the heart of the plant – what an entire cement plant is dimensioned around, and where most of the final chemical reactions take place. The ROTAX-2 kiln features an advanced support system – a fully flexible, self-aligning solution that follows the movement of the kiln.

Raw materials are fed into the vessel from the upper end and moved to the lower end, being stirred and mixed relying on the inclination and rotation of the kiln. The kiln burner produces a lot of heat by burning fuel. This kind of heat is usually transferred to materials through flame radiation, hot gas convection, kiln brick conduction, etc., which causes the chemical reaction between raw materials and finally forms a clinker.

The kiln is the heart of the plant – what an entire cement plant is dimensioned around





KILN TO FIT ROTAX-2 ROTARY KILN

MECHANICAL PARTS, INCLUDING BUT NOT LIMITED TO:

- Kiln Shell
- Supporting Roller
- Kiln Tyre

- Girth Gear
- Refractory Lining
- On-Site Inspection & Service





CEMENT GRINDING MILL

The cement grinding mill in a cement plant mainly includes cement vertical mill, cement ball mill, ultra fine grinding mill, cement roller press, etc. They are suitable for both wet process and dry process.

A cement grinding mill is usually used in the clinker grinding process. It is the final stage in cement production which will directly affect the cement product quality, output, and benefits.

Clinker particles, gypsum, and other materials in the cement grinding machine will be ground together into fine powder to match the fineness of the finished product.

A cement grinding mill is usually used in the clinker grinding process.









GRINDING MILL TO FIT FLSMIDTH ATOX MILL SERIES, OK MILL SERIES AND LOESCHE LM SERIES

MECHANICAL PARTS, INCLUDING BUT NOT LIMITED TO:

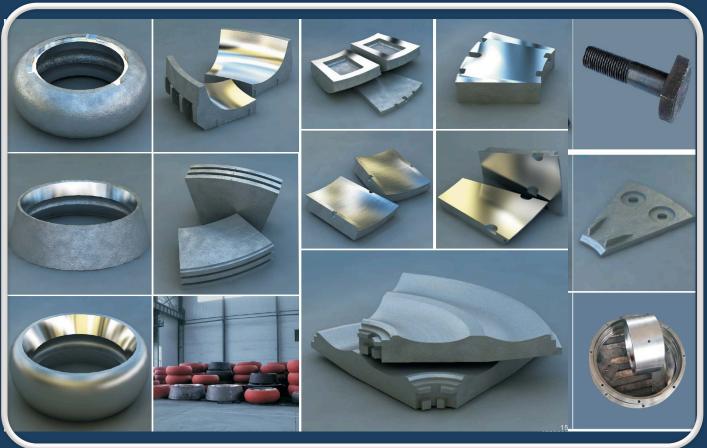
- Joint Head
- Torque Rod
- Grinding Table
- Wear Segment for Roller and Grinding Table
- Ceramic Wear Segment

- Clamping Segment
- Sealing Ring & Sealing Cover
- Hydraulic Cylinder & Seal Kit
- Rotary Shaft Seal
- Roller Assembly Re-Manufacturing





MILL ROLLER & LINER

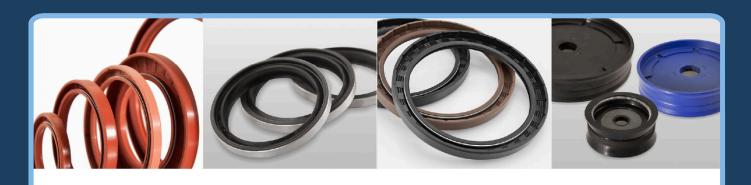






SEALS





ROTARY SHAFT OIL SEALS | GREASE SEALING | WIPER SEALS HIGH PRESSURE OIL SEALS | PISTON SEALS | V-RINGS



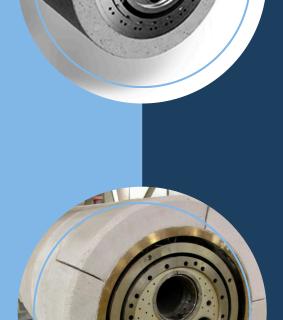
L2M® AND SPECIAL METAL CASED SEALS | BBS® – BIG BEARING SEALS |
TEXTILE RUBBER SEALS | CUSTOM MADE ARTICLES TO DRAWING |
INDUSTRIAL COMPONENTS IN RUBBER-TO-METAL |
SELF LUBRICATING BUSHINGS AND WASHERS



CEMENT-KILN BURNER

The kiln burner is a vital piece of equipment in the pyro system, which is responsible for clinker formation. The kiln burner is an integral component of a rotary kiln system, part of the pyro-processing system, serving to optimize the combustion of fuels and heat release in the kiln. Kiln burner is also called rotary kiln combustor, burner of rotary kiln, or combustor of rotary kiln.

The burner system is used for the sole purpose of providing heat to the rotary kiln to activate the chemical reactions that yield cement clinker.



The kiln burner is an integral component of a rotary kiln system.



KILN BURNER TO FIT FLSMIDTH AND PILLARD BURNER

COMPLETE SYSTEM (ONE KILN - ONE BURNER DESIGN) AND MECHANICAL PARTS, INCLUDING BUT NOT LIMITED TO:

- Multi-Fuel Channel Burner System Air Nozzle
- Trolly
- Hydraulic Station
- Refractory Lining
- Burner Repair and Re- Manufacturing









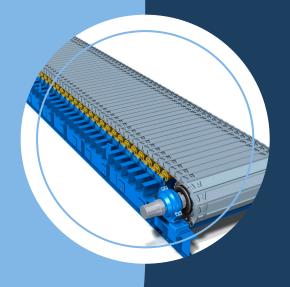


CEMENT APRON FEEDER

Apron Feeders are generally used as a primary or bin feeder application designed for varying applications, from light-duty to severe-duty, from low tonnage to high tonnage of material. Integrating the Apron Feeder drive to the crusher it feeds ensures the crusher is performing at its peak efficiency while integrating an Apron Feeder to any downstream system ensures the highest operating performance.

Apron Feeders are used to feed material in a wide variety of material handling applications, from mining ores, aggregates, scrap/recycle material, or any special material you have. They can handle small and large capacities from 10-6,000 tph and can withstand extreme impact loading. Apron Feeders deliver material at a uniform rate, allowing optimal feeding to downstream equipment. Due to their long service life with low-maintenance applications, Apron Feeders are a popular feeder choice.









CEMENT - APRON FEEDER

- Feeder Pan
- Lamella
- Roller and Shaft
- Chains





CEMENT -ROTARY SLUICE

This Rotary Sluice is specifically for the vertical mill of the company with the dosing of large and mediumsized air lock feeding devices, and with positive pressure and negative pressure to transport and drying functions.

Rotary Sluice its a simple structure, reliable performance, and good sealing performance, with replaceable wear liners and checking doors, its structural features can be resolved into the grinding particulate material is stuck problem in long-term use has highlights the characteristics of the product - small, compact structure, has been used widely in home and abroad.





| Parameter | Specification | 800mm | 1000mm | 1200mm | 1200 x 1600mm | 1600mm | 1800mm | 2000mm | 2200mm |
|--------------------------------|---------------|-----------|-----------|-----------|---------------|------------|------------|-----------|-----------|
| Density (t/m3) | | 1.1-1.4 | 1.1-1.4 | 1.1-1.4 | 1.1-1.4 | 1.1-1.4 | -1-1.4 | 1.1-1.4 | 1.1-1.4 |
| Granularity (mm) | | 0-80 | 0-100 | p=ioo | 0-80 | 0-80 | b-80 | 0-80 | 0-80 |
| The moisture (%) and liquidity | | 4-10 poor | '110 poor | 4-10 poor | -10 poor | 14-10 poor | 14-10 poor | 4-10 poor | 4-10 poor |
| Feed capabilities (t/h) | | 65-100 | 100-150 | 150-250 | 250-320 | 300-400 | 400-520 | 520-650 | 550-600 |
| Negative pressure millI (nbar) | | -60~-80 | -60~-80 | -6080 | -6080 | -6080 | -60~-80 | -60~-80 | -60~-80 |



CEMENT - ROTARY SLUICE

ROTARY WEIGHFEEDER TO FIT PFISTER DRW AND TRW SERIES, SCHENCK CEMENT AND AF SERIES

- Upper & Lower Housing
- Sealing Plate
- Rotor Complete
- Drive Shaft

- Nozzle Socket
- Blow Out Nozzle & Tube
- Complete Eletrical Control System

ROTARY SLUICE / AIR-LOCK ID800 TO ID2200

• Complete System to replace existing type and brand.





CEMENT -BALL MILL

The cement ball mill is a kind of cement grinding mill. It is mainly used for grinding the clinker and raw materials of the cement plant, and also for grinding various ores in metallurgical, chemical, and electric power enterprises. The cement ball mill is mainly composed of the feeding part, discharging part, rotary part, transmission part (reducer, pinion, motor, electric control), etc.

The cement ball mill has the characteristics of strong adaptability to materials, continuous production, a large crushing ratio, and easy-to-adjust the fineness of grinding products. The cement ball mill can be used not only in dry method cement production lines but also in wet method cement production lines. In addition, it can realize simultaneous grinding and drying, which is an important equipment for cement grinding.







CEMENT - BALL MILL

BALL MILL COMPLETE SYSTEM & BALL MILL SPARE PARTS TO SUPPORT FLSMIDTH AND METSO SERIES, AND OTHER OEM BRAND.

- Chamber Liners
- Diaphragm
- Head Wall

- Mill Shell
- Motor & Gearbox



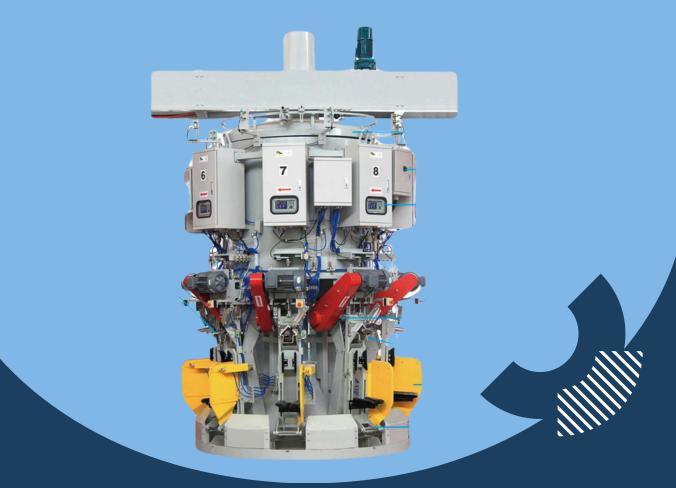
CEMENT - PACKER SYSTEM

Roto-packers or rotary packers are highly efficient cement packing machines. Due to their high cement packing capacities and fast cement filling speed, they are the most widely used cement packing machines worldwide.

They have the following features:

AGICO roto-packer cement packing machines

- Fast packing speed and high packing capacity;
- High weighing precision;
- Compact design structure and simple working process, the configuration of a cement packing line is very flexible;
- High automatic degree and easy to operate;
- Stable good performance during long-term running;
- Durable parts manufactured with quality materials, reduce your maintenance cost and extend the packers' service lives;
- High airproof, reduce dust pollution and improve workers' working environment;
- High packing efficiency and low energy consumption.







CEMENT - MOTION& ELECTRICAL

MECHANICAL PARTS

- Gearboxes
- Geared Motors
- Filters
- Valves
- SEALS
- Heat Resistant Material
- Blowers
- Compressors
- Actuators
- Pumps
- Oil Coolers
- Bearings

- Couplings
- Pneumatic parts
- Hose



















ELECTRICAL

- Motors
- Circuit Breakers
- Solenoid Valves
- Automation parts
- Modules
- Cables

- Carbon Brush
- Starters
- Panels
- Fuses
- Relays
- ABB,AEG & SIEMENS parts











RELATED SPARE PARTS

INSTRUMENTATION

- Thermocouples
- Transducers
- PLC
- Complete range of all instruments



AUTOMATION

- Touch Screen
- Switches
- Kiln Camera
- Lynx Camera
- Spyrometer
- Flow meters
- Socket









MINERAL PROCESSING





MINERAL PROCESSING - CENTRIFUGE SPARE PARTS

Centrifugation in mineral processing is achieved by using industrial centrifuge decanters, also known as centrifugal decanters. These specialised centrifuge decanters reduce waste and increase overall & separation efficiency.

Centrifuges for mineral processing significantly increase the throughput when separating Your valuable components.

Thanks to their robust and reliable design and wear- and corrosion-resistant materials,

Ferrum centrifuges guarantee long and trouble-free operation.

The ingenious technology meets the highest demands to increase the separation efficiency of Your mineral materials.

These specialised centrifuge decanters reduce waste and increase overall & separation efficiency.









CENTRIFUGE SPARE PARTS

COAL CENTRIFUGE TO FIT FC SERIES AND VM SERIES

MECHANICAL STRUCTURE PARTS AND HYDRAULIC PARTS

- Basket
- Drive Motor
- Gears

- Hydraulic Fittings
- Oil Pump
- Pully and Belt



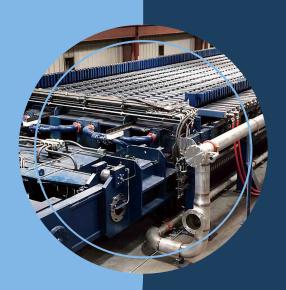


MINERAL PROCESSING - FILTER PROCESS

Filter press is the most commonly used pressure filter machine in some industries. By applying a certain pressure between filter plates, this batch-operated filter makes it possible to produce filter cakes that reach the desired moisture.

The filtrate passes through the filter cloth and flows along the filter plate groove to the corner channel of the plate frame, and is discharged in a concentrated manner. After filtering, the filter residue can be washed with clean water. After washing, compressed air is sometimes passed to remove the remaining washing liquid. Then open the filter press to remove the filter residue, clean the filter cloth, repress the plate and frame, and start the next working cycle.









MINERAL PROCESSING - FILTER PROCESS

FILTER PRESS TO FIT

MECHANICAL STRUCTURE PARTS INCLUDING BUT NOT LIMITED TO:

- Intermediate Plate
- Base Beam

- Chute
- Piping





MINERAL PROCESSING - FLOTATION

Flotation, in mineral processing, method used to separate and concentrate ores by altering their surfaces to a hydrophobic or hydrophilic condition-that is, the surfaces are either repelled or attracted by water.

Flotation is widely used to concentrate copper, lead, and zinc minerals, which commonly accompany one another in their ores. Many complex ore mixtures formerly of little value have become major sources of certain metals by means of the flotation process.









MINERAL PROCESSING - FLOTATION

FLOTATION TO FIT WEMCO AND DORR-OLIVER

MECHANICAL STRUCTURE AND WEAR PARTS, BUT NOT LIMITED TO:

- Bearing Housing Shaft Assembly
- Rotors
- Polyurethane Wear Parts
- Dart Valves & Grommets





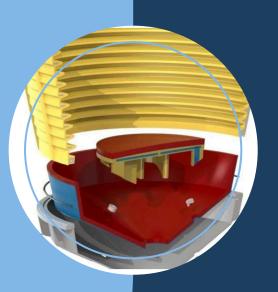
MINERAL PROCESSING -KNELSON CONCENTRATOR SPARE PARTS

The Knelson concentrator (KC) is essentially a vertical-axis bowl-type centrifugal concentrator that uses a fluidized bed to concentrate the dense material over a wide size range (0.02-0.850mm), which is composed of a feed and discharge system, separation system, power system, and water supply system

The Knelson concentrator (KC) is widely used in gold ore and other precious metal ore processing technology because of its excellent separation performance.

Widely used in gold ore and other precious metal ore processing technology









MINERAL PROCESSING - KNELSON CONCENTRATOR SPARE PARTS

GLOD CONCENTRATOR TO FIT KNELSON

MECHANICAL STRUCTURE PARTS INCLUDING BUT NOT LIMITED TO:

- Feeding Pipe
- Drain Pan
- Liner
- Main Frame

- Discharge Mouth
- Rubber Cushion
- Main Shaft
- Bearing

PULLY, BELT, MOTOR, VALVES AND HYDRAULIC PARTS





MINERAL PROCESSING -PNEUMAPRESS SPARE PARTS

The Pneumapress Filter offers solutions to recurring, pressure-filter issues. It uses a remarkably simple filtration system which both dramatically improves solid and filtrate production, as well as reduces costs.

Since the Pneumapress Filters are simple, versatile, and use very few consumable items, they are compatible with many different applications. They even work well with specialized applications such as processing corrosive and/or high-temperature streams. Even under these circumstances, the filter produces dry and uniform solids and high-quality filtrate.









MINERAL PROCESSING - PNEUMAPRESS SPARE PARTS

VERTICAL FILTER PRESS TO FIT PNEUMAPRESS

MECHANICAL STRUCTURE PARTS INCLUDING BUT NOT LIMITED TO:

- Upper and Lower Pattern
- Base Beam
- Intermediate Plate
- Chute
- Piping

ELECTRICAL AND HYDRAULIC PARTS

- Manifold
- Valve
- Hydraulic Fitting

- Solenoid
- Sensor





MINERAL PROCESSING -THICKENER SPARE PARTS

Thickeners are important and widely used for mineral processing to make concentrate from ROM (raw ore). Specifically, thickeners are used to increase the solid content of concentrate slurry (concentrate + process water) so that we can effectively deliver the concentrated slurry and reuse the process water.



In the process of thickening (also called sedimentation), the solids in a suspension settle under the influence of gravity in a tank and form a thick pulp. This pulp, and the clear liquid at the top of the tank, can be removed continuously or intermittently.



Thickeners are used to increase the solid content of concentrate slurry.





MINERAL PROCESSING - THICKENER SPARE PARTS

THICKNER TO FIT EIMCO AND DORR-OLIVER

MECHANICAL STRUCTURE PARTS AND DRIVING PARTS INCLUDING BUT NOT LIMITED

- Bearing Housing
- Eccentric Assembly
- Pinion and Shaft for Drive Assembly
- Heater Assembly

- Screw Jack
- Main Gear Shaft
- Others





CLIENT FEEDBACK





Stephanie Gaskel

It was a very difficult phase for my company before we met the Systra team. They have helped us out with expert explanations and good consultancy. We moved from hopelessness to getting the right products.





Albert Belle

Systra has some really high standards and their vision is vast too. Their way of consultancy helped to overcome problems in our product development phase. We came out successful and our company survived and thrived.





SYSTRA (ZIBO) INDUSTRIAL TECHNOLOGY CO.,LTD

In our role as your service provider, we tailor our services to your specific requirements. Our dedicated service team harnesses their professional technical expertise to deliver swift and comprehensive service and support. Leveraging our substantial industry experience and a dependable supply chain, we guarantee you timely access to the most fitting products and components, thus ensuring the seamless operation of your equipment.

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