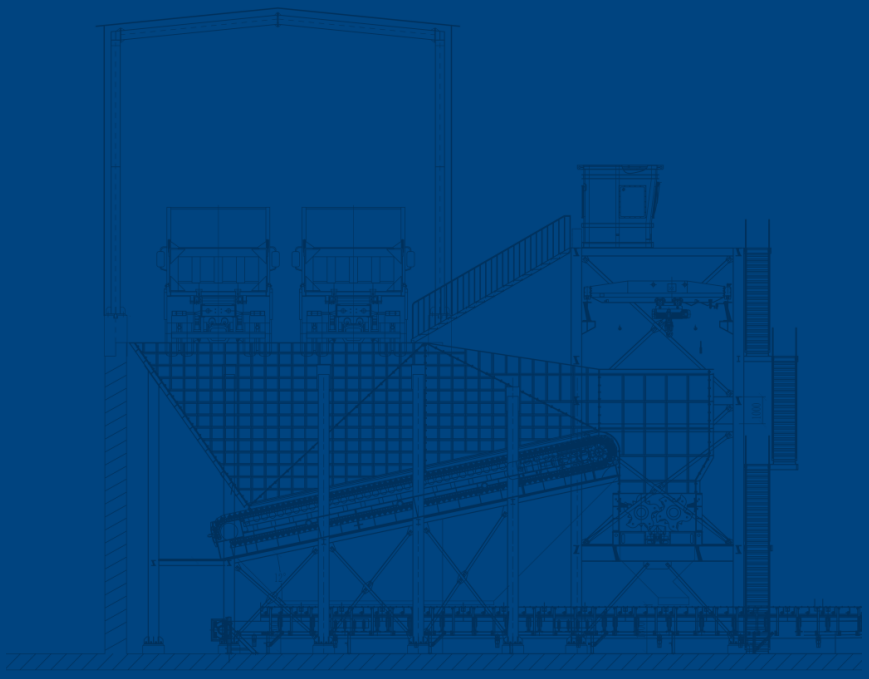
ZHENYUAN

Coal Mining Machinery Leader

CRUSHING STATION BROCHURE



Henan Zhenyuan Science&Technology Co.,Ltd.

COMPANY PROFILE

Zhenyuan Technology is an excellent leader in the design and manufacture for crushing and screening production systems. We are committed to creating value for our customers in the global mining sector with superior technologies. For us, this means improving our customers' technological processes in terms of reliability, efficiency and accuracy. Combining superior equipment and extensive process knowledge, we develop and produce innovative solutions for material crushing, screening, conveying, dust removal, storage, industrial weighing, automation and electrical intelligence.

180000㎡

Area Covers

2000+

Customer Cases

1000+

Production & Processing Capacity

DESIGN AND R&D CAPABILITY

Zhenyuan Technology Center has been recognized as a "Provincial Engineering Technology Research Center," with research departments dedicated to crushing equipment, screening equipment, feeding equipment, and electrical equipment. Development is an undeniable truth, but it cannot be achieved without the recruitment and cultivation of talent. The company advocates for a philosophy of utilizing each individual's abilities to their fullest potential.

Currently, Zhenyuan Company boasts 3 experts in the crushing and screening industry, 2 heavy machinery researchers, 30 full-time research and development personnel, 80 individuals with senior professional technical titles, 120 individuals with intermediate professional technical titles, 2 doctoral candidates, and 4 master's degree holders. Devoted to research and development with unwavering persistence, the company adheres to a scientific management model, striving for precision engineering, intelligent manufacturing, and pioneering innovation, making it a deserving pioneer in the domestic machinery manufacturing industry.

QUALIFICATIONS AND HONORS

BRAND HONOR AND STRENGTH CERTIFICATION


中国煤炭工业科学技术奖

获奖证书

证书编号：2023-3127-D03

获奖项目：大型高效滚轴筛

获奖等级：三等奖

获奖单位：河南省振源科技有限公司


建筑业企业资质证书

（副本）


发明专利证书

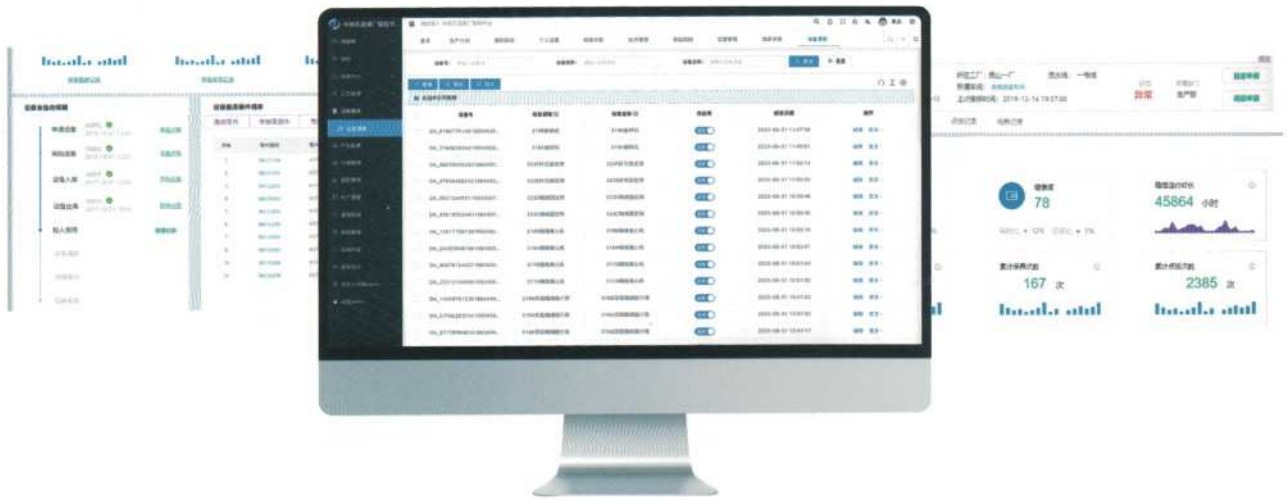

发明专利证书

INTELLIGENT ELECTRICAL SYSTEM

Full Lifecycle Management Of Equipment:

The equipment archives for electromechanical devices include: equipment classification and coding, basic equipment information, auxiliary equipment details, spare parts information, wear parts specifications, procurement documentation and technical materials, maintenance schedules, plan implementation and acceptance records, special equipment inspection and calibration data, equipment upgrades and modification records, and decommissioning information.

The full lifecycle management of equipment revolves around the entire lifespan of electromechanical devices. It integrates management processes such as demand planning, bidding and procurement, arrival and warehousing, withdrawal and issuance, with post-issuance procedures including usage, routine maintenance, periodic inspections, preventive upkeep, repairs, transfers, handovers, decommissioning, and disposal. This interconnected system enables comprehensive tracking and management of equipment flow and actual usage throughout its lifecycle.



Operations Management:

Utilizing real-time equipment status monitoring data and electromechanical equipment management module data, this system enables full-process management of equipment faults from detection to resolution completion, accomplishing functions including fault reporting, fault analysis, maintenance plan formulation, automatic fault alerts, and real-time feedback on response measures.

Online Warranty Service Management

Intelligent Fault Diagnosis

Real-time Monitoring & Early Warning

Intelligent Operation&Maintenance System

Establish an intelligent operation and maintenance system that organically integrates monitoring, management, and fault localization. This system constructs a smart O&M management and control model to achieve predictive equipment maintenance, automatically identify business issues, simplify operational complexity, and continuously improve business health.

- Analysis & Early Warning
- Formulate Maintenance Plans
- Automatically Assign Tasks
- Track Execution Record

FEEDER BREAKER

Working Principle

Feeder Breaker is an innovative piece of equipment that integrates material receiving, conveying, screening, crushing, and discharge functions into a single system. The conveying section can be optionally equipped with an apron plate or chain plate structure, and the crushing section is compatible with hammer-type or roller-type configurations. Customizable combinations based on material characteristics and production needs.

Advantages & Features

1. The compact design with a lower feeding height and horizontal material flow technology enables the feeder breaker to be widely applied in open-pit mines.

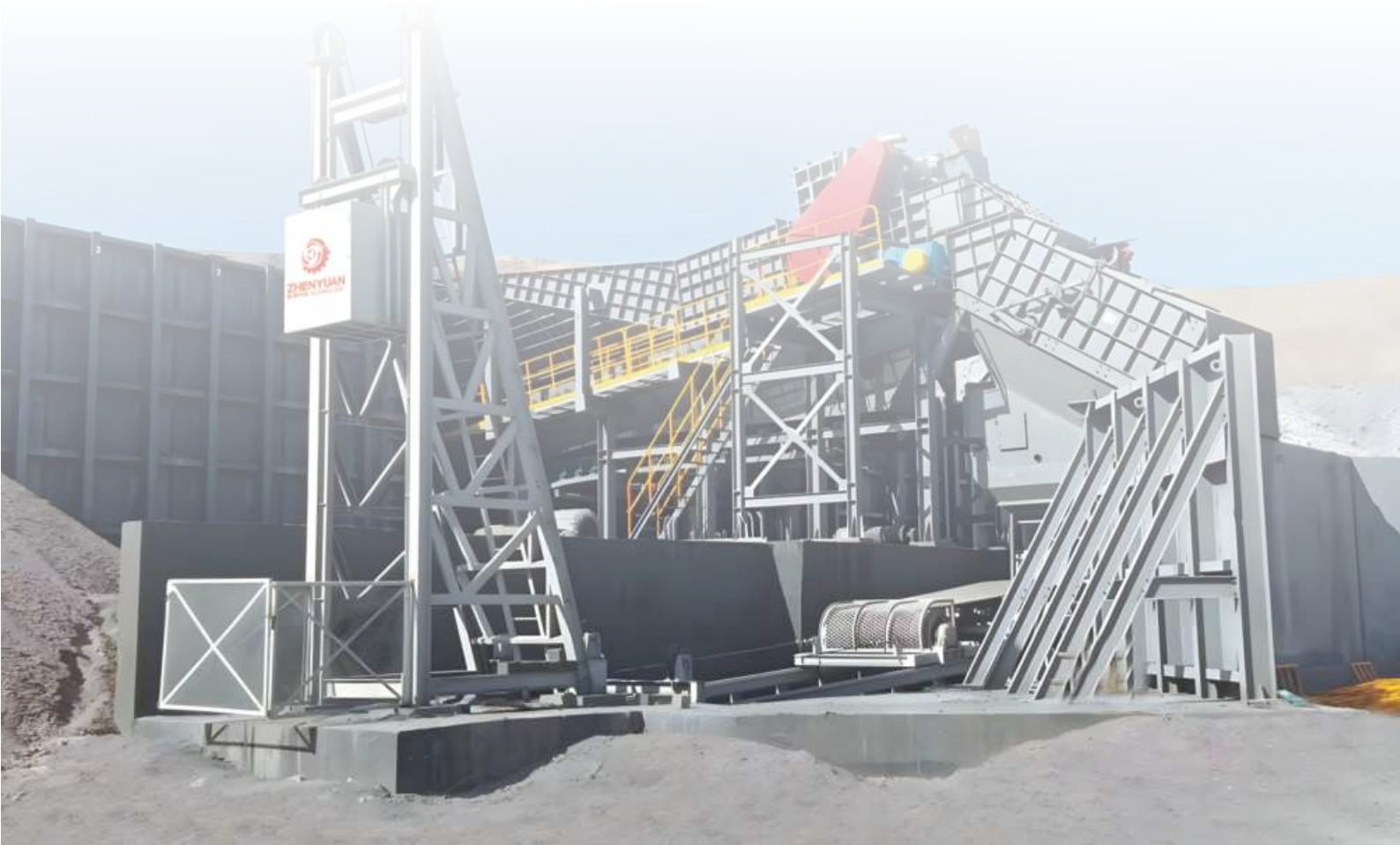
2. Feeder breaker integrates the functions of conveying, screening, and crushing into a single machine, achieving multi-functional integration and significantly improving operational efficiency.

3. Feeder Breaker boasts oversized continuous crushing capacity, strong portability, minimal foundation demands, and adaptability to adverse working conditions.

4. The system is equipped with an intelligent electrical system, enabling unmanned production processes and precision daily maintenance, thereby reducing production and operational maintenance costs.

TECHNICAL PARAMETER

Model	Capacity (t/h)	Average Input Size H*W*L(mm)	Inlet Port Size H*W(mm)	Output Finished Product Size(mm)
TP1200	500-1000	800*950*∞	1790*1350	0-200
TP1400	1000-1500	1000*1400*∞	1790*1550	0-300
TP1600	1500-2500	1200*1600*∞	1790*1750	0-300
TP1800	2500-3500	1200*1800*∞	1790*1950	0-300
TP2000	3500-4500	1400*2000*∞	1790*2150	0-350
TP2400	4500-6000	1600*2400*∞	1790*2600	0-400



OPEN-PIT MINE SEMI-MOBILE CRUSHING STATION

Working Principle

To achieve large-scale production and processing of various minerals, a crushing and screening production system has emerged through the organic integration of different modules including feeding, crushing, conveying, screening, storage and loading, and electrical systems. This integrated system accomplishes comprehensive functions such as crushing, screening, material conveying, and storage/loading operations for various open-pit minerals.

Advantages & Features

1. Standard modular design: Feeding module, crushing module, screening module, and conveying module are rationally configured according to user requirements and operating conditions to meet production demands of open-pit mines with various scales.

2. Innovative relocation-friendly solutions are integrated into each module design from the initial stage, enabling cost-effective and time-saving rapid relocation that delivers additional value-added benefits to customers.

3. The feeding module adopts variable frequency control for precise feeding speed regulation. It can achieve interlocking functions with crushing equipment through intelligent control systems, ensuring optimal overall performance of the crushing station under any operating conditions.

4. Intelligent electrical systems monitor equipment operation status and potential faults in real time. The unmanned production process and targeted precision maintenance significantly improve efficiency while dramatically reducing labor intensity for workers.

TECHNICAL PARAMETER

Model	Maximum Input Size	Output Size (mm)	Capacity (t/h)	Power (KW)
PSZ-1500	1200	300	1000-1500	395-490
PSZ-2500	1200	300	2000-2500	532-660
PSZ-3500	1500	300	3000-3500	685-850
PSZ-5000	1800	400	4500-5000	894-1030
PSZ-7000	2000	400	6000-7000	1080-1200

Note: Customization can be made according to the actual needs of the customer on site

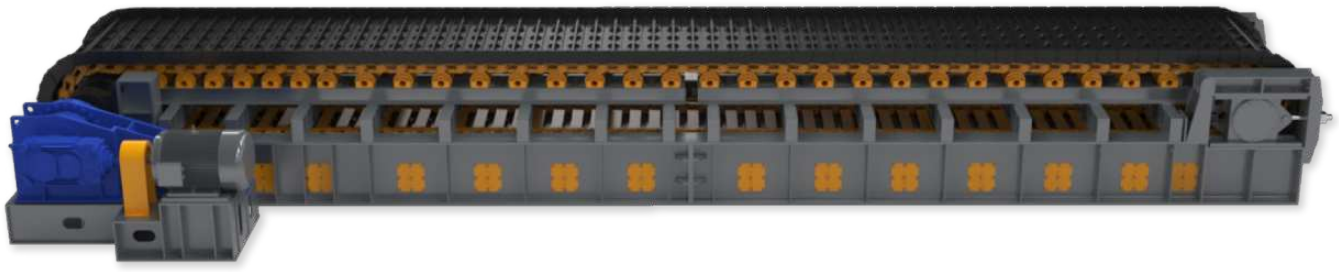
MODULES OF SEMI-MOBILE CRUSHING STATION

Zhenyuan Technology has consistently dedicated itself to the processing and utilization of open-pit minerals, particularly excelling in the open-pit coal mining sector with its innovative solutions that hold unparalleled advantages. Years of practical applications and a substantial market share have earned the company a broad customer base. Among its achievements, the Heavy-duty Feeder Breaker developed for open-pit coal mines integrates feeding, crushing, and screening functions into a unified system, streamlining traditional production processes and spearheading technological advancements in the industry.

The Semi-mobile Crushing Station, which incorporates robust components such as heavy-duty apron plate feeders and mineral sizers, has proven its enduring value over time. Renowned for unmatched reliability and minimal maintenance requirements, this solution remains highly favored by clients and continues to be an indispensable force in the market.

The Semi-mobile Crushing Station is primarily composed of feeding module, crushing module, screening module, steel structure module, electrical module, etc. For the feeding module, two solutions are available: heavy-duty apron plate feeder or heavy-duty scraper feeder. Engineers will make the appropriate selection based on customer requirements and operational conditions. The technical parameters of heavy-duty apron plate feeder are as follows:

ZBWJ HEAVY-DUTY APRON PLATE FEEDER



TECHNICALPARAMETER

Model	Plate Width (mm)	Plate Length (m)	Feeding Speed (m/s)	Feeding Size (mm)	Feeding Capacity (m^3/h)
ZBWJ1200	1200	3-50	0.02-0.19	≤600	100-600
ZBWJ1400	1400	3-50	0.02-0.19	≤800	100-800
ZBWJ1600	1600	3-50	0.02-0.19	≤1000	200-1000
ZBWJ1800	1800	3-50	0.02-0.25	≤1000	400-1500
ZBWJ2000	2000	3-50	0.02-0.25	≤1200	600-2000
ZBWJ2400	2400	3-50	0.02-0.25	≤1400	800-3000
ZBWJ2800	2800	3-50	0.03-0.36	≤1800	1300-4000

Note:The center distance of the sprocket and the motor power are determined based on the actual needs on site.

2PLF SERIES MINERAL SIZER

The crushing module adopts Mineral Sizer solution, among which a screening type Mineral Sizer is used for secondary crushing. The addition of screening function can provide greater processing capacity to meet the large-scale production needs of open-pit mines.

GZS SERIES ROLLER SCREEN

The screening module adopts Roller Screen, which completely overcome the drawbacks of low capacity, susceptibility to clogging and low screening efficiency. It is widely used in the classification process of open-pit mines

Received the 2023 Coal Industry Association Science and Technology Award

ZXF SERIES BANANA SCREEN

The screening module also adopts Banana Screen. This screen employs advanced equal thickness screening principles, offering advantages such as high processing capacity, efficient screening performance, and reliable operation compared to traditional screening machines.

SYKH SERIES CIRCULAR VIBRATING SCREEN

The screening module also adopts Circular Vibrating Screen. This screen is specially designed for the classification of materials in various mining industries. Its performance indicators, such as vibration frequency, amplitude, and inclination angle, are optimized based on years of practical experience and screening theory, ensuring superior screening performance.

MFF SERIES MECHANICAL FLIP-FLOW SCREEN

The fine screening module adopts Mechanical Flip-Flow Screen. This screen can achieve very high screening efficiency with a relatively small screen area while ensuring that the screen mesh does not get blocked. It is widely used in various mines for screening fine, wet and sticky materials that are difficult to separate.

GLD SERIES QUANTITATIVE WEIGHING BELT FEEDER

The feeding module adopts Quantitative Weighing Belt Feeder. This belt feeder(patent number:201210273898.0) is mainly used in mining blending system and quantitative rapid loading system with dynamic weighing and measuring function. This belt feeder has obtained national invention patent and the Science and Technology Achievement Certificate issued by the Henan Provincial Department of Science and Technology, with its overall performance reaching the internationally leading level.

ENGINEERING CASE

1250TPH/SET PRIMARY FEEDER BREAKER/TOTAL 6 SETS/RAW COAL/INDONESIA

1250TPH/SET SECONDARY MINERAL SIZER/TOTAL 6 SETS/COAL/INDONESIA

1000TPH/SET PRIMARY FEEDER BREAKER/TOTAL 2 SETS/RAW COAL/INDONESIA

1000TPH/SET SECONDARY MINERAL SIZER & ROLLER SCREEN /TOTAL2 SETS/COAL/INDONESIA

1500TPH/SET APRON FEEDER & PRIMARY MINERAL SIZER/COAL&GANGUE/MONGOLIA

1500TPH/SET SECONDARY MINERAL SIZER/TOTAL 2 SETS/COAL&GANGUE/MONGOLIA

1600TPH/SET APRON FEEDER & PRIMARY MINERAL SIZER/OIL SHALE/CHINA

1600TPH/SET SECONDARY MINERAL SIZER/OIL SHALE/CHINA

1000TPH/SET COAL CRUSHING STATION/RAW COAL/CHINA

1000TPH/SET PRIMARY FEEDER BREAKER & SECONDARY MINERAL SIZER /RAW COAL/CHINA

2500TPH/SET COAL CRUSHING STATION/RAW COAL/CHINA

1800TPH/SET COAL CRUSHING & SCREENING PLANT/RAW COAL/CHINA

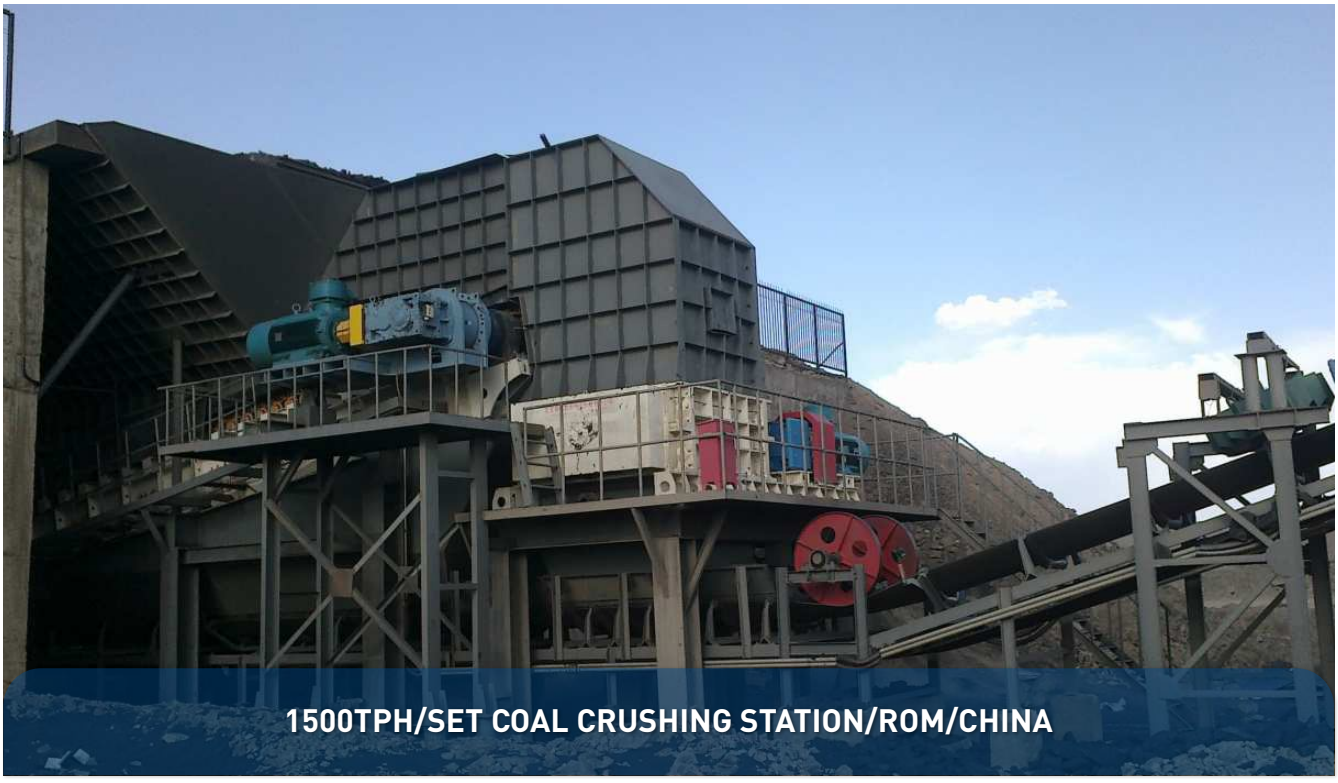
3000TPH/SET SEMI-MOBILE CRUSHING PLANT/ROM/CHINA

2000TPH/SET COAL CRUSHING STATION/ROM/CHINA

3500TPH/SET OPEN-PIT COAL MINE CRUSHING & SCREENING PLANT/RAW COAL/CHINA

2500TPH/SET SEMI-MOBILE CRUSHING PLANT/ROM/CHINA

2500TPH/SET SEMI-MOBILE COAL CRUSHING &SCREENING PLANT/RAW COAL/CHINA



1500TPH/SET COAL CRUSHING STATION/ROM/CHINA

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