"With 15 years of continuous technical innovation, We have a 90% market share of large sizing crushing equipments in China now." said Dr. Pan Yongtai
Enterprise Profile

Crushing Equipment Center of Coal Preparation Branch of China Coal Research Institute is a national-level scientific research institution, and is the only and the earliest professional institution engaging in the research and marketing of coal sizing and crushing equipments in China. More than 70% of its staff hold the master’s degree and above.

Through continuous innovation and accumulation of 15 years, it has sold a total of more than 600 super sizing crushing equipments of the SSC and 2PLF series which are developed by itself. Its users are distributed in all coal producing areas in China, and it has a market share of above 40% for such type of products. The stand-alone capacity ranges from 500 to 8000t/h. The super sizing crushing equipment with the installed power of 150 ～ 730kw has completely reached the international advanced level in terms of technical indexes, operation reliability and technical advancement, and is replacing imported products on a large-scale basis. A total of more than 200 products have been sold, with the market share of 80%. At present, it is the only No. 1 brand in China that can completely compete with foreign advanced products. From 500t/h to 1000t/h, and from 3000t/h to 8000t/h, every increase of the index has created a No. 1 in China, and represented the progress and leap of the national industry.

As a listed company, it has the largest professional processing base for coal preparation equipments in China and even in the world. It has a factory building area of 30000m2 and a product workshop area of 2500m2, with the annual production capacity of 200 million yuan. It has possessed the double-side butted boring & milling machine, 600-ton press-filling machine, 5-meter double-column vertical lathe, digital-controlled torch cutting machine, 6-meter digital-controlled plate bending machine, and a large number of machining equipments such as 50 lathe, shot blasting equipment and sandblasting equipment.

Total Solution for Sizing Crushing

Sizing and crushing of coals ensure the size, simplify the process and reduce over crushing operation.

Crushing for top coal caving and blasting downhole or at the shaft mouth of coal mines, crushing for high-hardness coal, white sand rock or igneous rock.

Mobile screening crushing plant for open cast mine and coal yard.

Crushing of middlings, refuses, dry or wet coal.

Crushing of coke, coking coal, silicate, glass, clay and limestone.

Crushing of power coal and slag of power plant.

Crushing of bauxite ore, ceramics, gypsum and other non-metal ores.

Crushing and sizing of urban garbage and industrial solid waste.

Crushing of sinter ores and ores of below medium hardness.
Expert Introduction

Pan Yongtai, the founder of the project, is the only postdoctor who is engaged in the research of sizing crushing technologies in China, and is also the academic and technical leader in the crushing field of the coal industry in China.

Ten years ago, the product concept of "international integration, high-end reliability, replacing imported products" was proposed. Through continuous innovation and practices, the SSC super sizing crushing product, a national high-end brand with complete intellectual property rights, high market influence and reputation, has been cultivated. Such concept, in addition, is being recognized and respected in the industry today, leading to the revolutionary change of the recognition and application of such types of products in China.

It has been in charge of 7 projects assigned by the Eleventh Five-Year Plan, Provincial Development and Reform Commission, Ministry of Science and Technology and Ministry of Education, won a number of scientific-technical progress prizes of ministry levels, possessed 8 patents, drafted and prepared the standard for Sizing Crushers for Coal which has become the generally applied and referenced industrial standard in China. It has published more than 40 theses on science and technology at the international rock breaking conferences, international coal preparation conferences and mineral processing technology conferences. These theses have become the main references of relevant technicians and researchers in China.

Brand Concept Operation

Brand vision:
Build up an international brand that has a large market share in China and in the world

Product concept:
Provide customers with not only products, but also technologies

Service concept:
Provide services not just at the time of product faults

Design concept:
For every operating condition for crushing, only one type of tooth is the best;

Operation concept:
credit, multi-win, responsibility

Market concept::
Every customer and achievement are our best propagandist

Innovation concept::
Being imitated is a kind of honor

Experiment and research

Crushing of middlings, refuses, dry or wet coal

Crushing of coke, coking coal, silicate, glass, clay and limestone

Crushing of power coal and slag of power plant

Crushing of bauxite ore, ceramics, gypsum and other non-metal ores

Crushing and sizing of urban garbage and industrial solid waste

Crushing of sinter ores and ores of below medium hardness
Patent and Honor
Service and Application

A large Group's Application

Shenhua Ningxia Coal Industry Group                     Semi-mobile crushing plant for open cast mine
Xilinhot, Inner Mongolia                                          Semi-mobile crushing plant for open cast mine
Huolin River, Inner Mongolia                                           Semi-mobile crushing plant for open cast mine
Datang Coal, Inner Mongolia                                      Semi-mobile crushing plant for open cast mine
Jiaohua Factory of Baogang Group                             Semi-mobile crushing plant for open cast mine
Liaoning Yingkou Port Yatai Group                         Semi-mobile crushing plant for the port
Shenhua Group                                                   Super sizing crusher for large coal
Erdos areas of Inner Mongolia                                      Super sizing chunk crusher
Shanxi Coal Industry Company Limited                         Super sizing chunk crusher
Xinjiang Coking Coal (Group) Duty Limited Company          Super sizing chunk crusher
Baogang Group                                                  Super sizing chunk crusher
Yangquan Coal Industry(Group)Co.,Ltd                          Super sizing chunk crusher
Xishan Coal Electricity Group Co., Ltd                        Super sizing chunk crusher
Xishan Coal Electricity Group Co., Ltd                        Super sizing chunk crusher
Hebei Jinniu Energy Resources Co., Ltd                          Super sizing chunk crusher
Fu'xin Mining Industry Group Co.,Ltd                           Super sizing chunk crusher
Yanzhou Mining Group                                            Super sizing chunk crusher
Longmay Group                                                   Super sizing chunk crusher
Lu'an Group                                                     Super sizing chunk crusher
Huainan Mining Group                                            Super sizing chunk crusher
Beijing Mining Group                                             Super sizing chunk crusher
Shanghai Datun Coal and Electricity Group                  Downhole super sizing crusher
Beijing Luneng Group                                           Downhole super sizing crusher
Shuozhou Shanxi                                               Downhole super sizing crusher
Fu'xin Mining Industry Group Co.,Ltd                           Downhole super sizing crusher
Fushun Taihe Coal                                            Downhole super sizing crusher
Guizhou Huafei Chemical Industry                               Bauxitic ore crushing
Shanxi Zhaofeng Aluminum Industry Co., Ltd                    Bauxitic ore crushing
Shandong Longkou Mining Bureau                                Crusher used for power plant
Shandong Tongda Electric Power                                Crusher used for power plant
Experiment and Research

Our company has the professional laboratories and experimental facilities and instruments in terms of rock mechanics, material wearability, test piece analysis, size test, etc. Therefore, we can not only provide data basis for pre-sales services, but also provide professional experiments and analysis in terms of rock characteristics, size characteristics and technical feasibility free of charge for the materials to be crushed.
Minufacture Capability

Coal Preparation Branch of China Coal Research Institute has invested more than 40 million Chinese Dollars to reconstruct and expand the original production system since it came into the market. Now it has 30000m² of production factory building and 2500m² of product workshop. Its operational capacity has reached 100 million Chinese Dollar. It has possessed the 5-meter double-column vertical lathe, 2.5-meter numerical-control vertical lathe, numerical-control flame cutting machine, 6-meter numerical-control bender, Toshiba 130 borer, DL-32 full-function numerical-control lathe, CK6163/6150 numerical-control lathe, 6-meter open-side planing machine, precise gear hobber, 1M-3M planer type milling machine, B5063 slotter, 600-ton press-filling machine, sheet leveller, double-side boring and milling machine, and a large number of 50 and 30 lathes, buzz planers, shot blasting equipment, sand blasting equipment and other routine processing equipment. It has become the largest production and processing base for coal preparation processing equipments in China and even in the world, with its leading products being the super sizing crusher series of products.

Give us an opportunity
We will provide you with
Internationally advanced technologies
Highly reliable products
Considerate after-sales services
We are awaiting your verification!
Large handling capacity grading crusher

Technical Features

Large capacity, high reliability

Accurate control of product length of pull, adjustable rigidity of center distance

Low over breaking of products, high binding rate, low energy consumption for crushing

New materials and structures for crushing teeth, with high strength, high wearability and easy maintenance

Various tooth types available to meet on-site needs of various operating conditions

Reliable and advanced intelligent measurement control, lubrication system and self-advancing mechanism

Various drive forms, single-motor or double-motor drive, depending on needs

Customized and professionalized need-based design, year-round zero time supply of parts

Main Technical Parameter

Capacity: 10000t/h

Upper limit of feeding size: 1500mm

Lower limit of discharging size: 13mm

Crushing strength: < 300Mpa

Single-stage crushing ratio: 2 -6

Installed power: maximum 730kw
Lengthened-type super sizing crusher

Technical Features

Lengthened-type super sizing crusher

Capacity: 500-10000 t/h, completely meets the annual design capacity

Crushing for 3-50 million tons/year large coal preparation plant and large mine transloading, crushing for open cast mine

Feeding size: ≤50~1500mm

Discharging size: ≤ 15~ 300mm

Crushing strength: ≤300MP

Single-stage crushing ratio: 2~6

Tooth type: multiple types of teeth available to match the operating conditions at site

On-site application: This series of products have been well applied in Shenhua Group, Luneng Group, Shanxi Large-scale Mining Bureau, Shandong Large-scale Mining Bureau and Electric Power Group, Inner Mongolia Large-scale Group Mining Bureau and open cast mine, large groups and mining bureaus in Huainan and Northeast regions, Yunan, Guizhou and Sichuan provinces.
Standard-type super sizing crusher

Technical Features

Capacity: 400 - 1500t/h, completely meets the annual design capacity

Used for crushing operations in 2-5 million tons/year large coal preparation plant, electric power, rare metal and building material environment

Feeding size: ≤50 - 1000mm

Discharging size: ≤ 15 - 300mm

Crushing strength: ≤ 250MPa

Single-stage crushing ratio: 2 -6

Tooth type: multiple types of teeth available to match the operating conditions at site

On-site application: This series of products have been well applied in Shenhua Group, Luneng Group, Baogang Group, each major large-scale mining bureau in Shanxi, Shandong Coal and Electric Power Group, each major mining bureau in Hebei, each large group and mining bureau and large open cast mines in Inner Mongolia, each large group and mining bureau in the three northeast provinces of China, large groups and mining bureaus in Huainan and Huaibei regions, Yunan, Guizhou and Sichuan provinces.
Short-box-type super sizing crusher

Technical Parameter

Capacity: 150-500t/h, completely meets the annual design capacity

Used for crushing operations in 0.9-3 million tons/year large coal preparation plant, electric power, rare metal and building material environment

Feeding size: ≤50 ~ 1000mm

Discharging size: ≤ 15~ 300mm

Crushing strength: ≤ 200MPa

Single-stage crushing ratio: 2~6

Tooth type: multiple types of teeth available to match the operating conditions at site

On-site application: This series of products have been well applied in Shenhua Group, Luneng Group, Baogang Group, each major large-scale mining bureau in Shanxi, Shandong Coal and Electric Power Group, each major mining bureau in Hebei, each large group and mining bureau and large open cast mines in Inner Mongolia, each large group and mining bureau in the three northeast provinces of China, large groups and mining bureaus in Huainan and Huaiabei regions, Yunan, Guizhou and Sichuan provinces
Semi-mobile crushing plant

Features

It meets the operational requirements of large and medium open-air coal mines in feeding, crushing and transport. The crushing plant is equipped with the highly reliable SSC series of double-roller super sizing crushing equipments. It may run one or two crush rollers respectively based on the actual capacity, and has such obvious advantages as flexibility and energy saving.

The crushing plant adopts the modular structural steel design, and may be moved totally by the creeper truck, or be moved after modular disassembly.

The heavy-duty plate type feeder or heavy-duty scraper conveyor sends the materials into the crusher from the receiving hopper.

The crushing plant is equipped with the all-round antifreezing system, and the system may operate normally under the temperature of -40°C.

The crushing plant is equipped with the intelligent monitoring and control system, lighting system, water supply and exhaust system, etc.

All the standard parts adopted by the crushing plant are of international famous brands to ensure the high operational reliability of the system.

The design is equipped with complete iron removal device and the hydraulically-controlled discharger for chunk foreign materials.

Typical Users

Shenhua Ningxia Coal Industry Group, Inner Mongolia Xilin Hemei Chemical Co., Ltd, Xiwuzhumuqin Banner Yilong Coal Industry Co., Ltd, Inner Mongolia Datang Coal Industry, China National Coal Group Corp., Xijiang Yihua Chemical Co., Ltd, Pingzhuang Coal Industry, Jiaohua Factory of Baogang Group, Yatai Group, etc.

Main Technical Parameter

Main technical parameter

Capacity: 10000t/h
Maximum size processed: 2000mm
Minimum size of product: 50mm
Crushing strength : 200MPa
Installed power of system: 600~1200kw
Underground crusher

Crusher Used Underground

It may be installed at the mine downhole or shaft mouth, and adopt the sizing crushing method to control chunk raw coals. It has good adaptability to the mines that contain recrement/rock, top-coal-caving coals and blasting mined coals. The sizing crusher has passed the safety certification. Both central lubrication and electronic control have adopted the explosion-proof products.

Feeding size 1500mm
Discharging size 200^-300mm
 Crushing strength 300MPa
 Voltage range 380v/660v/1140v/10kv

The discharged size of the product is strictly controlled, with adjustable rigidity of discharged size.

Good adaptability to sticky and wet materials.

Various tooth types are available to match the drive forms, and may be customized according to the requirements of customers. This not only meets the requirements for crushing strength, but also has the downhole replaceability.

The complete machine may be disassembled. The modular disassembly makes it easy to transport it downhole. Smooth operation is possible after installation, with sufficient strength and rigidity.

The complete machine operates reliably. The crushing teeth have a long life, good impact resistance and easy replacement.

It has been well applied at Shanghai Datun Coal Power Group, Beijing Luneng Group, Shanxi Shuozhou, Fuxin Mining Industry Group, and Fushun Taihe Coal.

Application of Underground Crusher
New-tooth-type sizing crusher

Crusher Used Underground

The 2PLF series of sizing crushers are the earliest typical products launched by us. Several hundred such products have been applied all over China. They are the recommended types for medium and small sizing crushing. The crushing toothed rolls are designed according to the sizing crushing mechanism. The drive adopts double motors to drive the belt. It not only has the good technical effects of sizing crushing, but also has the following features:

Technical Feature

Simple and practical structure, reliable operation, good adaptability
The two motors respectively drive the toothed rolls directly via belts, with a small number of trouble points and little maintenance
Stable operation, with the noise of idle running lower than 75d
Two-level overload protection devices of safety pin and intelligent measurement control
Convenient adjustment of product size
Module design, with two sets of crushing toothed rolls completely exchangeable
Energy reserve function of the belt pulleys, providing low installed power and economic price of complete machine

Main Technical Parameter

Crushing strength: \( \leq 120 \text{MPa} \)
Feeding size: Upper limit 1500mm
Discharging size: Lower limit > 3mm
Capacity: 10~500t/h

Completely meets the operation requirement of the coal preparation plant with a design capacity of 0.3-2 million tons/year

On-Site Application of New-Tooth-Type Sizing Crusher