



Research Service
Manufacturing Design
Development Consulting

The main business includes:
Crushing Technology and Equipment
Screening Technology and Equipment
Drying & Environmental Protection
Technology and Equipment
Ultra-High Pressure Filtration Technology
and Equipment

Address: South of Wafangzhuang Village,
High-tech Zone, Tangshan City
Postal Code: 063000
Website: www.techheir.com

Promotion in Russia:
Eco Technics Consulting LLC
37, bld 3 office 1024, Leningradskiy ave.,
Leningradskiy ave., 125167, Russia
Tel, +74957853383
etc@ecotc.com, www.ecotc.com



EQUIPMENT MANUAL OF TIANHE

TANGSHAN TIANHE ENVIRONMENTAL
PROTECTION TECHNOLOGY CO.,LTD.



COMPANY PROFILE

Tangshan Tianhe Environmental Technology Co., Ltd. (formerly Tangshan Tianhe Technology Development Co., Ltd.) established in 2001, Tangshan Tianhe Environmental Technology Co., Ltd. is a high-tech enterprise integrating R&D, design, manufacturing, service, and consulting. We specialize in the development, production, and sales of coal preparation equipment, as well as providing technical consulting and services for comprehensive coal utilization. Our solutions also extend to non-coal industries.

Core Strengths:

Innovation Leadership: Over 60 patents, backed by a team of industry experts.

Customized Solutions: Tailor-made designs to meet diverse client needs.

Global Reach: Our products are exported worldwide, with extensive on-site applications in countries such as Malaysia, Russia, Indonesia, and more.

Comprehensive Support: Nationwide

sales and after-sales service network.

Accreditations & Honors:

National High-Tech Enterprise • National "Little Giant" Specialist Firm • Hebei Province Manufacturing Champion • Provincial Enterprise Technology Center • Hebei Technology Innovation Demonstration Enterprise • Provincial Industrial Design Center • Awarded multiple government recognitions.



Double Toothed Roller Grading Crusher

Technical Feature

- 2DSKP/2PLF series grading crusher is a crushing equipment independently developed by our company for various coal crushing conditions;
- The crusher casing adopts the integral box structure, which effectively solves the problem that the bearing of not firmly positioned, and the sealing of the crushing chamber is realized, and the working environment is cleaned;
- Crusher teeth material is babbitt wear-resistant alloy (HRC45-55, impact toughness $38\text{Kg} \cdot \text{m}/\text{cm}^2$), with high hardness, high wear resistance, high toughness, strong impact resistance, etc., service life is the 2-3 times than common material;
- There are various types of crusher teeth, movable teeth structure, ferrule structure, toothed ring structure, toothed plate structure and whole roller structure;
- The discharge size is adjustable, there are three adjustment method such as eccentric cup, screw and hydraulic method;
- There are various of mobile device, such as fixed mobile device, screw-type mobile device, hydraulic and electric mobile device, facilitating daily maintenance and repairing;
- Equipped with advanced overload and stall protection device, intelligent control system and auto-lubrication system, it is easy to operate and the equipment is safe and reliable.

Application

- Coal mine such as raw coal, cleaned coal, lignite, coking coal, coal gangue, etc.
- Boiler fuel coal in coal-fired power plant;
- Underground coal mine, coal washing plant, open-pit crushing station, etc.
- Oil shale, petroleum coke, limestone, laterite nickel ore, bauxite, soapstone, kaolin and construction waste material which Mohs hardness is not more than 5.

Specification

- Primary grading crusher, secondary grading crusher, fine grading crusher, etc. Meet the need of different requirements.

Primary Grading Crusher

Technical Feature

- Input size ≤ 2000 mm, output size 150-500 mm;
- The maximum processing capacity is upto 7000t/h, with high efficiency and reliable operation;
- Spiral arrangement of crushing teeth, the block rate is upto 90%, and the over-grinding rate is low. Movable tooth type, ferrule type, toothed ring type, and whole roller type structure.

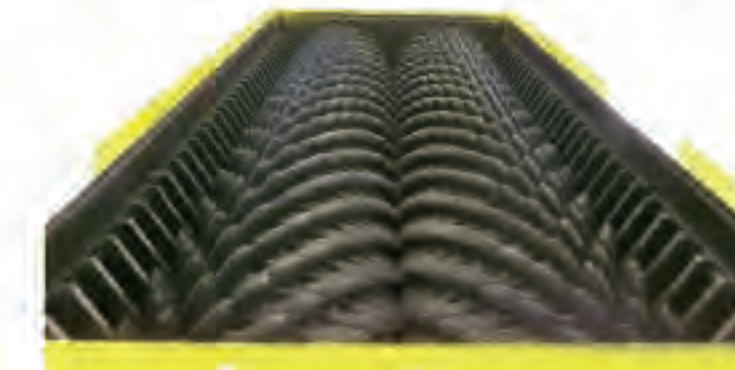


Technical Data

Series	Model	Input Size(mm)	Output Size(mm)	Capacity(t/h)	Motor Power(kw)
CP75	2DSKP75100	400 ~ 500	150 ~ 200	200	2×55
	2DSKP75150	400 ~ 500	150 ~ 200	400	2×75
	2DSKP75200	400 ~ 500	150 ~ 200	600	2×110
CP80	2DSKP80100	500 ~ 600	200 ~ 300	200	2×55
	2DSKP80150	500 ~ 600	200 ~ 300	500	2×90
	2DSKP80200	500 ~ 600	200 ~ 300	800	2×132
	2DSKP80250	500 ~ 600	200 ~ 300	1000	2×160
CP95	2DSKP95150	800 ~ 1000	200 ~ 300	1000	2×160
	2DSKP95200	800 ~ 1000	200 ~ 300	2000	2×250
	2DSKP95300	800 ~ 1000	200 ~ 300	4000	2×315
CP120	2DSKP120200	1200 ~ 1500	300 ~ 500	3000	2×250
	2DSKP120300	1200 ~ 1500	300 ~ 500	5000	2×315
CP150	2DSKP150300	≤ 1500	250 ~ 350	8000	2×315

Secondary Grading Crusher

- Input size ≤ 600 mm, output size 40-150 mm, maximum capacity is upto 2000t/h;
- The discharge size is adjustable, and various adjustment modes are arranged, which is convenient to adjust and reliable in operation;
- Bullet type crushing tooth with spiral arrangement, best biting effect, super wear resistant;
- Toothed ring type, toothed plate type, whole roller type, various mounting structures;
- Special structure design of the main shaft, high torque transmission torque with high stability.

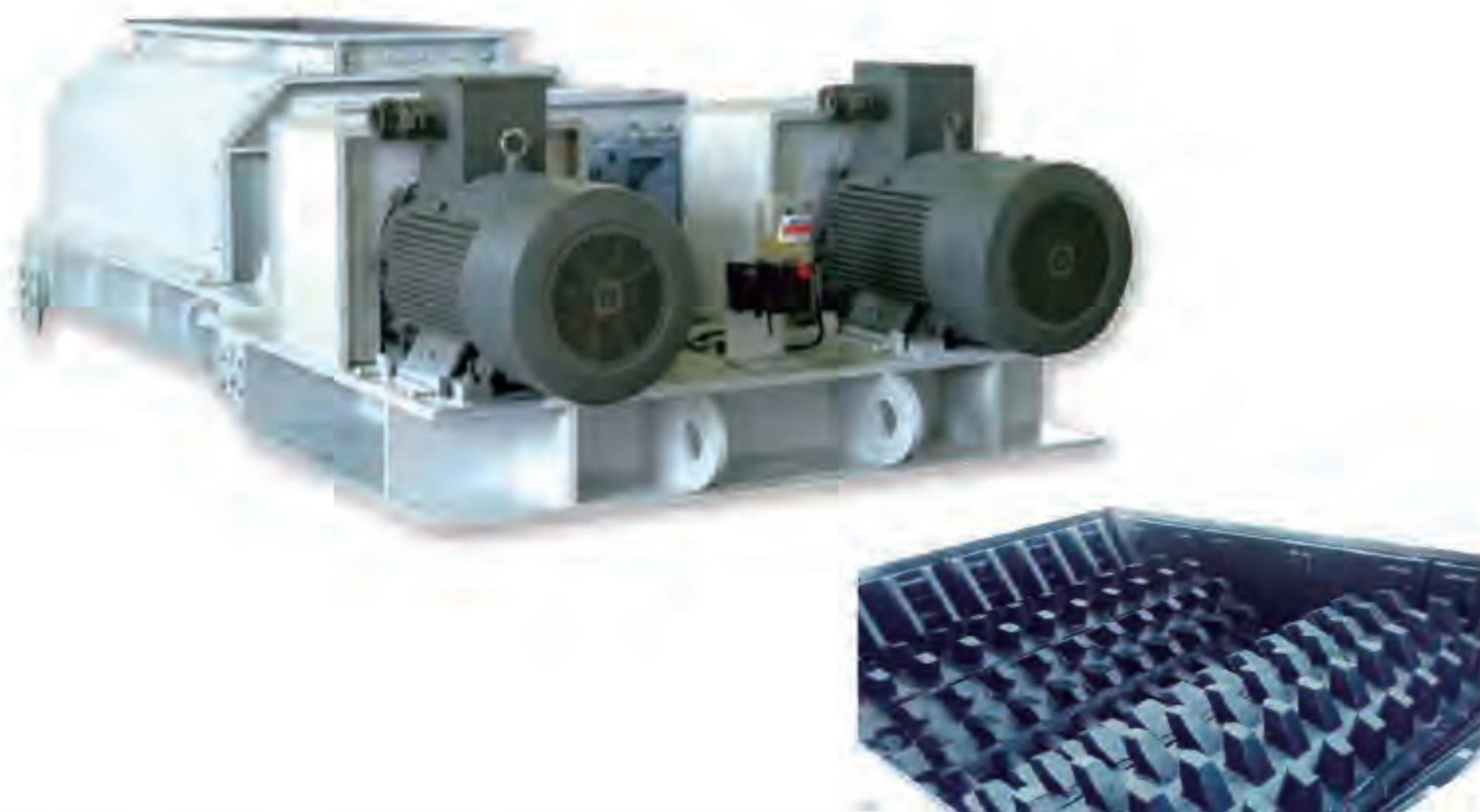


Technical Data

Series	Model	Input Size max.(mm)	Output size (mm)	Capacity (t/h)	Motor Power (kw)
ZP70	2DSKP7070	250 ~ 300	50 ~ 80	70	2×22
	2DSKP70100	250 ~ 300	50 ~ 80	130	2×30
	2DSKP70150	250 ~ 300	50 ~ 80	200	2×45
	2DSKP70200	250 ~ 300	50 ~ 80	400	2×75
ZP75	2DSKP75100	300 ~ 350	50 ~ 80	150	2×37
	2DSKP75150	300 ~ 350	50 ~ 80	250	2×55
	2DSKP75200	300 ~ 350	50 ~ 80	400	2×75
	2DSKP75250	300 ~ 350	50 ~ 80	500	2×110
ZP80	2DSKP80100	350 ~ 400	80 ~ 100	150	2×45
	2DSKP80150	350 ~ 400	80 ~ 100	300	2×75
	2DSKP80200	350 ~ 400	80 ~ 100	600	2×110
	2DSKP80250	350 ~ 400	80 ~ 100	800	2×160
ZP90	2DSKP90100	400 ~ 450	100 ~ 150	200	2×55
	2DSKP90150	400 ~ 450	100 ~ 150	300	2×75
	2DSKP90200	400 ~ 450	100 ~ 150	600	2×132
	2DSKP90250	400 ~ 450	100 ~ 150	800	2×160
ZP100	2DSKP90300	400 ~ 450	100 ~ 150	1200	2×250
	2DSKP100100	300 ~ 400	50 ~ 80	200	2×75
	2DSKP100150	300 ~ 400	50 ~ 80	300	2×90
	2DSKP100200	450 ~ 500	100 ~ 150	600	2×160
ZP120	2DSKP100250	450 ~ 500	100 ~ 150	800	2×200
	2DSKP100300	450 ~ 500	100 ~ 150	1200	2×250
	2DSKP120200	450 ~ 500	50 ~ 80	800	2×200
	2DSKP120250	450 ~ 500	50 ~ 80	1000	2×250
	2DSKP120300	450 ~ 500	50 ~ 80	1500	2×315

Fine Grading Crusher

- Input size $\leq 200\text{mm}$, output size 15-40 mm, maximum capacity is upto 550t/h;
- Special tooth design, high block rate, low over-grinding rate;
- Optimized design of tooth height, width and thickness, with strong biting ability and long service life;
- Equipped with crushing roller cleaning device, the wet and stricky material can be crushed normally.



Technical Data

Series	Model	Input Size(mm)	output size(mm)	Capacity(t/h)	Motor Power(kw)
XP65	2DSKP65100	50 ~ 80	30	100	2×37
	2DSKP65150	50 ~ 80	30	150	2×45
	2DSKP65200	50 ~ 80	30	200	2×55
XP75	2DSKP75100	80 ~ 100	30	100	2×45
	2DSKP75150	80 ~ 100	30	150	2×55
	2DSKP75200	80 ~ 100	30	200	2×75

Limestone Crusher

Double roller crusher adopts the crushing theory of shearing, squeezing and stretching to break the material. The advantage is high lump formation rate, low over-crushing rate, and regular discharge material shape.

Limestone is mainly used for the production of calcium carbide or quicklime after crushing. The higher lump rate and the more regular material shape, the better quality of the finished product and the higher of production efficiency.

Since 2013, our purpose-designed powerful double roller crusher has gradually replaced traditional secondary crushing equipment in the limestone crushing field in Inner Mongolia, Xinjiang, Shandong, Shanxi, and Hebei province. The use of nearly 100 sets has basically monopolized the market for secondary crushing. Compared with traditional secondary crusher, such as hammer crusher, impact crusher, jaw crusher, cone crusher etc., it has the following advantages:



Item	Traditional Secondary		Advanced Secondary
Equipment	Hammer Crusher, Impact Crusher	Jaw Crusher, Cone Crusher	Double Roller Crusher
Crushing Principle	Impact principle	Extrusion principle	Principle of shearing and stretching
Lump Rate	30-40%	40%-55%	65%-80%
Material Final Shape	Good shape, close to regular polyhedron or round shape	Contains a lot of long strips and flakes material	Uniform discharge size, the product is close to regular polyhedron
Efficiency	Low efficiency		High efficiency, max capacity upto 1000t/h
Discharge Size Adjustable	Adjustable, but difficult to operate		Adjustable, easy operate
Maintenance Cost	Large amount of maintenance and high maintenance cost		Few repairs and extremely low maintenance cost. the service life of crushing teeth can reach 3 million tons.
Resource Utilization	Low utilization rate, severe over crushing rate		Improve 15%-30%
Economic benefits	The use of limestone to produce calcium carbide and white ash industry requires higher particle size and material shape of limestone. The products crushed by the traditional secondary crushing equipment have high over crushing rates and poor material shapes, which seriously affect the production efficiency and sales of limestone, and produce too much over crushed materials, causing serious waste of resources.		The production rate of finished material is increased by more than 15%, which greatly improves the utilization rate of raw materials. Breaking the material is done by shear force, very low speed of rollers and keeps power cost & wear cost to minimum, with small amount of maintenance and low maintenance cost.

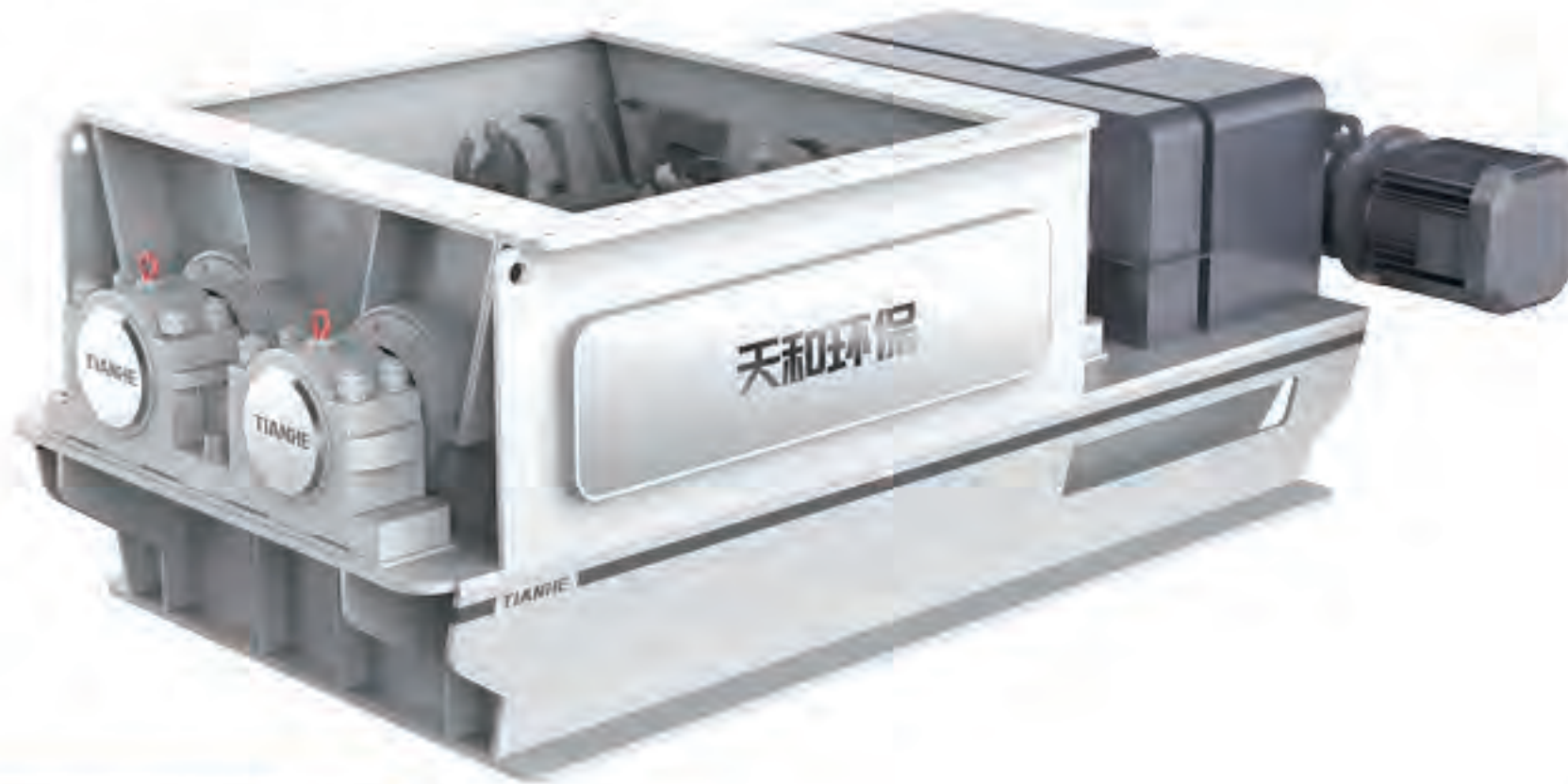
The 2DSKP series powerful double roller crusher for limestone is divided into two types: direct-coupled type and rigid-flexible type.

Technical Data

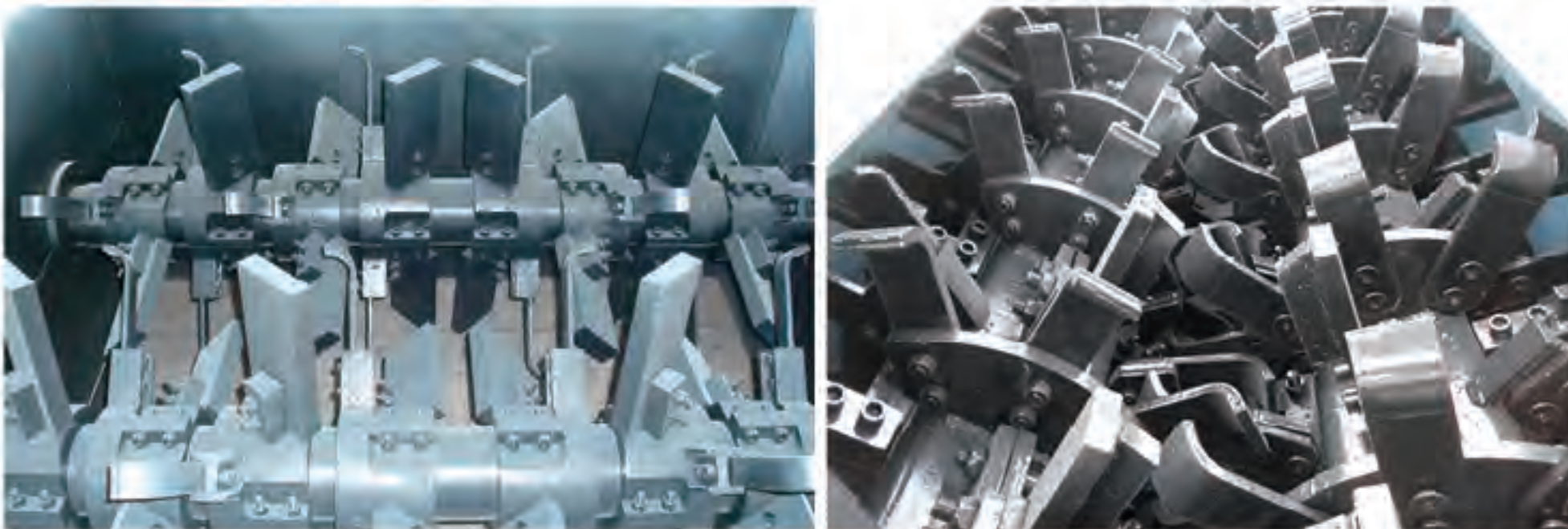
Series	Model	Input Size(mm)	output size(mm)	Capacity(t/h)	Motor Power(kw)
ZP90	2DSKP90120	≤ 300	80 ~ 100	150	2×55, 2×75
	2DSKP90150	≤ 300	80 ~ 100	200	2×75, 2×90
	2DSKP90200	≤ 300	80 ~ 100	300	2×90, 2×110
ZP100	2DSKP100200	≤ 350	80 ~ 100	400 ~ 500	2×132
	2DSKP100250	≤ 350	80 ~ 100	500 ~ 600	2×160
ZP120	2DSKP120300	≤ 400	80 ~ 100	800 ~ 1000	2×220, 2×250

Slurry crusher

The MNP Series Coal Slurry Crusher is a crushing equipment developed by our company based on market demands, building upon our graded crusher technology. It is primarily designed for breaking large chunks of coal slurry filter cakes and agglomerated coal slurry. After processing through our patented crusher, the crushed coal slurry can be blended into thermal coal for sale. This not only complies with environmental regulations prohibiting coal slurry stockpiling but also significantly enhances production efficiency for enterprises.



Technical Features



- The crusher adopts a spiral blade + live-tooth scraper structure with individually replaceable components. Utilizing shearing and splitting principles, it minimizes contact area between crushing teeth and material. The spirally arranged blades force uniform material feeding into the crushing chamber during roller engagement, preventing localized accumulation while effectively gripping large chunks.
- Intermeshing and undercutting scrapers are mounted on counter-rotating rollers, enabling self-cleaning to eliminate adhesion on scrapers and rollers, thus overcoming failures caused by coal slurry clogging.

- A patented "piano-wire dispersion device" ensures precise control of discharge particle size.
- The system integrates mixing, blending, and crushing functions, achieving homogeneous blending of coal slurry with raw fine coal.
- The split-type housing with advanced sealing isolates bearings from the crushing zone, reducing seal damage during operation. This design ensures reliable performance in harsh conditions by preventing contamination from dust, water, or oil ingress into bearing chambers.

The PCKW Series Coal Slurry Crusher is a specialized coal slurry crushing equipment developed by our company based on hammer crusher technology, specifically designed to meet the needs of coal washing plants.

With advancements in filter press technology, modern high-pressure filter presses can now reduce the moisture content of coal slurry filter cakes to below 17%. The industry trend has shifted towards in-line crushing and blending of coal slurry filter cakes without stockpiling, enabling direct recycling. This approach not only prevents environmental pollution but also significantly improves the economic efficiency of coal preparation plants.

The PCKW Series operates through a drive system that powers a high-speed rotor interacting with an anti-clogging screen. Fine coal slurry particles pass through the screen apertures, while larger filter cake chunks are continuously impacted and crushed by the rotor until they reach the required particle size specification.



Technical Features

- Hammer heads manufactured with wear-resistant alloy for prolonged service life.
- Gradated screen aperture design (progressively increasing size) prevents clogging while ensuring particle uniformity.
- Integrated cleaning device removes adhered coal slurry from crushing chamber.
- Hydraulic opening mechanism allows bilateral side panel access for maintenance.
- Material blockage alarm system and Electrical control safeguards prevent abnormal operation damage.

Screening & Crushing Station

Applications



- The screening and crushing station is designed to meet the material handling requirements of large and medium-sized open-pit coal mining operations,
- Including receiving, feeding, crushing, screening, conveying and temporary storage. It is widely used for crushing applications in coal, limestone and construction waste industries.



Technical Features

- A complete large-scale crushing and screening production system integrating material receiving, feeding, crushing, conveying, screening and temporary storage processes;
 - Comprising major equipment including rapid loading buffer feed bin, heavy-duty plate feeder, vibrating feeder, large double-tooth roller crusher, large vibrating screen, box-type substation, complete electrical system, monitoring system, and supporting steel structure platforms;
 - Features low investment cost, compact structure, stable operation, short production/installation/commissioning cycles, high mobility, and advanced intelligence;
- With strong adaptability, capable of operating either as independent units for primary crushing or flexibly combined into cooperative systems for intermediate crushing and screening;



- Equipped with comprehensive electrical and monitoring systems enabling remote centralized control, with the entire system adopting PLC control for high automation;
- Designed with advanced technology, excellent performance, reliable operation, short construction period, high production efficiency, convenient maintenance, and low operating costs.



XZK Series Box-Type Exciter Large Linear Vibrating Screen



Application

The XZK series box-type exciter large linear vibrating screen is mainly used for dry/wet size classification, dewatering, medium removal and desliming of medium and fine-grained materials.

Structural Feature

The XZK series box-type exciter large linear vibrating screen offers high screening efficiency, low energy consumption, lightweight construction, quiet operation, smooth running, and high reliability. Key features include:

- Side panels are fabricated from high-strength structural steel with precision CNC cutting to ensure dimensional accuracy of all openings and contours. The high-strength bolted connections eliminate welds and associated thermal stresses, significantly reducing the risk of panel cracking.
- The exciter incorporates high-precision carburized and quenched helical gears to ensure load capacity, operational smoothness and reliability. Imported oil seals prevent lubricant leakage, while magnetic drain plugs remove fine metallic particles to maintain lubricant cleanliness. Specialized imported bearings withstand vibration loads reliably. The exciter housing is machined complete in CNC machining centers and inspected with coordinate measuring machines.
- The exciter drive beam uses high-strength steel plates in a box-section design, with automated welding using specialized fixtures to achieve high-strength welds meeting international standards. Post-weld heat treatment eliminates residual stresses.
- Cross beams feature rectangular seamless tube construction for optimal sectional strength, with polyurethane coating providing wear, corrosion and impact resistance.
- The spring system combines metal coil springs with rubber coating, delivering small resonance amplitudes, low noise and extended service life.
- Screen panels employ stainless steel tensioned construction with polyurethane edges, offering high open area, wear resistance, long service life and easy maintenance.

2XZK Series Box-Type Exciter Large Linear Vibrating Screen



XZK Series Box-Type Exciter Large Linear Vibrating Screen

Model	Deck Number	Screen Dimensions W×L(m)	Screen Area(m ²)	Mesh size (mm)	Capacity (t/h)	Motor Power (Kw)
XZK1848	1	1.8×4.8	8.64	0.5-13	60-90	18.5Kw
XZK2045	1	2.0×4.5	9	0.5-13	60-120	18.5Kw
XZK2436	1	2.4×3.6	8.64	0.5-13	80-140	22Kw
XZK2442	1	2.4×4.2	10.08	0.5-13	80-150	22Kw
XZK2445	1	2.4×4.5	10.8	0.5-13	80-150	22Kw
XZK2448	1	2.4×4.8	11.52	0.5-13	80-150	22Kw
XZK2461	1	2.4×6.1	14.64	0.5-13	100-180	30Kw
XZK3045	1	3.0×4.5	13.5	0.5-13	100-160	30Kw
XZK3048	1	3.0×4.8	14.4	0.5-13	100-160	30Kw
XZK3061	1	3.0×6.1	18.3	0.5-13	130-200	37Kw
XZK3645	1	3.6×4.5	16.2	0.5-13	130-220	37Kw
XZK3648	1	3.6×4.8	17.28	0.5-13	130-230	37Kw
XZK3655	1	3.6×5.5	19.8	0.5-13	130-280	37Kw
XZK3661	1	3.6×6.1	21.96	0.5-13	160-300	45Kw
XZK3673	1	3.6×7.3	26.28	0.5-13	170-400	55Kw

2XZK Series Box-Type Exciter Large Linear Vibrating Screen

Model	Deck Number	Screen Dimensions W×L(m)	Screen Area(m ²)	Mesh size (mm)	Capacity (t/h)	Motor Power (Kw)
2XZK2461	2	2.4×6.1	29.28	Top Deck	100-300	37Kw
2XZK3061	2	3.0×6.1	36.6	3-50	130-400	45Kw
2XZK3661	2	3.6×6.1	43.92	Bottom Deck	180-500	55Kw
2XZK3673	2	3.6×7.3	52.56	0.5-13	190-600	75Kw

ZDT(F) Series Box-Type Exciter Large Banana Screen

Applications

The ZDT(F) series box-type exciter large banana screen is a linear vibrating screen featuring multi-section decks with varying inclination angles. It is primarily designed for size classification of large and medium-sized materials with high fine particle content, and can also be used for dewatering, medium removal, and desliming of medium and fine-grained materials.



Structural Feature

ZDT(F) Series Box-Type Exciter Large Banana Screen offers the advantages of high efficiency, low energy consumption, light weight construction, low noise, stable operation, and high reliability. The product features are as follows:

- The banana-shaped multi-section screen surface facilitates material projection, reduces aperture blockage rate, and significantly improves screening efficiency and processing capacity.
- The side plates are made of high-strength structural steel, precision-cut by CNC to ensure dimensional accuracy of all contours and holes. High-strength bolted connections eliminate welding and thermal stress, greatly preventing side plate cracking.
- The exciter adopts high-precision carburized and quenched helical gear transmission to ensure load capacity, operational stability and reliability. Imported oil seals prevent lubricant leakage during operation. Magnetic drain plugs absorb fine metal particles inside the vibrator to purify lubricant. Special imported vibration bearings ensure reliable operation under vibration loads. The exciter housing is completed in one process by CNC machining center and inspected by coordinate measuring machine.
- The exciter drive beam uses high-strength steel plates with box-section design, automatically welded with special fixtures to achieve high weld strength meeting international welding standards. Post-weld heat treatment eliminates residual welding stress. The cross beams feature rectangular seamless tube structure with more reasonable sectional strength. The polyurethane-coated surface ensures wear resistance, corrosion resistance and impact resistance.
- The spring system adopts rubber-coated metal coil composite springs, featuring small amplitude in resonance zone, low noise and long service life.
- The screen panels use stainless steel tensioned panels with polyurethane edges, offering high open area ratio, wear resistance, long service life and easy maintenance.

ZDT(F) Series Box-Type Exciter Large Banana Screen

Model	Deck Number	Screen Dimensions W×L(m)	Screen Area(m ²)	Mesh size (mm)	Capacity (t/h)	Motor Power (Kw)
ZDT1861	1	1.8×6.1	10.98	0.5-13	50-100	22Kw
ZDT2173	1	2.1×7.3	15.33	0.5-13	50-110	30Kw
ZDT2473	1	2.4×7.3	17.52	0.5-13	150-300	30Kw
ZDT2461	1	2.4×6.1	14.64	0.5-13	150-280	30Kw
ZDT3061	1	3.0×6.1	18.3	0.5-13	180-330	37Kw
ZDT3073	1	3.0×7.3	21.9	0.5-13	240-380	37Kw
ZDT3661	1	3.6×6.1	21.96	0.5-13	240-400	37Kw
ZDT3673	1	3.6×7.3	26.28	0.5-13	290-480	45Kw
2ZDT2461	2	2.4×6.1	29.28	Top Deck 3-50 Bottom Deck 0.5-13	180-520	37Kw
2ZDT3073	2	3.0×7.3	43.8		300-1000	55Kw
2ZDT3061	2	3.0×6.1	36.6		250-800	55Kw
2ZDT3661	2	3.6×6.1	43.92		300-1000	55Kw
2ZDT3673	2	3.6×7.3	52.56		350-1200	75Kw

GPX Series High-frequency Dewatering Screen

Applications

The GPX series high-frequency dewatering screen is specialized screening equipment designed for coal slurry dewatering. It is widely used in coal slurry recovery, pre-filtration for filter presses, filtration pretreatment, and dewatering/recovery operations of other fine materials.



Structural Feature

The GPX series high-frequency dewatering screen mainly consists of a box-type exciter, screen box, vibration motor and support system. Its main features include:

- The dewatering screen is equipped with a high-efficiency box-type exciter that uses oil bath lubrication for quiet operation and easy maintenance. The cross beams feature a rectangular seamless tube structure with optimized sectional strength, and are coated with polyurea externally to ensure wear resistance, corrosion resistance and impact resistance.
- The screen employs spiral composite springs that provide excellent vibration isolation. The drive shaft is connected to the exciter with high-quality flexible rubber couplings, which offer greater load capacity compared to traditional universal joints while providing better protection for the exciter.
- The screen features a 45° inclined angle at the feed end to facilitate rapid bed formation, while the middle and discharge sections have a -5° design that creates a gentle slope to slow material movement and improve screening efficiency.
- The screen surface is made of polyurethane material, with polyurethane panels connected by rail mounting to form a continuous large surface area. This design allows for easy installation and removal, while the polyurethane material provides excellent wear resistance.

Technical Parameters of GPX Series High-Frequency Dewatering Screen

Model	Screen Dimensions W×L(m)	Screen Area(m ²)	Mesh size (mm)	Capacity (t/h)	Motor Power (Kw)	电机功率 (Kw)
GPX1836	1.8×3.6	6.48	3-0	0.15-0.35	10-17	15Kw
GPX1848	1.8×4.8	8.64	3-0	0.15-0.35	15-25	15Kw
GPX2436	2.4×3.6	8.64	3-0	0.15-0.35	25-30	18.5Kw
GPX2448	2.4×4.8	11.52	3-0	0.15-0.35	25-37	18.5Kw

ZKS Series Linear Vibrating Screen

Applications

The ZKS series linear vibrating screen is suitable for various industries including coal, chemical, and building materials. It is widely used for material dewatering, desliming, medium removal operations, as well as final product classification.



Structural Feature

The ZKS series linear vibrating screen is designed and manufactured by incorporating advanced international technologies and innovative structures while addressing the practical needs of China's industrial development. This series comprises two main categories: single-deck linear vibrating screens (ZKS) and double-deck linear vibrating screens (2ZKS), with specific models available to meet various requirements.

- The screening machine mainly consists of the screen box, exciter, support system and motor.
- Block eccentric exciter with adjustable amplitude within a certain range through addition/removal of counterweight plates.
- Dual-motor synchronization principle.
- Flexible coupling connection between exciter and motor, universal joint can be used for intermediate shaft.
- Rubber spring vibration isolation.
- High-strength torsional shear bolts for connecting cross beams and side plates.
- Advanced anti-loosening technology using nylon nuts.

Technical Parameters of ZKS Series Linear Vibrating Screen

Model	Screen Surface		Capacity (t/h)	Motor		Maximum Dynamic Load per Point (N)
	Inclination(°)	Mesh size (mm)		Model	Power (Kw)	
ZKS1230	0-5	0.5-50	20-40	Y132M ₁ -6	2×4Kw	2670
ZKS1236	0-5	0.5-50	20-40	Y132M ₁ -6	2×4Kw	3500
ZKS1248	0-5	0.5-50	20-50	Y132M ₁ -6	2×4Kw	4150
ZKS1536	0-5	0.5-50	35-80	Y132M ₁ -6	2×4Kw	4250
ZKS1548	0-5	0.5-50	35-90	Y132M ₂ -6	2×5.5Kw	4800
ZKS1645	0-5	0.5-50	40-90	Y132M ₂ -6	2×5.5Kw	4980
ZKS1836	0-5	0.5-50	50-90	Y132M ₂ -6	2×5.5Kw	5090
ZKS1848	0-5	0.5-50	60-100	Y132M ₂ -6	2×5.5Kw	5500
ZKS2060	0-5	0.3-50	70-150	Y132L-6	2×11Kw	6150
ZKS2148	0-5	0.3-50	70-130	Y160M-6	2×7.5Kw	6200
ZKS2160	0-5	0.3-50	70-130、70-150	Y160M-6	2×7.5Kw	6950
ZKS2448	0-5	0.3-50	80-150	Y160M-6	2×7.5Kw	7100
ZKS2460	0-5	0.3-50	80-170	Y160L-6	2×11Kw	8400
ZKS3060	0-5	0.3-50	100-200	Y180L-6	2×15Kw	11055
ZKS3660	0-5	0.3-50	120-240	Y200L ₁ -6	2×18.5Kw	14575

Notes:

1.Non-standard vibrating screens with different widths and lengths can be designed and manufactured according to production processes and customer requirements.

2.For ordering: Motor position is divided into left (L) or right (R) installation. When the motor is on the left side along the material flow direction, it is left installation, and vice versa.

2ZKS Series Linear Vibrating Screen



Technical Parameters of 2ZKS Series Linear Vibrating Screen

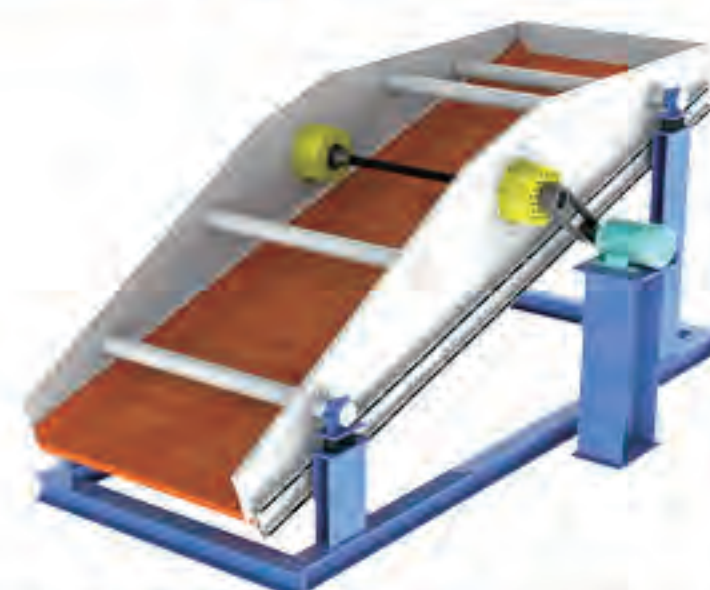
Model	Screen Surface		Capacity (t/h)	Motor		Maximum Dynamic Load per Point (N)
	Inclination(°)	Mesh size (mm)		Model	Power (Kw)	
2ZKS1230	0-5	0.3-50	25-40	Y132M ₁ -6	2×4Kw	4860
2ZKS1236	0-5	0.3-50	25-40	Y132M ₁ -6	2×4Kw	5600
2ZKS1248	0-5	0.3-50	25-50	Y132M ₂ -6	2×5.5Kw	6580
2ZKS1536	0-5	0.3-50	45-80	Y132M ₂ -6	2×5.5Kw	7200
2ZKS1548	0-5	0.3-50	45-90	Y132M ₂ -6	2×5.5Kw	8540
2ZKS1645	0-5	0.3-50	50-100	Y160M-6	2×7.5Kw	8820
2ZKS1836	0-5	0.3-50	70-120	Y160M-6	2×7.5Kw	9100
2ZKS1848	0-5	0.3-50	70-130	Y160M-6	2×7.5Kw	9340
2ZKS2060	0-5	0.3-50	90-160	Y160L-6	2×11Kw	11135
2ZKS2148	0-5	0.3-50	100-160	Y160L-6	2×11Kw	10035
2ZKS2160	0-5	0.3-50	100-160	Y160L-6	2×11Kw	11500
2ZKS2448	0-5	0.3-50	120-200	Y180L-6	2×15Kw	12150
2ZKS2460	0-5	0.3-50	120-200	Y180L-6	2×15Kw	14335
2ZKS3060	0-5	0.3-50	150-250	Y200L ₁ -6	2×18.5Kw	18225
2ZKS3660	0-5	0.3-50	200-300	Y200L ₂ -6	2×22Kw	25270

Notes: The feed particle size is 0-150mm.

HCZ Flip-flop Screen

Applications

This screening machine is used for bulk loose material screening in industries such as coal, quarries, steel plants, and cement plants. It is the preferred equipment for processing fine-grained, high-moisture, and sticky materials.

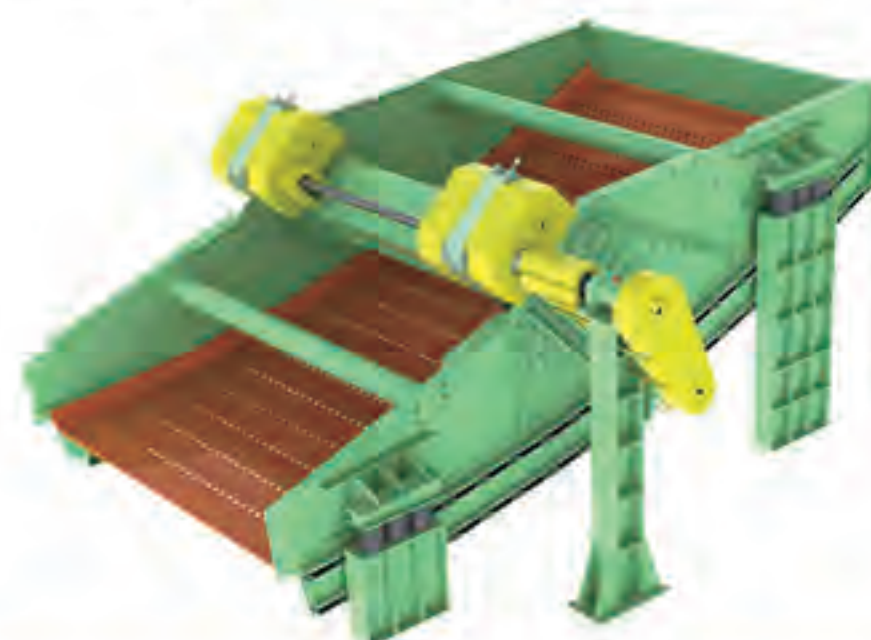


Working Principle

The screening machine consists of a fixed screen frame and a floating screen frame. The vibrator generates the basic vibration of the machine (a single shaft produces circular motion, while dual shafts produce linear motion). At the same time, it causes the floating screen frame to produce additional elliptical motion, completing the screening of materials.

Technical Features

- The amplitude of the screen can be adjusted (4–8 mm) by modifying the eccentric weight of the exciter.
- The amplitude of the floating screen frame can be adjusted (12–20 mm) by varying the number of shear springs or changing their stiffness.



- Made of highly wear-resistant and flexible polyurethane, the screen panel has strong self-cleaning properties during expansion and contraction, making it suitable for fine-particle materials with high moisture content (9%–15%).
- The screen panels are easy to disassemble and replace quickly.

Technical Parameters of HCZ Flip-Flow Screen

Model		Screen Surface		Capacity (t/h)	Motor (Kw)
		Inclination(°)	Mesh size (mm)		
Single-Shaft Screen	HCZ2091	15-18	6-13	150-350	Y225M-4 30Kw
Single-Shaft Screen	HCZ2491	15-18	6-13	180-420	Y250M-4 37Kw
Single-Shaft Screen	HCZ3091	15-18	6-13	240-550	Y280M-4 45Kw
Banana Screen	XCS2090	8-15	6-13	150-350	Y225M-4 30Kw
Banana Screen	XCS2490	8-15	6-13	180-420	Y250M-4 37Kw
Banana Screen	XCS3090	8-15	6-13	240-550	Y280M-4 45Kw

XJS Series Banana Linear Vibrating Screen



Applications

The excitation force acts directly on the side plate, ensuring high reliability. With grease lubrication and a screening efficiency 1.5 to 2 times higher than traditional grading screens, it represents an advanced grading device that can replace imported products.

Technical Parameters of XJS Series Banana-Type Linear Vibrating Screen

Application	Model	Screen Deck Specification W×L(m)	Mesh Size(mm)	Capacity (t/h)	Motor Power(Kw)	Amplitude (Dual)(mm)	Frequency (HZ)
Grading	XJS1861F/5	1.8×6.1	13~100	200~600	2×11Kw	8~11	15
	XJS2461F/5	2.4×6.1	13~100	300~1200	2×15Kw	8~11	15
	XJS3061F/5	3.0×6.1	13~100	300~1600	2×18.5Kw	8~11	15
	XJS3661F/5	3.6×6.1	13~100	400~2000	2×22Kw	8~11	15
Dewatering & Medium Drainage	XJS1861T/5	1.8×6.1	0.5~13	90~120	2×11Kw	8~11	15
	XJS2461T/5	2.4×6.1	0.5~13	120~160	2×15Kw	8~11	15
	XJS3061T/5	3.0×6.1	0.5~13	150~200	2×18.5Kw	8~11	15
	XJS3661T/5	3.6×6.1	0.5~13	180~250	2×22Kw	8~11	15

Notes:

Maximum feed size ≤350mm.

Custom designs are available to meet specific client requirements.

YKS Series Circular-Motion Vibrating Screen

Applications

The YKS series circular motion vibrating screen is suitable for various industries such as coal, mining, metallurgy, chemical, and building materials, and is widely used for material grading operations.

Working Principle

The YKS series circular motion vibrating screen is designed and manufactured based on the absorption of foreign advanced technologies and new structural concepts, combined with the practical needs of China's industrial development, the YKS series offers the following features:

- The screen mainly consists of a screen box, exciter, support system, and motor.
- Screen panels include polyurethane rubber panels, punched plates, welded round steel panels, and stainless steel welded panels.
- The block eccentric exciter allows adjustable amplitude within a certain range by adding or removing counterweight plates.
- Flexible couplings connect the exciter and motor, with the option of universal joints for intermediate shafts.
- Rubber springs are used for vibration damping.
- High-strength torsional shear bolts connect the cross beams and side plates.
- Advanced anti-loosening measures such as nylon nuts are employed.

Technical Parameters of YKS Series Circular-Motion Vibrating Screen

Model	Screen Surface		Capacity (t/h)	Motor		Maximum Dynamic Load per Point (N)
	Inclination(°)	Mesh size (mm)		Model	Power (Kw)	
YKS1224	15-20	6-50	40-200	Y132S-6	3Kw	2450
YKS1230	15-20	6-50	40-200	Y132S-6	3Kw	3150
YKS1236	15-20	6-50	45-250	Y132M ₁ -6	4Kw	3550
YKS1445	15-20	6-50	50-250	Y132M ₁ -6	4Kw	3630
YKS1530	15-20	6-50	60-250	Y132M ₁ -6	4Kw	3550
YKS1536	15-20	6-50	60-250	Y132M ₂ -6	5.5Kw	4000
YKS1645	15-20	6-50	70-300	Y132M ₂ -6	5.5Kw	4245
YKS1836	15-20	6-50	80-300	Y132M ₂ -6	5.5Kw	4000
YKS1845	15-20	6-50	80-400	Y160M-6	7.5Kw	4250
YKS2045	15-20	6-50	100-500	Y160M-6	7.5Kw	4930
YKS2060	15-20	6-50	100-500	Y160L-6	11Kw	6720
YKS2445	15-20	6-50	150-600	Y160L-6	11Kw	6785
YKS2460	15-20	6-50	180-600	Y180L-6	15Kw	7785
YKS3045	34	6-50	200-800	Y180L-6	15Kw	8000
YKS3060	34	6-50	220-800	Y200L ₁ -6	18.5Kw	10165

2YKS series circular motion vibrating screen



Technical Parameters of 2YKS Series Circular-Motion Vibrating Screen

Model	Screen Surface		Capacity (t/h)	Motor		Maximum Dynamic Load per Point (N)
	Inclination(°)	Mesh size (mm)		Model	Power (Kw)	
2YKS1224	15-20	6-80	50-250	Y132S-6	3Kw	3185
2YKS1230	15-20	6-80	50-250	Y132S-6	3Kw	4095
2YKS1236	15-20	6-80	60-300	Y132M ₁ -6	4Kw	4615
2YKS1445	15-20	6-80	70-300	Y132M ₁ -6	4Kw	4720
2YKS1530	15-20	6-80	80-300	Y132M ₂ -6	5.5Kw	4615
2YKS1536	15-20	6-80	80-350	Y132M ₂ -6	5.5Kw	5200
2YKS1645	15-20	6-80	90-400	Y160M-6	7.5Kw	5520
2YKS1836	15-20	6-80	110-450	Y160M-6	7.5Kw	5200
2YKS1845	15-20	6-80	110-500	Y160M-6	7.5Kw	5520
2YKS2045	15-20	6-80	130-600	Y160L-6	11Kw	6400
2YKS2060	15-20	6-80	150-600	Y160L-6	11Kw	8730
2YKS2445	15-20	6-80	200-700	Y200L ₁ -6	18.5Kw	8820
2YKS2460	34	6-80	200-700	Y200L ₁ -6	18.5Kw	10120
2YKS3045	34	6-80	260-800	Y200L ₁ -6	18.5Kw	10400
2YKS3060	34	6-80	260-800	Y200L ₂ -6	22Kw	13210

Notes:

1. Feed particle size: 0-300 mm (for all models).
2. Non-standard vibrating screens with customized widths and lengths can be designed and manufactured to meet specific production processes or user requirements.
3. The motor of the screening machine can be installed on either left (L) or right (R) side. When facing the material flow direction, if the motor is on the left side, it's considered left installation (L); otherwise, it's right installation (R). Please specify your preferred installation side when placing orders.

JKS Series High-Frequency Coal Slurry Dewatering Screen



Applications

The JKS Series High-Frequency Coal Slurry Dewatering Screen is specialized equipment designed for coal slurry dewatering operations. It is widely applied in

Coal slurry recovery, Coarse separation for pressure filtration, Coarse separation for standard filtration, Dewatering and recovery of other fine materials

Working Principle

The JKS Series High-Frequency Coal Slurry Dewatering Screen is mainly composed of a screen box, exciter, support system, and motor. In addition to retaining the features of our company's ZKS Series Vibrating Screens, it also offers the following characteristics:

- The entire screen is horizontally installed, with the screen mesh mounted at a negative angle to ensure forced dewatering efficiency.
- The screen mesh can be selected from stainless steel composite screens (tension-mounted) or stainless steel welded wedge-wire panels (compression-mounted) to meet different requirements.
- The vibration frequency can be adjusted in real-time via a frequency converter to achieve optimal dewatering performance.

Technical Parameters of JKS Series High-Frequency Coal Slurry Dewatering Screen

Model	Screen Surface		Capacity (t/h)	Motor		Maximum Dynamic Load per Point (N)
	Inclination(°)	Mesh size (mm)		Model	Power (Kw)	
JKS1233	0	0.15, 0.2, 0.3	5-10	Y100L ₂ -4	2×3Kw	1910
JKS1533	0	0.15, 0.2, 0.3	8-15	Y112M-4	2×4Kw	1910
JKS1833	0	0.15, 0.2, 0.3	9-16	Y132S-4	2×5.5Kw	3430
JKS1841	0	0.15, 0.2, 0.3	15-20	Y132S-4	2×5.5Kw	3430
JKS2041	0	0.15, 0.2, 0.3	20-25	Y132M-4	2×5.5Kw	3940
JKS2045	0	0.15, 0.2, 0.3	22-27	Y132M-4	2×7.5Kw	3940
JKS2445	0	0.15, 0.2, 0.3	25-35	Y160M-4	2×11Kw	3940

Note: The feed particle size is 1-0mm. Different specifications can be designed and manufactured based on production processes and customer requirements.

GPS Series High-Frequency Dewatering Screen

Applications

The GPS Series High-Frequency Dewatering Screen is specialized equipment for coal slurry dewatering and tailings dewatering. It can be used in combination with cyclone thickeners, achieving a moisture content of 20–25% in recovered tailings. It is widely applied in: Coal slurry recovery, Coarse separation for pressure filtration, Coarse separation for standard filtration, Dewatering and recovery of other fine materials



Structural Features

The GPS Series High-Frequency Dewatering Screen mainly consists of a screen box, vibration motors, and a support system, featuring the following characteristics:

- Two counter-rotating vibration motors generate linear motion, reducing screen clogging and enhancing dewatering efficiency compared to traditional vibrating screens.
- 45° incline at the feed end for rapid material bed formation, -5° gentle slope at the middle and discharge sections to slow material flow and improve dewatering
- The screen deck is constructed with polyurethane material, where polyurethane panels are interconnected via a rail-joint system to form a large, continuous screening surface. This design ensures easy installation and removal, while the polyurethane material provides exceptional wear resistance.
- The screen amplitude can be adjusted according to on-site requirements, ensuring user-friendly operation.
- The crossbeam features a rectangular seamless tube structure with optimized sectional strength. Its exterior is polyurea-coated to ensure wear, corrosion, and impact resistance.

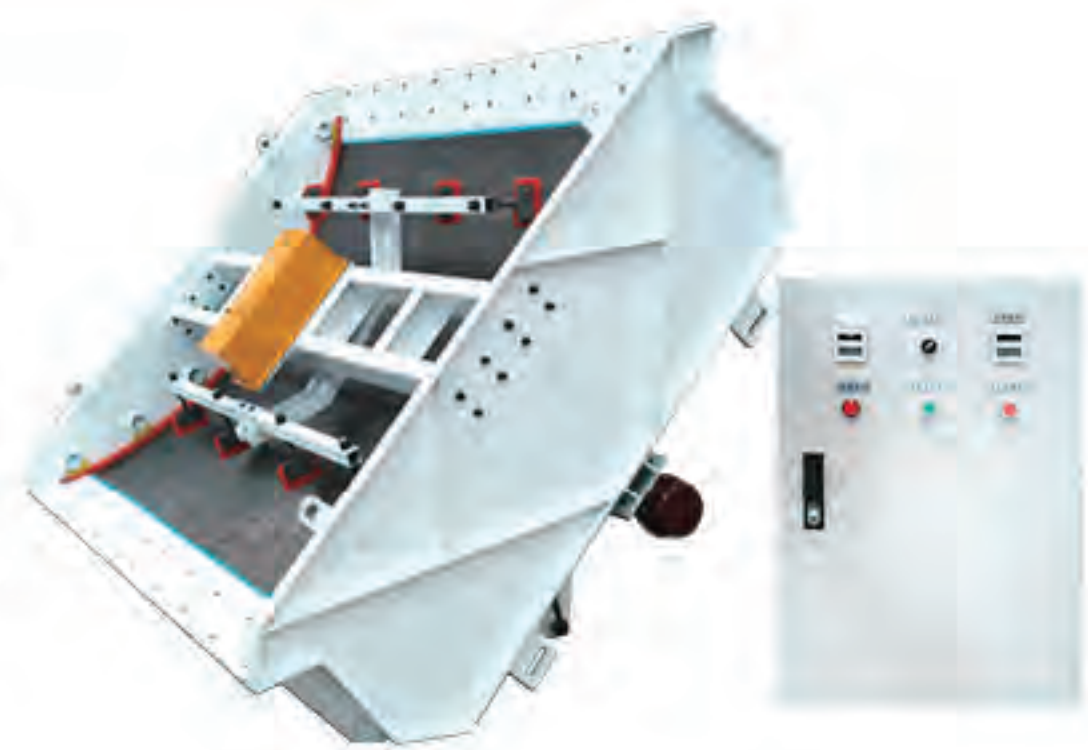
GPS Series High-Frequency Dewatering Screen

Model	Capacity (Dry Material t/h)	Mesh Size (mm)	Motor Power (Kw)
GPS1236	10-20	0.3-1	2.2Kw×2
GPS1536	20-30	0.3-1	3.2Kw×2
GPS1836	40-60	0.3-1	(3.7-5.5) Kw×2
GPS2136	50-70	0.3-1	(5.5-6.3) Kw×2

UHM Series Sieve Bend

Application

The UHM Sieve Bend is primarily used in coal preparation plants for preliminary dewatering, desliming, and medium removal. It can also be paired with hydrocyclones to achieve effective classification, dewatering, desliming, and medium removal of fine-grained materials.



Technical Features

This screening machine consists of a screen box with three curvature radii of 2030mm corresponding to wrap angles of 45°, 53°, and 60°. Featuring an arc-shaped screen surface and a pivoting screen frame structure that can rotate 180°, It effectively improves operational efficiency and extends the service life of the screen surface.

Technical Parameters of UHM Series Sieve Bend											
	Model	Unit	UHM07	UHM10	UHM13	UHM16	UHM19	UHM22	UHM24	UHM28	UHM34
Technical Specifi- cation	Wrap Angle	°	45°53°60° Three options available								
	Crurve Radius	mm	2030								
	Aperture Size	mm	0.3-1.0								
	Screen Width	mm	700	1000	1300	1600	1900	2200	2400	2800	3400
	Capacity	m³/h	60-180	100-250	130-300	170-400	180-450	250-500	280-550	350-650	450-750

Ordering Instructions

- In addition to the above specifications, the UHM Sieve Bend is also available in various sizes compatible with linear vibrating screens, as well as vibrating Sieve Bend equipped with exciters.
- When placing an order, please specify the wrap angle, aperture size, and whether a feed box is included.



GZJS Series Heavy-Duty Roller Screen



Product Overview

The GZJS series heavy-duty roller screen is a multi-stage, interconnected roller-type screening equipment designed for coarse and fine separation of various materials, including soil, gravel, sand, coal, ores, construction waste, and demolition debris. It effectively screens out fine particles before they enter the crushing process. These fine materials often contain high moisture or highly abrasive substances, which, if fed directly into the crushing system, may lead to over-grinding, increased system load, blockages, and accelerated wear of crusher components—ultimately reducing overall system efficiency. By installing the GZJS series heavy-duty roller screen prior to the crushing stage, the operational efficiency of the crushing equipment can be significantly improved, enhancing the entire system's productivity while reducing operating costs.

The screening mechanism of the GZJS series consists of multiple sets of rollers and discs. The shaft spacing and screen disc gaps determine the particle size separation, offering a wide range of configuration options. The screen can be customized based on material composition, undersize ratio, and screening efficiency requirements. Additionally, equipped with a variable frequency speed control system, the roller speed can be adjusted in real time according to operational conditions to achieve optimal sorting performance.



Technical Features



- The GZJS series heavy-duty roller screen boasts numerous advantages, including strong material adaptability, large feed particle size, high screening efficiency, large processing capacity, excellent screening performance, simple structure, stable operation, and convenient maintenance.
- The interior casing of the equipment is lined with wear-resistant plates on both sides. These plates form a labyrinth structure with the roller shaft assembly and the inner wall of the casing, preventing direct contact between the casing and materials, thereby reducing wear and blockages caused by large chunks. This enhances the operational stability and service life of the equipment. The liner plates adopt a segmented structure, improving wear utilization efficiency. They are connected to the casing via threaded fasteners, facilitating maintenance and replacement.
- The sealing design between the roller shaft ends and the casing employs a gland packing structure, utilizing polytetrafluoroethylene (PTFE) fiber braided packing. Its excellent properties—such as corrosion resistance, wear resistance, low friction, and self-lubrication—make it highly suitable for low-speed applications, ensuring effective sealing performance.
- The roller discs can be configured in various shapes, including triangular, toothed, or petal-shaped (plum blossom type), selected based on material characteristics and user requirements. They are made of high-strength wear-resistant alloy to ensure durability. Depending on the roller disc configuration, the discs can be arranged in either aligned or staggered patterns.
- The roller shafts are made of high-strength solid forged alloy steel, offering strong impact and bending resistance, which ensures stable and safe operation of the equipment.
- The bearing housing adopts a heavy-duty split structure and is lubricated with grease, ensuring operational stability while simplifying maintenance and replacement.

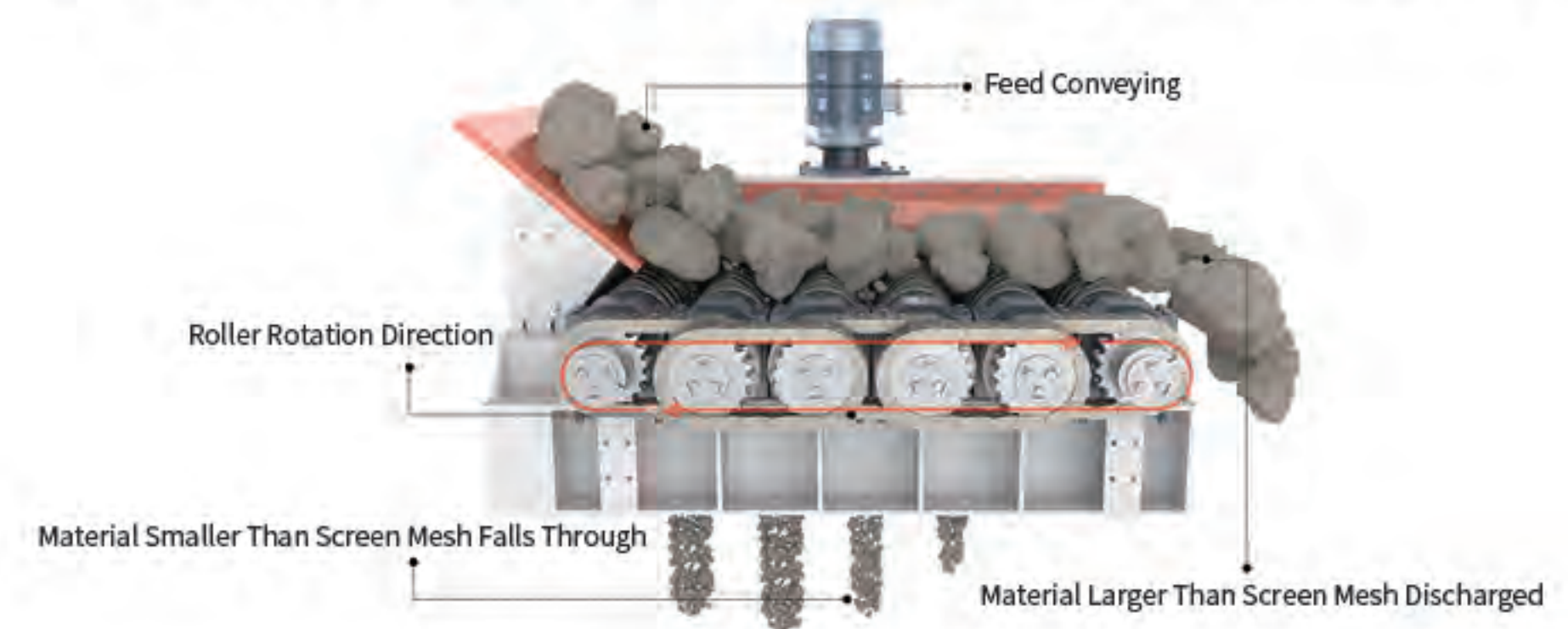


- The chain drive system offers high transmission efficiency, making it suitable for low-speed, heavy-duty applications. Its simple structure ensures easy maintenance and replacement.
- Proximity sensors are installed at both ends of the chain drive. In case of blockage or chain breakage, the system automatically triggers an alarm and stops the equipment, ensuring operational reliability and safety.
- The electrical control system can be optionally equipped with frequency conversion control, enabling real-time adjustment of working conditions to save energy and optimize process performance.

Working Principle

The GZJS series heavy-duty roller screen consists of multiple roller shafts and screening discs. The motor and reducer drive the main roller shaft via a coupling, while the chain drive synchronizes the movement of all roller shafts. Each shaft rotates in the same direction at identical speeds, creating gaps between adjacent rollers and discs for material classification.

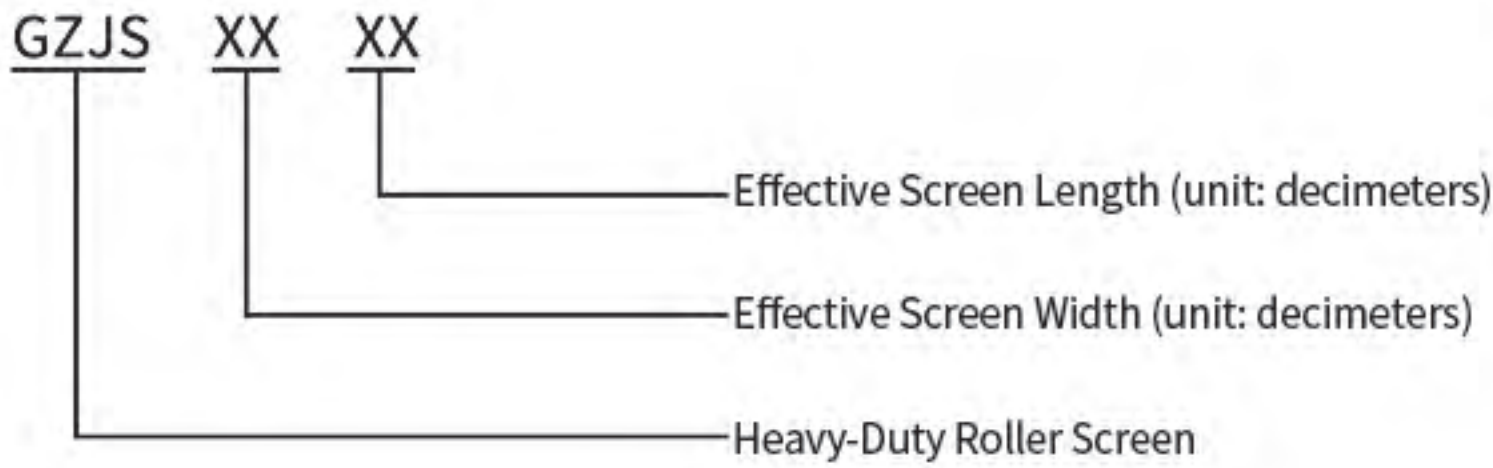
The material to be screened is uniformly fed into the inlet end of the heavy-duty roller screen through front-end hoppers or conveying equipment such as heavy-duty apron feeders, and under the propulsion of the rotating roller shafts and screening discs, the material is quickly dispersed on the screening surface and moves forward along the screen toward the discharge end at the opposite side, during which materials with particle sizes larger than the screen gap are discharged from the outlet end into the crushing system while materials with particle sizes smaller than the screen gap are gradually screened and fall through the screen openings to enter subsequent processes via conveying equipment, and to prevent the roller gaps from being clogged by mud, toothed scraper plates are installed beneath the rollers for real-time cleaning.



Specifications and Technical Parameters of GZJS Series Heavy-Duty Roller Screen					
Model	Effective Screen Width (mm)	Effective Screen Length (mm)	Max. Feed Size (mm)	Screen Mesh (mm)	Capacity (t/h)
GZJS1024	1000	2400	500	50 ~ 80	350 ~ 450
GZJS1224	1200	2400	600	50 ~ 80	420 ~ 520
GZJS1424	1400	2400	800	50 ~ 80	620 ~ 800
GZJS1624	1600	2400	800	50 ~ 80	700 ~ 880
GZJS1824	1800	2400	800	50 ~ 80	780 ~ 980
GZJS2024	2000	2400	1000	50 ~ 80	870 ~ 1360
GZJS2224	2200	2400	1000	50 ~ 80	960 ~ 1500
GZJS2424	2400	2400	1000	50 ~ 80	1050 ~ 1600

Note: The models listed are standard 6-shaft configurations. Processing capacity is calculated based on limestone (bulk density: 1.6 t/m³). Customized production is available for other specifications.

Model instructions



The GZJS Series Heavy-Duty Roller Screen is typically customized according to user requirements to meet practical operational needs and achieve optimal equipment performance.

Heavy-Duty Apron Feeder



Application

The heavy-duty apron feeder is primarily used beneath bins and hoppers with certain storage pressure. It uniformly and continuously delivers large volumes of bulk materials over short distances to various crushing, screening, or conveying equipment. It is a commonly used heavy-duty feeding device in crushing stations.

The GBZ Series Heavy-Duty Apron Feeder produced by our company can handle demanding feeding and conveying tasks in harsh environments. It exhibits strong adaptability to variations in material particle size, temperature, viscosity, and moisture, ensuring uniform, accurate, and reliable feeding. The machine features a rational structure and offers advantages such as simple installation, disassembly, and maintenance.



Technical Data

Model	Pan Width (mm)	Sprocket Center Distance (mm)	Conveying Speed (m/s)	Installation Angle (°)	Feed Size (mm)	Feed Capacity (t/h)
GBZ1200	1200	4000	0.015-0.25	0-25	≤ 600	400
GBZ1500	1500	6000			≤ 800	800
GBZ1800	1800	8000			≤ 1000	1200
GBZ2000	2000	12000			≤ 1200	2000
GBZ2400	2400	14000			≤ 1500	3000

Note: The above data is related to the density, particle size, and installation angle of the conveyed material. The specifications are for reference only.

Drying Technology and Equipment



MGT Series High-Efficiency Rotary Drum Coal Slurry Drying Process and Equipment

The MGT series high-efficiency rotary drum drying process and equipment is a new fine-particle, high-moisture material dewatering system developed by our company to address the aforementioned practical conditions. This system employs thermal drying to deeply dewater coal products, transforming high-moisture (26%–32%) coal slurry filter cakes recovered from filter presses into products with a certain particle size and moisture content below 15%. This effectively improves their calorific value and storage, loading, and transportation performance, meeting the specifications of commercial thermal coal. It not only enhances the coal preparation plant’s washing process but also delivers significant economic, environmental, and social benefits.

Application Scope:

The MGT series high-efficiency rotary drum drying process and equipment can substantially reduce material moisture on the basis of mechanical dewatering, meeting the needs of production, transportation, storage, and sales. This system is widely applicable in:

Coal industry: Drying of coal slurry, raw coal, flotation clean coal, blended clean coal, coke powder, and magnetite powder;

Construction industry: Drying of blast furnace slag, clay, limestone, sand, quartz, etc.;

Mineral processing industry: Drying of various metal concentrates, waste residues, and tailings;

Chemical industry: Drying of non-heat-sensitive materials;

Other industries: Drying of aggregates, sawdust, sludge, etc.



Technical Features and Advantages:

Remarkable dewatering effect: Feed moisture can be up to 60%, while product moisture can be reduced to below 8%;
High thermal efficiency and large processing capacity, enabling large-scale production;
Significantly improves material quality and enhances storage, loading, and transportation performance;
Comprehensive, efficient, energy-saving, eco-friendly, and highly automated system;
Safe and reliable equipment operation, with simple and convenient system maintenance.

Product Specifications and Parameters:

Drum diameter ranges from 1.5m to 4.2m, and length ranges from 8m to 38m, covering 12 series and over 60 specifications.
Single-unit production capacity: Up to 180 t/h for coal slurry and 300 t/h for other materials, fully meeting the needs of different users.

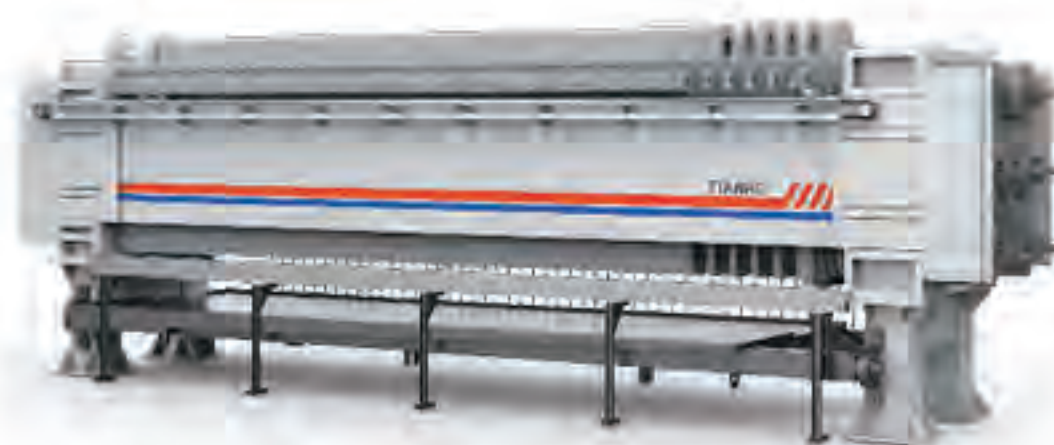
S/N	Dryer Model (m)	Processing Capacity Range (t/h)	System Description
1	1.8×18	10 ~ 15	Applicable Scenarios: Small Coal Washeries
2	2.2×18	15 ~ 25	Applicable Scenarios: Small Coal Washeries
3	2.4×18	25 ~ 35	Applicable Scenarios: Medium Coal Washeries
4	2.6×18	35 ~ 45	Applicable Scenarios: Medium Coal Washeries
5	2.8×18	45 ~ 55	Applicable Scenarios: Medium Coal Washeries
6	3.0×20	55 ~ 60	Applicable Scenarios: Medium Coal Washeries
7	3.2×20	60 ~ 65	Applicable Scenarios: Medium-Large Coal Washeries
8	3.4×20	65 ~ 75	Applicable Scenarios: Large Coal Washeries
9	3.6×20	75 ~ 85	Applicable Scenarios: Large Coal Washeries
10	4.0×20	90 ~ 110	Applicable Scenarios: Large Coal Washeries
11	4.2×20	120 ~ 140	Applicable Scenarios: Large Coal Washeries

Note: The above model selection applies to coal slurry. The specific dryer model shall be accurately determined based on parameters such as material processing capacity and moisture content.

Ultra-High Pressure Diaphragm Filter Press

Operating Principle

- A hybrid configuration of chamber plates and diaphragm plates, where each diaphragm plate is lined with elastic membranes on both surfaces.
- In production, pressurized water is introduced between the membranes and diaphragm plates, enabling high-pressure squeezing filtration.



Technical Features of Ultra-High Pressure Diaphragm Filter Press

- **1.High Pressurization Capability:**
Operates at an ultra-high pressure of 4–8 MPa, which is 2–5 times higher than conventional diaphragm filter presses. Reduces coal slurry cake moisture to 13%–19% in a single pass, eliminating the need for traditional thermal drying post-filtration.
- **2.Centralized Feeding System:**
Simplified piping design with direct slurry injection into filter chambers, preventing feed port clogging.
- **3.High Efficiency & Large Capacity:**
1.5–2 times the output of same-sized plate-and-frame filter presses, significantly reducing retrofitting and construction costs.
- **4.Composite Filter Plates:**
Made of metal-nonmetal hybrid materials for superior pressure resistance, fatigue resistance, and anti-aging properties, extending service life.
- **5.Durable Diaphragm Design:**
Unique materials and engineering drastically prolong diaphragm lifespan, reducing consumables and lowering overall operational costs.

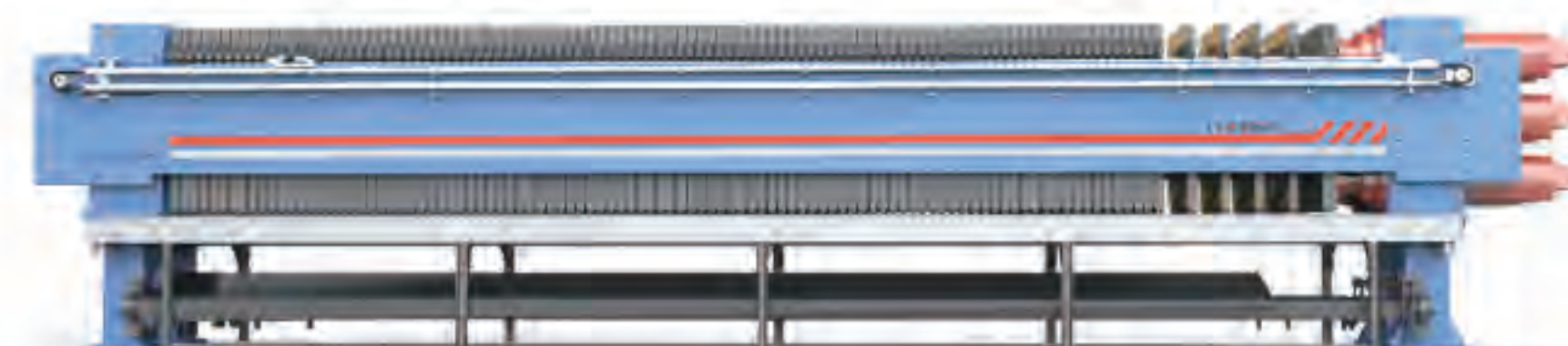
XCSMF Series Ultra-High-Pressure Diaphragm Filter Press Specifications

Model	Filter plate size	Chamber volume	Operating pressure	Machine weight	Machine power	Daily capacity
XCSMF/1500-300	1500×1500	8m ³	4~8MPa	82t	18.5kW	≈ 200t
XCSMF/1500-400	1500×1500	10m ³	4~8MPa	110t	20kW	≈ 300t
XCSMF/1500-500	1500×1500	12m ³	4~8MPa	135t	30kW	≈ 400t
XCSMF/2000-600	2000×2000	14m ³	4~8MPa	160t	30kW	≈ 500t
XCSMF/2000-800	2000×2000	19m ³	4~8MPa	190t	32.5kW	≈ 700t

Ultra-High Pressure Direct Pressure Filter Press

Operating Principle

- The system consists of metal plate frames integrated with thermoplastic elastomers, where the elastomers are mounted on both sides of each plate.
- In production, high-pressure compression force is exerted on the filter plates, inducing elastomer deformation to mechanically squeeze and dewater the filter cake.



Technical Features of Ultra-High Pressure Direct Pressure Filter Press

- **1.Clog-Free Centralized Feeding** Simplified piping design with direct slurry injection into filter chambers Prevents feed port blockages
- **2.Dual-Sided Filtration Technology** Permeable channels on both filter plate surfaces Reduces feeding/pressing time by 30-50% Increases throughput and production efficiency
- **3.Elastic Plate Direct Pressing System** Eliminates high-pressure water system requirements Simplifies operation while enhancing reliability Reduces initial investment by 15-20%
- **4.Membrane-Free Design** No diaphragm consumables or replacement labor Lowers operating costs by eliminating membrane expenses
- **5.Optimized Filter Chamber Structure** 20-30% increased chamber volume Extended filter plate lifespan (50,000+ cycles) 15-25% higher production capacity
- **6.Automated Unattended Operation** Stable and reliable 24/7 performance Intelligent control ready Eliminates manual intervention requirements

XCSDF Series Ultra-High Pressure Direct Pressure Filter Press Product Specifications

Model	Filter plate size	Machine weight	Machine power	Daily capacity
XCSDF/1500-300	1500×1500	72t	20kW	≈ 200t
XCSDF/1500-400	1500×1500	82t	25kW	≈ 300t
XCSDF/1500-500	1500×1500	105t	30kW	≈ 400t
XCSDF/2000-600	2000×2000	120t	40kW	≈ 500t
XCSDF/2000-800	2000×2000	140t	45kW	≈ 700t