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A World-renowned Equipment Manufacturer

ZENITH
MINING & CONSTRUCTION

–MINERAL
PROCESSING SOLUTIONS
工业选矿产品及解决方案

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上海西芝矿山工程机械有限公司
Shanghai Zenith Minerals Co., Ltd.

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公司简介

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我们的产品远销全球160多个国家和地区

Our products have been sold to more than 160 countries and areas.

30
多个海外分公司和业务机构

ZENITH has established 30 overseas business institutions and branches.

9
出口额连续九年位居中国矿山机械行业第一

According to the statistics from China General Administration of Customs, ZENITH Group is the No. 1 in the export sales of crushing and grinding machinery in China for nine consecutive years!

上海西芝矿山工程机械有限公司 是专业从事矿山破碎、建筑破碎、塔楼制砂、工业磨粉领域设备研发、生产、销售、服务于一体的国际化企业，国家首批高新技术重点单位，中国主要的高端矿机生产和出口基地。公司产品远销全球160多个国家和地区，拥有30多个海外分公司和业务机构，出口额连续九年位居中国矿山机械行业第一。

SHANGHAI ZENITH MINERALS CO.,LTD. is an international company specialized in R&D, production, sales and service of the minerals and stone crushing machines, VU sand making system as well as industrial grinding mills. Not only is our group company the first batch of high technology key enterprise, but also it is the main production and export base for high-end mining machines. It has established 30 overseas business institutions and branches, with the products exported to more than 160 countries and regions throughout the world. Exports from Shanghai Zenith Minerals Co.,Ltd. ranked the Top one for nine years in a row in China's mining machinery industry.

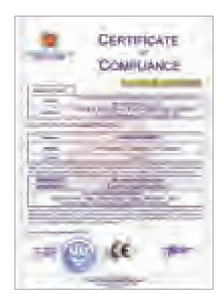
PRODUCTION STRENGTH
生产能力

上海西芝 拥有90余万平方米的生产基地和配套齐全的现代化金属切削设备，配备先进的SOLIDWORKS三维机械设计系统、模拟测试系统，以及国际一流的生产线和现代化检测基地，所有产品全部按照国际质量认证体系标准进行设计、生产、组装和检验，已顺利通过IS09001:2000, CE(欧盟)和COST(俄罗斯)认证。公司重视人才战略，目前总部96%的员工拥有本科以上学历，研发中心有多名享受国务院特殊津贴的著名专家，拥有专利27项，注册商标41项，并已形成了一支团结互助、开拓进取的研发团队，为企业发展提供着坚强的技术支撑。

Shanghai Zenith has a 900,000-square-meter production base, complete modern metal cutting equipment equipped with advanced Solidworks 3D mechanical design and simulation test system and international first-class production lines and modern test bases; moreover, all the products are designed, produced, assembled and tested in conformity with the international quality certification system standards and it has successfully achieved the certification of IS09001:2000, CE (EU) and GOST (Russia). Our company attaches great importance on talent strategy and 96% employees have bachelor degree or above. The company' s Technical R&D Center boasts a number of well-known experts entitled to the special allowance of the State Council, 27patents, 41registered trademarks, as well as a research team with solidarity, mutual assistance and pioneering spirit, to give endless impetus to corporate development.

临港基地·LinGang

HONORS
企业荣誉



破碎设备
Crusher

破碎设备主要用于将大石块破碎为较小的石块。破碎设备主要包括颚式破碎机，圆锥破碎机，反击式破碎机，锤式破碎机，辊式破碎机，移动式破碎机，冲击式破碎机等种类。破碎机广泛应用于矿山，建筑等领域。

Crusher is a machine designed to reduce large rocks into smaller rocks, gravel, or rock dust.Including jaw crusher,cone crusher,gyratory crusher,roll crusher,mobile crusher and vsi crusher.Crusher is widely used in mining, construction, etc.

ZENITH MINERALS

HST系列单缸液压圆锥破碎机
HSTSeries Single Cylinder Hydraulic Cone Crusher

1 介绍 Introductions

在矿山和石料行业，人们不仅要求破碎设备产量高，产品质量优异，而且希望能源利用率高、运行维护成本低、操作使用方便。HST系列单缸液压圆锥破碎机正是为了满足这些需求而设计的:破碎效率高、生产成本低、控制全自动化，能够适应各种破碎工艺。

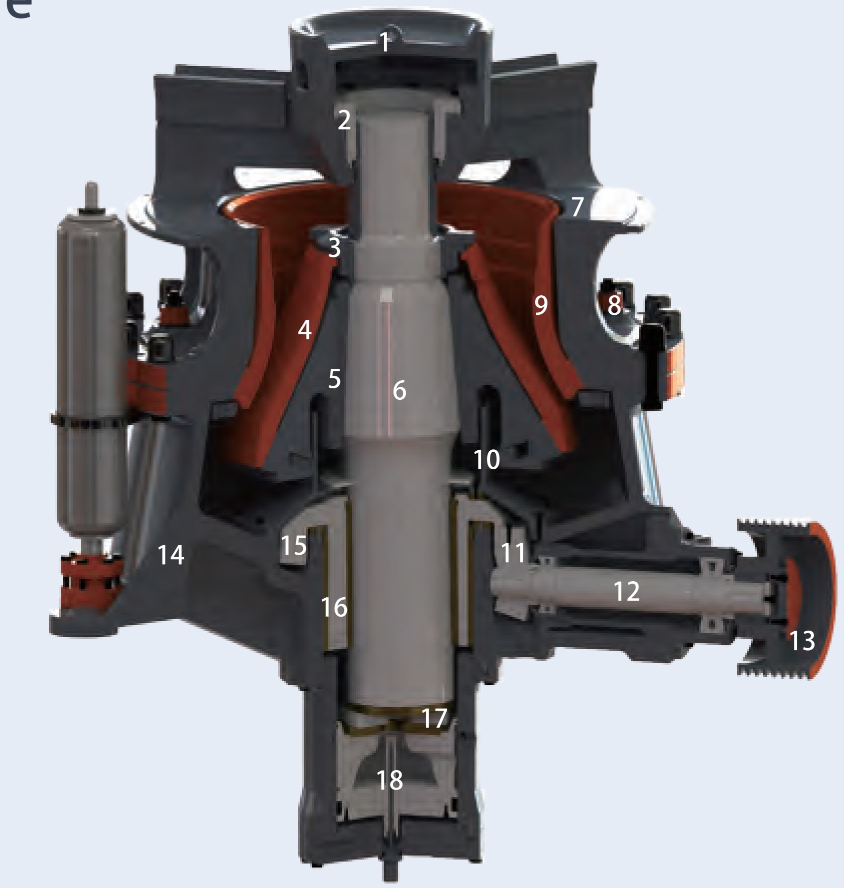
If your aggregate or mining business demand is not only big capacity and first-class product quality but also low operating cost, high utilization of source and easy maintainence, you will find that ZENITH HST crusher is optimized for your needs. As a kind of energy efficient product, HST series can be efficiently applied to various crushing processes with full automation control and relatively low operating and maintenance cost.

2 产品优势 Product Advantages

- 生产效率高，承载能力强
- 易于维护，运行成本低
- 全自动控制生产过程
- 多腔型适应多种工艺需求

- High performance & Great Compressive Capacity
- Lower Operating Cost & Longer Life Cycle
- Full Automatic Control
- Multiple cavities for Various Process Requirements

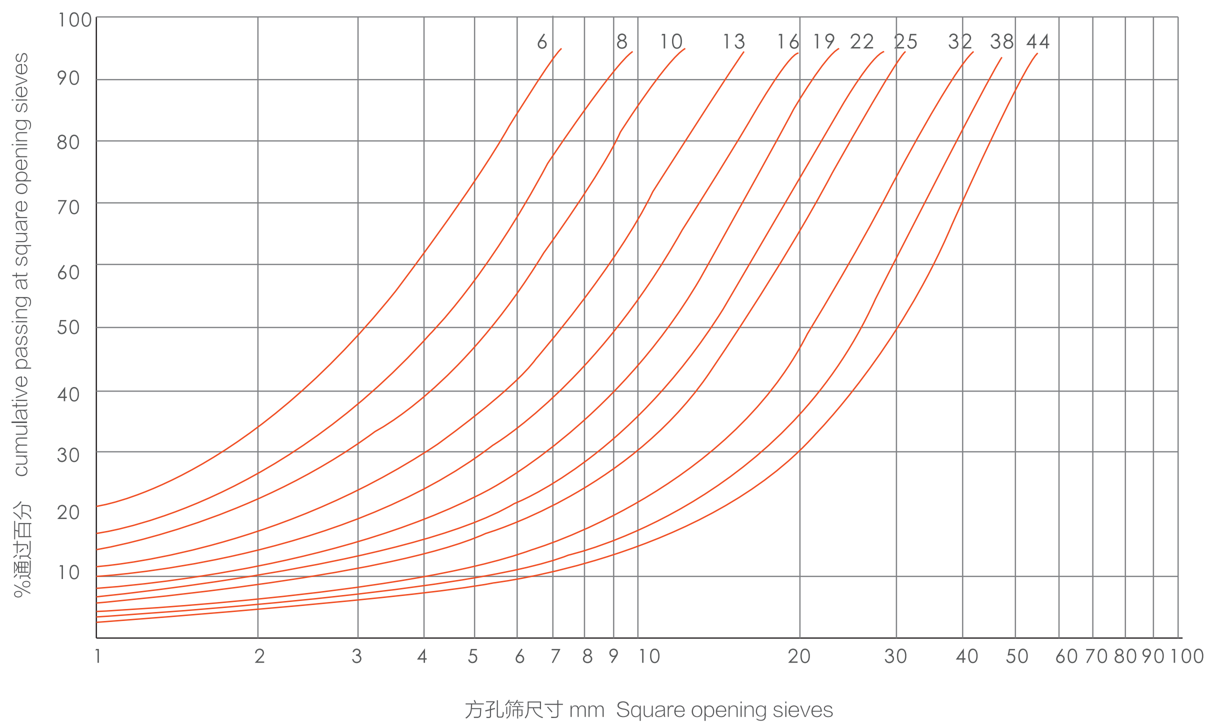
3 结构组成
Main Structure



1、顶部轴承盖 Top Bearing Capl
2、顶部轴承 Top Bearing
3、锁紧螺母 Locknut
4、破碎壁 Mantle
5、动锥 Movable Cone
6、主轴 Main Shaft
7、上架体 Upper Frame
8、轧臼壁紧锁螺栓 Concave Lockbolt
9、轧臼壁 Concave
10、防尘密封圈 Dustproof Sealing Ring
11、小齿轮 Pinion
12、传动轴 Transmission Shaft
13、皮带轮 Pulley
14、下架体 Lower Frame
15、大齿轮 Big Gear
16、偏心套 Eccentric Bush
17、止推轴承 Thrust Bearing
18、液压缸 Hydraulic Cylinder

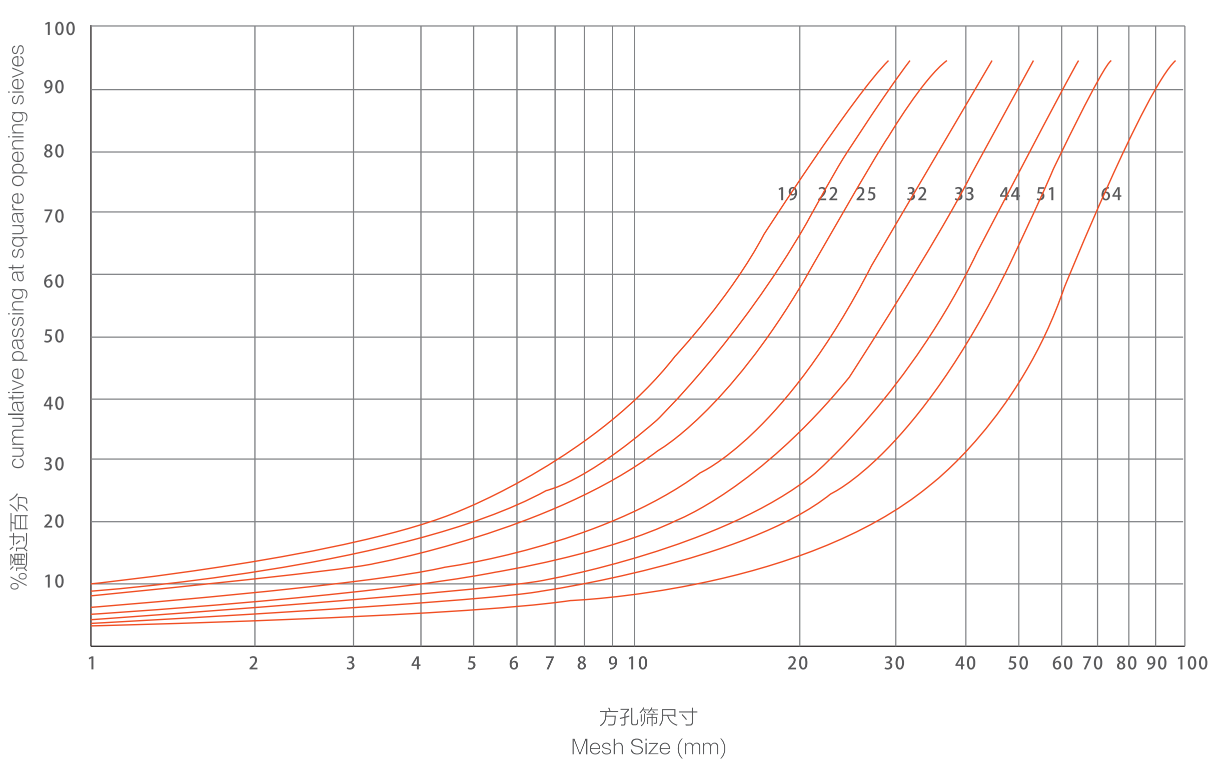
HST细碎粒度曲线

Indicative Gradation Curves(t/h)



HST中碎粒度曲线

Indicative Gradation Curves(t/h)



4 规格与性能参数表

Specifications

型号 Model	腔型 Cavity	最大进料粒度 Maximum feeding size	最小排料口尺寸 Minimum discharging size	处理能力 Capacity	标配装机功率 Nominal installed power	最大装机功率 Maximum installed power	外形尺寸 Overall dimension
HST100	(/)	(mm)	(mm)	(t/h)	(kw)	(kw)	(mm)
	S1(超粗)Extra Coarse	240	22	85–170	90	90	1550×1575×2545
	S2(中粗)Medium Coarse	200	19	70–130	90	90	
	H1(细)Fine	135	10	45–115	90	90	1550×1575×1965
	H2(中细)Medium Fine	65	8	35–80	90	90	
	H3(超细)Extra Fine	35	4	27–60	90	90	
HST160	(/)	(mm)	(mm)	(t/h)	(kw)	(kw)	(mm)
	S1(超粗)Extra Coarse	360	25	120–345	132	160	1875×1920×3195
	S2(中粗)Medium Coarse	300	22	105–305	132	160	
	S3(粗)Coarse	235	19	90–275	132	160	
	H1(细)Fine	185	13	66–210	132	160	1875×1920×2400
	H2(中细)Medium Fine	90	10	65–165	132	160	
	H3(超细)Extra Fine	50	6	48–105	132	160	
HST250	(/)	(mm)	(mm)	(t/h)	(kw)	(kw)	(mm)
	S1(超粗)Extra Coarse	450	35	255–605	220	250	2100×2320×4096
	S2(中粗)Medium Coarse	400	29	215–515	220	250	
	S3(粗)Coarse	300	25	190–490	220	250	
	H1(细)Fine	215	16	110–395	220	250	2100×2320×2780
	H2(中细)Medium Fine	110	13	115–340	220	250	
	H3(超细)Extra Fine	70	8	90–255	220	250	
HST315	(/)	(mm)	(mm)	(t/h)	(kw)	(kw)	(mm)
	S1(超粗)Extra Coarse	560	41	335–1050	315	315	2380×2735×4630
	S2(中粗)Medium Coarse	500	38	305–895	315	315	
	H1(细)Fine	275	16	170–665	315	315	2380×2735×3265
	H2(中细)Medium Fine	135	16	190–505	315	315	
	H3(超细)Extra Fine	65	13	205–320	315	315	
HST560	(/)	(mm)	(mm)	(t/h)	(kw)	(kw)	(mm)
	H1(细)Fine	300	22	430–1515	560	560	3780×2341×4531
	H2(中细)Medium Fine	155	19	380–1375	560	560	
	H3(超细)Extra Fine	80	10	270–775	560	560	
HST750	(/)	(mm)	(mm)	(t/h)	(kw)	(kw)	(mm)
	H1(细)Fine	370	25	460–2130	710	750	3100×3623×5305
	H2(中细)Medium Fine	195	22	525–1605	710	750	
	H3(超细)Extra Fine	85	10	350–885	710	750	

备注:产量为按中等硬度物料测定的概略通过量，由于给料、粒级、岩石类型和物料含水量的差异，实际结果会有所不同。

NOTE: The above capacity figures are based on the general throughput of medium hardness materials. Depending on different feeding, size, rock types and water content, the actual performance maybe different.

ZENITH
MINERALS

HPT系列多缸液压圆锥破碎机

HPTSeries Multiple Cylinder Hydraulic Cone Crusher

1 介绍
Introductions

HPT系列圆锥破碎机是在二十多年破碎机研发经验积累的基础上，结合丰富的现场经验，以及对新技术、新材料的探索，开发成功的新一代多缸液压圆锥破碎机。一直以来，HPT系列圆锥破碎机以其优秀的现场表现和高效的生产能力不断帮助客户实现需求，获得价值。

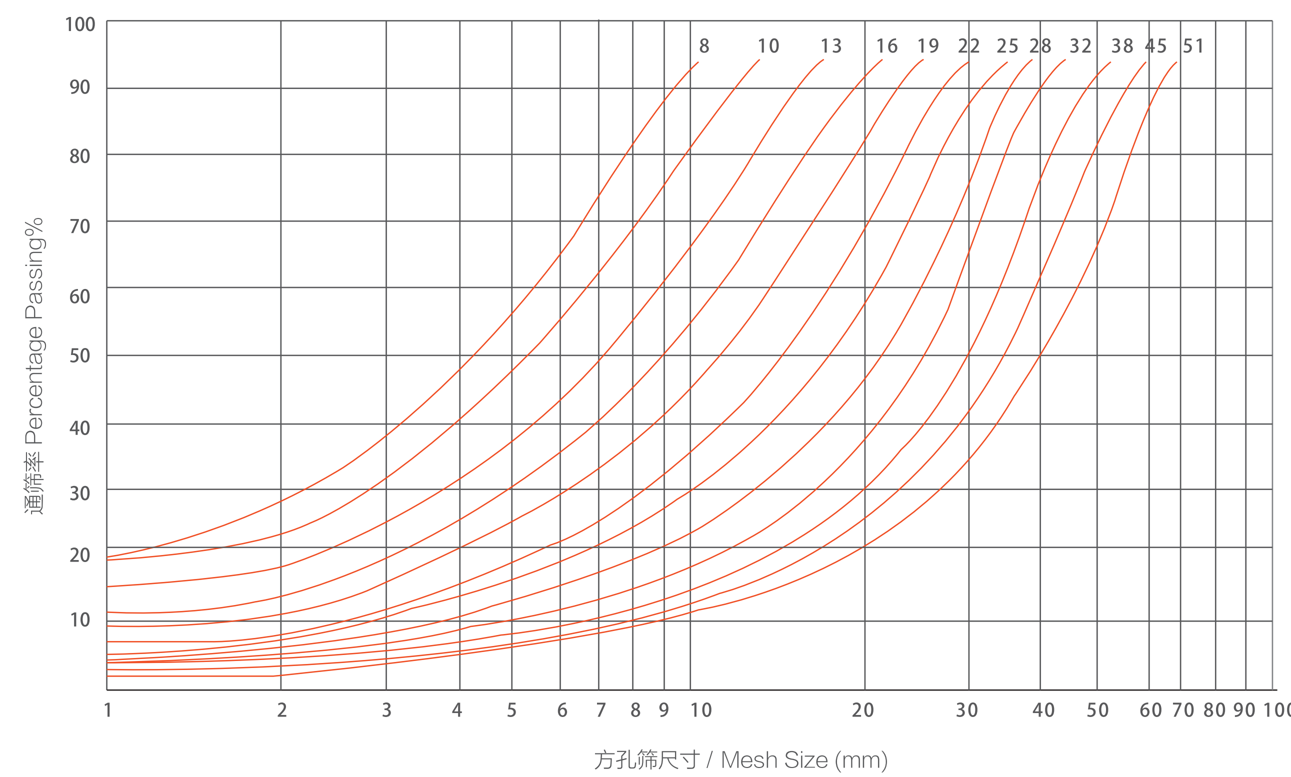
HPT series cone crushers are a new generation of multi-cylinder hydraulic cone crusher with high efficiency, built on the success of our 20+ years' experience of crusher research and development. As a result, the HPT series offers several outstanding features that enable our customers to fulfill their crushing needs.

2 产品优势
Product Advantages

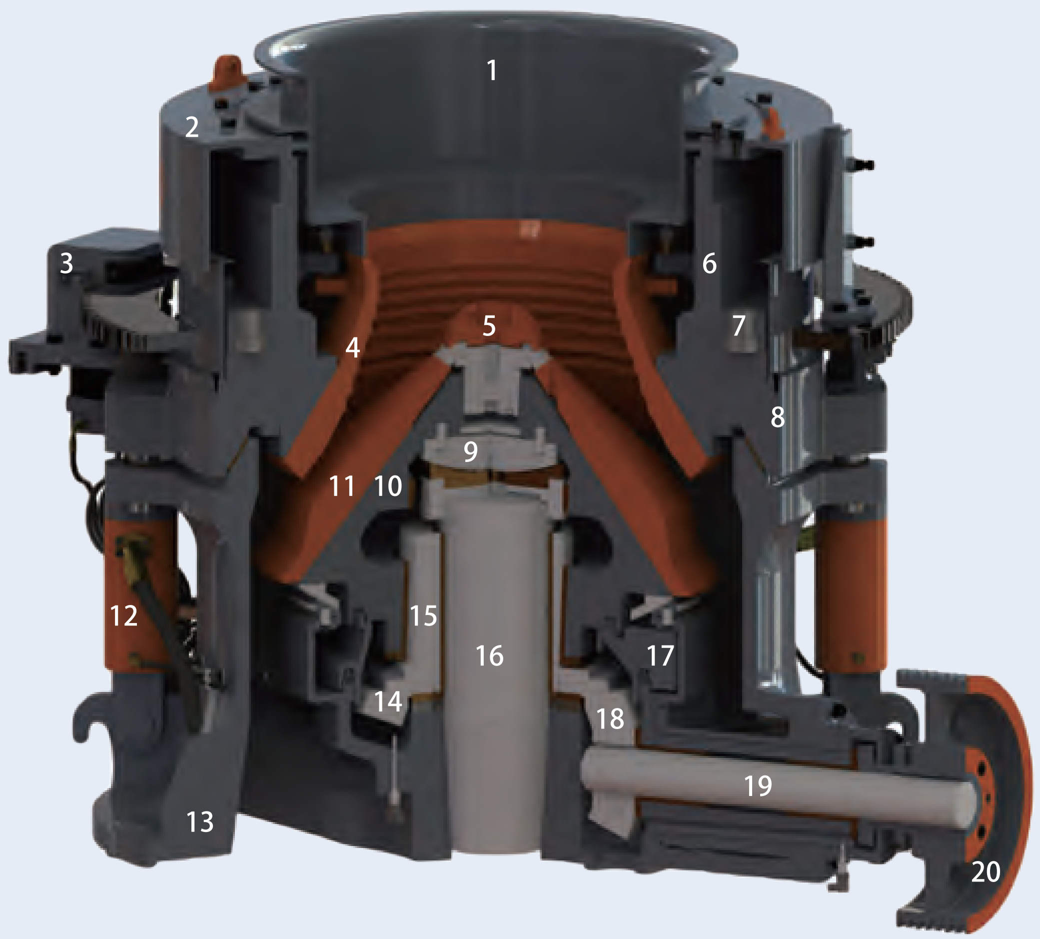
- 液压润滑一体化设备控制自动化
- 层压破碎出料粒形好
- 一机多用腔型转换灵活

- Intergrated lubrication system & automatic control system
- Laminating crushing makes good cubical shapes
- Flexible application

HPT粒度曲线 Indicative Gradation Curves(t/h)



3 结构组成
Main Structure



1、料斗 Hopper	2、调整帽 Adjusting Cap	3、液压调整装置 Hydraulic Adjustment Device	4、轧臼壁 Concave	5、锥头 Cone Head
6、调整环 Adjusting Ring	7、锁紧缸 Locking Cylinder	8、支撑套 Supporting Bush	9、球轴承 Socket Bearing	10、动锥 Movable Cone
11、破碎壁 Mantle	12、保险缸 Protective Cylinder	13、机架 Main Frame	14、大齿轮 Big Gear	15、偏心套 Eccentric Bush
16、主轴 Main Shaft	17、平衡环 Balance Ring	18、小齿轮 Pinion	19、传动轴 Transmission Shaft	20、皮带轮 Pulley

4 规格与性能参数表
Specifications

型号 Model	腔型 Cavity	给料口尺寸 Feed opening	最小排料口尺寸 Minimum discharging size	处理能力 Capacity	标配装机功率 Nominal installed power	最大装机功率 Maximum installed power	外形尺寸 Overall dimension
	(/)	(mm)	(mm)	(t/h)	(kw)	(kw)	(mm)
HPT100	C1(超粗)Extra Coarse	140	19	75-140	90	90	1705×1510×1583
	C2(粗)Coarse	100	13	60-110	90	90	
	M(中)Medium	70	9	52-100	90	90	
	F1(细)Fine	50	9	50-95	90	90	
	F2(超细)Extra Fine	20	6	45-90	90	90	
HPT200	C2(粗)Coarse	185	19	145-250	160	160	2135×1750×1927
	M(中)Medium	125	16	135-235	160	160	
	F1(细)Fine	95	13	115-220	160	160	
	F2(超细)Extra Fine	75	10	90-190	160	160	
HPT300	C1(超粗)Extra Coarse	230	25	220-440	220	250	2725×2110×2871
	C2(粗)Coarse	210	19	190-380	220	250	
	M(中)Medium	150	16	175-320	220	250	
	F1(细)Fine	105	13	145-280	220	250	
	F2(超细)Extra Fine	80	10	110-240	220	250	
HPT400	C1(超粗)Extra Coarse	295	30	300-630	315	315	2775×2370×2295
	C2(粗)Coarse	251	25	285-560	315	315	
	M(中)Medium	196	20	250-490	315	315	
	F1(细)Fine	110	13	180-345	315	315	
	F2(超细)Extra Fine	90	10	135-320	315	315	
HPT500	C1(超粗)Extra Coarse	330	38	425-790	400	400	2800×3480×4050
	C2(粗)Coarse	290	30	370-700	400	400	
	M(中)Medium	210	22	330-605	400	400	
	F1(细)Fine	135	16	270-535	400	400	
	F2(超细)Extra Fine	95	13	220-430	400	400	
HPT800	C1(超粗)Extra Coarse	350	38	570-1200	630	630	3970×3345×4235
	C2(粗)Coarse	299	32	520-1050	630	630	
	M(中)Medium	265	25	475-950	630	630	
	F1(细)Fine	220	16	370-800	630	630	
	F2(超细)Extra Fine	150	13	310-600	630	630	

备注:产量为按中等硬度物料测定的概略通过量，由于给料、粒级、岩石类型和物料含水量的差异，实际结果会有所不同。

NOTE: The above capacity figures are based on the general throughput of medium hardness materials. Depending on different feeding, size, rock types and water content, the actual performance maybe different.

ZENITH MINERALS

C6X系列颚式破碎机

C6XSeries Jaw Crusher

1 介绍

Introductions

为解决市场上现有颚式破碎机生产效率低、安装维护困难等问题，上海西芝矿山工程机械有限公司作为全球顶尖的岩石和矿物加工设备供应商，在多年的产品研发和数千条生产线工程服务经验基础上，开发出了新一代高能效颚式破碎机---C6X系列颚式破碎机，其设备结构、使用功能和生产效率等各项指标均为国际一流水平，成为目前国内外市场上最理想的粗碎设备。

SHANGHAI ZENITH MINERALS CO.,LTD. is the globally rock and mineral processing equipment supplier. In order to solve such problems as low production efficiency, and difficult installation and maintenance of the existing jaw crushers on the market, ZENITH developed a new generation of energy-efficient jaw crusher - C6X series jaw crusher with its years' experience in product development and production as well as services in thousands of production line projects. The C6X series jaw crusher has all international first-class level indexes (such as equipment structure, use functions, production efficiency, etc.), and becomes the most ideal coarse crushing equipment on the market currently at home and abroad.

2 产品优势

Product Advantages

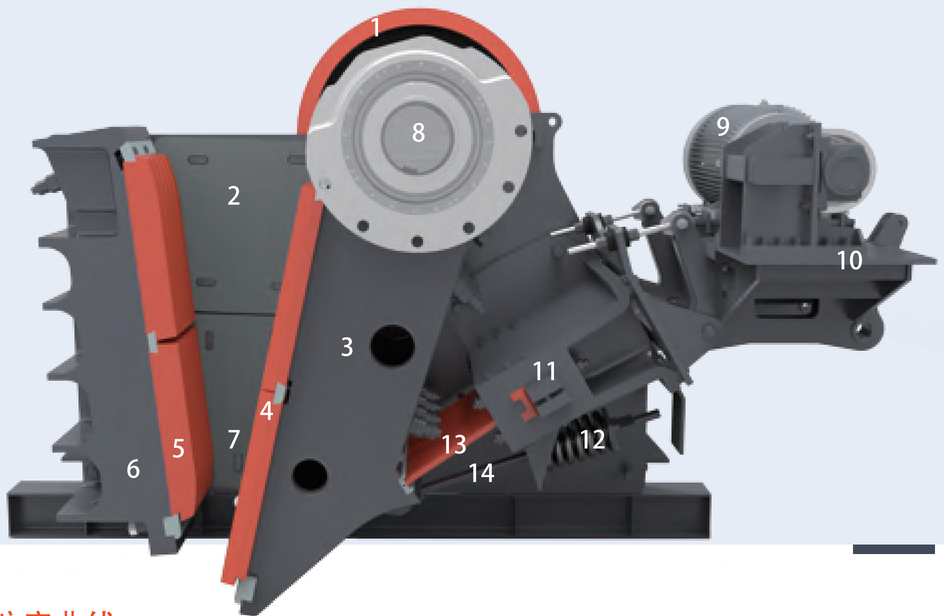
- 可拆分机架 强度更高
- 高效腔型 破碎效率高
- 一体化设计 节约安装空间
- 弹性减震固定 降低设备冲击力
- 固定式或移动式作业灵活切换

- Detachable frame - Higher strength;
- Efficient cavity type – Higher crushing efficiency;
- Integrated design, smaller installation space;
- Elastic damping anchors, able to decrease the equipment impact;
- Flexible switching between fixed and mobile operations.

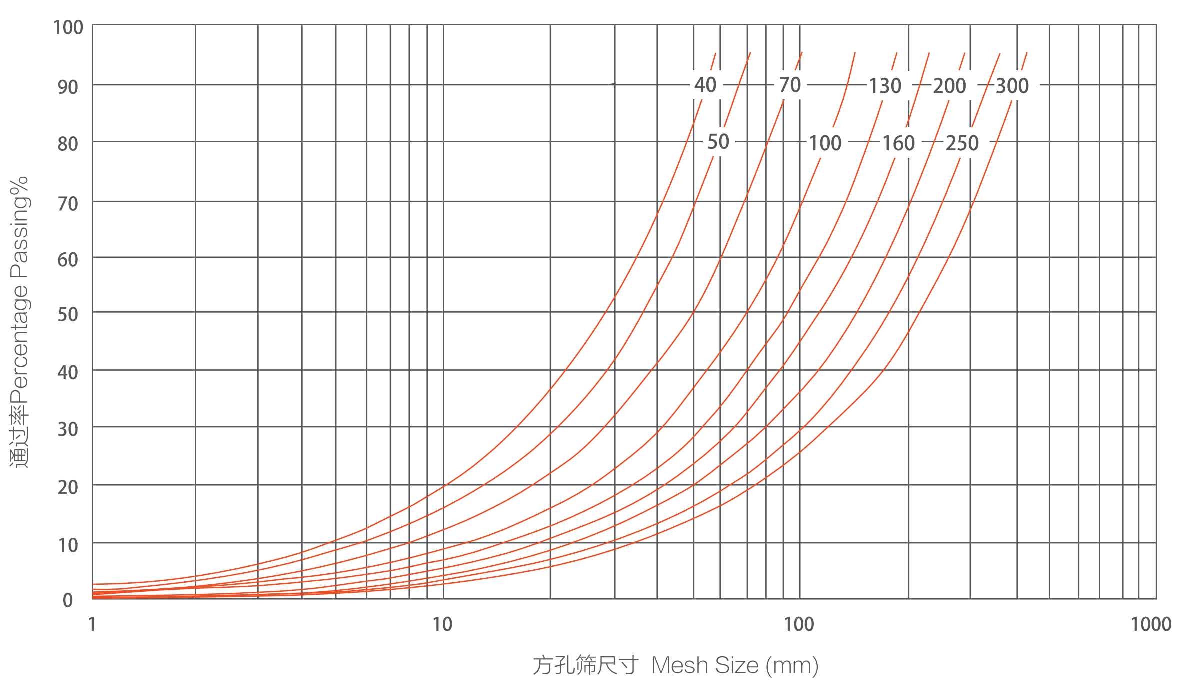
ZENITH MINERALS

3 结构组成
Main Structure

1、飞轮 Flywheel	2、上边护板 Upper Lining Plate	3、动颚 Movable Jaw	4、活动颚板 Movable Jaw Plate	5、固定颚板 Fixed Jaw Plate	6、机架 Frame	7、下边护板 Lower Lining Plate
8、偏心轴 Eccentric Shaft	9、电机 Motor	10、电机座 Motor Bracket	11、调整座 Adjustment Device	12、弹簧 Spring	13、肘板 Toggle Plate	14、拉杆 Tension Rod



C6X粒度曲线
Indicative Gradation Curves(t/h)



4 规格与性能参数表
Specifications

型号 Model	进料口尺寸 Feed opening	最大进料粒度 Maximum feeding size	出料口调整范围 Range of discharge opening	处理能力 Capacity	偏心轴转速 Speed	电机功率 Power	外形尺寸 Overall dimension
C6X系列	(mm)	(mm)	(mm)	(t/h)	(r/min)	(kw)	(mm)
C6X80	520×800	420	60–150	80–290	350	75	2650×1540×1780
C6X100	760×1000	630	70–175	130–420	260	110	3700×2440×2520
C6X110	850×1100	720	80–200	160–550	230	160	3800×2450×2550
C6X125	950×1250	800	100–250	230–760	220	160	4100×2750×2780
C6X145	1100×1450	920	125–275	320–950	220	200	4400×3060×3210
C6X160	1200×1600	1020	150–300	410–1150	220	250	5700×3650×3550
C6X200	1500×2000	1200	175–300	610–1510	200	400	6500×3990×4260
PEW系列	(mm)	(mm)	(mm)	(t/h)	(r/min)	(kw)	(mm)
PEW250×1000	250×1000	220	20–40	15–50	330	30	1400×1850×1310
PEW250×1200	250×1200	220	20–40	20–50	330	37	1400×2050×1310
PEW400×600	400×600	350	35–85	15–70	250	37	1920×1460×1840
PEW760	760×1100	640	75–200	150–350	270	110	2600×2500×2200
PEW860	860×1100	720	100–225	200–500	240	132	3300×2320×3120
PEW1100	1100×1200	930	150–275	300–650	210	185	4140×2660×3560
PE系列	(mm)	(mm)	(mm)	(t/h)	(r/min)	(kw)	(mm)
PE600×900	600×900	500	65–160	70–120	250	75	2520×1840×2303
PE750×1060	750×1060	630	80–140	130–260	250	90	2620×2302×3110
PE900×1200	900×1200	750	95–165	220–380	200	130	3789×2826×3025
PE1000×1200	1000×1200	850	195–265	230–380	200	130	3889×2826×3025
PE1200×1500	1200×1500	1020	150–300	400–800	220	200	4930×3150×3700


C6X系列


PEW系列


PE系列

备注:产量为按中等硬度物料测定的概略通过量，由于给料、粒级、岩石类型和物料含水量的差异，实际结果会有所不同。

NOTE: The above capacity figures are based on the general throughput of medium hardness materials. Depending on different feeding, size, rock types and water content, the actual performance maybe different.

HGT系列旋回式破碎机
HGTSeries Gyratory Crusher

1 介绍
Introduction

HGT系列旋回式破碎机集机械、液压、电气、自动化和智能控制等技术于一体，对标国际先进的旋回式破碎机，是一款大产能、高效率及智能化的新型粗碎设备，与传统旋回式破碎机相比，破碎效率高、使用成本低、维护调整方便，可以给用户提供更高效智能的超大产能粗碎解决方案。

HGT series gyratory crusher integrates mechanical, hydraulic, electrical, automation and intelligent control technologies. It is the most advanced rotary crusher in the world and a new type of crusher with large production capacity, high efficiency and intelligence. Compared with the traditional gyratory crusher, the crushing efficiency is higher, the cost is low, the maintenance and adjustment is convenient, and the super large capacity crusher solution can be provided to the clients more efficiently and intelligently.

2 产品优势
Product Advantages

- 可拆分机架 强度更高
- 高效腔型 破碎效率高
- 一体化设计 节约安装空间
- 弹性减震固定 降低设备冲击力
- 固定式或移动式作业灵活切换

- Detachable frame - Higher strength;
- Efficient cavity type – Higher crushing efficiency;
- Integrated design, smaller installation space;
- Elastic damping anchors, able to decrease the equipment impact;
- Flexible switching between fixed and mobile operations.

3 工作原理
Working principle

旋回式破碎机主要由横梁部、上中下机架部、动锥部、偏心套部、传动部和液压缸部等组成，由电动机带动水平轴旋转，水平轴通过齿轮带动偏心套旋转，再由偏心套带动动锥部做圆周摆动，从而实现连续的挤压破碎石块。
通过调整处于动锥底部的液压缸可以使动锥上下运动从而方便的调整排矿口的大小，方便地调整产品粒度大小。同时液压缸也提供过铁保护功能，当有不能破碎的物体（如铁块）进入破碎腔时，液压缸能自动使动锥下落，从而释放铁块，继续破碎，保护破碎机。

The gyratory crusher is mainly composed of the cross beam, the upper middle and lower frame, the moving cone, the eccentric sleeve, the transmission and the hydraulic cylinder, etc. The horizontal axis is driven by the motor to rotate, and the horizontal axis drives the eccentric sleeve to rotate by the gear. Then the eccentricity sleeve drives the moving cone to make the circumference swing, thus realizing the continuous extrusion and crushing stones.

Adjusting the hydraulic cylinder at the bottom of the moving cone, the moving cone can move up and down so that conveniently adjusts the size of discharge opening and the product. At the same time, the hydraulic cylinder also provides the function of iron protection. When an unbreakable object (such as iron block) enters the crushing cavity, the hydraulic cylinder can automatically cause the moving cone to fall, thus releasing the iron block, continuing to break, and protecting the crusher.

4 规格与性能参数表
Specifications

型号 Model	进料口尺寸 Feed opening	最大进料粒度 Maximum feeding size	出料口调整范围 Range of discharge opening	处理能力 Capacity	电机功率 Power	外形尺寸 Overall dimension
HGT系列	(mm)	(mm)	(mm)	(t/h)	(kw)	(mm)
HGT4265	1065	900	140-175	2015-2875	400	3940×4170×6900
HGT5065	1270	1050	150-175	2400-2940	400	4460×4430×7610
HGT5475	1370	1150	150-200	2890-3490	450	4930×4925×8410
HGT6275	1575	1350	150-200	2895-4335	450	5580×5250×9090
HGT6089	1525	1300	165-230	4200-5810	630	5590×5445×10470
HGT60110	1525	1300	175-250	5540-8895	1250	6200×5940×11390

齿辊破
Roll crusher

1 介绍
Introduction

分级破碎机具有筛分、破碎双重功能，可单独完成筛分、破碎作业，取消首选，简化工艺系统、降低土建及设备投资。在煤炭、电力、建材、化工、冶金、非金属矿、环保等行业得到广泛应用。上海西芝矿山工程机械有限公司生产的新一代分级破碎机融合了多年的经验和最新的设计理念。为客户在高效与低成本之间提供一个最佳的选择。

Roll crusher features both screening and crushing and it can complete screening, crushing work alone.Roll crusher cancel the preferred and simplify the process system which can reduce the investment of building and equipment. It is widely used in coal, electric, building, chemical, metallurgical,non-metallic mineral, environmental protection industries.The new generation roll crusher produced by Shanghai Zenith Mining and Construction Machinery Co., Ltd. which has incorporated years in the crusher production experience and latest design concept and provide a best choice between high efficiency and low cost.

2 产品优势
Product Advantages

整体箱式结构
破碎腔采用整体箱式结构，有效解决了分体箱式结构的轴承定位不牢、跳轴窜轴现象，并实现破碎腔的封闭性，保证作业环境的清洁。

Integral box-type structure
The crushing cavity adopts the integral box-type structure, effectively solves the fission chamber structure bearing positioning, jump shaft axis phenomenon, and realize the seal of the crushing cavity, ensure that the working environment clean.

智能系统
失速保护装置、智能控制系统及智能润滑系统。

Automatic System
Stalling protection device, automatic control system and automatic lubrication system.

行走装置
多种行走结构可供选择：固定型、丝杠型、液压型及电动型多种结构，方便设备的检修维护。

Walking Device
There is selection of various walking structure, fixed type, screw type, hydraulic type and electric type , convenient for the maintenance of equipment maintenance.

中心距调节装置
产品粒度可调，有偏心杯调距、丝杠调距及液压调距三种调距方式，调节方便、定位可靠，严格保证出料粒度。

Center Distance Adjusting Device
Product size is adjustable, with eccentric ring, screw and hydraulic adjustable adjusting the center distance .It is convenient and reliable and the discharging size can be assured.

齿形丰富，结构合理

破碎齿型多种结构，有活齿式、卡套式、齿环式、齿板式及整辊式等，可根据工况为客户提供性价比最优的齿型结构。破碎齿布置方式先进，大螺旋、双螺旋、多螺旋及直线型等多种布置方式，成块率高、破碎效率高。

Rich Tooth Shape, Reasonable Structure

There is a variety of tooth structures, live tooth, card sleeve, ring type, tooth plate and the whole roll type , we can provide customers with cost-effective optimal tooth structure according to the working condition. Advanced tooth arrangement, spiral, the double helix, screw and linear arrangement providing high block rate, high crushing efficiency.






3 规格与性能参数表

Specifications

分级破碎机-粗碎 Primary Crushers

系列 Series	型号 Model	入料粒度 Feed Size (mm)	出料粒度 Discharge Size(mm)	最大处理量 Capacity (t/d)	装机功率 Power (kw)
F65	2XC65100	300～350	150～200	200	2×45
	2XC65150	300～350	150～200	400	2×75
	2XC65200	300～350	150～200	600	2×90
F75	2XC75100	400～500	150～200	200	2×55
	2XC75150	400～500	150～200	400	2×75
	2XC75200	400～500	150～200	600	2×110
F80	2XC80100	500～600	200～300	200	2×55
	2XC80150	500～600	200～300	500	2×90
	2XC80200	500～600	200～300	800	2×132
	2XC80250	500～600	200～300	1000	2×160
F95	2XC95150	800～1000	200～300	1000	2×160
	2XC95200	800～1000	200～300	2000	2×250
	2XC95300	800～1000	200～300	4000	2×315
F120	2XC20200	1200～1500	300～500	3000	2×250
	2XC20300	1200～1500	300～500	5000	2×315

注：表内参数按破碎物料为含矸量不超过20%的原煤进行匹配，若含矸石量及其他技术特征发生改变，请联系厂家技术人员.

Note: parameters are according to the materials for the broken bottles content less than 20% of the raw coal match, if the content of coal gangue and other technical characteristics change, please contact the factory technician.

分级破碎机-中碎 Secondary Crushers

系列 Series	型号 Model	入料粒度 Feed Size (mm)	出料粒度 Discharge Size(mm)	最大处理量 Capacity (t/d)	装机功率 Power (kw)
S50	2XC50700	150～200	40～50	50	2×15
	2XC50100	150～200	40～50	100	2×30
	2XC50150	150～200	40～50	200	2×45
	2XC50200	150～200	40～50	350	2×75
S65	2XC6570	200～250	40～50	60	2×18.5
	2XC65100	200～250	40～50	120	2×30
	2XC65150	200～250	40～50	200	2×55
	2XC65200	200～250	40～50	350	2×75
S70	2XC7070	250～300	50～80	70	2×22
	2XC70100	250～300	50～80	130	2×30
	2XC70150	250～300	50～80	200	2×45
	2XC70200	250～300	50～80	400	2×75
S75	2XC75100	300～350	50～80	150	2×37
	2XC75150	300～350	50～80	250	2×55
	2XC75200	300～350	50～80	400	2×75
	2XC75250	300～350	50～80	500	2×110
S80	2XC80100	350～400	80～100	150	2×45
	2XC80150	350～400	80～100	300	2×75
	2XC80200	350～400	80～100	600	2×110
	2XC80250	350～400	80～100	800	2×160
	2XC80300	350～400	80～100	1000	2×200
S90	2XC90100	400～500	100～150	200	2×55
	2XC90150	400～500	100～150	300	2×75
	2XC90200	400～500	100～150	600	2×132
	2XC90250	400～500	100～150	800	2×160
	2XC90300	400～500	100～150	1200	2×160

注：表内参数按破碎物料为含矸量不超过20%的原煤进行匹配，若含矸石量及其他技术特征发生改变，请联系厂家技术人员

Note: parameters are according to the materials for the broken bottles content less than 20% of the raw coal match, if the content of coal gangue and other technical characteristics change, please contact the factory technician.

给矿设备
Feeding Equipment

BWZ系列重型板式给料机
BWZ Series Heavy Duty Apron Feeders

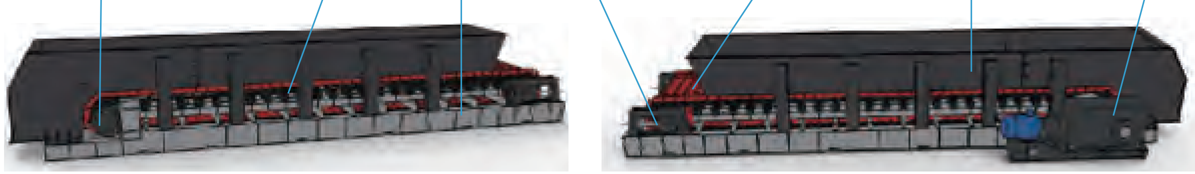
1 介绍 Introduction

BWZ系列重型板式给料机主要由驱动装置、链板装置、拉紧装置、传动主轴装置、机架、支承轮、托链轮等组成。
品质与工艺的结合成就复杂工况下的可控给料。

BWZ series heavy duty apron feeder mainly consists of driving device, chain plate, tension device, transmission main shaft device, frame, carrier roller and supporting roller, etc.
Combination of Quality and TechnologyAchieves Controllable Feeding in Complicated Conditions.

ZENITH MINERALS

2 结构组成
Main Structure



3 产品优势
Product Advantages

给料速度可控，可实现联动可调
变频电机驱动，给料速度与主机进行联动实现自动反馈.保证后续设备效能最大化。

设备强度大，寿命长
采用标准坦克链传动，强度大，拉力大，无需润滑，误差小，长寿命使用无需维修;
链板采用合金钢板焊接而成，强度大.使用时间长;工字型结构.筋板加固.整体式设计，结构坚固稳定。

有效降低给料高度
可根据需要安装为一定的倾斜角度，进料料仓高度有效降低。

使用维护简单
采用垂直交叉减速机，浮动悬挂安装，维护便捷;主轴与链轮等连接均采用胀套无键联接，强度好，拆装方便。

适用于复杂工况，应用范围广
受物料粒度成份、温度、粘度、冰霜、雨雪或冰结物料影响较小.环境适应性强，能在恶劣工况环境下运行。

设计安装简单，抗冲击能力强
给料粒度大，可直接与原料仓接触，能够承受较大的仓压，同时拉紧装置设计有碟簧的缓冲部分，减少设备振动冲击。

Adjustable Feeding Speed&Automatic Feedback
Variable frequency motor and automatic feedback between feeding speed and main machine can maximize the efficiency of following-up equipment.

High Strength&Long Service life
With standard tank chain of small deviation as transmission,the feeder is of high strength and can withstand high tension.Therefore, it can serve a long time without lubrication and maintenance.
Chain Plates are welded by alloy steel plates with high strength and long service life. Integral I -shape structure and reinforced ribs guarantee stability and firmness.

Lower Feeding Height
With a certain inclination angle of installation under customer' s requirements, height of the feeding hopper can be effectively reduced.

Simple Operation&Maintenance
Vertical cross reduction gear and float hang installationsimplify the maintenance. Connection of main shaft and chain wheel adopts expanding set of keyless connection, improving strengthand simplifying installation.

Complicated Conditions Adaptability&Wide Application
BWZ is less affected by raw material size, temperature,viscosity, snow, rain and freezing material, it can supply high-efficiency under poor operating conditions.

Simple Structure&High Anti-impact Ability
Larger feeding size can be accepted and it can directlycontact with the feeding hopper with bearing high pressure from it. The tension device with disc spring can reduce the impact force at the same time.

4 规格与性能参数表
Specifications

型 号 Model	链板宽度 Width of Chain Plate (mm)	链板轴距 Axle Base of Chain Plate (mm)	最大给料粒度 Max. Feeding Size (mm)	最大给料能力 Max. Feeding Capacity (t/h)	装机功率 Installed Power (kW)
BWZ1250×6	1250	6000	650	150	15
BWZ1400×8	1400	8000	750	250	18.5
BWZ1600×9	1600	9000	900	350	30
BWZ1800×9	1800	9000	1050	500	37
BWZ2000×10	2000	10000	1100	680	45
BWZ2200×10	2200	10000	1250	800	55
BWZ2400×12	2400	12000	1600	1000	2×55

磨矿设备
Grinding Equipment

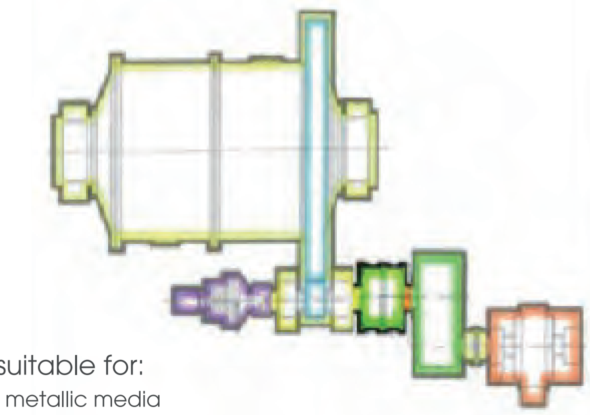
选矿用球磨机

Ball Mill

1 介绍
Introduction

球磨机是物料被破碎之后，再进行粉碎的关键设备，球磨机广泛应用于水泥、硅酸盐制品、新型建筑材料、耐火材料、化工、黑色与有色金属选矿以及玻璃陶瓷等生产行业，对各种矿石和其它可磨性物料进行粉磨。通常磨矿细度较细时宜用溢流型球磨机，较粗时宜用格子型球磨机。（可避免过磨对选别产生不利影响）

The ball grinding mill is the key equipment for conducting pulverizing operation after materials are crushed which is widely used in cement, silicate products, new building materials, fireproofing, chemical industry, mineral separation for ferrous metal and non-ferrous metal, glass-ceramic and other industries, is used for crushing and grinding every kind of ore or other grindable materials. In general, it is better to use overflow ball mill when the ore grinding fineness is fine and is better to use grate ball mill when it is coarse. (It is able to prevent adverse effect on sorting from heavily-milled materials)



球磨机/棒磨机适用于：
金属材料一段磨矿、再磨以及磨矿回路的二段磨矿。

Ball/rod mills are suitable for:
Ball/rod mills for use of metallic media
Single stage fine grinding
Regrinding
Second stage in two stage grinding circuits

球磨机/棒磨机的优势：
自动运行节约能源
软件设备适应复杂流程及复合矿。

Main advantage of ball mill/rod mill:
Automatic operation saves power
Software to suit the most complicated circuits and complex ores

操作:
球磨机可在开路和闭路中工作
球磨机在开路设计一般在以下情况选择：
处于磨矿的第一阶段，
喂料尺寸较小，一次性可获得较好的出料。
出料粒度大小要求不严，部分较大出料也可接受。

Operation:
Ball mills operate either in open or closed circuit.
Open circuit operation is best utilized when:
Another stage of grinding follows the mill
Reduction ratio is small
Feed material is already fine and one pass through the mill produces the desired results
Product size control is not critical and oversize material can be tolerated in the product

若对成品粒度要求较高的情况下，闭路研磨是最有效的运行方式，通过低成本的投入而获得较高的投资回报。

Where size control of the final product is important, closed circuit grinding is the most efficient method of operation. The production of a higher quality product at a lower cost justifies the additional capital investment.

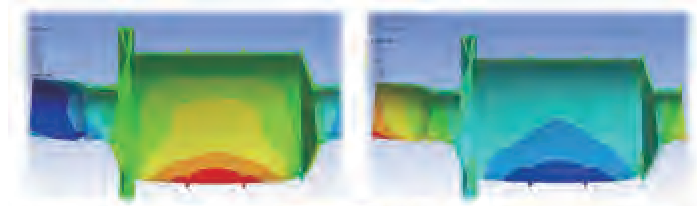
湿磨大致包括几个方面：
闭路带有水力旋流器
闭路带有振动筛
利用球磨机串联进行二段磨矿

Common wet grinding flow sheets include:
Open circuit
Closed circuit with hydro cyclones
Closed circuit with vibrating screens
Two stage variations of the above utilizing two mills in series

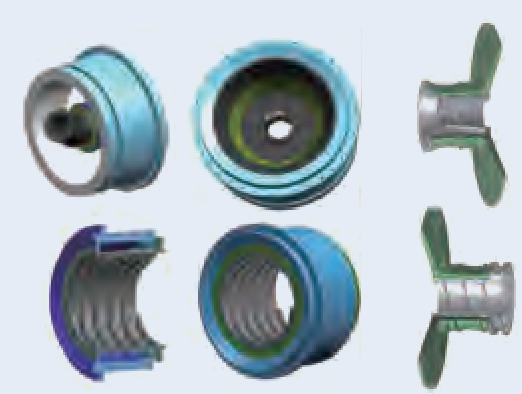
西芝球磨机的高科技技术支持

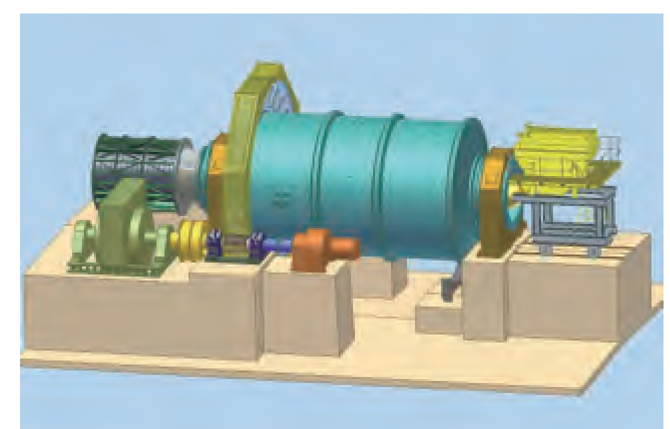
High technical support of ZENITH ball mill

■ 结构有限元优化分析
Finite element structure optimization analysis



■ 3D设计
3D design





2 规格与性能参数表
Specifications

湿式格子型球磨机技术性能表
Specification of wet grid ball mill

设备型号 Model	筒体直径 Diameter (mm)	筒体长度 Length (mm)	有效容积 E-volume (m^3)	磨机转速 R-speed (r/min)	研磨体装载量 Load of media(t)	电机功率 Power (kw)	参考总重 Reference weight (t)
MQG1224	1200	2400	1.14	26.6	2.4	22	12.5
MQG15I5	1500	1500	2.3	29.2	4.8	60	13.7
MQG1524	1500	2400	3.7	29.2	7.6	90	16.5
MQG1530	1500	3000	4.6	26.6	10	90	17.5
MQG2130	2100	3000	9.4	22.1	20	220	45
MQG2430	2400	3000	12.2	21	25	250	50
MQG2736	2700	P600	18.5	20.5	39	400	74
MQG2740	2700	4000	20.5	20.24	38	400	77
MQG2760	2700	6000	34.34	19.5	53	630	84
MQG3236	3200	3600	26.3	18.3	54	630	116.94
MQG3240	3200	4000	29.2	18.2	60	710	121.4
MQG3245	3200	4500	32.9	18.3	68.5	800	126.23
MQG3254	3200	5400	39.4	18.3	81.6	1000	135.4
MQG3645	3600	4500	41.4	17.25	86	1000	153.1
MQG3660	3600	6000	54	17.3	112	1400	190.6
MQG4060	4000	6000	69.8	16.0	126	1500	215.5
MQG4067	4000	6700	76	16.0	155	1600	235.2

半自磨机技术性能表
Specification of SAG Mill

设备型号 Model	筒体直径 Diameter (mm)	筒体长度 Length (mm)	磨机转速 R-speed (r/min)	电机功率 Power (kw)	参考总重 Reference weight (t)
MZ24IO	2400	1000	4.5	55	18.5
MZ3212	3200	1200	9.2	160	32.8
MZ4014	4000	1400	16.6	250	63
MZ55I8	5500	1800	34.6	800	178
MZ6433	6400	3300	107	2000	306

溢流型球磨机技术性能表
Specification of overflow ball mill

设备型号 Model	筒体直径 Diameter (mm)	筒体长度 Length (mm)	有效容积 E-volume (m^3)	磨机转速 R-speed (r/min)	研磨体装载量 Load of media(t)	电机功率 Power (kw)	参考总重 Reference weight (t)
MQY1530	1500	3000	5	26.6	9	90	17
MQY1536	1500	3600	5.7	26.6	10.6	90	18.3
MQY1864	1830	6400	14.4	24.5	24.6	220	38.3
MQY2130	2100	3000	9.4	22.1	15	200	43.5
MQY2430	2400	3000	12.2	21	22.5	250	49
MQY2736	2700	3600	18.5	20.5	39	400	72.34
MQY2740	2700	4000	20.5	20.24	38	400	76
MQY2745	2700	4500	23.5	20.5	43.5	500	78
MQY3236	3200	3600	26.3	18.3	48.4	500	115.94
MQY3240	3200	4000	29.2	18.2	60	560	121.4
MQY3245	3200	4500	32.9	18.3	60.5	630	124.23
MQY3254	3200	5400	39.4	18.3	73	800	129
MQY3264	3200	6400	46.75	18.3	86	1000	140
MQY3275	3200	7500	55.5	18.3	102	1250	154
MQY3290	3200	9000	64.2	18.3	106.6	1250	173
MQY3445	3400	4500	37	18.4	74.6	800	129.8
MQY3456	3400	5600	45.8	17.9	84.3	1120	135
MQY3645	3600	4500	41.4	17.25	76	1000	150.1
MQY3650	3600	5000	46.7	17.5	85.96	1250	158
MQY3656	3600	5600	55.4	17.76	106.3	1250	169.7
MQY3660	3600	6000	54	17.3	102	1250	182.7
MQY4060	4000	6000	69.8	16	126	1500	203.5
MQY4067	4000	6700	78	16	136.3	1600	208.2
MQY4361	4270	6100	80	15.67	144	1750	215.3
MQY5064	5030	6408	120	14.4	251	2600	318.5
MQY5083	5030	8300	152.3	14.4	266	3300	402.6
MQY5565	5500	6500	143.3	13.8	264	3400	451.5

水泥磨主机技术性能表
Specification of cement grinding mill

规格 Model (m)	产量 capacity (t/h)	磨机转速 R-speed (r/min)	入料粒度 Feeding size (mm)	研磨体装载量 Load of media (t)	有效容积 E-volume (m^3)	电机功率 Power (kw)	参考总重 Reference weight (t)
Φ2.2×7.5	13-14	22	<25	31	21.4	380	64
Φ2.4×8	15	20.8	<25	45	30	560	82.53
Φ2.6×13	30-32	19.6	<25	80	60	1000	144.5
Φ3×II	36	17.69	<25	100	69	1250	156.5
Φ3.8×12.5	55	16.4	<25	167	123.5	2500	301.4
Φ4.2×II	120	15.75	<25	182	134.5	2800	256
Φ4.2×I2.5	145	16	<25	210	151	3150	242
Φ4.2×13	75	15.6	<25	209	157	3150	255
Φ4.6×I4	95-110	15	<25	285	185	4200	310

溢流型球磨机：
外形尺寸从Φ1.5×3.0 到 Φ5.6×8.5m，有效容积从7.5 到194.3 m3，从而满足不同的需求。
格子型球磨机：外形尺寸从Φ1.2×2.4 到 Φ4×6.7m，有效容积从2.2 到 76 m3，从而满足不同的需求。
棒磨机：外形尺寸从Φ1.5×3.0 到 Φ3.5×5.8m，有效容积从4.6 to到60.7 m3，从而满足不同的需求。
自磨机：外形尺寸从Φ2.4×1.2 到 Φ6.4×3.3m，有效容积从5.6 到107 m3，从而满足不同的需求。

大齿轮加工
Gear machine plant

原料磨主机技术性能表
Specification of raw material grinding mill

规格 Model (m)	产量 capacity (t/h)	磨机转速 R-speed (r/min)	入料粒度 Feeding size (mm)	研磨体装载量 Load of media (t)	有效容积 E-volume (m^3)	电机功率 Power (kw)	参考总重 Reference weight (t)
Φ2.2×7.5	15-16	22	<20	22	18	380	64
Φ2.2×8	30	20.8	<25	45		475	66
Φ2.2×11	22-25	21.5	<25	40 ~45	43	500	105
Φ2.6×I3	43-50	19.4	<20	80	60	1000	152.3
Φ2.6×I3	43-50	19.4	<20	80	60	1000	153
Φ3×9	36-42	17.8	<15	70-80		1000	136.6
Φ3.2×10	55	17.83	<20	65	44.5	1000	186.9
Φ3.5×10	75	16.69	<20	80	64.6	1250	170
Φ3.8×9	90-95	16.5	<15	130	94	2000	256.3
Φ4.6×14	185-220	15		210	148	3550	310

For the overflow ball mill:
its model varies from 1.5×3.0 to 5.6×8.5m ,the effective volume varies from 7.5 to 194.3 m^3 to meet different needs
For the gate ball mill: its model varies from 1.2×2.4 to 4×86.7m ,the effective volume varies from 2.2 to 77.95 m^3 to meet different needs
For the rod mill: its model varies from 1.5×3.0 to 3.5×5.8m ,the effective volume varies from 4.6 to 60.7 m^3 to meet different needs
For the (semi) autogenous grinding mill(AG/SAG): its model varies from 2.4×1.2 to 6.4×3.3m ,the effective volume varies from 5.6 to 107 m^3 to meet different needs.

筒体
Main body

棒磨机

Rod Mill

1 介绍

Introduction

棒磨机是由筒体内所装载研磨体为钢棒而得名的，它由五个部分组成，包括圆柱壳，供料系统，排放系统，主轴承和传输系统。棒磨机可以根据客户的要求采用用于磨或湿磨两种方式进行磨粉。我们可以根据你的原料特性，匹配合适的磨矿介质，采用进口和出口控制的先进技术，得到更加均匀的出料粒度。摩氏硬度在5.5-12之间的矿石都可以用我们的棒磨机进行处理。

The rod mill is loaded with the grinding media of steel bars. It consists of five parts including cylinder shell, feeding system, discharge system, main bearing and transmission system. It is available for both of the dry grinding and wet grinding fashion as the customer's needs. By using a new advanced technology of inlet and outlet control, we can match the befitting grinding media according to your material property, which will make the discharge size well distributed. Mohs hardness of material that in 5.5-12 are all can be handled by our mill.

2 产品优势

Product Advantages

1、节能
与老棒磨机的滑动轴承相比，我们的新设备可以节省总共10-20%的动力，产量比通常提高10%以上。

1.Energy Saving
Compared with the sliding bearing of the old rod mill, our new equipment can save you 10-20% energy in total. The production is improved more than 10% than usual.

2、优良的出料粒度

2.Good Discharged Particle Size

3、经验丰富的技术设计以及规范的方案可以保证你解决过度破碎的问题，同时保证你的设备有一个良好的运行状态。

3.The experienced technology design on the specification can promise you a well running situation with less over crushing problem.

4、擅长湿磨
我们可以提供很多我们的棒磨机湿磨的案例，这些案例包括处理煤，处理焦化产品以及水煤浆的制作等等。

4.Good at Wet Grinding
We have supplied numberless of wet grinding rod mills for customer in coal chemical industry, to deal with the coal and petroleum coke material and prepare for the coal water slurry making.

5、我们的棒磨机可以设计作为第一级研磨设备，它也可以广泛地应用于人工制砂，矿石处理厂和化工厂等。

5.The mill can design as the first level open circuit grinding equipment, which can be widely used in the department of manual stone sand, ore treatment plant and chemical plant, etc.

6、安装方便，操作简单

6.Easy Installation, Easy Access

3 规格与性能参数表

Specifications

型号 Model (m)	直径 Diameter (mm)	长度 Length (mm)	有效容积 E-volume (m^3)	转速 Rotation Speed(r/min)	装棒量 Grinding Medium Load (t)	功率 Power (kw)	重量 weight (t)
Φ1.5×3	1500	3000	5	23	8	75	20
Φ3.1×3	2100	3000	8.8	19.4	25	220	48
Φ3.4×3	2400	3000	11.8	18.2	27	250	58
Φ2.7×3.6	2700	3600	18.8	17.5	42	400	70
Φ3.0×4	3000	4000	25.9	16.2	50	500	89
Φ3.2×4.5	3200	4500	33	15.5	56	630	111. 5
Φ3.2×4.8	3200	4800	34	15.5	60	710	121. 2
Φ3.4×5.8	3400	5800	49	14.65	95	900	160
Φ3.6×5.4	3600	5400	50	14.5	97	1000	155
Φ3.6×5.8	3600	5800	53.8	14.3	135	1120	175
Φ3.8×5.2	3800	5200	54.1	14.2	102	1120	175
Φ3.8×5.8	3800	5800	60.3	14.2	112.2	1250	156
Φ4.0×6	4000	6000	70	14	130	1400	163

分级设备

Classification Equipment

分级机主要有螺旋分级机和水力旋流器。广泛用于选矿厂中与球磨机配成闭路循环流程分级矿砂，或用于选矿厂中来分级矿砂和细泥，以及金属选矿流程中对矿浆进行粒度分级，以及选矿作业中的脱泥、脱水等作业。该分级机具有结构简单、工作可靠、操作方便等特点。

Classifier mainly has spiral classifier and hydrocyclone which is widely used in concentrating plants and watched with ball mill to form closed circulation procedure for the classification of the ore sand or used for the classification of the ore sand and fine silt in gravity mill, used for conducting size grading for pulp in the process of the metal separation and used for the desliming and dehydration in the mine separation .This kind of classifier owns advantages of simple structure, reliable working state and easy operation.

螺旋分级机

Spiral classifier

1 介绍 Introduction

螺旋分级机按螺旋轴的数目分为单螺旋和双螺旋
按溢流堰高度可分为高堰式、低堰式和沉没式三种。
高堰式：具有一定沉降区适用于粗粒分级，可以获得大于100mesh的溢流粒度。
低堰式：沉降区面积小，溢流生产能力低，它常常不用于分级作业，而用于冲洗矿砂和脱泥作业。
沉没式：沉降区具有较大面积和深度，适用于细粒度分级，可获得小于100mesh的溢流粒度。

Based on the number of screw shafts,the spiral classifier can be divided into two classes:single and double screw.
The spiral classifier can be divided into high weir,low weir and immersed-type spiral classifier based on the height of overflow weir.
The high weir is suitable for coarse grain classification with some depressed area,is capable of obtaining granularity over 100 mesh.
The low weir: The desliming area is small and overflow capability is low. Usually used on washing sand and desliming.
The immersed-type spiral classifier is suitable for the fine granule classification capable of obtaining overflow granularity less than 100 screens for the great depressed area and depth.

2 规格与性能参数表

Specifications

类型 Type	型号 Models	处理能力 Processing capacity 按返砂 Sandreturn-based(t/d)	按溢流over Flow-based	螺旋直径 Screw diameter (mm)	水槽长度 length (mm)	水槽坡度 Slope	传动电机功率 Power (kw)
高偃式单螺旋 High weir single spiral classifier	FG-300	30-80	10-30	300	3900	14-18	2.2
	FG-500	145-260	21-75	500	4390	14-18	2.2
	FG-750	255-564	65-154	750	5500	14-18	3
	FG-1000	473-1026	85	1000	6500	14-18	5.5
	FG-1200	1165-1630	150	1200	6500	14-18	5.5
	FG-1500	1140-2730	235	1500	8265	14-18	7.5
	FG-2000	3240-5940	400	2000	8400/9900	14-18	11;15
	FG-2400	6800	580	2400	9130	14-18	20
	FG-3000	11625	890	3000	14300	14-18	30
高堰式双螺旋 High weir double spiral classifier	2FG-1200	2340-3200	310	1200	6500	14-18	55X2
	2FG-1500	2240-5360	460	1500	8230	14-18	7.5X2
	2FG-2000	7780-11880	800	2000	8400	14-18	15X2,22,30
	2FG-2400	13600	1160	2400	9136	14-18	30
	2FG-3000	23300	1785	3000	12500	14-18	45
	2FG-3800	36000	2650	3800	14300	16-18.3	37X2
沉没式单螺旋 Submerged single spiral classifier	FC-1000	160-700	50-260	1000	6500	14-18	5.5
	FC-1200	1150-1640	120	1200	8400	14-18	7.5
	FC-1500	1140-2740	185	1500	10500	14-18	7.5
	FC-2000	3890-5940	400	2000	13000	14-18	11 15
	FC-2400	6800	455	2400	14130	14-18	18.5
	FC-3000	11650	705	3000	14300	14-18	30
沉没式双螺旋 Submerged double spiral classifier	2FC-1200	1770-2800	240	1200	8400	14-18	7.5x2
	2FC-1500	2240-5360	370	1500	10500	14-18	7.5x2
	2FC-2000	7780-11880	640	2000	12900	14-18	2x11,2x15 22 30
	2FC-2400	13700	910	2400	14130	14-18	37
	2FC-3000	23300	1410	3000	14300	14-18	45

水力旋流器

Hydrocyclone

1 介绍

Introduction

水力旋流器是利用离心力将矿浆分级的设备。设有运动力部件，需要配套相应的泥浆泵。在选矿工业中主要用于分级、分选、浓缩和脱泥；水力旋流器设备费用低，单位溶剂处理量大，分级粒度细，分级效率高，矿浆在旋流器中滞留的量和时间少，停机容易处理。

The hydrocyclone is a kind of equipment that conducts ore pulp classification with centrifugal force.It equips element parts for motion ,and its corresponding sludger shall be assembled. It is mainly used for classification , separation concentration and desliming in mineral separation industry which is lower ,easy to install ,easy to maintain ,cover small area, lower capital expenditure. Processing capacity in unit volume is great .,fine classification granularity ,high classification efficiency,volume and time is less staying in the swirler.

2 规格与性能参数表

Specifications

规格 specifications	给矿口 Feedport (mm)	溢流 Overflow Gate ()	排砂口 Sand Discharging gate(mm)	锥角 taperangle (°)	溢流粒度 Overflow granularity (mm)	矿浆浓度 Pulp density(%)	矿将处理量 Processing Quantity forpulp(m³/h)	外形尺寸（长×宽×高） Overall dimension (length×width×height) (mm)	重量 weight (t)
Φ125	25×10	Φ50	Φ15-30	20	0.025-0.25	50-60	2.4-15	320×260×646	0.080
Φ150	45×20	Φ70	Φ12, Φ17	20	0.025-0.25	50-60	4.8-54	612.5×380×899	0.088
Φ250	50×20	Φ120	Φ25	20	0.025-0.25	50-60	6.5-61.2	570×540×1172	0.21
Φ300	Φ75	Φ125	Φ50	20	0.025-0.25	50-60	24-60	575×550×1172	0.24
Φ350	80×35	Φ150	Φ25	20	0.025-0.25	50-60	24-90	695×690×1510	0.28
Φ500	140×20	Φ150	Φ17-68	20	0.025-0.25	50-60	24-108	1370×775×2170	0.64

浮选设备
Flotation Machine

浮选机适用于有色金属的选别，还可用于非金属如：煤、萤石、滑石的选别。
浮选机由电动机三角带传动带动叶轮旋转，产生离心作用形成负压，一方面吸入充足的空气与矿浆混合，一方面搅拌矿浆与药物混合，同时细化气泡，使矿物沾附在气泡纸上浮到矿浆面，形成泡沫层。调节闸板或锥阀开启度，控制液面，使有用泡沫被刮板刮出。

This flotation machine is applicable for the separation of nonferrous metal and ferrous metal even nonmetal, such as fluorite and talc.
Electrical motor drives the impeller via V-belt, forming negative pressure by generating centrifugal effect, which makes sufficient air absorbed with pulp, meanwhile, blending the reagent in the pump. The mineral bond on refined foam, float to surface of the pulp, so the foam-layer is formed. Adjusting the opening degree of flashboard or taper valve to control the liquid surface height, the useful foam concentrated with mineral will be scrapped out with scrapper blade.

ZENITH MINERALS

BF型浮选机
BF-type flotation machine

1 介绍 Introduction

BF型浮选机是SF型浮选机的改进型，特点是：
叶轮由闭式双截锥体组成，可产生强的矿浆下循环吸气量大，功耗低；
每槽兼有吸气、吸浆和浮选三重功能，自成浮选賄回路，不需要任何辅助设备，水平配置，便于流程的变更；
矿浆循环合理，能最大限度地减少粗砂沉淀；
设有矿浆液面自控和电控装置，调节方便；

BF-type flotation machine is the improved version of SF flotation machine with features:
The impeller is made up of enclosed two-section centrum capable of generating strong down-circulation in pulp;
Great suction intensity and low energy consumption;
Every slot owns tru-fuctions of suction, mortar suction and flotation as a whole that forms flotation loop itself, does need any auxiliary equipments. the slots configures Horizontally, so it is easier for modification;
The rational pulp circulation can decrease the coarse sand sediments as much as possible;
The self-control devices and electric control devices are equipped, which make it much easier to regulate.

2 规格与性能参数表 Specifications

Model	Effective Volume (m^3)	Size of Tank (L x W x H) (mm)	Impeller Diameter (mm)	Impeller Speed (m/s)	Capacity (m^3/min)	Motor Power (kw)	Air flow sucked (m^3/㎡.min)	Single Tank Weight (kg)
BF-0.25	0.25	650x600x700	250	6	0.12-0.28	1.5	0.9-1.05	370
BF-0.37	0.37	740x740x750	286	7.2	0.2-0.4	1.5	0.9-1.05	470
BF-0.65	0.65	850x950x950	300	7.35	0.3-0.7	3	0.9-1.10	932
BF-1.2	1.2	1050x1150x1100	450	7.02	0.6-1.2	5.5	0.9-1.10	1370
BF-2.0	2	1400x1450x1120	500	7.5	1.0-2.0	7.5	0.9-1.10	1750
BF-2.8	2.8	1650x1650x1150	550	8.06	1.4-3.0	11	0.9-1.10	2130
BF-4.0	4	1900x2000x1200	650	8	2.4-4.0	15	0.9-1.10	2585
BF-6.0	6	2200x2350x1300	700	7.5	3.0-6.0	18.5	0.9-1.10	3300
BF-8.0	8	2250x2850x1400	760	7.5	4.0-8.0	22	0.9-1.10	4130
BF-10	10	2250x2850x1700	760	7.52	5.0-10	22	0.9-1.10	4500
BF-16	16	2850x3800x1700	850	8.7	8.0-16	37	0.9-1.10	8320
BF-20	20	2850x3800x2000	850	8.7	10.0-20	45	0.9-1.10	8670
BF-24	24	3150x4150x2000	920	8.7	12.0-24	45	0.9-1.10	8970

SF型浮选机

SF-type flotation machine

1 介绍
Introduction

结构特点：自习空气和矿浆，叶轮带有后倾式双面叶片，可实现槽内矿浆双循环；与盖板的间隙较大，磨损时吸气量影响较小；吸气量大，前倾式槽体，死角小，泡沫运动速度快。

性能特点：吸气量大，能耗小；水平布置，不需泡沫泵；叶轮圆周速度低，叶轮盖板寿命长，矿浆按固定方式进行上、下循环，有利于粗矿物悬浮。

可与JJF浮选机构成联合浮选机组，作为每一个作业的吸入槽。

Structural features: it is capable of self-absorbing air and pulp, and its caster-style, two sided blades are equipped on the impeller capable of the double circulation for pulp inside the slot; its clearance with cover plate is big which will exert small impact on the suction when abrading; its suction intensity is big with forward-lean slot body and little dead angle, making the foam move fast.

Performance and features: big suction intensity and low energy consumption; it doesn't need foam pump for its vertical layout; the peripheral speed of the impeller is low; the cover plate is durable; the pulp is capable of the conducting downward and upward circulation in the fixed way that will be good for the suspension of the coarse mineral.

The united flotation machined can be formed after combining with JJF-type flotation machine which acts as the suction slot for every single operation.

2 规格与性能参数表
Specifications

Model	Effective Volume (m³)	Size of Tank (L x W x H) (mm)	Impeller Diameter (mm)	Impeller Speed (r/min)	Capacity (m³/min)	Motor Power (kw)	Air flow sucked (m³/m².min)	Single Tank Weight (kg)
SF-0.15	0.15	500x500x600	200	536	0.06-0.18	1.5/0.55	0.8-1	269
SF-0.37	0.37	700x700x750	296	386	0.2-0.4	1.5/0.05	0.8-1	468
SF-0.7	0.7	820x900x950	350	400	0.3-0.9	3/1.1	0.8-1	805
SF-1.2	1.2	1100x1100x1100	450	312	0.6-1.2	5.5/1.1	1-1.2	1373
SF-2.8	2.8	1700x1600x1150	550	268	1.5-3.5	11/1.5	1-1.2	2138
SF-4	4	1850x2050x1200	650	220	2-4	15/1.5	1-1.2	2582
SF-8	8	2200x2900x1400	760	191	4-8	30/1.5	0.9-1	4129
SF-10	10	2200x2900x1700	760	191	5-10	30/1.5	0.9-1	4486
SF-16	16	2850x3800x1700	760	191	5-16	30x2/1.5	0.9-1	8320
SF-20	20	2850x3800x2000	760	191	5-20	30x2/1.5	0.9-1	9828

浓缩机

Thickening equipment

浓缩机在选矿厂一般用于过滤之前的精矿浓缩和尾矿脱水，把矿浆浓度20-30%浓缩到40-70%左右。广泛用于选矿、冶金、化工、煤炭、建材以及水源和污水处理等工业中含固料浆液的浓缩和净化。

The thickener is often used in the concentrate concentration and tailings dewater before the filter in the concentrator and it can concentrate the slurry of 20-30% to 40-70% slurry. It is widely used in the concentration and purification of the solid material slurry in material processing, metallurgy, chemical industry, coal, Building material, water source, sewage processing and other industry.

ZENITH MINERALS

中心传动式浓缩机

Central Drive Thickener

1 介绍

Introduction

NZ 型中心传动式浓缩机是应用较早的传统型浓缩设备，直径12米以下，手动提耙方式（用S表示），12m以上采用电动提耙方式（用D表示），并有过载指示或报警装置，大型浓缩机一般采用混凝土池子。该机机构简单，磨损小，维修方便。

NZ type central drive thickener is the earlier used traditional concentration equipment. If its diameter is less than 12m, the manual operation lifting handle is adopted (use S for Short), If its diameter is more than 12 m, the power drive lifit handle device is adopted (use D for short). There is the overloading indication or alarm device and the concret pool is often adopted in larger thickener. This machine is characterized by simple structure, low abrasion and convenient maintenance.

2 规格与性能参数表

Specifications

型号 Model	直径 Diameter (mm)	深度 Depth (mm)	沉淀面积 Sediment Area (m²)	转速 Speed (R/min)	电机型号 Motor Model	功率 Power ()	电机转速 Motor Speed (R/min)	处理能力 Capacity (t/d)	重量 Total weight (t)
NZS1	1800	1800	2.55	0.5	Y90L-6	1.1	910	1.3-5.6	1300
NZS2.5	2500	1800	4.9	0.33	Y90L-6	1.1	910	5-10.8	2355
NZS3.6	3600	1800	10.2	0.33	Y10-6	1.5	940	5-22.4	3010
NZS6	6000	2956	28.3	0.3	Y90L-4	1.5	1400	14-62	8700
NZS8	8000	3318	50.2	0.27	Y132S-4	3	960	25-120	15460
NZS9	9000	3000	63.5	0.25	Y132S-6	3	960	32-150	16682
NZS12	12000	3600	113	0.19	Y132M2-6	3	960	50-250	33131
NZD15	15000	3600	177	0.1	Y132M2-6	5.5	960	70-350	55499
NZD18	18000	4400	268	0.1	Y132M2-6	5.5	960	100-560	10139
NZD20	20000	4400	314	0.1	Y132M2-6	5.5	960	200-960	22566
NZD24	24000	4400	452	0.1	Y160L-8	7.5	720	200-1440	24500

周边辊轮传动式浓缩机

Periphery driving thickener

1 介绍
Introduction

大型浓缩机一般采用周边辊轮传动式浓缩机，过载时辊轮打滑不需要特别安全装置，池子一般为混凝土机构。电机供电由设在中心支座上的集电装置实现。由于辊轮摩擦力小，轨道结冰或过载时，辊轮打滑，故不适用于寒冷结冰地区及量大、浓度高的矿浆环境。

The large thickener often adopts this Side Roller wheel thickener and the sliding of the roller wheel does not need the special safety equipment. The pool is often in the concrete structure and the power supply of the electrical machines is realized by the electricity collecting equipment set on the center of the support. Since the friction of the roller is small and the roller wheel will slide in the status of track freezing or overloading, therefore, it is not used in the cold and icy area and the environment condition of the large amount and high concentration slurry.

2 规格与性能参数表
Specifications

Model	Thickening tank diameter (mm)	Thickening tank depth (mm)	Capacity (t/h)	Sediment area (m)	Motor power (kw)	Weight (t)
NG-15	15000	3500	390	177	5.5	9.12
NG-18	18000	3500	560	255	5.5	10.56
NG-24	24000	3400	1000	452	7.5	24
NG-30	30000	3940	1560	707	7.5	26.42
NG-45	45000	5060	2400	1590	11	50.6

备注：1 辊轮摩擦力小、轨道结冰或超载时辊轮打滑，故不适用于寒冷冰地区以及量大、浓度高的矿浆。

2 不提供钢板池子。

1 Since the frictional force of running roller is low, the running roller is liable to skid in the event of icing, or the ore pulp with large quantity or hign concentration.

2 Tank made of steel plate is not provided.

过滤设备

Filter equipment

过滤机是选矿流程中必不可少的脱水设备之一，它是利用压力差而使固体颗粒与液体通过多孔介质（滤布、滤板等）进行分离。在形成滤饼时，除依靠真空的压力外，还可借助固体颗粒本身的重力、磁团聚进行脱水。广泛用于金属矿、非金属矿、煤矿、冶金、化工、造纸等行业。

Filter is a kind of necessary equipment during process dewatering of beneficiation, it is the use of a pressure differential leaving the solid particles and liquid through the porous medium (filter cloth, filter plate, etc.) for separation. In addition to relying on the vacuum pressure, but also using solid particles by gravity itself and magnetic reunion to achieve dehydration during forming the filter cake. It is widely used in metal ore, non-metallic minerals, coal, metallurgy, chemicals, paper and other industries.

GP 系列圆盘真空过滤机

GP series round disc vacuum filter

1 介绍
Introduction

Gp系列浮选精煤用除具有国内同类产品的滤饼水分低，过滤系数高，占地面积小，耗能低等一般优点的同时，结合了德国以及美国技术进一步进行了了优化设计，通过实际应用证明该产品主要技术以及性能指标均达到国内同类产品的先进水平。本机型针对浮选精煤脱水工艺的特点，进行了整体性能和各个部件之间可比性的优化设计，和传统的过滤机相比，处理量大，水分低，使用寿命长，可在数年内保持良好的工作状态。

Gp series flotation fine coal not only possesses the same features of low water content of the filtered cake, high filter coefficient, small occupation area, low energy consumption and other ordinary virtues with the same domestic products, but also the further optimization design has been conducted on the basis of combination the German and the American technology. The practical application proves that the main technology and the performance index have reached the advanced level of the same products at home. The optimization design of the whole performance and the comparability among all the components is conducted in this machine types as for the features of the dehydration of the flotation fine coal. Compared with the traditional filter, this machine is characterized by the large handing quantity, low water content and long service life. It can keep the excellent work condition in many years.

2 用途
Purposes

浮选精煤脱水， 也可用于化工等行业对细粒物料脱水的要求

Hydration of the flotation fine coal, it can also be used in the chemical industries which dehydration of the fine material

3 规格与性能参数表
Specifications

型号 No	过滤面积 Filter area (m^2)	处理能力 Capacity t/h	滤饼厚度 Thickness of the filter cake (mm)	过滤盘 Filterdisc			
				盘个数 QTY. disc	转速 Speed (r/min)	直径 Diameter (mm)	电机功率 Moto power (kw)
GP60-5	60			5			
GP72-6	72			6			4
GP84-7	84	≥0.3	≥10	7	0.2-1.0	3100	
GP96-8	96			8			
GP1089	108			9			5.5
GP120-10	120			10			
GP100-6	100			5			
GP120-6	120			6			5.5
GP140-7	140	0.25-0.35	≥10	7	0.2-1.0	4000	
GP160-8	160			8			
GP180-9	180			9			7.5
GP200-10	200			10			

型号 No	搅拌机 Mixer			滤饼含水量 Water content of cake (%)	滤饼含固量 Solid content ofthe filter rate (g/l)	槽体面积 Tank area	真空 Vacuum (Mpa)	抽气 Pumping (M^3/L)
	电机减速转速 speed motor reducing (r/min)	电机减速功率 Power motor reducing (kw)	转速 Speed (r/min)					
GP60-5						7.5		60-90
GP72-6		3				8.8		72-108
GP84-7	83		41.5-50	≤24	≤30	10.1	0.05-0.073	84-126
GP96-8						11.7		96-144
GP1089		4				13.4		108-162
GP120-10						14.5		120-180
GP100-6						11.9		120-180
GP120-6		4				14.1		140-270
GP140-7	83		41.5-50	≤24	≤30	16.3		169-270
GP160-8						18.5	0.05-0.073	180-270
GP180-9		5.5				20.8		200-300
GP200-10						23		

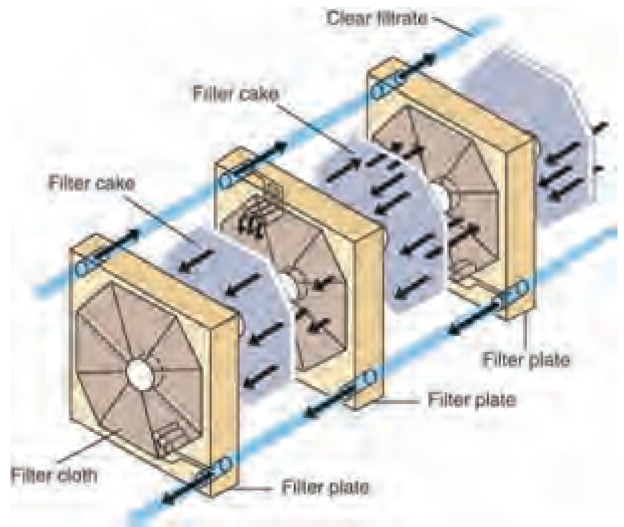
XAMY 箱式压滤机

XAMY Box Filters Press

1 介绍
Introduction

我集团提供的XAMY系列厢式自动压滤机，可以应用于选矿，冶金，化工，建材等行业的脱水作业，同时也可以应用于污水处理及固液分离作业。

Our XAMY series filters are mainly used in chemical, pharmaceutical, metallurgy, oil, light industry, ferrous metallurgy, ore flotation mining and other industries for solid-liquid suspension separation.



2 产品优势
Product Advantages

- 结构简单，设备占地少;
- 过滤压力高，滤饼含水较低;
- 回水利用率高;
- 过滤能力大;
- 易操作，故障少;

- Simple structure, less cover area;
- Higher pressure, lower cake moisture;
- High utilization rate of return water;
- Bigger filtering capacity;
- Easy operating, less failure;

3 规格与性能参数表
Specifications

Model	Filter area (m²)	Plank size (mm)	Plate thickness (mm)	Cake thickness (mm)	Filter chamber volume (L)	Dilmensions HxWxH (mm)	Weight (kg)
XAMY10/630-U	10	630×630	60	32	171	2550×900×1170	2
XAMY12/630-U	12	630×630	60	32	199	2730×900×1170	2.2
XAMY16/630-U	16	630×630	60	32	266	3150×900×1170	2.5
XAMY20/630-U	20	630×630	60	32	323	3510×900×1170	2.8
XAMY20/800-U	20	800×800	60	32	334	2950×1210×1260	3.1
XAMY-25/800U	25	800×800	60	32	417	3250×1210×1260	3.3
XAMY30/800-U	30	800×800	60	32	501	3550×1210×1260	3.5
XAMY40/800-U	40	800×800	60	32	668	4150×1210×1260	3.9
XAMY50/800-U	50	800×800	60	32	851	4750×1210×1260	4.3
XAMY60/800-U	60	800×800	60	32	1019	5350×1210×1260	4.7
XAMY70/800-U	70	800×800	60	32	1185	2950×1210×1260	5.1
XAMY80/800-U	80	800×800	60	32	1349	6550×1210×1260	5.5
XAMY40/900-U	40	900×900	60	32	640	3720×1310×1315	3.5
XAMY50/900-U	50	900×900	60	32	810	4200×1310×1315	3.8
XAMY60/900-U	60	900×900	60	32	981	4680×1310×1315	4.2
XAMY70/900-U	70	900×900	60	32	1152	5160×1310×1315	4.4
XAMY80/900-U	80	900×900	60	32	1322	5740×1310×1315	4.8
XAMY90/900-U	90	900×900	60	32	1493	6220×1310×1315	5
XAMY100/900-U	100	900×900	60	32	1664	6700×1310×1315	5.3
XAMY50/1000-U	50	1000×1000	60	32	830	4020×1410×1460	5.1
XAMY60/1000-U	60	1000×1000	60	32	985	4390×1410×1460	5.6
XAMY70/1000-U	70	1000×1000	60	32	1140	4750×1410×1460	6
XAMY-80/1000U	80	1000×1000	60	32	1296	5120×1410×1460	6.4
XAMY90/1000-U	90	1000×1000	60	32	1452	5490×1410×1460	6.8
XAMY100/1000-U	100	1000×1000	60	32	1607	5850×1410×1460	7.2
XAMY120/1000-U	120	1000×1000	60	32	1918	6580×1410×1460	7.9
XAMY140/1000-U	140	1000×1000	60	32	2229	7320×1410×1460	8.8
XAMY150/1000-U	150	1000×1000	60	32	2384	7680×1410×1460	9.2
XAMY80/1250-U	80	1250×1250	65	30	1200	4830×1750×1665	7.3
XAMY100/1250-U	100	1250×1250	65	30	1560	5350×1750×1665	7.8
XAMY120/1250-U	120	1250×1250	65	30	1830	5870×1750×1665	8.2
XAMY150/1250-U	150	1250×1250	65	30	2310	6520×1750×1665	9.3
XAMY160/1250-U	160	1250×1250	65	30	2380	6780×1750×1665	9.7
XAMY200/1250-U	200	1250×1250	65	30	3020	7820×1750×1665	11.1
XAMY240/1250-U	240	1250×1250	65	30	3570	8730×1750×1665	12.1
XAMY250/1250-U	250	1250×1250	65	30	3730	8990×1750×1665	12.4

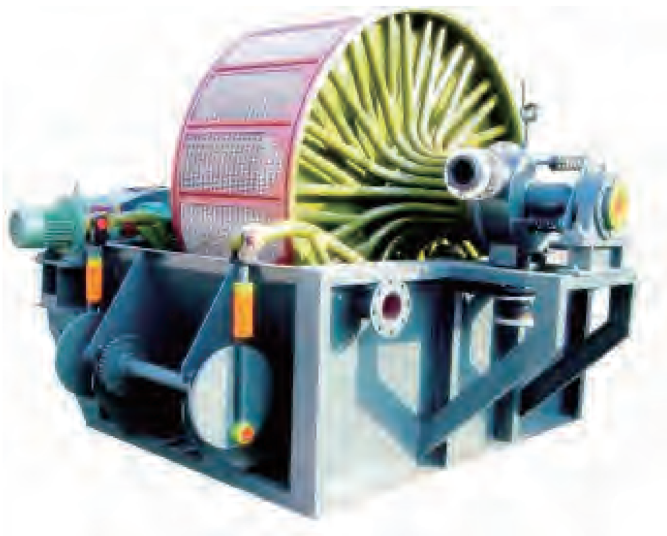
GW型外滤式筒形真空过滤机

GW cylindrical vacuum filter machine of the external filter type

1 介绍
Introduction

GW型外滤式筒形真空过滤机为连续过滤作业的设备。需要真空泵，气水分离器等辅助设备配套使用(单独订货)。主要用于过滤粒度细，要求产品含水低的矿浆，通过变频调速实现无级变速。具有结构简单，价格低，使用方便，维护份小.易损件少等优点。

GW cylindrical vacuum filter machine of the external filter type is the equipment of the continual operation. It needs the auxiliary equipment as vacuum pump and the gas-oil separator to conduct the matching use (order them independently). It is mainly used to filter the pulp of small granule and the pulp containing the lower water content. The infinitely variable speed can be realized through the speed adjustment of the frequency conversion. It owns the advantages of simple structure, low price, convenient application, small maintenance amount and few easily damaged components.



2 规格与性能参数表
Specifications

型号 Model	面积 area (m^2)	筒体规格 Cylinder specification (m)	筒体转速 speed (r/min)	真空计示压力 Pressure (Kpa)	抽气量 Suckingrate (M^3/min.m^2)	鼓风指示压力 Pressure air blast(Kpa)	鼓风量 Volume of blast (m^3/min.m^2)	处理能力 Capacity (t/d)	筒体电机功率 Power (T/h)	搅拌器电机功率 Powerof the Mixing (kw)
GW-3	3	Φ1.068×1.06	0.156-1.56	60-80	0.5-2	10-30	0.2-0.4	0.8-15.	1.5	0.75
GW-5	5	Φ1.6×1.03	0.156-1.56	60-80	0.5-2	10-30	0.2-0.4	1.6-1.4	1.5	0.75
GW-8	8	Φ2×1.5	0.1-0.6	60-80	0.5-2	10-30	0.2-0.4	2.8-3.6	2.2	4.5
GW-10	10	Φ2×1.75	0.1-0.6	60-80	0.5-2	10-30	0.2-0.4	3.0-4.0	2.2	1.5
GW-12	12	Φ2×2	0.1-0.6	60-80	0.5-2	10-30	0.2-0.4	3.0-5.0	2.2	2.2
GW-20	20	Φ2.5×2.65	0.14-0.54	60-80	0.5-2	10-30	0.2-0.4	3.0-8.0	3	2.2
GW-30	30	Φ3.35×3	0.12-0.56	60-80	0.5-2	10-30	0.2-0.4	4.5-12	4	3
GW-40	40	Φ3.35×4	0.12-0.56	60-80	0.5-2	10-30	0.2-0.4	6.0-16	4	3
GW-50	50	Φ3.35×5	0.12-0.56	60-80	0.5-2	10-30	0.2-0.4	7.5-20	5.5	4

磁选设备

Magnetic Separator

磁选机是使用于再利用粉状粒体中的除去铁粉等，磁选机广泛用于资源回收，木材业、矿业、窑业、化学、食品等其他工场，适用于粒度3mm以下的磁铁矿、磁黄铁矿、焙烧矿、钛铁矿等物料的湿式磁选，也用于煤、非金属矿、建材等物料的除铁作业，是产业界使用最广泛的、通用性高的机种之一。

Magnetic Separator is used to remove the iron powder or other magnetic material from the recycle powder. Magnetic separator is widely used in recycling, timber, mining, ceramics, chemical, food, etc., for the magnetic particle size less than 3mm magnetite, pyrrhotite, roasted ore, ilmenite and other materials. It also can be used to remove the iron from coal, non-metallic minerals, building materials and other materials. It is one of the most widely using and highly versatile equipment in industrial circle.

CTL型永磁干式磁选机

CTL Series Dry Magnetic Separator

1 介绍

Introduction

我公司研发的CTL型的永磁干式磁选机，结构简单可以直接安装在皮带机输送机的头部，也可以配置成单独的干式磁选机。主要用于低品味矿石的预选工作，提高入磨品味，降低选矿成本。同时也可以应用于非磁性物料的除铁作业。

CTL Series Dry Magnetic Separators are simple in terms of structures. They can be simply installed at the head of belt conveyors. They can also work as dry magnetic separation machines. They are mainly applied in in primarily separating low-grade ores to improve raw ore grade for feeding mills and to lower costs for ore separation. They are also suitable for de-ironing non-metallic materials.

2 产品优势

Product Advantages

- 工作平稳，安全可靠，易于维修;
- 用于低品位矿石的预选工作，提高入磨品位，降低选矿成本;
- 磁系采用稀土钕铁硼材料，可以根据实际要求选择不同的磁场强度。

- CTL Series Dry Magnetic Separators are efficient, reliable and easy for maintenance
- They are particularly suitable for primarily separating low-grade ores, improve raw ore grade for feeding mills and lower magnetic separating costs.
- The magnet system of CTL Series Dry Magnetic Separators is made from rare-earth permanent magnetic material--NdFeB. Their magnetic field intensities can be chosen based on different requirements

3 规格与性能参数表

Specifications

Model	Roller Size DxL (mm)	Speed (r/min)	Capacity (T/h)	Overall Dimension LxWxH (mm)	Power (kw)	Weight (t)
CTL-0816	800x1600	0-63	35-55	3053x1295x1671	7.5	2.75
CTL-0818	800x1800	0-63	55-70	3266x1295x1671	11	3.30
CTL-0821	800x2100	0-63	70-85	3936x1295x1671	15	3.90
CTL-0824	800x2400	0-63	85-100	4235x1295x1671	18.5	4.45
CTL-1021	1050x2100	0-50	100-130	4030x1545x2046	18.5	4.80
CTL-1021	1050x2100	0-50	100-130	4150x1545x1850	18.5	4.68
CTL-1224	1200x2400	0-50	115-150	4720x1545x1850	22	5.18

Note: The magnetic strength should be determined in accordance with the nature of the ore. CTL Series Dry separator can be customer-made

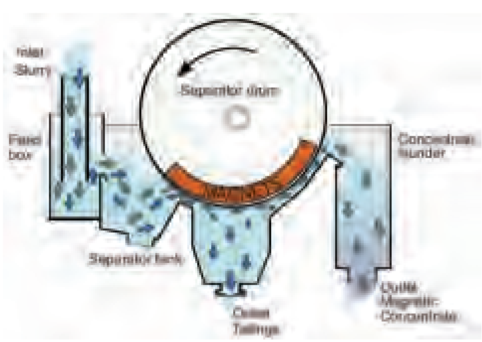
CT型湿式磁选机

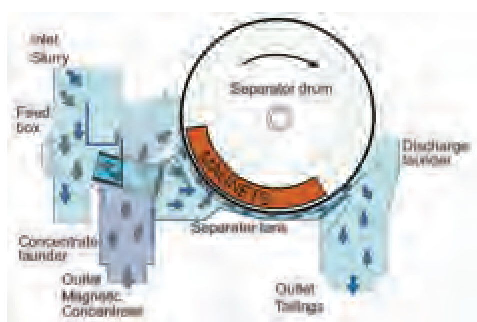
CT Series Wet Magnetic Separator

1 介绍
Introduction

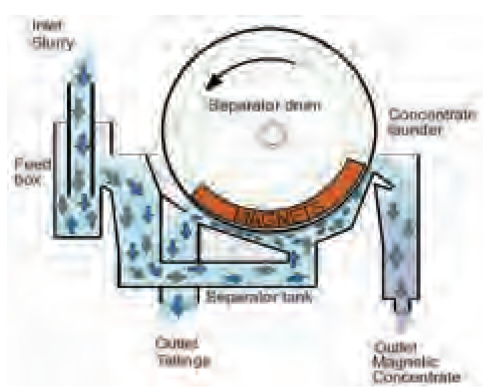
CT型湿式永磁筒式磁选机由圆筒，磁系和分选槽，传动装置及给排料等溢流装置组成。可以广泛应用于磁铁矿的选矿，脱水以及非金属矿物的除铁提纯作业。永磁筒式磁选机根据工作性质的不同，可以分为以下3种磁选机:顺流式(S)、逆流式(N)、半逆流式(B)。

CT Series Wet Magnetic Separators consist of separator drum, magnetic system, separator tank, transmission device and overflow devices for feeding and discharging. They are widely applied in magnetically separating magnetite, de-watering and de-ironing for non-metallic ores. According to different working principles, they are classified into three Kinds: current style(S), counter-current style (N) and Semi-countercurrent style (B)





Current Type (S)　Counter-current Type (N)　Semi-countercurrent Type (B)



2 产品优势
Product Advantages

- 选用钕铁硼稀土永磁材料;不锈钢滚筒，表面覆着橡胶面，提高磁选效果;可选用耐磨的陶瓷滚筒;
- 磁系调节装置，可调节磁系角度，获得最佳磁选效果;
- 可单机使用，可多台并联，也可串联使用实现多次精选;
- 适宜于处理粒度小于0. 2毫米的强磁性矿物的粗选与精选;

- The magnet is made from rare-earth permanent magnetic material--NdFeB; Stainless steel separator drum is covered with rubber to achieve higher separation performance; The wearable ceramic drum is optional;
- Magnetic system adjusting device can adjust magnetic angle to achieve good separation performance;
- CT series wet magnetic separators can be used singly, multiply or parallelly;
- They are suitable for rough or fine separating strong magnetic minerals smaller than 0.2mm.

3 规格与性能参数表
Specifications

Model	Roller Size DxL (mm)	Speed (r/min)	Capacity (T/h)	Overall Dimension LxWxH (mm)	Power (kw)	Weight (t)
CT(S/N/B)-712	750x1200	35	10-15	2330x1770x1280	3	1.85
CT(S/N/B)-718	750x1800	35	20-35	2930x1770x1280	3	2.43
CT(S/N/B)-918	900x1800	28	25-40	3095x1769x1465	4	2.75
CT(S/N/B)-924	900x2400	28	40-55	3695x1769x1465	4	3.65
CT(S/N/B)-1018	1050x1800	22	45-60	3115x1999x1565	5.5	3.6
CT(S/N/B)-1021	1050x2100	22	52-70	3415x1999x1565	5.5	4.2
CT(S/N/B)-1024	1050x2400	22	60-80	3715x1999x1565	5.5	4.8
CT(S/N/B)-1030	1050x3000	22	80-120	4315x1999x1565	7.5	6.26
CT(S/N/B)-1218	1200x1800	19	60-75	3150x2300x1920	7.5	5.85
CT(S/N/B)-1224	1200x2400	19	80-110	3750x2300x1920	7.5	6.97
CT(S/N/B)-1230	1200x3000	19	100-140	4350x2300x1920	7.5	8.5
CT(S/N/B)-1545	1500x4500	14	160-220	6050x2700x2300	15	15

Note: The magnetic strength should be determined in accordance with the nature of the ore. CTL Series Dry separator can be customer-made

HIMS系列立式转环感应式湿法强磁选机

HIMS vertical swivel induction wet high intensity magnetic separator

1 介绍

Introduction

本产品主要适用于赤铁矿、假象赤铁矿、褐铁矿、钒钛磁铁矿、锰矿、黑钨矿、钽铌矿等弱磁性矿物的湿法富集及石英、长石、高岭土、锂辉石、锆英石、霞石、萤石、硅线石等非磁性矿物的除杂铁提纯。

This equipment is mainly used for enrichment of weak magnetic minerals, like hematite, limonite, manganese ore, tungsten ore, etc, and also for purification of non-magnetic minerals, like quartz, feldspar, kaolin, etc.

2 产品优势

Product Advantages

- 分选磁场强度高，背景磁场强度最高可达1T，磁介质表面感应磁场最高可达2T。
- 首创励磁线圈节能技术，与以往同类设备相比励磁部分节能40%以上。
- 励磁线圈对地绝缘线由以往的B级提高至H级。
- 引入安全变压器，线圈端供电对地不形成回路，现场操作更安全可靠。
- 设备采用材质为不锈钢的冷却水道，耐腐蚀性强，设计水流截面大、水路短，不易结垢堵塞。
- 励磁线圈使用寿命大于5年。
- 同行业首家采用3D模拟磁场有限元法计算，消除了以往同类产品中背景磁场中的缺陷。
- 采用低电流控制，电控元件均为常规件，故障率低，方便采购、备库。
- 转环转速、脉动冲次变频调节，使脉动频率的调节更直观、方便，更利于获得较好的分选指标。
- 磁介质为多级排布，介质分布可根据使用方实际物料进行专门设计，获得更好的分选指标，增长了磁介质的使用寿命。
- 多次与同类设备作对比，磁性矿平均回收率高1.5个百分点，非磁性矿物带砂量平均低30%。

- Has high magnetic field intensity. The Background magnetic field strength can reach to 1T, and the induced magnetic field can reach to 2T on the surface of magnetic medium.
- Initiative the excitation coil of energy saving technology, which can save more than 40% energy in the exciting part compared with the similar equipments.
- The insulated wire of excitation coil increased from previous grade B to grade H.
- Introducing the security transformer, so the coil terminal power supply to ground can't form a loop, and make it more safe and reliable while doing spot operation.
- The cooling water channel is made of stainless steel, which has strong corrosion-resisting. The designed flow has big section and short path, so the equipment is not easy to scale or block up.
- The excitation coil service life is more than five years.
- First using the 3D simulation of magnetic field finite element calculating method within the industry, by which eliminated the defect of the previous product background magnetic field.
- Using low current control and the electronic components are all normal, which is convenient purchase for libraries and has low failure rate.
- The swivel speed and pulsating speed are controlled with frequency conversion, in which made it more intuitive and convenient. So it's more conducive to achieve good separation indexes.
- It's multi-level configuration in magnetic medium, which can be specially designed to get a better separation index and increase the service life of the magnetic medium.
- The magnetic average recovery is 1.5% higher than others, and the non-magnetic minerals with sand amount on average 30% lower than others.

3 规格与性能参数表

Specifications

项目Item / 机型 Model	HIMS-500	HIMS-1000	HIMS-1250	HIMS-1500	HIMS-1750	HIMS-2000
转环外径 External Diameter（mm）	500	1000	1250	1500	1750	2000
背景场强 Background Intensity（T）	0-1.0（1.2）	0-1（0.6） Cross flow continuously adjustable.				
矿浆通过能力 Pulp Through Capacity（m3/h）	0.5-1	12-20	20-50	50-100	75-150	100-200
干矿处理量 Dry Ore Capacity（t/h）	0.5-2	4-7	10-18	20-30	30-50	50-80
激励电流 Exciting Current（A）	18（23）	33	40	50	70	86
励磁功率 Exciting Power（kw）	9.5(15)	17(11)	21(14)	26(17)	37(24)	45(30)
转环减速机功率 Swivel Reducer Power（kw）	0.37	1.1	1.5	3.0	4.0	5.5
脉动电动机功率 Pulse Motor Power（kw）	0.37	2.2	3.0	3.0	4.0	7.5
给矿粒度 Feed Size（mm）	-1.0mm（ Optional -2 mm graded materials and others）					
转环转速 Swivel Speed（r/min）	0-3.5 Frequency conversion adjustment					
给矿浓度 Feed Density（%）	10-40					
脉动冲程 Pulsionstroke（mm）	16（ Mechanical adjust range from 12 to 30）					
脉动冲次 Pulsating Speed （ Times/min ）	0-300 Frequency conversion adjustment					
励磁电压 Excitation Voltage（DCV）	0-510	0-510（310） Change with current				
卸矿水压力 Mine Water Pressure（MPa）	0.2-0.4					
卸矿水耗量 Mine Water Consumption（m3/h）	0.75-1.5	5-10	10-20	20-30	30-50	50-100
冷却水道材质 Cooling Waterway Material	Stainless Steel					
单冷却水道截面 Waterway Cross Section（mm2）	800	2400	2500	2500	2600	2600
冷却水量 Water Consumption（m3/h）	1.2	1.5	1.8	2	3	3.5
主机重量 Weight(t)	2.27	8（5）	13（9.5）	22（16）	32（23）	45（35）
最大部件重量 The Largest Part Weight(t)	0.5	2.3(2.1)	4(3.5)	7(6)	9(7)	14(12)
外形尺寸（长×宽×高）Dimension (Length×Wide× high)(m)	2.5×1.6×2.1	2.5×2.26×2.4	3×2.76×3.1	3.4×3×3.1	3.7×3.35×3.58	4.1×4×4.2

ZENITH MINERALS

JT型锯齿波跳汰机

JT Series Sawtooth Wave Jigger

1 介绍

Introduction

锯齿波跳汰机是一种高效，节能，环保的新型重选设备，广泛用于砂金、钨、锡、铁、锰、钛、铬、硫、煤、金刚石等多种矿物选别和锰渣，铬渣，不锈钢渣等冶炼渣回收，矿山选矿尾矿中的金属回收处理等。

Sawtooth wave jigger is environmental friendly, high-efficient and new energy-saving gravity separation equipment, which is widely applicable to various minerals separation of gold, tungsten, tin iron,manganese, titanium, chromium, sulfur, coal and diamond and the smelting slag recovery of manganese slag, chromium slag and stainless steel slag as well as metal recycling of tailings

2 产品优势

Product Advantages

- 处理能力大;
- 选别粒度范围广，回收率高;
- 提高了中细粒级有用矿物的回收率;
- 耗水量减少，占地面积减少;
- 冲程可调整;
- 可处理矿物粒度最大可达60mm。

- Large handling capacity;
- Wide range of selective recovery granularity and high recovery rate;
- Recovery rate of valuable mineral with medium-fine particle-size increased;
- Low water consumption and low floor space;
- Stroke is adjustable;
- Max handling mineral particle size reaches 60mm.

3 规格与性能参数表

Specifications

Model		JT-0.57	JT1-1	JT2-2	JT3-1	JT4-2	JT5-2
Jigging Chamber	Section Form	Trapezium	Trapezium	Rectangle	Trapezium	Rectangle	Trapezium
	L*W(mm)	450-750 ×950	450-900 ×1500	1070×1070	960-2000 ×1950	1510×1510	1200-2000 ×3150
	Column Number	Single	Single	Single	Single	Single	Single
	Chambers	1	1	2	1	2	2
	Single chamber area (㎡)	0.57	1	1.14	3.3	2.43	2.12 (single chamber) 2.77 (double chamber)
	Total area(㎡)	0.57	1	2.28	3.3	4.86	5
Stroke Coefficient		0.57	0.64	0.45	1	0.58 (single power) 0.45 (dual power)	0.58 (single power) 0.45 (dual power)
Max Feeding Size(mm)		6	5	10	<20	8, plus sieve automatic discharge<60	8, plus sieve automatic discharge <60
Capacity(t/h)		1-2.5	2-3	4-8	10-15	12-16	10-20
Water Consumption (m³/h)		1-2	2-3	2-4	3-6	4-8	5-10
Separator	Stroke (mm)	12, 17, 21	12, 17, 21	12, 17, 21	10-47 adjustable	10-30	15，20，25
	Frequency (min^{-1})	60-156 adjustable	60-156 adjustable	60-156 adjustable	80-100 adjustable	80-120 adjustable	80-120 adjustable
Motor	Power (kw)	1.5	2.2	3	5.5	5.5x2 Or 7.5x1	5.5x2 Or 7.5x1
Overall Dimension (L*W*H) (mm)		1530×780 ×1550	2060×1112 ×1890	2870×1520 ×1880	2662×2000 ×3030	4240×1990 ×2750	3940×2006 ×2580
Weight (kg)		612	989	1637	3260	3500	3854

Notes: The above data is only for your reference, capacity and hutch water varying from ore granularity, ore property and operating condition.

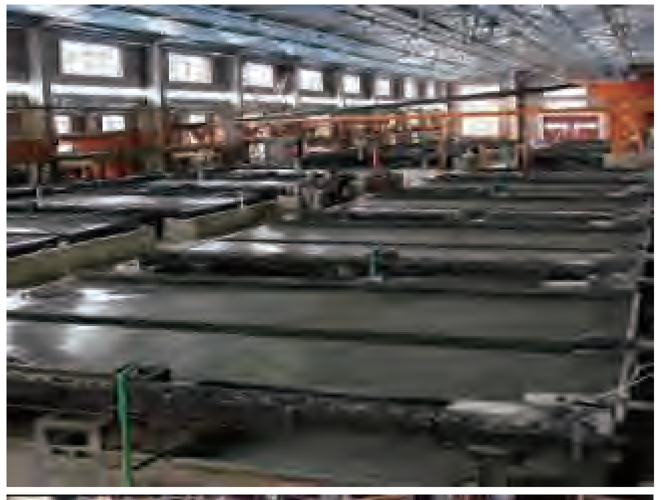
6S型摇床

6S Series ShakingTable

1 介绍 Introduction

6S摇床是重力选矿的主要设备之一，它广泛应用于选别钨、锡、钽、铌、金和其他稀有金属和贵金属矿。可用于粗选、精选、扫选等不同作业，选别粗砂(2-0.5mm)、细砂(0.5-0.074mm)、矿泥（-0.074)等不同粒级。也可用于选别铁、锰矿石和煤。当处理钨、锡等矿石时，摇床的有效回收粒度范围为2-0.22毫米。

6S Shaking table is one kind of main equipment of gravity concentration, which is be widely used in minerals separation of tungsten, tin, tantalum, niobium, gold and other rare metals and precious metal ores. It is applied in different separations of rough concentration, elaborate concentration and scavenging concentration, which can process coarse sand (2-0.5mm), fine sand (0.5-0.074mm) and ore slurry(-0.074). It also can be used in processing iron, manganese ore and coal.The effective recycling granularity range of shaking table is 2-0.22 millimeters during processing tungsten, tin ores.



2 产品优势 Product Advantages

6-S摇床具有富矿比高，选别效率高，看管容易，便于调节冲程。在改变横向坡度和冲程时仍可保持床面运行平衡，弹簧放置在箱体内，结构紧凑，且能一次得出最终精矿和最终尾矿。

6 S shaking table is characterized by high rich ore ratio, high separating efficiency, easiness to take charge and convenient adjustment. Keep table surface operate balanced even though changing cross fall and stroke. The springs with compact structure are placed in the table. The final concentrated ore and gangue can be obtained once.

3 规格与性能参数表 Specifications

Model and Specification		6-S/LY	6-S/LY	6-S/LY	LY
Table Size(mm)		4520×1850×1560	3000×1620×1100	2100×1050×850	1100×500×430
Selective area(㎡)		7.67	4.08	2	0.51
Capacity(t/h)	Coarse sand	1-2.5	0.6-1.5	0.4-0.8	0.1-0.2
	Fine sand	0.8-1.2	0.3-0.8	0.2-0.5	0.05-0.1
	Slurry	0.3-0.6	0.2-0.4	0.1-0.2	0.03-0.05
Water consumption(t/h)		0.5～3.5	0.3～1.5	0.2～1	0.1～0.5
Stroke(mm)		8～36	10～30	12～28	9～17
Jig frequency(q/m)		240～380	240～420	250～450	280～460
Cross fall(°)		0°～5°	0°～8°	0°～10°	0°～10°
Model	Power(kw)	1.1	1.1	1.1	0.55
	Revolving speed(r/min)	1400	1400	1400	1400
V-belt(mm)		A-2000	A-1033	B-2007	A-1245
Overall Dimension (L*W*H)mm		5630×1850×900	4075×1320×780	3040×1050×1020	1530×500×800
Weight(kg)		650	550	350	150

Notes: The above technical parameters based on stationary type shaking table, are for your reference only.

MANUFACTURING BASE

生产基地

TECHNICAL SERVICES

技术服务

选矿试验

矿物鉴定和化学分析、探索性试验、条件试验、开路和闭路试验 确定流程、编制试验报告的。

Dressing Test

Mineral identification&Chemical analysis test, Exploratory test, Condition test, Open&closed-circuit test, Solution confirmation, Issuing test report.

工程设计

选址设计、总图运输、土建设计、电气设计、厂房设计、给排水设计、尾矿排放、自动化设计、连接件设计、加药系统设计。

Engineering Design

Site design, Transportation solution, Civil Work drawing design, Electrical design, Factory design, Water Supply&drainage design, Tailings discharging, Automation Design, Connecting parts design, and Chemical feeding system design.

安装调试

我们拥有专业的项目经理及工程师队伍，根据客户要求可以指导客户进行设备安装调试或者派遣施工队伍提供一条龙服务。

Installation & Commissioning

We have professional project managers and engineer teams to instruct our customers and their workers to do the installation and commissioning work or supply the turn-key service.

员工培训

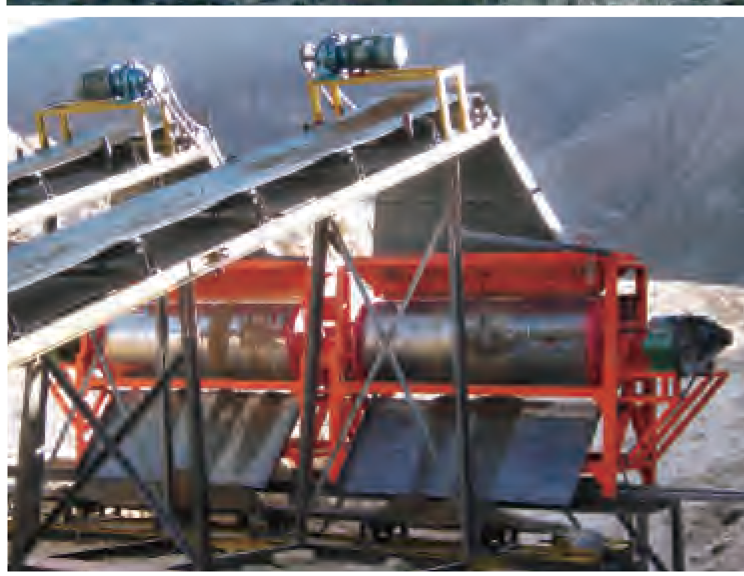
在安装过程中我方技术人员将对于客户的工作人员进行对于设备所需的安装，维修操作等培训。在安装调试完成之后对于客户的员工，按照专业分工合作，做好相关岗位所需的技能培训。

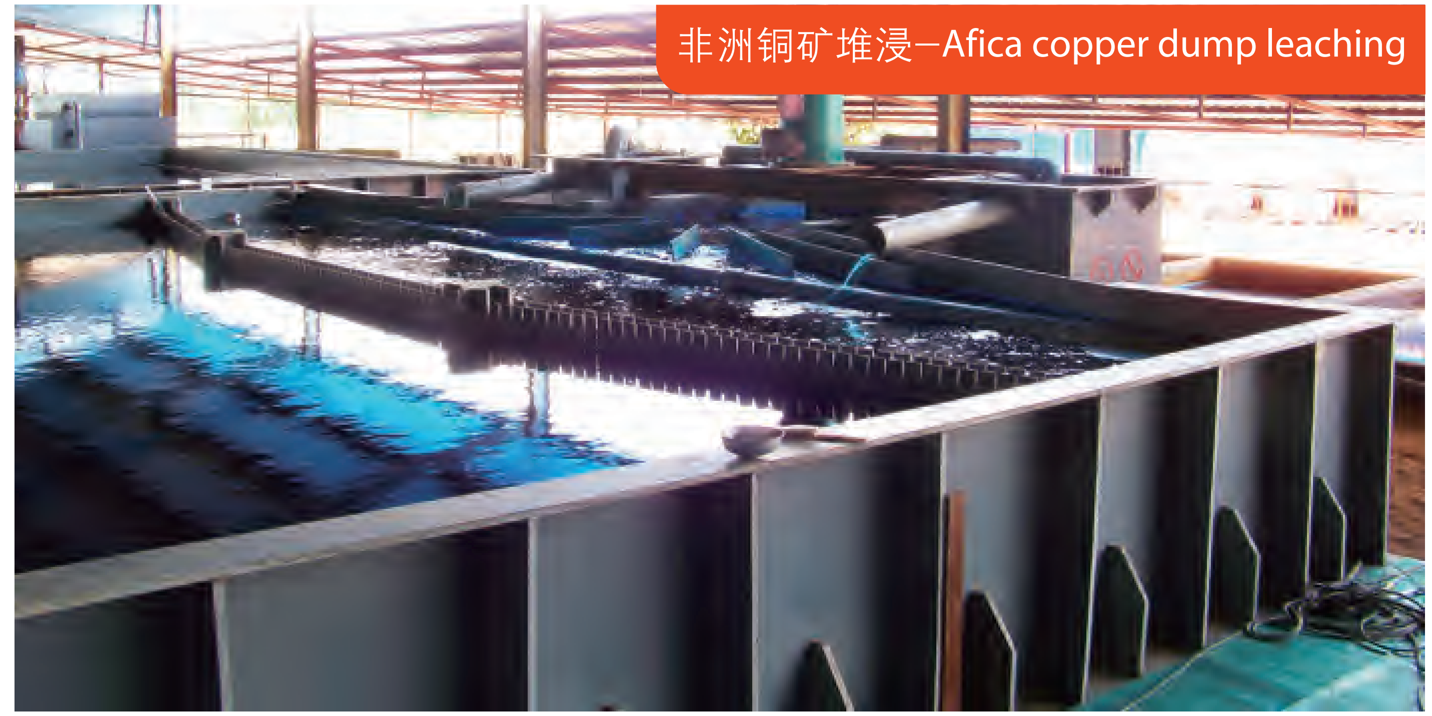
Personnel Training

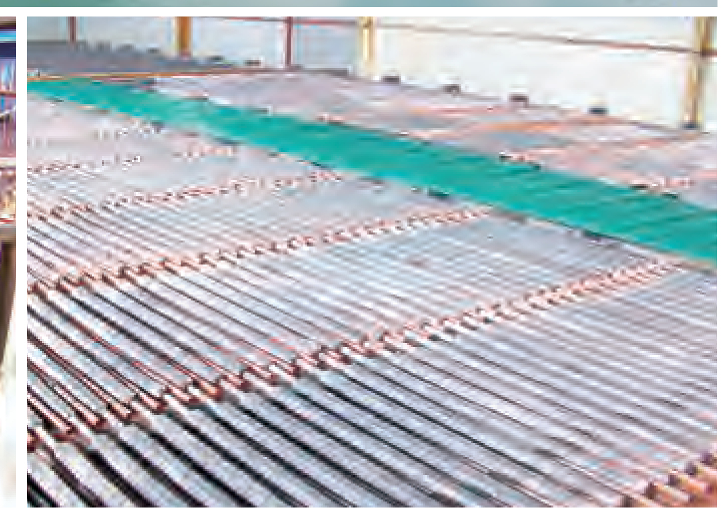
Our engineers will instruct customers` staff to do the installation and maintenance work and carry out technical training according to different specialties and relevant positions.

PROJECT CASE
工程案例


磁选现场—Magnetic Production Line

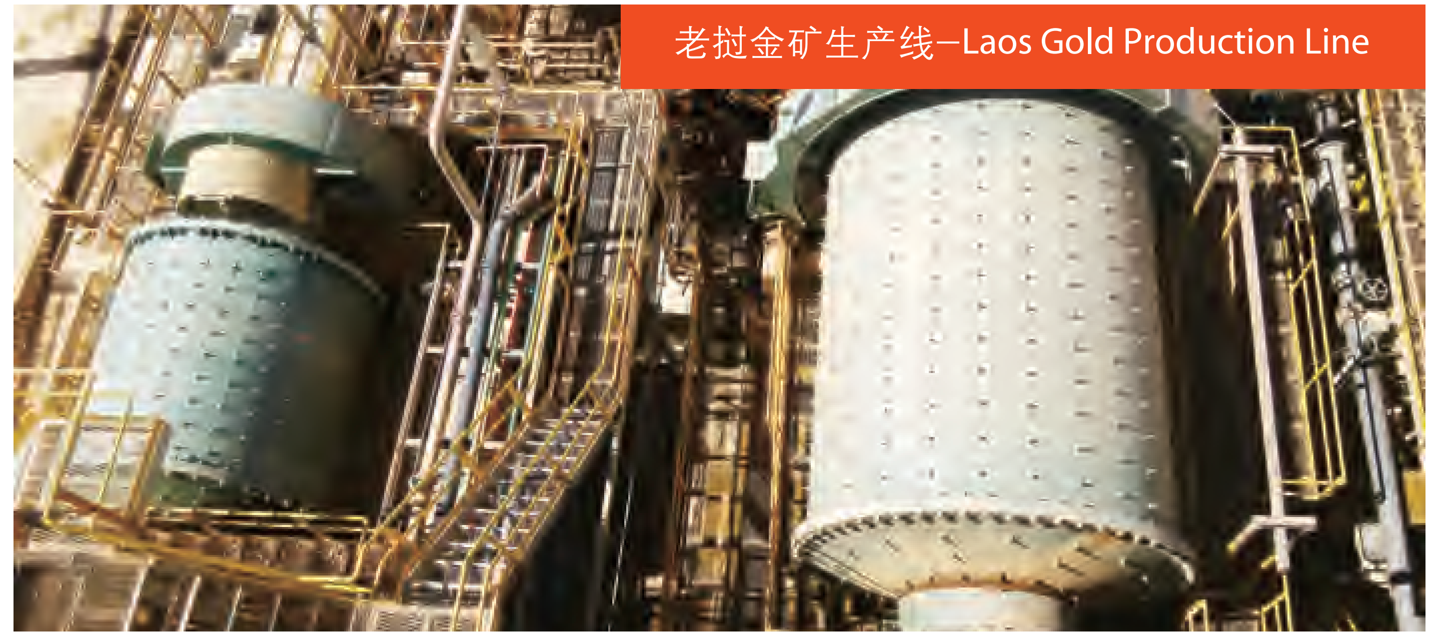



非洲铜矿堆浸—Afica copper dump leaching

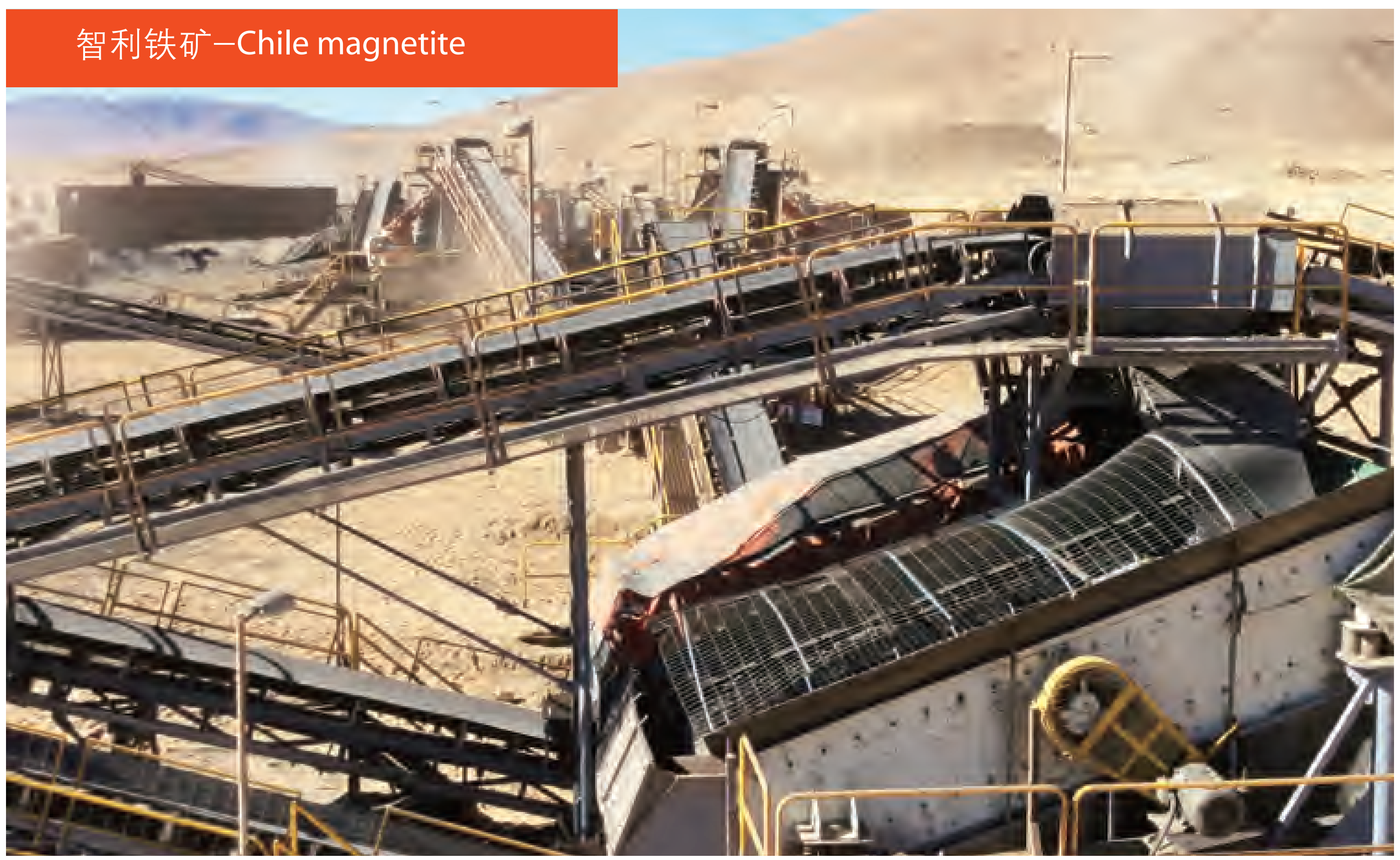


刚果金矿–Congo gold mine solution

老挝金矿生产线–Laos Gold Production Line




苏丹金矿—sudan gold Production Line



智利铁矿—Chile magnetite



伊朗铜矿—Iran Copper Production Line