

# 在每一处文明之光闪耀的地方 VSI离心冲击式破碎机

Vertical Shaft Impact Crusher



# 机制砂时代已来临

### Artificial Sand Era Is Around the Corner

随着中国经济的快速发展,"十一五"计划的全面展开,水利设施、公路、桥梁的建设急剧增加,建筑用砂的需求量也随之增加,供求矛盾已达到白热化程度。国家对已近枯竭的天然砂资源保护日益严格,对建筑质量的要求也越来越高。机制砂迅速取代天然砂而成为建筑用砂主流。机制砂生产原料丰富,投资少,见效快,无风险,因此投资机制砂生产前景广阔。

建筑行业对机制砂质量的要求日益提高,市场迫切需要更先进的制砂设备。世邦顺应市场需求,不断创新,继PCL立轴冲击式破碎机之后最新推出的VSI离心冲击式破碎机,是目前世界上最先进的制砂机。

With rapid development of economy, the "eleventh-five" plan has been put into full practice. Water conservancy, road building and bridge construction have been in great demand. Therefore, atificial sand is also in high need. China has made strict policy to protect the limited natural sand resources and has made strict requirement on construction quality. Artificial sand is beginning to replace natural sand and becomes the mainstream. Artificial sand features rich sources, low investment, quick profit and no risk, so it ensures a promising future.

Construction business makes increasing higher demand on artificial sand quality, and the market is looking for more advanced sand making equipment. Shanghai Shibang Machinery Co., Ltd. meets the needs, keeps innovating, after PCL vertical shaft impact crusher, launches VSI centrifugal impact crusher, which marks the most advanced machine in the world.



## 充满活力的世邦

### **Energetic Shibang**

上海世邦机器有限公司是专业从事矿山破碎机械和工业磨粉机械研发与制造的企业,也是国内主要的砂石、制粉机械生产和出口基地。

Shanghai Shibang Machinery Co., Ltd. is professional manufacturer of crushing and powder making equipment. It is a major production and export base of sand-stone and powder making machinery in China.











世邦拥有3万多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CAD计算机辅助设计系统 和模拟测试系统,并培养了一支专业的技术与服务队伍。

自成立起至今,公司已形成以破碎机、磨粉机系列产品为主,振动筛、给料机等配套设备为辅的完整产品链。 产品涵盖磨粉、石料粉碎与制砂三大系列近20个品种。高 技术含量、高可靠性、低使用维护成本,使我们的产品一 直处于业界领先水平,并广泛应用于矿业和建筑业。

创新、卓越是世邦人不懈的追求,也是世邦机器的活力之源。我们将不断创造更好的产品与更优质的服务,为客户带来更多的价值。

Shanghai Shibang Machinery Co., Ltd. features advanced CAD and computer simulation test system with factory area of 30,000 square meters. It has formed a professional group both in technology and service

Since establishment, Shibang has formed a complete productionchain that takes crushers and mills as the main products and vibrating screen, vibrating feeder, etc. as supplementary products, the products include: grinding mills, stone production line, sand making flow. High technological content, high reliability and low maintenance cost ensures our products stand at the leading place in the world and are widely applied in mine and construction industry.

Innovation and perfect is the endless pursuit of Shibang, and also the origin of Shibang's energy. Shibang will continue to manufacture better products and provide better service to bring customers more and more profits.











### 技术优势

集三种破碎模式于一体,下料方式集:料 打击料、料打击铁及瀑落下料模式,根据需求 自由调节,从根本上解决了一机多用的难题。

#### 性能优越 使用寿命长

- 专用的轻油润滑循环系统,确保温升在25℃以内;
- 全新的自动化保护装置,为机器提供振动、机油过滤报 警装置:
- 新型油质过滤系统,保证轴承及其它传动装置不被意外 磨损,增长使用寿命;
- ■耐磨材料的优化排列设计,提高使用寿命40%以上,从 而降低成本40%以上。

### Technological Advantages

VSI crusher incorporates three crushing styles: feeding style incoporates material on material, materials on iron and falling at sides. Customers can adjust the machines according to their own demand. VSI crusher realizes multiple functions in one machine, which is a big breakthrough in this field.

#### Excellent performance and long service time

- Special light oil lubrication systems ensures the temperature to be within 25%
- Brand new automatic protection device provide the machine with vibrating, oil filtering and warning system;
- New type oil filtering system ensures the bearings and other transmission system are not abraded and prolong their service time;
- Ichoice wearable materials prolong the service time of the machine by 40%. So the cost is lowered by more than 40%.

#### 品质升级 破碎效率高

- 优异的叶轮设计大大减少了物料通过阻力,提高物料通过量及破碎比,比传统冲击破效率提高30%~60%以上;
- 液压装置,自动启盖,降低人工劳动强度,检修极为方便,从根本上提高了使用效率;
- 机架首次采用热铆新工艺,增强设备的结构强度和韧性, 保证设备运转的平稳度,使品质上升到一个全新的层面;
- 采用世界先进的轻油防渗漏装置,免除更换油封的麻烦。

#### Better quality and high efficiency

- Better design of the impellers reduces the resistance of materials, highlightens passing through quantity of materials and crushing ratio, so the efficiency is raised by 30%~60% compared to traditional machines
- Hydraulic system allows automatic uncovering, which reduces labour intense and makes maintenance easier.
- The mainframe adopts new techniques, which strengthens the machine structure and tenacity, and ensures stable performance. The quality of the machines is lift to a higher level.
- VSI crusher employs world advanced light oil anti-leakage device. This saves the trouble of changing the oil seal.











#### 技术发展历程 Process of technology development

#### 1998.8 / August, 1998

上海世邦机器有限公司从新西兰引进立轴冲 击破

Shanghai Shibang Machinery Co., Ltd. imported PCL vertical shaft impact crusher from New Zealand.

#### 2002.4 / April, 2002

公司立轴冲击破投放市场

PCL vertical shaft impact crusher was launched to market.

#### 2003.3 / March, 2003

中国砂石协会正式授予我公司生产的制砂机 系列产品"中国砂石协会推荐品牌"

China Sand-stone Association credited our VSI crusher as "China sand-stone recommended brand".

#### 2004.6 / June, 2004

顺利通过ISO9001: 2000国际质量管理体系 认证

Shanghai Shibang Machinery Co., Ltd was approved ISO9001:2000 international quality certificate by Quality management system.

#### 2004.8 / August, 2004

世邦9517型高压磨粉机和世邦PCL型立轴冲击式破碎机获评"上海市高新技术成果转化项目"

YGM9517 high pressure suspension grinding mill and crusher were crowned with Shanghai high technology conversion effort.

#### 2004.9 / September, 2004

上海世邦机器有限公司祝桥加工组装中心正 式动工兴建

Zhuqiao processing and assembly center was set up.

#### 2005.12 / December, 2005

上海世邦机器有限公司举行了隆重的金桥生 产基地奠基仪式

Shanghai Shibang Machinery Co., Ltd held the significant foundation ceremony of Jinqiao production base.

#### 2007.3 / March, 2007

新型制砂机-VSI离心冲击破在公司研发中心 试机成功,是目前世界上最先进的冲击破, 标志着我公司制砂机已跻身世界先进水平

New type VSI crusher was proved a big success at Shibang research center, which marks Shibang VSI crusher has become the most advanced machine in the world.

## 工作原理 Working Principle

#### 中心进料:

物料落入进料斗,经中心进料孔进入高速旋转的叶轮内加速,然后从叶轮内射出,首先与反弹后自由下落的另一部分物料进行撞击,然后一起冲击到物料衬层(石打石)或反击板(石打铁)上,先被反弹到粉碎腔顶部,后偏转向下运动,与从叶轮流道发射出来的物料撞击形成连续的物料幕,最后经由下部排料口排出。

#### Feed at center:

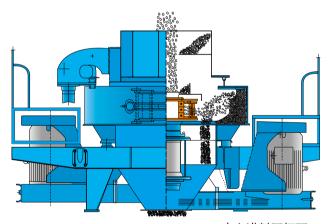
After materials are fed into the hopper, they are through a central feeding hole, thrown to the impellers, which are rotating at a high speed. Then, the material are accelerated and thrown out of impeller area. There part of materials, first, impact on the other part of materials, which are falling down, and then, they together strike on the material layers or on impact blocks. Due to rebound, they will back to top of crushing cavity and again be shot back to strike on another part of materials which are shot from the impeller flow and form a continuous material curtain. The final products will be discharged from the discharge open at the bottom

#### 中心进料伴随环形瀑落进料:

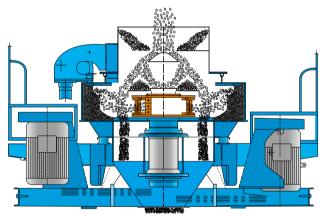
物料落入进料斗,再经环形孔落下,被散料锥分成两股。一股经分料盘进入高速旋转的叶轮,另一股从分料盘四周落下。进入叶轮的物料,在叶轮内被迅速加速后射出,首先同散料锥四周自由落体的另一部分物料冲击破碎,然后一起冲击到涡流腔内涡流衬层上,先被反弹到粉碎腔顶部,后偏转向下运动,与从叶轮流道发射出来的物料撞击形成连续的物料幕,最后经下部排料口排出。

#### Feed both at center and at sides:

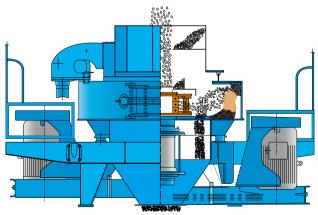
After materials are fed into hopper, they fall down through circular hole and are divided into two parts by the distributing mantle. One part enters the impellers, which are rotating at high speed; the other part fall down along the mantle. The first part is accelerated at the impeller area and are thrown out and to strike on the falling materials at sides. Then, they together strike on the material layers in whirlpool cavity and again be shot back to strike on another part of materials which are shot from the impeller flow and form a continuous material curtain. The final products will be discharged from the discharge open at the bottom.



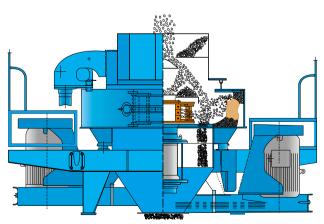
中心进料石打石



中心进料伴随环形瀑落进料石打石



中心进料石打铁



中心进料伴随环形瀑落进料石打铁







### 适用范围 Application

可广泛应用于各种矿石、水泥、耐火材料、铝矾土 熟料、石英砂、棕刚玉、珍珠岩、铁矿石、玄武岩、金 刚砂、玻璃原料等高硬、特硬物料的中、细碎领域。在 机制建筑砂、石料以及各种冶金矿渣的破碎中更是得到 普遍使用,特别对中硬、特硬物料比其他类型的破碎机 更具有优越性,产量功效高。 VSI crusher are widely applied to process all kinds of ores, concrete, fireproof material, bauxite, quartz, basalt, glass, etc. Especially for some very hard materials, VSI crusher possesses more advantages than other machines.

## 主要技术参数 Technical Parameter

型 묵 Model		VSI7611	VSI8518	VSI9526	VSI1140	
生产能力(t/h	)	瀑落与中心进料 Fed both at center and at sides	120~180	200~260	300 ~380	450~520
Capacity (t/h)		全中心进料 All fed at center	60~90	100~130	150~190	225~260
最大入料尺寸 (mm)		软料 Soft	<35	<40	<45	<50
Max feed size (	mm)	硬料 Hard	<30	<35	<40	<45
转速(r/min) Rotation speed(r/min)		1700 ~1890	1520~1690	1360 ~1510	1180~1310	
	双电动机功率(kW) Double motor power(kW)		110~150	180 ~220	264 ~320	400 ~ 440
外形尺寸 长x宽x高(mm) Overall dimension LxWxH (mm)			3700x2150x2100	4140x2280x2425	4560x2447x2778	5000x2700x3300
重量(t) Weight(t)		7.8	10.3	16	25.6	
电源 Voltage		380v; 50Hz				
振动传感器 Vibrating sensor		监测范围: 0.1 ~20mm/s连续可调 Detect range 0.1~20mm/s continuous and adjustable				
	双油泵电机功率 Double motor power		2x0.31KW			
润滑液压站 Hydraulic Iubrication system	安全保护 Safety assurance		双油泵互补保证供油;无油流、无油压自动停机;水冷降温;冬季电机加热启动 Double oil pumps assure enough oil supply; automatic switch off with no oil stream or hydraulic strength; lower the temperature with cool water in summer; raise the temperature with motor in winter.			
	外形尺寸 长x宽x高 (mm) Overall dimension LxWxH (mm)		820x520x1270			
	油箱加热器功率 Power of oil tank heater		2kW			

随着技术的发展,产品及数据将会有所变动,恕不另行通知,用户可向本公司查询。

We keep the right to revise the datum because of the technical development without any prior informing, please feel free to make an inquiry to our company.

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技术数据如有变动,恕不另行通知。

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