

VSI5X 系列高效冲击式破碎机
VSI High Efficiency Impact Crusher

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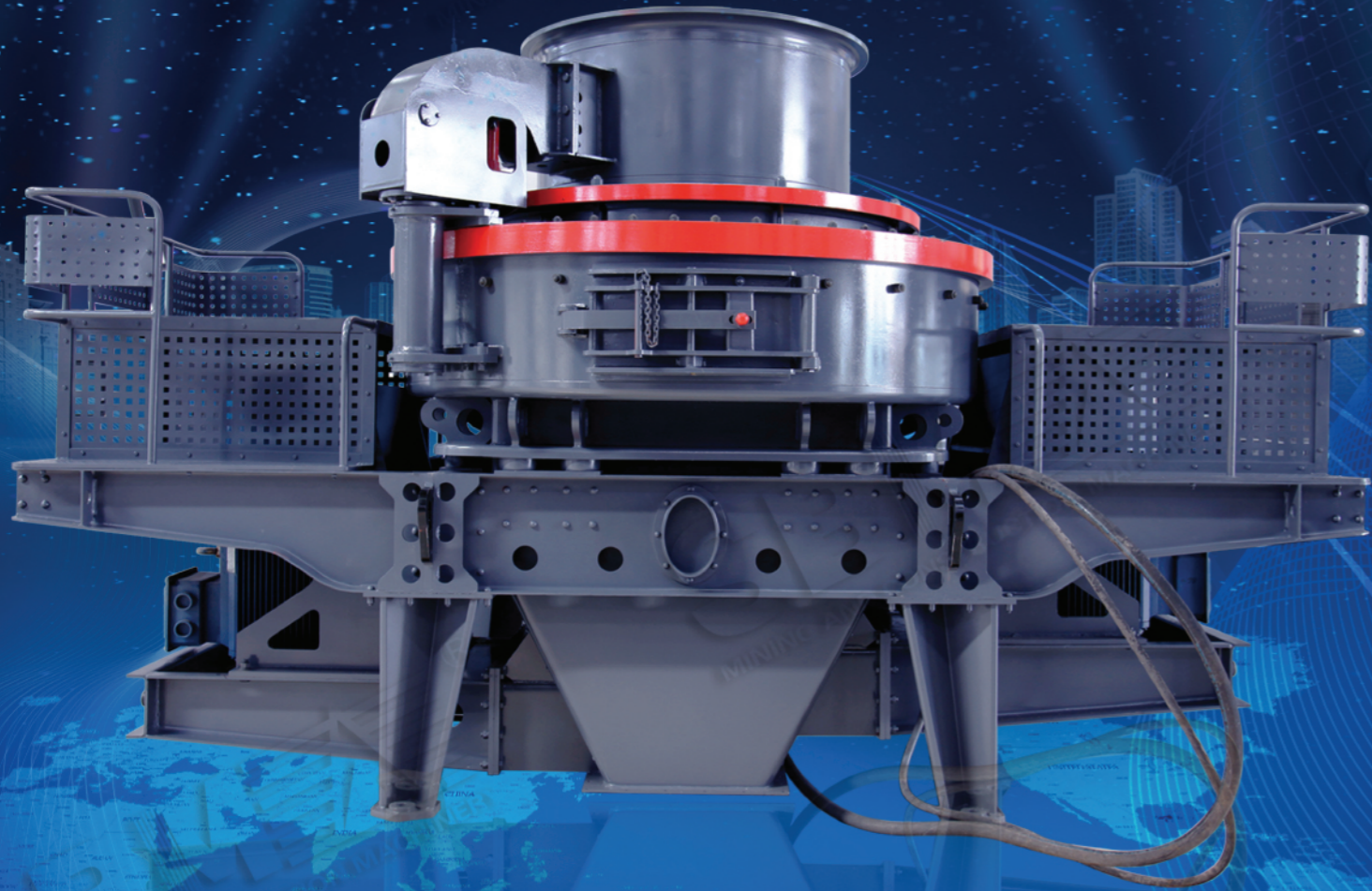
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VSI5X High Efficiency Impact Crusher 高效冲击式破碎机

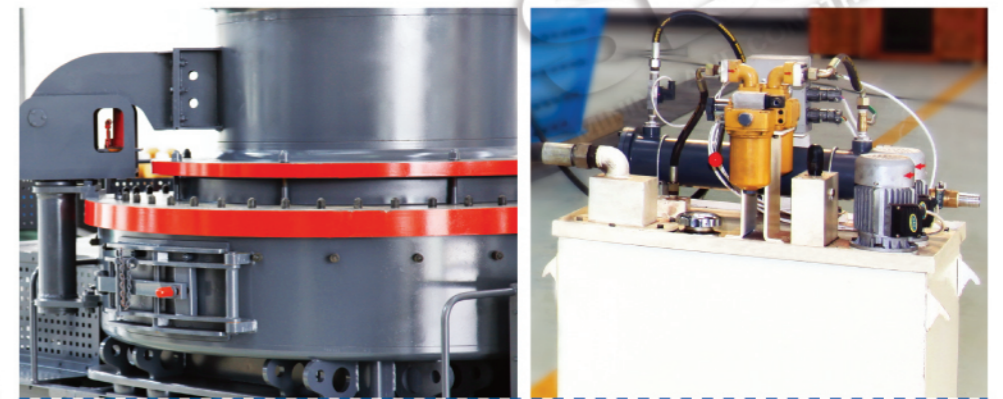
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The Light Of Quality And Civilization Shines The World!



VSI5X系列高效冲击式破碎机 PRODUCT OVERVIEW 产品概述

VSI5X系列高效冲击式破碎机是我公司引进德国技术，同时拥有多项自主知识产权的新一代产品。此破碎机集三种破碎模式于一体，各项指标均处于世界领先水平，是一种全新高效破碎制砂机，正在成为机制砂行业的核心设备。

VSI5X series high efficiency impact crusher is a new generation product for which our company introduces German technology and owns multinomial autonomous patent properties. This crusher, which integrates three crushing modes, with each index remaining at international leading level, is a kind of brand new high efficiency crusher and sand making machine, and is becoming a core equipment in machine-made sand industry.



VSI5X系列高效冲击式破碎机

CHARACTERISTIC FEATURE

性能特点

两用散料盘—操作简单、进料方式快速转换

Dual purpose bulk cargo tray – simplicity of operation, quick switchover of feedstock modes

传统冲击破进料转换需要拆卸分料锥，而VSI5X系列高效冲击式破碎机通过两用散料盘能够方便实现完全中心进料和中心进料伴随环状瀑落进料（图1，图2），方便快捷，提高了破碎效率。

The feedstock switchover of traditional impact crusher needs to dismantle segregation cone, but VSI5X series high efficiency impact crusher can conveniently realize complete center feedstock and center feedstock accompanied by annular cascading feedstock through dual purpose bulk cargo tray (Fig1, Fig2), which is convenient and quick, improves crushing efficiency.

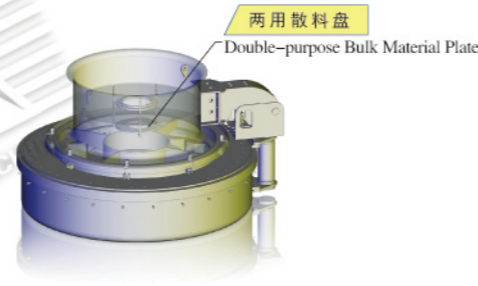


图1：两用散料盘
Fig 1: Double-purpose Bulk Material Plate

反击块的优化设计—上下对称、重复利用

Counterblow block optimization design—up and down symmetric, able to be reused

VSI5X系列高效冲击式破碎机反击块每一部分有两块上下对称，当局部磨损后可以掉头使用（图3，图4），提高材料利用率，可提高使用寿命48%以上。

The counterblow block of VSI5X series high efficiency impact crusher includes two blocks, up and down symmetric. After part is worn, it can be used inversely to increase material utilization (Fig 3, Fig 4). It can increase service life above 48%.

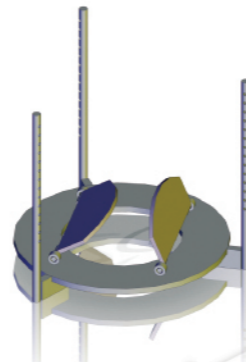


图2 Fig 2

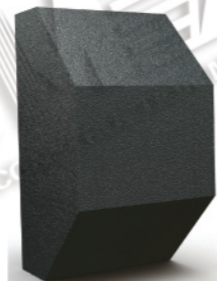


图3 Fig 3

锤头进行了优化设计—减少磨损、降低使用成本

Hammerhead optimization design – reducing wear and use-cost

对于核心部件锤头，本公司进行了重点优化，不但增加了副锤头，有效地防止主抛料头磨损后损坏立板；而且主锤头采用组合式设计，只需更换磨损的锤头部分，可降低使用成本30%以上。

This company focuses on optimizing the hammerhead as core part, not only increases auxiliary hammerhead to effectively prevent main throwing stub bar wear from damaging vertical plate, but also adopts combined design for main hammerhead. It only needs to replace wearing hammerhead and can reduce use-cost above 30%.

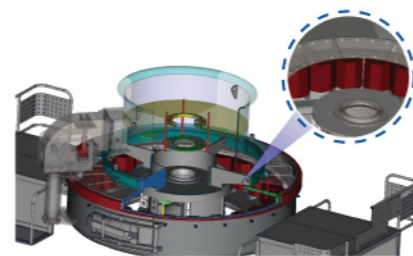


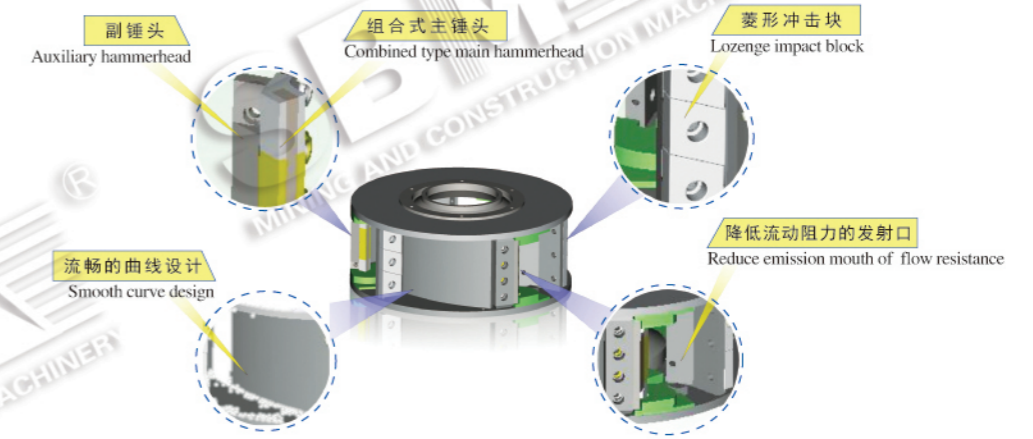
图4 Fig 4

采用优异耐磨菱形冲击块—配合紧凑、降低损伤

Adopt excellent wear proof lozenge impact block – compact conjugation, reducing damage

VSI5X系列高效冲击式破碎机采用的是菱形冲击块，配合更加的紧凑稳定，能很好的保护立板，有效的降低了物料冲击磨损对立板的损伤。

A lozenge impact block is adopted for VSI5X series high efficiency impact crusher. With conjugation much more compact and stable, it can protect vertical plate very well and effectively reduce damage of material impact wear on vertical plate.



发射口及内部曲线的精细设计—降低阻力、增加物料通过量

Elaborately-designed Emission Mouth and Inner Curve – reducing resistance and increasing throughput

通过流体力学分析和经验总结，本产品设计的发射口及内部更流畅的曲线形，能够最大程度的降低物料的流动阻力，大幅度提高的物料通过能力。

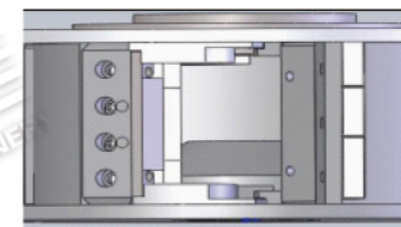
Through hydromechanics analyses and experience sum-up, emission mouth and even more smooth inner curve in this product design can farthest reduce material flowing resistance and increase material throughput.

转子的优化设计—深化腔型、提高产量

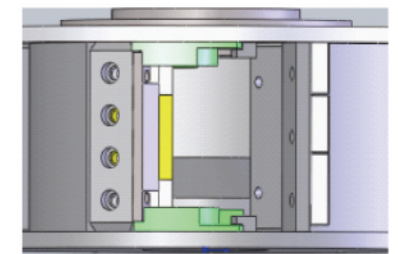
Rotor optimization design – deepening cavity type to increase yield

转子是VSI5X系列高效冲击式破碎机的“心脏”部件，转子不仅对以上所说的易损件进行了优化设计，同时优化了腔型，腔型更深，改进后的设计，使物料通过量提高约30%。

Rotor is a "heart" component of VSI5X series high efficiency impact crusher. The company not only conducts optimization design for wearing parts, but also optimizes cavity type to have cavity even more deeper. The improved design ensures throughput is increased by about 30%.



传统腔型
Traditional cavity type



优化的深腔设计
Optimized deep cavity design

轴承以及耐磨件的选用—知名品牌、增加寿命

Famous brand is adopted for bearing and wearing piece to increase life

公司秉承细节决定成败的设计理念，对机器的各个部件精打细琢，轴承选用日本、瑞典、美国等国际品牌产品（图1）；核心耐磨材料采用美国重要行业用高度耐磨耐高温材料（图2）。

Following design idea of "detail decides stand or fall", the company precisely makes each component of machine, adopts international brand products from Japan, Sweden and United States for bearing (Fig1), and adopts highly wear-proof high-temperature material used in American important industry for core wear resistant material (Fig 2).

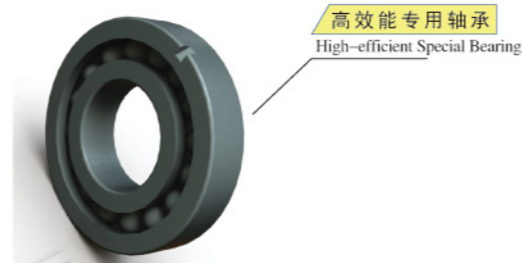


图1：高效能专用轴承
Fig2: High-performance bearing

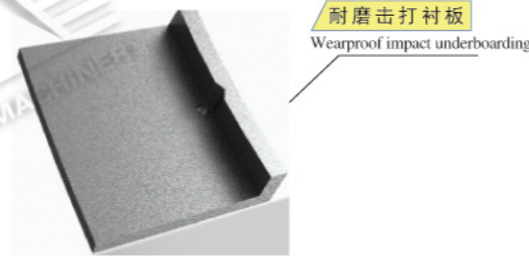


图2：耐磨击打衬板
Fig2: Wearproof impact underboarding

特殊的密封结构—轻油防渗漏、平稳高效

Specific sealing structure - light oil antiseep, smooth and highly efficient

主轴下端的采用世界先进的轻油防渗漏装置（图3，图4），大大降低了漏油的风险；并且此装置无油封，避免了客户更换油封的麻烦，使机器的运行更加平稳长久。

International advanced light oil antiseep device is adopted at lower end of main shaft to greatly reduce oil leak risk (Fig3, Fig4). There is no oil seal on this device, avoiding trouble for customer to replace oil seal and ensuring machine running is much more smooth and long.

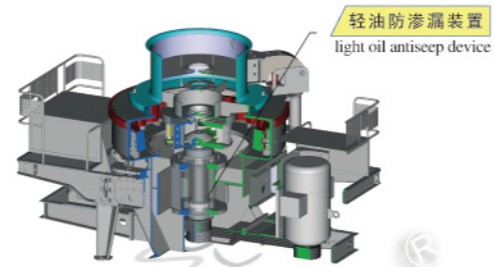


图3：轻油防渗漏装置
Fig3: light oil antiseep device

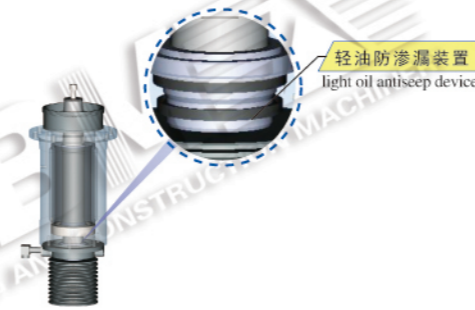


图4：轻油防渗漏装置
Fig4: light oil antiseep device

液压起顶装置—检修方便，效率提高

Hydraulic pressure jack device - convenient for overhaul, increase in efficiency

VSI5X系列高效冲击式破碎机采用的是菱形冲击块，配合更加的紧凑稳定，能很好的保护立板，有效的降低了物料冲击磨损对立板的损伤（图5，图6）。

Hydraulic pressure jack device is adopted for automatic jack-up of cover, which reduces hand-labor intensity and is convenient for overhaul, basically increasing service efficiency (Fig5, Fig6).

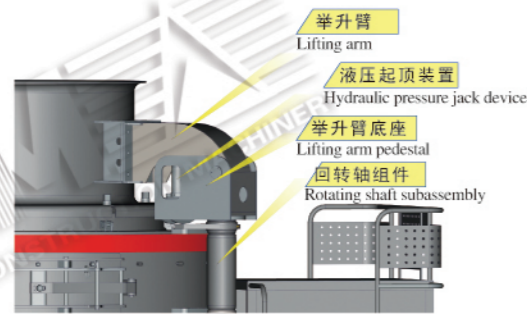


图5：液压起顶装置
Fig5: Hydraulic pressure jack device

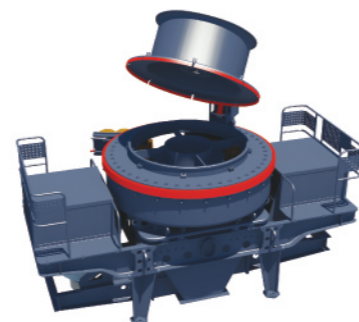


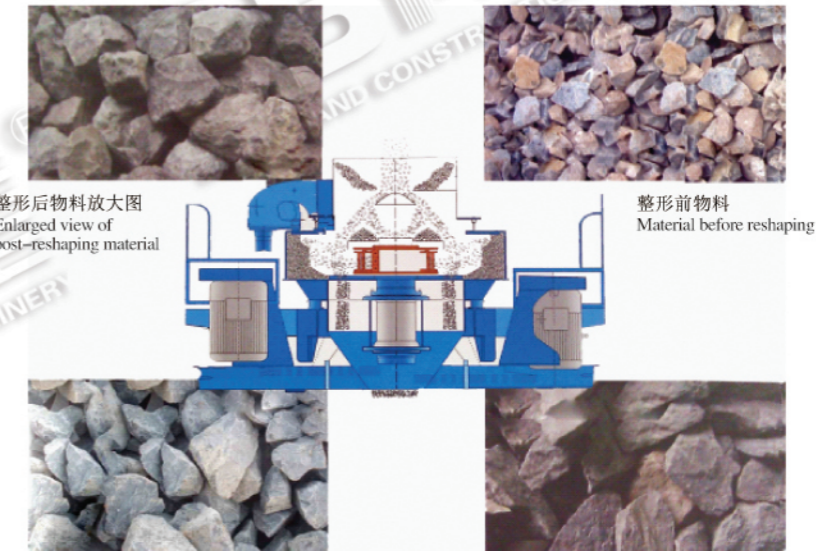
图6：液压起顶装置
Fig6: Hydraulic pressure jack device

破碎原理的选择—冲击破碎、粒形优良

Crushing principle selection - impact grinding, excellent particle shape

通过流体力学分析和经验总结，本产品设计的发射口及内部更流畅的曲线形，能够最大程度的降低物料的流动阻力，大幅度提高的物料通过能力。

When this series machine acts as a shaper, reshaping effect is very good. A majority of material becomes cubic and can be taken as superior aggregate of constructing bridges, which receive a great deal of favorable comment from



整形后物料放大图
Enlarged view of post-reshaping material

整形前物料
Material before reshaping

反击破物料
Counterattack break material

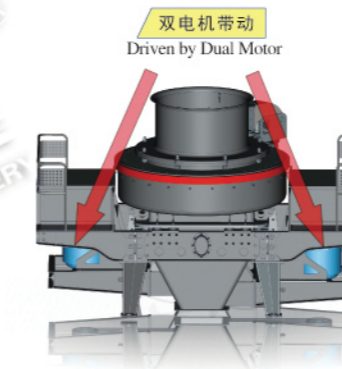
圆锥破物料
Material broken by Cone crusher

双电机的使用—运行平稳、主轴寿命增加

Dual motor application - running smooth, main shaft life increase

本系列的制砂机的是世界知名品牌电机；并且是双电机带动，使制砂机的运行更加平稳，同时双电机带动使主轴受力均匀，增加了主轴及轴承的使用寿命以及提高了生产效率。

This series sand making machine is driven by two international famous brand motors to ensure that running of sand making machine is much more smooth. Meanwhile, dual motor drive ensures main shaft is stressed uniformly, increases service life of main shaft and bearing, and improves production efficiency.

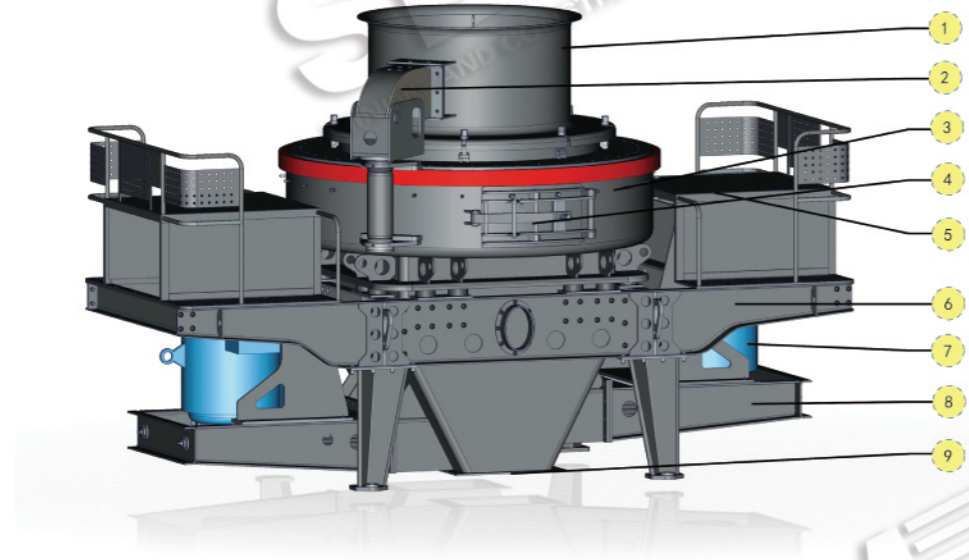


VS15X系列高效冲击式破碎机 MAIN STRUCTURE 主要结构

主要结构 | Main structure

VS15X系列高效冲击式破碎机主要组成部分有：进料斗、顶盖液压顶起回转装置、破碎腔、观察门、两侧的踏板架、铆接的机座支架、电机、电机架以及内部的主轴装配总成和转子部总成等。

The key parts of VS15X series high efficiency impact crusher include: Feed hopper, coping hydraulic jack slewer, crushing chamber, observation door, bilateral pedal bracket, riveted base bracket, motor, motor bracket and inner main shaft assembly and rotor assembly, etc.

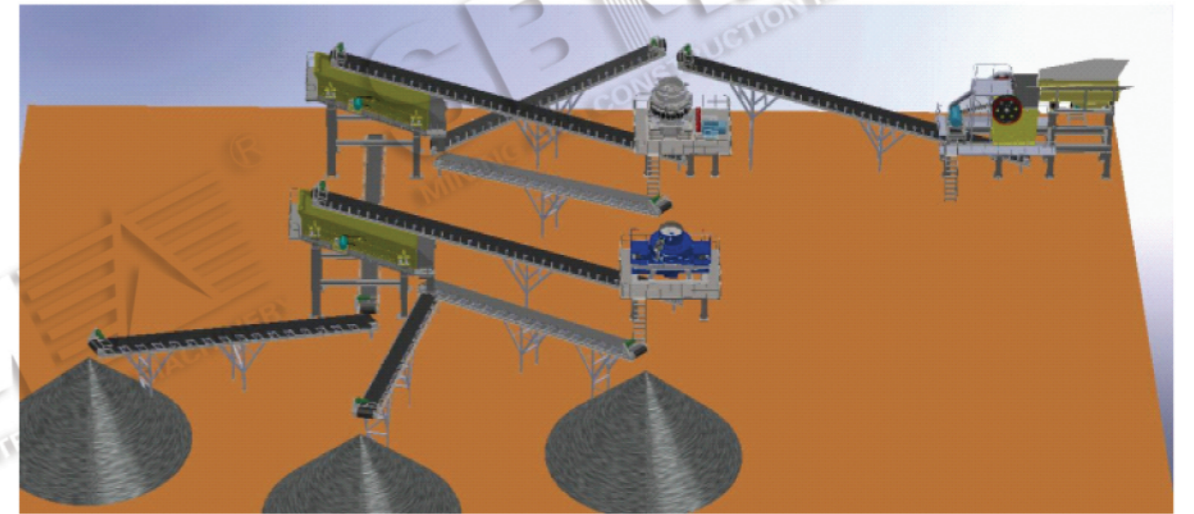


- | | |
|----------|--------------------------------|
| 1 进料斗 | 7 Feed hopper |
| 2 顶盖回转装置 | 2 Coping hydraulic jack slewer |
| 3 破碎腔 | 3 Crushing chamber |
| 4 观察门 | 4 Observation door |
| 5 踏板架 | 5 Pedal bracket |
| 6 支架 | 6 Bracket |
| 7 电机 | 7 Motor |
| 8 电机架 | 8 Motor bracket |
| 9 出料口 | 9 Discharge hole |

VS15X系列高效冲击式破碎机
VS15X series of highly efficient impact crusher

VS15X系列高效冲击式破碎机 TYPICAL PRODUCTION LINE CONFIGURATION 典型生产线配置

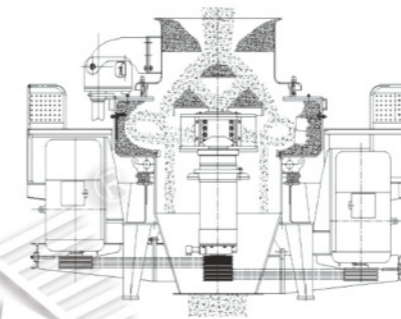
典型生产线配置 | Typical production line configuration



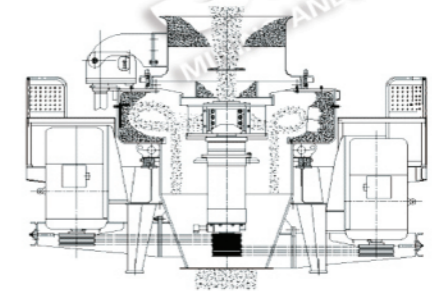
工作原理 | Operational principle

VS15X系列高效冲击式破碎机的工作形式可分为四种：中心进料伴随瀑落进料“石打石”和“石打铁”，完全中心进料“石打石”和“石打铁”。

VS15X series high efficiency impact crusher can be divided into 4 operational modes: center feedstock accompanied by cascading feedstock "PL" and "PLST", entire center feedstock "PL" and "PLST".



中心进料伴随瀑落料
石打石（左）/石打铁（右）
Center feedstock accompanied
by cascading feedstock



完全中心进料
石打石（左）/石打铁（右）
Entire center feedstock
PL (left) / PLST (right)

VS15X系列高效冲击式破碎机

CUSTOMER SITE 客户现场

现场图片
FIELD PICTURE



主要技术参数 | Main Technical Parameters

型号	Model	VS15X7615	VS15X8522	VS15X9532	VS15X1145
生产能力 Productive capacity (t/h)	瀑落与中心进料 Cascading and center feedstock	150~280	240~380	350~540	500~640
	全中心进料 Entire center feedstock	70~140	120~190	180~280	250~360
最大入料尺寸 Maximal feed size (mm)	软料 Soft material	<35	<40	<45	<50
	硬料 Hard material	<30	<35	<40	<45
转速 (r/min) Rotation speed (r/min)		1700-1900	1500-1700	1300-1510	1100-1310
双电动机功率 (KW) Double motor power (kW)		110-150	180-220	264-320	400-440
最大外型尺寸长×宽×高 (mm) Maximal external dimension lwh (mm)		4100×2330×2300	4140×2500×2700	4560×2600×2900	5100×2790×3320
电源 Power supply		AC380V, 50Hz			
润滑液压站	流量 (L/min) Flowrate (L/min)	8			
	双油泵电机功率 (KW) Motor power of dual oil pump (KW)	2×0.37			
	安全保护 Security protection	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。 Dual oil pump complementation ensures oil supply, automatic stop without oil flow and oil pressure, water-cooling and motor heating start-up in winter.			
	外型尺寸长×宽×高 (mm) External dimension lwh (mm)	820×520×1270			
	油箱加热器功率 (KW) Box heater power (KW)	2			