

SC系列单缸液压圆锥破碎机

SC SERIES SINGLE CYLINDER HYDRAULIC CONE CRUSHERS



河南红星矿山机械有限公司
HENAN HONGXING MINING MACHINERY CO., LTD

地址 (Add) : 中国·郑州市高新技术开发区檀香路8号
No.8, Tanxiang Road, High & New Technology Industries Development
Zone of Zhengzhou city, P.R. China

电话 (Tel) : 0371-67776666 66699999

传真 (Fax) : 0371-67825066

网址 (Web) : www.hxjq.com



关注微信公众号

我公司保留技术改进的权利。内容如有变动，解释权归我公司所有。

2020年11月版

卓越的品质和性能

Excellent quality and performance

从事破碎筛行业四十多年来，红星机器在圆锥破的设计和生应用方面积累了丰富的经验。

目前，红星集团有上千台圆锥破碎机已在世界各地投入运行。

SC系列圆锥破碎机在吸收世界最先进的技术基础上，融入公司多年的设计经验研发而成，集机械、液压、电气和智能控制及远程控制为一体。

它具有效率高、粒型好、液压调整、远程自动化控制、可选择多个破碎腔型以及在不换任何零部件下调整偏心量等高性能的优点。

人机交互界面易懂易用且高效，使操作维护简单，最大化的提高生产率。

紧凑和易于服务的设计也成为移动破碎站的完美选择。

远程自动控制系统最大限度的保障您的设备正常运行时间，从而使圆锥破碎机在不改变喂料状态的条件下依然可以发挥设备的最高性能水平，并且不会使破碎机超载。

In the crushing and screening industry for more than 40 years, Hongxing Machinery has accumulated rich experience in the design and production application of cone crushers.

Currently, Hongxing Group has thousands of cone crushers in operation all over the world.

The SC series cone crusher is developed by absorbing the world's most advanced technology and incorporating the company's years of design experience. It integrates



有多个标准的破碎腔可供选择。

通过破碎腔与偏心距的结合，可以满足用户的不同需求。

There are multiple standard crushing cavities to choose from.

Through the combination of crushing cavity and eccentricity, it can easily meet different needs of users.

mechanical, hydraulic, electrical, intelligent control and remote control. It has the advantages of high efficiency, good product shape, hydraulic adjustment, remote automatic control, multiple crushing cavity types and adjustment of eccentricity without changing any parts.

The human-computer interaction interface is easy to understand, easy to use and efficient. By selecting the appropriate crushing cavity and eccentricity in production, SC series

cone crusher is an ideal two-stage and three-stage crushing equipment.

The compact and easy-to-service design has also become the perfect choice for mobile crushing stations.

The remote automatic control system guarantees the uptime of your equipment to the greatest extent, so that the cone crusher can still exert the highest performance level of the equipment without changing the feeding state, and will not overload the crusher.

低成本、高性能与CLP

Low cost of using, high performance and CLP

大量现场数据支撑所设计的破碎腔型配合高能化主机，使SC系列圆锥破碎机确保您的运营和收益更高。

- 破碎腔的优势是：**
- 恒定的进料能力；
 - 生产量大、成品率高；
 - 衬板使用寿命长；
 - 运行成本最低；

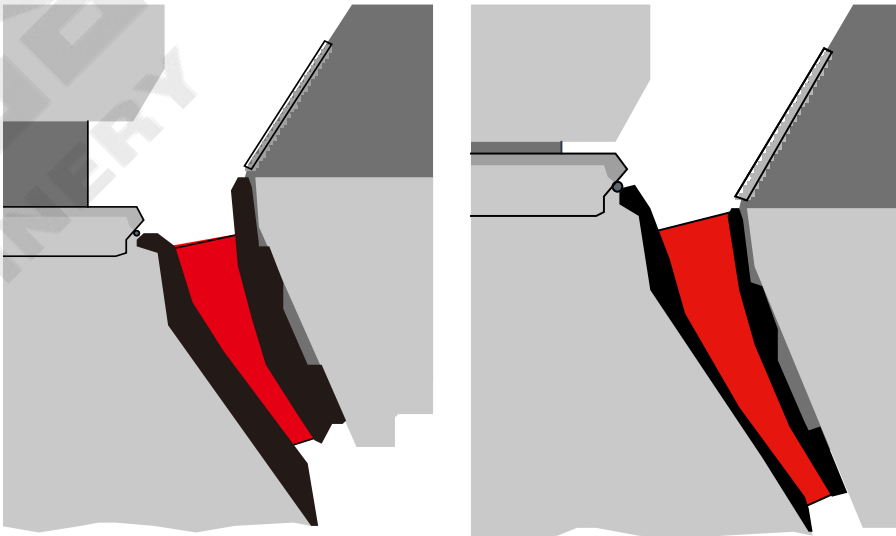
SC系列圆锥破碎机用途广泛，每种型号有多个破碎腔可选，一个上架体可用于所有腔型。

选择合适的破碎腔和偏心距，可以适应不同环境的工况。

SC系列圆锥破碎机可作为二段破碎设备与颚破或旋回破匹配，或作为第三段或第四段破碎设备，可以满足用户大多数的生产需求。

A large number of on-site data supports the design of the crushing cavity type and the high-energy host, so that the SC series cone crusher can ensure your operation and higher profits.

- The advantages of the crushing Cavity are:**
- Constant feeding capacity;
 - Large output and high yield;
 - Long service life of the liner;
 - Lowest operating cost;



衬板使用初期
Early use of liner

衬板使用中、后期
Middle and late use of liner

CLP破碎腔，CLP代表恒定破碎腔型。几乎垂直的进料口意味着破碎腔在整个磨损寿命周期中几乎保持不变。

CLP crushing cavity, CLP stands for constant crushing cavity type. The almost vertical feed port means that the crushing chamber remains almost unchanged throughout the wear life cycle.

SC series cone crushers have a wide range of uses. Each model has multiple crushing cavities to choose from, and one upper frame can be used for all cavity types.

Choosing a suitable crushing cavity and eccentricity can adapt to different working conditions.

The SC series cone crusher can be used as secondary crushing equipment to match the Jaw Crusher or Gyrotary Crusher, or as the tertiary or fourth crushing equipment, which can meet most of the users' production needs.

操作过程实现智能监控

Intelligent monitoring of operation process

便于维护

主机所有部件总成均可从上部或者侧面拆卸，使得操作更便捷高效，维护成本更低。



Easy to maintain

All parts of the host can be disassembled from the upper or side, making operation more convenient and efficient, and lower maintenance costs.

液压系统

液压系统除了可以轻松实现最基本的调整功能外，更重要的是它能有效地保护主机，它的自动高速卸荷能力可使铁块儿或不可破碎物快速通过后排料口自动复位，减少了物料粒级曲线的变化，使产出的物料在保证生产力的同时始终达到或接近目标粒级值，带来了更高的经济效益。

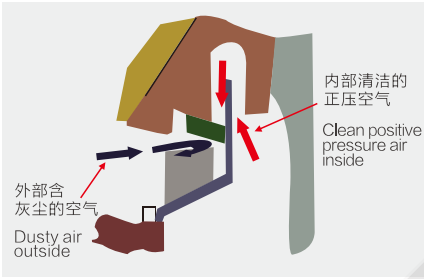


Hydraulic system

In addition to the easy realization of the most basic adjustment functions of the hydraulic system, it is more important that it can effectively protect the machine. Its automatic high-speed unloading capability can make iron or unbreakable objects quickly pass through the rear discharge port and automatically reset, reducing the change of the output size curve makes the output material always reach or close to the target grade value while ensuring productivity, which brings higher economic benefits.

正压防尘系统

该系统的加入使破碎机内部气压高于外界气压，可以有效地阻止粉尘进入破碎机，使润滑油最大程度的保持洁净，从而延长各摩擦副部件的寿命，使设备故障率更低，润滑油的更换周期更长，节省了大量的使用成本。



Positive pressure dust-proof system

The addition of this system makes the internal air pressure of the crusher higher than the outside air pressure, which can effectively prevent dust from entering the crusher and keep the lubricating oil clean to the greatest extent, thereby prolonging the life of each friction pair component, lowering the equipment failure rate and making the replacement cycle of lubricating oil longer, saving a lot of cost to run.

智能控制系统

智能控制系统的加入有效地减少了设备过载的频次，确保设备能够实现更大的通过量和更低的故障率；对于细碎破碎机，它能自动适应给料的变化，可以实现衬板磨损自动补偿等多种功能模式，它的自动校准功能可以实现一键操作，极大地减少了人工及时间的投入，降低了使用成本；智能控制系统的人机界面更加友好，可使操作员更快和更有效地排除故障。



Intelligent control system

The addition of the intelligent control system effectively reduces the frequency of equipment overload, ensuring that the equipment can achieve greater throughput and lower failure rate; For the H-type fine crusher, it can automatically adapt to changes in feed, and can achieve various function modes such as automatic compensation liner wear, its automatic calibration function can realize one-key operation, which greatly reduces the labor and time investment, and reduces the use cost; The man-machine interface of the intelligent control system is more friendly, allowing the operator to troubleshoot more faster and effectively.

远程监控及诊断系统

通过物联网技术，可以实时获取破碎机的运行状态，如负荷情况、衬板使用情况、故障频次等。分析这些数据，我们可以在设备还在正常工作的状态下，提前判断出可能发生的故障，可以提前对设备做相应的维护，因此可有效的减少设备停机所带来的损失，做到生产效率最大化。

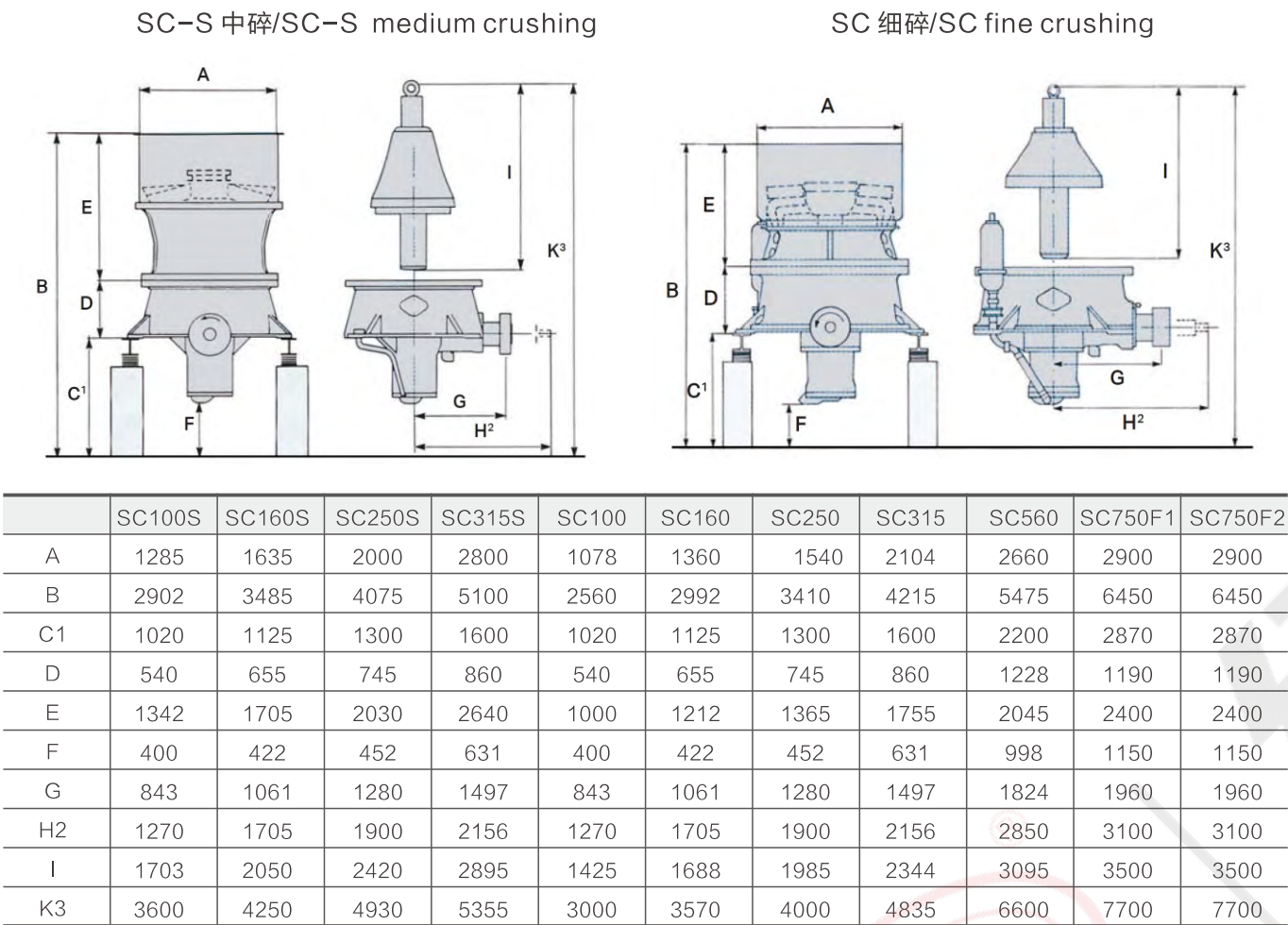


Remote monitoring and diagnosis system

Through the Internet of Things technology, the operating status of the crusher can be obtained in real time, such as load conditions, liner usage, failure frequency, etc. By analyzing these data, we can determine possible failures in advance while the equipment is still working. At this time, the equipment is maintained in advance, which can reduce the loss caused by equipment shutdown and maximize the production efficiency.

外形尺寸

Dimensions



尺寸仅供参考，仅供安装前期规划之用，不得用于基础等的建造。
The dimensions are for reference only, and are only for pre-installation planning, and should not be used for foundation construction.

产品重量

Host weight

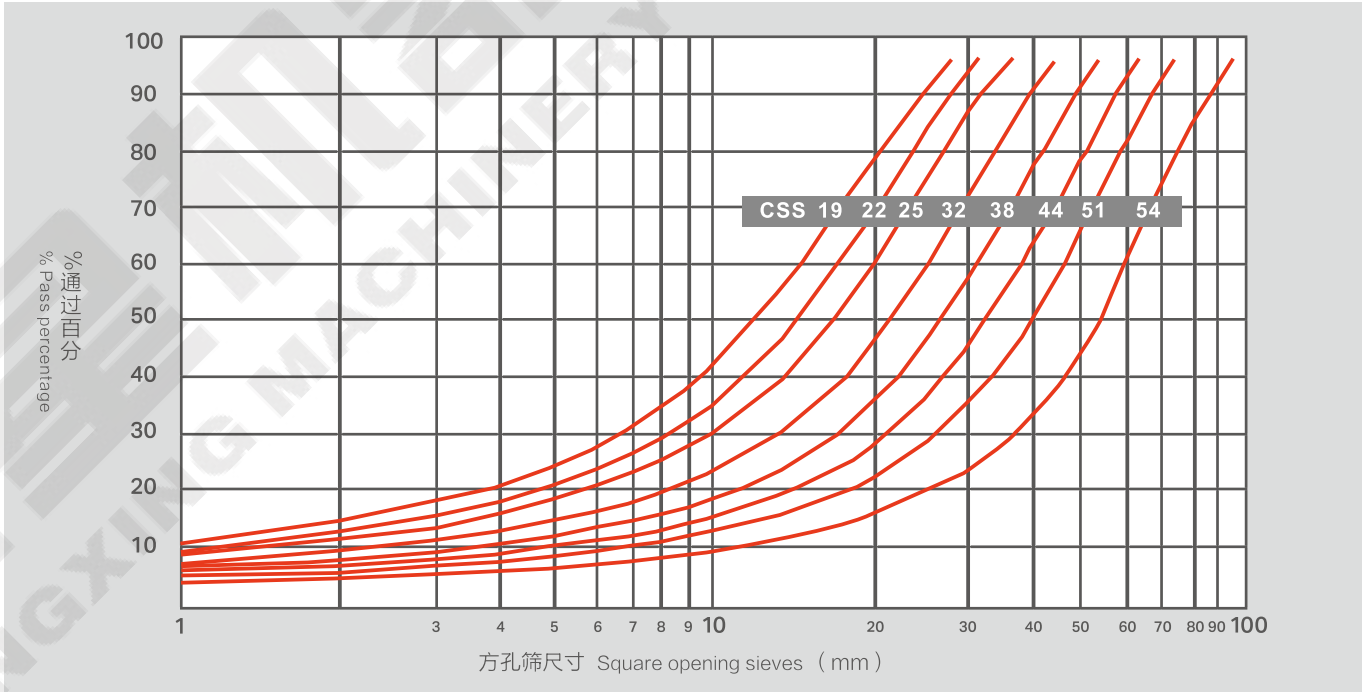
	SC100S	SC160S	SC250S	SC315S	SC100	SC160	SC250	SC315	SC560	SC750F1	SC750F2
维护期间最大的重量 Maximum weight during maintenance	2300	5100	8100	16500	1400	2900	4700	8500	13200	21600	24900
总重量 Total weight	6800	12000	19300	35700	5300	9200	14300	26800	49800	76100	79100

粒度分布曲线

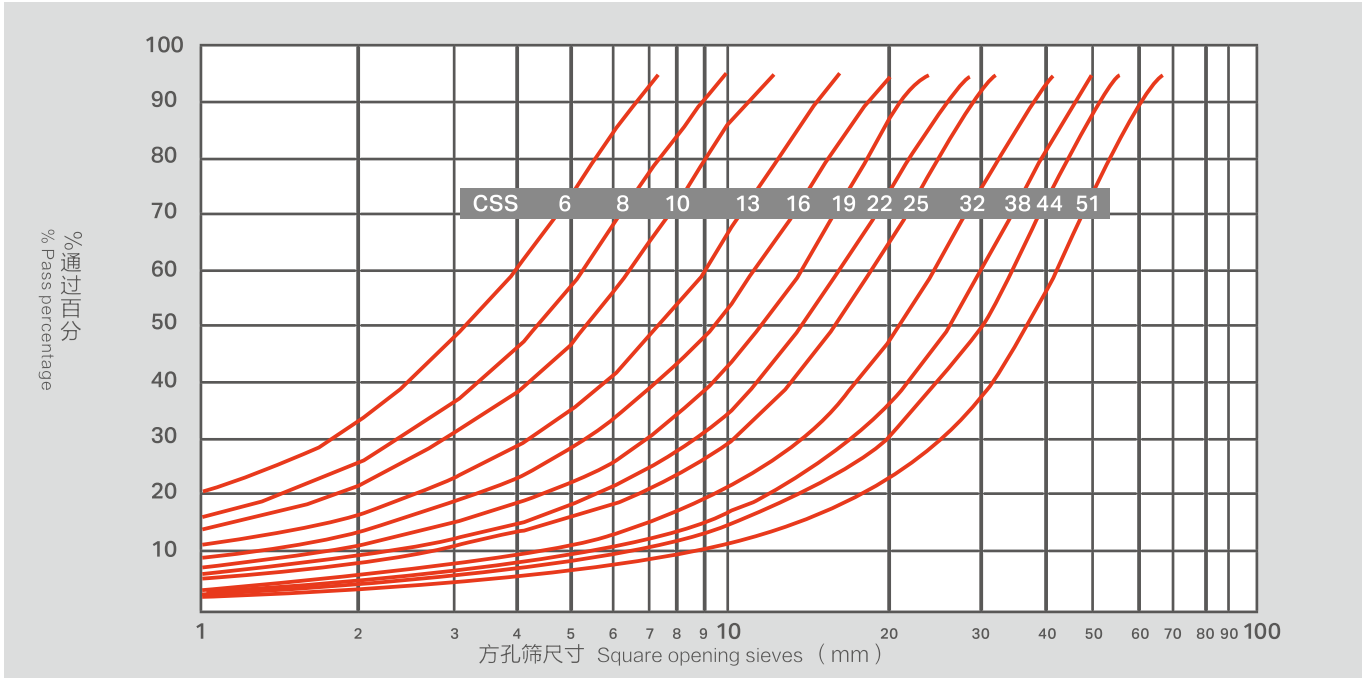
Indicative gradation curve

产品曲线和成品率取决于物料的可破碎性（Wi），进料尺寸分布和其他因素。
The product curve and yield depend on the crushability (Wi) of the material, the size distribution of the feed and other factors.

SC-S 中碎粒度分布曲线 SC-S medium crushing Indicative gradation curve



SC 细碎粒度分布曲线 SC fine crushing Indicative gradation curve



破碎腔

Crushing cavity

SC-S中碎系列有二种标准破碎腔:
C1—超粗
C2—粗

The SC-S medium crushing series has two standard crushing cavities:
C1—Ultra Coarse
C2—Coarse

SC细碎系列有三种标准破碎腔:
F1—超粗
F2—中粗
F3—细

The SC fine crushing series has three standard crushing cavities:
F1—Ultra Coarse
F2—Intermediate Coarse
F3—Fine

生产能力

Production capacity

适用于容重为1600 kg/m³的石灰石的产量，进料粒度，岩石性质，都会影响到设备产能。

It is suitable for the output of limestone with a bulk density of 1600 kg/m³, the feed size, and the properties of stone, which will affect the production capacity of the equipment.

SC-S中碎的生产能力 SC-S medium crushing production capacity

紧边排料口CSS（mm）及对应的生产能力(t/h) Tight-edge discharge opening CSS (mm) and corresponding production capacity (t/h)																						
	最大功率 (KW) Max power		最大进料尺寸 (mm) Max feed size	16	19	22	25	29	32	35	38	41	44	48	51	54	57	60	64	70	76	83
SC100S	90	C1	240	-	-	102-118	108-144	115-154	121-162	127-145	132	-	-	-	-	-	-	-	-	-	-	-
		C2	200	77	82-110	87-116	92-123	98-113	103	-	-	-	-	-	-	-	-	-	-	-	-	-
SC160S	160	C1	360	-	-	-	151	161-245	169-257	176-269	184-281	192-292	200-304	210-281	218-250	225	-	-	-	-	-	-
		C2	300	-	-	-	170-196	182-277	191-290	199-304	208-217	217-330	226-302	237	-	-	-	-	-	-	-	-
SC250S	250	C1	450	-	-	-	-	-	-	273-318	285-434	297-452	309-470	325-495	337-447	349-406	-	-	-	-	-	-
		C2	400	-	-	-	-	-	291	304-463	317-483	331-503	344-456	362-421	375	-	-	-	-	-	-	-
SC315S	315	C1	560	-	-	-	-	-	-	-	331-385	345-514	359-593	378-624	392-647	406-670	420-693	433-716	452-746	480-792	508-756	540
		C2	500	-	-	-	-	-	-	335	350-464	364-602	379-626	399-658	413-683	428-707	443-731	458-755	477-710	507-589	-	-

SC细碎的生产能力 SC fine crushing production capacity

紧边排料口CSS（mm）及对应的生产能力(t/h) Tight-edge discharge opening CSS (mm) and corresponding production capacity (t/h)																			
	最大功率 (KW) Max power		最大进料尺寸 (mm) Max feed size	4	6	8	10	13	16	19	22	25	32	38	44	51	57	64	70
SC100	90	F1	150	-	-	-	46	50-85	54-92	85-99	62-105	66-112	76-128	-	-	-	-	-	-
		F3	38	27-34	29-50	31-54	32-57	35-48	38	-	-	-	-	-	-	-	-	-	-
SC160	160	F1	185	-	-	-		69-108	75-150	80-161	86-171	91-182	104-208	115-208	-	-	-	-	-
		F2	115	-	-	-	57	62-140	67-151	72-162	77-173	82-184	93-145	-	-	-	-	-	-
		F3	50	-	48-78	51-83	54-88	59-96	63-103	68-105	72-95	77	-	-	-	-	-	-	-
SC250	250	F1	215	-	-	-	-	-	14-200	122-276	131-294	139-313	159-357	175-395	192-384	-	-	-	-
		F2	140	-	-	-	-	97-122	105-262	113-282	120-301	128-320	146-328	161-242	-	-	-	-	-
		F3	70	-	-	90-135	96-176	104-191	112-206	120-221	129-236	137-251	156-208	-	-	-	-	-	-
SC315	315	F1	275	-	-	-	-	-	177	190-338	203-436	212-519	242-592	268-654	293-521	323-359	-	-	
		F2	175	-	-	-	-	-	162-253	174-426	186-455	240-500	274-502	302-403	-	-	-	-	-
		F3	85	-	-	-	-	195-304	210-328	225-352	241-376	-	-	-	-	-	-	-	-
SC560	500	F1	300	-	-	-	-	-	-	-	448-588	461-893	525-1018	581-1125	636-1232	700-1357	756-1464	820-1461	876-1286
		F2	195	-	-	-	-	-	-	380-440	406-723	455-836	519-953	573-1054	628-1154	692-1271	746-1372	810-1248	865-1098
		F3	90	-	-	-	-	357-395	385-656	414-704	442-752	400-680	455-775	503-128	551-669	-	-	-	-

我们的圆锥破碎机 是市场上性能优越的产品

Our cone crusher,
a product with superior performance in the market

- ① 衬板
采用超高合金锰钢(ZGMn18Cr2), 使用寿命长; 无需填料, 更换方便。

② 高压系统
具有自动过载保护和排料口调整功能。

③ 正压防尘系统
有效防止润滑油污染而破坏轴承, 延长润滑油和设备的使用寿命。

④ 筋护板
采用合金材质的下架体筋护板。

⑤ 齿轮
采用螺旋伞齿轮设计, 承载能力高, 转动平稳, 噪声低。

⑥ 偏心铜套
可通过偏心衬套调整产能, 满足客户多种需求。

⑦ CLP破碎腔
设备运行整个寿命生命周期内, CLP破碎腔保持进料口尺寸不变, 产量稳定。

⑧ 滑动轴承
采用铅青铜材质, 特殊油槽设计, 防止轴承损坏。

⑨ 高压油封
采用高压设计来满足低压力需求, 提高了液压系统的可靠性。

⑩ 位移传感器
配备德国进口MTS位移传感器, 自动调节排料口的强有力保障。

⑪ 液压润滑站设计
• 优化的油箱容积, 更小的安装空间, 在完全满足油量需求的同时, 使得日常的运营成本更低;
• 世界级品牌核心部件的使用, 带来了极高的可靠性。
- ① Liner
Using super high alloy manganese steel (ZGMn18Cr2), Long service life, no need for packing, easy replacement.

② High pressure system
It has automatic overload protection and discharge port adjustment functions.

③ Positive pressure dust-proof system
Effectively prevent lubricating oil pollution and damage the bearing, Extend the service life of lubricants and equipment.

④ Rib guard
The lower frame body rib guard plate under alloy material is adopted.

⑤ Gear
Using spiral bevel gear design, High carrying capacity, stable power transmission and low noise.

⑥ Eccentric copper sleeve
The production capacity can be adjusted through the eccentric bushing, Meet the various needs of customers.

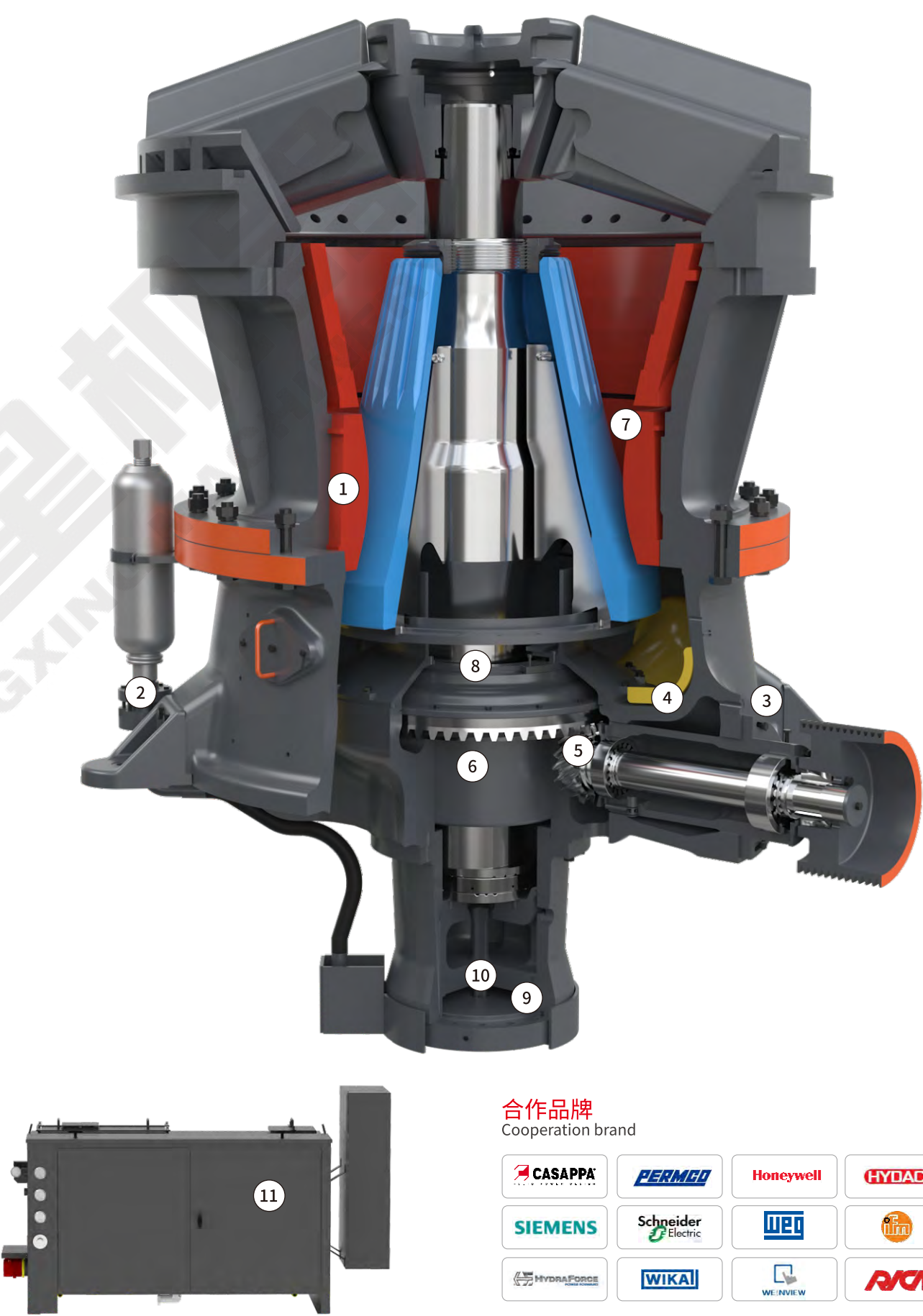
⑦ The CLP crushing cavity
During the entire life cycle of equipment operation, The CLP crushing cavity keeps the size of the feed inlet unchanged.

⑧ Sliding bearing
The sliding bearing is made of lead bronze and special oil wedge design to prevent bearing damage.

⑨ High pressure oil seal
High pressure equipment designed to meet the low pressure requirements and improve the hydraulic system.

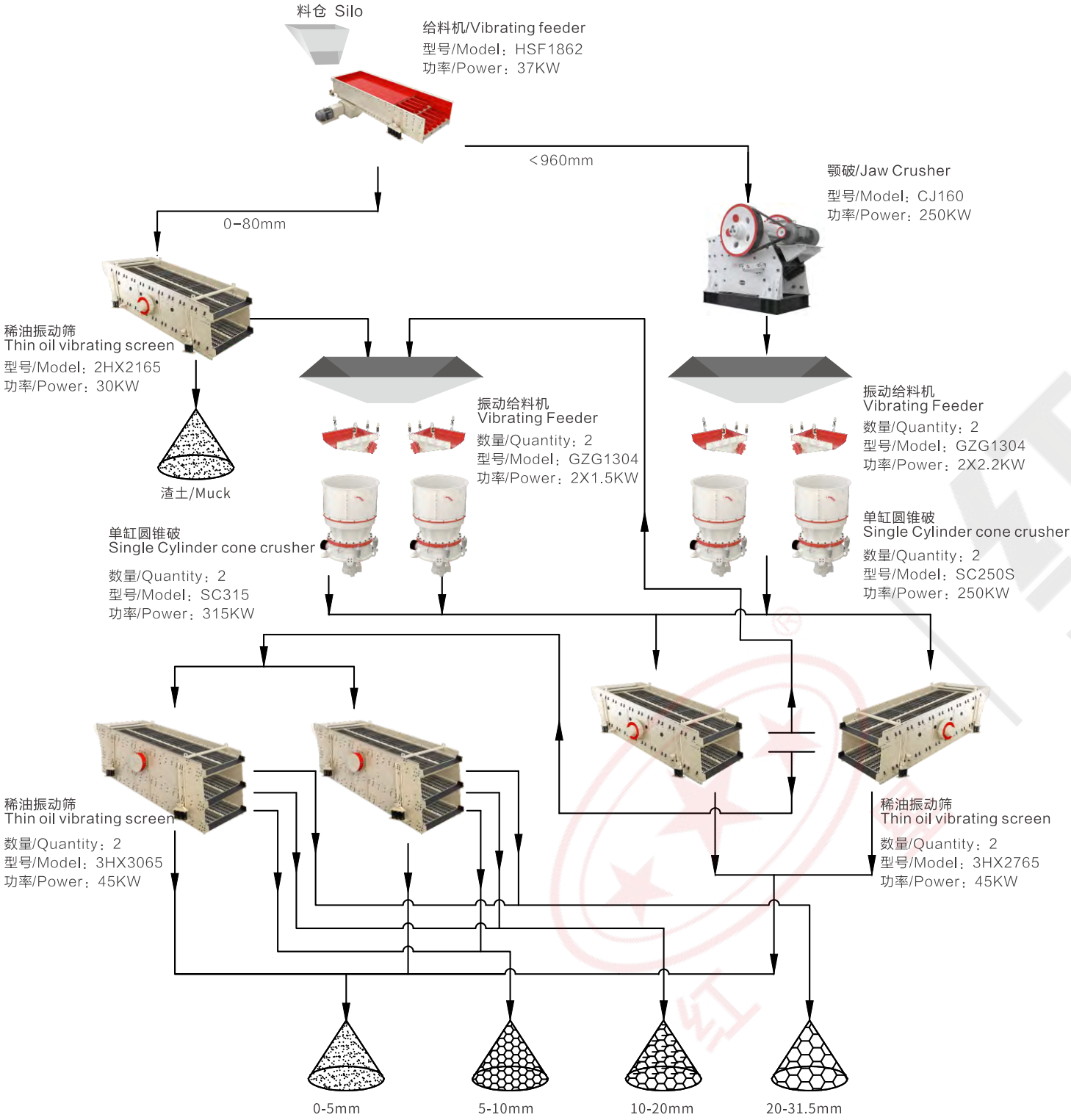
⑩ Motion detector
Equipped with MTS displacement sensor imported from Germany, which can automatically adjust the discharge port.

⑪ Design of hydraulic lubrication station
• Optimized fuel tank volume and smaller installation space, while fully meeting the fuel demand, make daily operating costs lower;
• The use of world-class brand core components brings extremely high comprehensive reliability.



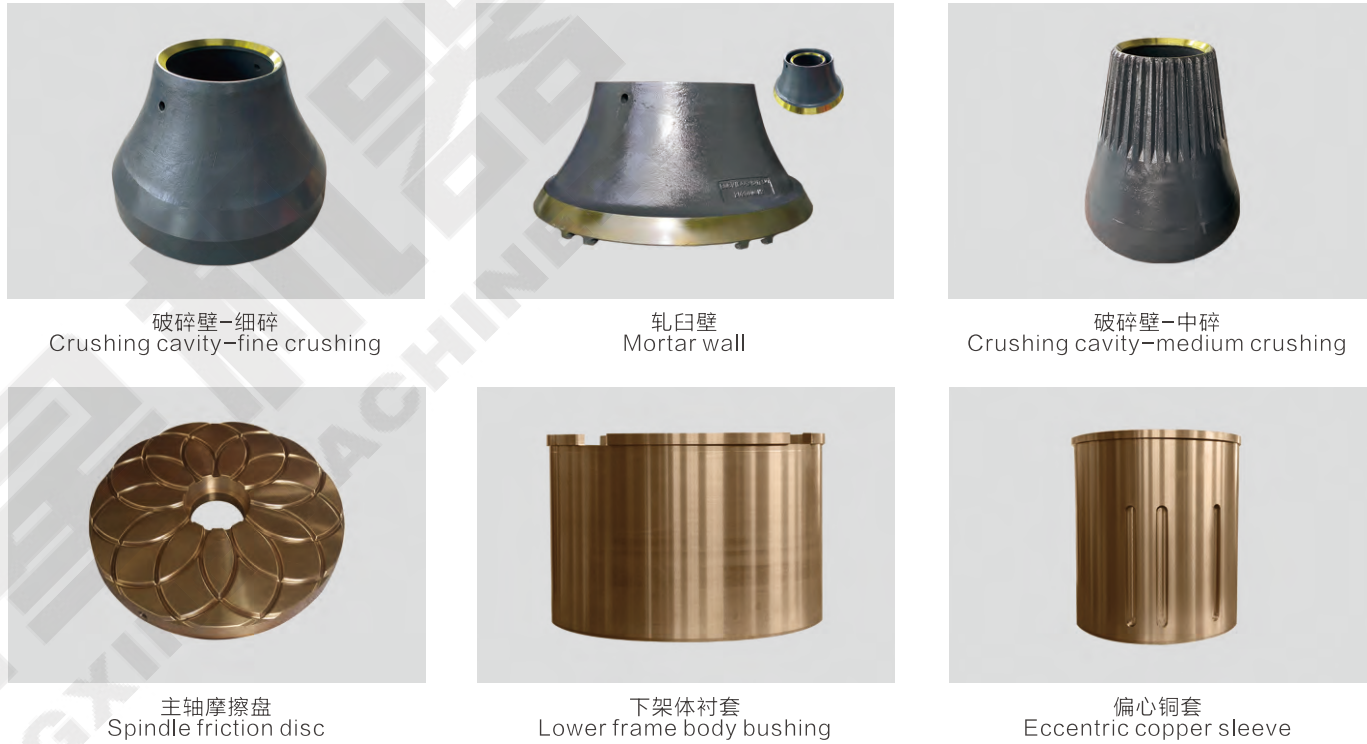
石料破碎工艺流程(800-1000tph)

Stone crushing process(800-1000tph)



常用备件

Common spare parts



油站细节

Petrol station details



带给用户更大的价值

Bring greater value to users

历史底蕴/Historical background:



高端智能矿机生产出口基地

红星集团以为用户创造更大的价值为使命，经过40多年的积累，已成为20万+客户的选择，产品遍布世界各地。

High-end smart mining machine manufacture and export base
Hongxing Group takes the mission of creating greater value for users. After more than 40 years of accumulation, we have become the choice of 200,000+ customers, and our products are all over the world.



全面的制作能力

公司主要生产有破碎设备、制砂设备、磨粉设备和选矿设备四大系列产品。设备的全面性可为您提供一站式服务。

Comprehensive manufacturing capacity
HXJQ mainly produces four series of products: crushing equipment, sand making equipment, grinding equipment and ore beneficiation equipment. Because of comprehensiveness of the equipment, we can provide you with one-stop service.



精湛的技术专家团队

专业的研发及售前、售后技术团队，为您提供专业的解决方案。完善地客户回访管理机制，全面、系统的培训体系，为您的后期使用提供全面的技术支持。

Superb team of technical experts
The professional R&D and pre-sales technical team will provide you with professional solutions. Perfect customer return visit management mechanism, comprehensive and systematic training system, will provide comprehensive technical support for your later use.



我们的售后服务

我们深知真正的销售是从售后开始的。红星人365天*24小时专业售后团队随时待命为您的生产保驾护航。

Our after-sales service
We know that real sales start from after-sales. The professional after-sales team of Hongxing 365 days * 24 hours is on standby to escort your production.

我们的愿景/Our vision:

成为全球客户所信赖的产品和解决方案供应商。

Become a trusted supplier of products and solutions to global customers.

我们的使命/Our mission:

为用户创造更大的价值。

Create greater value for users.

