

/ Z E N I T H I N T H E W O R L D /



旋回式破碎机
Gyratory Crusher

NO.416 Jianye road, South Jinqiao Area, Pudong New
Area, Shanghai, China

E-mail
info@zenithcrusher.com

Tel
0086-21-58386256/58386258

Web
www.zenithcrusher.com



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HGT系列旋回式破碎机

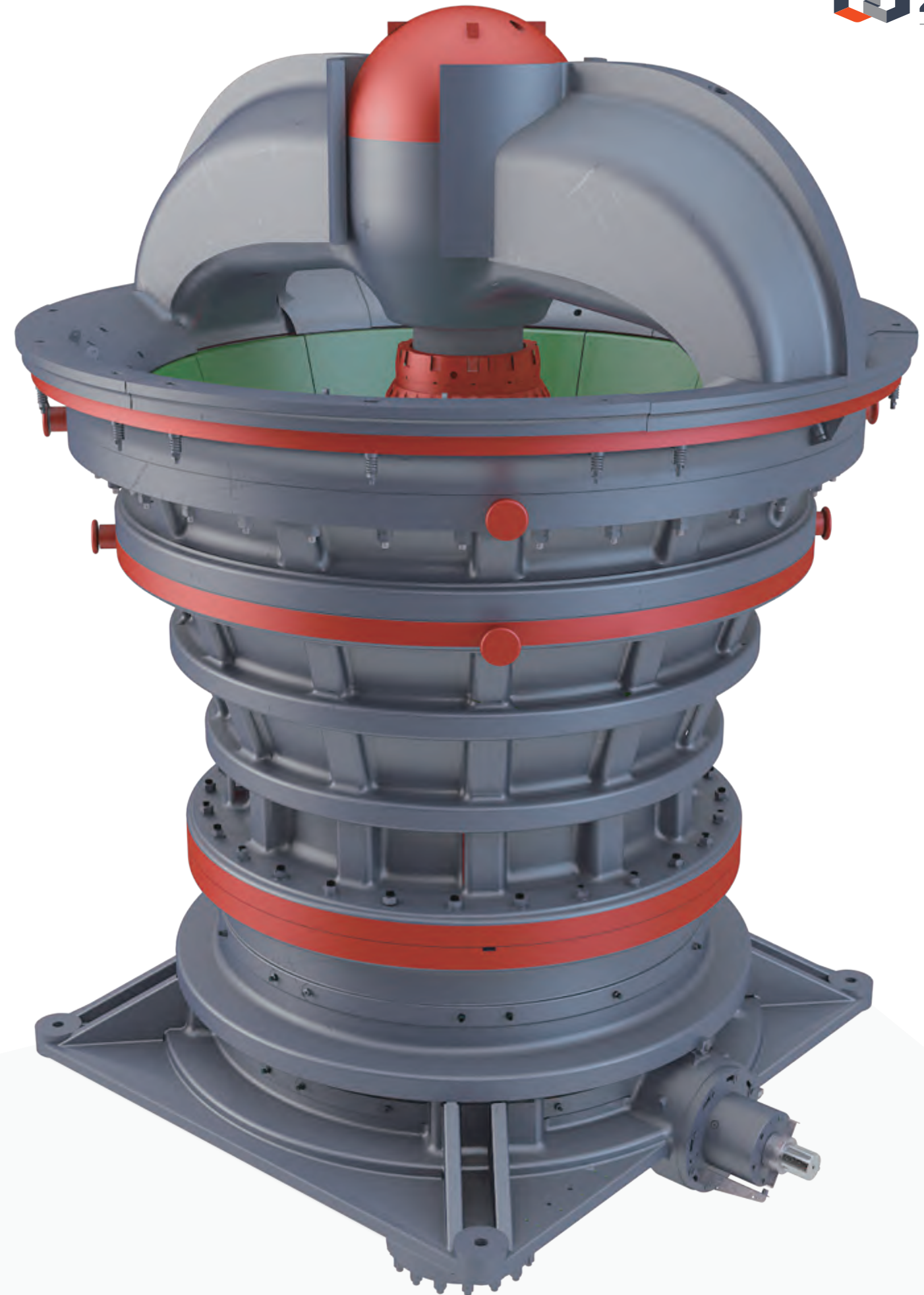
HGT series gyratory crusher

HGT 系列旋回式破碎机是在三十多年的破碎产品研发设计和数千条生产线的工程服务经验基础上，结合现代行业发展需求和世界先进的破碎机技术，针对目前全球市场上对大型设备的需求自主开发的新型高效旋回式破碎机。

HGT series gyratory crusher is invented based on more than 30 years of research and design of crushing products and engineering service experience of thousands production lines, combined with the modern industries developing requirements and advanced crusher technology in the world, which is a new type of high-efficiency rotary crusher developed independently according to the demand for large equipment in the global market at present. The equipment structure and performance can reach the international first-class level, so it is the first choice in the domestic and foreign market of ultra-large coarse crushing equipment.

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，破碎效率更高、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.



主要结构

Main Components

破碎腔。破碎腔采用大倾角和长破碎面设计，可以用于各种粗碎破碎作业需求，适用于更大的进料需求，破碎性能最佳。

Crushing cavity. The crushing cavity adopts large dip angle and long crushing surface, able to service for various coarse crushing demands. It is applicable for larger feeding size and has better crushing performance.

主轴。采用重型整体式主轴，主轴和动锥为一体式设计，强度更高，避免使用过程中动锥松动，较少停机时间。

Axis. The axis is heavy-duty and integral. It is forged integrally with the movable cone, eliminating the risks that the cone may get loose during operation, and further shortening the downtime. So, the intensity is higher.

锁紧螺母。动锥锁紧螺母配备切割环，更换动锥衬板更方便。螺纹在可更换的主轴套上，减小主轴应力，主轴强度更高。

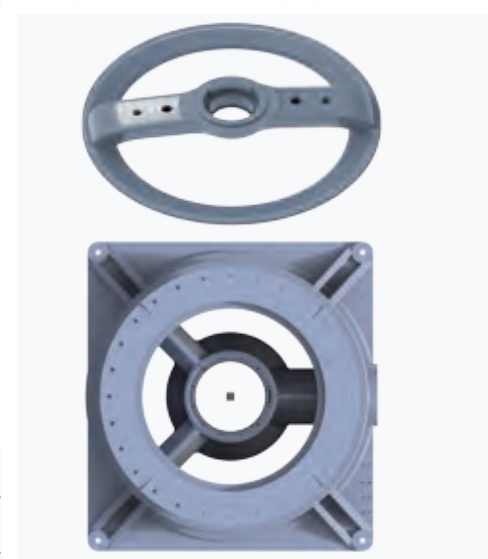
Locking nut. The movable cone's locking nut is equipped with a cutting ring which makes the replacement of movable cone's lining plate easier. The thread is on the replaceable axis bushing to reduce axis stress and allow higher intensity.

机架。采用高强度机架设计，可适应最恶劣的破碎生产条件，确保安全无故障运行，使用寿命更长。

Frame. The frame is of high intensity, suitable for various severe crushing environment and beneficial to safe operation. Besides, it has longer service life.

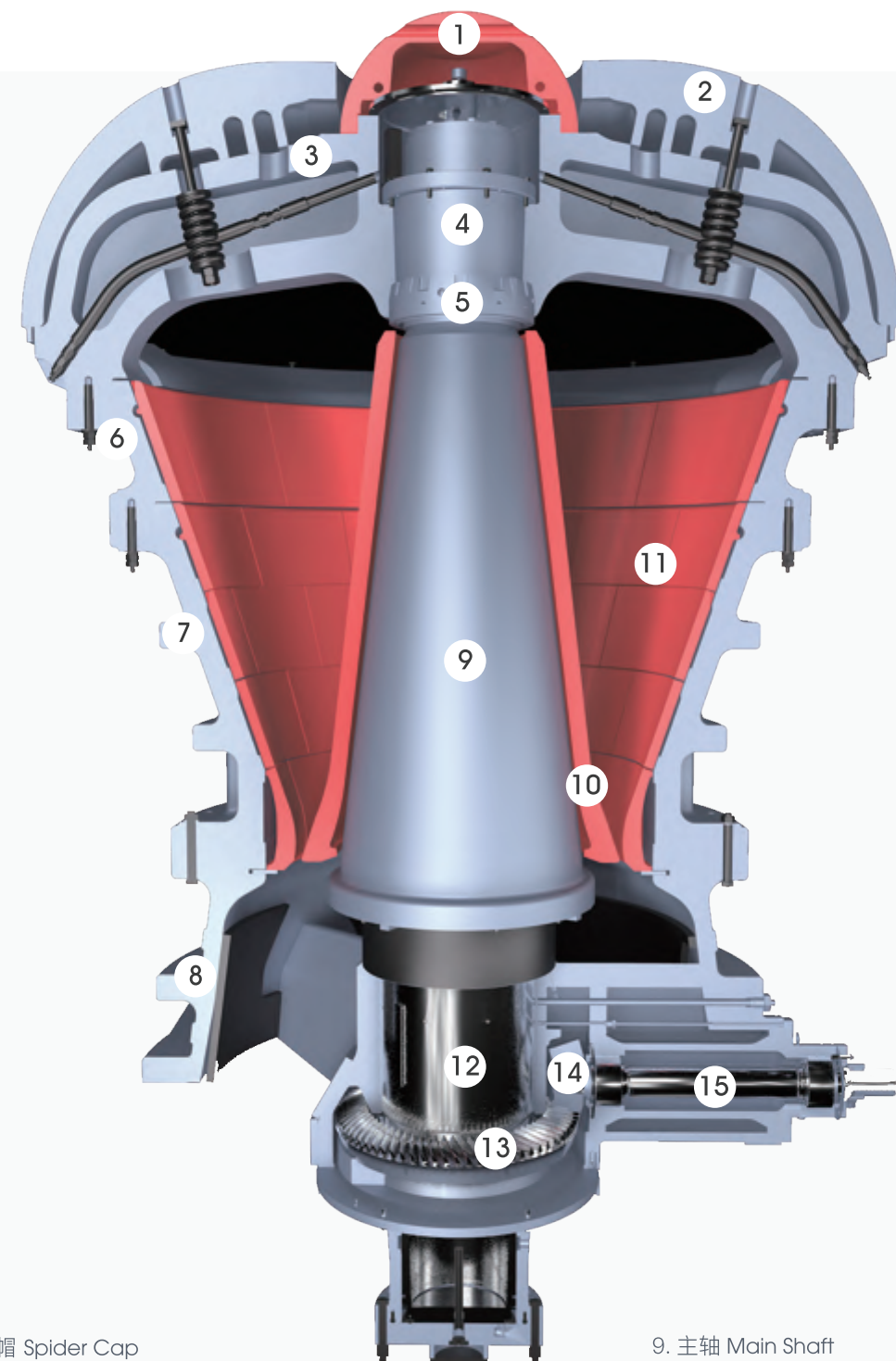
横梁。横梁无需拆卸，便可以更换横梁衬套和油封，更方便快捷，降低维护成本。可配置液压横梁分离器，方便操作维护过程中横梁拆卸。

Beam. Users can finish replacing the beam bushing and oil seal without disassembling the beam. It is easier and more convenient and can reduce maintenance costs. A hydraulic beam separator can be configured to facilitate the removal of the beam during operation and maintenance.



偏心套。偏心套轴承采用高精度铸造铜套，承载能力大，使用寿命长；偏心套采用平衡式设计，设备工作更平稳，对基础冲击力最小，可以用于移动或半固定式工作站。

Eccentric sleeve. Bearing of the eccentric sleeve adopts copper sleeve which is cast precisely, so it has stronger holding capacity and longer service life. Meanwhile, the eccentric sleeve takes the balanced design, hence, the equipment can work more stably, and its shock on the foundation is negligible. It's applicable for mobile and semi-fixed production lines.



1. 球帽 Spider Cap
2. 臂架护板 Spider arm shield
3. 横梁 Spide
4. 横梁衬套 Spider bushing
5. 锁紧螺母 Locknut
6. 上机架 Upper Frame
7. 中机架 Mid Frame
8. 下机架 Lower Frame

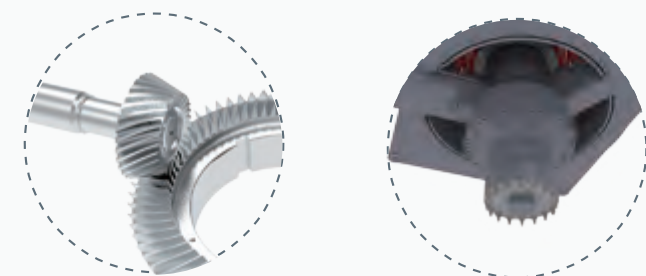
9. 主轴 Main Shaft
10. 破碎壁 Mantle
11. 定锥衬板 Concave
12. 偏心套 Eccentric Bush
13. 大齿轮 Big Gear
14. 小齿轮 Pinion
15. 液压缸 Hydraulic Cylinder

防尘密封。采用正压防尘密封设计，配备正压鼓风机，可以提供高压力和大风量洁净的空气，有效防止灰尘进入污染润滑油，延长轴承使用寿命。

Dust sealing. The positive-pressure dust seal design is used. Besides, a positive-pressure air blower is equipped to bring high pressure and large volume of clean air to avoid the intrusion of dust and pollution of lubrication oil, which is helpful to extend service life of the bearing.

齿轮。采用螺旋伞齿轮传动，承载能力更大；通过水平轴架旋转角度，可调节传动齿轮齿侧间隙，现场客户调节简单方便。

8.Gear. The transmission is performed by the spiral bevel gear, so the holding capacity is bigger. Through rotating the horizontal shaft frame, the side clearance of gear can be freely controlled. It is easy for customers at production sites to adjust it,ther shortening the downtime. So, the intensity is higher.



排矿口调节。配置主轴位置控制系统，可以通过液压系统控制主轴，方便调节排矿口大小，还可以补偿衬板磨损，控制产品粒度。

Adjustment of discharging port. The automated axis' position controlling system can control the axis through the hydraulic system. It can help adjust the opening of the discharge port freely on one hand and compensate abrasion of the lining plate to control granularity on the

控制系统。采用自动化控制系统，实现对设备的每个环节进行控制，并且能自动诊断运行故障，记录设备生产信息，能有效优化设备的工作状态，降低设备维护成本及停机时间，提高设备作业率。

Controlling system. The automatic controlling system can realize the strict detection of every production step. It can not only diagnose operational failures and record production situations in real time, but also optimize working parameters, reduce maintenance costs and shorten the downtime.

产品优势

Product advantage

大产能低成本破碎

Large capacity crushing with low cost

设备的产能关键在于设备的腔型设计，HGT 旋回破拥有精细的破碎腔设计，来确保更强生产能力、更大的进料粒度及更长的衬板寿命；采用了大倾角和长破碎面设计，配合优化设计的冲程和转速，使破碎机具有超强的破碎能力，可以用于各种粗碎破碎作业需求，适用于更大的进料需求，破碎性能更佳；通过简单地更换偏心套，就可以改变破碎机的处理能力，以满足不同的破碎工艺需求。

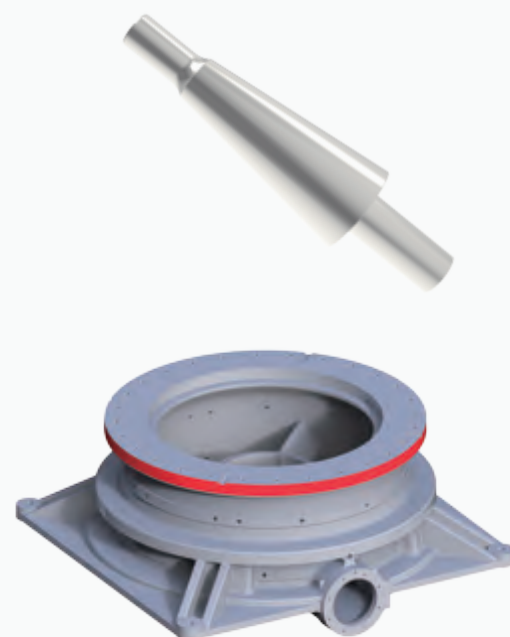
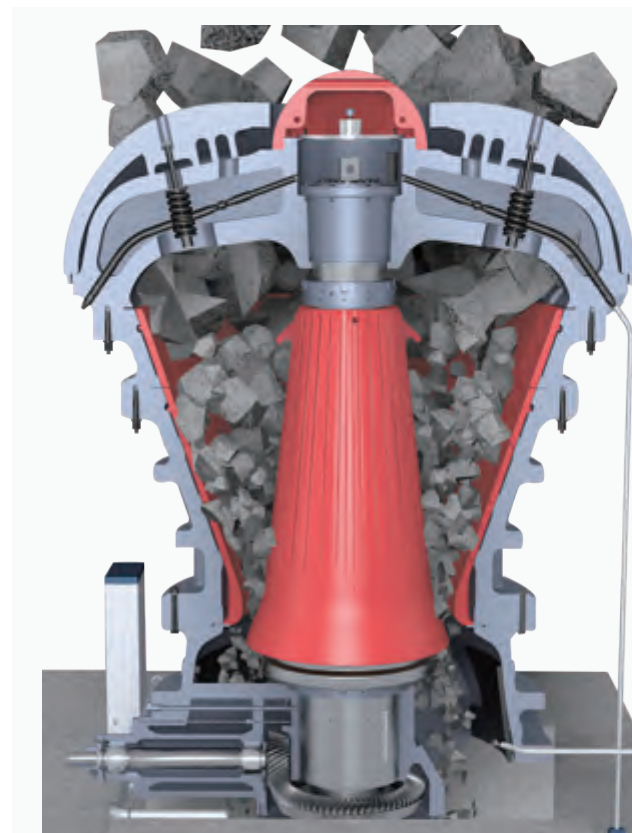
The key of equipment capacity depends on the design of equipment cavity shape, so the HGT gyratory crusher owns the fine crushing cavity design to ensure the best production capacity, the bigger feeding size and the longer liner life. It also adopts the design of large inclination angle and the long crushing surface, combined with the stroke and rotating speed of optimization design, the crusher owns the super crushing ability, which can be used in all kinds of coarse crushing operation requirements, suitable for larger feeding demand and better crushing performance. The capacity of crusher can be changed easily by simply replacing eccentricity sleeve so that meet the different requirements of crushing process.

可连续高强度工作

High strength working continuously

HGT 旋回破拥有超重型机架、大直径整体式的主轴和高精度铸造轴承，整机强度更高，使用寿命更长，确保更安全可靠的连续高强度生产；高强度超重型机架设计，可以适用于较为恶劣的生产工况，确保安全无故障运行，使用寿命更长；采用重型一体式主轴和动锥设计，主轴和动锥整体锻造，避免使用过程中动锥松动，减少停机时间；动锥锁紧螺纹位于可更换的主轴套上，主轴无螺纹无应力集中，强度更高。

HGT gyratory owns super heavy machine frame, large diameter integral main shaft and high precision casting bearing; the whole machine owns higher strength and longer service life, which can ensure more safe and reliable continuously high strength production. The super heavy frame design is suit for the worst conditions, ensure safe and fault-free operation, longer service life. Take the heavy integrated main shaft and moving cone design, main shaft and moving cone integral forging to avoid loosening the moving cone, reduce the shutdown time. The moving-cone locking thread is located on the replaceable main shaft sleeve. The main shaft has no thread and no stress concentration, the strength is higher.

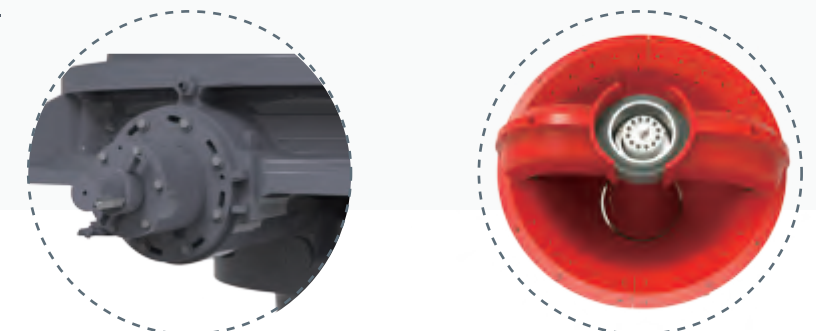


更简单的操作维护

Simpler maintenance

HGT 旋回破作为超大型设备，在设计时特别注重维护保养的便捷性，配置自动润滑及液压系统。润滑系统可以根据生产状况自动润滑加热、冷却和循环等；配置自动主轴位置控制系统，可以通过液压系统控制主轴，方便调节排矿口大小，还可以补偿衬板磨损，控制产品粒度；通过外置齿轮调节装置可以方便的调节齿轮侧隙，横梁衬套和密封无需拆下横梁即可完成更换，当需要拆卸横梁时，还可配置液压横梁分离器方便操作维护过程中拆卸。

HGT gyratory crusher is a kind of super-large equipment, so it paid special attention to the convenience of maintenance, automatic lubrication and hydraulic system. The lubricating system can automatically lubricate heating, cooling and circulation according to the production conditions. And the automatic main shaft position control system can be configured to control the main shaft through hydraulic system, which can easily adjust the size of discharge port, and can also compensate for the wear of liner so that control the product size. The external gear adjustment device can easily adjust the gear clearance, beam bushing and seal can be replaced without removing the beam, when it is necessary to remove the beam, the hydraulic beam separator can also be configured to facilitate the operation and maintenance of disassembling process.



高效智能化生产过程

High effective and smart production process

设备采用自动化控制系统，配置润滑压力、润滑温度、轴承温度、转速、主轴位置等多种传感器，配置 PLC 和触摸屏，实现对设备的每个环节进行检测控制并实时显示；并且能自动诊断运行故障，记录设备生产信息。自动化控制系统不仅能对设备运行进行控制并保护，降低设备维护成本及停机时间，提高设备作业率；还能根据设备运行情况，优化配置设备的工作参数，提高设备生产效率，确保设备稳定高效低耗生产。

The equipment adopts automatic control system, including lubrication pressure, lubrication temperature, bearing temperature, rotation speed, and main shaft position and so on. PLC and touch screen are used to detect and control every section of the equipment and display it in real time. And it can automatically diagnose running failure, record equipment production information. The automatic control system can not only control and protect the operation of the equipment, reduce the maintenance cost and shutdown time of the equipment, but also improve the working rate of the equipment, optimize the working parameters of the equipment according to the operating conditions of equipment, and improve the production efficiency of the equipment. Ensure equipment stable, efficient and low consumption production.

参数

Specification

型号 Model	进料口尺寸 Feed opening (mm)	最大进料粒度 Maximum feeding size(mm)	出料口调整范围 Range of discharge opening(mm)	处理能力 Capacity (t/h)	功率 Power (Kw)	外形尺寸 Overall dimension t/h)
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

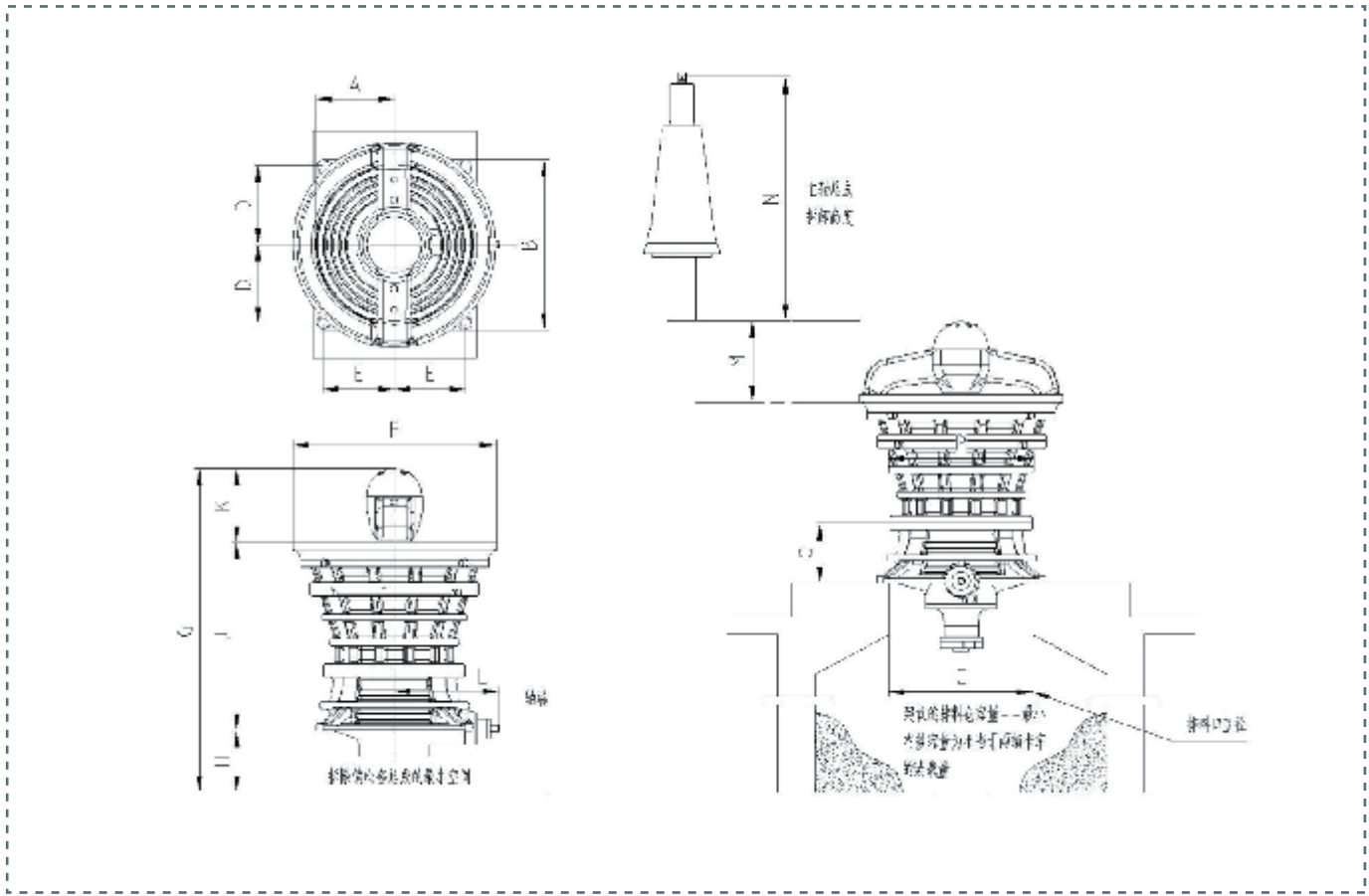
处理能力

Capacity(t/h)

型号 Model	紧边排料口尺寸 Closed Side Setting(mm)									
	140	150	165	175	190	200	215	230	240	250
HGT4265	2015	2340	2520	2875						
HGT5065		2400	2785	2940						
HGT5475		2890	2990	3150	3340	3490				
HGT6275		2895	3620	3820	4210	4335				
HGT6089			4200	4545	5085	5300	5535	5810		
HGT60110				5540	6950	7340	7575	8285	8600	8895

外形尺寸图

Overall dimension



型号 Model	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P
HGT4265	1680	3580	2620	1664	1524	3940	6900	2100	3390	1430	2200	160	4580	1250	3010
HGT5065	1680	3580	2620	1664	1524	4460	7610	2100	4010	1510	2200	160	5200	1250	3010
HGT5475	2050	4400	3230	2070	1740	4930	8410	2500	4350	1610	2460	160	5640	1455	3580
HGT6275	2050	4400	3230	2070	1740	5580	9090	2500	5040	1610	2460	160	6190	1455	3580
HGT6089	2290	5130	3750	2413	1753	5590	10470	3000	5370	2110	2650	160	6830	1755	3890
HGT60110	2490	5490	4430	2438	2184	6200	11390	3870	5380	2150	2840	230	7660	1860	4780

