

SHUKY

DG

系列单缸液压圆锥式破碎机

DG

Single-Cylinder Hydraulic Cone Crusher



01 产品简介

Brief Introduction



DG系列单缸液压圆锥式破碎机广泛应用于金属与非金属矿、建材、交通、冶金、水利等行业，适用于各种矿石的中细碎破碎，如铁矿石、有色金属矿、花岗岩、石灰岩、石英岩、砂岩、河卵石等。

DG series single-cylinder hydraulic cone crusher is widely applied in industries, such as metal and non-metallic mineral, building materials, transportation engineering, metallurgy and hydraulic engineering; it can be used for intermediate and fine crushing of all kinds of mineral, such as iron ore, non-ferrous metal ores, granite, limestone, quartzite, sandstone, cobble and so on.

DG系列单缸液压圆锥式破碎机集机械、液压、电气、自动化、智能控制等技术于一体，是我公司在总结二十多年来从事破碎行业设计、生产、销售、服务经验的基础上，结合现代工业科技的发展，广泛吸收美国、德国等先进破碎机技术，而自主研发和设计的新型高效破碎机。该系列代表着世界最先进的破碎机技术，具有多项传统破碎机无法比拟的优点：破碎效率高，生产成本低，维护调整方便，破碎产品粒型优异，可以广泛地应用于中碎、细碎以及超细碎等破碎作业。

DG series single-cylinder hydraulic cone crusher has a combination of crushing machinery, hydraulic, electrical, automation and intelligent control technology. The machine is the high efficient crusher which is researched and developed independently by our company based on 20 years of experience on design, production, sales and service, combined the development of modern industrial technology, and has widely absorbed advanced crusher technology of the United States and Germany. This machine represents the world's most advanced technology and has many incomparable advantages such as high efficiency, low production cost, easy maintenance and good product shape. It can be widely used in intermediate crushing, fine crushing and ultra fine crushing operations.

02 性能特点 Features

1. 结构简单，性能可靠。DG系列单缸液压圆锥式破碎机集排料口调整和过载保护功能于一体，简化了结构，增强了可靠性。每种规格均有不同腔型，可满足不同的破碎要求。所有维护从上部进行，操作简单，维护方便。

1. Simple structure and reliable performance. DG series single-cylinder hydraulic cone crusher integrates discharge opening adjustment and overload protection functions as a whole, which simplifies the structure and enhances the reliability. All different sizes have different cavity types to meet different crushing requirements. All maintenances are processed from the upper part, which makes maintenance more convenient.

2. 产品粒型好，生产能力强。采用层压破碎原理，改善了产品粒型，呈立方体。合理的偏心距、腔型和运动参数配合，大大提高了设备的生产能力和工作效率。

2. Simple structure and reliable performance. DG series single-cylinder hydraulic cone crusher integrates discharge opening adjustment and overload protection functions as a whole, which simplifies the structure and enhances the reliability. All different sizes have different cavity types to meet different crushing requirements. All maintenances are processed from the upper part, which makes maintenance more convenient.

3. 控制系统先进，调控精准。全自动控制系统提供手动控制、恒定排料口控制、恒功率控制等多种运转模式可供选择。自动监测系统，可实时了解设备运行状况，有利于发挥设备最佳性能。

3. Advanced control system brings precision control. Full automatic control system provides various operation modes, such as manual control, constant discharge opening control and constant power control. Automatic monitoring system can help to know the equipment operation situation at any time, which is in favor of playing the best performance of this equipment.

4. 结构优化设计，使用寿命长。滑动轴承采用特殊的油楔设计，避免轴与轴承的直接摩擦接触。加强的机架结构和特殊轴承材料，承载能力大，可靠性高，延长了设备的使用寿命。

4. Optimized designed structure brings long service life. Sliding bearing adopts special oil wedge design, which can avoid direct frictional contact between shaft and bearing. Reinforced frame structure and special bearing materials have large carrying capacity and high reliability, which can extend the service life of this equipment.

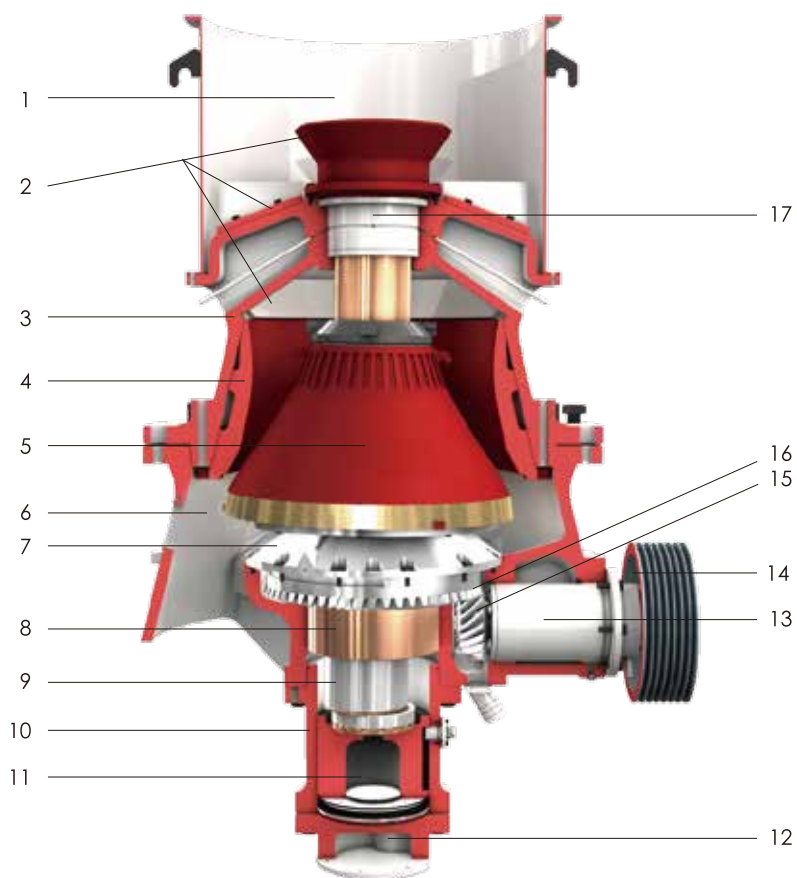
5. 液压润滑站，运行成本低。液压站和润滑站一体化设计，节约设备安装空间。优化的元器件布局和油箱容积，操作维护简单，运行成本更低。

5. Hydraulic lubrication station makes low operation cost. The integrated design of hydraulic pressure station and lubricating station save installation space. Optimized components layout and tank volume can make operation and maintenance simple and decrease operating cost.



03 产品结构

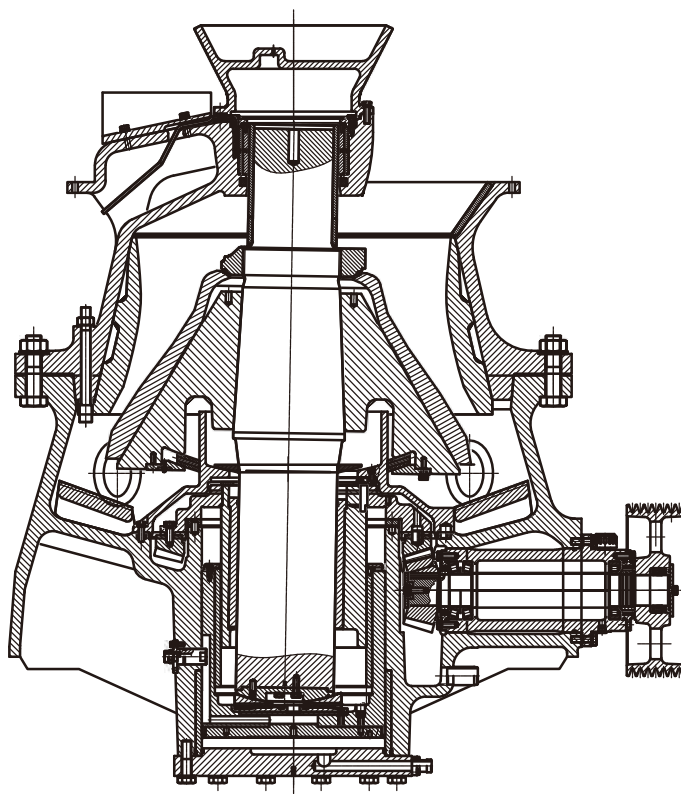
Internal Structure



- 1、进料斗 Feeding Hopper
- 2、上机架防护装置
Protective Device For Upper Bracket
- 3、上机架 Upper Bracket
- 4、轧臼壁 Bowl Liner
- 5、破碎壁 Mantle
- 6、下机架 Lower Bracket
- 7、内罩部 Inner Cover
- 8、偏心套部 Eccentric Bushing
- 9、主轴 Main Shaft

- 10、液压缸 Hydraulic Cylinder
- 11、活塞体 Piston
- 12、位移传感器
Displacement Transducer
- 13、水平轴部
Countershaft Bushing
- 14、主机皮带轮 Pulley Wheel
- 15、小螺旋锥齿轮 Pinion
- 16、大螺旋锥齿轮 Gear
- 17、滑动轴承 Bush Bearing

04 工作原理 Working Principle



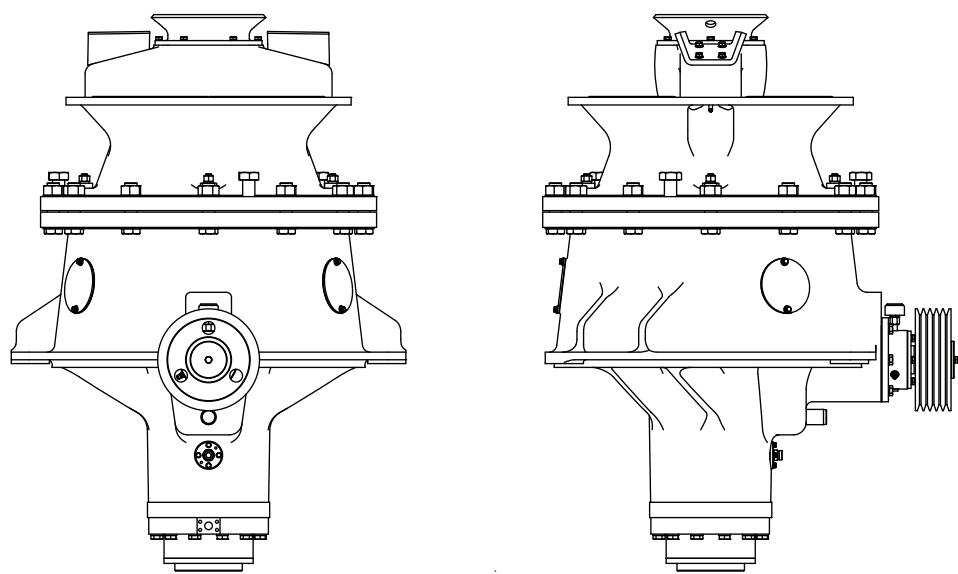
DG系列单缸液压圆锥式破碎机主要由上架体、中架体、下架体、动锥部、偏心套部、传动部、液压缸部等部件组成。由电动机带动水平轴旋转，水平轴通过螺旋伞齿轮啮合带动偏心套旋转，再由偏心套带动动锥部做旋转摆动，从而实现连续的挤压破碎。

DG series single-cylinder hydraulic cone crusher is mainly composed of upper bracket, middle bracket, bottom bracket, movable cone, eccentric sleeve, transmission and hydraulic cylinder. The whole working process of this machine is that motor drives rotation of horizontal axis, horizontal axis drives the rotation of eccentric sleeve through the spiral bevel gear, and then eccentric sleeve would drive the rotary oscillation of movable cone so as to realize the continuous extrusion.

DG系列单缸液压圆锥式破碎机通过调整动锥底部的液压缸推动主轴带动动锥部上下运动，调整动锥和定锥衬板之间的间距，从而控制产品粒度大小。同时液压缸也具有过载保护功能：当有不可破异物（如铁块）进入破碎腔时，触发蓄能器工作，液压缸自动使动锥下落，从而释放铁块，继续破碎，保护破碎机。

The adjustment of hydraulic cylinder at the bottom of movable cone can drive main shaft thus driving movable cone move up and down to easily adjust the space of movable cone and the lining plate of fixed cone, then the product size will be controlled. Hydraulic cylinder also has the function of overload protection. When materials that cannot be crushed (such as iron) enter into crushing chamber, the accumulator will be triggered, then the hydraulic cylinder will drop movable cone to release the iron and recover normal crushing automatically, which can protect the crusher perfectly.

05 技术参数
Technical Parameters



外形尺寸图 Dimensions (mm)

型号 Model	腔型 Type of Chamber	入料尺寸 Max.feeding Size (mm)	排料口调节范围 Adjusting Range of Discharge Opening (mm)	处理能力 Capacity (t/h)	功率 Power (kw)
DG100	粗型 Coarse Type	200	20 ~ 50	80 ~ 190	75 ~ 90
	中型 Medium Type	150	16 ~ 40	60 ~ 125	
	细型 Fine Type	50	10 ~ 30	40 ~ 100	
DG200	粗型 Coarse Type	250	20 ~ 70	160 ~ 280	132 ~ 160
	中型 Medium Type	220	16 ~ 50	120 ~ 230	
	细型 Fine Type	70	10 ~ 30	100 ~ 210	
DG300	粗型 Coarse Type	300	30 ~ 80	260 ~ 650	220 ~ 250
	中型 Medium Type	240	20 ~ 60	200 ~ 400	
	细型 Fine Type	100	16 ~ 30	150 ~ 300	
DG400	粗型 Coarse Type	400	35 ~ 100	350 ~ 750	250 ~ 315
	中型 Medium Type	300	25 ~ 70	260 ~ 500	
	细型 Fine Type	145	18 ~ 40	180 ~ 370	
DG500	粗型 Coarse Type	500	40 ~ 120	480 ~ 1050	280 ~ 355
	中型 Medium Type	350	30 ~ 80	335 ~ 900	
	细型 Fine Type	200	20 ~ 50	220 ~ 680	



地址：上海市浦东新区金海路1000号

电话：021-66039988

传真：021-66030508

邮编：201206

网址：www.shunky.com www.shunky.cn

Email：Service@shunky.com



注：本手册内容如有变更恕不另行通知。

