OPERATION MANUAL

2PG SERIES ROLLER CRUSHER

ANHUI CEMINE MACHINERY CO.,LTD

OPERATION MANUAL

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In order to ensure the normal working and fully utilize the function of the crusher, the users must read and carry out the instructions before the crusher start operation.

1. Application and the range of the crusher

2PGseries crusher is a new and out-to-date type of roller crusher that is researched and manufactured with rich experience of our technicians as well as the reference to the technology of MMD Co.. Its unique function fills in the blank in the technique at home and becomes the favorite equipment to crush clinker with more quantity and higher quality than the other types. They have been introduced in beneficiation, chemical industry, refractory material, grinding material, building materials industry and etc. to crush various kinds of stones and rocks of high and middle hardness. In recent years they are also widely used to crush steel-sand industry.

2. Working principle:

The crusher has two groups of independent driving rollers, which rotate oppositely to create the force of extrusion, milling, grinding and shearing to crush material. When material enters the crusher, because of the compressing force of the surfaces of rollers, it has to pass between the two rollers, suffered from extrusion and milling and cracked into

small particles, and to go out along with the direction of tangent of roller through the space between the two rotating rollers at the low part of crusfer. The big particles shall remain inside the crusher to crush once more until they can pass the space of the two rotating rollers.

3. Technical parameters

Data	2PGQ600	2PGQ800	2PGQ1000	2PGQ1200	2PGQ1500
dia.of roller （mm）	ϕ600	ϕ800	ϕ1000	ϕ1200	ϕ1500
feeding granularity （mm）	＜40	＜60	＜80	＜90	＜100
discharging granularity （mm）	＜3~8	＜3~10	＜3~12	＜3~14	＜3~15
output (t/h)	5~20	15~40	20~50	40~80	60~120
size of feeding open （L×W mm）	400×370	600×500	700×600	800×600	800×800
power of motor （kw）	11×2	22×2	30×2	45×2	75×2
outer size L×H×W mm	2555×2490 ×1050	3295×2609 ×1035	4089×3000 ×1190	4492×3250 ×1478	4630×3592 ×1765
total weight （kg）	~4000	~7500	~12000	17000~19000	~28000

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4. Main component of machinery and structural properties

This crusher consists of bracket, rollers, driving system and some other parts. Driven by the motor and the reducer with V-belt, pulley and couplings, the two groups of rollers run oppositely to form a crushing chamber. The crushed material shall be discharged from the low part of machine.

The distance between the two rollers shall decide the granularity of material to be crushed. The rollers are made of special material and oil cup is equipped at all the lubricating points. It is necessary to check the lubrication and replace or refill oil and grease periodically.

5. Installation, adjustment and test running

5.1.Check whether there is any damage or missing parts to the crusher when it is transported to the users' factory. It cannot start mounting activity until the crusher is confirmed to be perfect.

5.2.The end users must redesign the foundation drawings for the crusher based on the foundation holes shown in the technical book, the local geological conditions and the requirement of production technology to steady the machine on the foundation.

5.3. The crusher must be installed on horizontal and all the driving devices must be erected on the instructions of installation

5.4. The idle test must be performed after installation. Before test,

check carefully all the bolts or screws and adjust them if necessary.

5.5. Test running without load:

5.5.1. Put lubricating oil or grease into all the lubricating points, rotate the rollers and check whether there exists any abrasion and loose to all the fittings. Shoot the trouble immediately if any.

5.5.2. Start the test running without load after confirming the crusher is in good condition. Point-start the crusher firstly and then put it into idle running if everything is normal.

5.5.3. The idle testing should be carried for more than 1 hour. Check the crusher working condition and the unusual vibration is not allowed. The temperature of bearings cannot increase 30 degree and the ambient temperature cannot be over 70 degree. If everything is normal and smooth, test running with load can start.

5.6. Test running with load:

5.6.1. Observe whether the current fluctuation of motor is big or not.

5.6.2. The test must keep running continuously for more than 4 hours and then the crusher can be put into operation if the test running with load is successful.。

6. Operatio instructions:

6.1. Before starting, check the screws and bolts and fasten them if necessary. Check the clearance between the rollers and make

adjustment if necessary.

6.2. It is necessary to feed material to the crusher evenly. The crusher must be cleaned in time if some mixed metal pieces or hard materials into the machine.

6.3. The stop procedure: stop feeding material and keep the machine running until all the material is crushed

6.4. It is forbidden to do lubrication and dangerous cleaning work during the crusher is running.

7. Maintenance and safety instructions

7.1 The rollers can be used again by re-welding them if the surfaces are worn-out and influence the granularity and the output.

7.2. Make sure the ambient around the crusher clean and enough luminous.

7.3. The motor as well as the electric devices must respect the safe instructions and the outer hood of motor must be earthed.

7.4. The crusher must be performed and supervised by the qualified operators and technicians.