

4PGG 1200×1000 Four-roll Crusher



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Main technical parameter

Roller diameter: upper roll 1200mm

lower roll 1200mm

Roller length: upper roll 1000mm

lower roll 1000mm

Feeding size: ≤ 75 mm (space between upper roll 10)

Feeding size: ≤ 100 mm (space between upper roll 40)

Discharging size: 3 ~ 8mm

Roller speed: upper roll 83, lower roll 153 r/min

Crushing capacity: 35 ~ 55t/h

Power : upper roll : YD280S-8/4 40/55kw 740/1480r/min

lower roll : Y315S-6 75kw 980r/min

Weight : 68670kg

Applications and suitable range

4PGG1200×1000 four-roll crusher is mainly used to crush metallurgical coking coal, and also can crush big particle size material by adjusting the space of upper and lower roll. Its properties: compact structure, small occupation of land, large crushing ratio (18:1) and high production.

Operational principle

This machine is to crush material by two pairs of rollers which rotate in opposite direction and produce pressing and shearing force. When the material got into the upper crushing cavity, by the force of rotating roller, it is enforced to pass the two rollers to be pressed and cut by rollers, then, it begins to be crushed. Small grains after crushing is along the tangent direction of rollers, through two rollers of down cavity, and thrown out. Big sized grains which surpass the space will go on being crushed.

Main components and structural performance

This machine mainly consists of main frame, roll parts, driving parts, bumpers, hydraulic plants.

Rollers can be divided into active roller and driven roller. Upper and down rollers are both fixed firmly on main frame of machine.

Active rolls are fixed up while driven rolls are removable and its back part is equipped with hydraulic cylinder. Balanced crushing force and passing through of over hard material are both finished by hydraulic cylinder.

Rolling leather on rollers parts are moulded by alloy steel with heat processing to improve strength and hardness.

Bearing base of roll has connector and is connected to oil pot with screw cover. Lubricating condition must be checked regularly. All lubricating oil should depend on places and temperature, generally use calcium-based and calcium-sodium grease, the grease in bearing base should take up its volume of 50%, and change every 3-6 months.

Gear box adopts medium-load industrial gear lubricants N220 or N320 (VG220 , Mobil630 or VG320, Mobil632) . When peripheral speed of gear is high, or temperature is under 35 °C , or lubricated by cycle oil, use N220; peripheral speed of gear is low, or temperature is between 35 ~ 50 °C , use N320; Lubricants should be warm-up before start up when the temperature is lower than -5 °C . Newly used gear box should be changed oil after 7-14 days, and afterwards, change once every 3-6 months according to usage.