EFFICIENT

DOUBLE ROLL

CRUSHING

CRUSHER





THE FIELDS OF APPLICATION

Double roll crushers are used for both, primary and secondary crushing. They guarantee a strictly defined final grain size with a minimum of fine grains.

THE FEED MATERIALS

Raw materials, secondary materials and by-products such as coke, sinter, coal, soft to medium-hard rock, ore, chalk, broken glass and similar products.



Double roll crusher with mechanical vertical adjustment, type 2322.



THE MODE OF OPERATION

The crushing rolls are individually driven in counterrotation by electro-motors with coupling and gears via V-belts. The crushing material is fed into the machine by means of conveyors or similar aggregates while it is spread over the whole width of the roll. An optimum use of the crushing tools and a uniform belt charging are thus achieved. Roller diameter, tooth form and circumferential speed are adjusted to the type and the size of the feeding material in relation to the required final grain size.

THE SPECIAL CHARACTERISTICS

The crushing rolls consist of the roller bodies, complemented with crushing rings or crushing shells. The rolls are secured either with anchor bolts and end disks, or bolted with screws. In order to facilitate maintenance, the crushing roll shafts are arranged in heavy-duty cast steel housings with lubricated, amply dimensioned spherical roller bearings. Materials used are of highly wear-resistant specially cast alloys in order to achieve long lifetimes of parts.



Double roll crusher with mechanical horizontal adjustment



Possibilities for hydraulical adjustment



Possibilities for mechanical adjustment



Double roll crusher with hydraulical horizontal adjustment



THE VERSATILITY

To influence the final grain size by changing the gap and to compensate wear and tear, one of the two crushing rolls is designed as a loose roll. The adjustment is done mechanically, hydraulically or electromechanically. Overload protection is always integrated.

- The mechanical vertical adjustment
 Two swivel arms located in the housing of the machine are linked by means of a transversal bar. The gap width is changed by adjusting the loose roll, aided by a hand-operated hollow thread shaft.
- The mechanical horizontal adjustment
 The thread shafts directly affect both of the loose
 roll sliding bearings, located in guiding skids.
- The hydraulical vertical adjustment If the required power can no longer be achieved manually, hydraulic cylinders take over the loose roll adjustment.
- The hydraulical horizontal adjustment
 The hydraulical horizontal adjustment consists of two hydraulic differential cylinders and the accompanying hydraulic aggregate. All of the mechanical adjustment functions are fully integrated into the hydraulic system.
- The electromechanical vertical adjustment Here, the adjustment is done by means of a driving motor and a reduction gear, via a hollow shaft.

THE ADVANTAGES

- high and constant capacity
- low susceptibility to breakdowns
- long lifetime
- easy replacement of wear and spare parts
- wide range of application
- with a minimum of fine grains
- gentle crushing

THE SCOPE OF APPLICATION

- Capacity:
- Feeding size:
- Final grain size:
- Reduction ratio:
- Required power:
- up to 2500 m³/h up to approx. 1500 mm 15-300 mm depending on the feed material and its size up to 1 : 5 up to 2 x 250 kW

