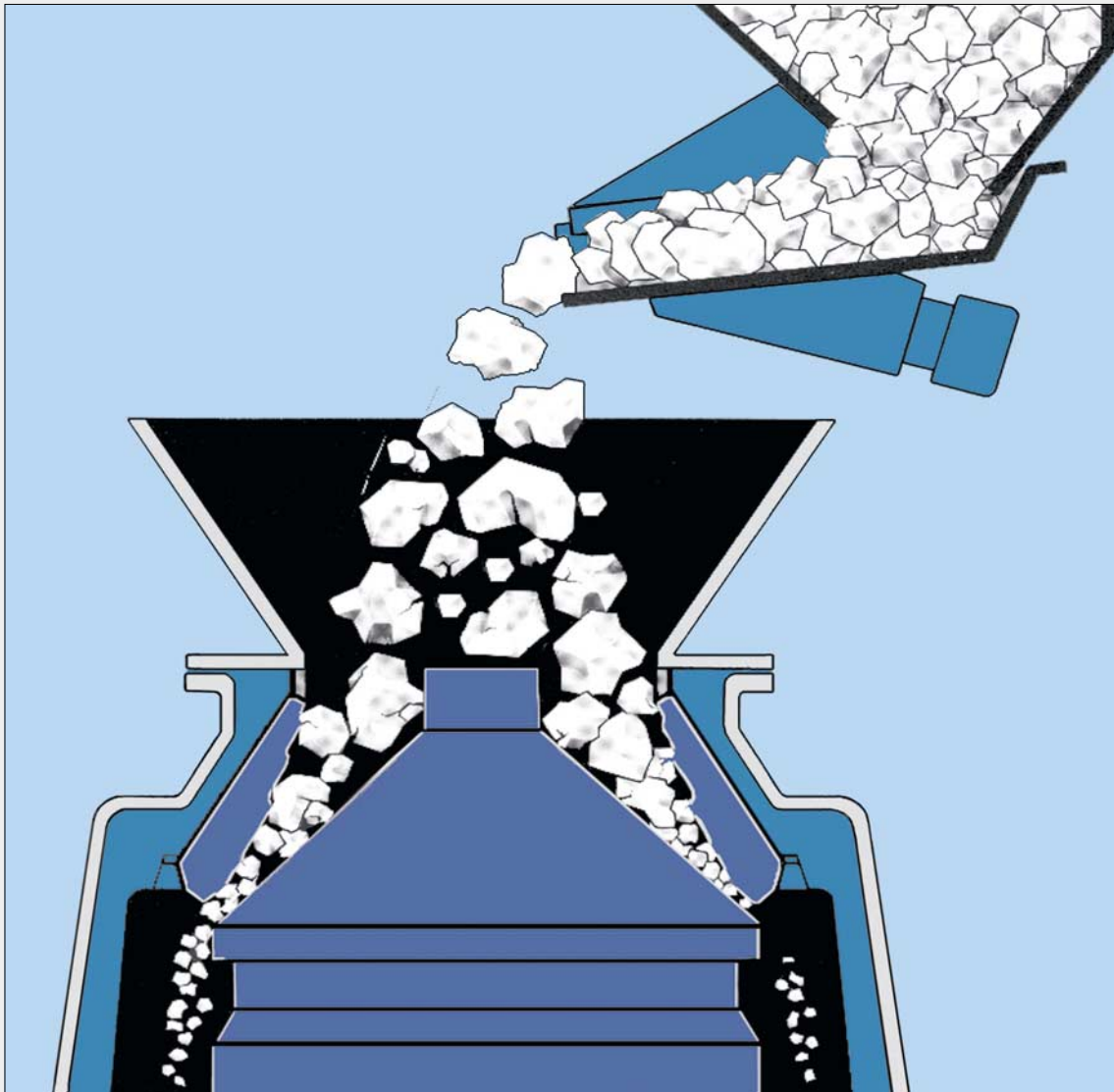


ECONOMICAL

CONE CRUSHER

CRUSHING



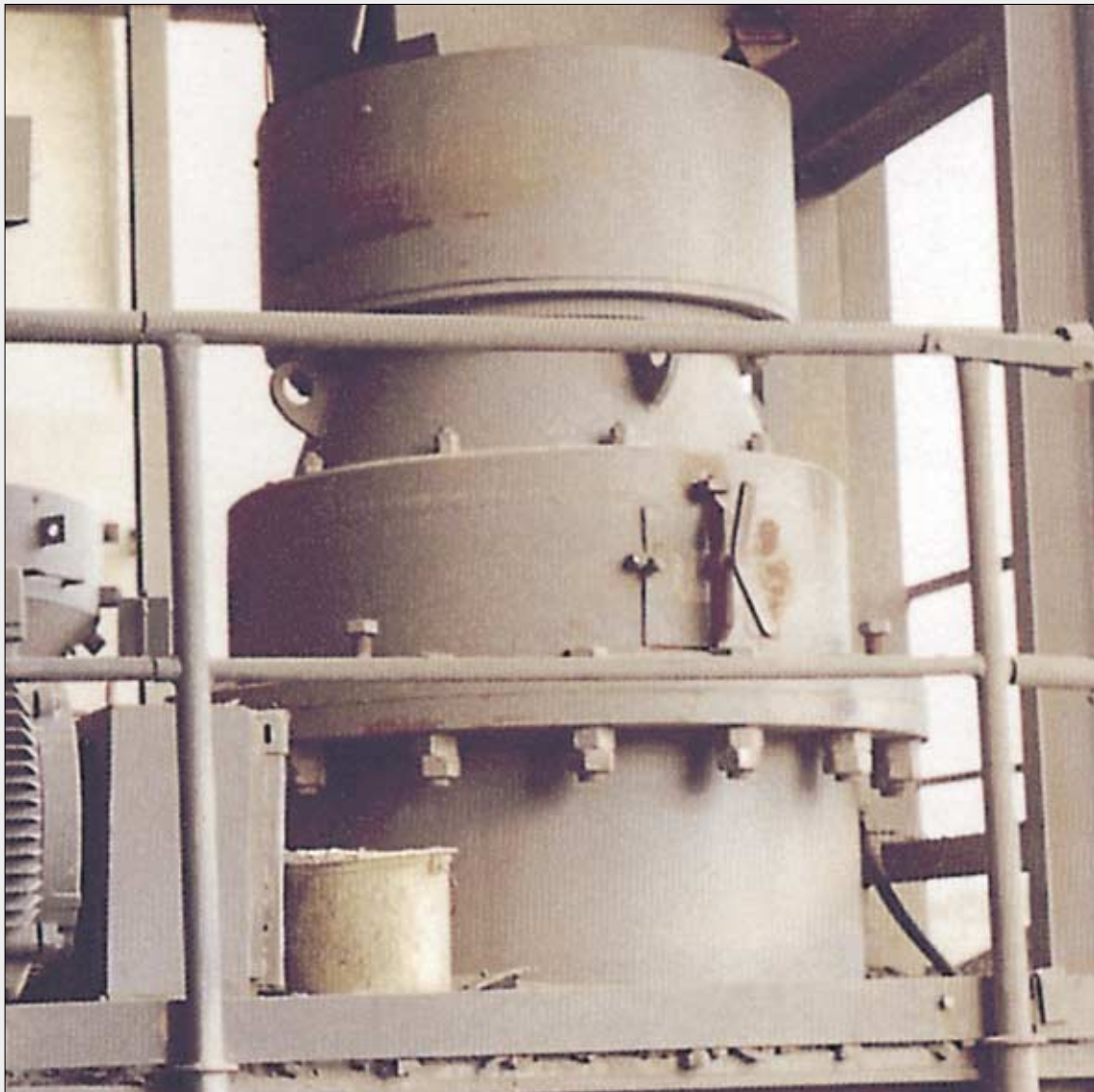
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M A S C H I N E N M I T B I S S

◆ THE FIELDS OF APPLICATION

Cone crushers are particularly suitable for crushing of products ranging from medium-hard to hard as well as brittle and tough feed materials.

◆ THE FEED MATERIALS

Rock, gravel, different kinds of ore, fireclay, slag and other hard materials.



Cone crusher for production of fine gravel



◆ THE MODE OF OPERATION

The cone crusher reduces the feed material by means of pressure. The adjustable gap width can be varied by a hydraulic piston, which is located in the lower part of the housing. The upper section of the housing accommodates the wedge-shaped crushing tools. The crusher drive is situated between those two sections. The crushing force is produced by an eccentric bush, which moves the crushing cone towards the crushing shell in a circular oscillating movement. Due to the friction of the material to be crushed, the crushing cone moves slowly in opposite direction towards the driving rotation. The rotation produced by the crusher shaft has no influence on the crushing action itself.

The variation of the gap width is performed by the hydraulic piston. On request the crusher can be provided with a fully automatic gap measurement system. In case of a temporary overload, the gap width is increased by means of a rapid hydraulic lowering of the crushing cone to ensure quick passing of foreign particles. After completion of this process, the gap is set automatically to the previously selected width.

◆ THE CHARACTERISTICS

A bevel gear drive with helicoidal toothing ensures a smooth and quiet running of the machine. As there are no bearings located in the upper part of the housing, it is easy to replace the crushing tools within a short period of time. This particular design ensures continuous operation even when materials are being processed which might clog and later possibly jam the machine. Such an incident would lead to a machine stop with other types of crushers. Dust-proof sealing elements inserted between the supporting conical housing to the eccentric shaft and supporting cone prevent penetration of dust. The hydraulic system provided for gap adjustment and gap width control as well protection against overload is adjusted by means of a hydraulic/electronic control system. Due to the configuration of the crushing tools and their structural arrangement, the use of synthetic resin, which can be detrimental to one's health, is no longer necessary for the filling of hollow spaces. As a consequence, the crusher is quickly available for operation after replacement of worn-out crushing tools.

THE CRUSHING TOOLS

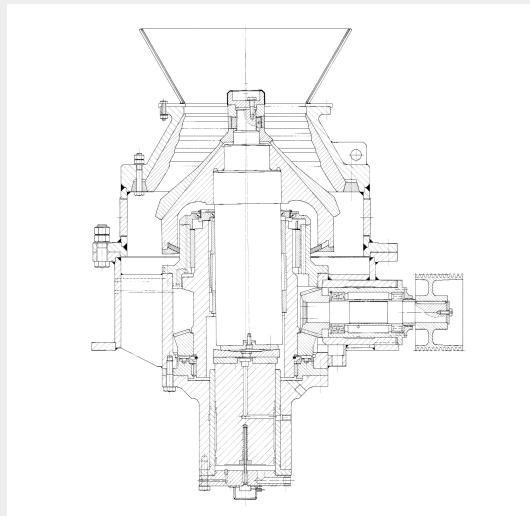
The crushing tools are properly selected to match the specific requirements of application. The combination of the crushing shell and the crushing cone is especially determined taking into account the type of feed material, the feed size and the required final grain size. The crushing tools are made of highly wear-resistant and durable manganese or cast steel alloys. The configuration of the crusher cavity, which is in particular based on the fact that there are no bearings located in the upper part of the housing provides an efficient utilization of the crushing tools.

Fixing of the crushing tools:

- The crushing cone is fixed on the cone shaft by means of a thrust piece with a shaft nut (supported hydraulically).
- The crusher shell is connected to the upper section of the crusher housing by means of a trapezoid clamping ring and is secured by means of bolts.

THE VERSALITY

The crusher types ranging from 2210/02-01 to 2210/05-01 are equipped with fully hydraulic gap adjustment and overload protection.



Cross section with improved crushing tools

THE ADVANTAGES

- high capacity
- high reduction ratio in the secondary crushing stage
- final grain with high cubic grain proportion
- low maintenance
- low susceptibility to breakdowns
- fast replacement of wear and spare parts
- long lifetime
- low cost operation

THE SCOPE OF APPLICATION

- Feed size: up to 350 mm
- Final grain size: < 4 bis < 52 mm depending on the feed material and its size
- Capacity: up to 200 m³/h
- Reduction ratio: up to 1:6
- Required power: up to 250 kW

AUBEMA
M A S C H I N E N M I T B I S S