CRUSHING

PRALLSPALTER

AND GRINDING

HAMMER MILLS







FIELDS OF APPLICATION

AUBEMA Prallspalter are hammer mills and are mainly used in the sectors of raw materials and the iron and steel industries for primary and secondary crushing of various materials.



FEED MATERIALS

Hard coal and lignite in coaling plants, coking coal for the iron and steel industry, limestone and gypsum as well as other related minerals of soft to medium-hard consistency and salts.



Prallspalter with regulating gear for the preparation of coking coal



OPERATION

When the feed material is inserted into the crushing radius of the rotor it is grasped by the beater heads, thrown against the impact wall, and gradually crushed. Secondary crushing is then carried out in the lower section between the rotor and impact wall.

The flexible suspension of the beater arms on the rotor ensures that the Prallspalter is sturdy enough against the intrusion of extremely hard foreign particles. As the beater heads are subject to wear, they are of course exchangeable. Adjustment of the impact wall relative to the crushing radius of the rotor (width of gap) and rotor speed (m/s) are the major factors in determining the rate of reduction and the final grain size.



SPECIAL CHARACTERISTICS

The rotor is forged in one piece and has been drilled in a special jig. The finely balanced design of the opposing beater arms and beater heads ensures balanced running. The beater arms are made of high-quality steel and are easy to exchange. The beater heads are manufactured as chromemolybdenum alloy steel or compound castings.

The Prallspalter are designed in such a way that they can be driven at both continuous or variable rotor speeds. Inspection flaps and hinged housings are provided to facilitate easy maintenance.



Rotor size 1600 Ø x 2800 mm wide



Impact wall furnished with grinding ledges in the upper section and exchangeable grating in the lower section for reducing oversized grains.



Heating with electrical heating elements



Heating with steam or heat-conducting oil





VERSATILITY

Depending on the application, various configurations and/or additional facilities can be utilised:

- Reversible and non-reversible Prallspalter

On the reversible version, the beater heads can be utilized to their optimum by reversing the direction of drive without having to reverse the heads themselves. A number of different drive concepts are available. The Prallspalter can be driven at either a constant or a variable speed.

- Mechanically adjustable impact walls
 For balancing wear and for changing grain sizes.
- Hydraulically adjustable impact walls
 For tasks that frequently vary in relation to product quality and grain sizes.
- Shock pressure resistant housing design
 As a protective measure when processing explosive products.
- With a surrounding impact wall
 For very moist products with a tendency to clog.
- With heated impact walls
 (electric, steam or heat-conducting oil)
 To improve the material flow when processing materials with a tendency to clog.
- With exchangeable grate
 To limit oversized grains. Not suitable for moist, sticky and clayey materials.
- For grinding and simultaneous drying
 For reducing the moisture content and grinding of materials in one cycle.



THE ADVANTAGES

- high and constant capacity
- low susceptibility to breakdowns
- long lifetime
- easy replacement of wear and spare parts
- broad range of applications
- high reduction ratio



SCOPE OF APPLICATION

Capacity: up to 4000 m³/h
 Size of feed material: up to approx. 300 mm

- Final grain size: up to < 1 mm

depending on type and size of feed material

Reduction ratio: up to 1:15Required power: up to 1800 kW

