

Title (en)
VERTICAL ROLLER MILL

Title (de)
VERTIKAL-ROLLENMÜHLE

Title (fr)
BROYEUR VERTICAL À ROULEAUX

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Application
EP 20735283 A 20200619

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Abstract (en)
[origin: WO2021004757A1] The invention relates to a vertical roller mill comprising a driven plate (1) rotatably mounted around an axis of rotation for transporting grinding stock (2), a feed device for feeding the grinding stock (2) onto the plate (1), and at least one roller (3), wherein the roller (3) forms a grinding gap (4) with the plate (1), wherein the grinding stock (2) forms a grinding stock bed (5) on the plate (1), which can be supplied to the grinding gap (4) via a rotation of the plate (1), wherein an installation (6) for ventilating and compressing the grinding stock bed (5) and for homogenising a height of the grinding stock bed (5) supplied to the grinding gap (4) is provided in front of the grinding gap (4) in the transport direction of the grinding stock bed (5), wherein the installation (6) has a compression element (7) which is at a variable distance from the surface (8) of the plate (1) facing the roller (3). In order to provide a vertical roller mill, in which a preferably constant operation of the mill, with a grinding stock bed that is even and well-prepared for grinding in the grinding gap, is guaranteed despite the changing characteristics of the grinding stock, it is proposed that the vertical roller mill comprises: at least one measuring device (9) for measuring forces acting on the installation (6); an open-loop and closed-loop control device (10) for evaluating measurement signals from the measuring device (9) and for generating a control signals for actively adjusting the distance of the compression element (7) from the surface (8) of the plate (1) facing the roller (3) according to the measurement signals from the measuring device (9); and a control device (11), with which the distance of the compression element (7) from the surface (8) of the plate (1) facing the roller (3) can be adjusted according to the control signal from the open-loop and closed-loop control device (10).

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