

Title (en)

Method and device for producing moulded articles from viscous pulp

Title (de)

Verfahren und Vorrichtung zur Herstellung von Formkörpern aus viskosen Massen

Title (fr)

Procédé et dispositif pour la fabrication d'objets moulés de masses visqueuses

Publication

EP 1020561 A3 20010117 (DE)

Application

EP 00250009 A 20000112

Priority

- DE 19901359 A 19990115
- DE 19904568 A 19990204

Abstract (en)

[origin: EP1020561A2] To shape a body from a viscose mass, of paper and/or paper fibers in water together with fibers and/or chips of vegetable and wood materials, it is poured into a mold for water to be extracted and then dried. The mass to fill the mold contains 80-95 wt% water, 10-40 wt % paper fibers and 60-90 wt% chopped straw, chaff and/or other vegetable fibers. To shape a body from a viscose mass it is poured into a mold for water to be extracted and then dried. The mass is passed into the mold in an accurate charge, with the water content to be extracted taken into account. Core dies are moved into the mold, to form mold passages and walls. A die compresses the material mass in the mold at a pressure of 500-2000 kPa for a few secs. to extract water, and the shaped mass is taken from the mold. The shaped body is dried in an air stream at 30-60 degrees C. Additives such as chopped straw and chaff, plant fibers and the like are added to the mixture of used paper dissolved in the water. After the application of pressure for a few secs., the die (15) is raised slightly, the core die is moved downwards and the frame (16) with the molds is moved upwards, so that the transport unit (18) can be moved under the mold frame (16). The mold frame (16) is moved upwards further, to press against the die for the molded bodies to be ejected downwards on to the transport unit (18) to be carried to the drying kiln. An Independent claim is included for an assembly with a feed line (3) which is moved between end positions over the dosing supply containers (4) packed together without gaps, and a funnel (5). The funnel (5) is linked to the mixer/supply container (6). A pump (7) gives a continuous and uninterrupted delivery of the mass from the mixer/supply container (6) through the feed line (3) to the dosing containers (4). A frame (8) to carry the containers (4) has a swing axis (10) for them, and the frame (8) slides between end positions (C,D). Hoses (12) are at the dosing containers (4) over the swing axis (10) to carry the molding mass from the tilted containers (4) into the molds, with their ends at adjustable mountings on struts (13) which are fitted to the frame (8) and slide with it. A guide frame (14) has a number of dies (15). A frame (16) holds the molds. A frame (17) carries the core dies. A horizontal transport unit (18) takes off the ejected moldings. The assembly has a control to set the working operations, the successive movements and the movement path lengths. Preferred Features: One or more dosing containers (4) are fitted for each mold. A scraper plate (11) is at the struts (13), to give a scraping action to the mold openings on a retracting movement. The hoses (12) can be used in a variety of configurations for one or more molds.

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