

Title (en)
PUMP FOR CONVEYING A MOIST PULP

Title (de)
PUMPE ZUR FÖRDERUNG FEUCHTER PULPE

Title (fr)
POMPE DESTINEE AU TRANSPORT DE PATE HUMIDE CONTENANT DES FIBRES

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Application
EP 96914477 A 19960410

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Abstract (en)
[origin: WO9632591A2] The present invention relates to a device for pumping a moist pulp and may be used in the wood-pulp and paper industry for conveying a highly concentrated pulp. The proposed pump comprises a body (1) having a hopper (2) for receiving a pulp; a replaceable pipe connection (3) in which a worm feeder (5) is coaxially located; a check valve (6) mounted as viewed from a pump outlet from said pipe connection (3); and a mixing chamber (4) for mixing the pump with a carrying agent; said chamber is coupled with said pipe connection (3) and fitted with a means for supplying the carrying agent. Between the worm feeder end (5) and the check valve (6) an adjustable gap is provided. On the surface of the pipe connection, on the level of the last flight of the worm feeder there are provided longitudinal through splines (8) for evacuating air which have a length of not more than a lead of the last flight of said worm feeder, a width of about 0.2 - 1.0 mm and a total open area of from 0.5 DELTA S to DELTA S, where DELTA S means the difference between an inner sectional area of the pipe connection and a sectional area of the worm feeder rod. The proposed pump enables pumping over a moist pulp of a high concentration (16-90 %) with maximum efficiency at different sectors of production lines of paper making industry with the result that a need for using a system for the pulp dilution with water is ruled out, a total quantity of waste waters and energy expenditures to treat thereof are reduced.

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