

Title (en)

HEADBOX AND SHEET-FORMING UNIT COMPRISING A HEADBOX

Title (de)

STOFFAUFLAUF UND BLATTBILDUNGSEINHEIT MIT EINEM STOFFAUFLAUF

Title (fr)

CAISSE DE TÊTE ET UNITÉ DE FORMATION DE FEUILLE COMPRENANT UNE CAISSE DE TÊTE

Publication

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Application

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Abstract (en)

[origin: WO2011095577A1] The invention relates to a headbox (1) comprising at least one feeding device (5) feeding at least one fibrous material suspension (FS), a nozzle (4) having an outlet gap (11) for dispensing the fibrous material suspension (FS) in a free jet to a downstream functional unit of a shaping unit (2) downstream of the headbox (1) and a turbulence-generating device (6) arranged directly upstream of the nozzle (4) in the flow direction. The headbox further comprises a plurality of turbulence-generating channels (7, 7.xy, 7.11 - 7.4n) having at least one fluidization region each for guiding the fibrous material suspension (FS) in partial flows and supplying the nozzle (4), the individual channels (7, 7.xy, 7.11 -7.4n) being arranged in parallel to each other, forming rows (R1-Rx, R1-R4), in the transversal direction of the turbulence-generating device (6), and the rows (R1-Rx, R1-R4) being arranged next or on top of each other at a right angle to the transversal direction. The headbox (1) according to the invention is characterized in that the portion of a row (R1-Rx, R1-R4) of turbulence-generating channels (7, 7.xy, 7.11 -7.4n) supplying the nozzle (4) across a predefined unit of length at a right angle to the direction of throughflow forms a hydraulic unit (EH) and in that the nozzle (4) and the turbulence-generating device (6) are designed such that the volume which is referred to as volume (V<sub>hydr.unit</sub>) of the hydraulic unit and which is supplied by an individual hydraulic unit (EH) has a discharge width =0.005 m<sup>3</sup> / m.

IPC 8 full level

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