

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 (Vhydr.unit) of the hydraulic unit and which is supplied by an individual hydraulic unit (EH) has a discharge width =0.005 m³ / m.

IPC 8 full level

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