

Title (en)

Apparatus for the treatment of textile webs

Title (de)

Vorrichtung zur Behandlung von textilen Warenbahnen

Title (fr)

Dispositif de traitement de bandes continues textiles

Publication

EP 1262726 A1 20021204 (DE)

Application

EP 02010491 A 20020508

Priority

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- DE 10125960 A 20010529

Abstract (en)

The assembly to dry wet fabric goods has a transport system to carry the spread material through a housing fitted with jets to blow a heated gas on to the fabric. A fan generates a recirculating gas flow. The gas temperature is raised by an indirect heating unit (6) with a cross counter-flow recuperator (60). The cross counter-flow recuperator, for the indirect heating unit in a fabric goods drying assembly, has a combustion chamber linked to the recuperator through a distributor (63). The unit has heat transfer components as flat tube bundles, with the combustion chamber between the bundles and parallel to them. The system also has additional guides to direct the recirculating gas flow at least twice across the line of the heat transfer bundles. The bundles form at least two heat exchanger zones (64a, 64b) for the gas flows. The second zone (64b) is hotter than the first zone (64a). The distributor also forms a heat exchange zone for the gas to flow through. The combustion zone is linked to an external burner at one end, and to the recuperator at the other end through the distributor. The exhaust gas collection point (65) is at the end of the combustion zone away from the burner, with a secondary gas channel link to the burner. The indirect gas heater has a further fan (67) to extract the exhaust gas from the recuperator by suction, and impel it selectively towards the combustion chamber and/or the exhaust gas outflow. A control (69) determines the exhaust gas volume flow to the combustion chamber and the outlet. The burner has a flame tube extending into the combustion chamber. The exhaust gas returned to the combustion chamber by the fan is in a ring-shaped flow around the flame tube. The exhaust gas outflow section has a fresh air heater (70), as an initial heating stage for the fresh air fed into the assembly. The tube bundles can be around the combustion chamber. The combustion chamber and the recuperator are on straight line, parallel to each other.

Abstract (de)

Die Erfindung betrifft eine Vorrichtung zur Behandlung von textilen Warenbahnen, enthaltend ein Gehäuse (2), Einrichtungen (3) zum Transport der Warenbahn im ausgebreiteten Zustand durch das Gehäuse, ein Düsensystem (4) zum Aufblasen von Behandlungsgas (12) auf die Warenbahn, wenigstens einen mit dem Düsensystem zusammenwirkenden Ventilator (5) zur Erzeugung eines zirkulierenden Behandlungsgasstromes sowie wenigstens eine Einrichtung (6) zum indirekten Erhitzen des Behandlungsgases. Die Einrichtung zum indirekten Erhitzen des Behandlungsgases weist ferner einen im Gehäuse angeordneten Kreuzgegenstrom-Rekuperator (60) auf. <IMAGE>

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IPC 8 full level

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Citation (applicant)

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