

Title (en)
Heat exchanger

Title (de)
Wärmetauscher

Title (fr)
Echangeur de chaleur

Publication
EP 0950760 B1 20020619 (DE)

Application
EP 98105915 A 19980401

Priority
EP 98105915 A 19980401

Abstract (en)
[origin: EP0950760A1] The heat exchanger, especially for a heated roller, is operated by steam with a feed channel (7) and a channel (8) to extract the condensation. When using a heating fluid, the condensation channel (8) is used for its outflow. The feed and outlet channels lead to a valve (9) so that, under pressure in the feed channel (7), the outflow channel (8) is blocked so that only condensation and/or slip steam is fed through the outlet (18) of the outflow channel (8). On pressure in the outflow channel (8), it opens into a build-up zone (14). The feed channel (7) is linked to the valve (9) through the heating circuit of the heat exchanger, and the outflow channel (8) leads directly to the valve (9). The valve is a non-return valve (9), with a valve body (15) expanding in a slight cone shape into a feed zone in the lifting direction. It has a pot shape, with a conical pot base towards the outflow channel (8). The valve body (15) is of a plastics material with a low specific gravity, and pref. $\leq 7.85 \text{ g/cm}^3$, and is resistant to corrosion. The feed zone material or its coating has the same thermal coefficient of expansion as the valve body (15). The feed zone has a limit stop (19) to define the stroke movement of the valve body (15). The dimensions of the moving parts of the valve allow their movement through the feed channel (7) for exchange and/or repair.

IPC 1-7
D21G 1/02; D21F 5/02; F26B 13/18

IPC 8 full level
D21F 5/02 (2006.01); **D21G 1/02** (2006.01); **F26B 13/18** (2006.01)

CPC (source: EP)
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Cited by
CN102419124A; DE102010044943A1; CN102400409A; CN102419126A; DE10239559A1; DE10239559B4; US7097605B2

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