

Title (en)

A heat exchanger and a method of manufacturing thereof

Title (de)

Wärmetauscher und Verfahren zu dessen Herstellung

Title (fr)

Echangeur de chaleur et sa méthode de fabrication

Publication

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Application

EP 04015096 A 20040628

Priority

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Abstract (en)

The invention relates to a heat exchanger (1) comprising a cooling core (2) consisting of plurality of parallel tubes and cooling fins, two manifolds (3) fluidly connected with opposite ends of each tube, and an inlet and outlet ports for a heat exchanging medium, and a method of manufacturing thereof. To preliminary assemble the heat exchanger, which allows one-shot furnace brazing of all components thereof, with no need to use auxiliary supporting elements, said method comprises the steps of (i) preliminary assembling on the manifold (3) at least one bracket (4) having a mounting plate (5); (ii) making at least one fitting block (7) having a slot (8) for the mounting plate (5) of the bracket (4) and a flow duct ended by an orifice (10) surrounded by annular groove (16) for a brazing agent (17), bordered at its outer side by securing ring (18); (iii) pushing the fitting block (7) in the mounting plate (5) of the bracket; (iv) placing at least one joint pipe (11) fluidly connected with the manifold (3), in the orifice (10) of the fitting block (7) to create an annular capillary gap; (v) placing the brazing agent (17) in the annular groove (16) and squeezing the securing ring (18) inwards, at least in few points; and (vi) one shot brazing of the heat exchanger components together.

IPC 1-7

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IPC 8 full level

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Cited by

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