

Title (en)

Tube element for laminated heat exchanger.

Title (de)

Rohrelement für einen Laminatwärmetauscher.

Title (fr)

Élément tubulaire pour un échangeur de chaleur à structure stratifiée.

Publication

EP 0650024 A1 19950426 (EN)

Application

EP 94307738 A 19941021

Priority

- JP 28763193 A 19931022
- JP 30095693 A 19931105
- JP 34538993 A 19931221

Abstract (en)

The bead width A, the bead spacing B of the beads formed in the tube element, the tube element thickness H and the formed plate thickness T are determined to fall within the range of $2.0\text{mm} \leq A \leq 3.0\text{mm}$; $3.5 \leq B \leq 6.3\text{mm}$; $1.9\text{mm} \leq H \leq 2.7\text{mm}$, and $0.25\text{mm} \leq T \leq 0.47\text{mm}$ respectively. By setting these ranges, it is possible to provide an ideal tube element(4) with which the passage resistance, heat exchanging efficiency, strength and the like are in the best possible balance. A plurality of bead rows (20) which run at a right angle to the direction in which the heat exchanging medium passage is formed are provided in the tube element (1) and the beads (20) may be provided in such a manner that they are located at different intervals in adjacent bead rows or so that the areas (21) where beads (20) are not provided are different among bead rows and these areas may form a continuum. With such a structure, the number of beads provided in the dead water regions is reduced and the passage resistance is reduced so that the flow of the heat exchanging medium is improved. <IMAGE>

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F28F 3/04; **F28D 1/03**

IPC 8 full level

F28D 1/03 (2006.01); **F28F 3/04** (2006.01)

CPC (source: EP)

F28D 1/0341 (2013.01); **F28F 3/044** (2013.01)

Citation (search report)

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