

Title (en)

Heat transfer tube with grooved inner surface.

Title (de)

Wärmetauscherrohr mit gerillter Innenfläche.

Title (fr)

Tube de transfert de chaleur à surface interne rayée.

Publication

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Application

EP 92109811 A 19920611

Priority

JP 16762591 A 19910611

Abstract (en)

The present invention provides a heat transfer tube with grooved inner surface (1) superior in heat transfer performance and more lightweight. The said heat transfer tube with grooved inner surface (1) has spiral grooves (2) on its inner surface (1) in which the helix angle (α) of grooves from the tube axis ranges from 16 to 22 DEG, the ratio (H_f/D_i) of the groove depth (H_f) to the inside diameter (D_i) of the tube ranges from 0.023 to 0.025, the wall thickness (T_f) between the groove bottom and the tube surface ranges from 0.25 to 0.35 mm, and in-tube fluid causes a phase change; wherein the ratio (W/H_f) of the groove bottom width (W) to the groove depth (H_f) on a cross section perpendicular to the axis is set to 1.22-1.27 and the apex angle (γ) of a ridge formed between grooves is set to 50-55 DEG at the cross section perpendicular to grooves. <IMAGE>

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IPC 8 full level

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CPC (source: EP)

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Citation (search report)

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