Microchannel heat exchanger

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The paper presents an original design of compact heat exchanger which uses principle of parallel agent flow through a variety of parallel slotted channels. Heat transfer element is a both-side finned tube made by deformational cutting method. Coolant flow is organized in hundreds gaps between external and internal fins on a half of length of a circle of a heat exchange element. Tests on various modes have shown heat exchanger capacity up to 7 kW with thermal heat transfer coefficient at 740 W/(m^2·K).

Keywords: *heat exchanger, deformational cutting, microchannel, finned tube.*

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