CFD STUDY OF A DOUBLE PIPE HELICAL HEAT EXCHANGER

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ABSTRACT

Numerical studies for a double-pipe helical heat exchanger are performed with the aid of a commercial computational fluid dynamics CFD package for the fluid flow and heat transfer characteristics.
The goal of this study is to evaluate a double-pipe helical heat exchanger for fluid-to-fluid flow. Simulations were performed using various flow rates (laminar regime) in the inner tube and in the annulus, as well as for parallel flow and counterflow heat exchangers.

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