

Investigation on Shell and Tube Heat Exchanger by Using CFD - A Literature Review

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Abstract: *In this study, the Shell and tube heat exchanger (STHE) was studied with variations in baffle types. Various baffle types and angles allow a wide range of possibilities. Baffles can be configured in a variety of ways to achieve better results at various phases of their use. Many additional improvements can be made to STHXs to improve performance. In order to optimize the design of STHE, material selection is critical. The distribution of temperature was produced using the Computational Fluid Dynamic (CFD) approach in the ANSYS FLUENT program due to the use of various materials. This publication compiles a list of successful changes that have left enough traces for future research.*

Keywords: Shell and tube heat exchanger, Baffle angle, Material, computational fluid dynamic (CFD), ANSYS FLUENT.

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