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Heat Exchanger Design with Supercritical Fluid

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Abstract: *Supercritical fluids are utilised to improve the thermal performance of various heat exchangers all over the world, and their use in power cycles in thermal power plants is also being studied. These fluids boost the ability of low-grade energies, such as heat energy, to be used more effectively. Before beginning the study, various fluids were considered. CO2 is being considered by a number of studies. To make brayton cycles apps perform better. Simulations were run with isobutane as the supercritical fluid in this investigation. The thermal performance of printed type heat exchanger channels in counter flow configurations was calculated. Isobutane was discovered to be a better option to* CO_2 *as a working fluid in heat exchangers.*

Keywords: Supercritical Fluid, Heat Exchangers, Isobutene, Heat Exchangers, etc.

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