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## THE BRIEF REVIEW ON THE VARIOUS THERMODYNAMIC CYCLES

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### ABSTRACT

The organic Rankine cycle and the super critical Rankine cycle for the conversion of low heat to electricity are discussed in this paper, as well as the collection of possible workflow parameters, the screening of 35 workflow fluids for two cycles, and an overview of fluid characteristics output on the loop. Thermodynamic and physical characteristics, durability, environmental consequences, protection and compatibility, supply and prices are all important considerations when choosing an operating liquid. The kinds of working fluids, the effect of latent heat, density, and actual heat, and the overheating efficiency are all covered in this article.. Superheating is needed for moist fluids in organic Rankine cycles. In the case of dry fluids, superheat may have a detrimental impact on cycle efficacy. Fluids with low critical temperatures and pressures are good candidates for the supercritical Rankine cycle.

**KEYWORDS:** Organic Rankine cycle, Rankine, Renewable energy source, Supercritical Rankine cycle.

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