

Comparative Study on application of SRC, ORC to the energy system and proper working fluid selection strategies

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The recovery of low-grade heat such as industrial waste heat, geothermal, solar-thermal, is becoming an area of increased interest due to increasing cost of energy. Using conventional methods to recover energy from this kind of low-grade heat is economically infeasible. However, integrating ORC or SRC to the energy system, such as power plants, could achieve using low grade energy to generate high grade energy(electric power). The choice of working fluids is of key importance for the performance of ORC and SRC. To maximize power generation and obtain economic feasibility, we should select proper working fluids within operation range of application process. This study is about comparative study on SRC, ORC and analyzes strategy of proper selection working fluids.