
Can a solar Cal storage system be integrated with a Brayton cycle?
This work deals with the integration of the solar CaL storage system with an unconventional supercritical CO 2 (s-CO 2) Brayton cycle. We analyze different s-CO 2 Brayton cycle layouts suitable for direct integrationwith the storage system.

What is a closed Brayton cycle?
On the other hand,the closed Brayton cycle does not discharge the working fluid to the environmentand,thus,allows designers to examine different working fluids. However,this cycle also needs additional systems to improve its energy efficiency due to the high temperature of the fluid at the turbine outlet.

How efficient is the solar Cal storage system?
The solar CaL storage system was integrated with the 320-MW intercooling s-CO 2 power plant. As shown in the previous section,the s-CO 2 Brayton cycle has an efficiency equal to 49.4%when it works at the condition summarized in Supplementary Table 6.

Can waste heat be used in a closed Brayton cycle?
The present research examined the use of waste heatin different industries for operating a hybrid closed Brayton cycle,ORC,and absorption chiller system. The temperature range used in this research covered all the heat sources and waste from 800 to 300 °C. In addition,HP and LP turbines were used to improve the system performance.

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