Errata sheet

Thermodynamic Cycles using Carbon Dioxide as Working Fluid

CO₂ transcritical power cycle study

Yang Chen

Page 24 footnote  Effectiveness\( (\varepsilon) = \frac{T_{c,o} - T_{c,i}}{T_{h,i} - T_{c,i}} \) should read:

\[
\text{Effectiveness}(\varepsilon) = \frac{T_{h,i} - T_{h,o}}{T_{h,i} - T_{c,i}}
\]

Page 45, text: “…, the proposed system can work from March to September and reaches…” Should read:

“…, the proposed system can work from March to September and reaches reach…”

Page 121, text: “…, about 20% of energy in the exhaust gas can be converted into useful work.” Should read:

“…, about 13% of energy in the exhaust gas can be converted into useful work.”

In attached paper 1

Page 1, text: “…, about 20% of energy in the exhaust gas can be converted into useful work…. and the efficiency is about 19%.” Should read:

“…, about 13% of energy in the exhaust gas can be converted into useful work. … and the cycle can achieve about 19% efficiency with 350 °C expansion inlet temperature.”

Page 6 (2046), text: “…and the temperature is 25 °C accordingly (see Fig. 5).” Should read:

“… and the temperature is 22 °C accordingly (see Fig. 5).”

Page 6 (2046), text: “… The efficiency is 0.19 and 0.31 after assuming 60% and 90% effectiveness …” Should read:

“… The efficiency is 0.10 and 0.13 after assuming 60% and 90% effectiveness …”
Page 9 (2049), text: “... is becomes 0.05 and 0.14 with 60% effectiveness and 90% effectiveness....”  Should read:

“... is becomes 0.05 and 0.09 with 60% effectiveness and 90% effectiveness....”

Page 12 (2051), figure 12.

![Basic cycle efficiencies comparison](image)

**Basic cycle efficiencies comparison**

Cycle number

Page 13 (2052), text: “Among all the cycles, cycle1 has the highest efficiency. Again, this demonstrates theoretically that cycle1 is more attractive than the others.”

The entire line is removed