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Experimental investigation of heat transfer of supercritical CO₂ cooled in helically coiled tubes based on exergy analysis

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1 **Hightlights:**

- 2 • Exergy analysis of heat transfer of supercritical CO₂ cooled in helically coiled
3 tubes is investigated through experiment.
- 4 • A suitable range of Re with better exergy utilization of certain diameter is found.
- 5 • The optimal Re is more sensitive with mass flux and diameter rather than heat
6 flux.
- 7 • A correlation of optimal Re for supercritical CO₂ in helically coiled tube is
8 proposed.

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