sCO2 Symposium

Feb. 24, 2022

The Development Status of KEPCO Oxy-combustion supercritical CO₂ GT

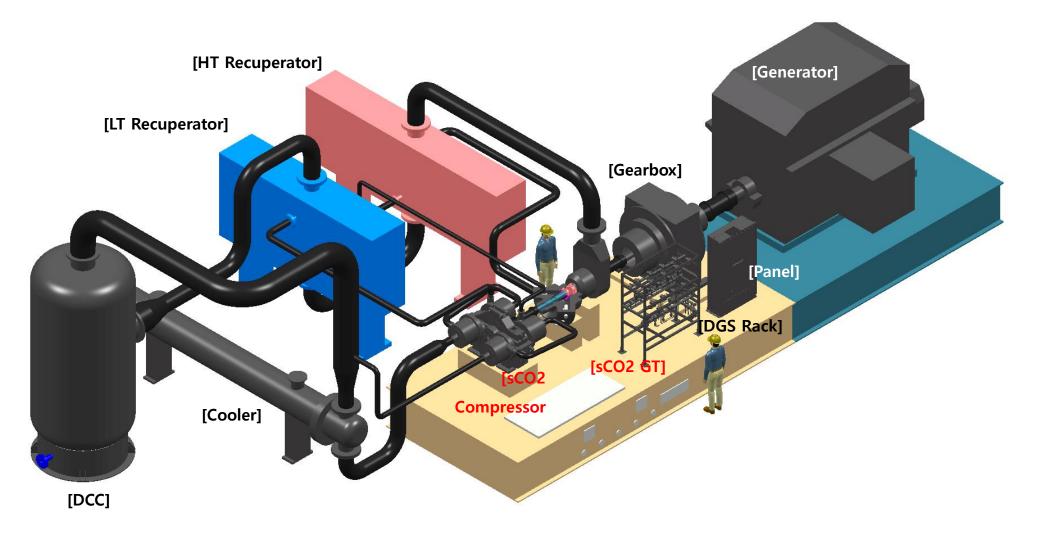




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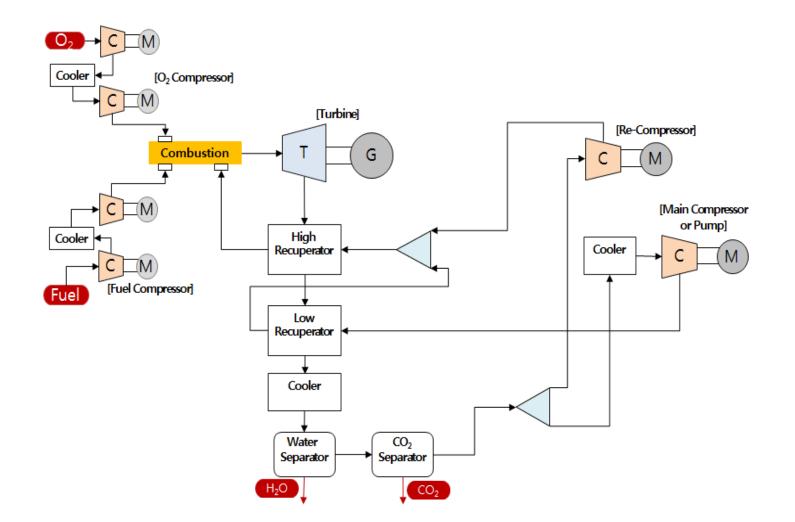
1 Oxy combustion GT Generation Plant(Concept)



* DCC : Direct Contact Cooler

2 Cycle Developed

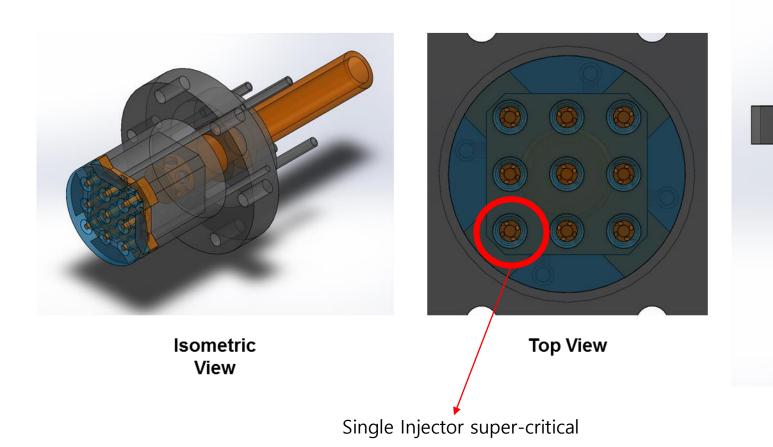
Oxy combustion GT Generation cycle basic design



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3 Combustor – Injector

□ Injector Model

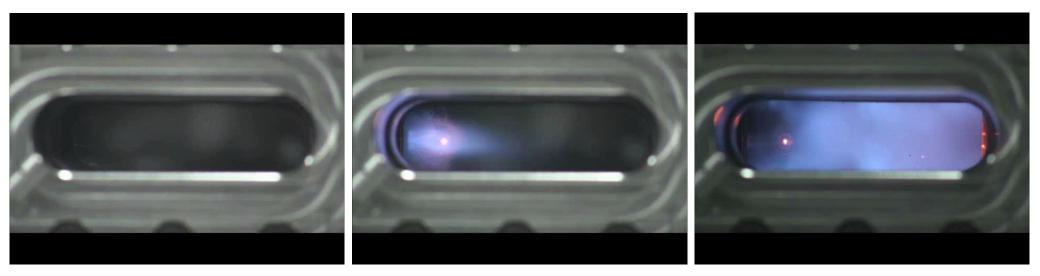


combustion test (next page)

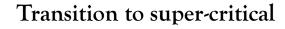
Front View

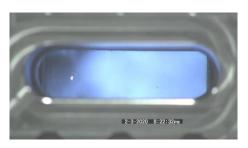
3 sCO₂ Injector – supercritical combustion test

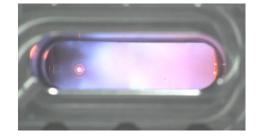
- Pilot burner ignition (60") Main
- Main burner ignition (60")
- Power increasing (41")



Under Super-critical









Super-critical

