

Press Release

August 22, 2016
Osaki CoolGen Corporation

Start of a Full-scale Commissioning in the Oxygen-Blown IGCC Demonstration Project

We are pleased to announce that we have now started a full-scale oxygen-blown IGCC system commissioning to perform combined power generation by a gas turbine with gasified and cleaned up coal as the fuel and a steam turbine that uses the exhaust heat of the gas turbine. This commissioning is aimed at an oxygen-blown IGCC demonstration we plan to carry out from March 2017 as the first step of the Osaki CoolGen Project* that we are implementing as a project subsidized by the New Energy and Industrial Technology Development Organization (NEDO).

We will check and adjust the operability and controllability of each facility while gradually increasing the power generation output up to the rated output. At the same time, we will verify the plant performance and safety. We then plan to switch to a demonstration in March 2017.

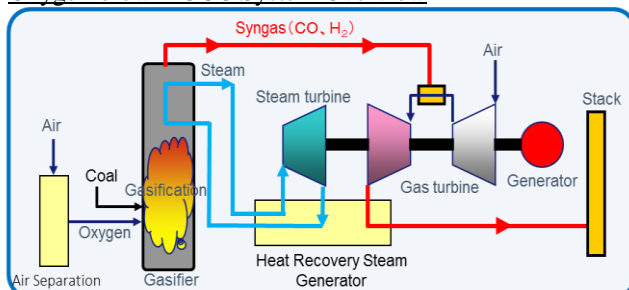
We will steadily proceed with this commissioning toward achieving the goals of the Osaki CoolGen Project with our top priorities being to ensure safety and protect the environment.

Power Plant Overview



- Name: Oxygen-blown IGCC Demonstration Power Plant
- Output: 166,000 kW
- Location: 6208-1 Nakano, Osakikamijima-cho, Toyota-gun, Hiroshima Prefecture, Japan (In Osaki Power Station, The Chugoku Electric Power Co., Inc.)
- Main Background: We began construction work on this project in March 2013. We started installing the equipment from June 2014. We received power in the plant in November 2015. Since then, we have been conducting stand-alone equipment commissioning and coal acceptance/transport/gasification tests.

Oxygen-blown IGCC System Overview



- The oxygen-blown IGCC system is a combined power generation system. This system uses oxygen to convert coal to combustible gas which is then burned in a gas turbine. Furthermore, heat is recovered from the gas turbine exhaust to generate steam and also turn the steam turbine.

* We aim to conduct a demonstration that combines the Integrated Coal Gasification Combined Cycle (IGCC) and CO₂ capture to achieve innovative low-carbon coal-fired thermal power generation. This will be comprised of an oxygen-blown IGCC demonstration (first stage), oxygen-blown IGCC with CO₂ capture demonstration (second stage) and IGFC with CO₂ capture demonstration (third stage).