

- HEAT RECOVERY
- BIOMASS
- PRIMARY FUELS
- SOLID RESIDUES
- LIQUID & GASEOUS RESIDUES



# CCP PLANT HÖCHST FRANKFURT AM MAIN, GERMANY



## CCP PLANT HÖCHST, FRANKFURT AM MAIN, GERMANY



<b>Number of Lines</b>	2
<b>Energy Source</b>	GT Exhaust Gas
<b>Type of Gas Turbine</b>	GE 6F.03
<b>GT-Exhaust Gas Flow</b>	221 kg/s
<b>GT-Exhaust Gas Temperature</b>	615 °C
<b>GT-Electrical Output</b>	88.7 MW
<b>Steam Capacity</b>	200 t/h
<b>Steam Temperature</b>	512 °C
<b>Steam Pressure</b>	123.2 bar
<b>Feedwater Temperature</b>	72 °C
<b>FG Temp. Boiler Outlet</b>	95 °C
<b>Fuel for Auxiliary Firing</b>	Natural Gas
<b>Type of Boiler</b>	Natural Circulation
<b>Year of Commissioning</b>	2022

### THE TASK

In the Höchst Industrial Park the supply infrastructure with process steam and electricity is being further developed. For that purpose, INFRASERV GmbH & Co. Höchst KG is constructing two new gas turbine plants, as well as two downstream waste heat steam generators. Standardkessel Baumgarte secured the order for the supply and erection of the two waste heat steam generators (K7 + K8) incl. the ancillary plants.

### THE SOLUTION

The boiler plant is of suspended vertical design and is arranged in natural circulation. The two heat recovery steam generators were designed as a 2-pressure boiler with an additional firing system arranged after two upstream gas turbines. The two new gas turbine plants have a capacity of 88 MW each. The heat recovery steam generators will each generate up to 200 t/h of high-pressure steam and – depending on the load case – up to 22 t/h of low-pressure steam.

The waste heat steam generators are additionally equipped with a firing system that can be operated both in GT waste heat operation as an additional firing system and in operation without a gas turbine with fresh air. Switchover between the two modes of operation takes place in the so-called “change on-the-fly” within a few seconds and, hence, ensures continuous steam production also during the changeover from one mode of operation to the other.

### SCOPE OF SUPPLY

- 2-Pressure Waste Heat Steam Generator with Flying-takeover
- Feed Water Tanks and Pumps
- Additional Firing System
- Main Stacks, Bypass System with Bypass Stacks
- Steelwork incl. Facades and Technical Building Equipment, Concrete Staircase
- Gas Pressure Control Stations, Compressed Air Station
- Fail-safe Control Technology, Electrical Engineering and Cabling

### ENGINEERING SERVICES

- Engineering
- Assembly
- Commissioning

