

HOFOR BIO4

BIOMASS-TO-ENERGY PLANT, COPENHAGEN (DK)

Key information:

- Fuel: Wood Chips
- Installation: New line in existing Plant
- Capacity: 415 MW_{th} + 150 MW_{el}
- Upstream Equipment: Fluidized Bed Boiler, SNCR
- Heat Recovery: 123 MW
- Commissioning: 2019-2020
- FGC process: SecoLAB™ / Flue Gas Condensation combined to Combustion Air Humidification

TECHNICAL HIGHLIGHTS

- 4 FABRIC FILTERS + 2 ID FANS + 2 CONDENSATION UNITS + 1 HUMIDIFIER
- STACK 150 M HIGH
- VERY EFFICIENT CONDENSATE WATER TREATMENT TO FEED WATER BOILER PRODUCTION
- BIGGEST CONDENSATION UNIT IN EUROPE

HOFOR BIO4

SECOLAB™ FLUE GAS CONDENSATION, COMBUSTION AIR HUMIDIFICATION

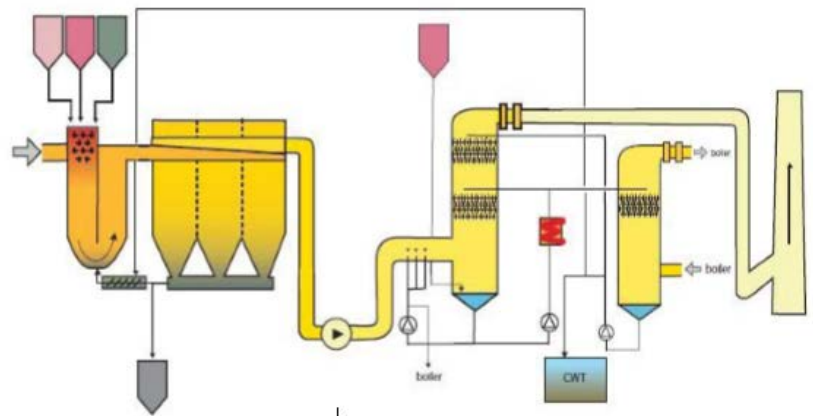
Hofor becomes the biggest Condensation Unit in Europe and provides the heat through District Heating to the vicinity of Copenhagen.

The process is divided in 2 steps:

- 1st step based on patented SecoLAB™ (dry system) for dust, acid gases and heavy metals removal.
- 2nd step is the Flue Gas Condensation, with a packed Scrubber/Condenser for Energy recovery.

In order to maximize the Energy Recovery, a Humidifier is installed, to increase the humidification of the combustion air and in the end to get a higher efficiency condensation.

Finally, a Condensate Water Treatment is installed, and allows production of make-up water for boiler.



SecoLAB® Process

Flue Gas Condensation

Volume flow	835'000 Nm ³ /h wet	
Inlet Temperature	120 to 170°C	
Pollutants (mg/Nm ³)	Before FGT	After FGT
Dust	3000	1
HCl	90	0,5
SO ₂	240	1,5
Hg	2	0,2
Heat Recovery	123 MW	

HOFOR has more than 1200 employees, supplying 1.1 million customers in the Copenhagen metropolitan area with :

- Drinking water
- District cooling
- District heating
- Town gas
- Disposal of wastewater

HOFOR Biomass Plant is one of the steps towards Copenhagen's goal of becoming the world's first carbon neutral capital.



To learn more about us visit our website www.lab.fr

