Weiss Combined Heat & Power

Weiss new completely Tar-Free 2-Stage Gasification System with efficiency over 30%+ (normal plants only have 10-22%)

The gasification of Biomass started a long time ago. The Weiss Tar-Free Gasification Plants have highest efficiency, over 30%.

CHP to CPH! Copenhagen chose a Weiss 2-stage Gasification plant for the Combined Heat & Power in Hillerød, Denmark

The Weiss CHP Plant in Copenhagen/Hillerød, Denmark.

The Green Weiss Chimneys

Look out for the Green Weiss Chimneys. Then you now it’s a Weiss plant you see - with all benefits, both economically and environmentally!

"Let me say one word to you: Biomass": The energy would come from Biomass in the future - that’s for sure! The efficiency of the Weiss Plants is now so high, that it beats all the other fuels!
Weiss 2-stage Gasification +30% System Combined Heat & Power

From Woodchips to clean Tar-Free Biogas for heat and power

How Weiss 2-stage Gasification System works:

1. Woodchips are loaded in the bunker from trucks.
2. Screw conveyors load the woodchips into the drying conveyor.
3. Drying conveyor dries nearly all water out of the woodchips.
4. Pyrolysis conveyor is dividing the woodchips in solids and gas.
5. In the gasification unit the TAR is removed.
6. The gas is cleaned for bigger parts in the cyclone.
7. In the bag filter the rest of the smaller parts is removed.
8. Ash is continuously conveyed away from the gasification unit.
9. Heat from heat-exchanger can be connected to district-heating.
10. Purified gas is led into the gas-generator, which produces electric-power.
11. Heat exchanger is connected to the gas-generator.
12. The electric-power is connected to the domestic power grid.

The new 2-stage Gasification System from Weiss have more than 30% efficiency from woodchips. This is more than 50% better than other Biomass systems!

The 2-stage Gasification Systems for Biomass is from start made in the following sizes/types:

- 250 KWe
- 500 KWe
- 1 MWe

Biomass to work with the 2-Stage Gasification:
Woodchips with 45% water content (~and still low emission!)

A WEISS plant is the safe, and economically the best, green choice:

PROOF OF TECHNOLOGIES

All the Weiss machinery and complete plants are tested and have been sold since 1995. More than 1000 references say it all.

GREEN AND BLUE

A Weiss plant is designed to bring maximum energy out of our valuable crops. Biomass from many different areas of the world can be burnt in an original Weiss plant.

CO2 NEUTRAL ENERGY

Using Biomass as an energy source, Weiss is holding the whole environment thanks to the CO2-neutral gasification.

Profitable Solutions

A Weiss plant is always carefully calculated and designed, and a feasibility study is made to illustrate the pay-back time on the investment.

Blue and Green

Weiss A/S has always been an Innovative Company and the 2-Stage Gasification System is another proof. Weiss A/S will be in front of use of Biomass for producing energy in many forms: Heat for District Heating, Steam for Industrial Use or Electric Power, CHP-systems.

The new 2-stage Gasification System is now installed as a full scale Plant in Hillerod, Copenhagen in Denmark.

The next plants is already in the pipeline and we know this will be a very interesting system for many customers Worldwide.
An Original Weiss Plant

Weiss is a green profile company, with long experience in environmental and efficiency optimized combustion, whether it is for industrial steam or for district heating or even electrical power production.

From start we make our feasibility study, then design process, and later our own Weiss Production Facility produces the different machinery, and finally our own staff installs the complete plant at your site.

When you choose a Weiss Energy Power Plant, you have for sure made the right decision!

Weiss DNA profile

Weiss A/S have since the start in 1922 specialized in tailor-made Turn-key Energy Power Plants to burn various kinds of Biomass: woodchips, bark, wood pellets, briquettes, grot, straw, grain, husk, sawdust, household waste and even municipal sludge.

Weiss A/S Energy Power Plants can almost handle all common Biomass and waste, and we still try to handle even more!

Weiss A/S has its own Development, Design and Construction Dept., Project Management and own production facilities both in Denmark and in Poland. This has been developed since the start and over the approx. 1000 references World Wide, all the know-how from all the Energy Power Plants gives a unique DNA.

Weiss A/S has today a very solid and stable growth in Scandinavia but also in Europe and are expanding rapidly World Wide.

Competences

- Designing, producing and delivering reliable Energy Power Plants.
- Own installation crew and inhouse System Controlling Development.
- After Sales Service Team takes good care of all installed plants.