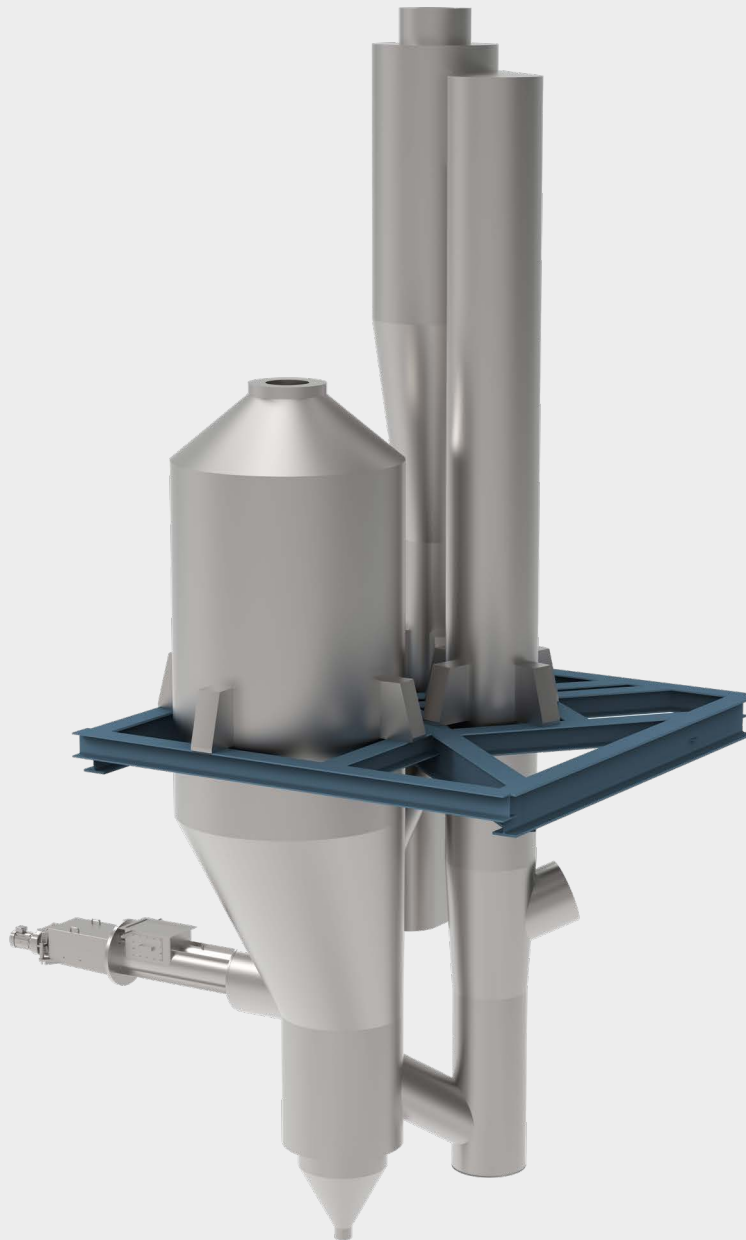


FACT SHEET

DFB | Dual Fluidized Bed Gasification



TECHNOLOGY

The DFB (Dual Fluidized Bed) process is a well proven gasification process developed in Austria. Seven plants with a fuel heat input between 4 and 32 MW have been built and successfully operated since 2001.

The produced synthesis gas can be used for

- direct thermal use in industrial processes
- production of hydrogen (H₂)
- synthesis of green fuels & waxes (Fischer Tropsch Synthesis)
- synthesis of methane (Methanation)

AUTOTHERMAL PROCESS

The DFB process uses a part of the fuel energy for driving the gasification. No supplementary heat supply is needed. The process is autothermal which means self-sustaining.

GASIFICATION WITH HIGH FUEL EFFICIENCY

The DFB gasifier converts >70% of the fuel energy to synthesis gas.

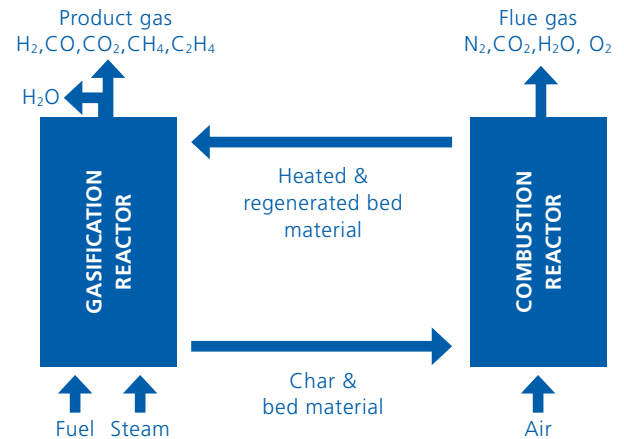
HIGH QUALITY SYNTHESIS GAS

The DFB process uses steam for the gasification and converts the fuel in the absence of oxygen and air. The synthesis gas is practically free from nitrogen which is a major prerequisite for the use in synthesis processes. Additionally, the synthesis gas is low in tar content.

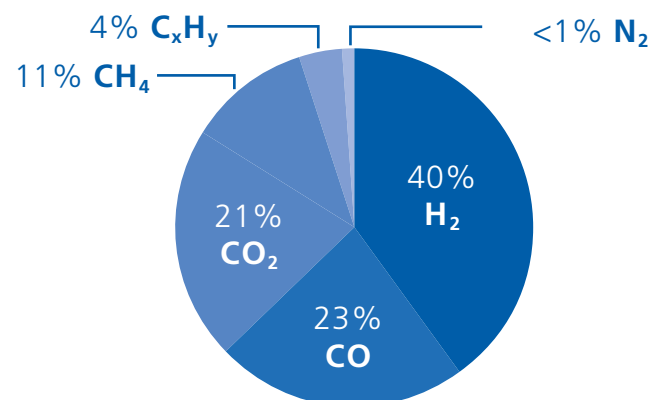
FUEL SPECTRUM

Biomass, biogenic wastes, mixtures of plastic waste & biomass

DFB gasification process



Typical syngas composition from biomass



MAJOR PROCESS STEPS

