

INSTALLATION PARTNER:



## COMMERCIAL INSTALLATION

### Namibia Breweries, Namibia K8-5000kW HW Kohlbach Biomass Boiler

#### PROJECT:

Established in 1920 the Namibia Breweries is one of the leading beverage manufacturing companies in South Africa. As part of an expansion of the beer production capacity, Namibia Breweries decided to install and use the thermal energy from a Kohlbach biomass furnace. The plant in Namibia was to be designed & manufactured as a K8-Kohlbach-Standard furnace, a counterflow furnace which would be internal fully lined with firebricks and equipped with a moving-stepped grate.

#### SOLUTION:

The thermal plant now supplies super-heated water with a temperature level between 140-160 °C at maximum 10 barg. The fuel-mix consists of chipped bush wood (very dry) and spent grain from the brewery process with a maximum mix-level of 20% (wet basis), is feasible with the K8 furnace. The maximum water content of the wooden biomass fuel amounts to less than 30% and the average water content amounts to approx. 10%, so rather dry fuel. The water content of the spent grain lies between 50-60%. The K8 furnace is able to burn off the other fuel smoothly. The system was adapted on the fuel infeed and the system software and was equipped with high power flue gas recirculation.

BOILER TYPE	K8-5000kW HW Kohlbach boiler
FUEL TYPE	Wood residue from landscape
CO <sub>2</sub> SAVINGS	> 8,000 tonnes / year

