

CLIMATE-FRIENDLY STEAM SUPPLY



GETEC

**Food industry:
Oil mill Brökelmann, Hamm (Northrhine-Westfalia)**

ENERGY FOR MORE.

Gefördert durch:



aufgrund eines Beschlusses
des Deutschen Bundestages





Regional fuel.



Biomass heating plant under construction.

THE CUSTOMER

Brökelmann + Co Oelmühle GmbH + Co, based in the city of Hamm, is known for the production and distribution of exquisite cooking oils. With its own brand, BRÖLIO, as well as private brands of the trade, the oil mill is a full-range supplier and delivers to all market segments at home and abroad.

THE CHALLENGE

Sustainability, energy efficiency and responsible use of raw materials are important to the Brökelmann oil mill. The goal was to develop a highly efficient steam supply that meets the requirements for a sustainable energy supply at the Hamm site and at the same time contributes to the success of the energy transition.

THE SOLUTION

Together, GETEC and Brökelmann took a completely open-minded approach to the technology, examined many alternatives and then decided on the most economical and best solution for the customer. In the future, the entire plant of the manufacturer of exquisite edible oils will be supplied with heat from a modern biomass heating plant.

In the project, the existing pulverized lignite boiler will be decommissioned and the future process steam supply for the oil mill will be converted to a biomass-fired steam boiler for generating process steam. The biomass heating plant has an output of 17 MW_{th} and around 0.5 MW_{el} and produces up to 23 tons of process steam per hour.

The biomass heating plant is fueled with scrap wood and fresh wood chips from the region. This will save around 90 percent of CO₂ in the supply of steam to the customer and generate almost climate-neutral steam and electricity for production. The project is funded by the Federal Ministry for Economic Affairs and Climate Protection.

SCOPE OF SUPPLY AND SERVICES

- Project development
- Approval
- Financing
- Engineering and plant construction
- Plant management
- Fuel purchasing

PLANT DATA

Supply with: Steam
Power

Energy source: Biomass (Waste wood A1-A2, forest residue)
natural gas, HEL (redundancy)

Components and installed capacity:

- saturated steam boiler 17 MW (25 bar)
- air-cooled grate firing
- flue gas cleaning with cyclone separation, dust removal and denitrification
- water treatment (ultrafiltration + reverse osmosis)
- backpressure steam turbine 500 kW

"As a future-oriented and sustainable company, Brökelmann, in cooperation with our long-standing partner GETEC, relies on an energy supply based on waste wood and regional landscaping material. The regional procurement of fuel, in combination with state-of-the-art technology, provides the Brökelmann oil mill with a process heat supply that optimally combines climate neutrality, competitiveness and the economic performance of a modern industrial company."

CHRISTIAN SCHELENZ

Managing director Brökelmann + Co Oelmühle GmbH + Co