

Client: Wandschneider + Gutjahr
Project: Refit of flue-gas cleaning system, BBR Böblingen
Services: Planning work



General

The association RBB (Zweckverband RBB) operates a waste incineration plant in Böblingen with two incineration lines that are practically identical. The flue gases from incineration are fed into a multi-stage flue gas cleaning system that also includes a gas scrubber. For the retrofit, the wet part of the flue gas cleaning system was to be omitted and replaced by a two-stage dry process. The scrubbers along with the ancillary equipment such as lime milk preparation, gypsum drainage, water treatment and HCl plant were to be decommissioned and partly dismantled or used elsewhere.

Core areas

The wet scrubber in the flue gas cleaning system was replaced by a two-stage dry scrubbing process using hydrated lime and sodium hydrogen carbonate as absorbents. To minimize the downtimes of the entire plant when working on the scrubbers, the refit was carried out in two steps. A provisional system was first installed, providing a single-stage dry scrubbing process using sodium hydrogen carbonate. The refit was then completed in the second step by providing a two-stage dry scrubbing

process and dismantling the components that had now become superfluous, such as the scrubber and the ancillary equipment.

On completion of the refit, the fly ash is now separated, and the acidic flue-gas components are pre-separated in the first fabric filter already in place using hydrated lime. The acidic corrosive gases are then separated using sodium bicarbonate in the second fabric filter that was newly installed. The conversion was implemented in 2018/19.

Scope of services provided by T&N

The following services were provided as a subcontract to w+g:

- Rating and specification of the components
- Preparation of tender documents for a European-wide tender, evaluation of the bids and assistance with contract awarding
- Preparation of approval documents, verification of notice of approval and incorporation of the requirements in the planning documents
- Support with detailed planning and implementation planning