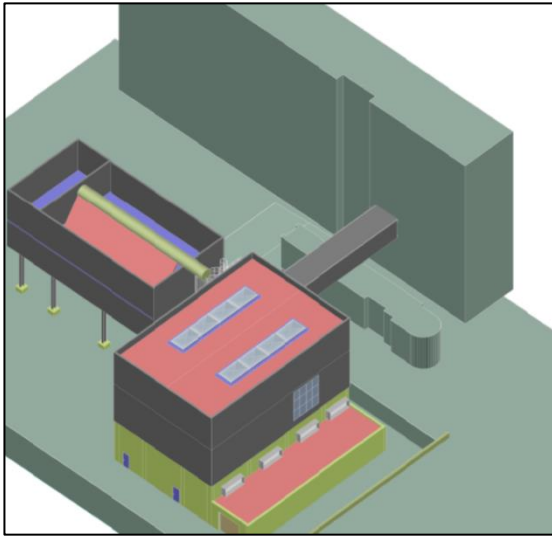


Client: Hager Entsorgungsbetrieb

Project: New steam turbine station

Services: Preliminary planning, draft planning, approval planning, tendering, contract awarding, site management



General

At the waste incineration plant MVA Hagen the steam generated in the refuse boilers is used for district heating. However, more steam is produced than is actually required by the district heating system. In order to better utilize the excess steam for generating electricity, a steam turbine with an electric power of approx. 3.8 MW is to be used. After it has been used in the turbine, the steam is condensed in an air-cooled condenser and returned to the existing boilers as feedwater.

The turbogenerator with all the ancillary equipment, including tanks and pumps were mounted in a new machine house, while the air-cooled condenser was to be installed outdoors.

Planning work

The scope of services provided by T&N included the preliminary, draft and approval planning. Moreover, T&N also carried out implementation planning.

Tendering and contract awarding took place in lots from the beginning of 2012 in a European-wide process.

Implementation

The construction of the new steam turbine and its commissioning, including the air-cooled condenser, the building and ancillary equipment was completed mid-2014.

Partners

In addition to Tiede- und Niemann acting as the general planner, the hanse-ing member companies Fiedler Beck Ingenieure AG were subcontracted for the civil part and Selck Planung Beratung Projektmanagement for the instrumentation and control engineering.

Customer

The services were performed for the Hager Umweltservice und Investitionsgesellschaft, Fuhrparkstraße 14 – 20, 58089 Hagen, Tel.: 023 31 35 443 868. The work was carried out over a period from 2011 to 2015.