# New waste recycling station in Gentofte

Construction of an innovative waste recycling station



One of Denmark's busiest waste recycling stations had to be temporarily moved during the construction of a new motorway loop north of Copenhagen.

When the construction work for the motorway loop was completed, the waste recycling station could be moved back to its original place. Now being one of Denmark's most modern and sustainable waste recycling station – placed inside the motorway loop.

Per Aarsleff A/S has constructed the new waste recycling station, and the work was carried out as a turnkey contract with Claus Bjarrum Arkitekter A/S and Rambøll A/S as consultants.

The installation and ventilation work was carried out by our subsidiaries Wicotec Kirkebjerg A/S and E. Klink A/S.

### Constructed as a roundabout

The final result of the project design was determined by the site's circular shape, surrounded by the new motorway loop. The waste recycling station is constructed as a roundabout with two access roads for light and heavy vehicles. Private customers are to use the inner ring, whereas industrial customers are to use the outer ring.

The waste collection and waste separation containers are lowered down two metres below ground level to allow easy access.

# Constructed in accordance with Energy Framework 2015

At the 11,000-square metre-large site, we have constructed five buildings covered with Corten steel as well as container boxes for 33 containers and garden waste.

Three of the buildings are constructed in accordance with Energy Framework 2015 which means that these buildings must be self-sufficient in energy. Originally, we had planned vertical geothermal drillings, but we were not allowed to drill through the clay layer due to deposited ash and cinders in the area. So instead, we established horisontal geothermal systems.





## Data

- 900 m<sup>3</sup> of concrete
- 1,200 m² of flagstone paving
- 8,000 m<sup>3</sup> of contaminated soil
- 4,000 m³ of gravel
- 2.000 m of pull pipes
- 1,035 lm of 250 × 250 piles
- 1,640 lm of 400 × 400 piles
- 8,560 m² semi-flexible asphalt
- 500 m of retaining wall made
- of L-shaped precast elements
- 487 m² of floor area
- + 435  $m^2$  of ground area
- 130 m of noise barrier.

Client Gentofte Municipality

**Contractor** Per Aarsleff A/S

Subcontractors Wicotec Kirkebjerg A/S E. Klink A/S Flexmodul A/S Dansk Halbyggeri A/S

**Type of contract** Turnkey contract

# Consultant

Claus Bjarrum Arkitekter A/S (today CORE Arkitekter) Rambøll A/S

Construction period June 2012-October 2013

**Contract value** DKK 41 million

### Contact

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