

# District heating work in framework agreement

Renovation and renewal work in Copenhagen



**AARSLEFF**

From March 2006 to March 2010, Aarsleff has carried out new district heating pipes and renewal of existing pipes in the centre of Copenhagen as well as in the districts of Vesterbro and Valby. The district heating system in Copenhagen consists partly of a concrete channel system with underground concrete structures and partly of pre-insulated copper and steel pipes. Heat is supplied by means of hot water and steam.

#### **From small laterals to main pipes**

Our contract comprised excavation, sheet piling, soil displacement and reinforcement. Mainly in highways and byways, but also through basements and across courtyards and gardens.

We also carried out concrete work for connection to and repair of existing concrete channels and for renovation of walls, decks and descents to concrete chambers.

Our work was carried out as one-off projects and varied from minor laterals to big main pipes, e.g. in the streets Bremerholmen and Gothersgade.

#### **Focus on planning and management**

Many of the district heating works were carried out in narrow, busy streets in the centre of Copenhagen. Therefore, to avoid accidents, we had major focus on management, planning and safety. For instance, one employee focused entirely

on carrying out traffic plans and updating safety procedures. In addition, many of the excavators applied were of a small type having a short rear end allowing easy operation in the narrow streets. Several excavators were also equipped with a rotor head thus providing an operation range of approx. 350 degrees. No accidents occurred during our work.



#### Data

- Removal of existing pavings
- Support of pipe trenches with sheet piles
- Pipe renewal of main pipelines and laterals by means of excavation
- Spot repair by means of excavation
- Demolition work for cancellation of old chambers
- Concrete work on existing pipelines and chambers

- Reinstatement of pavings/ surfaces
- Various traffic diversions inclusive of traffic plans.

#### Client

Copenhagen Energy

#### Type of contract

Framework agreement

#### Contractor

Aarsleff/Kamco

#### Cooperative partner

Kamco A/S

#### Consulting engineer

Copenhagen Energy

#### Construction period

March 2006-March 2010

#### Contract value

Approx. DKK 40 million per year

#### Contact

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