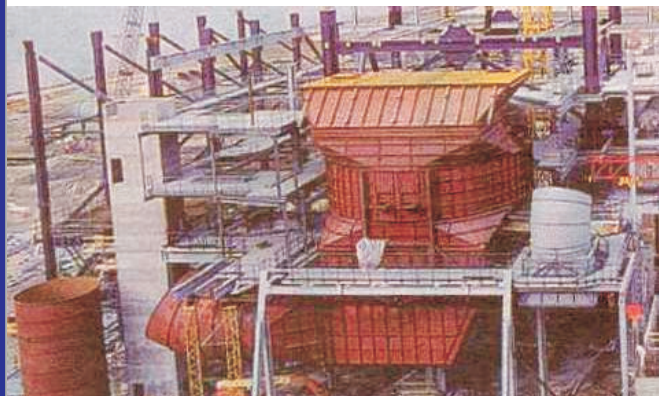


# Avedøre Power Station - Unit 2



Air Preheater for Ultra Super Critical Boiler



In Copenhagen, Dong Energy operates a modern power plant - Avedøre Unit 2. This plant includes an Ultra Super Critical (USC) boiler equipped with a Quad sector type Air Preheater both supplied by BWE.

The APH is installed in the air/flue gas duct system and is used to preheat the combustion air prior to entering the burners by exchanging heat with the hot flue gases.

The APH is of the rotary regenerative type with a matrix of heating elements transferring the heat by alternately being heated by the flue gases

and cooled by the air for the combustion.

In order to protect the cold end elements from corrosion due to sulfuric acid condensing on the cold surface, the elements are enamelled.

The APH is a quad-sector type with one sector for the flue gas, one sector for the primary air and the two remaining sectors for the secondary air.

The APH is provided with an automatic sensor sealing system for the radial seals, which ensures a very low leakage of air to flue gas side.

## World leader in steam power technology

Burmeister & Wain Energy A/S has specialized in the development and design of advanced steam boiler plants for utility and biomass fired power stations.

Furthermore, BWE designs a wide range of auxiliary power station equipment such as the BWE Low-NOx coal/oil/N-gas/biomass burners, Air Preheaters, Gas-Gas Heaters and Flue Gas Desulphurization.

BWE is part of the Italian STF S.p.A. Group.

### Performance Data:

#### Primary air side:

Flow, outlet 42 kg/s  
Temperature, inlet 50 °C  
Temperature, outlet 344 °C

#### Secondary air side:

Flow, outlet 245 kg/s  
Temperature, inlet 39 °C  
Temperature, outlet 344 °C

#### Flue gas side:

Flow, inlet 327 kg/s  
Temperature, inlet 363 °C  
Temperature, outlet 110 °C

### Dimensions:

Type: VIQD 33.5 / 2700

Rotor diameter 16.11 m  
Rotor height 3.05 m  
Rotor speed 0.8 min<sup>-1</sup>  
Hot end elements CU  
Height 1200 mm  
Intermediate elements DU  
Height 1000 mm  
Cold end elements DU+E  
Height 500 mm  
Heating surface 109,033 m<sup>2</sup>

Total weight 900 tons

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