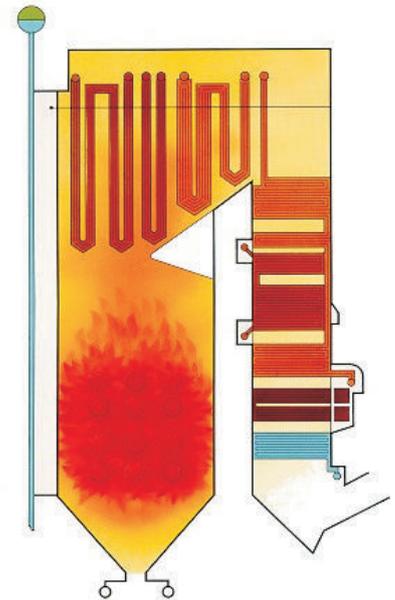


# Asnæs Power Station Unit 2



Rehabilitation with new drum boiler



Having been in operation for almost thirty years, a total modernization of Unit 2 at Asnæsværket (Kalundborg, Denmark) took place from 1989 to 1991 in order to increase the lifetime of the existing coal/oil-fired plant by 20 years.

The works included the dismantling of the existing boiler, which was more than 40 m high, and the erection of a new 2-pass drum type boiler in the boiler house.

When Unit 2 was reconnected with the supply network, the consumption of coal was reduced by 10-15%, thus reducing the impact on the environment.

The new firing system comprises 12 off BWE type 4AF Low-NO<sub>x</sub> burners arranged in a vertically displaced boxer-type firing from the furnace side walls, resulting in halving of NO<sub>x</sub> emissions.

The BWE drum type boiler is supplied with a reheater to obtain high efficiency for the entire unit. Each of the four coal mills supplies 3 burners. A separate tubular air heater for primary air is located in the 2<sup>nd</sup> pass of the boiler. With PA-temperatures of about 350 °C, it is possible to run the plant on relatively wet coals (20 % water content).

The firing system is designed to obtain 100 % boiler load with one of the four coal mills out of operation, and by oil firing, full load is achieved at 9 burners.

## 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-NO<sub>x</sub> coal/oil/N-gas/biomass burners, Air Preheaters and Gas-Gas Heaters.

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

## Boiler specification

BWE type 4AF Low-NO <sub>x</sub> burners		12 off
Fuel consumption coal/oil		54/31 t/h
Steam capacity	SH	440 t/h, 540 °C, 155 bar
	RH	410 t/h, 540 °C, 34 bar
Efficiency, coal		94.1 %

BURMEISTER & WAIN ENERGY A/S  
 Lundtoftøgårdsvej 93A  
 DK-2800 Kgs. Lyngby, Denmark  
 Tel. +45 39 45 20 00  
 Fax. +45 39 45 20 05  
 E-mail: info@bwe.dk  
 Http://www.bwe.dk