

# Tangjin Power Station



## 4 Gas-Gas Heaters for FGD Plants



In 2003, BWE was awarded a contract from STX Corporation, Korea for the supply of two rotating, regenerative GGHs to be installed at the Tangjin Thermal Power Plant units 5 & 6. A further contract for the supply of GGHs for units 7&8 was awarded in 2005.

STX Corporation in consortium with Hanwha Engineering & Construction have received contract from KEWESPO (Korea East-West Power Co.) for the

desulphurization plants at Tangjin Thermal Power Plant Units 5&6 and 7&8 each of 500 MW capacity.

The FGD process will be a wet limestone process incorporating a GGH (Gas-Gas Heater) to reheat the treated flue gas temperature to above 90°C.

Covered by a Technical Collaboration Agreement, BWE will supply the design and detail engineering together with deli-

very of some key components where STX will take care of all the main steel structure and auxiliary equipment, which will be supplied by local sub-suppliers.

The GGH is of the counter-flow rotary regenerative type with a matrix of heating elements which transfers the heat by alternately being heated by the untreated gas and cooled by the treated gas.

The GGHs are having a full leakage minimizing system which ensures very low leakage of untreated gas to the treated 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 and Gas-Gas Heaters.

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

Unit 5&6		Unit 7&8	
Type:	GVI 32.0 / 540	Type:	GVI 32.5 / 590
Rotor diameter	13.97 m	Rotor diameter	14.66 m
Rotor height	900 mm	Rotor height	900 mm
Rotor speed	1.0 min <sup>-1</sup>	Rotor speed	1.0 min <sup>-1</sup>
Heating elements	UNF+E	Heating elements	UNF+E
Height	540 mm	Height	590 mm
Heating surface	13,985 m <sup>2</sup>	Heating surface	16,827 m <sup>2</sup>
Untreated Flue Gas:		Untreated Flue Gas:	
Flow, inlet	398 Nm <sup>3</sup> /s	Flow, inlet	389 Nm <sup>3</sup> /s
Temperature, inlet	146 °C	Temperature, inlet	140 °C
Treated Flue Gas:		Treated Flue Gas:	
Flow, inlet	406 Nm <sup>3</sup> /s	Flow, inlet	402 Nm <sup>3</sup> /s
Temperature, outlet	91 °C	Temperature, outlet	90 °C

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