

NEW HEAT RECOVERY STEAM GENERATORS FOR AMBARLI, TURKEY

UNIS Power has supplied two Heat recovery steam generators for re-powering project of an obsolete oil-fired power plant located at Ambarli district at vicinity of Istanbul international airport, Turkey. The project has been executed for utility company EUAS together with EP International BV who served as an EPC contractor.

The HRSGs utilizing flue gases from 300 MW Siemens gas turbine challenged execution team with number of specific design features. The customer requested so called “dry run” concept when the steam generators can be operated in simple cycle mode as stack function only with fully drained water content and thus with uncooled heat surface bundles. Furthermore, steel structure of the boilers had to be accommodated for extremely narrow installation area when trailer manoeuvring of large boiler bundles underneath of the structure had to take place from tight gas turbine side as long as the other side was already fully occupied by existing turbine hall.

The HRSGs are of utility design with triple pressure reheat concept and feed water tank integrated into the LP drum.

The design has been prepared based on ASME norms with CE marking (Pressure European Directive).



Client

EP International BV

Year of Completion

2012

Boiler data

- 281 / 47 / 29 t/h
- 112 / 31 / 4 bar(a)
- 530 / 524 / 194 °C
- vertical
- triple pressure with reheat and integrated deaerator
- „dry run“ concept

UNIS Power scope of work

Design, manufacturing, site delivery including advisory services within erection and commissioning of two HRSGs including feed water system, chemical dosing equipment, field instrumentation etc.

Gas turbine

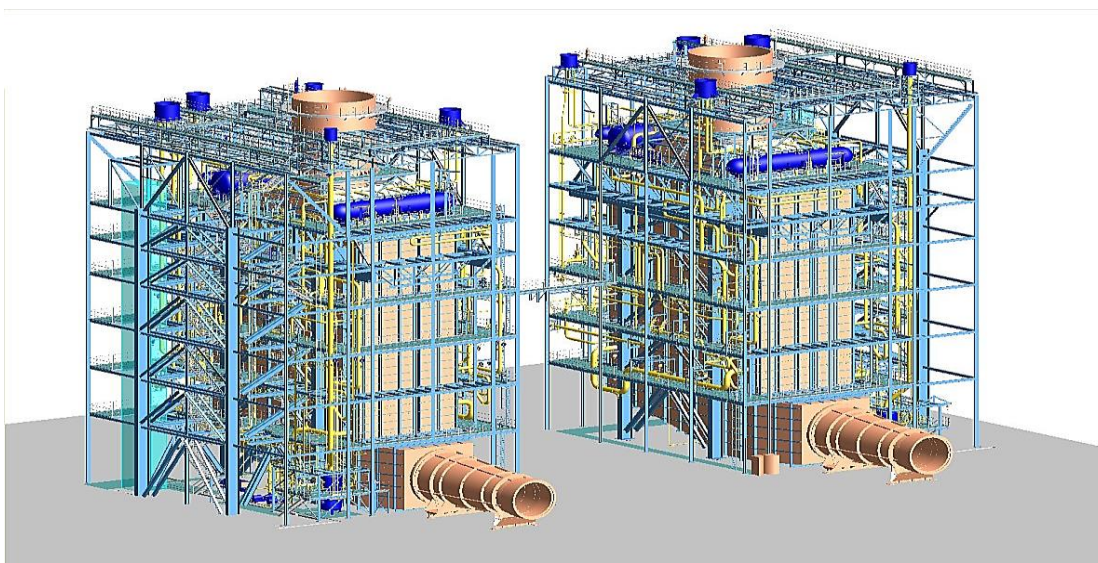
SGT5 – 4000F



Overall plant view



Commissioning phase



3D model of HRSG island