

REFERENCE PROJECT

Offshore Steam Boiler Plant

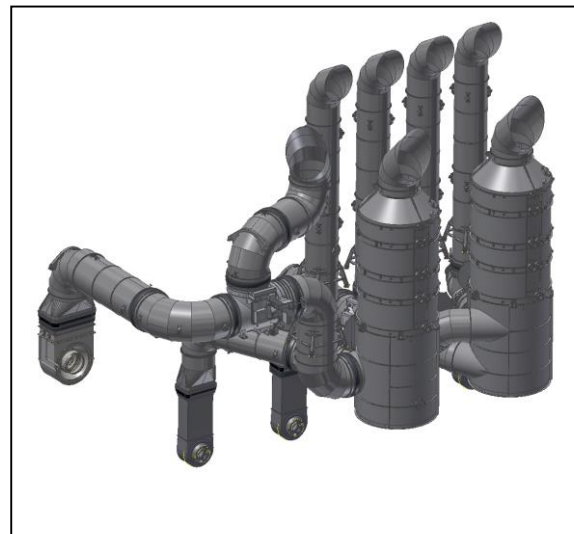
- Location: Eldfisk Platform , North Sea - Norway
- Project : Steam Boiler plant upgrade project for offshore
- Scope of supply: Design / Engineering / Fabrication and Installation supervision of complete boiler plant for Power Generation.

The Site:

ConocoPhillips is the operator of the Greater Ekofisk Area located in the southern part of the Norwegian sector 300 kilometres southwest of Stavanger. The Eldfisk 2/7 E platform is mainly a water injection platform, and is equipped with 6 Gas turbines. Four of those Gas turbines are drivers for water injection pumps, pressurizing the oil field. The platform is also equipped with a steam drive power generation system. The energy for the steam productions is extracted from the Gas turbine exhaust Gas. Over the years the operational reliability of the plant decreased. It became clear that the existing plant has to be renewed, and ConocoPhillips decided to renew and also increase the capacity of the steam generator plant.

Mjørud was awarded the contract for improving capacity and renewal of the Steam Boiler Plant. The scope of supply included:

- 5 of Gas Turbine exhaust gas ducting systems
- 5 of Exhaust Gas By-Pass stacks
- 5 of Multi louvre Exhaust gas valves
- Multiple steam boiler inlet plenums
- 2 of Steam Boiler units
- Balance of Plant for the entire system
- Installation supervision
- Commissioning and testing



Project execution:

The main challenge for this project was a very tight project timeline. The design /engineering phase had to be performed almost simultaneously with fabrication activities. In addition, limited space on-board of the platform called for untraditional plant lay –out. The highly experienced Mjørud team; with decades of involvement with the offshore industry; managed to meet the customer’s expectation in terms of delivery time, capacity increase and quality. Key figures of the new Steam Boiler plant is fabricated corrosion resistant Stainless Steel and is designed for 40 years offshore operation.

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