

A total concept for FPSOs and FSOs

A special business centre for equipment supply and service to offshore customers has been set up in Aalborg Industries to provide package solutions of boilers, heaters and inert gas systems.

General

Aalborg Industries has been a leading supplier of boilers, heat exchangers and inert gas systems for several decades.

For several years, Aalborg Industries has also been involved in the oil & gas industry. During this period quite a number of large jobs have been performed - new boilers with complete burners and control systems, boiler retrofits as well as boiler repairs and conversions.

Some of the systems have been installed in ordinary engine rooms based on normal marine standard. But most of them have been installed on deck in hazardous areas, exposed to harsh weather conditions.

Advanced boiler systems for the strictest requirements

Large capacities of steam or hot-water are required onboard an FPSO, FSO. The leading fuel is normally gas with diesel, crude or condensate as back-up fuels. The detailed specification of the steam or hot-water system varies, but one fact will always remain - the requirements are always very strict. Safe and environmentally friendly operation are key issues.

- Boilers for steam, hot-water or thermal oil, for gas, crude and diesel
- Waste heat recovery boilers
- Combustion systems

- Heat exchangers
- Inert gas systems (flue gas type)
- Boiler repairs, conversions and retrofits

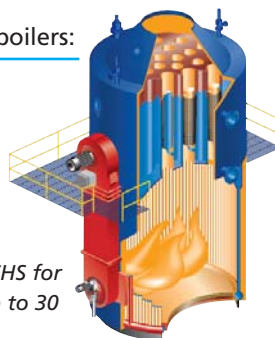
The wide range of products and services provides a strong platform for us to work from - an important advantage for all our clients.

Steam boilers from 1-120 t/h:



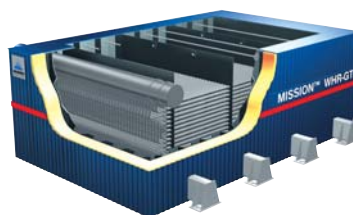
MISSION™ D-type boiler for capacities up to 120 t/h

Hot-water boilers:



SUNROD™ CHS for capacities up to 30 MW

Heat recovery boilers for installation after gas turbines for diesel engines:



MISSION™ WHR-GT for installation after gas turbines

Steam, hot-water or thermal oil
The boilers onboard an FPSO or FSO are not related to the operation of the vessel itself but to the petrochemical process onboard the vessel. For instance for heating the crude oil before separation, tank washing, pump drives or for power generation. Normally the heating medium for the process is steam, but depending on different factors also other heating media should be considered. Aalborg Industries can deliver systems for steam, hot-water and for thermal oil.

If the system design is not intended for pump drives or power production, many clients see hot-water as their first choice.

Aalborg Industries has delivered SUNROD™ CHS hot-water boilers for "Petrobras PXVIII", "Texaco Captain FSPO" and "Elf Amenam FSO".

Experts on boiler plants

Aalborg Industries has the knowledge to design the entire boiler plant. With all the various types of boilers in the programme, it is always possible to find an optimal solution for each case. Or combine various products into a more complete and integrated system, for instance an integrated boiler and inert gas system, a new boiler with a steam-to-steam generator for back-up or to repair and convert an existing boiler and supply a whole new boiler system for the topside.