

PARAT MCS

Combined Smoke Tube / Exhaust Gas Boiler



PARAT MCS: Combined Smoke Tube / Exhaust Gas Boiler

Technical data



- Compact, two in one solution
- Vertical or horizontal design
- Easy maintenance
- Smoke tube type
- Approved by DNV, LRS, BV, ABS, etc.
- Capacity 3.5 t/h exhaust gas, 5 t/h smoke tube boiler
- Available with ASME S-stamp
- Available with oil, gas or dual fire burner

The boiler is of vertical design with smoke tubes through the boiler and steam evaporation at the upper section. The boiler is constructed from drawings approved by all classification societies and delivered with equipment in accordance with class requirements. The combination of both an oil fired section and exhaust gas section in the same boiler leads to a simpler and more economical steam system on board. A two in one system is less expensive to install than two separate boilers. A combined system is easy to service and maintain, thus providing cost savings during the lifetime of the ship. Capacity of the exhaust gas section will depend on the exhaust gas quantity and temperature.

The principle of the boiler is based on a common water and steam space and separate sections for oil firing and exhaust gas. If several engines are utilized, the boiler can be delivered with several separate exhaust gas sections. The boiler comprises smoke tubes both for the oil fired and the exhaust gas section. From the top of the boiler there is good access to the tubes which make service and maintenance easy.

A main feature of the boiler is its automatic mode. When this mode is activated, the exhaust gas section becomes the main heating source. If the capacity is too small and the steam pressure drops, the oil burner automatically ensures correct pressure. The control system is designed to enable an unmanned engine room. The system is fully automatic and operates with electronic controllers and electric/pneumatic actuators. The panel is mounted on the boiler side. Operation of the boiler control panel is done from the local touch screen. Boiler PLC can be connected to the main control system by standard ethernet/profibus/modbus communication.