

MULTIMISER Hot Water Boiler



Installation equipped with a MULTIMISER boiler for combustion of wood chips and straw alike

Capacities: up to 4400 kW

The MULTIMISER is a well-dimensioned, all-welded fire-tube hot water boiler provided with open bottom. The design of the boiler combines proven technology and the stringent demands of the future in terms of economy, performance, operational liability and environmental issues.

The boilers - as standard available in 3-pass design with capacities up to 4400 kW heat output and in 5-pass design up to 3000 kW - are perfectly suited for the combustion of solid fuels - e.g. straw, wood chips and wood waste with moisture contents up to 55%.

On account of Danstoker's many years of experience within boiler design, construction and product development the MULTIMISER boiler has become a well-known and highly recognized product among professional suppliers of combustion equipment throughout Europe.

The concentric position, optimal dimensioning as well as the functional design of the furnace allows an efficient exploitation of the radiation heat. An important parameter for obtaining a complete and sootfree combustion is a low furnace load. This feature - combined with relatively

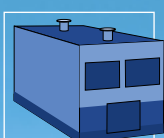
high flue gas velocities in the fire-tube sections - reduces the risk of fly ash accumulation, thereby resulting in high efficiencies and a low fuel consumption.

The boilers are thoroughly insulated on all surfaces, thereby minimizing the radiation loss and improving the environment in the boiler house.

As standard the boilers are provided with a platform on the boiler top to facilitate access for service and maintenance. Service conditions are further improved by the appropriate position of cleaning and slag doors - in fact the position of doors and inspection holes may be freely decided by the client so as to perfectly suit the specific requirements and conditions of the individual installation.

The MULTIMISER boilers are intended for erection on a foundation or directly on the combustion aggregate and have been designed to accommodate to a variety of combustion systems, such as stokers, step grates and chain grates.

On request the boilers may be prepared for fitting of an auxiliary oil or gas burner, for reasons of flexibility and emergency in periods of unstable supplies of the solid fuel normally used.



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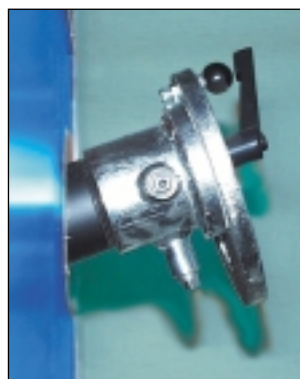
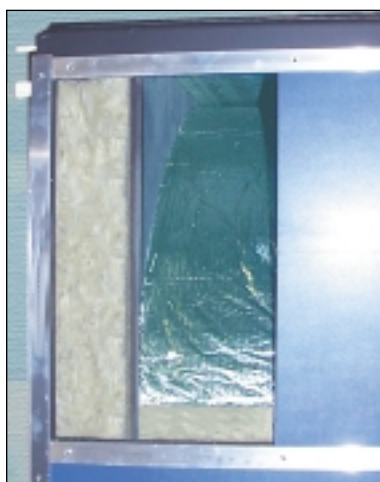
MULTIMISER - ease of operation

The tube sections are easily accessible for inspection and cleaning behind the well-insulated front doors.



The position of the rectangular slag door - which provides access to the combustion chamber - is optional (sides, front or rear end) in order to suit specific plant requirements. On request, the door may be provided with an observation hole and be combined with a swing burner refractory door, intended for fitting an auxiliary burner.

With a view to minimizing the heat loss and to enhancing the thermal efficiency, the boiler is fully insulated in mineral wool on all surfaces - which has the additional advantage of maintaining a pleasant ambient temperature in the boiler room.



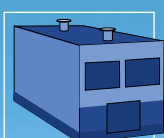
The observation hole provides a good view of the flame and the combustion aggregate.

Standard equipment:

- Insulated slag door (optional position)
- Observation hole (normal position rear end - however, position is optional)
- Service platform

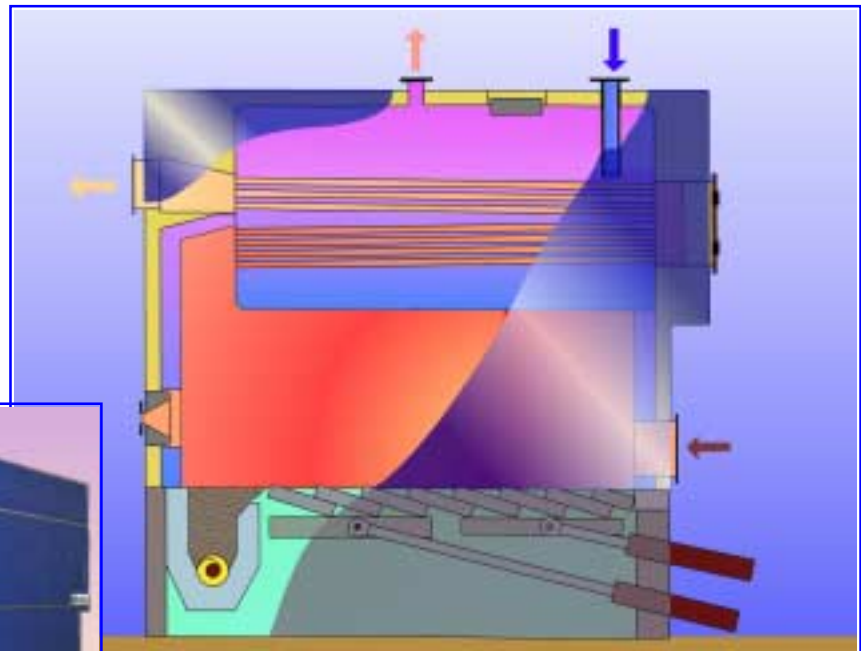
Additional equipment:

- Extra slag door(s)
- Extra observation hole(s)
- Swing refractory door, prepared for auxiliary oil/gas burner
- Auxiliary oil/gas burner
- Additional branch sockets
- Valves and fittings
- Shunt pump arrangement
- Ladder and railings
- Chockblasting cleaning system acc. to user's specifications
- Etc.



VHS

High pressure hot water boilers



Cross section of a VHS boiler

Capacities up to 6.300 kW

The VHS are robust boilers of proven technology, intended for the generation of high pressure hot water. The boiler are particularly suitable for the combustion of solid fuels, such as straw, wood waste and wood chips with moisture contents up to 55%.

VHS boilers are 3-pass, all-welded constructions with open bottom, with capacities up to 6,300 kW hot water at design pressures up to 16 baro.

On account of Danstoker's many years of experience within boiler design and product development, applying the most recent technological achievements, the VHS boilers have become well-known and highly recognized products among professional suppliers of combustion equipment throughout Europe.

The furnace is a stayed box-construction, and the low furnace load is an important feature with a view to achieving optimal combustion characteristics and minimized NO_x emissions.

The convection part with 2 fire-tube sections are integrated in the upper fire-licked drum, the large water capacity of which ensures a considerable heat accumulation. This again results in a constant and steady heat transmission - even under operating conditions with considerable fluctuations of the fuel input.

The boilers are thoroughly insulated on all surfaces, thereby minimizing the radiation loss - and the fuel consumption - and improving thermal efficiency and the working environment of the boiler operators.

The VHS boilers are erected directly on the firing equipment, typically combustion equipment such as stokers, step grates or chain grates.

As standard the boilers are provided with a platform on the boiler top to facilitate access for service and maintenance of valves, pumps, etc.



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