



Zantingh Flue gas condenser

Sustainable investment, maximum efficiency

Benefits of a Zantingh flue gas condenser

- Made of stainless steel for a **longer life cycle**.
- Large heated surface and aluminium fins for **maximum efficiency**.
- Can be adapted to a maximum **working pressure of 6 bar** on the water side.
- Can be modified to a minimal water flow.
- **Self-cleaning** and maintenance-free because of the vertical position of the heat exchanger.
- Very **compact** and, therefore, easy to install anywhere.
- Supplied with all accessories and temperature and pressure safeties.
- **Easy installation** using the supplied adjustable legs.



Zantingh
reliability

You can count on our expertise

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Maximum efficiency

The flue loss is limited to the bare minimum when a Zantingh flue gas condenser is placed between your boiler and the chimney. The available felt heat and even the latent heat that is released during condensation will be exchanged with return water temperatures lower than 58 °C. This ensures maximum efficiency!

The Zantingh flue gas condenser can be placed behind gas-fired over-pressure boilers with a maximum capacity of approx. 20 MW and a maximum flue gas temperature of 240 °C.

On the water side, the condenser can be connected to a closed system with a maximum water temperature of 90 °C and a maximum operating pressure of 3 bar. We can also make the condenser suitable for an operating pressure of 6 bar as an option. A minimum quantity of water must always circulate through the exchanger to ensure there is no damage as a result of overheating. We can modify the baffles in such a way that both small and large water flows are possible, based on your preferences. The supply and return connections have aluminium PN10 push-on flanges.

Compact model

The Zantingh flue gas condenser has an integrated and manually operated flue gas valve and bypass channel as standard, which means that the heat exchanger can be closed during emergencies. You can then, for example, burn oil temporarily and the boiler can continue being operational when the water flow over the exchange block is too low. We can provide optional motor operation for the valve section if required.

The heat exchanger has been fitted vertically in the flue gas flow and is, therefore, flushed continuously by condensation. This means that a Zantingh flue gas condenser is **self-cleaning** and its efficiency is optimal during the complete life cycle. Installation behind the boiler is easy using the supporting legs that are also supplied as standard and, because of the compact structure, the condenser does not take up too much space.

The flue gas inlet has been equipped with a square flange connection. The flue gas outlet has a round connection for the easy assembly of a single-wall (aluminium) chimney. An inspection hatch has been fitted for optimal accessibility. The heat exchanger of a Zantingh flue gas condenser has a low flue gas side resistance.



High-quality materials

Zantingh only uses high-quality materials. The heat exchanger is fitted in an enclosure made of stainless steel. The exchanger itself has been constructed from stainless steel tubes, which have been welded to a tube plate. The tube plate is also made of stainless steel and is fitted with a stainless steel cover with baffles and water connections.

The tubes are equipped with aluminium fins. The structure allows the heat of the flue gas to be optimally exchanged with the counterflowing water. The entire system has the best possible resistance to aggressive condensation thereby ensuring a **long life cycle**.

Large heated surface:

The use of a relatively large number of fin tubes ensures that a Zantingh flue gas condenser has a large heated surface which guarantees **high efficiency**, which is the essence of a heat exchanger. Zantingh has been able to find an optimum configuration where the large HA and the required investment are perfectly balanced. In other words: purchasing a Zantingh condenser literally means "more value for money".

Complete delivery

A Zantingh flue gas condenser is, of course, equipped with all required accessories as standard:

- Inlet and outlet thermometers for both the flue gas side and the water side.
- Maximum temperature safety thermostat.
- Maximum pressure safety on the flue gas side.
- Overflow valve for overpressure protection on the water side.
- Limit switch on the flue gas valve for signalling the valve position.
- All required de-aerators and drains.

