

**Power made-to-measure:  
thermal oil heaters.**

- for outputs from 50 kW to over 20 MW
- two flexible product lines for individual requirements
- suitable for a variety of fuels.

**NESS**

## Convincing technology and practical equipment.

*For dust-like fuels, a particularly spacious, cooled combustion chamber is used.*

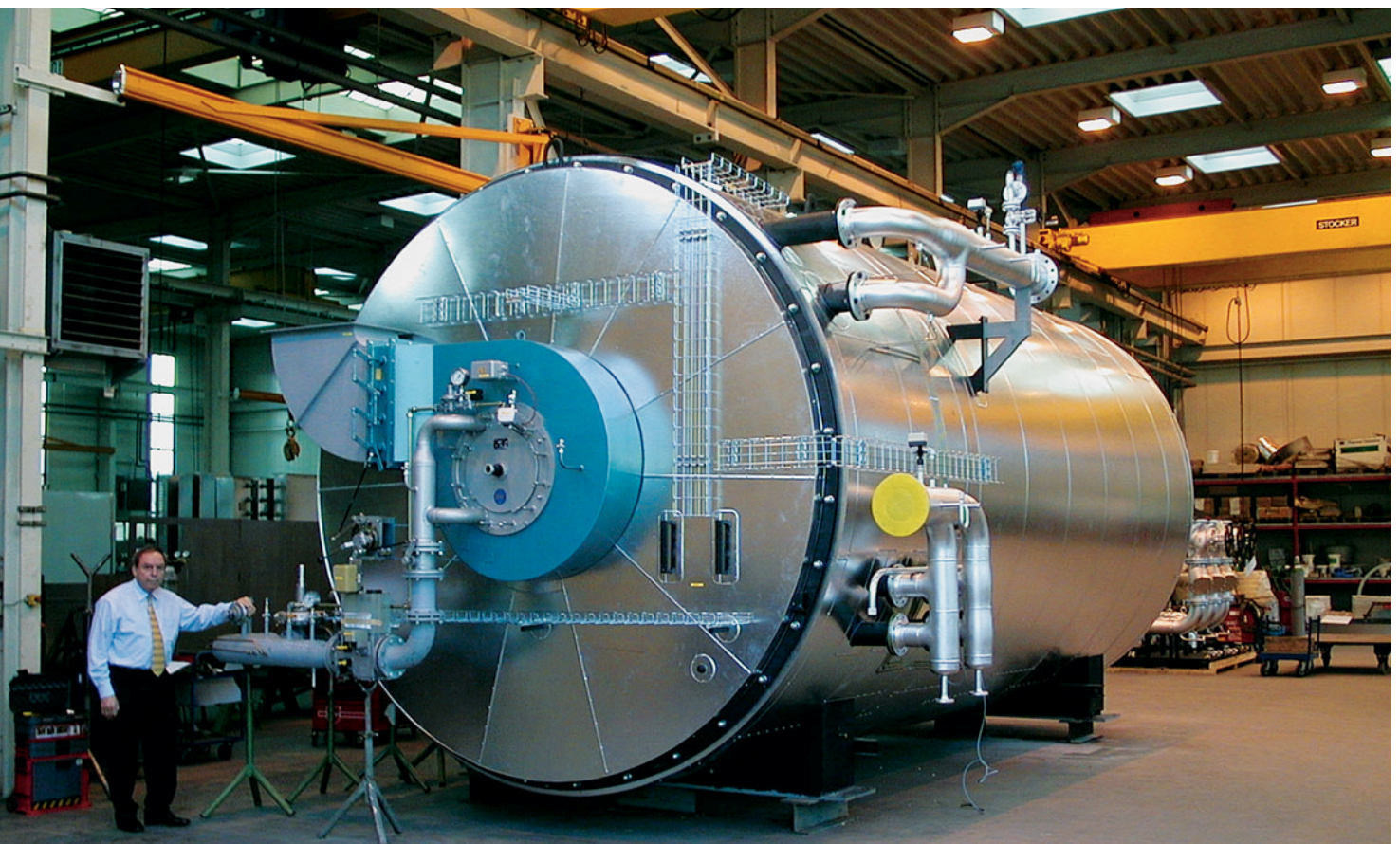


All products from NESS are thermodynamically optimised and are characterised by high efficiency and excellent heat transfer to the thermal oil. The combustion chambers are generously dimensioned and sufficiently long. The flame can thus burn fully, and the emission values remain very low for all fuel types.

The use of high-quality fire-resistant materials with long service life and low heat capacity avoids

the need for an emergency power supply. The permissible supply temperature may be increased from 320°C to up to 400°C, depending on the application and thermal oil used. Particularly noteworthy is the special design of the coil inside the NESS heater, ensuring thermal expansion with low stress.

*NESS Wärmotechnik only uses high-quality materials, fittings, instruments and control systems. Maximum system efficiency is achieved through optimally coordinated components. The production of Model WE 10000 (12,000 kW) with combustion air pre-heater is shown in the NESS factory.*





For smaller units, the electrical switchgears manufactured by us are mounted directly (type WE 80 shown (93 kW)). Larger heaters are equipped with a separate switch cabinet.

### The WE/WED product line from NESS.

Unsurpassed efficiency. Three concentric coils and a large heat exchanger surface area ensure optimum heat transfer with a compact, horizontal design.

The well-planned design enables good access for maintenance and cleaning via detachable rear and front heater panels. Compressed air lances enable cleaning even during operation with closed rear panel. The heaters of this product line are ideally suited for operation with heavy fuel oil containing ash or with solid fuels.

### The WEH/WEV product line from NESS.

The WEH/WEV product line from NESS achieves high efficiency through the use of two concentric coils and three passes of the flue gases. For requirement profiles with fuels containing little contamination, product line WEH/WEV is thus an economic alternative.

Cleaning and maintenance can be carried out through the detachable heater front panel. Another advantage results from the flexible mounting options offered by the horizontal or vertical design.



*Model WEV 3000 (3500 kW) with top-mounted burner. An optional, cost-effective air pre-heater with for increasing the system efficiency can be seen on the right.*

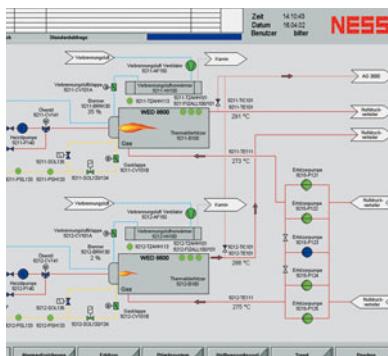
#### Fuels and furnace types

- extra light fuel oil (diesel), heavy fuel oil
- natural gas and LPG, process gases
- wood sander dust
- wood particles, wood chips
- brown coal, hard coal
- combination of different fuels
- special furnaces for special fuels

## High quality throughout – the NESS accessory range.

We round off the excellent technology of our thermal oil heaters with an optimally balanced service and range of accessories.

- pump stations with single or multiple pumps (operation and standby)
- complete thermal oil systems with expansion vessels, drain tanks, headers, etc.
- secondary heating and cooling systems
- flue gas cleaning equipment
- automatic complete system control with sequential heater switching and automatic peak load/standby control
- indirectly heated steam and hot water generator.



### NESS meets the international quality standards.

Ness is certified according to ISO 9001.

The heaters can be manufactured and supplied according to the EU pressure equipment directive, ASME, "Import of Boiler and Pressure Vessel of Peoples Republic of China" and other significant standards.

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# NESS