



Electric boiler for steam production



The electric boiler is a well-established heating system solution. A key advantage of electrically produced energy is its ability to regulate the electrical grid load when needed. In grid fault situations, the electric boiler can be switched on or off by Fingrid when participating in the frequency regulation market. Participation in the reserve market provides capacity compensation from Fingrid.

In the resistance boiler method, steam is produced by heating the boiler water with metallic resistance elements that convert electrical energy into thermal energy. The boiler output can be adjusted by switching resistance elements on and off, as well as by regulating the output of individual elements.

The electric boiler is an excellent choice as a primary or secondary steam source, enabling optimization of heating costs by utilizing spot electricity prices and Fingrid reserve market compensation.

- Over 30 years of experience in electric resistance-heated pressure equipment and boiler systems
- Standard design values: 16 bar(g), 204 °C; also available with higher or lower design values
- Design and manufacturing in accordance with PED 2014/68/EU
- Suitable for industrial use; can be connected directly to the steam network
- Manhole included as standard
- Integrated steam dryer as standard — steam quality meets the most demanding applications
- Standard power range: 500–5,000 kW; available up to 80,000 kW on request
- Compact design — no chimney required, significantly easier environmental permitting

Steam boiler	500kW	1000kW	1500kW	2000kW	2500kW	3000kW	3500kW	4000kW	4500kW	5000kW
Length/mm	3310	3310	3310	3310	4600	4600	5750	5750	7130	7130
Width/mm	1565	1565	1915	1915	1915	1915	1915	1915	1915	1915
Height/mm	1560	1560	1560	1560	1560	1560	1560	1560	1560	1560
Weight empty/kg	2550	2670	2850	2980	3910	4140	4310	4630	5880	6320
Weight t full/kg	4430	4550	4630	4860	6690	6920	7810	8130	10260	10690

**Indicative dimensions. Dimensions do not include valves or instruments.*

**Dimensions do not include the control or electrical cabinet, which can be placed separately.*