



Kelford Engineering
Services Limited

ELECTRIC STEAM BOILERS

Buy New, Hire,
Parts & Service





EECA
TE TARI TIAKI PŪNGAO
ENERGY EFFICIENCY & CONSERVATION AUTHORITY

LOW EMISSION ELECTRIC STEAM BOILERS

With an ever-increasing focus on global warming, conservation and sustainability, it is more essential than ever that we all do our part to keep our water clear and our skies blue. That's why Kelford Engineering includes a commitment to enhance the quality of life in all areas we serve.

Kelford Engineering electric boiler technology meets the New Zealand Government decarbonisation targets. We can assist you to switch from boilers run on coal and gas to clean energy steam boilers.

With our boilers, we want to eliminate energy wastage and meet your organisation's sustainability goals. We work with our clients to deliver smart and innovative boiler technology.

- Highly efficient
- Increased productivity
- Low maintenance
- Reduced emissions



Three Boys Brewery are one of New Zealand's most awarded craft brewers and has been making great, independent craft beer in Christchurch since 2004.

We have been dealing with Kelford Engineering for years. They are our boiler experts, and we rely on them for fast and cost-effective support both for maintenance and emergency repairs.

In recent years we have installed a brand-new electrode stem boiler designed and manufactured by Kelford Engineering. It's fast, efficient, and reliable. It also means that we can keep our carbon emissions to a minimum, keeping our customers and the planet happy!

With no boiler there's no beer – Kelford Engineering keep the beer flowing for us and our customers! I cannot recommend their boilers and service enough.

Cheers to Kelford's expertise and their great team!

RALPH BUNGARD · OWNER OF



Kelford Electric Steam Boilers for all your pressure steam needs

Our 'new design' Kelford Electric Steam Boilers are self-contained with integrated feed-water and blow-down tanks. They don't generally require any additional ancillary equipment as with other electric steam boilers.

Kelford Electric Steam Boilers are very efficient. They are compact and require no venting. Steam is discharged directly from the electric boiler for a quick, efficient operation. Either model can be modified to fit with purpose when necessary and yet either model will fit with most requirements.

If Kelfords range does not meet requirements, we can supply Norwegian made 600KW to 60 MW electric steam boilers.

KELFORD'S RANGE

	75KW	150KW	300KW	600KW
Model:	KESB 75	KESB 150	KESB 300	KESB 600
Nominal Capacity:	≤75KW	≤150KW	≤300KW	≤600KW
Steam Output:	[@75KW] 100KgHr ⁻¹ @ 10 Bar G / 184°C	[@150KW] 210KgHr ⁻¹ @ 10 Bar G / 184°C	[@300KW] 420KgHr ⁻¹ @ 10 Bar G / 184°C	[@600KW] 840KgHr ⁻¹ @ 10 Bar G / 184°C
Design Pressure:	12 Bar G.	12 Bar G.	12 Bar G.	12 Bar G.
Design Code:	PD500: 2021 CAT 3	PD500: 2021 CAT 3	PD500: 2021 CAT 3	PD500: 2021 CAT 3
Electrical Supply:	440V 3-Phase + Neutral + Earth.	440V 3-Phase + Neutral + Earth.	440V 3-Phase + Neutral + Earth.	440V 3-Phase + Neutral + Earth.
Current Required:	130A per phase for 75KW output.	220A per phase for 150KW output.	520A per phase for 300KW output.	1040A per phase for 600KW output
Boiler Control:	PLC Based.	PLC Based.	PLC Based.	PLC Based.

Benefits of a Kelford Steam Boiler:

- ✔ All you need is a water supply, power supply and a drain
- ✔ Self-contained, clean operation
- ✔ Easy to operate
- ✔ Simple and robust - stainless steel frame and tank
- ✔ Safety and seismic compliant with NZ regulations
- ✔ Inherently safe design - no water - no current draw
- ✔ All panels are aluminium and frames stainless steel
- ✔ Built to the highest safety standards
- ✔ Perfect for clean environments such as laboratories and food manufacturing

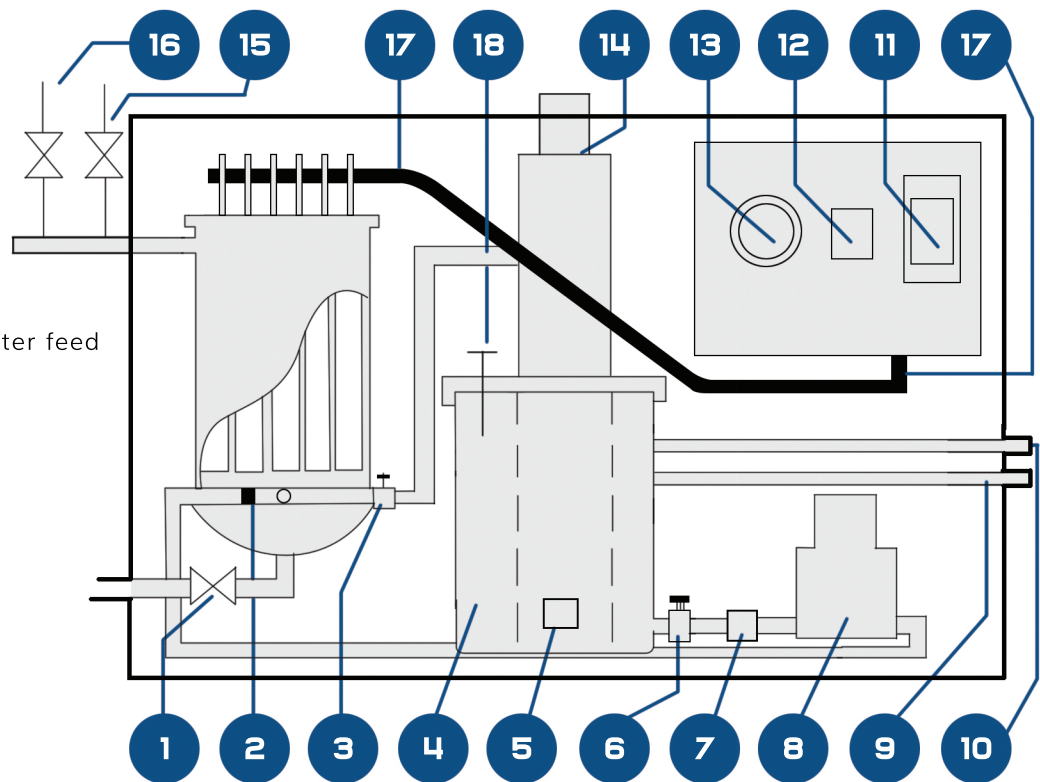
BOILER HIRE SERVICE

Hire boilers to keep your business going

We have a solution for your specific situation with boilers in a variety of sizes, capacities, and pressures. Our rental boilers fire on Diesel. We can provide turnkey installation... start-up services, operator training, and support.

CONSTRUCTION DETAILS

- 1 Blowdown valve
- 2 Check valve
- 3 Solenoid valve discharge
- 4 Feedwater Tank
- 5 Feedtank Electric Heating
- 6 Feed water isolating valve
- 7 Feed water strainer
- 8 Multi Stage Feedpump
- 9 Mains pressure make up water feed
- 10 Condensate return
- 11 HMI Screen
- 12 Main Circuit Breaker
- 13 Pressure gauge
- 14 Blowdown Tank, Vent & Overflow from Feedtank
- 15 Safety Valve
- 16 Main stop valve
- 17 Heavy Duty Wiring
- 18 Feed Tank Level Control



BOILER PARTS AND REPAIRS

The Kelford Engineering team not only supply and repair Boilers, they also have a wide range of parts both new and reconditioned.

600KW-60 MW

HIGH VOLTAGE ELECTRODE BOILER

- High-Pressure Steam up to 85 Bar G
- Zero-Load
- Combined Hot Water & Steam in one unit

Kelford Engineering are the only Authorised Distributor of Parat boiler technology in New Zealand.

PARAT High-Pressure Boiler can contribute in reduction of NOx and CO2 emissions for large industrial companies, by replacing fossil fuel-fired boilers with clean Electrical steam production of up to 85 Bar G design pressure. This will be a major game changer to decarbonise high-capacity steam production.

The Electrode Boiler is delivered both in hot water and/or steam versions. Renewable energy can be used in steam grids and district heating networks. The Electrode Boiler is also a valuable backup boiler.



THE SUPERIOR SOLUTION FOR

POWER TO HEAT

JUST GOT BETTER

LET'S TALK BOILERS

For more information about purchasing or hiring a boiler, contact:

Service Calls 03 381 4499
After Hours 027 443 2116 / 027 433 5199

enquiries@kelfordengineering.co.nz
www.kelfordengineering.co.nz

Business co-funding and finance options

The businesses that use fossil fuels as the source of energy in their industrial processes may be eligible to receive co-investment from the \$69m Government Investment in Decarbonising Industry (GIDI) Fund to install a low carbon emission technology.

For more information visit -

<https://www.eeca.govt.nz/co-funding/industry-decarbonisation/about-the-government-investment-in-decarbonising-industry-fund/>

Loans and lease options are available for green technology projects.

Contact us and we will connect you with expert advice to assist with the available funding options.



Kelford Engineering is a Telarc SAI Registered Supplier

We obtained AS-NZS ISO9001 certification in December 1999 and have continued to pass successful audits for the supply of boiler installation, tuning, servicing, maintenance checks and maintenance of boiler control systems, safety valve servicing, testing and supply of spare parts; fabrication and general engineering. The supply of boiler hire services. The manufacture and supply of Kelford Electric Steam Boilers.

