

KAUKORA

J|Ä|S|P|I®

 **AKVATERM**

KAUKORA OY Company presentation



Kaukora Ltd
P.O.Box 21
21201 Raisio, Finland

www.jaspi.fi
www.akvaterm.fi

KAUKORA LTD, FINLAND
ESTABLISHED in 1949



FACTORIES:

- RAISIO: stainless steel water heaters (electric & indirect), thermal storage systems, electric boilers, cool tanks, heat pumps
- TURKU: black steel accumulator tanks, buffers, central heating boilers, thermal storage systems

PERSONNEL: c. 160

TURNOVER 2024: 37.000.000 €

EXPORT: 10 %



Raisio headquarter



Turku factory



Raisio factory

JÄSPI History of the company

OY JÄSPI & MÄKINEN AB

JÄMÄ



JÄSPI

AKVATERM



1949 1976 1983 1986 1996 1998 2004 2006 2008 2017

Oy Jäspi & Mäkinen AB (JÄMÄ)

Jäspi
- Hot water heaters
- Accumulator tanks
- Electric boilers

Pekkavaraajat Oy
joined the Kaukora

NIBE Industrier AB
- owner

- Heat pumps
- Hybrid systems

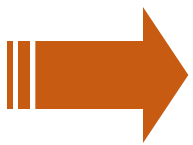
Kaukora Oy
(sub-company)
- District heating

OY Turun Lämpötekniikka AB
- Boilers (wood & oil/gas)

Sento Högfors
joined the Kaukora

JÄMÄTEK
joined the Kaukora

AKVATERM
joined the Kaukora



73 years of JÄMÄ history
46 years of JÄSPI history

KAUKORA OY

J | Ä | S | P | I [®]

FEARLESS FINNS

OFFICIAL PARTNER





- Stainless steel domestic water heaters,
- Air to water heat pumps,
- Central heating boilers – electric, solid fuels,
- Thermal storage buffers,
- Solar heating systems



- Black steel & stainless steel buffers,
- cooling tanks,
- large domestic water accumulators



- Ground source Heat pumps



OUR PRODUCTS

HYBRID BUFFERS

Main advantages:

- ✓ Unique square design.
- ✓ All connections conveniently in front.
- ✓ Size-optimized tank: narrow, low and square design.
- ✓ Fits in through narrow doors and fits in low basements.
- ✓ Very low heat loss: Closed-cell insulation.
- ✓ Equipped with three cells: 2 hot water coils and one solar coil.
- ✓ Installation friendly connections.



- **GTV HYBRID 500 | OVALI HYBRID 1000, 2000 | OVALI 2400**
 - 2 x Dhw-coil (2,5 sqm each – total 5 sqm heat exchange surface) made of finned copper
 - 1 x solar coil 1,3 sqm made of finned copper
 - finished connectors for various energy sources
 - steel plate
 - Polyurethan insulation





OUR PRODUCTS

CUSTOMIZED BUFFER TANKS

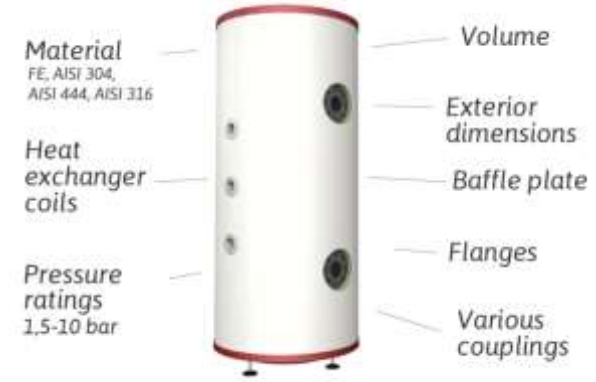
Main advantages:

- ✓ Material: Black steel: EN 10025, EN 1.4521 (AISI 444), EN 1.4301 (AISI 304), EN 1.4404 (AISI 316).
- ✓ All tanks can be produced to customer specifications.
- ✓ Short delivery time despite single order batches
- ✓ Energy class B on 300-1000L with closed-cell sprayed polyurethane.
- ✓ Flexibility and quality are key factors why customers choose Akvaterm.
- ✓ Over 2000 pieces of unique made-to-order products



• AKVA PRO 300-10000 I

- Over 2000pcs manufactured products per year
- Material: Black steel: EN 10025, EN 1.4521 (AISI 444), EN 1.4301 (AISI 304), EN 1.4404 (AISI 316)
- All tanks can be delivered with a customer specific design
- Short delivery time despite single order batches
- Energy class **B** on 300-1000L with sprayed polyureth
- Flexibility and quality are key factors why customer choose **Akvaterm**



Equalising tank

Domestic water tank

Working tank

Cold storage tank

Cooling water tank



HEAT LOSS DIFFERENCES DEPENDING ON TYPE OF INSULATION

Tank size	Rockwool heatloss kWh / Year 	Polystyrene heatloss kWh / Year 	AKVATERM POLYURETHANE heatloss kWh / Year 
500 L	1238	963	<u>648</u>
750 L	1514	1178	<u>823</u>
1000 L	1706	1327	<u>929</u>
1500 L	2147	1670	<u>1121</u>
2000 L	2513	1954	<u>1270</u>
2500 L	2785	2166	<u>1547</u>
3000 L	3070	2388	<u>1705</u>
4000 L	3676	2859	<u>2073</u>



Tested according to the EU: s Eco design directive (EU No 814/2013).













ELECTRIC BOILERS

Jäspi FIL-SPL electric boilers are used in heating as the primary heat source, as well as backup or additional ones for private residences, schools, warehouses, multistorey buildings and industrial processes. Our boilers take care of all your heating and hot water supply needs. Available power ranges up to 1600 kW.

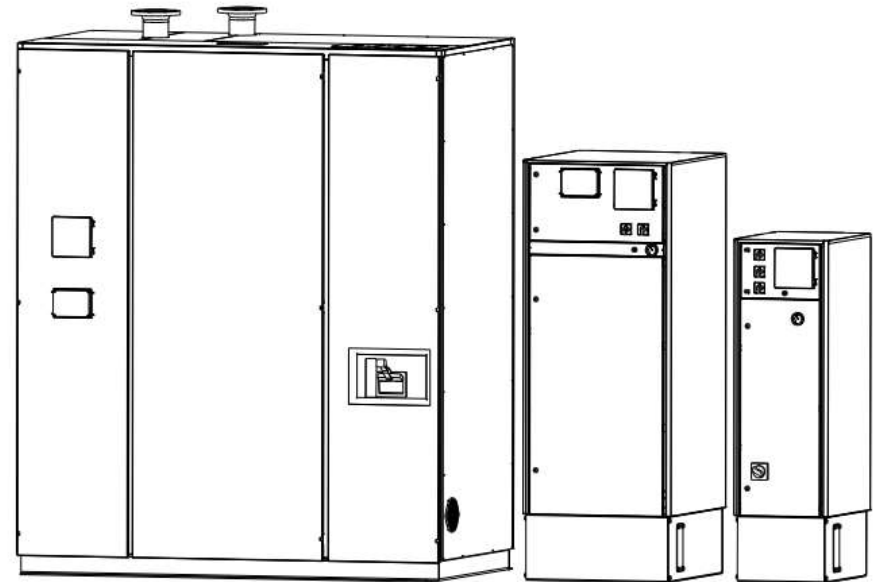
[SEE ALL PRODUCTS →](#)

Main advantages:

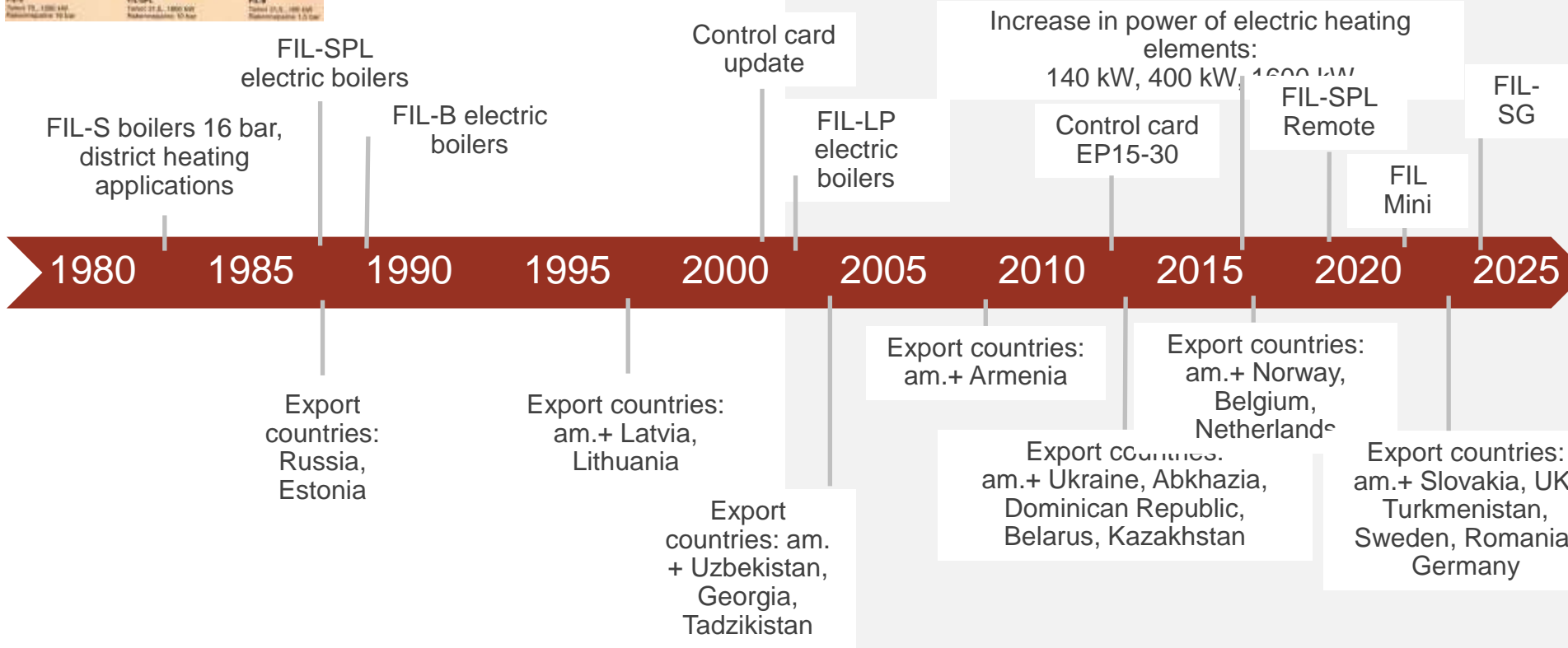
- ✓ Independent heat source or additional heat source for heat pump systems.
- ✓ Can be connected to many heating systems.
- ✓ For detached houses and terraced houses, blocks of flats and industrial properties.
- ✓ Electrical resistors and control unit.
- ✓ Can be controlled remotely.
- ✓ Does not include a hot water tank.
- ✓ Works with flow-through technology and requires an external circulating water pump that circulates water in the boiler.
- ✓ 7 or 15-stage control system.

FIL-SPL models

- Wide range with different powers
 - Small frame 31,5...140 kW
 - 400 V 3 N AC 50 Hz
 - Medium frame 150...400 kW
 - 400 V 3 N AC 50 Hz
 - 300 kW and over: 400 V 3 AC 50 Hz
 - Large frame 400+...1600 kW
 - 400 V 3 AC 50 Hz
 - Height of the frame differs by power
 - 400+...800 kW
 - 800+...1200 kW
 - 1200+...1600 kW



Jäspi FIL-electric boilers



- End users:
- Heating plants
 - Hospitals
 - Sports centers
 - Stadiums
 - Hotels
 - Factory premises
 - Shopping malls
 - School centers
 - Banks
 - Nuclear power plants
 - Airports

Jäspi FIL-electric boilers

before 2000
about 260
pcs
25 MW

2000s:
about 250
pcs
37,5 MW

2010s:
about 1100
pcs
136 MW

2020s:
about 1300
pcs
163 MW

FIL-electric boilers



- End users:
- Water supply
 - Wholesale stores
 - Embassies
 - Offices of the President
 - Mine processes
 - Olympic village
 - Terminals
 - Gardens
 - Industrial processes
 - Heat sources of buildings
 - Marine industry

In total:
more than 2900 delivered electric boilers
with a combined power of more than 360
MW

KAUKORA in the world

Russia: Metro of S.-Petersburg, Moscow, Kazan: since 1994 more 100 pcs. electric boilers **FIL-B and FIL-SPL**

Georgia: New hospital in Tbilisi, **2 x FIL-SPL 1000 kW**, winter 2007-2008.

Tadjikistan: Executive Office of the President of the Republic of Tadjikistan, **FIL-SPL 1200 kW + FIL-SPL 1000 kW + FIL-SPL 400 kW**, 2009.

Russia: Olympic facilities in Sochi, 18 pcs. electric boilers **FIL-SPL 52,5 – 300 kW**, 2012.

Dominican Republic: Gold mine, **FIL-SPL 800 kW**, 2010 and 2018.

Ukraine: Eristovsky mining and processing plant, **3 x FIL-SPL 600 kW + 3 x FIL-SPL 720 kW + 3 x FIL-SPL 900 kW**, 2013.

Russia: Koashva, Murmansk region, **5 x FIL-SPL 1600 kW**, 2014.

Slovakia: Glassworks, **2 x FIL-SPL 1000 kW**, 2019.

Russia: Moscow, Administrative center, **FIL-SPL 1000 kW (16 bar) + FIL-SPL 1600 kW**, 2019.

UK: Saltholme, National Grid Power station, **2 x FIL-SPL 300 kW**, 2020.

Latvia: Adazi, Orkla Factory, **2 x FIL-SPL 1600 kW**, 2021.

Norway: Thermo Control Ost, **FIL-SPL 1000 kW + FIL-SPL 800 kW**, 2020-2021.

Jäspi FIL-electric boilers

- Three frame sizes:
 - 31,5 kW - 140 kW
 - 150 kW - 400 kW
 - 500 kW - 1600 kW
 - FIL-B with a larger water volume
- Control options
 - FIL-SPL
 - FIL-SPL Remote
 - FIL-LP
 - FIL-SG (150 kW - 1600 kW)
 - (FIL-B)



DEMAND RESPONSE AND ELECTRIC BOILERS

More and more companies are utilising their electronic equipment, such as electric hot-water boilers, fans, ventilation, pumps, etc., as FCR-D demand response assets to earn revenues.

Demand response assets' energy consumption can be temporarily reduced to compensate for imbalances in the energy grid. Commercial electric boilers are perfect for this type of power grid balancing because they respond quickly and can preserve heat well, even when momentarily shut off.

USE YOUR E-BOILER AS A DEMAND RESPONSE ASSET

Jäspi's electric heating boilers paired with a demand response solution will give you

- ✓ revenues
- ✓ a smaller carbon footprint
- ✓ a safe, efficient and long-lasting heating solution



Comming soon!





Electric heating
and heat
pumps



Hybrid heating



Bio heating



Oil / bio oil and
naturel gas
heating



District heating

Jacek Paluch | Export Director – Central Europe
mobile phone: +48 603 34 22 54 | e-mail: jacek.paluch@kaukora.fi
KAUKORA OY | Tuotekatu 11, PL/P.O.Box 21 | FI-21200 RAISIO, FINLAND
www.jaspi.fi | www.akvaterm.fi

