

**PECO**

PELLET BOILER



BETTER HEATING

INNOVATIVE AND  
COMFORTABLE

**froling** 



---

ENVIRONMENTALLY  
RESPONSIBLE  
HEATING, ECONOMICALLY  
ATTRACTIVE

---



The price changes for different energy sources in recent years illustrate the benefits of wood pellets: this type of clean and eco-friendly heating is also attractive from an economical standpoint. Wood is a renewable energy source that is also CO<sub>2</sub>-neutral. Pellets are made of natural wood. The large volumes of wood shavings and sawdust generated by the wood-

processing industry are compacted and pelleted without being treated beforehand. Pellets have a high energy output and are easy to deliver and store. These are just some of the advantages that make pellets the perfect fuel for fully automatic heating systems. Pellets are delivered by tanker and unloaded directly into your store.

For almost sixty years Froling has specialised in the efficient use of wood as a source of energy. Today the name Froling stands for modern biomass heating technology. Froling firewood, wood chip and pellet boilers are successfully in operation all over Europe. All of our products are manufactured in our factories in Austria and Germany. Froling's extensive service network ensures that we can handle all enquiries quickly.

---

GUARANTEED  
QUALITY AND  
RELIABILITY  
FROM AUSTRIA

---

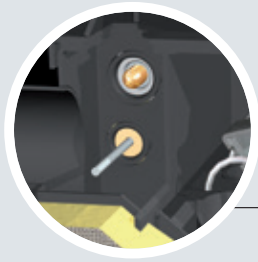
- International pioneer in technology and design
- Sophisticated fully automatic operation
- Excellent environmental compatibility
- Environmentally responsible energy efficiency
- Renewable and CO<sub>2</sub>-neutral fuel
- Ideal for all types of house
- Up to 5 year Froling-warranty (subject to warranty conditions)

Occupying just 0.64 m<sup>2</sup> of space, the PECO pellet boiler sets new standards. The new PECO stands out due to its quiet operation and ease of use, combined with low emissions and very low energy consumption. Thanks to its high energy efficiency the PECO is particularly suitable for low-energy and passive houses.



# PECO PELLET BOILER

Speed-controlled, quiet induced-draught fan with function monitor



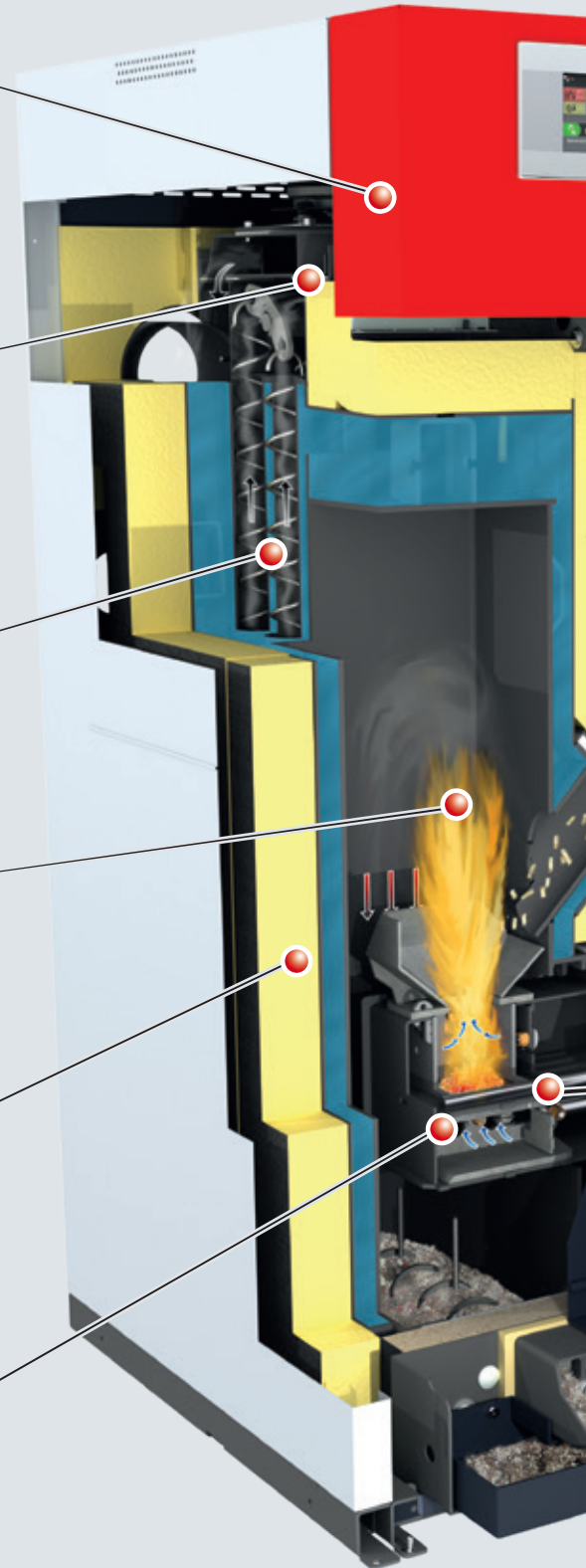
Lambda probe for optimal combustion

Manual cleaning of exchanger by activating a lever

High quality pellet burner

High-quality insulation

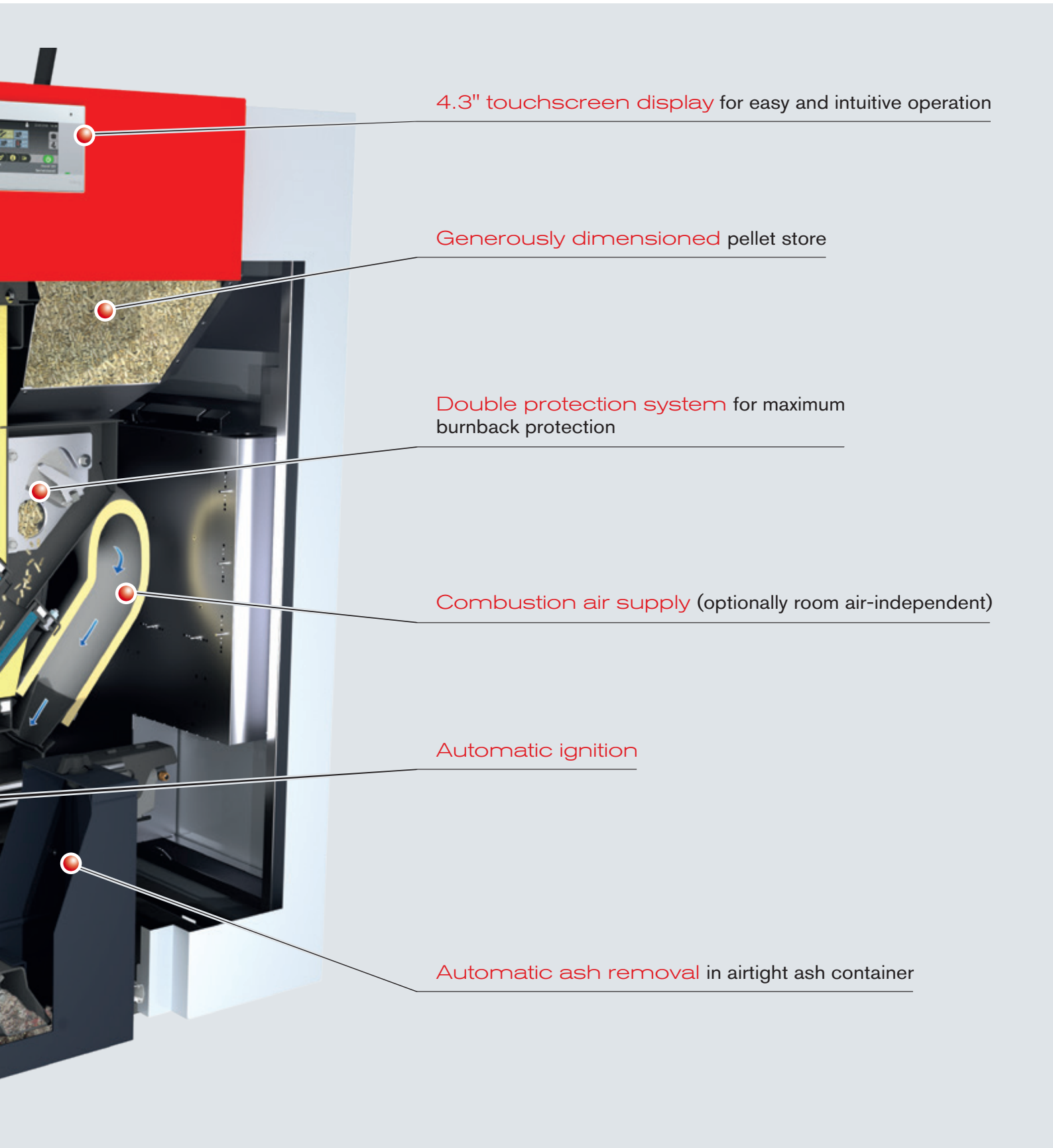
Automatic sliding grate for ash removal



---

# STATE-OF-THE-ART TECHNOLOGY

---



4.3" touchscreen display for easy and intuitive operation

Generously dimensioned pellet store

Double protection system for maximum burnback protection

Combustion air supply (optionally room air-independent)

Automatic ignition

Automatic ash removal in airtight ash container



---

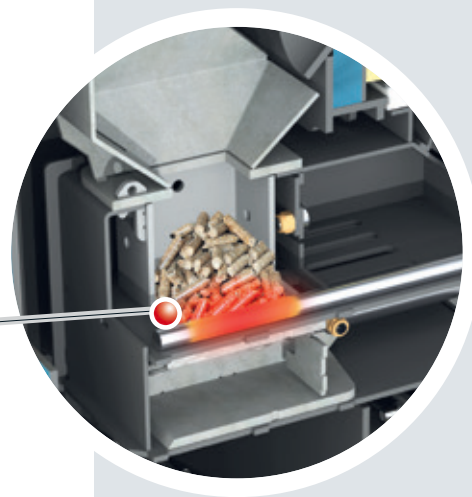
## A WELL-DESIGNED INTERIOR

---

### Automatic ignition

The new glow ignition is particularly suitable for low boiler outputs. It is extremely quiet and consumes very little energy.

- Advantages:
- Quiet operation
  - Low electricity consumption



### Pellet burner with automatic sliding grate

The burner is perfectly adapted to the fuel pellets and their requirements, enabling particularly high levels of efficiency. The sliding grate ensures automatic ash removal to an ash container.

- Advantages:
- High efficiency
  - Automatic ash removal

Open sliding grate

Closed sliding grate



### Practical ash removal

We never compromise on convenience. An ash screw automatically conveys the ash that has accumulated into an airtight ash container. The ash container can be easily emptied.

- Advantages:
- Long intervals between emptying
  - Easy and convenient to empty





### Gate valve fuel store

When the boiler is filling with pellets, the flap on the fuel store is open and the one on the burner is closed.



### Large pellet store

The large pellet store can hold from 32 to 76 l (depending on output size) and reduces the frequency of pellet feed. The pellet store is filled completely automatically by means of an external suction turbine

- Advantages:
- Easy and convenient to fill
  - Efficient operation



### Burner safety flap

The double protection system ensures a reliable closure between the pellet store and the burner while guaranteeing maximum burnback protection.

---

# INTELLIGENT DESIGN

---

## Variable speed induced-draught fan with lambda control

The variable speed-regulated induced draught fan, which comes as standard, ensures the exact air quantity for combustion. The variable speed-regulated extraction fan stabilises combustion throughout and adjusts the output to requirements. In conjunction with the lambda control, it ensures optimum combustion conditions. In addition, the induced-draught fan runs very quietly and consumes very little electricity.

- Advantages:
- Maximum ease of use
  - Constant optimisation of combustion



## WOS system as standard

The WOS (Efficiency Optimisation System), which comes as standard, consists of special turbulators used in the heat exchanger pipes. The lever mechanism is controlled manually. Clean heating exchanger surfaces allow for higher efficiency and thus lower fuel consumption.

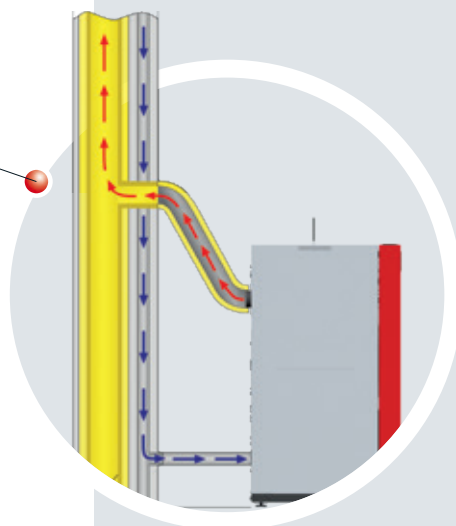
- Advantages:
- Even greater efficiency
  - Fuel savings



## Room air-independent operation

Low-energy houses often have a closed boiler room. In traditional boiler rooms there can be uncontrolled heat loss from the ventilation openings. This phenomenon is avoided in the case of room air-independent boilers thanks to the direct air connection. In addition, an integrated system preheats the combustion air fed in, increasing the efficiency of the system.

- Advantages:
- Perfectly suited to low-energy houses
  - Maximum efficiency





**NEW!**

### Bag silo

The bag silo system is a flexible, simple way of storing pellets. They are available in 3 sizes (from 2 m to 2.3 m), with a capacity of between 2.4 to 4.7 tonnes depending on the density. There are several advantages to using a bag silo: it is easy to assemble, dustproof and, if necessary, can also be installed outside provided it is protected from rain and UV rays.



### Cube 300/500 S pellet supply bin

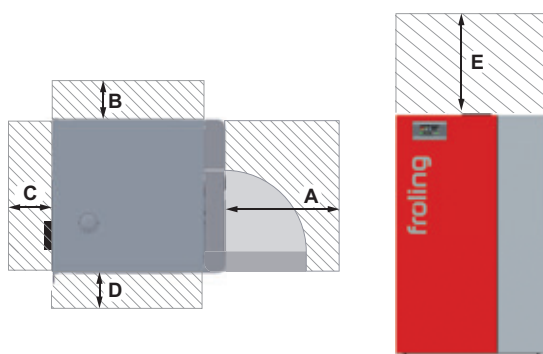
The Cube 300/500S is the optimal and most cost-effective solution for low fuel requirements. Manually filled (e.g. pellets in sacks) it can store a total of 330 kg/495 kg of pellets (22/33 sacks of 15 kg each). The pellets are transported to the boiler by means of a suction probe, which is also included in delivery.

Cube 300 dimensions: 690 x 690 x 1230 mm (LxDxH)  
Opening for filling Cube 300: 600 x 295 mm (LxD)

Cube 500 S dimensions: 760 x 1000 x 1250 mm (LxDxH)  
Opening for filling Cube 500 S: 670 x 340 mm (LxD)



## OPERATING AND MAINTENANCE AREAS



Distances - PECO [mm]	15 - 20	25 - 35
A Insulated door to wall		600
B Side of boiler to wall (control side)		300
C Rear side to wall		300
D Side of boiler to wall (door stop side)		100
E Maintenance area above the boiler		500
Minimum room dimensions (length x width)	1550 x 1150	1750 x 1150
Minimum store height, including maintenance area	1900	2200

# INDIVIDUAL CONTROL UNIT FOR THE HEATING SYSTEM

## Lambdatronic P 3200 control unit

Froeling forges ahead into the future with the Lambdatronic P 3200 boiler control unit and the new 4.3" touchscreen display. Intelligent control management makes it possible to connect up to 18 heating circuits, up to 4 stratified storage tanks and up to 8 domestic hot water tanks. The control unit ensures clear display of all operating statuses. A clearly organised menu structure makes for easy navigation. All essential functions can be selected by simply pressing icons on the large colour display.

- Advantages:
- Precise control of combustion thanks to the Lambda controller, by way of a Lambda probe
  - Connections for up to 18 heating circuits, 8 domestic water heaters and up to 4 management systems for stratified tanks
  - Possibility of connecting a solar panel system
  - LED frame for status display with illuminated presence detection
  - Simple and intuitive operation
  - Various smart home options (e.g. Loxone)
  - Remote control from the living room (RBG 3200 and RGB 3200 Touch room console) or via Internet ([froeling-connect.com](http://froeling-connect.com))



## SIMPLE & INTUITIVE OPERATION

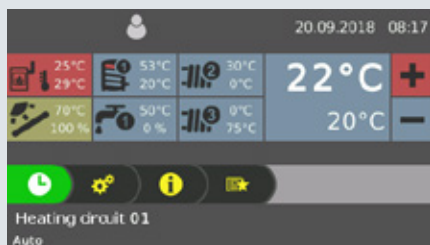


Fig. 1 General overview of the heating circuit (start screen)



Fig. 2 View of the heating times (individually adjustable)

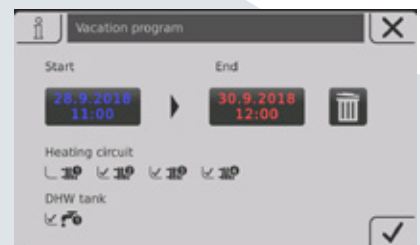


Fig. 3 Overview of the new holiday mode



---

## KEEP TRACK OF EVERYTHING WITH THE FROLING APP

---

The Froling App allows you to check and control your Froling boiler online from anywhere, at any time. You can read and modify the main status information and settings easily and conveniently online. You can also specify which status messages you want to be informed about via SMS or e-mail (e.g. when the ash box is to be emptied or in the event of a fault message).

Froling boiler (software core module from version V50.04 B05.16) with boiler touch display (from version V60.01 B01.34) a broadband internet connection and a tablet/smartphone with iOS or Android operating system are required.

Once the boiler has been connected to the internet and activated, the system can be accessed 24/7 from anywhere using a web-enabled device (mobile, tablet, PC, etc.). The app is available in the Android Play Store and iOS App Store.

NEW! Desktop version  
with even more options.



- Simple and intuitive operation of the boiler
- Status information can be called up and changed within seconds
- Individual naming of the heating circuits
- Changes of status are notified directly to the user (e.g. via e-mail or push notifications)
- No additional hardware required (such as an Internet gateway)

---

## SMART HOME

---

Enjoy smart, convenient and piece-of-mind living with the Smart Home connection options from Froling.

---

### Loxone

---

Combine your Froling heating system with the Loxone Miniserver and the new Froling Extension and implement individual boiler control on the basis of the single room control of the Loxone Smart Home.

**Advantages:** Easy operation and viewing of the heating circuit via the Loxone Miniserver, immediate notification of status changes and individual operating modes for each situation (presence, holiday, economy mode, etc.)

---

### Modbus

---

Via the Froling modbus interface, the system can be integrated into a building management system.



---

## ACCESSORIES FOR EVEN GREATER CONVENIENCE

---

### FRA room temperature sensor

The FRA room temperature sensor, compactly sized at just 8x8 cm, allows you to easily select and adjust the main modes of the corresponding heating circuit. The FRA sensor can be connected with or without affecting the store. The adjusting wheel allows you to change the room temperature by up to  $\pm 3^{\circ}\text{C}$ .



### RBG 3200 room console

Use the RBG 3200 room console and the new RBG 3200 Touch for even more convenience. Conveniently control the heating system from your living room. Easily check all values and important status messages and change settings at the push of a button.



### RBG 3200 Touch room console

The RBG 3200 Touch will impress you with its touchpad interface. Its clear menu structure makes the room console easy and intuitive to use. The approximately 17x10 cm colour screen room console displays the most important functions at a glance and automatically adjusts its backlighting to the ambient conditions. A bus cable connects the room consoles to the boiler controller.



---

## EVEN MORE CONVENIENT

---



Heating circuit module

Controls two additional mixer heating circuits. Features wall casing and one contact sensor.



Hydraulic module

Features wall casing and two immersion sleeve sensors to control one or two pumps and one reversing valve with up to 6 sensors.



WMZ solar package kit

Set for measuring heat quantity, consisting of a volume pulse transmitter ETW-S 2.5, a collector sensor and two contact sensors for recording flow and return temperatures.



---

# SYSTEMS ENGINEERING FOR OPTIMUM ENERGY CONSUMPTION

---

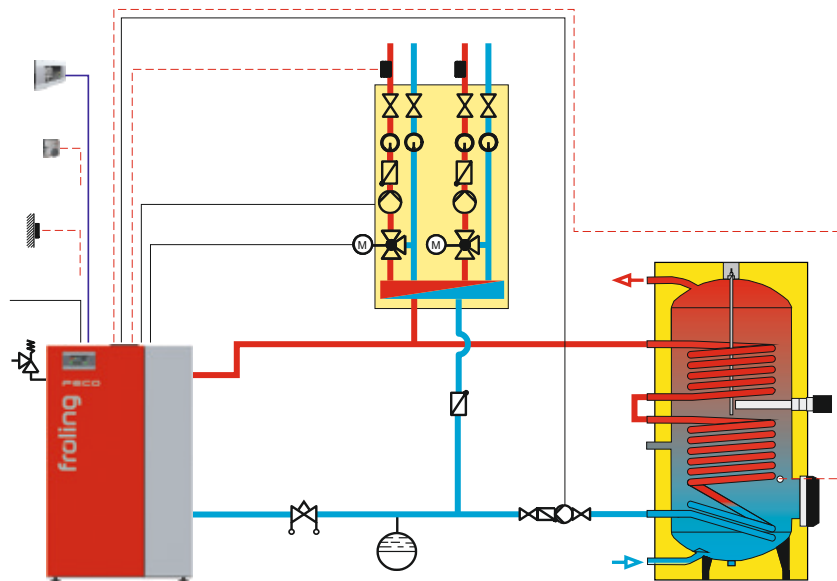
Froling systems engineering provides efficient energy management. It is possible to integrate up to 4 storage tanks, 8 hot water tanks and 18 heating circuits to help manage the heating. You can also take advantage of the ability to integrate other means of energy production such as solar panel systems.

- Advantages:
- Complete solutions for all your needs
  - The components work perfectly together
  - Integrated solar power

---

## PECO with Unicell NT-S

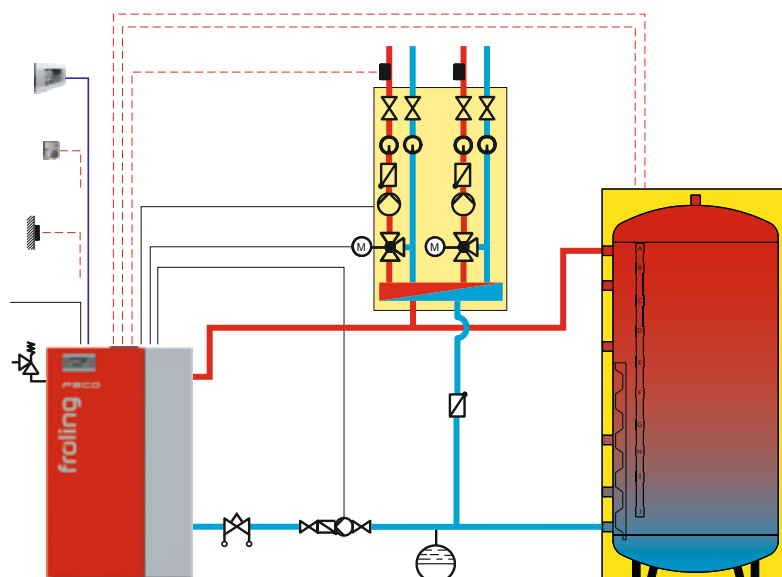
---



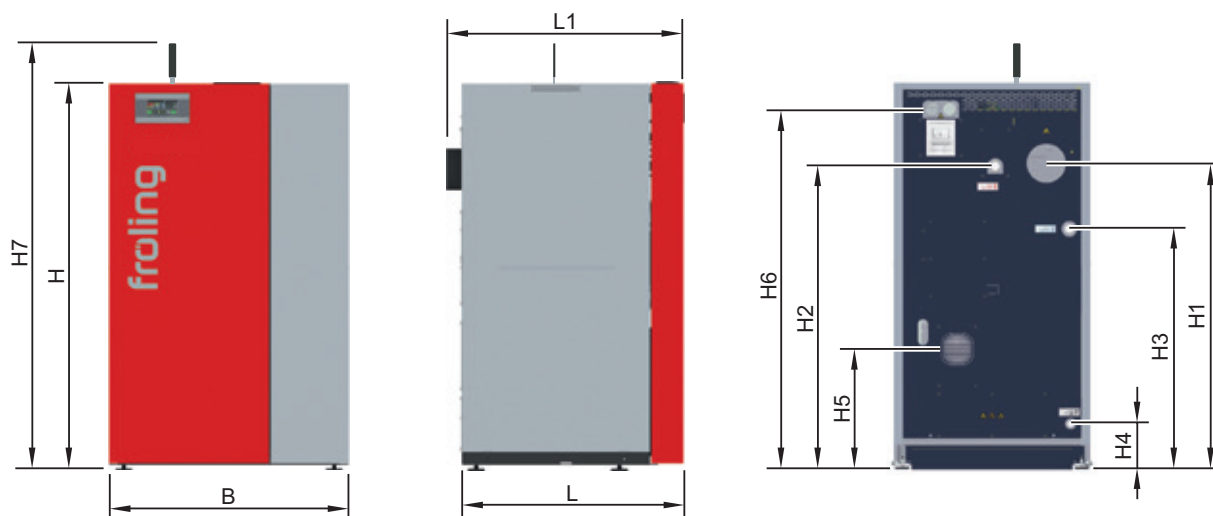
---

## PECO with layered tank

---



## DIMENSIONS AND TECHNICAL SPECIFICATIONS



Dimensions - PECO [mm]	15	20	25	30	35
L Length of boiler	690	690	850	850	850
L1 Total length including flue pipe connection	740	740	890	890	890
B Width of boiler	750	750	750	750	750
H Height of boiler	1210	1210	1480	1480	1480
H1 Height including central flue pipe connection	940	940	1170	1170	1170
H2 Height of flow connection	930	930	1160	1160	1160
H3 Height of return connection	750	750	920	920	920
H4 Height of drainage connection	95	95	175	175	175
H5 Height of supply air connection (for room air-independent operation)	390	390	460	460	460
H6 Height of suction system connection	1110	1110	1380	1380	1380
H7 Height of boiler with WOS lever	1335	1335	1600	1600	1600

Technical data - PECO	15	20	25	30	35
Nominal output [kW]	15	20	25	30	35
Output range [kW]	4.1 – 15	4.1 – 20	7.2 – 25	7.2 – 30	7.2 – 35
Energy (ErP) label <sup>1</sup>	A <sup>+</sup>	A <sup>+</sup>	A <sup>+</sup>	A <sup>+</sup>	A <sup>+</sup>
Electrical connection [V/Hz/A]	230 V / 50 Hz / protected by C16A fuse				
Boiler weight [kg]	250	250	380	380	380
Pellet container capacity [l]	41	41	76	76	76
Ash container capacity [l]	20	20	23	23	23
Minimum flow [l/h]	260	340	430	430	430
Recommended approximate buffer volume [l]	300	500	500	700	700

<sup>1</sup> Composite label (boiler + controls)



### Pellet boiler

PE1 Pellet	7 to 35 kW
PE1c Pellet	16 to 22 kW
P4 Pellet	48 to 105 kW



### Firewood boiler

S1 Turbo	15 to 20 kW
S3 Turbo	20 to 45 kW
S4 Turbo	22 to 60 kW

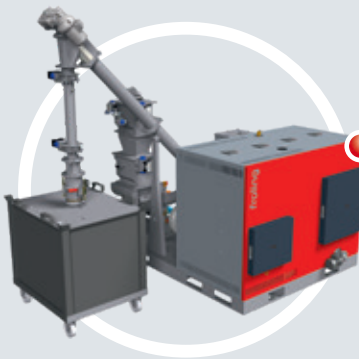
### Dual fuel boiler

SP Dual compact	15 to 20 kW
SP Dual	22 to 40 kW



### Wood chip boiler/large installations

T4e	20 to 250 kW	T1	350 kW
Turbomat	150 to 550 kW	Lambdamat	750 to 1500 kW



### Heat and current from wood

CHP wood energy system 45 to 500 kWel

Your Fröling partner

Fröling Heizkessel- und Behälterbau Ges.m.b.H.

A-4710 Grieskirchen, Industriestr. 12

AT: Tel +43 (0) 7248 606-0

Fax +43 (0) 7248 606-600

DE: Tel +49 (0) 89 927 926-0

Fax +49 (0) 89 927 926-219

E-mail: [info@froeling.com](mailto:info@froeling.com)

Internet: [www.froeling.com](http://www.froeling.com)

P1170121 - All illustrations intended as a guide only!  
We reserve the right to make technical changes without prior notice.  
Errors and omissions excepted.

**froling** 

