

WHY PELLTECH?

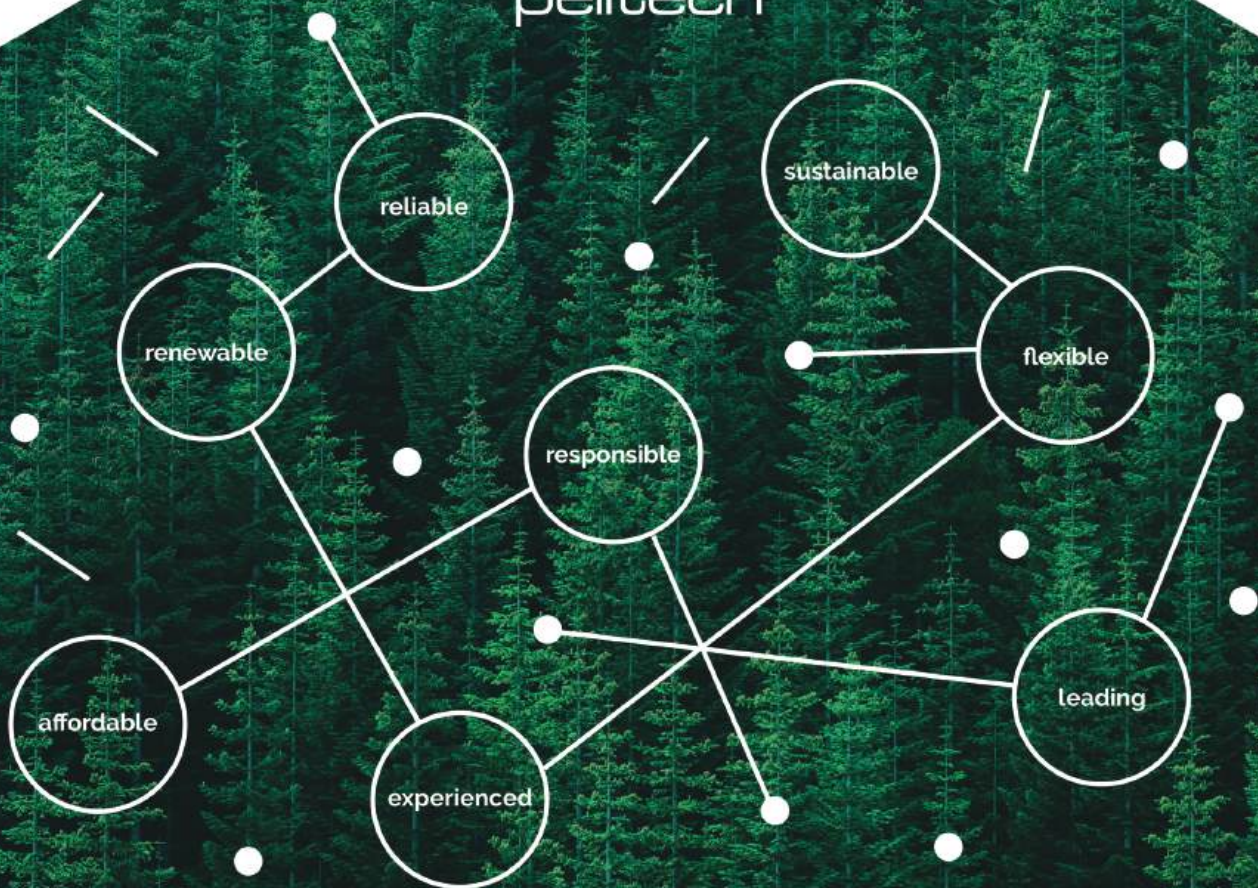


INDUSTRIAL

Pellet burning equipment for technological enterprises in various fields

All Pelltech products are designed with ease of use as a priority. Installation and setup of Pelltech products is simple and straightforward. Once up and running, our burners and boilers require low maintenance thanks to automatic cleaning and fully automated control system. Our products can be easily implemented in many different industrial processes, like steam generating, drying, evaporating, baking etc.

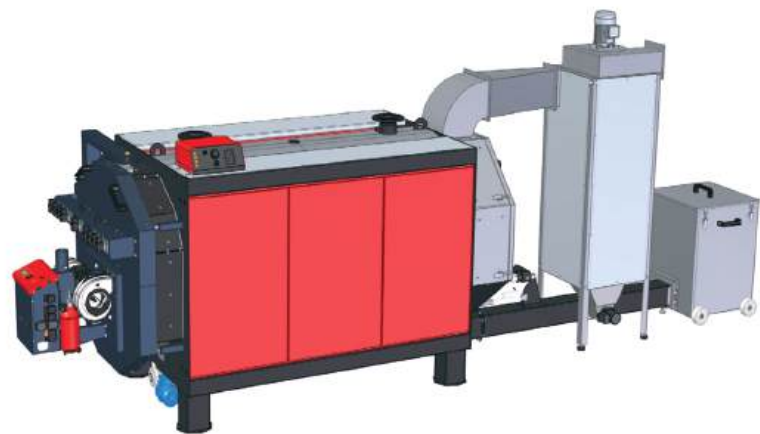
Pelltech is driven by the ambition to continuously improve already released products as well as invest in development of new burners and boilers. At Pelltech we aim to thrive in the increasingly growing renewable energy market by offering the best solutions for our clients.



HOT WATER PELLET BOILERS

These highly efficient EVERCLEAN PK-series pellet boilers are specially designed for Pelltech pellet burners. The 6 separate integrated cleaning mechanisms guarantee a long maintenance free operation period for the boiler. Boiler door with double hinges gives easy accessibility to the furnace.

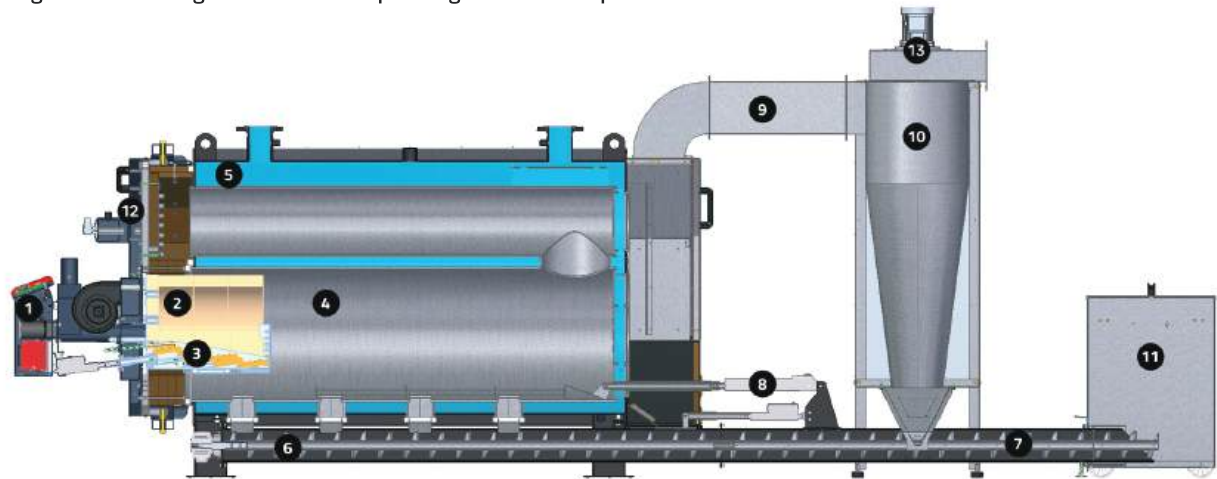
Thanks to boilers compact size it can be installed into sea containers or any similar space-saving buildings.



- Horizontal 3-pass boiler meets the requirements of class 5 according to EN303-05
- Third pass is equipped with turbulators
- Ash removal from boiler furnace
- Pneumatic cleaning system for heat exchanger tubes is integrated to boiler door
- Online monitoring and managing
- Ash cyclones with flue gas fan available for all boilers
- Boiler control box is mounted already on the boiler

BOILERS		PK250	PK350	PK500	PK700	PK1000
Rated heat output***	kW	235	329	450	650	893
Rated heat input***	kW	250	350	500	700	950
Minimum return water temp	°C	55				
Permissible working/operating temperature	°C	95(110*)				
Permissible operating pressure	bar	4		6		
Required draught	mbar	-0,04...- 0,12				
Boiler water volume	litre	523	696	947	1258	1850
Boiler weight	kg	983	1204	2037	2527	3168
Overall dimensions (LxWxH)	mm	2305x1170x1350	2795x1170x1350	2905x1300x1620	3560x1300x1620	3830x1585x1800
Combustion chamber lenght	mm	1441	1933	1954	2610	2784
Combustion chamber diameter	mm	475		621		734
Heat exchanger surface	m2	11,93	15,83	23,5	33,1	42,6
Efficiency**	%	92				
Boiler flow and return connections		DN65/PN6	DN80/PN6	DN100/PN6		DN125/PN6

* Safety thermostat must be regulated accordingly
** The efficiency is measured at boiler temperature 70 degrees and only losses through flue gases have been taken into account
*** Value is given considering that boilers are operating with Pelltech pellet burners



1. Burner

2. Ceramic burning chamber

3. Moving grates

4. Furnace
5. Waterjacket

6. Ash auger

7. Ash auger extension

8. Ash scraper motor
9. Ash cyclone inlet

10. Ash cyclone with integrated flue gas fan

11. Ash container

12. Pneumatic cleaning system

13. Flue outlet

INDUSTRIAL PELLET BURNERS

Pelltech industrial pellet burners serve an effective and inexpensive heating solution. Those can be installed into different kinds of heating appliances such as steam boilers, hot air dryers, evaporators, baking ovens and much more.

The burners are fully automated with an integrated control system and not only easy to set up but also easy to maintain. Automatic cleaning system provides stable burning conditions and efficient combustion over long working periods. In order to withstand high temperatures, the burning chamber is made from high quality ceramic refractory.

Remote control and detailed online monitoring allows to adjust and diagnose burners operation very easily.



PV 700

- 1. Fuel level sensors
- 2. Flame sensor
- 3. Brick t° sensor
- 4. LCD display
- 5. Keyboard
- 6. Optional GSM modem
- 7. Control board
- 8. Network module
- 9. Fan inverters (3x)
- 10. Feeder motor
- 11. Backup battery
- 12. Powder extinguisher
- 13. Power connectors
- 14. Moving grates
- 15. Refractory
- 16. Secondary fan

Advantages/ features

- Full online monitoring
- Userfriendly interface
- Automatic ash removal
- Intelligent power modulation
- Fuel amount counter
- Fast and fumeless single point ignition
- Hold flame mode
- Forecasting temperature changes
- Low emissions
- Low power consumption
- Back-up battery
- Draught and fan regulation
- Powder extinguisher
- High safety
- Integrated electrical cabinet



Burners		PV250b	PV350c	PV500b	PV700a	PV1000a	PV1500a
Nominal power	kW	250	350	500	700	950	1500
Recommended annual heat generation	MWh/year	500-600	700-850	1000-1200	1500-1700	2200-2400	3300-3600
Power consumption at ignition	W	400	570	800	800	2100	1600
Power consumption at stand by	W	9	28	28	38	38	38
Maximum fuel consumption	kg/h	55	75	104	146	208	312
Recommended min.boiler furnace length	mm	1200	1700	2000	2200	2500	3000
Recommended min. boiler furnace diameter	mm	600	600	700	700	800	900
Required chimney diameter	mm	≥ 200	≥ 200	≥ 250	≥ 300	≥ 350	≥ 400
Flue gas / Maximum amount (at 200°C)	m3/h	750	900	1400	1800	2500	3900
Optimal O2 concentration	%	4...6				3...6	
Electrical supply	VAC	230VAC, 6A	3x400,6A	3x400, 6A	3x400, 6A	3x400, 10A	3x400, 10A
Overall dimensions (LxHxW)	mm	740x450x450	1027x530x650	1205x590x740	1205x590x740	1310x680x780	1485x780x890
Burning chamber dimensions (LxWxH)	mm	460x360x390	525x360x390	600x530x460	600x530x460	700x635x550	820x770x660
Burner weight (netto)	kg	80	95	165	165	230	300

ONLINE MANAGING

Enables

- to control pellet burners working regime and adjust it
- start and stop the burner from distance
- to change parameter values
- to check the fuel level in the silo
- to update burner`s software
- to see the full working history (working power, feeder current, fan speed, draught etc)
- the technician to diagnose the condition of the burner without having to travel to the site
- to adjust an alarm notification (sms, email or push notification)
- to control a cascade consisting of two boilers
- to control two heating circuits with different temperature charts (via 3-way valves)
- to set for each circuit different daily and weekly temperature regime
- to control up to 4 pumps
- connecting 7 different wired temperature sensors (NTC or PT1000)
- connecting wireless temperature sensors (RF sensors)
- to choose which energy source is most favourable to use



ABOUT PELLTECH

Pelltech OÜ is a company specialised in the development, manufacture and sale of pellet burning equipment. Founded in 2006, Pelltech has grown to become the largest and most trusted firm in the Baltic countries in our field.

Pelltech OÜ has successfully delivered pellet burners and pellet boilers to a wide range of industries and sectors across all the world. Our products have been installed in various applications such as district heating systems, agricultural drying processes and industrial manufacturing facilities. In Argentina our burners are drying tea leaves, in Brasil they produce steam for textile factory, in Sweden many grain dryers use our burners, in Finland they pasteurize milk, in Germany they heat the baking ovens etc. Pelltech's reputation for quality, automation and environmental sustainability has made it a preferred choice for businesses seeking advanced and reliable renewable energy solutions.

Our product catalog features a wide range of pellet burners with capacities from 20 kW to 2 MW, hot water pellet boilers from 30 kW to 1 MW and mobile pellet heaters for industrial use.

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