

PelleTech® BU SERIES

INDUSTRIAL BURNERS

200 - 5000 kW



Moving Grate Technology Industrial Biomass Burners

www.pelletech.gr

47 YEARS OF EXPERIENCE

- ENVIROMENTALLY FRIENDLY HEATING SYSTEMS
- MAXIMUM EASE TO USE
- MAXIMUM REDUCTION OF HEATING COSTS



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Industrial burners

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PelleTech®

BU 950



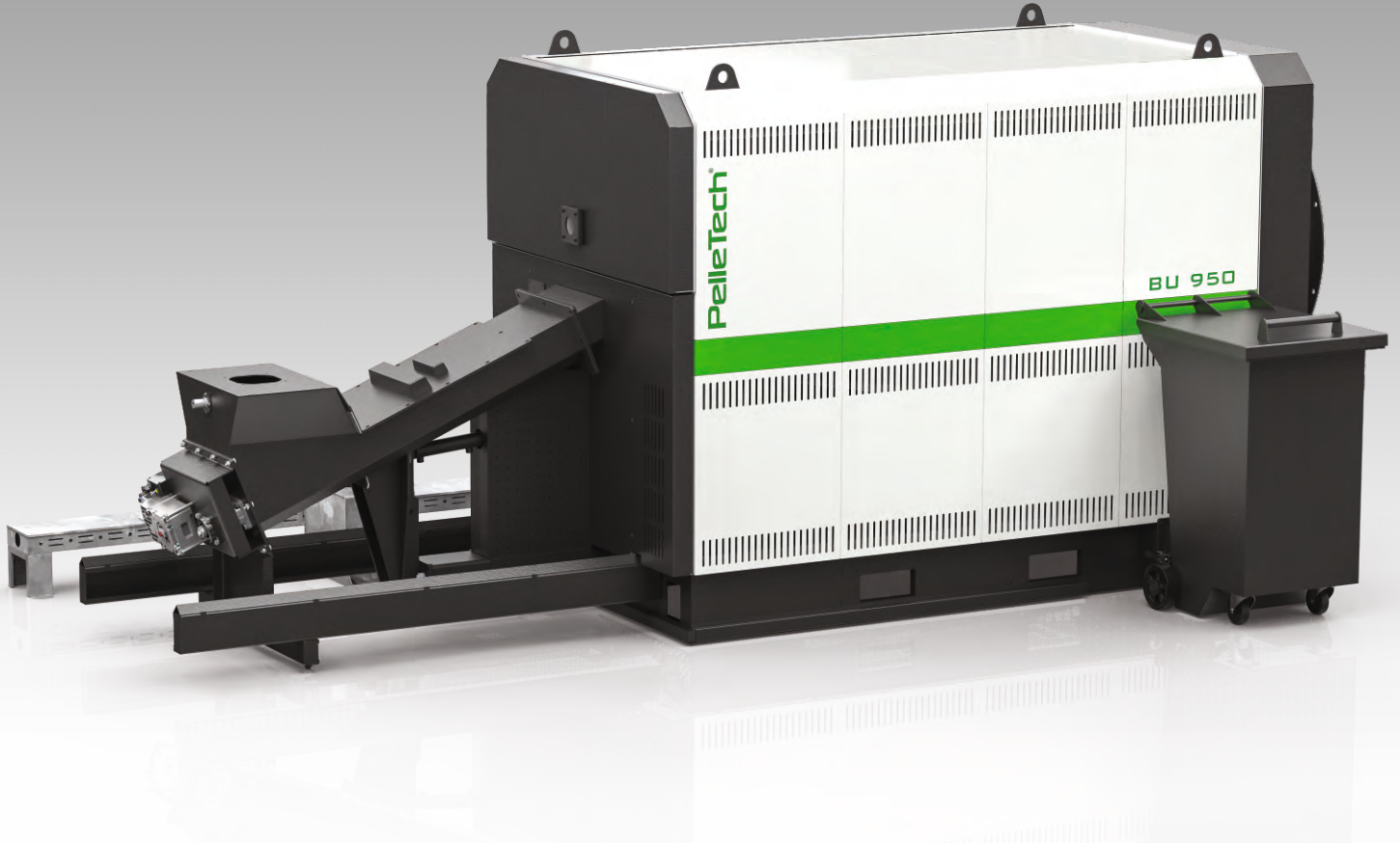
Our engagements

PELLETECH offers you reliable, efficient and economical heating units which today allow you to opt for biomass fuel in industry, agriculture, the tertiary sector, collective housing and public buildings.

To meet economic and environmental challenges, PELLETECH offers you a range of innovative services dedicated to your energy savings. True expert in heating solutions, and partner in energy efficiency, we support you towards clean and efficient energy.

PelleTech® BU SERIES

MOVING GRATE TECHNOLOGY INDUSTRIAL BIOMASS BURNERS



NEW PELLETECH BU SERIES INDUSTRIAL BIOMASS BURNERS

The manufacturing of PelleTech BU series industrial burners has been inspired by the needs of our customers.

The moving grate has been specially developed for the automatic combustion of dry and moist wood fuels (waste wood, wood pellets or woodchips from forest thinning).

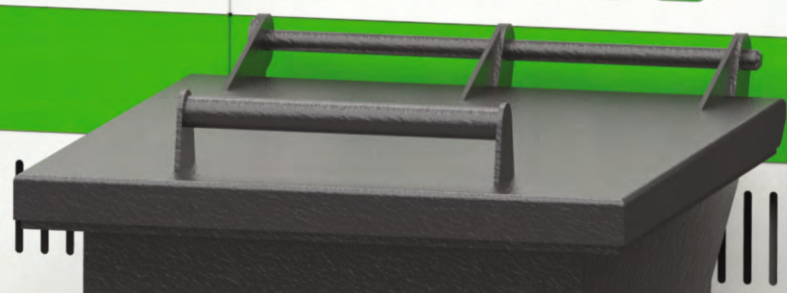
Whatever are your needs, from drying applications with the use of flue gases or conversion of your conventional fossil fuel boiler, PelleTech BU Burners are your daily partner to your business combining high-end technology, robust construction and user-friendly operation.

The PelleTech BU BURNERS produced in accordance with the Machinery Directive EC/2006/42.

APPLICATION:

- Drying
- Conversion of conventional fossil fuel heating units
- Steam/Thermal oil production

BU 950

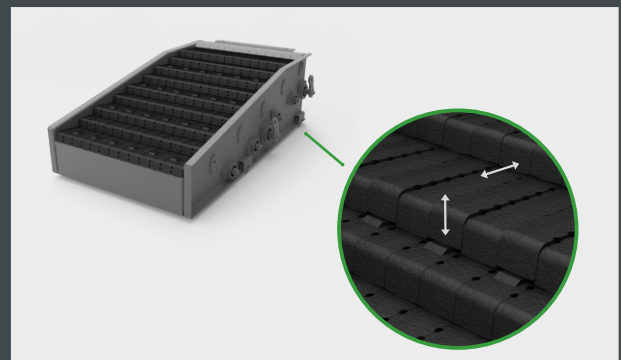


Advantages:



BACK BURN PROTECTION SYSTEM

The BPS device ensures the seal between the transfer screw and the fuel tank. A spring return servomotor or a rotary valve guarantees the fire stop function.



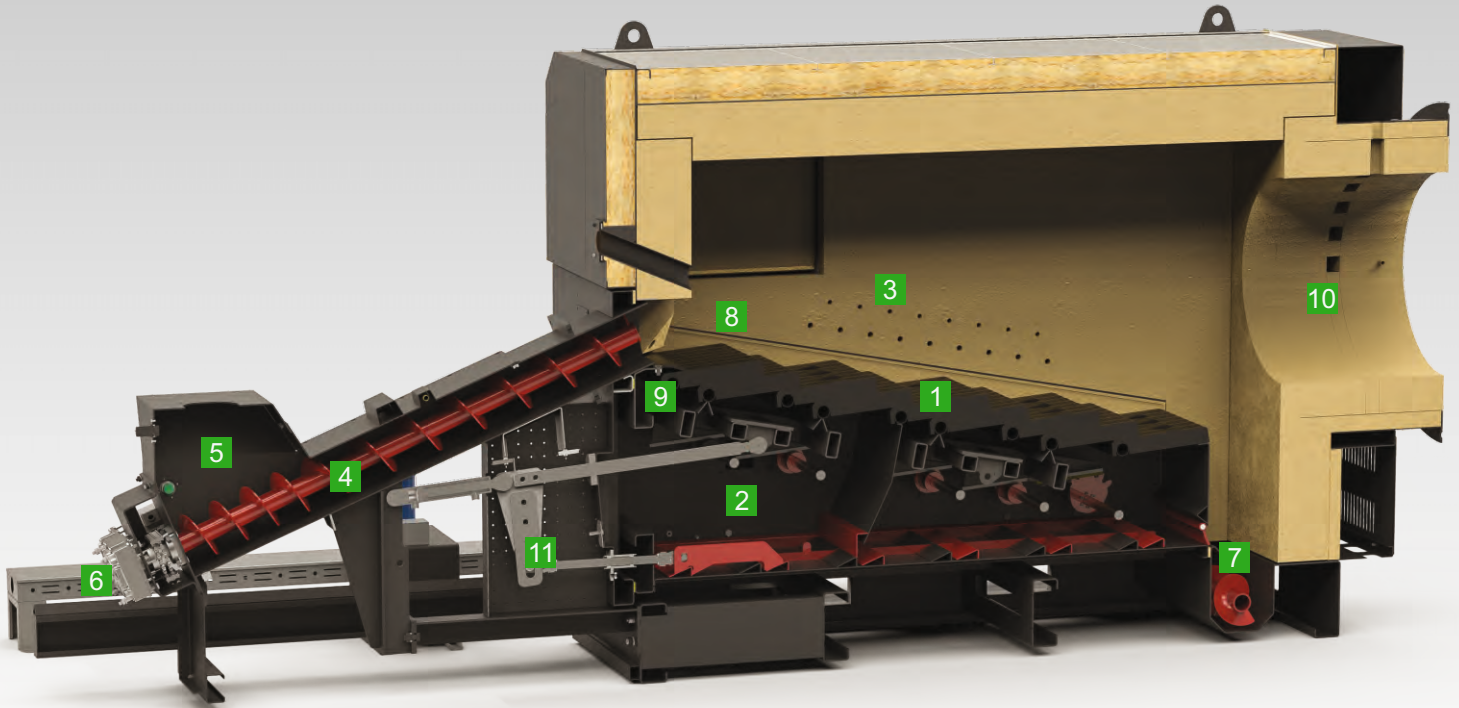
MOVING GRATE COMBUSTION TECHNOLOGY

The movable and fixed bars with high chromium content allow the advance of the fuel on the grate with an optimal interaction between the wood and the primary, secondary and tertiary air. The combustion grate allows the automatic and continuous evacuation of ashes.



ROBUST COMBUSTION CHAMBER

The high thermal resistance refractory concrete chamber guarantees optimal combustion and durability. The particularly long thermal inertia allows easier ignition of the fuel.



technology

- 1** Multi-step moving grate consisting of high Cr content cast steel grate bars, which allows the combustion of a wide range type of biomass fuels and extended service life. The special design of the grate bars provide better distribution of the primary combustion air while special shape permits a 2-d axis movement which eliminates clinkering and blockages.
- 2** Main combustion air supply (primary combustion air) speed-controlled blower.
- 3** Individually controlled secondary combustion air supply, that ensure even more controlled air flow in the flue gas, enrichment and ignition for optimum combustion quality and great efficiency.
- 4** Wide variety of stokers with large diameter heavy duty augers, for transferring wood chips up to P45S*. (* Heating units > 500 kW with dual auger stoker)
- 5** Back Burn Protection safety device which maintains a continuous seal between the heating unit's stoker and the fuel line, preventing the back burn in the fuel line and the fuel tank. (Available versions with star valves or clapet devices)
- 6** New generation heavy duty gearbox motors, with high torque output and low energy consumption.
- 7** Automatic combustion chamber ash extraction system with reinforced auger. The ash is transferred and collected into an ash container with big capacity for extended maintenance-free operation.
- 8** Double wall combustion chamber lining (high alumina content refractory cement and insulating cement), ensuring high resistance to chemical processes and temperatures developed in the combustion chamber.
- 9** Hot air blower for rapid ignition of biomass fuel. The hot air blower ensures the successful ignition of fuels with high humidity content (up to W50) while reduces the period of ignition phase contributing to energy saving.
- 10** Combustion chamber temperature sensor for accurate control.
- 11** Moving grate motion with heavy duty electric gearbox motors for units up to 500 kW or hydraulic group for units with output > 500 kW.

optional equipment



4,3" COLOUR TOUCH SCREEN

This control screen allows you to make the settings for your boiler (temperature, load, fuel) as well to monitor boilers information such as the flow and return temperature, O₂ level, flue gas temperature, etc.



LAMBDA SENSOR

The Lambda sensor provides feedback to the boiler control unit allowing the boiler to automatically alter the combustion environment to achieve the highest possible efficiency, and maximize the gain from the fuel.



HOT AIR IGNITER

For the successful ignition of all biomass products Camino Design recommends the use of the hot air ignition blower.

- ✓ Ignition energy saving
- ✓ Energy saving of over 88%
- ✓ Efficient Ignition Control
- ✓ Silent system
- ✓ Built in device for fast and safe ignition
- ✓ Operational safety thanks to electronic protection of the heating element
- ✓ Blower and heating element can be controlled separately
- ✓ According to European and Safety requirements



4HEAT APPLICATION

This application provides direct access to the equipment control screen using a touchscreen tablet or smartphone connected to the Internet.

The user can thus visualize the operation of the installation. From a distance.

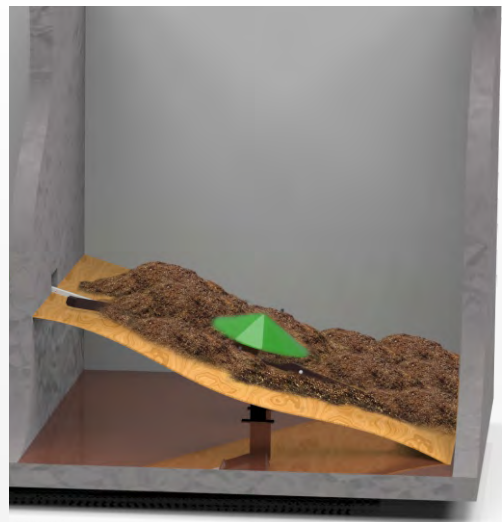
The uses of this application are multiple, real-time (data visualization of boilers, remote on / off, interpretation of faults equipment) and remote technical assistance

feeding systems



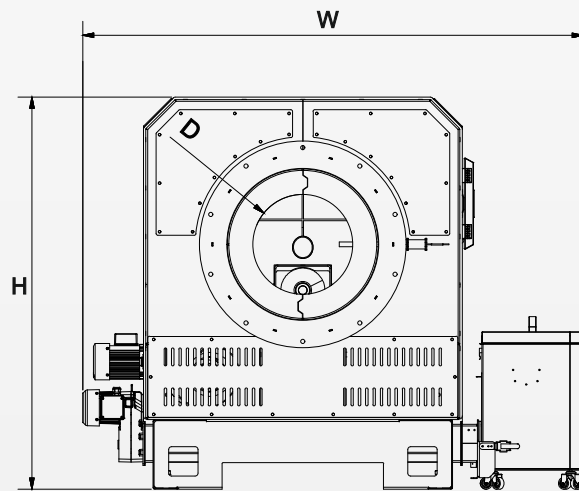
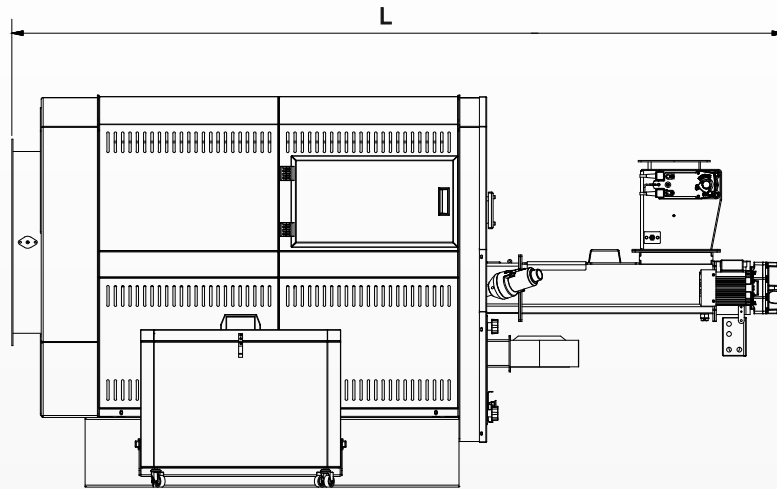
SILO

The use of a pellet silo is optimal solution for storing and supplying pellets to your heating unit. PelleTech provides a wide variety of silo capacities to provide great autonomy according to your needs.



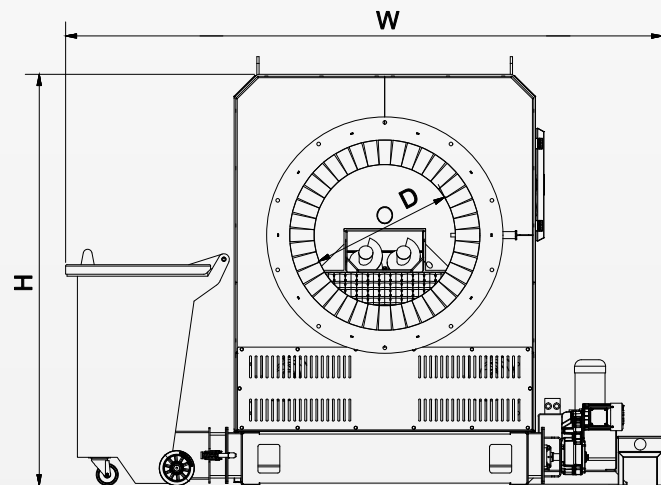
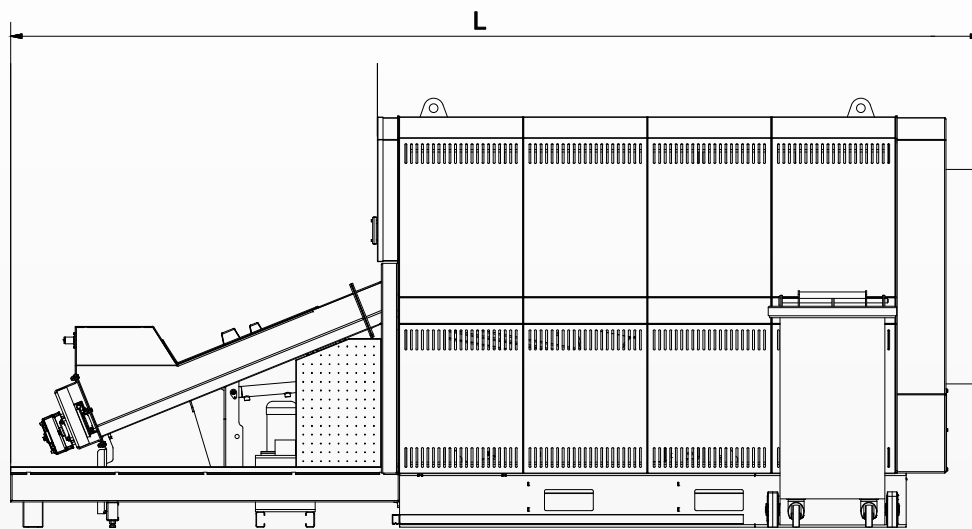
SPRING CORE AGITATOR UP TO 6m IN DIAMETER

The use of a spring core agitator is the optimal solution for storing and supplying fuel to your installation. This type of feeding system is possible with calibrated fuel or wood pellets, with single or double transfer screws.



Technical specifications for BU 200 - 500

Model	Power	L	W	H	D	Weight
BU	kW	mm	mm	mm	mm	kg
200	200	2436	1615	1235	∅340	1300
300	300	2628	1705	1335	∅340	1600
500	500	2934	1793	1400	∅450	2100



Technical specifications for BU 700 - 2200

Model	Power	L	W	H	D	WEIGHT
BU	kW	mm	mm	mm	mm	kg
700	700	4000	1150	1760	∅580	3500
950	950	4450	2558	1860.	∅640	4200
1150	1150	4450	2758	1860	∅640	5000
1750	1750	4900	2828	2225	∅780	7000
2200	2200	5260	2828	2325	∅980	8000

references



Application of a Biomass BU burner for drying purposes in an oil mill in Lebanon

HEATING UNIT: PELLETECH BU BURNER
OUTPUT POWER : 950kW
FUEL: PELLET
INSTALLER: CAMINO DESIGN
CUSTOMER: ADON & MYRRH
LOCATION: BEIRUT - LEBANON

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references



**Conversion of conventional fossil fuel boiler
to biomass boiler with the use of BU burners
for the heating of a Poultry Farm**

PROJECT: WYNANDRE
LOCATION: SOUTH AFRICA
HEATING UNITS: 2 X PELLETECH BU 1150
OUTPUT POWER : 2 X 1150 kW
FUEL: WOODCHIPS

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