# WHY PELLETS?

**Renewable and CO2 neutral** - pellets are an upgraded form of firewood, made from timber industry byproducts. The CO2 released during combustion is offset by the carbon previously absorbed by trees, making them a carbon-neutral fuel.

A circular economy fuel - pellets are value-added byproducts of the wood industry, reducing waste and making the most of existing resources.

**Mostly local fuel** - the added value of its entire production chain will remain within the local economy, boosting energy independence

**Highly automatable and low maintenance** – pellet heating systems require minimal manual labour for transport, storage and operation. Maintenance for large-scale systems takes just 2-4 hours per month. **Consistent quality and low emissions** – unlike some biomass fuels, pellets have a uniform composition, ensuring stable combustion, easy system setup and low emissions.

**Cost-effective investment** – equipment for pellet-based heating is significantly more affordable compared to wood chip systems of the same capacity.

**Energy efficient** - pellet-based equipment consumes up to 10 times less electricity than wood chip systems with the same capacity **Compact and affordable storage** - Pellet storage requires less space and is cost-effective, making it easier to manage fuel reserves

**Crisis-proof fuel** – pellets can be stockpiled long term, ensuring a reliable heat supply even in times of uncertainty.

belltech





MOBILE HOT AIR GENERATOR



### **MOBILE HOT AIR GENERATOR 250kW**

Weatherproof design: The PC250 hot air generator is thermally insulated, built to withstand all weather conditions without requiring additional protection. Rain, snow, wind, or freezing temperatures will not disrupt its performance, ensuring reliable operation in demanding environments.

High-efficiency 6-pass heat exchanger consists of stainless steel tubes, where flue gases pass through the tubes while clean air circulates around them, heating up efficiently. The heated air exits through two 500 mm diameter outlets, allowing for the attachment of large flexible hoses to direct warm air where it is needed most.

Smart & remote-controlled operation: The integrated control system features a touchscreen panel for on-site operation, providing easy and intuitive control. Additionally, the built-in internet module enables remote monitoring and adjustments, ensuring effortless control from anywhere.

High performance air circulation fan: A high-performance fan, located behind the air intake, ensures continuous air circulation within the calorifier, efficiently directing warm air to the desired location. The PC250 can operate with either outdoor air or recirculated indoor air, depending on the heating requirements. To circulate indoor air,

a 600 mm hose must be connected.

Smoke fan & negative pressure control: To ensure optimal combustion, the PC250 maintains a slight negative pressure in the combustion chamber, regulated by a negative pressure sensor and a smoke fan. The smoke fan efficiently directs exhaust gases into the chimney, minimizing smoke accumlation.

Intermediate pellet storage tank is periodically refilled by the vacuum pump, ensuring a steady fuel supply. A pellet feed auger is positioned beneath the storage chute to regulate fuel flow into the burner.

#### Convenient fuel & power connections: The

fuel supply system and power connections are conveniently located on the side of the PC250. The unit requires a 3-phase 16A supply, and the controller automatically verifies phase sequence and quality for optimal motor performance.

### Vacuum pellet transport system:

A 2.2 kW vacuum pump efficiently transports pellets from the hopper to the calorifier . The system includes a small intermediate storage container, periodically refilled by the vacuum pump to ensure continuous fuel supply.

#### Pneumatic cleaning system

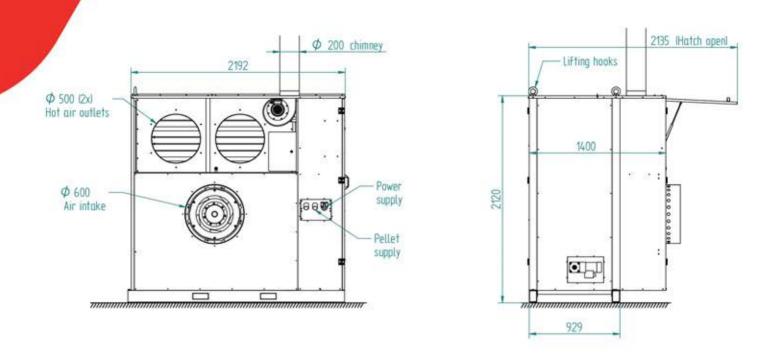
To maintain maximum efficiency, the PC250 heat exchanger is equipped with a pneumatic cleaning system. This system runs periodically, keeping heat exchanger surfaces clean and ensuring the device operates at peak performance with minimal maintenance.

Precision pellet feeding system: The pellet feed auger transports fuel from the intermediate tank to the PV250 pellet burner, ensuring a consistent and reliable fuel supply.

Fully automatic pellet burner PV250: The PC250 is equipped with the Pelltech PV250, a modulating, fully automatic pellet burner. This high-efficiency burner automatically adjusts to varying heat demands, ensuring optimal performance even at low heat consumption levels.

**Ash container:** Pellet combustion produces only up to 1% ash, which needs to be removed from the device. IN addition to pneumatic cleaning system, the PC250 features an ash auger, which automatically transports ash from the combustion chamber to the ash container. Routine inspection and emptying of the ash container is the most important maintenance task, ensuring long-lasting and trouble-free operation.





The PC250 mobile pellet air heater is designed for maximum efficiency, ease of use, and reliability. With just two buttons – START and STOP – operating the system is effortless, while inside, advanced automation and engineering ensure exceptional performance with minimal maintenance. Unlike conventional systems, the PC250 recirculates air, significantly improving heating efficiency and reducing heat loss. The user can set the desired temperature and fan speed (max air output 16000m<sup>3</sup>/h @400Pa), ensuring precise control over the indoor climate.

This hot air generator is ideal for spaces without central heating, like warehouses, temporary halls, garages, and other large spaces where quick, efficient heating is needed. It is easy to relocate the heater beacuse its lightweight (ca 1200kg), compact and mobil design allows for fast transfer to different locations

# ABOUT PELLTECH

Pelltech OU 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 OU 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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