

## AUTOMATIC PELLET STOVE 16KW



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### Experimental capabilities

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- Identification of the components of a heating system such as an automatic domestic pellet stove.
- Commissioning and functional testing.
- Parameter control.
- Adjustment of control and safety devices.
- Thermal balance and calculation of efficiencies.
- Heat Transfers
- Combustion control (requires optional analyzer).
- Preventive and curative maintenance.
- Draw electrical and hydraulic diagrams.

## Operating principle

The bench consists of the classic elements of a pellet stove system, a stove for heat production, a buffer tank for energy storage and two circuits for dissipation (a circuit for the connection of optional module and a circuit with two radiators). The students will first have to identify the components of the installation, draw the hydraulic diagram and then commission. They will then be able to make the thermal balance of the installation and the adjustments.

The rugged design of this equipment makes it perfectly suited for use in a school setting.

Its anodized aluminum structure on wheels gives it great robustness as well as great flexibility of integration into your premises.

The manufacture of this equipment complies with the European Machinery Directive

This equipment can be used alone or in combination with other compatible equipment in our range (see last part of this document).

## Technical Specifications

The bench includes:

1) A screwed anodised aluminium profile structure equipped with 4 directional brake castors

2) Hydraulic pellet stove

- Power: 20KW
- Daily and weekly programming
- Automatic ash removal of the heat exchanger and burner
- Glass door
- Pellet tank capacity: 48L
- Built-in safety valve and expansion tank

3) Water filling system including:

- Two shut-off valves
- a volumetric meter
- a Y-screen filter
- a pressure gauge for the supply network
- a disconnector

4) Primary heating circuit including:

- four 0/120°C dial thermometers
- an injection pot with a set of valves
- a digital energy meter
- a balancing valve on the return
- a thermostatic valve to maintain the temperature of the stove
- a sludge remover jar

5) ballon tampon:

- a 200L buffer tank with insulation and protective jacket
- a high-point air vent and a low-point drain valve
- three 0/120°C dial thermometers on the front panel to visualize the stratification
- an expansion tank with air drain and pressure gauge

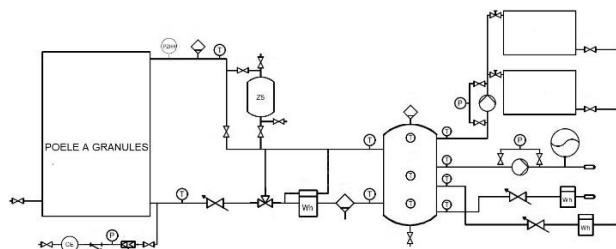
6) Dissipation circuit No. 1 comprising:

- Two quick couplings for connection to an optional dissipation system
- two 0/120°C thermometers (inlet and outlet)
- a digital energy meter
- a variable speed circulator with parallel pressure gauge for HMT measurement
- a TA type balancing valve on the return

7) Dissipation circuit No. 2 comprising:

- Two radiators mounted in parallel with control tee and manual valve
- two 0/120°C thermometers (inlet and outlet)
- a digital energy meter
- a variable speed circulator with parallel pressure gauge for HMT measurement
- a TA type balancing valve on the return

8) An electrical box that complies with current standards (general disconnector, live indicator light, emergency stop button and residual current circuit breaker). It is equipped with a switch to turn on the various components (pumps, stove, etc.).





# POG100

## Installation Specifications

## Documentation

- Power supply :230 Vac – 50 Hz – 10 A
- Power Supply Type: 1 phase(s) + Neutre + Terre.
- Water supply: filling (300L approximately-1.7bars)
- Dimensions: (LxIxH mm): 2900 x 790 x 1900
- Weight(Kg): 250

Nota : Dans le cadre d'une installation de l'équipement par nos services, tous les raccordements aux réseaux doivent se situer à moins de 2m de la machine

- User's manual
- Technical Documentation of Components
- Lab exercises
- Electrical Diagram
- Hydraulic Diagram
- CE Certificate of Conformity

## Options

- Combustion Analyzer
- Balance case

- Ref : ANA100
- Ref : TCF123

## Compatible add-on equipment

- Aerothermal dissipation bench
- Radiator bench
- Underfloor heating
- Hydraulic balancing bench (radiators)
- Convector fan bench

- Ref : AER033
- Ref : TCF120
- Ref : TCF121
- Ref : TCF122
- Ref : TCF124