

# Cortena Series

## All-in-one Pellet Boilers

### "Your Pellet Boiler is now on the Balcony"

Cortena Series is designed to fit limited spaces. Due to this feature can be easily installed in the lowest possible space in a boiler room and even balconies.

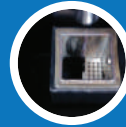
The compact structure of the Cortena Series is remarkable and fast becoming a leader in its own right. With the large integrated fuel tank, fuel loading intervals have been extended to the maximum. It is a true plug & play product as it includes all features required in a boiler room with its circulation pump, expansion tank, plumbing, and modular burner, it ensures to occupy the lowest possible space in a boiler room.

Cortena Series is equipped with top-of-line safety measures. Pressure discharge valves prevent any damage in an event of unexpected pressure increase inside the combustion chamber. All child-accessible doors are protected with child locks. With these features, safety is top-level among equivalents.

Due to the automatic cleaning feature, accumulated ash in the burner is collected in the ashtray without the need to open the front door, increasing the combustion efficiency, and consequently, the cleaning intervals are extended. This process increases your comfort and decreases your expenses.



### Features



#### Modular Burner & Cleaning Mechanism

Cortena Series automatically cleans itself at certain intervals in order to ensure the smooth and easy operation. Prolonged times of uninterrupted burning ensures comfort and efficiency. This feature is the first in this class product.



#### Adaptive Air Feed

The high-capacity fan ensures efficient combustion and prevents gas leakage.



#### Increased Safety

The ROBAX thermal glasses, pressure discharge valves, child lock on door and fire resistant cable covers ensures top-level safety.



#### All-in-one System

Cortena comes with an expansion tank, circulation pump and all with plumbing ready to start right away. It is a true plug & play product out of the box.



#### Large Fuel Tank

Large fuel tank providing maximum period of operation. The hatch of silo opens to sides or forth-back depending on the user preference. It is easily adjustable by the user. This is a standard feature in all Cortena products.



#### Easy Cleaning

An ashtray located beneath the burner allows easy extraction of ashes. All the ash is accumulated here as a result of the operation of the automated cleaning system which is active during operation. Tubes are easily cleaned by the move of an external arm removing the necessity of opening up the boiler for cleaning.



#### Sanitary Hot Water

Cortena is able to provide sanitary hot water with the addition of a plate heat exchanger to the boiler. This is an optional item and must be selected during the order phase.



#### Fresh Air Inlet

The fresh air inlet is separated with a duct in order to not consuming ambient air.



Hydro Type



Pellet Fuel



Changeable Burner



Ceramic Igniter



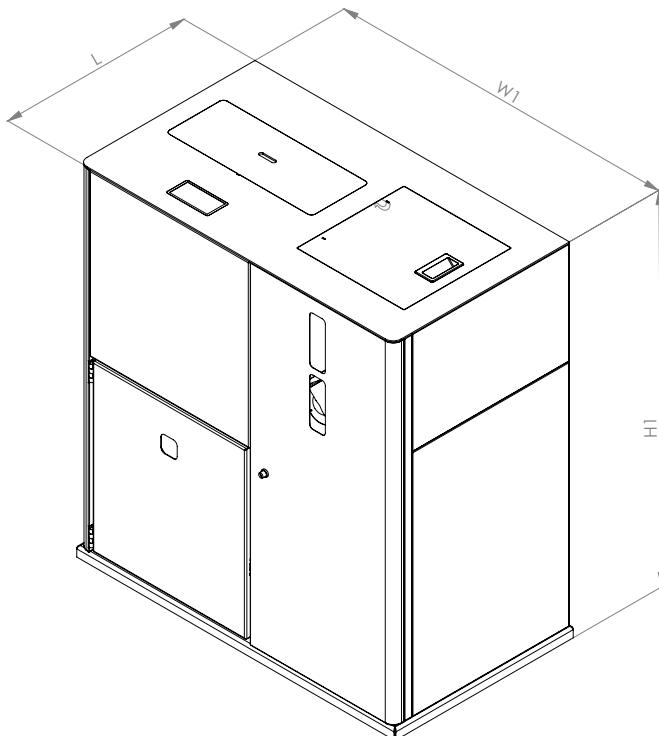
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Auto Burner Cleaning

## Technical Specifications

| TECHNICAL SPECIFICATION of CORTENA          |   | Unit                      | TYPE                              |           |
|---|---|---------------------------|-----------------------------------|-----------|
|   |   |                           | C23                               |           |
| <b>CAPACITY</b>                             | Nominal-Minimum Heat Output                 | kW                        | 23 - 6,9                          |           |
|   |   | kcal/h                    | 19.780 - 5,934                    |           |
|   | Direct Efficiency, Full load                | %                         | >90%                              |           |
| <b>OPERATING CONDITIONS</b>                 | Safety Limit Temperature                    | °C                        | 95                                |           |
|   | Max. Operating Temperature                  | °C                        | 80                                |           |
|   | Min. Water Return Temperature               | °C                        | 55                                |           |
|   | Operating & Test Pressure                   | bar                       | 1,5 - 4                           |           |
|   | Electrical Connection                       | -                         | 230 Vac , 50 Hz                   |           |
|   | Required Stack Draught                      | Pa                        | -10                               |           |
|   | Fuel Type                                   | -                         | Ø6 mm Premium Quality, EN Plus A1 |           |
|   | Approximate Fuel Consumption                | in full & partial load    | kg/h                              | 5,4 - 1,6 |
| <b>MAIN DIMENSIONS</b>                      | Base & Boiler Width, W1 & W2                | mm                        | 1015 - 1000                       |           |
|   | Base & Boiler Length, L1 & L2               | mm                        | 570 - 560                         |           |
|   | Height, H                                   | mm                        | 1090                              |           |
|   | Stack Size (Inner-Outer), ØD1               | mm                        | 98 - 102                          |           |
|   | Flue Gas Exit Connection                    | Position & Height, A & H1 | mm                                | 450 - 315 |
|   | Boiler Empty Weight & Freight Weight        | kg                        | 325 - 350                         |           |
|   | Freight Dimensions (width x depth x height) | mm                        | 710x1160x1250                     |           |
| <b>INSTALLATION &amp; WATER CONNECTIONS</b> | Water Outlet Connection                     | Diameter, ØD2             | inç                               | 1"        |
|   |   | Position & Height, B & H2 | mm                                | 95 - 650  |
|   | Water Inlet Connection                      | Diameter, ØD3             | inç                               | 1"        |
|   |   | Position & Height, C & H3 | mm                                | 42 - 300  |
|   | Expansion Tank Volume                       | lt                        | 12                                |           |
| Water Content                               | lt  | 65                        |                                   |           |
| <b>STORAGE VOLUME</b>                       |   | lt                        | 100                               |           |
|   |   | kg                        | 75                                |           |



### Highlights on the Features of Cortena:

- Proportional air fan control with unique software support,
- User friendly control system,
- Unique software for regulation of combustion,
- Large internal fuel storage,
- Easy cleaning,
- Flexible and easy installation,
- Easy service & maintenance design,
- Automatic ignition,
- Auto cleaning system,
- Superior security measures,
- Package system and plug-and-play feature.

