

Caria Series

Full Automatic Pellet Fired Boilers



Optional Touch Screen

“Minimum User Intervention”

The Caria Series burner system has been developed as a very quiet and self-cleaning system. A unique design marvel with international Patent rewards, the burner is comprised of logical controls which helps promote an outstanding combustion process.

With its superior abilities, the Caria burners are capable of igniting the wood pellets under 4 minutes.

Caria Series, is the first boiler to operate under continuous of vacuum, which effectively prevents soot, smoke, or any gas leakage to the boiler room. The combustion chamber is made up of special stainless steel which is highly acid and high-temperature resistant. The series subsist a patented self-cleaning system to prevent the accumulation of ash and sticky substances blocking the combustion air of the burner grate.

The Caria Series excel in reliability and long service life. That is why it is in great demand in Europe and more than 5 thousand products is successfully working for more than 12 years.

Patented



CP100 100 kW Caria Model

Features



Back Burn Control

Since Caria Series operate under negative pressure, fire back burn is prevented. In addition, safety thermostat that constantly controls the boiler water temperature prevents the boiler from reaching high temperatures.



Advanced Control System

An advanced central control system regulates the system constantly with the data provided by sensors.



Compact Burner Unit

Easily dismantlable burner unit provides service friendly maintenance as well as accessibility.



High Capacity Air Feed

Caria Series boilers are equipped with high capacity flue gas vacuum fans. Precise control of the boiler at the desired capacity is provided with the infinitely variable (modulation) fan.



Automated Ash Cleaning System

The ashes and wastes which are accumulated under the boiler are periodically collected to an external ash box by a screw feeder.



Advanced Combustion System

With Caria burners, up to 94% efficiency is obtained. Ignition element is a low power unit which decreases the electric consumption and also has a longer service life.



New Elegant Control Panel

Every system on boiler is controlled by user friendly control panel. All functions are expressed by symbols for any language.



Automated Tube Cleaning

Caria Series are equipped with a special turbulator system that enables periodically cleaning of tubes by the control panel.



Automated Burner Cleaning

Caria Series burner has a unique and patented cleaning system which effectively cleans the combustion chamber and discharges all the ashes.



Pellet Silo Variations

Different sizes of fuel silos designed for different boiler capacities. Silos are sent disassembled for ease of transportation and easily installed.



Hydro Type



Pellet Fuel



Changeable Burner



Ceramic Igniter



Photocell



Auto Burner Cleaning



Auto Tube Cleaning



Touch Screen



Remote Control



Back Burn Control



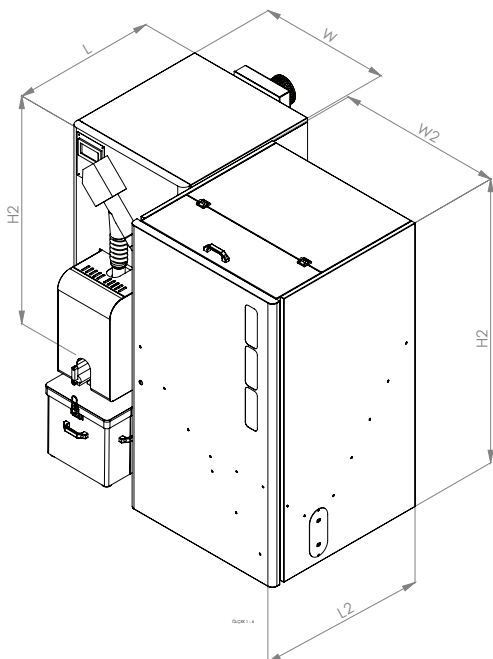
Different of Auger Variations



Pellet Silo Variations

Technical Specifications

TECHNICAL SPECIFICATION of CARIA		Unit	Boiler Type							
			CP-12	CP-23	CP-40	CP-60	CP-80	CP-100	CP-150	
CAPACITY	Nominal-Minimum Heat Output	kW	12 - 3,6	23 - 6,9	40 - 12	60 - 18	80 - 24	100 - 30	150 - 45	
		kcal/h	10.320 - 3.096	19.780 - 5.934	34.400 - 10.320	51.600 - 15.480	68.800 - 20.640	86.000 - 25.800	129.000 - 38.700	
	Direct Efficiency in Full Load	%	93,5	93,2	93,4	92,8	92,0	92,0	91,0	
OPERATING CONDITIONS	Boiler Class	°C	CLASS 5 acc. To EN 303-5							
	Safety Limit Temperature	°C	95							
	Setting Range for Operating Temperature	°C	80 - 65							
	Min. Water Return Temperature	°C	55							
	Operating® Test Pressure	bar	3 - 4,5							
	Electrical Connection	-	230 Vac , 50 Hz							
	Average Electricity Consumption	W	120	100	120	140	210	210	320	
	Recommended Fuel Types	-	Ø6 mm Premium Quality Pellet, EN Din PLUS A1, A2							
MAIN DIMENSIONS	Cabin Width, W	mm	700		750		750			
	Height, H	mm	1395		1495	1695	1695		1710	
	Cabin Depth, L	mm	800		825		825		1275	
	Total Boiler Depth ± 2, Lt	mm	1285	1295	1330	1330	1420		1935	
	Stack Size, (Outer, ØD1 -Inner Diameter)	mm	130-125		150-146		180-176		200-196	
	Height of Stack Connection, H1	mm	1058		1155	1355	1420		1210	
	Water Content	lt	99	91	116	140	117		250	
	Empty Weight	kg	295	315	404	444	450		625	
	Filling & Drain Connections	ØD2	inch	½"				½"		
	Hot Water Outlet Connections	ØD3	inch	1", Male		1 ½", Male		2", Male		
	Water Inlet Connections	H3	mm	1115		1218	1418	1365		1750
ØD4		inch	1", Male		1 ¼", Male		2", Male			
	H4	mm	245		255		197		215	
FUEL & STORAGE	Fuel Container Type	-	PS300		PS500		PS800			
	Net Volume	lt	325		507		800			
		kg	200		330		520			
	Silo Dimensions	W2 x L2 x H2	600x850x1433		850x850x1433		950x950x1633			



Highlights on the Features of Caria:

- Automatic ignition,
- Automatic cleaning of boiler tubes,
- Automatic cleaning of burner grates,
- Automatic ash removal,
- Automatic pellet-air ratio control (automatic adjustment of pellet dosage),
- Flexible installation (can be used easily with the closed expansion tank),
- External fuel silo,
- User friendly digital display,
- Optimum combustion performance with superior control software for pellet,
- Electronic air supply regulation, up to 94% efficiency,
- Easy maintenance with patented modular burner,
- Industrial performance for hotels and big businesses.

