



**METAL-FACH**  
HEATING TECHNOLOGY

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# CATALOG

## CENTRAL HEATING BOILERS

# METAL-FACH Heating Technology Manufacturer of **Central Heating Boilers**

## ■ METAL-FACH Heating Technology

METAL-FACH Heating Technology is a family company established in 1989. For all these years we have been developing the production of central heating boilers, which have become more and more efficient, economical and ecological every year. Our experience has been appreciated both on global markets and in Poland, thanks to obtaining such certificates as EcoDesign (EkoProjekt), 5th class, TÜV Rheinland. Boilers offered by the manufacturer METAL-FACH Heating Technology guarantee the highest quality, they are ecologically, environmentally friendly and financially beneficial for the user.



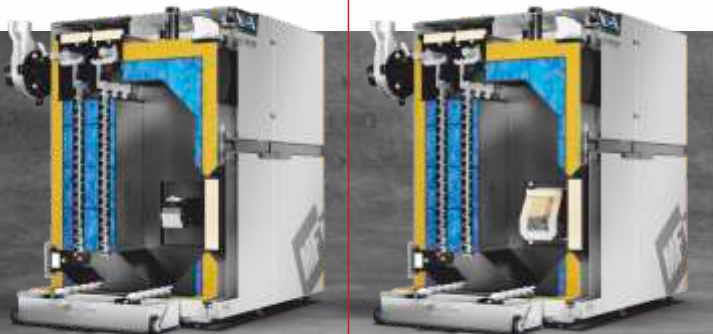






# GRAND PELLETT

DW PPW



**Heat exchanger | vertical convection channels | tubular**  
Efficient design adapted for automatic exchanger cleaning. The construction of the boiler exchanger ensures high heat collection from the furnace.

**Flue outlet at the back of the boiler | top, side adjustment from the fan**  
The boiler construction has been designed in such a way that the flue outlet is located at the back. The use of such a solution in the central heating boiler allows for direct discharge of the flue to the chimney.

**Limit switch**  
For your safety, the boiler is equipped with a limit switch. The limit protection system is located in the boiler door. Each time the door is opened, the burner and other boiler elements are automatically stopped until they are closed again.

**Exhaust fan | adjustable height**  
The exhaust fan effectively supports the natural draft of exhaust gases in the boiler.

**The PLATINUM PELLETT controller supports:**

- Pump (DHW, C.O., additional),
- One C.O.1 mixing circuit with a room thermostat,
- RTC clock with a weekly programmer,
- Weather control,
- Winter/summer operating mode,
- FuzzyLogic & PID.

**Automatic feeder**

Based on information received from sensors, the controller determines the fuel demand and doses the appropriate amount. The fuel combustion process itself is therefore very economical, ecological and does not require additional user service.

**Automatic ash removal system**

The automatic ash removal process consists in pushing ash outside the boiler, into two specially designed containers. Both ash collection containers have wheels and a handle, thanks to which you can efficiently pull or lift them.

**Swirlers | with automatic cleaning**

The swirlers installed in the convection channels, connected to the automatic cleaning system, effectively reduce the exhaust gas outlet speed. Thanks to systematic cleaning, the boiler maintains a constant high heat collection through the water jacket. The use of automatic cleaning of convection channels contributes to the reduction of fuel demand.

**Self-cleaning DW burner**

- Installed in boilers with a power of 15 | 20 kW,
- Automatic cleaning,
- Automatic ceramic igniter,
- Fuel: pellet  $\Phi$ 6-8mm.



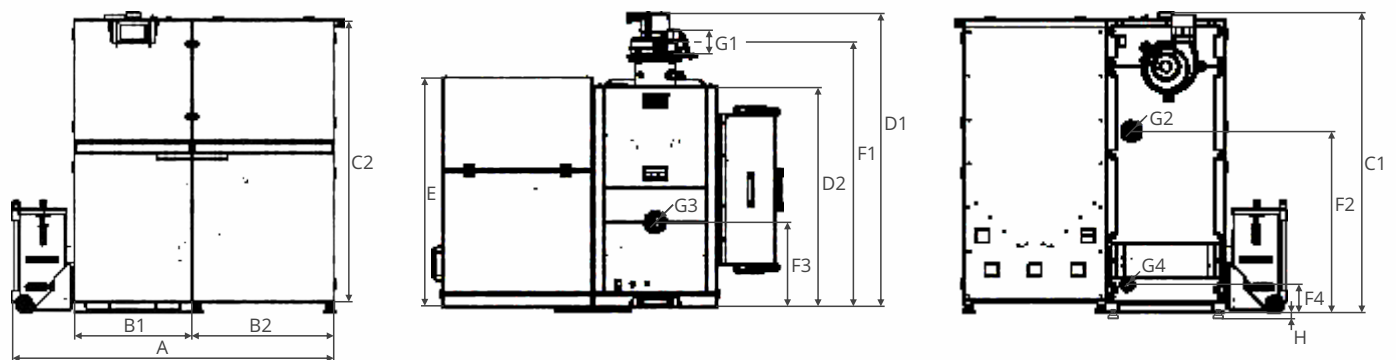
**Self-cleaning PPW burner**

- Installed in boilers with a power of 25 | 34 kW,
- Automatic cleaning,
- Automatic ceramic igniter,
- Fuel: pellet  $\Phi$ 6-8mm.



Boiler model		GRAND PELLETT 15	GRAND PELLETT 20	GRAND PELLETT 25	GRAND PELLETT 34
Nominal power	[kW]	15	20	25	34
Heatable surface*	[m <sup>2</sup> ]	67,5-225	90-300	112,5-375	153-510
Fuel	[-]	wood pellets according to the 303-5:2021-09 standard			
Water capacity	[L]	70	92	92	128
Fuel tank capacity	[L]	270	270	270	290
Fuel tank capacity	[kg]	162	162	162	174
Boiler weight	[kg]	400	440	445	585
Boiler class	[-]	5	5	5	5
EcoDesign	[-]	yes	yes	yes	yes
Energy class	[-]	A+	A+	A+	A+
Seasonal particulate emission	[mg/m <sup>3</sup> ]	18,16	13,92	16,05	16,81
Efficiency for nominal power	[%]	92,52	92,67	92,42	92,72
Nominal particulate emission	[mg/m <sup>3</sup> ]	11,44	10,32	12,34	13,35
Efficiency for minimum power	[%]	92,98	92,93	92,84	92,26
Minimum particulate emission	[mg/m <sup>3</sup> ]	19,35	10,32	16,70	17,42

\*A new building with very good thermal insulation was assumed for the calculations.



Dimensions		GRAND PELLETT 15	GRAND PELLETT 20	GRAND PELLETT 25	GRAND PELLETT 34
A	[mm]	1400	1400	1400	1450
B1	[mm]	508	508	508	560
B2	[mm]	620	620	620	620
C1	[mm]	1300	1300	1300	1475
C2	[mm]	1265	1265	1265	1440
D1	[mm]	1030	1200	1200	1200
D2	[mm]	760	900	900	900
E	[mm]	960	960	960	960
F1	[mm]	905	1085	1085	1085
F2	[mm]	785	785	785	960
F3	[mm]	319	345	345	405
F4	[mm]	125	125	125	125
G1	[mm]	100	100	100	100
G2	[cal]	1 ½	1 ½	1 ½	1 ½
G3	[cal]	1 ½	1 ½	1 ½	1 ½
G4	[cal]	¾	¾	¾	¾
H	[mm]	30	30	30	30

#### Additional equipment

Lambda probe	Measures oxygen in exhaust gases and controls its course by changing the fan power
ecoNET Internet module	<b>(Standard equipment)</b> Smartphone control, Wi-Fi or wired connection
Platinum Touch x40 room thermostat	Analog, wireless
Platinum Touch x80 room thermostat	Touch, wireless
Platinum ecoSTER100 room thermostat	Touch, wired, 5" display
Platinum B module	Buffer operation control, additional two heating circuits, 2x pumps, 2x mixer, 2x thermostat
Platinum C module	Additional two heating circuits, 2x pumps, 2x mixer, 2x thermostat
Exhaust fan	<b>(Standard equipment)</b>
Automatic ash removal system	<b>(Standard equipment)</b>
Automatic self-cleaning exchanger system	<b>(Standard equipment)</b>



# GRAND PELLETT



■ **Heat exchanger | vertical convection channels | tubular**  
Efficient design adapted for automatic exchanger cleaning. The construction of the boiler exchanger ensures high heat collection from the furnace.

■ **Flue outlet | at the back of the boiler**  
The boiler design has been designed in such a way that the flue outlets are located at the back. Using such a solution in a central heating boiler allows for direct discharge of the flue to the chimney.

■ **Limit switch**  
For your safety, the boiler is equipped with a limit switch. The limit protection system is located in the boiler door. Each time the door is opened, the burner and other boiler elements are automatically stopped until they are closed again.

■ **Exhaust fan | adjustable height**  
The exhaust fan effectively supports the natural draft of exhaust gases in the boiler.

■ **The PLATINUM PELLETT controller supports:**

- Pump (DHW, C.O., additional),
- One C.O.1 mixing circuit with a room thermostat,
- RTC clock with a weekly programmer,
- Weather control,
- Winter/summer operating mode,
- FuzzyLogic & PID.

■ **Automatic feeder**

Based on information received from sensors, the controller determines the fuel demand and doses the appropriate amount. The fuel combustion process itself is therefore very economical, ecological and does not require additional service from the user.

■ **Automatic ash removal system**

The automatic ash removal process consists in pushing ash out of the boiler, into two specially designed containers. Both ash collection containers have wheels and a handle, thanks to which you can efficiently pull or lift them.

■ **Swirlers | with automatic cleaning**

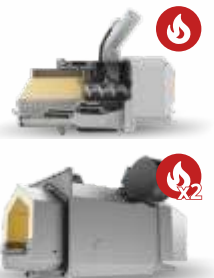
The swirlers installed in the convection channels, connected to the automatic cleaning system, effectively reduce the exhaust gas outlet velocity. Thanks to systematic cleaning, the boiler maintains a constant high heat reception through the water jacket. The use of automatic cleaning of the convection channels contributes to the reduction of fuel demand.

■ **Steel screens**

The use of steel screens in the combustion chamber improves the efficiency of the combustion process. The screens increase the temperature in the combustion chamber and stop the particles floating above the furnace, burning them. The thermal efficiency of the boiler increases, and the exhaust gases have the amount of harmful compounds to the environment reduced to a minimum.

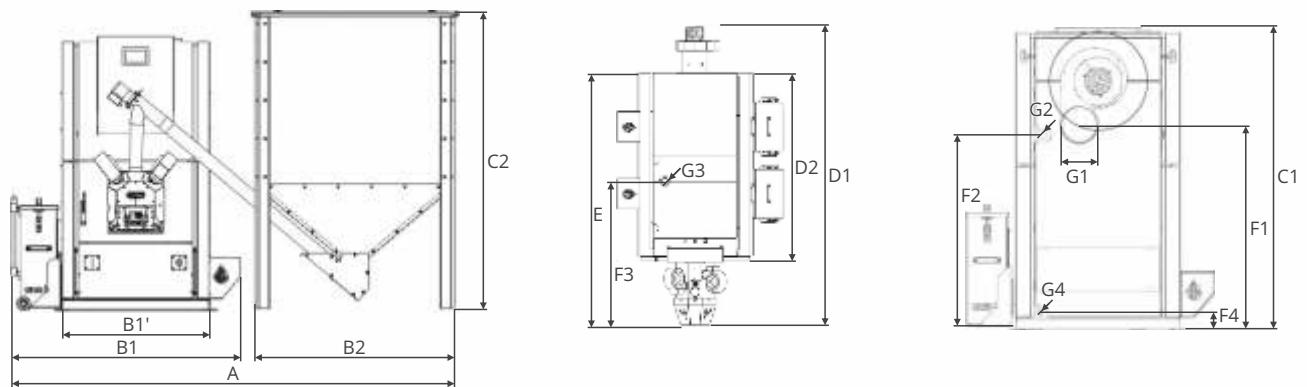
■ **Self-cleaning PPW burner**

- Automatic cleaning,
- Automatic ceramic igniter (50.75kW),
- Two automatic ceramic igniters (100.150kW),
- Fuel: pellet  $\Phi$ 6-8mm.



Boiler model		GRAND PELLET 50	GRAND PELLET 75	GRAND PELLET 100	GRAND PELLET 150
Nominal power	[kW]	50	75	100	150
Heatable surface*	[m <sup>2</sup> ]	225-750	337,5-1125	450-1500	675-2250
Fuel	[-]	wood pellets according to the 303-5:2021-09 standard			
Water capacity	[L]	245	245	360	360
Fuel tank capacity	[L]	1000	1000	1000	1000
Fuel tank capacity	[kg]	600	600	600	600
Boiler weight	[kg]	880	880	1095	1125
Boiler class	[-]	5	5	5	5
EcoDesign	[-]	yes	yes	yes	yes
Energy class	[-]	A+	A+	A+	A+
Seasonal particulate emission	[mg/m <sup>3</sup> ]	13,87	16,01	13,14	16,82
Efficiency for nominal power	[%]	92,82	92,75	92,83	92,78
Nominal particulate emission	[mg/m <sup>3</sup> ]	10,04	12,15	10,14	11,64
Efficiency for minimum power	[%]	93,09	92,93	92,66	92,93
Minimum particulate emission	[mg/m <sup>3</sup> ]	14,54	16,69	13,67	17,73

\*A new building with very good thermal insulation was assumed for the calculations.



Dimensions		GRAND PELLET 50	GRAND PELLET 75	GRAND PELLET 100	GRAND PELLET 150
A	[mm]	2429	2429	2429	2429
B1   B1'	[mm]	1255   815	1255   815	1255   815	1255   815
B2	[mm]	1111	1111	1111	1111
C1	[mm]	1475	1475	1715	1715
C2	[mm]	1636	1636	1636	1636
D1	[mm]	2190	2190	2500	2600
D2	[mm]	1450	1450	1600	1600
E	[mm]	1890	1890	2130	2230
F1	[mm]	1015	1015	1345	1345
F2	[mm]	970	970	1250	1250
F3	[mm]	1000	1000	1140	1240
F4	[mm]	145	145	145	145
G1	[mm]	180	180	185	185
G2	[cal]	1 ½	1 ½	1 ½	1 ½
G3	[cal]	1 ½	1 ½	1 ½	1 ½
G4	[cal]	¾	¾	¾	¾
H	[mm]	-	-	-	-

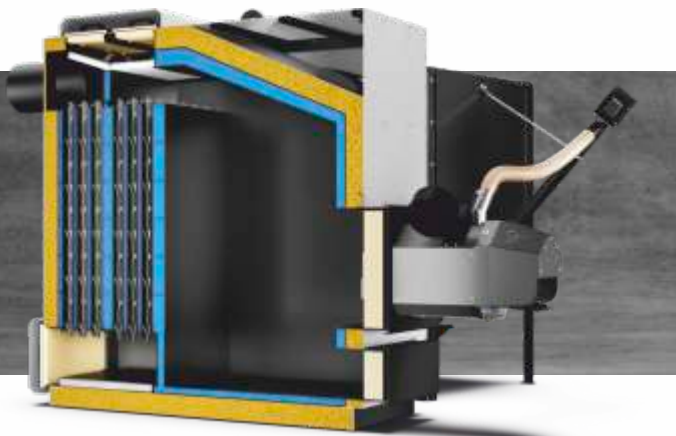
#### Additional equipment

Lambda probe	Measures oxygen in exhaust gases and controls its course by changing the fan power
ecoNET Internet module	<b>(Standard equipment)</b> Smartphone control, Wi-Fi or wired connection
Platinum Touch x40 room thermostat	Analog, wireless
Platinum Touch x80 room thermostat	Touch, wireless
Platinum ecoSTER100 room thermostat	Touch, wired, 5" display
Platinum B module	Buffer operation control, additional two heating circuits, 2x pumps, 2x mixer, 2x thermostat
Platinum C module	Additional two heating circuits, 2x pumps, 2x mixer, 2x thermostat
Exhaust fan	<b>(Standard equipment)</b>
Automatic ash removal system	<b>(Standard equipment)</b>
Automatic self-cleaning exchanger system	<b>(Standard equipment)</b>





# GRAND PELLETT



**Heat exchanger | vertical convection channels | tubular**  
Efficient design adapted for automatic exchanger cleaning. The construction of the boiler exchanger ensures high heat collection from the furnace.

**Flue outlet | at the back of the boiler**  
The boiler design has been designed in such a way that the flue outlets are located at the back. Using such a solution in a central heating boiler allows for direct discharge of the flue to the chimney.

**Limit switch**  
For your safety, the boiler is equipped with a limit switch. The limit protection system is located in the boiler door. Each time the door is opened, the burner and other boiler elements are automatically stopped until they are closed again.

**Exhaust fan | adjustable height**  
**(Additional equipment)**  
The exhaust fan effectively supports the natural draft of exhaust gases in the boiler.

**The PLATINUM PELLETT controller supports:**

- Pump (DHW, C.O., additional),
- One C.O.1 mixing circuit with a room thermostat,
- RTC clock with a weekly programmer,
- Weather control,
- Winter/summer operating mode,
- FuzzyLogic & PID.

**Automatic feeder**

Based on information received from sensors, the controller determines the fuel demand and doses the appropriate amount. The fuel combustion process itself is therefore very economical, ecological and does not require additional service from the user.

**Automatic ash removal system**  
**(Additional equipment)**

The automatic ash removal process consists in pushing ash out of the boiler, into two specially designed containers. Both ash collection containers have wheels and a handle, thanks to which you can efficiently pull or lift them.

**Swirlers | with automatic cleaning**  
**(Additional equipment)**

The swirlers installed in the convection channels, connected to the automatic cleaning system, effectively reduce the exhaust gas outlet velocity. Thanks to systematic cleaning, the boiler maintains a constant high heat collection through the water jacket. The use of automatic cleaning of the convection channels contributes to the reduction of fuel demand.

**Self-cleaning PPW burner**

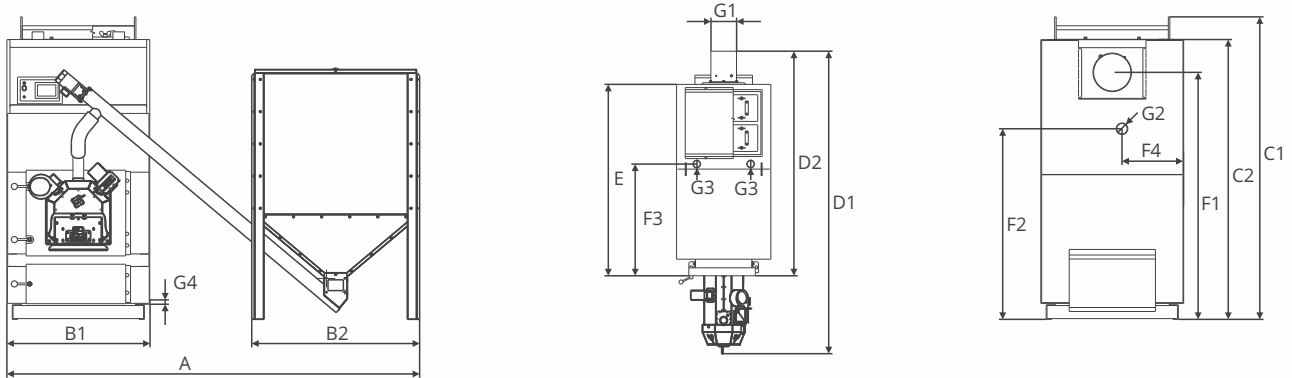
- Automatic cleaning,
- Two automatic ceramic igniters,
- Fuel: pellet  $\Phi$ 6-8mm.





Boiler model	GRAND PELLET 200	
Nominal power	[kW]	200
Heatable surface*	[m <sup>2</sup> ]	900-3000
Fuel	[-]	wood pellets according to the 303-5:2021-09 standard
Water capacity	[L]	530
Fuel tank capacity	[L]	1000
Fuel tank capacity	[kg]	600
Boiler weight	[kg]	2100
Boiler class	[-]	5
EcoDesign	[-]	yes
Energy class	[-]	A+
Seasonal particulate emission	[mg/m <sup>3</sup> ]	17,85
Efficiency for nominal power	[%]	92,91
Nominal particulate emission	[mg/m <sup>3</sup> ]	12,32
Efficiency for minimum power	[%]	92,17
Minimum particulate emission	[mg/m <sup>3</sup> ]	18,83

\*A new building with very good thermal insulation was assumed for the calculations.



Dimensions	GRAND PELLETT 200	
A	[mm]	2700
B1	[mm]	930
B2	[mm]	1111
C1	[mm]	1969
C2	[mm]	1872
D1	[mm]	2952
D2	[mm]	2162
E	[mm]	1838
F1	[mm]	1608
F2	[mm]	1252
F3	[mm]	1060
F4	[mm]	400
G1	[mm]	250
G2	[cal]	2
G3	[cal]	2
G4	[cal]	¾
H	[mm]	-

#### Additional equipment

Lambda probe	Measures oxygen in exhaust gases and controls its course by changing the fan power
ecoNET Internet module	<b>(Standard equipment)</b> Smartphone control, Wi-Fi or wired connection
Platinum Touch x40 room thermostat	Analog, wireless
Platinum Touch x80 room thermostat	Touch, wireless
Platinum ecoSTER100 room thermostat	Touch, wired, 5" display
Platinum B module	Buffer operation control, additional two heating circuits, 2x pumps, 2x mixer, 2x thermostat
Platinum C module	Additional two heating circuits, 2x pumps, 2x mixer, 2x thermostat
Exhaust fan	
Automatic ash removal system	
Automatic self-cleaning exchanger system	



# GRAND PELLETT



■ **Heat exchanger | horizontal convection channels | tubular**  
Efficient design adapted for automatic exchanger cleaning. The construction of the boiler exchanger ensures high heat collection from the furnace.

■ **Flue outlet | at the back of the boiler**  
The boiler construction has been designed in such a way that the flue outlets are located at the back. The use of such a solution in the central heating boiler allows for direct discharge of the flue to the chimney.

■ **Limit switch**  
For your safety, the boiler is equipped with a limit switch. The end protection system is located in the boiler door. Each time the door is opened, the burner and other boiler elements are automatically stopped until they are closed again.

■ **Exhaust fan | adjustable height**  
**(Additional equipment)**  
The exhaust fan effectively supports the natural draft of exhaust gases in the boiler.

■ **The PLATINUM PELLETT controller supports:**

- Pump (DHW, C.O., additional),
- One C.O.1 mixing circuit with a room thermostat,
- RTC clock with a weekly programmer,
- Weather control,
- Winter/summer operating mode,
- FuzzyLogic & PID.

■ **Automatic feeder**

The controller, based on information received from sensors, determines the fuel demand and doses the appropriate amount. The fuel combustion process itself is therefore very economical, ecological and does not require additional service from the user.

■ **Automatic ash removal system**  
**(Additional equipment)**

The automatic ash removal process consists in pushing ash outside the boiler, into two specially designed containers. Both ash collection containers have wheels and a handle, thanks to which you can efficiently pull or lift them.

■ **Swirlers | with automatic cleaning**  
**(Additional equipment)**

The vorticolators installed in the convection channels, connected to the automatic cleaning system, effectively reduce the speed of the exhaust gas outlet. Thanks to systematic cleaning, the boiler maintains a constant high heat reception through the water jacket. The use of automatic cleaning of the convection channels contributes to the reduction of fuel demand.

■ **Steel screens**

The use of steel screens in the combustion chamber improves the efficiency of the combustion process. The screens increase the temperature in the combustion chamber and stop the particles floating above the furnace, burning them. The thermal efficiency of the boiler increases, and the exhaust gases have the amount of harmful compounds to the environment reduced to a minimum.

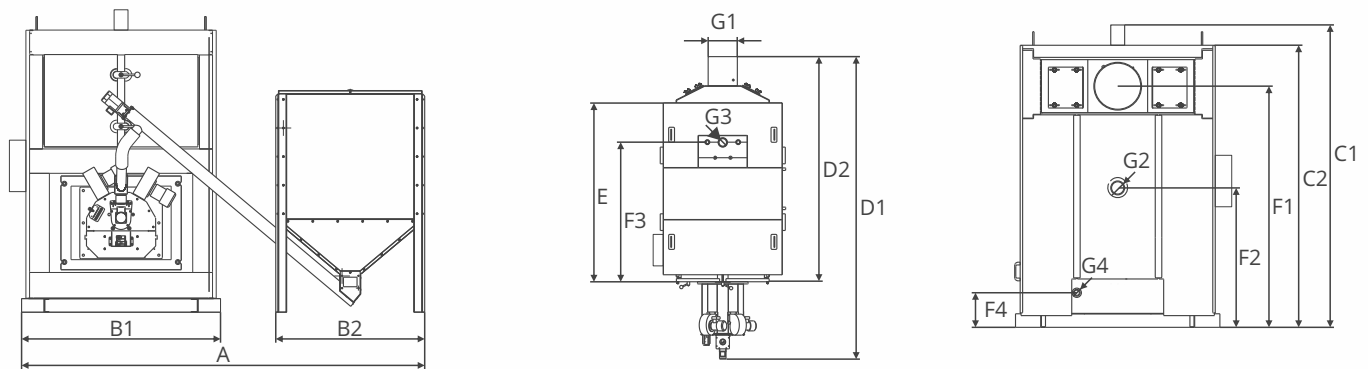
■ **Self-cleaning PPW burner**

- Automatic cleaning,
- Two automatic ceramic igniters,
- Fuel: pellet  $\Phi 6-8\text{mm}$ .



Boiler model	GRAND PELLET 300	
Nominal power	[kW]	300
Heatable surface*	[m <sup>2</sup> ]	1350-4500
Fuel	[-]	wood pellets according to the 303-5:2021-09 standard
Water capacity	[L]	1266
Fuel tank capacity	[L]	1000
Fuel tank capacity	[kg]	600
Boiler weight	[kg]	2800
Boiler class	[-]	5
EcoDesign	[-]	yes
Energy class	[-]	A+
Seasonal particulate emission	[mg/m <sup>3</sup> ]	18
Efficiency for nominal power	[%]	90,5
Nominal particulate emission	[mg/m <sup>3</sup> ]	19
Efficiency for minimum power	[%]	89,9
Minimum particulate emission	[mg/m <sup>3</sup> ]	18

\*A new building with very good thermal insulation was assumed for the calculations.



Dimensions	GRAND PELLETT 300	
A	[mm]	2970
B1	[mm]	1500
B2	[mm]	1111
C1	[mm]	2220
C2	[mm]	2100
D1	[mm]	3630
D2	[mm]	2729
E	[mm]	2060
F1	[mm]	1770
F2	[mm]	958
F3	[mm]	1672
F4	[mm]	206
G1	[mm]	340
G2	[-]	DN 100
G3	[-]	DN 100
G4	[cal]	G 1 ¼"
H	[mm]	-

#### Additional equipment

Lambda probe	Measures oxygen in exhaust gases and controls its course by changing the fan power
ecoNET Internet module	<b>(Standard equipment)</b> Smartphone control, Wi-Fi or wired connection
Platinum Touch x40 room thermostat	Analog, wireless
Platinum Touch x80 room thermostat	Touch, wireless
Platinum ecoSTER100 room thermostat	Touch, wired, 5" display
Platinum B module	Buffer operation control, additional two heating circuits, 2x pumps, 2x mixer, 2x thermostat
Platinum C module	Additional two heating circuits, 2x pumps, 2x mixer, 2x thermostat
Exhaust fan	
Automatic ash removal system	
Automatic self-cleaning exchanger system	



# GRAND PELLETT



■ **Heat exchanger | horizontal convection channels | tubular**  
Efficient design adapted for automatic exchanger cleaning. The construction of the boiler exchanger ensures high heat collection from the furnace.

■ **Flue outlet | at the back of the boiler**  
The boiler construction has been designed in such a way that the flue outlets are located at the back. The use of such a solution in the central heating boiler allows for direct discharge of the flue to the chimney.

■ **Limit switch**  
For your safety, the boiler is equipped with a limit switch. The end protection system is located in the boiler door. Each time the door is opened, the burner and other boiler elements are automatically stopped until they are closed again.

■ **Exhaust fan | adjustable height**  
**(Additional equipment)**  
The exhaust fan effectively supports the natural draft of exhaust gases in the boiler.

■ **The PLATINUM PELLETT controller supports:**

- Pump (DHW, C.O., additional),
- One C.O.1 mixing circuit with a room thermostat,
- RTC clock with a weekly programmer,
- Weather control,
- Winter/summer operating mode,
- FuzzyLogic & PID.

■ **Automatic feeder**

The controller, based on information received from sensors, determines the fuel demand and doses the appropriate amount. The fuel combustion process itself is therefore very economical, ecological and does not require additional service from the user.

■ **Automatic ash removal system**  
**(Additional equipment)**

The automatic ash removal process consists in pushing ash outside the boiler, into two specially designed containers. Both ash collection containers have wheels and a handle, thanks to which you can efficiently pull or lift them.

■ **Swirlers | with automatic cleaning**  
**(Additional equipment)**

The vorticolators installed in the convection channels, connected to the automatic cleaning system, effectively reduce the speed of the exhaust gas outlet. Thanks to systematic cleaning, the boiler maintains a constant high heat reception through the water jacket. The use of automatic cleaning of the convection channels contributes to the reduction of fuel demand.

■ **Steel screens**

The use of steel screens in the combustion chamber improves the efficiency of the combustion process. The screens increase the temperature in the combustion chamber and stop particles floating above the furnace, burning them out. The thermal efficiency of the boiler increases, and the exhaust gases have the amount of compounds harmful to the environment reduced to a minimum.

■ **Self-cleaning PPW burner**

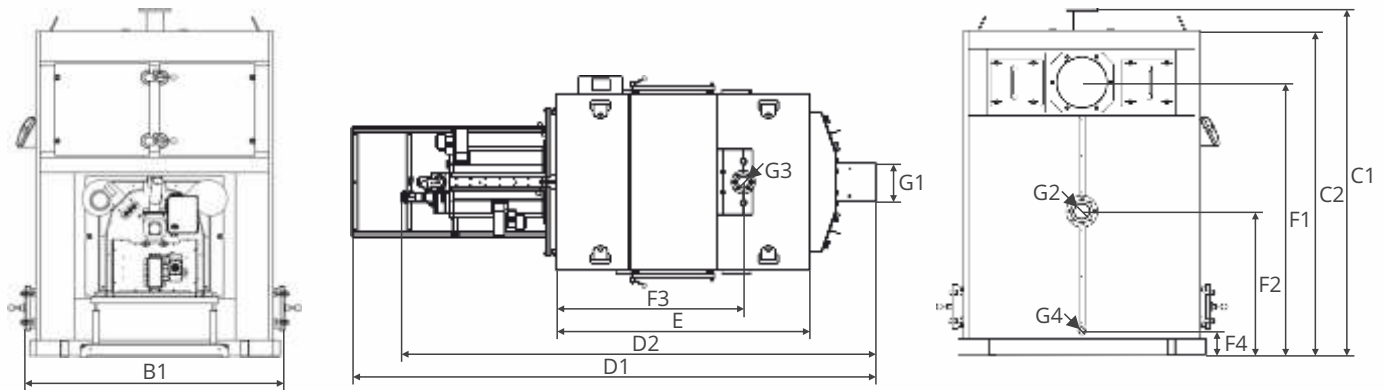
- Automatic cleaning,
- Two automatic ceramic igniters,
- Fuel: pellet  $\Phi 6-8\text{mm}$ .





Boiler model		GRAND PELLETT 400	GRAND PELLETT 500
Nominal power	[kW]	400	500
Heatable surface*	[m <sup>2</sup> ]	1800-6000	2250-7500
Fuel	[-]	wood pellets according to the 303-5:2021-09 standard	
Water capacity	[L]	1750	1950
Fuel tank capacity	[L]	1000	1000
Fuel tank capacity	[kg]	600	600
Boiler weight	[kg]	-	-
Boiler class	[-]	5	5
EcoDesign	[-]	yes	yes
Energy class	[-]	A+	A+
Seasonal particulate emission	[mg/m <sup>3</sup> ]	19	19
Efficiency for nominal power	[%]	90,7	91
Nominal particulate emission	[mg/m <sup>3</sup> ]	18	18
Efficiency for minimum power	[%]	90,9	90,5
Minimum particulate emission	[mg/m <sup>3</sup> ]	19	19

\*A new building with very good thermal insulation was assumed for the calculations.



Dimensions		GRAND PELLETT 400	GRAND PELLETT 500
A	[mm]	-	-
B1	[mm]	1714	1921
B2	[mm]	-	-
C1	[mm]	2310	2310
C2	[mm]	2160	2160
D1	[mm]	4721	4721
D2	[mm]	4270	4270
E	[mm]	2284	2284
F1	[mm]	1818	1818
F2	[mm]	960	960
F3	[mm]	1686	1686
F4	[mm]	165	165
G1	[mm]	340	340
G2	[-]	DN 100	DN 100
G3	[-]	DN 100	DN 100
G4	[cal]	G 1 ¼"	G 1 ¼"
H	[mm]	-	-

#### Additional equipment

Lambda probe	Measures oxygen in exhaust gases and controls its course by changing the fan power
ecoNET Internet module	<b>(Standard equipment)</b> Smartphone control, Wi-Fi or wired connection
Platinum Touch x40 room thermostat	Analog, wireless
Platinum Touch x80 room thermostat	Touch, wireless
Platinum ecoSTER100 room thermostat	Touch, wired, 5" display
Platinum B module	Buffer operation control, additional two heating circuits, 2x pumps, 2x mixer, 2x thermostat
Platinum C module	Additional two heating circuits, 2x pumps, 2x mixer, 2x thermostat
Exhaust fan	
Automatic ash removal system	
Automatic self-cleaning exchanger system	



# SLIM PELLETT



## ■ The PLATINUM PELLETT controller supports:

- Pump (DHW, C.O., additional),
- One C.O.1 mixing circuit with a room thermostat,
- RTC clock with a weekly programmer,
- Weather control,
- Winter/summer operating mode,
- FuzzyLogic & PID.

## ■ Automatic feeder

The controller, based on information received from sensors, determines the fuel demand and doses the appropriate amount. The fuel combustion process itself is therefore very economical, ecological and does not require additional service from the user.

## ■ Heat exchanger | horizontal convection channels | tubular

Efficient design adapted for automatic exchanger cleaning. The construction of the boiler exchanger ensures high heat collection from the furnace.

## ■ Flue outlet at the back of the boiler | top, side adjustment from the fan

The boiler construction has been designed in such a way that the flue outlets are located at the back. The use of such a solution in the central heating boiler allows for direct discharge of the flue to the chimney.

## ■ Exhaust fan | adjustable height (Additional equipment)

The exhaust fan effectively supports the natural draft of exhaust gases in the boiler.

## ■ Limit switch

For your safety, the boiler is equipped with a limit switch. The end protection system is located in the boiler door. Each time the door is opened, the burner and other boiler elements are automatically stopped until they are closed again.

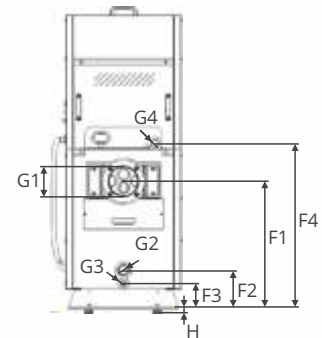
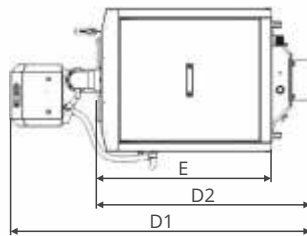
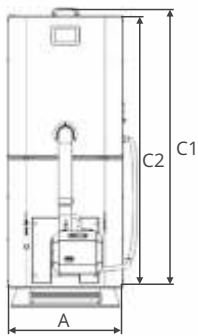
## ■ Self-cleaning DW Burner

- Automatic cleaning,
- Automatic ceramic igniter,
- Fuel: pellet  $\Phi$ 6-8mm.



Boiler model		SLIM PELLET 10	SLIM PELLET 15	SLIM PELLET 20
Nominal power	[kW]	10	15	20
Heatable surface*	[m <sup>2</sup> ]	45-150	67,5-225	90-300
Fuel	[-]	wood pellets according to the 303-5:2021-09 standard		
Water capacity	[L]	45	65	75
Fuel tank capacity	[L]	120	160	180
Fuel tank capacity	[kg]	72	96	108
Boiler weight	[kg]	260	310	340
Boiler class	[-]	5	5	5
EcoDesign	[-]	yes	yes	yes
Energy class	[-]	A+	A+	A+
Seasonal particulate emission	[mg/m <sup>3</sup> ]	17,84	17,25	15,82
Efficiency for nominal power	[%]	92,26	92,07	92,51
Nominal particulate emission	[mg/m <sup>3</sup> ]	15,05	16,13	15,07
Efficiency for minimum power	[%]	91,05	91,10	91,58
Minimum particulate emission	[mg/m <sup>3</sup> ]	18,33	17,45	15,95

\*A new building with very good thermal insulation was assumed for the calculations.



Dimensions		SLIM PELLET 10	SLIM PELLET 15	SLIM PELLET 20
A	[mm]	590	590	690
B1	[mm]	-	-	-
B2	[mm]	-	-	-
C1	[mm]	1550	1550	1550
C2	[mm]	1510	1510	1510
D1	[mm]	1250	1465	1465
D2	[mm]	870	1090	1090
E	[mm]	705	920	920
F1	[mm]	656	656	656
F2	[mm]	200	200	200
F3	[mm]	130	130	130
F4	[mm]	850	850	868
G1	[mm]	160	160	160
G2	[cal]	1 ¼	1 ¼	1 ¼
G3	[cal]	¾	¾	¾
G4	[cal]	1 ¼	1 ¼	1 ¼
H	[mm]	30	30	30

#### Additional equipment

Lambda probe	Measures oxygen in exhaust gases and controls its course by changing the fan power
ecoNET Internet module	Smartphone control, Wi-Fi or wired connection
Platinum Touch x40 room thermostat	Analog, wireless
Platinum Touch x80 room thermostat	Touch, wireless
Platinum ecoSTER100 room thermostat	Touch, wired, 5" display
Platinum B module	Buffer operation control, additional two heating circuits, 2x pumps, 2x mixer, 2x thermostat
Platinum C module	Additional two heating circuits, 2x pumps, 2x mixer, 2x thermostat
Exhaust fan	



# SLIM PELLET MINI



■ **Heat exchanger | horizontal convection channels | tubular**  
Efficient design adapted for automatic exchanger cleaning. The construction of the boiler exchanger ensures high heat collection from the furnace.

■ **Flue outlet at the back of the boiler | top, side adjustment from the fan**  
The boiler construction has been designed in such a way that the flue outlets are located at the back. The use of such a solution in the central heating boiler allows for direct discharge of the flue to the chimney.

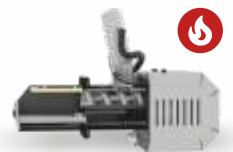
■ **Exhaust fan | adjustable height (Additional equipment)**  
The exhaust fan effectively supports the natural draft of exhaust gases in the boiler.

■ **The PLATINUM PELLET controller supports:**  
- Pump (DHW, C.O., additional),  
- One C.O.1 mixing circuit with a room thermostat,  
- RTC clock with a weekly programmer,  
- Weather control,  
- Winter/summer operating mode,  
- FuzzyLogic & PID.

■ **Automatic feeder**  
The controller, based on information received from sensors, determines the fuel demand and doses the appropriate amount. The fuel combustion process itself is therefore very economical, ecological and does not require additional service from the user.

■ **Limit switch**  
For your safety, the boiler is equipped with a limit switch. The end protection system is located in the boiler door. Each time the door is opened, the burner and other boiler elements are automatically stopped until they are closed again.

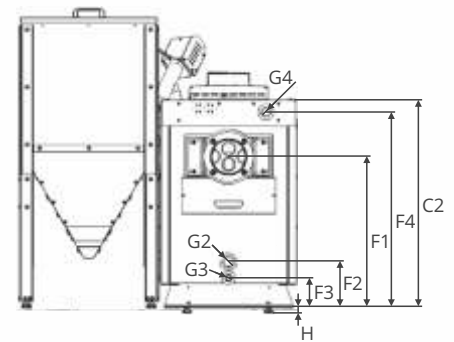
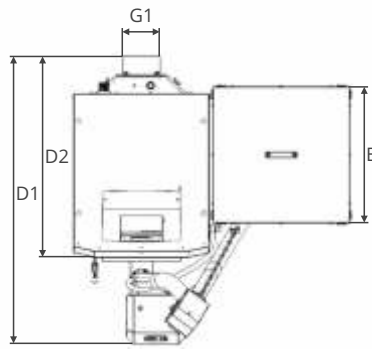
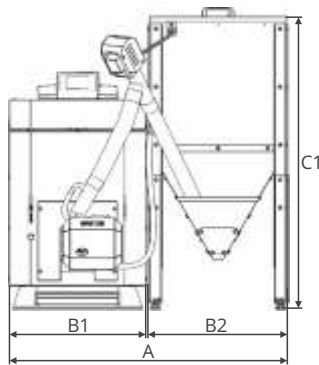
■ **Self-cleaning DW Burner**  
- Automatic cleaning,  
- Automatic ceramic igniter,  
- Fuel: pellet  $\Phi$ 6-8mm.





Boiler model		SLIM PELLETT MINI 10	SLIM PELLETT MINI 15	SLIM PELLETT MINI 20
Nominal power	[kW]	10	15	20
Heatable surface*	[m <sup>2</sup> ]	45-150	67,5-225	90-300
Fuel	[-]	wood pellets according to the 303-5:2021-09 standard		
Water capacity	[L]	45	65	75
Fuel tank capacity	[L]	230	230	230
Fuel tank capacity	[kg]	138	138	138
Boiler weight	[kg]	270	305	345
Boiler class	[-]	5	5	5
EcoDesign	[-]	yes	yes	yes
Energy class	[-]	A+	A+	A+
Seasonal particulate emission	[mg/m <sup>3</sup> ]	17,84	17,25	15,82
Efficiency for nominal power	[%]	92,26	92,07	92,51
Nominal particulate emission	[mg/m <sup>3</sup> ]	15,05	16,13	15,07
Efficiency for minimum power	[%]	91,05	91,10	91,58
Minimum particulate emission	[mg/m <sup>3</sup> ]	18,33	17,45	15,95

\*A new building with very good thermal insulation was assumed for the calculations.



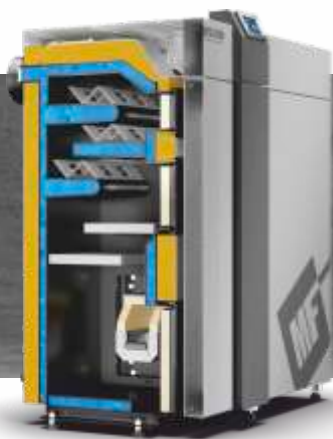
Dimensions		SLIM PELLETT MINI 10	SLIM PELLETT MINI 15	SLIM PELLETT MINI 20
A	[mm]	1200	1200	1300
B1	[mm]	590	590	690
B2	[mm]	605	605	605
C1	[mm]	1270	1270	1270
C2	[mm]	905	905	905
D1	[mm]	1250	1465	1465
D2	[mm]	870	1090	1090
E	[mm]	605	605	605
F1	[mm]	656	656	656
F2	[mm]	200	200	200
F3	[mm]	130	130	130
F4	[mm]	850	850	868
G1	[mm]	160	160	160
G2	[cal]	1 ¼	1 ¼	1 ¼
G3	[cal]	¾	¾	¾
G4	[cal]	1 ¼	1 ¼	1 ¼
H	[mm]	30	30	30

#### Additional equipment

Lambda probe	Measures oxygen in exhaust gases and controls its course by changing the fan power
ecoNET Internet module	Smartphone control, Wi-Fi or wired connection
Platinum Touch x40 room thermostat	Analog, wireless
Platinum Touch x80 room thermostat	Touch, wireless
Platinum ecoSTER100 room thermostat	Touch, wired, 5" display
Platinum B module	Buffer operation control, additional two heating circuits, 2x pumps, 2x mixer, 2x thermostat
Platinum C module	Additional two heating circuits, 2x pumps, 2x mixer, 2x thermostat
Exhaust fan	



# SMART PELLETT WF PRO



## Heat exchanger | horizontal convection channels | shelf

Efficient design adapted for quick cleaning of the exchanger from the front. The construction of the boiler exchanger ensures high heat collection from the furnace.

## Flue outlet | at the back of the boiler or at the top

The boiler design has been designed in such a way that the flue outlets are located at the back of the boiler or at the top. The use of such a solution in the central heating boiler allows for direct or indirect discharge of the flue to the chimney.

## Limit switch

For your safety, the boiler is equipped with a limit switch. The limit protection system is located in the boiler door. Each time the door is opened, the burner and other boiler elements are automatically stopped until they are closed again.

## The PLATINUM PELLETT controller supports:

- Pump (DHW, C.O., additional),
- One C.O.1 mixing circuit with a room thermostat,
- RTC clock with a weekly programmer,
- Weather control,
- Winter/summer operating mode,
- FuzzyLogic & PID.

## Automatic feeder

Based on information received from sensors, the controller determines the fuel demand and doses the appropriate amount. The fuel combustion process itself is therefore very economical, ecological and does not require additional user service.

## Swirlers

The swirlers installed in the convection channels effectively reduce the exhaust gas outlet velocity while maintaining high heat collection by the water jacket.

## Ceramic plates

The use of ceramic plates in the combustion chamber improves the efficiency of the combustion process. The screens raise the temperature in the combustion chamber and stop particles floating above the furnace, burning them out. The thermal efficiency of the boiler increases, and the amount of compounds harmful to the environment is reduced to a minimum in the exhaust gases.

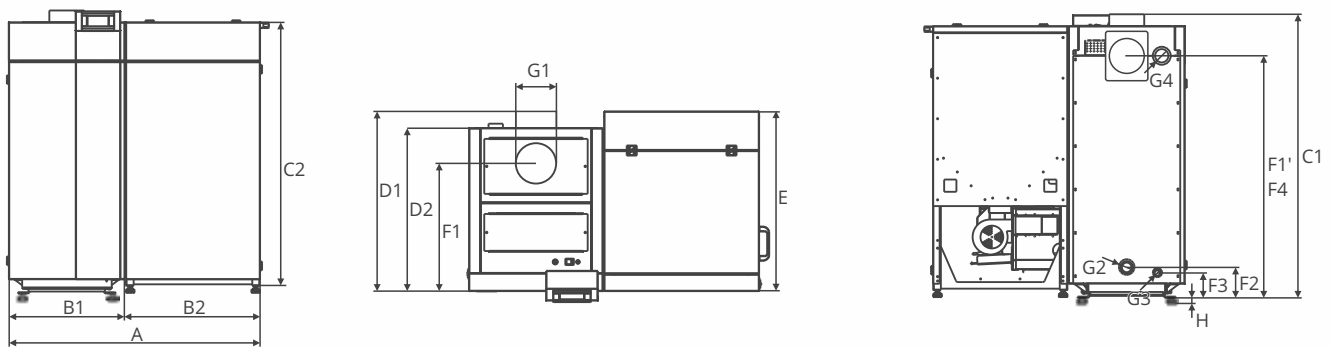
## PPW Self-Cleaning Burner

- Automatic cleaning,
- Automatic ceramic igniter,
- Fuel: pellet  $\Phi$ 6-8mm.



Boiler model		SMART PELLETT WF PRO 16	SMART PELLETT WF PRO 20	SMART PELLETT WF PRO 25	SMART PELLETT WF PRO 32
Nominal power	[kW]	16	20	25	32
Heatable surface*	[m <sup>2</sup> ]	72-240	90-300	112,5-375	144-480
Fuel	[-]	wood pellets according to the 303-5:2021-09 standard			
Water capacity	[L]	48	60	71	80
Fuel tank capacity	[L]	160	175	200	290
Fuel tank capacity	[kg]	96	105	120	174
Boiler weight	[kg]	335	405	445	495
Boiler class	[-]	5	5	5	5
EcoDesign	[-]	yes	yes	yes	yes
Energy class	[-]	A+	A+	A+	A+
Seasonal particulate emission	[mg/m <sup>3</sup> ]	16,47	17,27	17,25	17,02
Efficiency for nominal power	[%]	92,13	92,36	92,22	92,44
Nominal particulate emission	[mg/m <sup>3</sup> ]	11,09	12,94	15,93	15,02
Efficiency for minimum power	[%]	92,68	91,92	91,59	91,57
Minimum particulate emission	[mg/m <sup>3</sup> ]	17,42	18,03	17,48	17,37

\*A new building with very good thermal insulation was assumed for the calculations.



Dimensions		SMART PELLETT WF PRO 16	SMART PELLETT WF PRO 20	SMART PELLETT WF PRO 25	SMART PELLETT WF PRO 32
A	[mm]	1150	1150	1200	1200
B1	[mm]	530	530	580	580
B2	[mm]	615	615	615	615
C1	[mm]	1345	1400	1400	1490
C2	[mm]	1295	1350	1350	1450
D1	[mm]	770	840	930	955
D2	[mm]	646	716	806	806
E	[mm]	712	716	806	806
F1/F1'	[mm]	520   1100	590   1160	680   1160	665   1255
F2	[mm]	140	140	140	140
F3	[mm]	115	115	115	115
F4	[mm]	1100	1160	1160	1255
G1	[mm]	160	160	160	180
G2	[cal]	1 ½	1 ½	1 ½	1 ½
G3	[cal]	¾	¾	¾	¾
G4	[cal]	1 ½	1 ½	1 ½	1 ½
H	[mm]	30	30	30	30

#### Additional equipment

Lambda probe	Measures oxygen in exhaust gases and controls its course by changing the fan power
ecoNET Internet module	Smartphone control, Wi-Fi or wired connection
Platinum Touch x40 room thermostat	Analog, wireless
Platinum Touch x80 room thermostat	Touch, wireless
Platinum ecoSTER100 room thermostat	Touch, wired, 5" display
Platinum B module	Buffer operation control, additional two heating circuits, 2x pumps, 2x mixer, 2x thermostat
Platinum C module	Additional two heating circuits, 2x pumps, 2x mixer, 2x thermostat



# SMART BIO



## Heat exchanger | horizontal convection channels | shelf

Efficient design adapted for quick cleaning of the exchanger from the front. The construction of the boiler exchanger ensures high heat collection from the furnace.

## Flue outlet | at the back of the boiler or at the top

The boiler design has been designed in such a way that the flue outlets are located at the back of the boiler or at the top. The use of such a solution in the central heating boiler allows for direct or indirect discharge of the flue to the chimney.

## Limit switch

For your safety, the boiler is equipped with a limit switch. The limit protection system is located in the boiler door and in the tank flap. Each time the door or tank flap is opened, the burner and other boiler elements are automatically stopped until they are closed again.

## The PLATINUM PELLETS controller supports:

- Pump (DHW, C.O., additional),
- One C.O.1 mixing circuit with a room thermostat,
- RTC clock with a weekly programmer,
- Weather control,
- Winter/summer operating mode,
- FuzzyLogic & PID.

## Automatic feeder

Based on information received from sensors, the controller determines the fuel demand and doses the appropriate amount. The fuel combustion process itself is therefore very economical, ecological and does not require additional service from the user.

## Swirlers

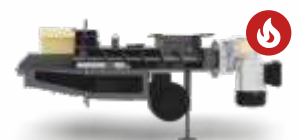
The swirlers installed in the convection channels effectively reduce the exhaust gas outlet velocity while maintaining high heat collection by the water jacket.

## Ceramic plates

The use of ceramic plates in the combustion chamber improves the efficiency of the combustion process. The screens raise the temperature in the combustion chamber and stop the particles floating above the furnace, burning them out. The boiler's thermal efficiency increases, and the exhaust gases have the amount of compounds harmful to the environment reduced to a minimum.

## Gutter burner

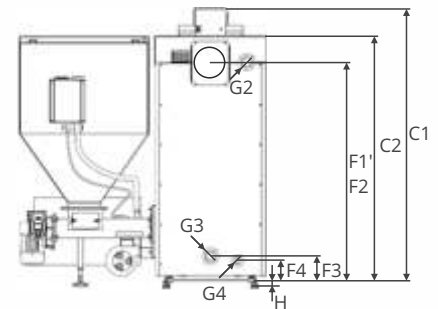
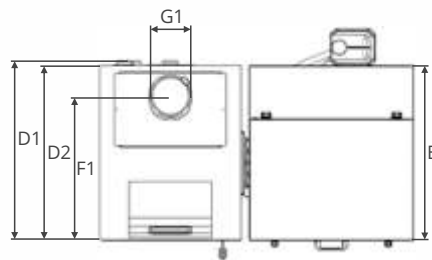
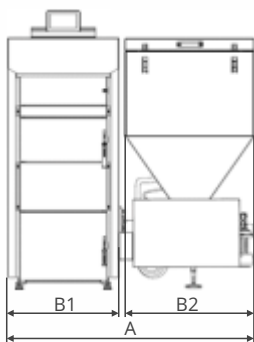
- Automatic ceramic igniter,
- Fuel: pellets  $\Phi$ 6-8mm.





Boiler model		SMART BIO 15	SMART BIO 20	SMART BIO 25	SMART BIO 30
Nominal power	[kW]	15	20	25	30
Heatable surface*	[m <sup>2</sup> ]	67,5-225	90-300	112,5-375	135-450
Fuel	[-]	wood pellets according to the 303-5:2021-09 standard			
Water capacity	[L]	48	60	71	80
Fuel tank capacity	[L]	190	200	260	260
Fuel tank capacity	[kg]	114	120	156	156
Boiler weight	[kg]	335	360	410	430
Boiler class	[-]	5	5	5	5
EcoDesign	[-]	yes	yes	yes	yes
Energy class	[-]	A+	A+	A+	A+
Seasonal particulate emission	[mg/m <sup>3</sup> ]	19	14	19	-
Efficiency for nominal power	[%]	90,7	90,2	90,6	90,7
Nominal particulate emission	[mg/m <sup>3</sup> ]	20	10	15	15
Efficiency for minimum power	[%]	89,9	90,0	90,0	90,2
Minimum particulate emission	[mg/m <sup>3</sup> ]	12	15	20	16

\*A new building with very good thermal insulation was assumed for the calculations.



Dimensions		SMART BIO 15	SMART BIO 20	SMART BIO 25	SMART BIO 30
A	[mm]	1150	1135	1300	1300
B1	[mm]	535	535	585	585
B2	[mm]	580	580	680	680
C1	[mm]	1340	1400	1400	1485
C2	[mm]	1240	1300	1300	1395
D1	[mm]	590	660	750	750
D2	[mm]	560	630	720	720
E	[mm]	-	-	-	-
F1/F1'	[mm]	435/1100	505/1155	595/1155	580/1190
F2	[mm]	1100	1160	1160	1255
F3	[mm]	140	140	140	140
F4	[mm]	115	115	115	115
G1	[mm]	160	160	160	180
G2	[cal]	1 ½	1 ½	1 ½	1 ½
G3	[cal]	1 ½	1 ½	1 ½	1 ½
G4	[cal]	¾	¾	¾	¾
H	[mm]	30	30	30	30

#### Additional equipment

Lambda probe	Measures oxygen in exhaust gases and controls its course by changing the fan power
ecoNET Internet module	Smartphone control, Wi-Fi or wired connection
Platinum B module	Buffer operation control, additional two heating circuits, 2x pumps, 2x mixer, 2x thermostat
Platinum C module	Additional two heating circuits, 2x pumps, 2x mixer, 2x thermostat



# SEG PELLE



## Heat exchanger | vertical and horizontal convection channels | shelf

Effective design adapted for quick cleaning of the exchanger from the front. The construction of the boiler exchanger ensures high heat collection from the furnace.

## Flue pipe outlet | at the back of the boiler

The boiler design has been designed in such a way that the flue pipe outlets are located at the back. The use of such a solution in a central heating boiler allows for direct discharge of the flue pipe to the chimney.

## Limit switch

For your safety, the boiler is equipped with a limit switch. The limit protection system is located in the boiler door. Each time the door is opened, the burner and other boiler elements are automatically stopped until they are closed again.

## The PLATINUM PELLE controller supports:

- Pump (DHW, C.O., additional),
- One C.O.1 mixing circuit with a room thermostat,
- RTC clock with a weekly programmer,
- Weather control,
- Winter/summer mode,
- FuzzyLogic & PID.

## Automatic feeder

The controller, based on information received from sensors, determines the fuel demand and doses the appropriate amount. The fuel combustion process itself is therefore very economical, ecological and does not require additional user service.

## Swirlers

The swirlers installed in the convection channels effectively reduce the exhaust gas outlet velocity while maintaining high heat collection by the water jacket.

## Steel screens

The use of steel screens in the combustion chamber improves the efficiency of the combustion process. The screens increase the temperature in the combustion chamber and stop particles floating above the furnace, burning them out. The thermal efficiency of the boiler increases, and the exhaust gases have the amount of compounds harmful to the environment reduced to a minimum.

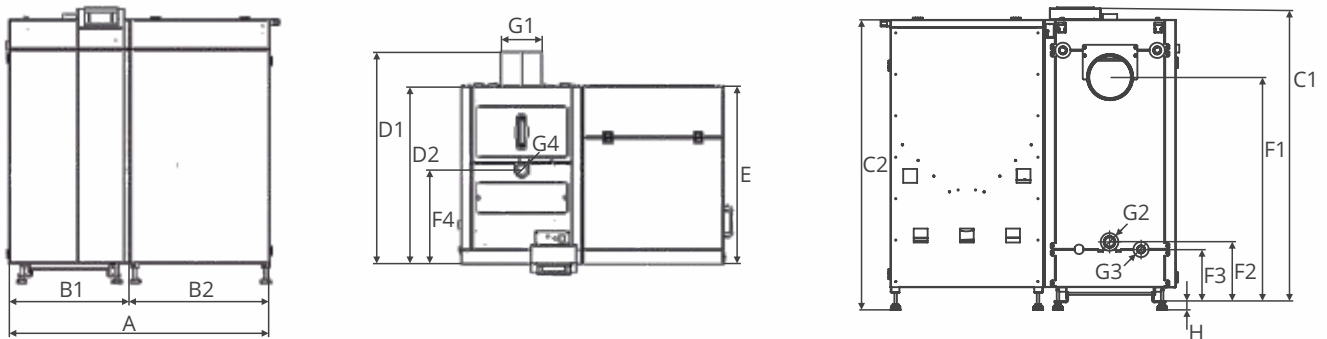
## Self-cleaning PPW Burner

- Automatic cleaning,
- Automatic ceramic igniter,
- Fuel: pellet  $\Phi$ 6-8mm.



Boiler model		SEG PELLETT 15	SEG PELLETT 20	SEG PELLETT 25	SEG PELLETT 30
Nominal power	[kW]	15	20	25	30
Heatable surface*	[m <sup>2</sup> ]	67,5-225	90-300	112,5-375	135-450
Fuel	[-]	wood pellets according to the 303-5:2021-09 standard			
Water capacity	[L]	66	74	83	95
Fuel tank capacity	[L]	150	220	230	230
Fuel tank capacity	[kg]	90	132	138	138
Boiler weight	[kg]	379	453	484	488,5
Boiler class	[-]	5	5	5	5
EcoDesign	[-]	yes	yes	yes	yes
Energy class	[-]	A+	A+	A+	A+
Seasonal particulate emission	[mg/m <sup>3</sup> ]	17	17	28	28
Efficiency for nominal power	[%]	91,2	91,1	91,2	91,3
Nominal particulate emission	[mg/m <sup>3</sup> ]	19	14	19	19
Efficiency for minimum power	[%]	90,1	89,1	90,3	90,2
Minimum particulate emission	[mg/m <sup>3</sup> ]	16	17	28	29

\*A new building with very good thermal insulation was assumed for the calculations.



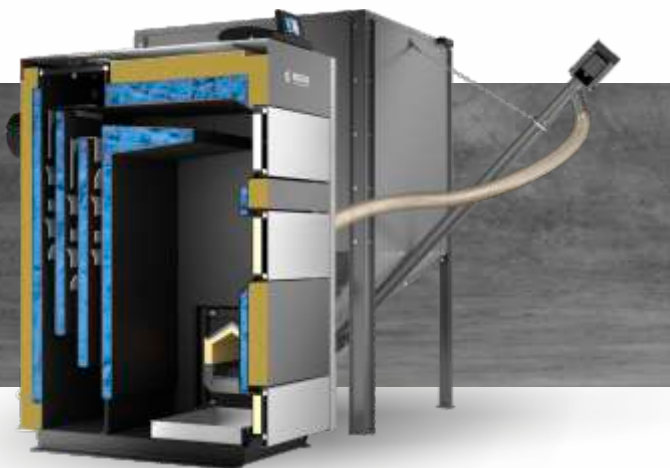
Dimensions		SEG PELLETT 15	SEG PELLETT 20	SEG PELLETT 25	SEG PELLETT 30
A	[mm]	1150	1150	1110	1160
B1	[mm]	530	530	530	580
B2	[mm]	615	615	570	540
C1	[mm]	1185	1380	1440	1440
C2	[mm]	-	-	-	-
D1	[mm]	930	970	1020	1020
D2	[mm]	780	815	860	860
E	[mm]	-	-	-	-
F1	[mm]	908	1105	1162	1162
F2	[mm]	214	250	246	246
F3	[mm]	214	210	206	206
F4	[mm]	413	423	472	472
G1	[mm]	180	180	180	180
G2	[cal]	¾	¾	¾	¾
G3	[cal]	1 ½	1 ½	1 ½	1 ½
G4	[cal]	1 ½	1 ½	1 ½	1 ½
H	[mm]	30	30	30	30

#### Additional equipment

Lambda probe	Measures oxygen in exhaust gases and controls its course by changing the fan power
ecoNET Internet module	Smartphone control, Wi-Fi or wired connection
Platinum B module	Buffer operation control, additional two heating circuits, 2x pumps, 2x mixer, 2x thermostat
Platinum C module	Additional two heating circuits, 2x pumps, 2x mixer, 2x thermostat



# SEG PELLET



## Heat exchanger | vertical and horizontal convection channels | shelf

Effective design adapted for quick cleaning of the exchanger from the front. The construction of the boiler exchanger ensures high heat collection from the furnace.

## Flue pipe outlet | at the back of the boiler

The boiler design has been designed in such a way that the flue pipe outlets are located at the back. The use of such a solution in a central heating boiler allows for direct discharge of the flue pipe to the chimney.

## Limit switch

For your safety, the boiler is equipped with a limit switch. The limit protection system is located in the boiler door. Each time the door is opened, the burner and other boiler elements are automatically stopped until they are closed again.

## The PLATINUM PELLETT controller supports:

- Pump (DHW, C.O., additional),
- One C.O.1 mixing circuit with a room thermostat,
- RTC clock with a weekly programmer,
- Weather control,
- Winter/summer mode,
- FuzzyLogic & PID.

## Automatic feeder

The controller, based on information received from sensors, determines the fuel demand and doses the appropriate amount. The fuel combustion process itself is therefore very economical, ecological and does not require additional user service.

## Swirlers

The swirlers installed in the convection channels effectively reduce the exhaust gas outlet velocity while maintaining high heat collection by the water jacket.

## PPW Self-Cleaning Burner

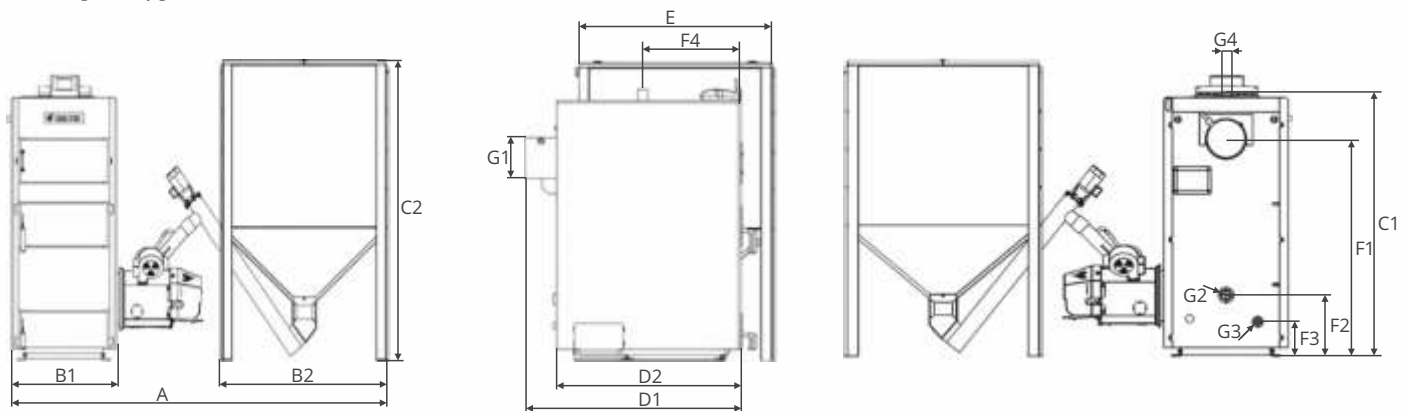
- Automatic cleaning,
- Two automatic ceramic igniters,
- Fuel: pellet  $\Phi$ 6-8mm.





Boiler model		SEG PELLETT 42	SEG PELLETT 60	SEG PELLETT 75	SEG PELLETT 100
Nominal power	[kW]	42	60	75	100
Heatable surface*	[m <sup>2</sup> ]	189-630	270-900	337,5-1125	450-1500
Fuel	[-]	wood pellets according to the 303-5:2021-09 standard			
Water capacity	[L]	95	120	173	-
Fuel tank capacity	[L]	230	1000	1000	1000
Fuel tank capacity	[kg]	138	600	600	600
Boiler weight	[kg]	488,5	-	855	-
Boiler class	[-]	5	5	5	5
EcoDesign	[-]	yes	yes	yes	yes
Energy class	[-]	A+	A+	A+	A+
Seasonal particulate emission	[mg/m <sup>3</sup> ]	19	20	19	20
Efficiency for nominal power	[%]	90,5	91,3	89,4	90,8
Nominal particulate emission	[mg/m <sup>3</sup> ]	19	16	19	18
Efficiency for minimum power	[%]	89,6	90,1	88,9	89,3
Minimum particulate emission	[mg/m <sup>3</sup> ]	19	20	19	20

\*A new building with very good thermal insulation was assumed for the calculations.



Dimensions		SEG PELLETT 42	SEG PELLETT 60	SEG PELLETT 75	SEG PELLETT 100
A	[mm]	1160	2450	2444	2444
B1	[mm]	580	682	793	902
B2	[mm]	540	1093	1093	1093
C1	[mm]	1140	1455	1520	1574
C2	[mm]	1140	1629	1629	1629
D1	[mm]	1020	1175	1413	1555
D2	[mm]	860	1003	1175	1322
E	[mm]	860	1093	1093	1093
F1	[mm]	1162	1200	1115	1186
F2	[mm]	246	337	350	431
F3	[mm]	206	190	175	160
F4	[mm]	472	535	545	547
G1	[mm]	180	220	220	208
G2	[cal]	1 ½	1 ½	1 ½	1 ½
G3	[cal]	¾	¾	¾	¾
G4	[cal]	1 ½	1 ½	1 ½	1 ½
H	[mm]	30	-	-	-

#### Additional equipment

Lambda probe	Measures oxygen in exhaust gases and controls its course by changing the fan power
ecoNET Internet module	Smartphone control, Wi-Fi or wired connection
Platinum Touch x40 room thermostat	Analog, wireless
Platinum Touch x80 room thermostat	Touch, wireless
Platinum ecoSTER100 room thermostat	Touch, wired, 5" display
Platinum B module	Buffer operation control, additional two heating circuits, 2x pumps, 2x mixer, 2x thermostat
Platinum C module	Additional two heating circuits, 2x pumps, 2x mixer, 2x thermostat



# SEG BIO



## Heat exchanger | vertical and horizontal convection channels | shelf

Effective design adapted for quick cleaning of the exchanger from the front. The construction of the boiler exchanger ensures high heat collection from the furnace.

## Flue pipe outlet | at the back of the boiler

The boiler design has been designed in such a way that the flue pipe outlets are located at the back. The use of such a solution in a central heating boiler allows for direct discharge of the flue pipe to the chimney.

## Limit switch

For your safety, the boiler is equipped with a limit switch. The end protection system is located in the boiler door and in the tank flap. Each time the door or tank flap is opened, the burner and other boiler elements are automatically stopped until they are closed again.

## The PLATINUM PELLETT controller supports:

- Pump (DHW, C.O., additional),
- One C.O.1 mixing circuit with a room thermostat,
- RTC clock with a weekly programmer,
- Weather control,
- Winter/summer mode,
- FuzzyLogic & PID.

## Automatic feeder

The controller, based on information received from sensors, determines the fuel demand and doses the appropriate amount. The fuel combustion process itself is therefore very economical, ecological and does not require additional user service.

## Swirlers

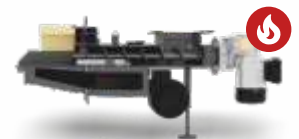
The swirlers installed in the convection channels effectively reduce the exhaust gas outlet velocity while maintaining high heat collection by the water jacket.

## Fireman

Protects the fuel in the boiler tank from ignition.

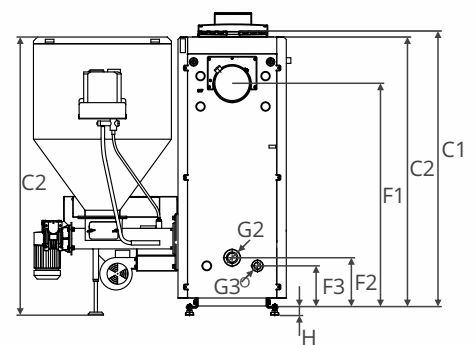
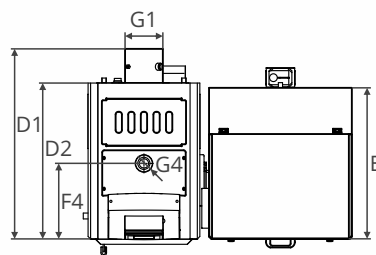
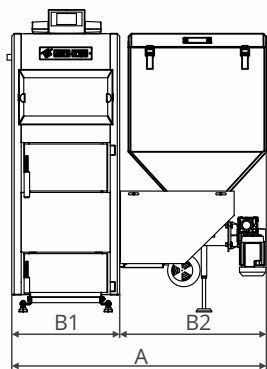
## Gutter Burner

- Automatic ceramic igniter,
- Fuel: pell



Boiler model		SEG BIO 15	SEG BIO 20	SEG BIO 30	SEG BIO 40	SEG BIO 50	SEG BIO 75
Nominal power	[kW]	15	20	30	40	50	75
Heatable surface*	[m <sup>2</sup> ]	67,5-225	90-300	135-450	180-600	225-750	337,5-1125
Fuel	[-]	wood pellets according to the 303-5:2021-09 standard					
Water capacity	[L]	60	68	73	95	120	173
Fuel tank capacity	[L]	190	290	350	350	400	520
Fuel tank capacity	[kg]	114	174	210	210	240	312
Boiler weight	[kg]	396	474	510	530	725	855
Boiler class	[-]	5	5	5	5	5	5
EcoDesign	[-]	yes	yes	yes	yes	yes	yes
Energy class	[-]	A+	A+	A+	A+	A+	A+
Seasonal particulate emission	[mg/m <sup>3</sup> ]	19	19	19	19	19	19
Efficiency for nominal power	[%]	90,76	91,32	91,46	91,86	92,22	93,10
Nominal particulate emission	[mg/m <sup>3</sup> ]	19,5	18,4	18,7	18,8	18,8	18,9
Efficiency for minimum power	[%]	89,38	89,85	90,22	90,61	90,94	91,82
Minimum particulate emission	[mg/m <sup>3</sup> ]	19	19,3	19,3	19,4	19,5	19,5

\*A new building with very good thermal insulation was assumed for the calculations.



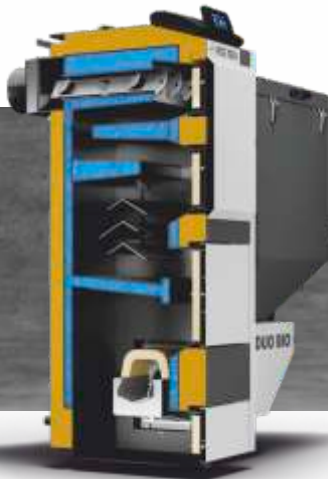
Dimensions		SEG BIO 15	SEG BIO 20	SEG BIO 30	SEG BIO 40	SEG BIO 50	SEG BIO 75
A	[mm]	1256	1256	1256	1306	1406	1505
B1	[mm]	535	535	535	585	682	793
B2	[mm]	680	680	680	680	680	680
C1	[mm]	1160	1355	1415	1415	1484	1520
C2	[mm]	1130	1325	1385	1385	1454	1490
D1	[mm]	870	905	955	955	1218	1413
D2	[mm]	705	745	795	795	1003	1175
E	[mm]	707	720	776	766	850	1075
F1	[mm]	910	1105	1160	1160	1110	1115
F2	[mm]	213	247	245	245	337	350
F3	[mm]	213	207	205	205	190	175
F4	[mm]	350	360	410	410	535	545
G1	[mm]	180	180	180	180	220	220
G2	[cal]	1 ½	1 ½	1 ½	1 ½	1 ½	1 ½
G3	[cal]	¾	¾	¾	¾	¾	¾
G4	[cal]	1 ½	1 ½	1 ½	1 ½	1 ½	1 ½
H	[mm]	30	30	30	30	30	30

#### Additional equipment

Lambda probe	Measures oxygen in exhaust gases and controls its course by changing the fan power
ecoNET Internet module	Smartphone control, Wi-Fi or wired connection
Platinum Touch x40 room thermostat	Analog, wireless
Platinum Touch x80 room thermostat	Touch, wireless
Platinum ecoSTER100 room thermostat	Touch, wired, 5" display
Platinum B module	Buffer operation control, additional two heating circuits, 2x pumps, 2x mixer, 2x thermostat
Platinum C module	Additional two heating circuits, 2x pumps, 2x mixer, 2x thermostat



# SD DUO BIO



## Heat exchanger | horizontal convection channels | shelf

Effective design adapted for quick cleaning of the exchanger from the front. The construction of the boiler exchanger ensures high heat collection from the furnace.

## Flue pipe outlet | at the back of the boiler

The boiler design has been designed in such a way that the flue pipe outlets are located at the back. The use of such a solution in a central heating boiler allows for direct discharge of the flue pipe to the chimney.

## Limit switch

For your safety, the boiler is equipped with a limit switch. The end protection system is located in the boiler door and in the tank flap. Each time the door or tank flap is opened, the burner and other boiler elements are automatically stopped until they are closed again.

## The PLATINUM PELLETS controller supports:

- Pump (DHW, C.O., additional),
- One C.O.1 mixing circuit with a room thermostat,
- RTC clock with a weekly programmer,
- Weather control,
- Winter/summer mode,
- FuzzyLogic & PID.

## Automatic feeder

The controller, based on information received from sensors, determines the fuel demand and doses the appropriate amount. The fuel combustion process itself is therefore very economical, ecological and does not require additional user service.

## Swirlers

The swirlers installed in the convection channels effectively reduce the exhaust gas outlet velocity while maintaining high heat collection by the water jacket.

## Fireman

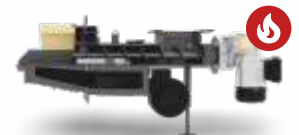
Protects the fuel in the boiler tank from ignition.

## Exhaust gas guide

Elevates the temperature in the combustion chamber, enhancing the emission parameters of the boiler.

## Gutter burner

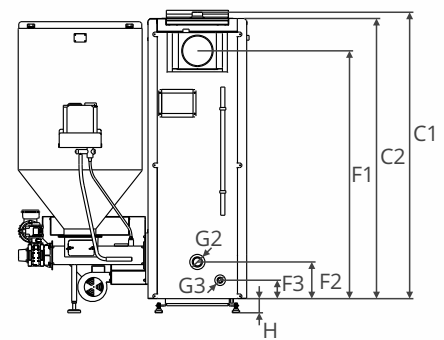
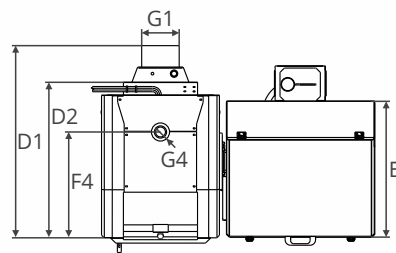
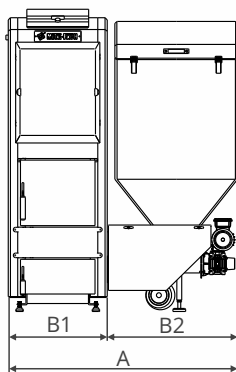
- Automatic ceramic igniter,
- Fuel: pellets  $\Phi 6-8\text{mm}$ .





Boiler model		SD DUO BIO 16	SD DUO BIO 20	SD DUO BIO 28	SD DUO BIO 34
Nominal power	[kW]	16	20	28	34
Heatable surface*	[m <sup>2</sup> ]	72-240	90-300	126-420	153-510
Fuel	[-]	wood pellets according to the 303-5:2021-09 standard			
Water capacity	[L]	78	84	90	100
Fuel tank capacity	[L]	300	300	300	300
Fuel tank capacity	[kg]	180	180	180	180
Boiler weight	[kg]	460	475	495	520
Boiler class	[-]	5	-	5	5
EcoDesign	[-]	yes	yes	yes	yes
Energy class	[-]	A+	A+	A+	A+
Seasonal particulate emission	[mg/m <sup>3</sup> ]	14	26	14	10
Efficiency for nominal power	[%]	-	90,1	-	90,1
Nominal particulate emission	[mg/m <sup>3</sup> ]	-	26	-	13
Efficiency for minimum power	[%]	-	89,1	-	90,7
Minimum particulate emission	[mg/m <sup>3</sup> ]	-	26	-	9

\*A new building with very good thermal insulation was assumed for the calculations.



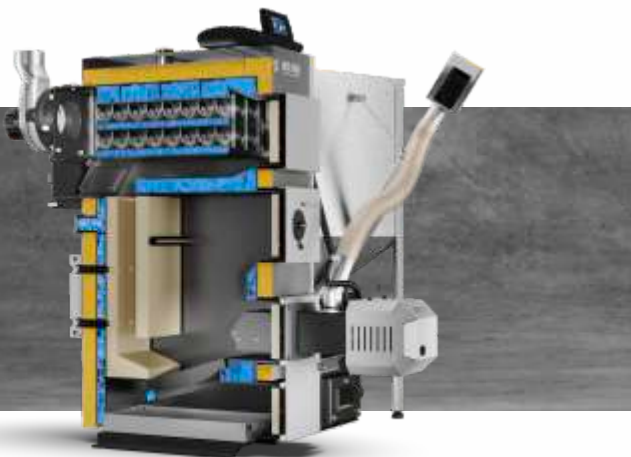
Dimensions		SD DUO BIO 16	SD DUO BIO 20	SD DUO BIO 28	SD DUO BIO 34
A	[mm]	1245	1245	1245	1300
B1	[mm]	541	541	541	591
B2	[mm]	680	680	680	680
C1	[mm]	1665	1665	1665	1665
C2	[mm]	1635	1635	1635	1635
D1	[mm]	830	880	930	930
D2	[mm]	653	703	753	753
E	[mm]	595	595	595	595
F1	[mm]	1400	1400	1400	1400
F2	[mm]	244	244	244	244
F3	[mm]	144	144	144	144
F4	[mm]	442	487	537	537
G1	[mm]	180	180	180	200
G2	[cal]	1 ½	1 ½	1 ½	1 ½
G3	[cal]	¾	¾	¾	¾
G4	[cal]	1 ½	1 ½	1 ½	1 ½
H	[mm]	30	30	30	30

### Additional equipment

Lambda probe	Measures oxygen in exhaust gases and controls its course by changing the fan power
ecoNET Internet module	Smartphone control, Wi-Fi or wired connection
Platinum B module	Buffer operation control, additional two heating circuits, 2x pumps, 2x mixer, 2x thermostat
Platinum C module	Additional two heating circuits, 2x pumps, 2x mixer, 2x thermostat



# SEM DUOPELL



## ■ Wood gasification boiler

It will prove to be an ideal solution for households that have large supplies of properly stored firewood.

## ■ Heat exchanger | horizontal convection channels | tubular and shelf

Efficient design adapted for automatic cleaning of the exchanger. The construction of the boiler exchanger ensures high heat collection from the furnace.

## ■ Flue outlet at the back of the boiler | top, side adjustment from the fan

The boiler construction has been designed in such a way that the flue outlets are located at the back. The use of such a solution in a central heating boiler allows for direct discharge of the flue pipe to the chimney.

## ■ Exhaust fan\*

It is attached with an adapter to the rear vertical wall of the flue. The fan generates the necessary draft needed for effective fuel combustion.

## ■ \*ATTENTION!

The air is regulated by means of an exhaust and blowing fan when using a boiler with a feeder.

## ■ Flue gas temperature sensor

Together with the controller, the sensor controls the flue gas temperature.

## ■ The PLATINUM PELLETT controller supports:

- Pump (DHW, C.O., additional),
- One C.O.1 mixing circuit with a room thermostat,
- RTC clock with a weekly programmer,
- Weather control,
- Winter/summer mode,
- FuzzyLogic & PID.

## ■ Secondary and primary air inyese\*\*

Air is sucked in through six holes to fully burn the fuel. The amount of air can be adjusted with sliders.

## ■ \*\*NOTE!

The air inyeses must be completely closed when using a boiler with a feeder.

## ■ Smoke extraction flap\*\*\*

Allows for effective removal of smoke from the combustion chamber.

## ■ \*\*\*ATTENTION!

The smoke extraction flap must be completely closed when using a boiler with a feeder.

## ■ Swirlers

The swirlers installed in the convection channels effectively reduce the exhaust gas outlet velocity while maintaining high heat collection by the water jacket.

## ■ Ceramic plates

The use of ceramic plates in the combustion chamber improves the efficiency of the combustion process. The screens increase the temperature in the combustion chamber and stop the particles floating above the firebox, burning them out. The thermal efficiency of the boiler increases, and the exhaust gases have the amount of compounds harmful to the environment reduced to a minimum.

## ■ \*\*\*\*ATTENTION!

The device allows for pellet combustion in automatic mode.

## ■ Automatic feeder\*\*\*\*\*

The controller, based on information received from sensors, determines the fuel demand and doses the appropriate amount. The fuel combustion process itself is therefore very economical, ecological and does not require additional user service.

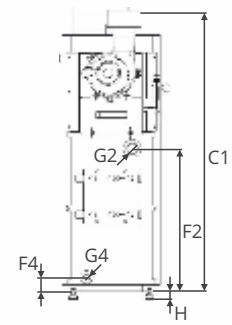
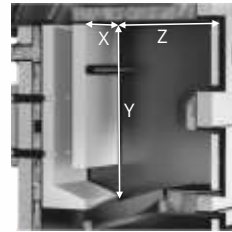
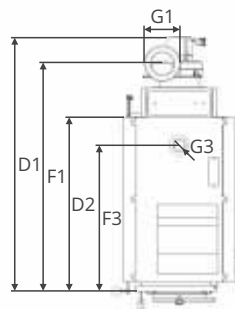
## ■ Self-cleaning DW Burner\*\*\*\*

- Automatic cleaning,
- Automatic ceramic igniter,
- Fuel: pellet  $\Phi$ 6-8mm.



Boiler model		SEM DUOPELL 16	SEM DUOPELL 23
Nominal power	[kW]	16	23
Heatable surface*	[m <sup>2</sup> ]	72-240	103-345
Fuel	[-]	primary fuel - firewood, lumps according to the 303-5:2021-09 standard additional fuel - wood pellets according to the 303-5:2021-09 standard	
Water capacity	[L]	71	97
Fuel tank capacity	[L]	230	230
Fuel tank capacity	[kg]	138	138
Boiler weight	[kg]	342	342
Boiler class	[-]	5	5
EcoDesign	[-]	yes	yes
Energy class	[-]	A+	A+
Seasonal particulate emission	[mg/m <sup>3</sup> ]	wood - 20   pellet - 20	wood - 19   pellet - 18
Efficiency for nominal power	[%]	wood - 89,2   pellet - 91,0	wood - 90,1   pellet - 90,5
Nominal particulate emission	[mg/m <sup>3</sup> ]	wood - 20   pellet - 18	wood - 19   pellet - 16
Efficiency for minimum power	[%]	wood - (-)   pellet - 89,2	wood - (-)   pellet - 89,6
Minimum particulate emission	[mg/m <sup>3</sup> ]	wood - (-)   pellet - 20	wood - (-)   pellet - 19
Heat storage tank (buffer) capacity	[l]	600	920

\*A new building with very good thermal insulation was assumed for the calculations.



#### Dimensions

#### SEM DUOPELL 16

#### SEM DUOPELL 23

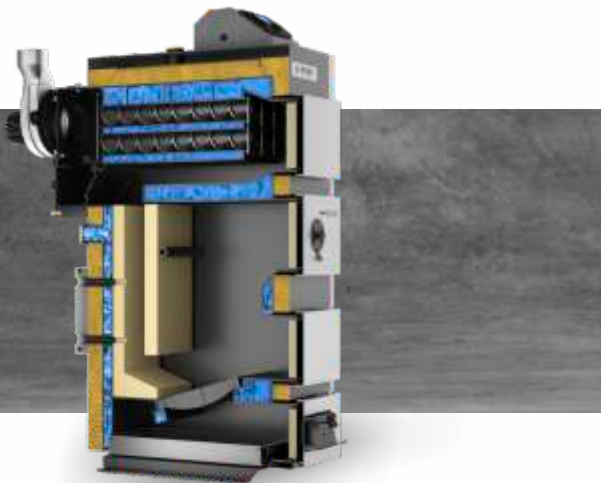
A	[mm]	490	495
B1	[mm]	-	-
B2	[mm]	-	-
C1	[mm]	1380	1664
C2	[mm]	1260	1540
D1	[mm]	1070	1144
D2	[mm]	730	785
E	[mm]	-	-
F1	[mm]	735	825
F2	[mm]	713	780
F3	[mm]	470	637
F4	[mm]	82	97
G1	[mm]	159	159
G2	[cal]	1 ½	1 ½
G3	[cal]	1 ½	1 ½
G4	[cal]	¾	¾
H	[mm]	30	30
X	[mm]	290	290
Y	[mm]	550	690
Z	[mm]	340	390

#### Additional equipment

Lambda probe	Measures oxygen in exhaust gases and controls its course by changing the fan power
ecoNET Internet module	Smartphone control, Wi-Fi or wired connection
Platinum Touch x40 room thermostat	Analog, wireless
Platinum Touch x80 room thermostat	Touch, wireless
Platinum ecoSTER100 room thermostat	Touch, wired, 5" display
Platinum B module	Buffer operation control, additional two heating circuits, 2x pumps, 2x mixer, 2x thermostat
Platinum C module	Additional two heating circuits, 2x pumps, 2x mixer, 2x thermostat
Exhaust fan	<b>(Standard equipment)</b>



# SEMEX OPTI



## Heat exchanger | horizontal convection channels | tubular and shelf

Efficient design adapted for automatic cleaning of the exchanger. The construction of the boiler exchanger ensures high heat collection from the furnace.

## Smoke vent flap

Allows for effective removal of smoke from the combustion chamber.

## Flue outlet at the back of the boiler | top, side adjustment from the fan

The boiler construction has been designed in such a way that the flue outlets are located at the back. The use of such a solution in a central heating boiler allows for direct discharge of the flue pipe to the chimney.

## Exhaust fan

It is attached with an adapter to the rear vertical wall of the flue. The fan generates the necessary draft needed for effective fuel combustion.

## Swirlers

The swirlers installed in the convection channels effectively reduce the exhaust gas outlet velocity while maintaining high heat collection by the water jacket.

## The TECH ST-880 controller with PID supports:

- Pump: C.O.1; C.W.U.; additionally,
- One C.O.1 mixing circuit with a room thermostat,
- Fan,
- Buffer tank\*\*.

## Flue gas temperature sensor

Together with the controller, the sensor controls the flue gas temperature.

## Secondary and primary air inyese

Air is sucked in through six holes to fully burn the fuel. The amount of air can be adjusted with sliders.

## Ceramic plates

The use of ceramic plates in the combustion chamber improves the efficiency of the combustion process. The screens increase the temperature in the combustion chamber and stop the particles floating above the firebox, burning them out. The thermal efficiency of the boiler increases, and the exhaust gases have the amount of compounds harmful to the environment reduced to a minimum.

## Wood gasification boiler

It will be an ideal solution for households that have large supplies of properly stored firewood. In gasification boilers, the wood combustion process takes place in two stages. In the charge chamber, with limited access to air, incomplete combustion of the fuel takes place, and the gases produced as a result burn out in the secondary chamber. The gasification boiler is the most efficient wood boiler.

## Buffer tank\*\*

Provides optimal operating conditions for the boiler. The boiler can operate at optimal power, and excess heat is collected in the buffer. The home heating system draws as much heat from the buffer as it needs at a given moment.

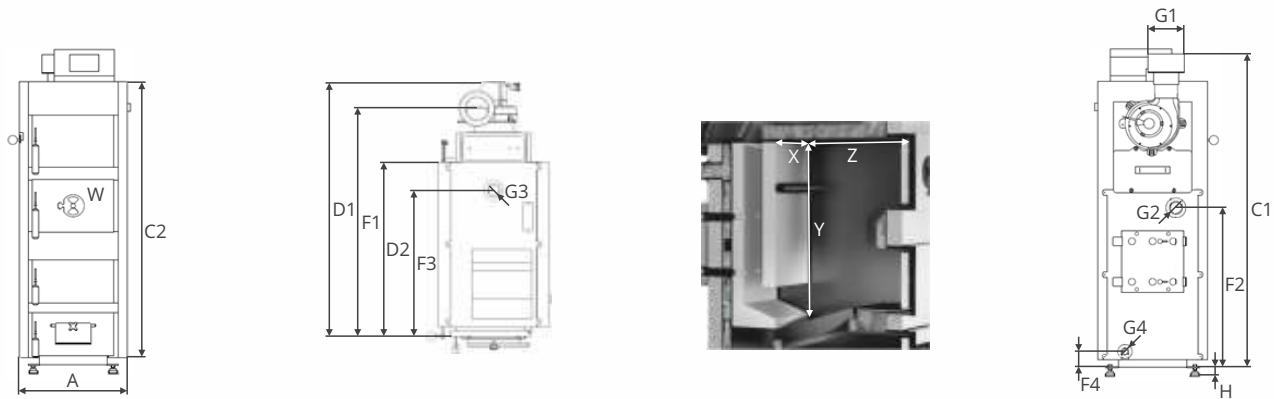
## \*\*ATTENTION!

The central heating boiler can be installed in the heating system, only together with the buffer tank. The tank is not included in the price of the boiler.



Boiler model	SEMAX OPTI 16	
Nominal power	[kW]	16
Heatable surface*	[m <sup>2</sup> ]	160-240
Fuel	[-]	firewood, lumps according to the 303-5:2021-09 standard
Water capacity	[L]	71
Log circumference	[cm]	30-40
Log length	[cm]	26
Boiler weight	[kg]	342
Boiler class	[-]	5
EcoDesign	[-]	yes
Energy class	[-]	A+
Seasonal particulate emission	[mg/m <sup>3</sup> ]	20
Efficiency for nominal power	[%]	88,85
Nominal particulate emission	[mg/m <sup>3</sup> ]	15
Heat storage tank (buffer) capacity	[l]	600

\*A new building with very good thermal insulation was assumed for the calculations.



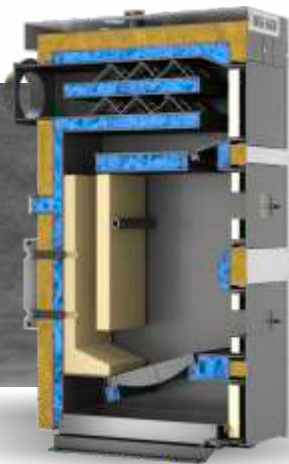
Dimensions	SEMAX OPTI 16	
A	[mm]	490
B1	[mm]	-
B2	[mm]	-
C1	[mm]	1380
C2	[mm]	1260
D1	[mm]	1070
D2	[mm]	730
E	[mm]	-
F1	[mm]	736
F2	[mm]	713
F3	[mm]	470
F4	[mm]	82
G1	[mm]	159
G2	[cal]	1 ½
G3	[cal]	1 ½
G4	[cal]	¾
H	[mm]	30
W	[mm]	290x200
X	[mm]	290
Y	[mm]	510
Z	[mm]	330

#### Additional equipment

ST880 controller + Exhaust fan	<b>(Standard equipment)</b> Electronic controller set with fan
Room thermostat TECH ST280 + ST260	Touch control, wireless connection



# SEMEX BASIC



■ **Heat exchanger | horizontal convection channels | shelf**  
Effective design adapted for quick cleaning of the exchanger from the front. The construction of the boiler exchanger ensures high heat collection from the furnace.

■ **Smoke vent flap**  
Allows for effective removal of smoke from the combustion chamber.

■ **Flue pipe outlet | at the back of the boiler**  
The boiler design has been designed in such a way that the flue pipe outlets are located at the back. The use of such a solution in a central heating boiler allows for direct discharge of the flue pipe to the chimney.

■ **Swirlers**  
The swirlers installed in the convection channels effectively reduce the exhaust gas outlet velocity while maintaining high heat collection by the water jacket.

■ **Draft regulator**  
Depending on the temperature of the medium, it controls the flap regulating the air supply to the boiler combustion chamber.

■ **Mechanical thermometer**  
A mechanical bimetal thermometer equipped with a long measuring probe.

■ **Secondary and primary air inyses**  
Air is sucked in through six holes to fully burn the fuel. The amount of air can be adjusted with sliders.

■ **Ceramic plates**  
The use of ceramic plates in the combustion chamber improves the efficiency of the combustion process. The screens increase the temperature in the combustion chamber and stop the particles floating above the firebox, burning them out. The thermal efficiency of the boiler increases, and the exhaust gases have the amount of compounds harmful to the environment reduced to a minimum.

**Wood gasification boiler**  
It will prove to be an ideal solution for households that have large supplies of properly stored firewood. In gasification boilers, the wood combustion process takes place in two stages. In the charge chamber, with limited access to air, incomplete combustion of the fuel takes place, and the gases produced as a result burn out in the secondary chamber. The gasification boiler is the most efficient wood boiler.

■ **Buffer tank\*\***  
Provides optimal operating conditions for the boiler. The boiler can operate at optimal power, and excess heat is collected in the buffer. The home heating system draws as much heat from the buffer as it needs at a given moment.

■ **\*\*ATTENTION!**  
The central heating boiler can be installed in the heating system, only together with the buffer tank. The tank is not included in the price of the boiler.





# SEG EKO



## Heat exchanger | vertical and horizontal convection channels | shelf

Effective design adapted for quick cleaning of the exchanger from the front. The construction of the boiler exchanger ensures high heat collection from the furnace.

## Flue pipe outlet | at the back of the boiler

The boiler design has been designed in such a way that the flue pipe outlets are located at the back. The use of such a solution in a central heating boiler allows for direct discharge of the flue pipe to the chimney.

## Limit switch

For your safety, the boiler is equipped with a limit switch. The end protection system is located in the boiler door and in the tank flap. Each time the door or tank flap is opened, the burner and other boiler elements are automatically stopped until they are closed again.

## Pressure equalization system

Prevents the flame from flashing back into the tank.

## The PLATINUM controller supports:

- Pump (DHW, CH1, CH2, circulation, additional),
- Two mixing circuits CH1 and CH2 with a room thermostat,
- RTC clock with a weekly programmer,
- Weather control,
- Winter/summer operating mode,
- FuzzyLogic & PID.

## Automatic feeder

The controller, based on information received from sensors, determines the fuel demand and doses the appropriate amount. The fuel combustion process itself is therefore very economical, ecological and does not require additional user service.

## Swirlers

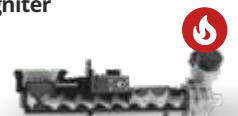
The swirlers installed in the convection channels effectively reduce the exhaust gas outlet velocity while maintaining high heat collection by the water jacket.

## Highly efficient combustion chamber

Thanks to the use of ceramic shapes together with the burner, the boiler achieves high efficiency. This technological solution increases the temperature in the combustion chamber and stops particles floating above the furnace, burning them out. As a result of this process, the thermal efficiency of the furnace increases, and the exhaust gases have the amount of compounds harmful to the environment reduced to a minimum.

## Ekoenergia II Cast Iron Burner | with igniter

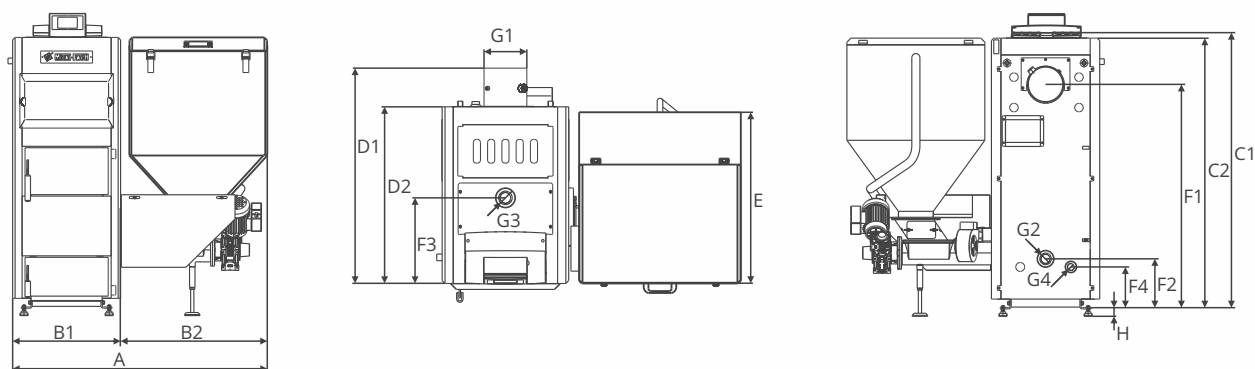
- Automatic igniter,
- Cast iron screw,
- Proven and reliable design,
- Fuel: eco-pea coal  $\Phi$ 0-32mm.





Boiler model		SEG EKO 12	SEG EKO 15	SEG EKO 20	SEG EKO 26	SEG EKO 34	SEG EKO 50	SEG EKO 75	SEG EKO 100	SEG EKO 150	SEG EKO 200	SEG EKO 300
Nominal power	[kW]	12	15	20	26	34	50	75	100	150	200	300
Heatable surface*	[m <sup>2</sup> ]	54-180	67,5-225	90-300	117-390	153-510	225-750	337,5-1125	450-1500	675-2250	900-3000	1350-4500
Fuel	[-]	hard coal according to the 303-5:2021-09 standard										
Water capacity	[L]	66	66	74	83	95	120	173	173	339	760	1765
Fuel tank capacity	[L]	190	190	290	350	350	400	520	520	1000	1500	1500
Fuel tank capacity	[kg]	139	139	212	256	256	292	380	380	510	1096	1096
Boiler weight	[kg]	438	448	510	539	551	785	935	935	1350	2100	<3000
Boiler class	[-]	5	5	5	5	5	-	-	-	-	-	-
EcoDesign	[-]	yes	yes	yes	yes	yes	-	-	-	-	-	-
Energy class	[-]	B	B	B	B	B	-	-	-	-	-	-
Seasonal particulate emission	[mg/m <sup>3</sup> ]	16	21	19	8	8	-	-	-	-	-	-
Efficiency for nominal power	[%]	93,76	92,64	93,42	92,97	90,76	-	-	-	-	-	-
Nominal particulate emission	[mg/m <sup>3</sup> ]	16,8	12,3	10,6	11,1	12,2	-	-	-	-	-	-
Efficiency for minimum power	[%]	94,73	93,17	92,47	94,13	93,54	-	-	-	-	-	-
Minimum particulate emission	[mg/m <sup>3</sup> ]	4,7	8,9	7,9	2,0	2,0	-	-	-	-	-	-

\*A new building with very good thermal insulation was assumed for the calculations.



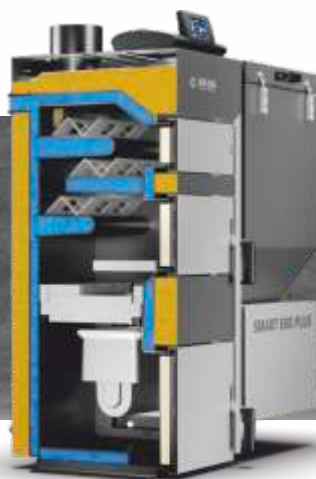
Dimensions		SEG EKO 12	SEG EKO 15	SEG EKO 20	SEG EKO 26	SEG EKO 34	SEG EKO 50	SEG EKO 75	SEG EKO 100	SEG EKO 150	SEG EKO 200	SEG EKO 300
A	[mm]	1250	1250	1250	1250	1300	1443	1505	1505	1965	2500	3140
B1	[mm]	532	532	532	532	582	681	793	795	955	1240	1820
B2	[mm]	680	680	680	680	680	680	680	700	1015	1200	1200
C1	[mm]	1160	1160	1356	1413	1413	1490	1440	1620	2200	2230	2220
C2	[mm]	1130	1130	1326	1383	1383	1460	1410	1590	2170	2200	2190
D1	[mm]	867	867	905	955	955	1218	1413	1570	1560	2240	-
D2	[mm]	705	705	745	796	796	1060	1175	1325	1260	1690	2545
E	[mm]	707	707	720	776	776	850	850	1075	1105	1190	1190
F1	[mm]	907	907	1104	1160	1160	1110	1115	1215	2005	1720	1722
F2	[mm]	213	213	247	245	245	337	350	300	165	375	320
F3	[mm]	349	349	359	409	409	536	545	695	515	890	1774
F4	[mm]	213	213	207	205	205	190	175	175	143	330	-
G1	[mm]	180	180	180	180	180	220	220	220	250	350	-
G2	[cal]	1 ½	1 ½	1 ½	1 ½	1 ½	1 ½	1 ½	1 ½	1 ½	101,6	101,6
G3	[cal]	1 ½	1 ½	1 ½	1 ½	1 ½	1 ½	1 ½	1 ½	1 ½	101,6	101,6
G4	[cal]	¾	¾	¾	¾	¾	¾	¾	¾	¾	1 ¼	1 ¼
H	[mm]	30	30	30	30	30	30	30	30	30	30	30

### Additional equipment

Lambda probe	Measures oxygen in exhaust gases and controls its course by changing the fan power
ecoNET Internet module	Smartphone control, Wi-Fi or wired connection
Platinum B module	Buffer operation control, additional two heating circuits, 2x pumps, 2x mixer, 2x thermostat
Platinum C module	Additional two heating circuits, 2x pumps, 2x mixer, 2x thermostat



# SMART EKO PLUS



## Heat exchanger | horizontal convection channels | shelf

Effective design adapted for quick cleaning of the exchanger from the front. The construction of the boiler exchanger ensures high heat collection from the furnace.

## Flue outlet | at the back of the boiler or at the top

The boiler design has been designed in such a way that the flue outlets are located at the back of the boiler or at the top. The use of such a solution in the central heating boiler allows for direct or indirect discharge of the flue to the chimney.

## Limit switch

For your safety, the boiler is equipped with a limit switch. The end protection system is located in the boiler door and in the tank flap. Each time the door or tank flap is opened, the burner and other boiler elements are automatically stopped until they are closed again.

## Pressure equalization system

Prevents the flame from returning to the tank.

## The PLATINUM controller supports:

- Pump (DHW, C.H.1, C.H.2, circulation, additional),
- Two mixing circuits C.H.1 and C.H.2 with a room thermostat,
- RTC clock with a weekly programmer,
- Weather control,
- Winter/summer operating mode,
- FuzzyLogic & PID.

## Automatic feeder

The controller, based on information received from sensors, determines the fuel demand and doses the appropriate amount. The fuel combustion process itself is therefore very economical, ecological and does not require additional user service.

## Swirlers

The swirlers installed in the convection channels effectively reduce the speed of the exhaust gas outlet, maintaining high heat collection by the water jacket.

## Highly efficient combustion chamber

Thanks to the use of ceramic shapes together with the burner, the boiler achieves high efficiency. This technological solution increases the temperature in the combustion chamber and stops particles floating above the furnace, burning them out. As a result of this process, the thermal efficiency of the furnace increases, and the exhaust gases have the amount of compounds harmful to the environment reduced to a minimum.

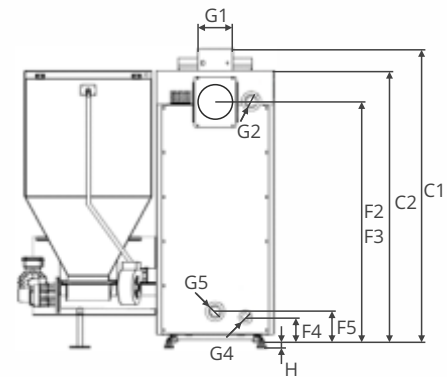
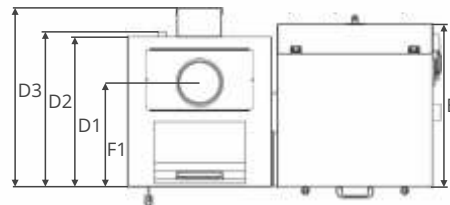
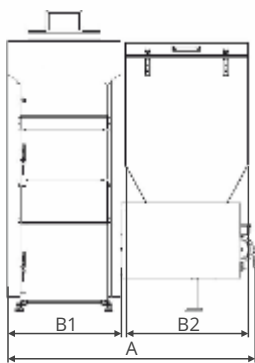
## Ekoenergia II Cast Iron Burner | with igniter

- Automatic igniter,
- Cast iron screw,
- Proven and reliable design,
- Fuel: eco-pea coal  $\Phi$ 0-32mm.



Boiler model		SMART EKO PLUS 15	SMART EKO PLUS 20	SMART EKO PLUS 25
Nominal power	[kW]	15	20	25
Heatable surface*	[m <sup>2</sup> ]	67,5-225	90-300	112,5-375
Fuel	[-]	hard coal according to the 303-5:2021-09 standard		
Water capacity	[L]	48	60	71
Fuel tank capacity	[L]	200	200	200
Fuel tank capacity	[kg]	146	146	146
Boiler weight	[kg]	380	405	480
Boiler class	[-]	5	5	5
EcoDesign	[-]	yes	yes	yes
Energy class	[-]	B	B	B
Seasonal particulate emission	[mg/m <sup>3</sup> ]	23,35	22,58	23,19
Efficiency for nominal power	[%]	90,69	91,00	90,94
Nominal particulate emission	[mg/m <sup>3</sup> ]	28,02	30,06	28,90
Efficiency for minimum power	[%]	90,95	90,71	90,72
Minimum particulate emission	[mg/m <sup>3</sup> ]	22,52	21,26	22,18

\*A new building with very good thermal insulation was assumed for the calculations.



Dimensions		SMART EKO PLUS 15	SMART EKO PLUS 20	SMART EKO PLUS 25
A	[mm]	1135	1135	1185
B1	[mm]	535	535	585
B2	[mm]	580	580	580
C1	[mm]	1340	1400	1400
C2	[mm]	1240	1300	1300
D1	[mm]	560	630	720
D2	[mm]	590	660	750
D3	[mm]	680	760	845
E	[mm]	610	630	630
F1	[mm]	435	505	595
F2	[mm]	1100	1155	1155
F3	[mm]	1100	1155	1155
F4	[mm]	115	115	115
F5	[mm]	140	140	140
G1	[mm]	160	160	160
G2	[cal]	1 ½	1 ½	1 ½
G4	[cal]	¾	¾	¾
G5	[cal]	1 ½	1 ½	1 ½
H	[mm]	30	30	30

#### Additional equipment

Lambda probe	Measures oxygen in exhaust gases and controls its course by changing the fan power
ecoNET Internet module	Smartphone control, Wi-Fi or wired connection
Platinum Touch x40 room thermostat	Analog, wireless
Platinum Touch x80 room thermostat	Touch, wireless
Platinum ecoSTER100 room thermostat	Touch, wired, 5" display
Platinum B module	Buffer operation control, additional two heating circuits, 2x pumps, 2x mixer, 2x thermostat
Platinum C module	Additional two heating circuits, 2x pumps, 2x mixer, 2x thermostat



**METAL-FACH**  
HEATING TECHNOLOGY

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