



METAL-FACH
HEATING TECHNOLOGY

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CATALOG

CENTRAL HEATING BOILERS

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METAL-FACH Heating Technology Manufacturer of

Central Heating Boilers

METAL-FACH Heating Technology

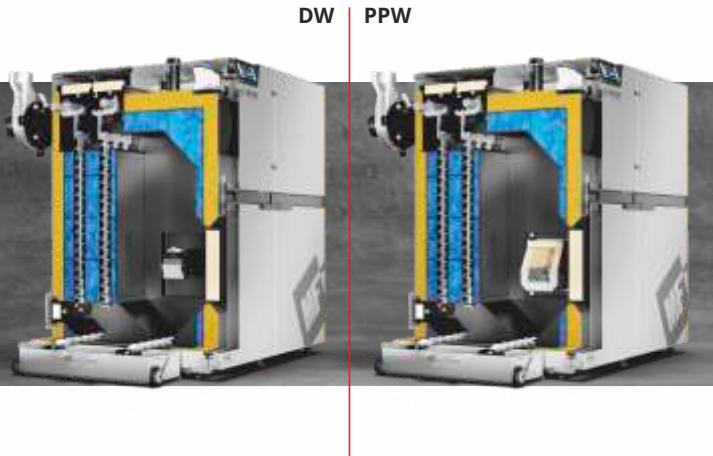
METAL-FACH Heating Technology is a family company established in 1989. For all these years we have been developing the production of central heating boilers, which have become more and more efficient, economical and ecological every year. Our experience has been appreciated both on global markets and 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 PELLET



■ 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 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

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 Ø6-8mm.

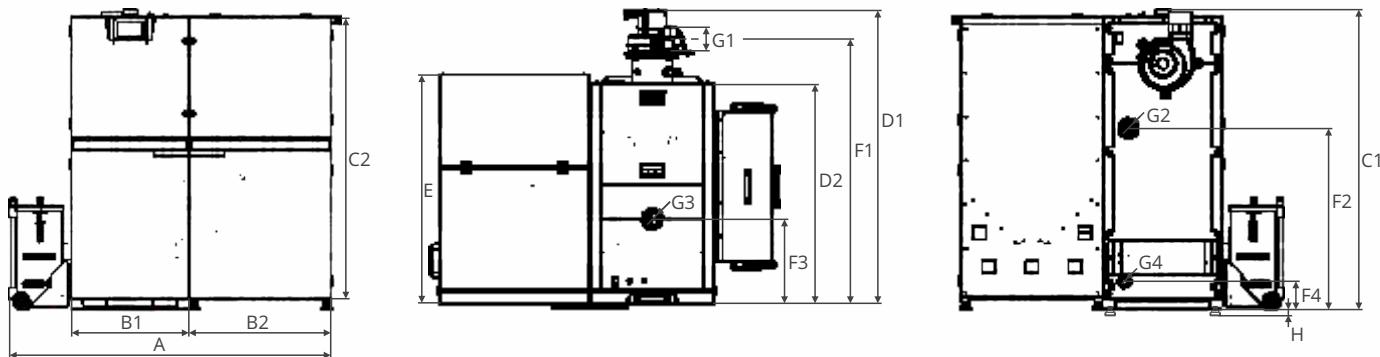


■ Self-cleaning PP burner

- Installed in boilers with a power of 25 | 34 kW,
- Automatic cleaning,
- Automatic ceramic igniter,
- Fuel: pellet Ø6-8mm.

Boiler model		GRAND PELLET 15	GRAND PELLET 20	GRAND PELLET 25	GRAND PELLET 34
Nominal power	[kW]	15	20	25	34
Heatable surface*	[m ²]	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 ³]	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 ³]	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 ³]	19,35	10,32	16,70	17,42

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



Dimensions		GRAND PELLET 15	GRAND PELLET 20	GRAND PELLET 25	GRAND PELLET 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	(Standard equipment) 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&C Module	The extension module can operate as a B or C module. Mode B allows you to extend the functionality of the boiler with: two additional heating circuits, 2x pumps, 2x mixer, 2x universal thermostat, output H. Mode C allows you to extend the functionality of the boiler with two additional heating circuits, 2x pumps, 2x mixer, 2x universal thermostat.
Exhaust fan	(Standard equipment)
Automatic ash removal system	(Standard equipment)
Automatic self-cleaning exchanger system	(Standard equipment)



GRAND PELLET



■ 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 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

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.

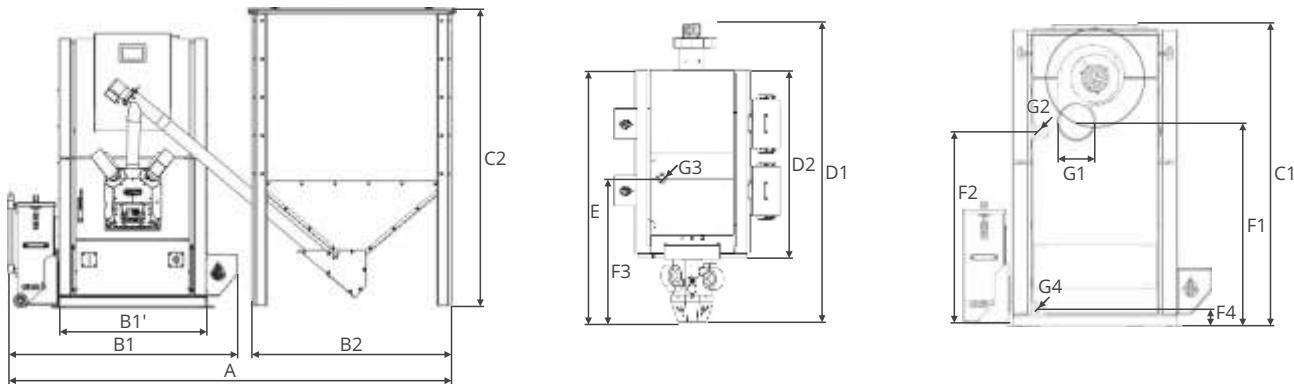
■ Self-cleaning PPW burner

- Automatic cleaning,
- Automatic ceramic igniter (50.75kW),
- Two automatic ceramic igniters (100.150kW),
- Fuel: pellet Ø6-8mm.



Boiler model		GRAND PELLET 50	GRAND PELLET 75	GRAND PELLET 100	GRAND PELLET 150
Nominal power	[kW]	50	75	100	150
Heatable surface*	[m ²]	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 ³]	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 ³]	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 ³]	14,54	16,69	13,67	17,73

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



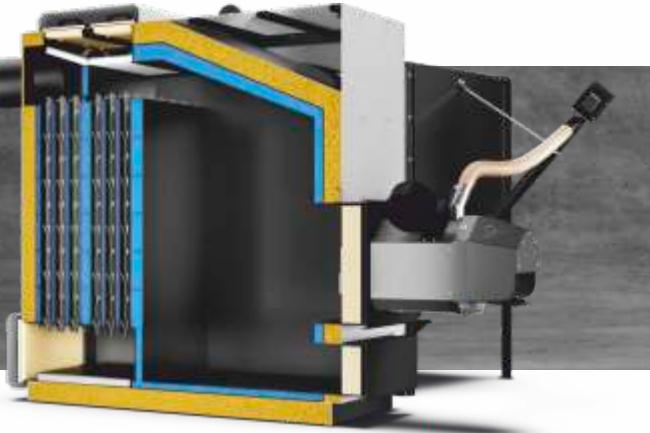
Dimensions		GRAND PELLET 50	GRAND PELLET 75	GRAND PELLET 100	GRAND PELLET 150
A	[mm]	2429	2429	2429	2429
B1 B1'	[mm]	1255 815	1255 815	1255 815	1255 815
B2	[mm]	1111	1111	1111	1111
C1	[mm]	1475	1475	1715	1715
C2	[mm]	1636	1636	1636	1636
D1	[mm]	2190	2190	2500	2600
D2	[mm]	1450	1450	1600	1600
E	[mm]	1890	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	180	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]	-	-	-	-

Additional equipment

Lambda probe	Measures oxygen in exhaust gases and controls its course by changing the fan power
ecoNET Internet module	(Standard equipment) 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&C Module	The extension module can operate as a B or C module. Mode B allows you to extend the functionality of the boiler with: two additional heating circuits, 2x pumps, 2x mixer, 2x universal thermostat, output H. Mode C allows you to extend the functionality of the boiler with two additional heating circuits, 2x pumps, 2x mixer, 2x universal thermostat.
Exhaust fan	(Standard equipment)
Automatic ash removal system	(Standard equipment)
Automatic self-cleaning exchanger system	(Standard equipment)



GRAND PELLET



■ 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 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

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 Ø6-8mm.

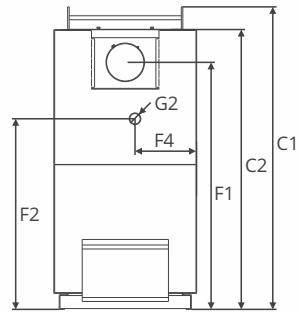
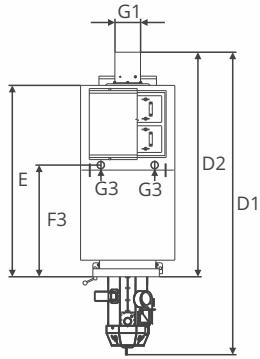
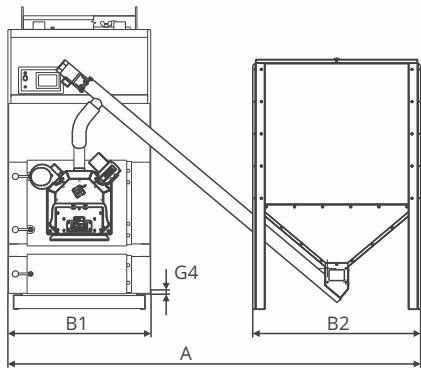


Boiler model

GRAND PELLET 200

Nominal power	[kW]	200
Heatable surface*	[m ²]	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 ³]	17,85
Efficiency for nominal power	[%]	92,91
Nominal particulate emission	[mg/m ³]	12,32
Efficiency for minimum power	[%]	92,17
Minimum particulate emission	[mg/m ³]	18,83

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



Dimensions

GRAND PELLET 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]	3/4
H	[mm]	-

Additional equipment

Lambda probe	Measures oxygen in exhaust gases and controls its course by changing the fan power
ecoNET Internet module	(Standard equipment) 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&C Module	The extension module can operate as a B or C module. Mode B allows you to extend the functionality of the boiler with: two additional heating circuits, 2x pumps, 2x mixer, 2x universal thermostat, output H. Mode C allows you to extend the functionality of the boiler with two additional heating circuits, 2x pumps, 2x mixer, 2x universal thermostat.
Exhaust fan	
Automatic ash removal system	
Automatic self-cleaning exchanger system	



GRAND PELLET



■ 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 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.

■ 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 vorticulators 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 Ø6-8mm.

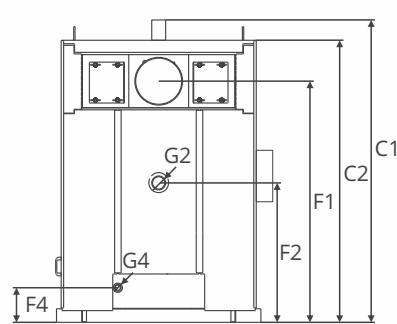
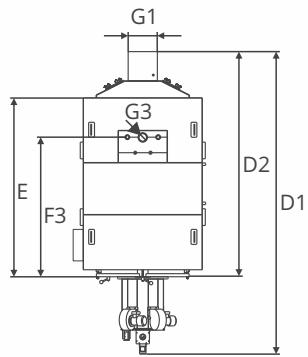
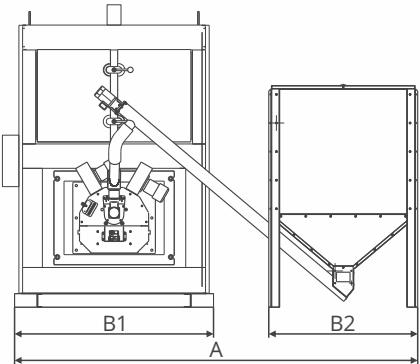


Boiler model

GRAND PELLET 300

Nominal power	[kW]	300
Heatable surface*	[m ²]	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 ³]	18
Efficiency for nominal power	[%]	90,5
Nominal particulate emission	[mg/m ³]	19
Efficiency for minimum power	[%]	89,9
Minimum particulate emission	[mg/m ³]	18

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



Dimensions

GRAND PELLET 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 1/4"
H	[mm]	-

Additional equipment

Lambda probe	Measures oxygen in exhaust gases and controls its course by changing the fan power
ecoNET Internet module	(Standard equipment) 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&C Module	The extension module can operate as a B or C module. Mode B allows you to extend the functionality of the boiler with: two additional heating circuits, 2x pumps, 2x mixer, 2x universal thermostat, output H. Mode C allows you to extend the functionality of the boiler with two additional heating circuits, 2x pumps, 2x mixer, 2x universal thermostat.
Exhaust fan	
Automatic ash removal system	
Automatic self-cleaning exchanger system	



GRAND PELLET



■ 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 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.

■ 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.

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The vorticulators 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.

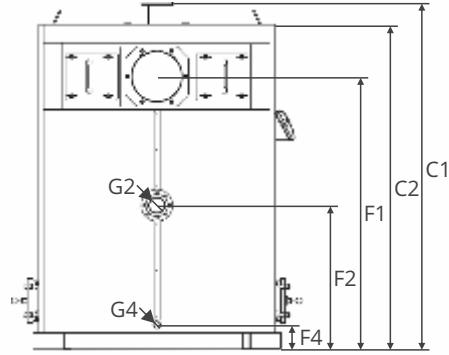
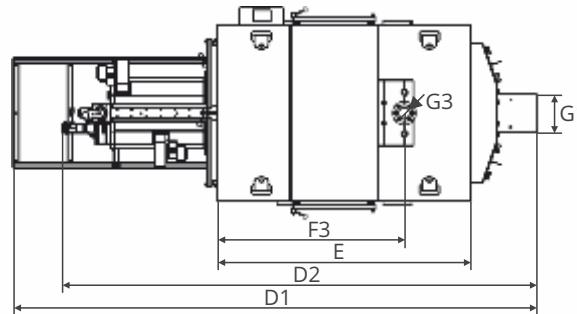
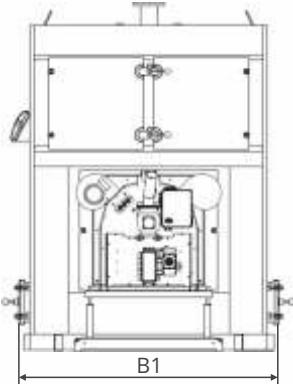
■ Self-cleaning PPW burner

- Automatic cleaning,
- Two automatic ceramic igniters,
- Fuel: pellet Ø6-8mm.



Boiler model		GRAND PELLET 400	GRAND PELLET 500
Nominal power	[kW]	400	500
Heatable surface*	[m ²]	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 ³]	19	19
Efficiency for nominal power	[%]	90,7	91
Nominal particulate emission	[mg/m ³]	18	18
Efficiency for minimum power	[%]	90,9	90,5
Minimum particulate emission	[mg/m ³]	19	19

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



Dimensions		GRAND PELLET 400	GRAND PELLET 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 1/4"	G 1 1/4"
H	[mm]	-	-

Additional equipment

Lambda probe	Measures oxygen in exhaust gases and controls its course by changing the fan power
ecoNET Internet module	(Standard equipment) 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&C Module	The extension module can operate as a B or C module. Mode B allows you to extend the functionality of the boiler with: two additional heating circuits, 2x pumps, 2x mixer, 2x universal thermostat, output H. Mode C allows you to extend the functionality of the boiler with two additional heating circuits, 2x pumps, 2x mixer, 2x universal thermostat.
Exhaust fan	
Automatic ash removal system	
Automatic self-cleaning exchanger system	



SLIM PELLET



■ 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.

■ 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)

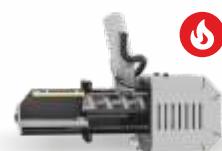
The exhaust fan effectively supports the natural draft of exhaust gases in the boiler.

■ 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.

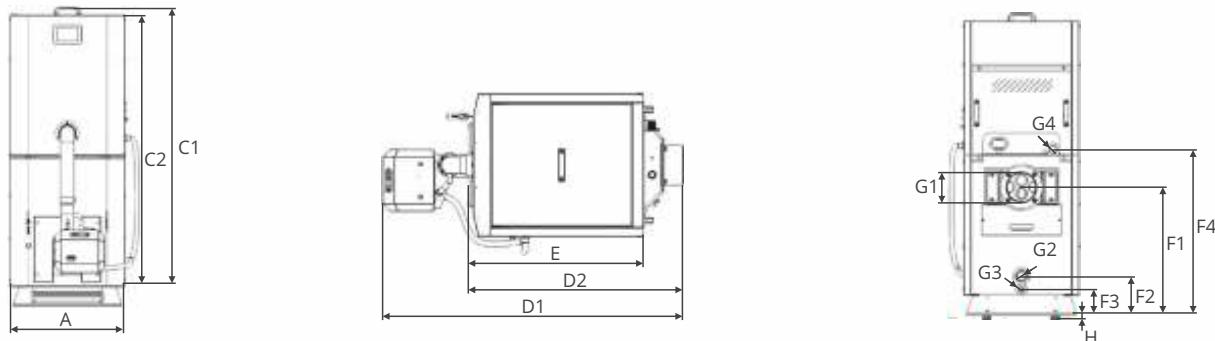
■ Self-cleaning DW Burner

- Automatic cleaning,
- Automatic ceramic igniter,
- Fuel: pellet Ø6-8mm.



Boiler model		SLIM PELLET 10	SLIM PELLET 15	SLIM PELLET 20
Nominal power	[kW]	10	15	20
Heatable surface*	[m ²]	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 ³]	17,84	17,25	15,82
Efficiency for nominal power	[%]	92,26	92,07	92,51
Nominal particulate emission	[mg/m ³]	15,05	16,13	15,07
Efficiency for minimum power	[%]	91,05	91,10	91,58
Minimum particulate emission	[mg/m ³]	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 1/4	1 1/4	1 1/4
G3	[cal]	3/4	3/4	3/4
G4	[cal]	1 1/4	1 1/4	1 1/4
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&C Module	The extension module can operate as a B or C module. Mode B allows you to extend the functionality of the boiler with: two additional heating circuits, 2x pumps, 2x mixer, 2x universal thermostat, output H. Mode C allows you to extend the functionality of the boiler with two additional heating circuits, 2x pumps, 2x mixer, 2x universal thermostat.

Exhaust fan



SLIM PELLET MINI



■ 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.

■ 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)

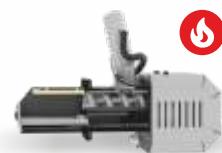
The exhaust fan effectively supports the natural draft of exhaust gases in the boiler.

■ 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.

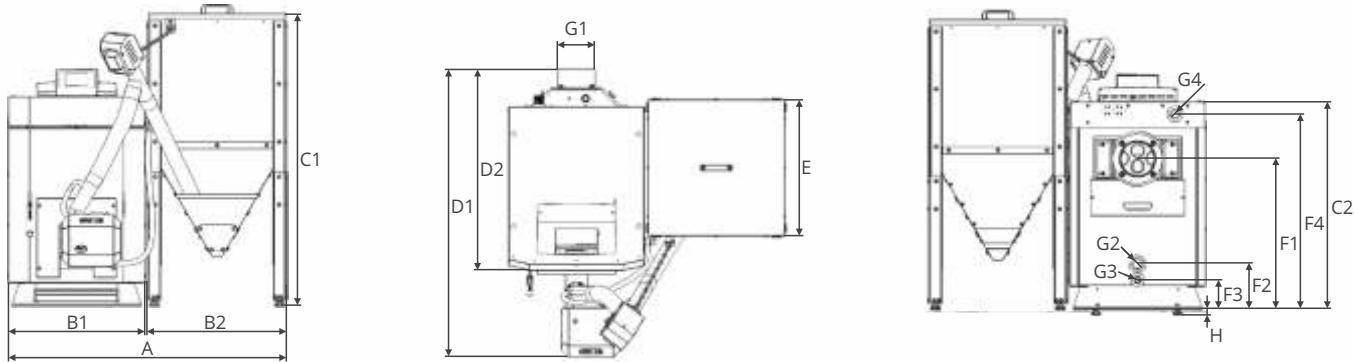
■ Self-cleaning DW Burner

- Automatic cleaning,
- Automatic ceramic igniter,
- Fuel: pellet Ø6-8mm.



Boiler model		SLIM PELLET MINI 10	SLIM PELLET MINI 15	SLIM PELLET MINI 20
Nominal power	[kW]	10	15	20
Heatable surface*	[m ²]	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 ³]	17,84	17,25	15,82
Efficiency for nominal power	[%]	92,26	92,07	92,51
Nominal particulate emission	[mg/m ³]	15,05	16,13	15,07
Efficiency for minimum power	[%]	91,05	91,10	91,58
Minimum particulate emission	[mg/m ³]	18,33	17,45	15,95

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



Dimensions		SLIM PELLET MINI 10	SLIM PELLET MINI 15	SLIM PELLET 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 1/4	1 1/4	1 1/4
G3	[cal]	3/4	3/4	3/4
G4	[cal]	1 1/4	1 1/4	1 1/4
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&C Module	The extension module can operate as a B or C module. Mode B allows you to extend the functionality of the boiler with: two additional heating circuits, 2x pumps, 2x mixer, 2x universal thermostat, output H. Mode C allows you to extend the functionality of the boiler with two additional heating circuits, 2x pumps, 2x mixer, 2x universal thermostat.

Exhaust fan



SMART PELLET 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 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

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

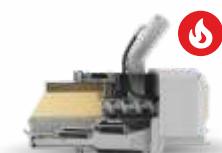
The swirlers installed in the convection channels effectively reduce the exhaust gas outlet velocity while maintaining high heat collection by the water jacket.

■ 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.

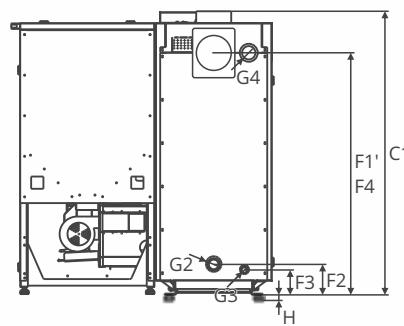
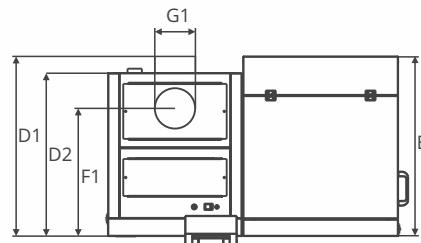
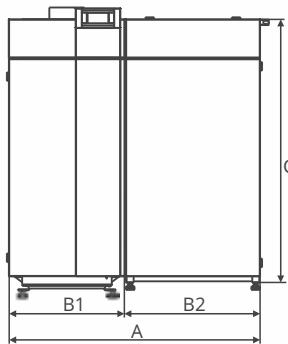
■ PPW Self-Cleaning Burner

- Automatic cleaning,
- Automatic ceramic igniter,
- Fuel: pellet Ø6-8mm.



Boiler model		SMART PELLET WF PRO 16	SMART PELLET WF PRO 20	SMART PELLET WF PRO 25	SMART PELLET WF PRO 32
Nominal power	[kW]	16	20	25	32
Heatable surface*	[m ²]	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 ³]	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 ³]	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 ³]	17,42	18,03	17,48	17,37

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



Dimensions		SMART PELLET WF PRO 16	SMART PELLET WF PRO 20	SMART PELLET WF PRO 25	SMART PELLET 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&C Module	The extension module can operate as a B or C module. Mode B allows you to extend the functionality of the boiler with: two additional heating circuits, 2x pumps, 2x mixer, 2x universal thermostat, output H. Mode C allows you to extend the functionality of the boiler with two additional heating circuits, 2x pumps, 2x mixer, 2x universal 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 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 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.

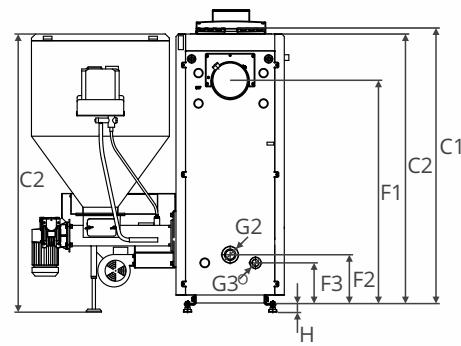
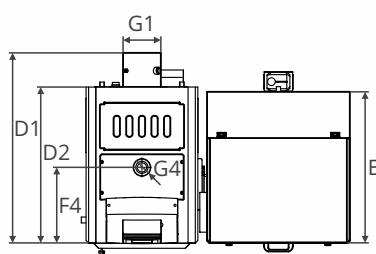
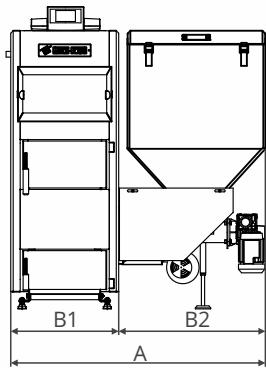
■ Gutter Burner

- 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 ²]	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 ³]	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 ³]	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 ³]	19	19,3	19,3	19,4	19,5	19,5

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



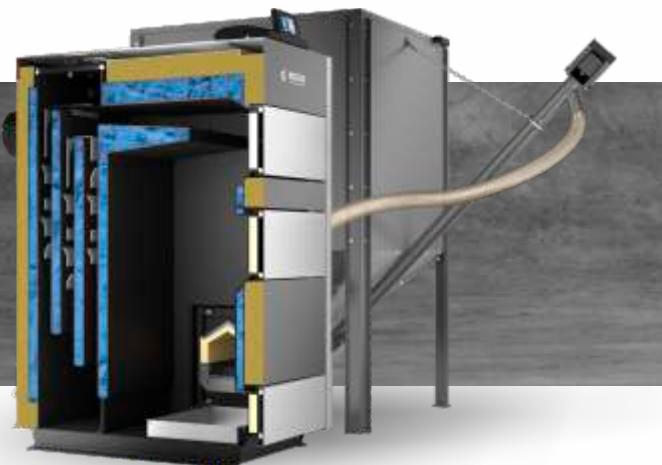
Dimensions		SEG BIO 15	SEG BIO 20	SEG BIO 30	SEG BIO 40	SEG BIO 50	SEG BIO 75
A	[mm]	1256	1256	1256	1306	1406	1505
B1	[mm]	535	535	535	585	682	793
B2	[mm]	680	680	680	680	680	680
C1	[mm]	1160	1355	1415	1415	1484	1520
C2	[mm]	1130	1325	1385	1385	1454	1490
D1	[mm]	870	905	955	955	1218	1413
D2	[mm]	705	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&C Module	The extension module can operate as a B or C module. Mode B allows you to extend the functionality of the boiler with: two additional heating circuits, 2x pumps, 2x mixer, 2x universal thermostat, output H. Mode C allows you to extend the functionality of the boiler with two additional heating circuits, 2x pumps, 2x mixer, 2x universal thermostat.



SEG PELLET



■ 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 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.

■ 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.

■ Swirlers

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

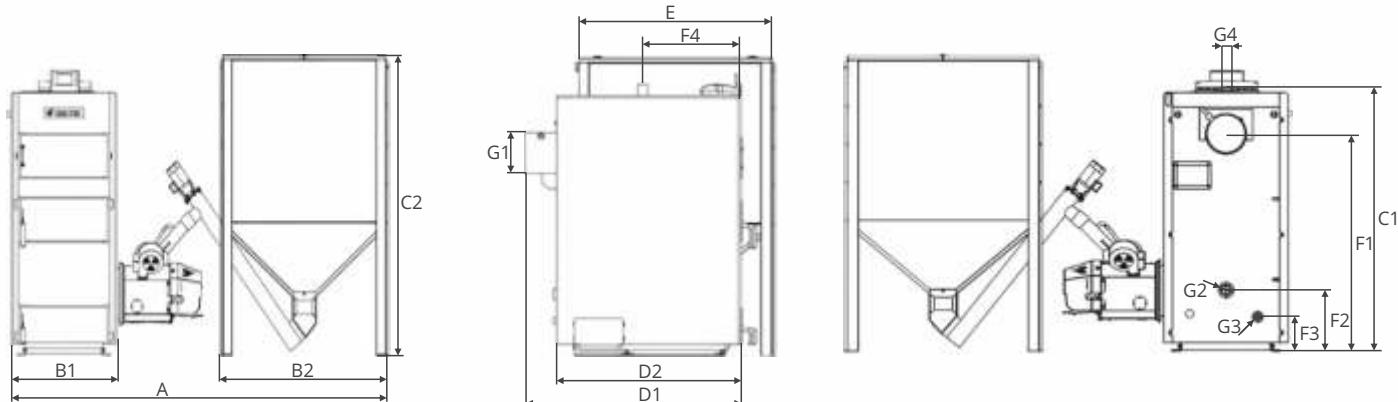
■ PPW Self-Cleaning Burner

- Automatic cleaning,
- Two automatic ceramic igniters,
- Fuel: pellet Ø6-8mm.



Boiler model		SEG PELLET 42	SEG PELLET 60	SEG PELLET 75	SEG PELLET 100
Nominal power	[kW]	42	60	75	100
Heatable surface*	[m ²]	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 ³]	19	20	19	20
Efficiency for nominal power	[%]	90,5	91,3	89,4	90,8
Nominal particulate emission	[mg/m ³]	19	16	19	18
Efficiency for minimum power	[%]	89,6	90,1	88,9	89,3
Minimum particulate emission	[mg/m ³]	19	20	19	20

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



Dimensions		SEG PELLET 42	SEG PELLET 60	SEG PELLET 75	SEG PELLET 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 1/2	1 1/2	1 1/2	1 1/2
G3	[cal]	3/4	3/4	3/4	3/4
G4	[cal]	1 1/2	1 1/2	1 1/2	1 1/2
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&C Module	<p>The extension module can operate as a B or C module.</p> <p>Mode B allows you to extend the functionality of the boiler with: two additional heating circuits, 2x pumps, 2x mixer, 2x universal thermostat, output H.</p> <p>Mode C allows you to extend the functionality of the boiler with two additional heating circuits, 2x pumps, 2x mixer, 2x universal thermostat.</p>



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.

■ 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 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 Ø6-8mm.

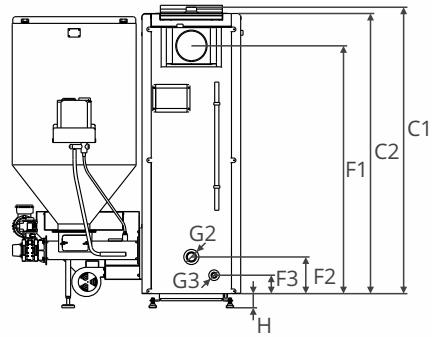
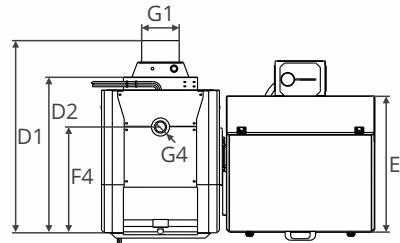
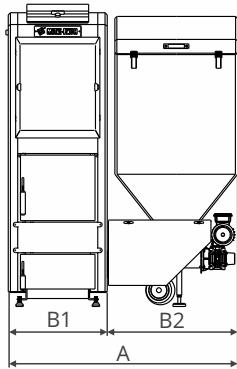


■ Limit switch

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.

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 ²]	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 ³]	14	26	14	10
Efficiency for nominal power	[%]	-	90,1	-	90,1
Nominal particulate emission	[mg/m ³]	-	26	-	13
Efficiency for minimum power	[%]	-	89,1	-	90,7
Minimum particulate emission	[mg/m ³]	-	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 1/2	1 1/2	1 1/2	1 1/2
G3	[cal]	3/4	3/4	3/4	3/4
G4	[cal]	1 1/2	1 1/2	1 1/2	1 1/2
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&C Module	The extension module can operate as a B or C module. Mode B allows you to extend the functionality of the boiler with: two additional heating circuits, 2x pumps, 2x mixer, 2x universal thermostat, output H. Mode C allows you to extend the functionality of the boiler with two additional heating circuits, 2x pumps, 2x mixer, 2x universal thermostat.



SEMAX BASIC DUO



■ **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 | 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 | top adjustment, side from the fan**

The boiler design has been designed in such a way that the flue outlet is located at the back. Using this solution in a central heating boiler allows for the flue to be led directly to the chimney.

■ **Exhaust fan***

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

■ ***ATTENTION!**

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

■ **Exhaust gas temperature sensor**

Together with the controller, the sensor monitors the exhaust gas temperature.

■ **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 mode,
- FuzzyLogic & PID.

■ **Secondary and primary air intake****

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

■ ****ATTENTION!**

Air intakes 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 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 support.

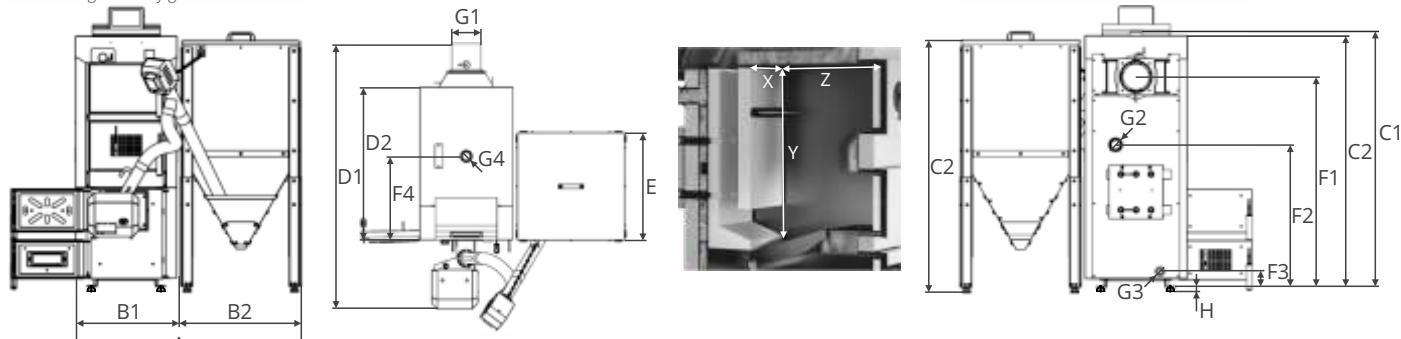
■ **Self-cleaning DW Burner******

- Automatic cleaning,
- Automatic ceramic igniter,
- Fuel: pellet Ø6-8mm.



Boiler model		SEMAX BASIC DUO 15	SEMAX BASIC DUO 20
Nominal power	[kW]	15	20
Heatable surface*	[m ²]	67,5-225	90-300
Fuel	[·]	primary fuel - firewood, lumps according to the 303-5:2021-09 standard secondary fuel - wood pellets according to the 303-5:2021-09 standard	
Water capacity	[L]	71	77
Fuel tank capacity	[L]	230	230
Fuel tank capacity	[kg]	138	138
Boiler weight	[kg]	342	390
Boiler class	[·]	5	5
EcoDesign	[·]	tak	tak
Energy class	[·]	A+	A+
Seasonal particulate emission	[mg/m ³]	firewood - 20 wood pellets - 17	firewood - 18 wood pellets - 19
Efficiency for nominal power	[%]	firewood - 90,0 wood pellets - 91,0	firewood - 88,7 wood pellets - 91,0
Nominal particulate emission	[mg/m ³]	firewood - 20 wood pellets - 13	firewood - 17 wood pellets - 16
Efficiency for minimum power	[%]	firewood - (-) wood pellets - 89,0	firewood - (-) wood pellets - 90,0
Minimum particulate emission	[mg/m ³]	firewood - (-) wood pellets - 18	firewood - (-) wood pellets - 20
Heat storage tank (buffer) capacity	[L]	555	780

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



Dimensions	SEMAX BASIC DUO 15	SEMAX BASIC DUO 20
A	[mm]	1135
B1	[mm]	490
B2	[mm]	605
C1	[mm]	1275
C2	[mm]	1255
D1	[mm]	1352
D2	[mm]	725
E	[mm]	605
F1	[mm]	1050
F2	[mm]	713
F3	[mm]	80
F4	[mm]	448
G1	[mm]	159
G2	[cal]	¾
G3	[cal]	1 ½
G4	[cal]	1 ½
H	[mm]	30
X	[mm]	290
Y	[mm]	515
Z	[mm]	340

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&C Module	The extension module can operate as a B or C module. Mode B allows you to extend the functionality of the boiler with: two additional heating circuits, 2x pumps, 2x mixer, 2x universal thermostat, output H. Mode C allows you to extend the functionality of the boiler with two additional heating circuits, 2x pumps, 2x mixer, 2x universal thermostat.

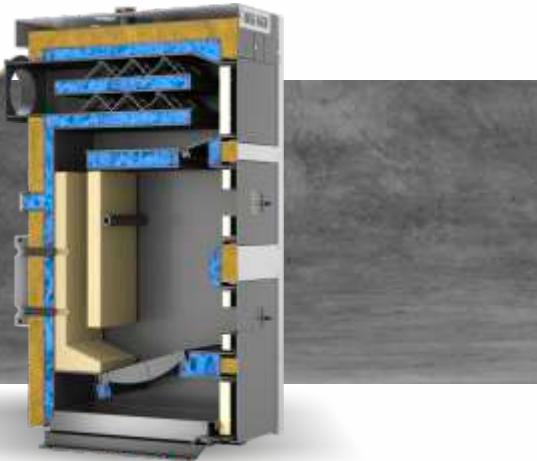
Exhaust fan

(Standard equipment)

SEMAX BASIC DUO | 29



SEMAX 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 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 prove to be an ideal solution for households that have large supplies of properly stored firewood. In gasification boilers, the wood combustion process yeses place in two stages. In the charge chamber, with limited access to air, incomplete combustion of the fuel yeses 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**

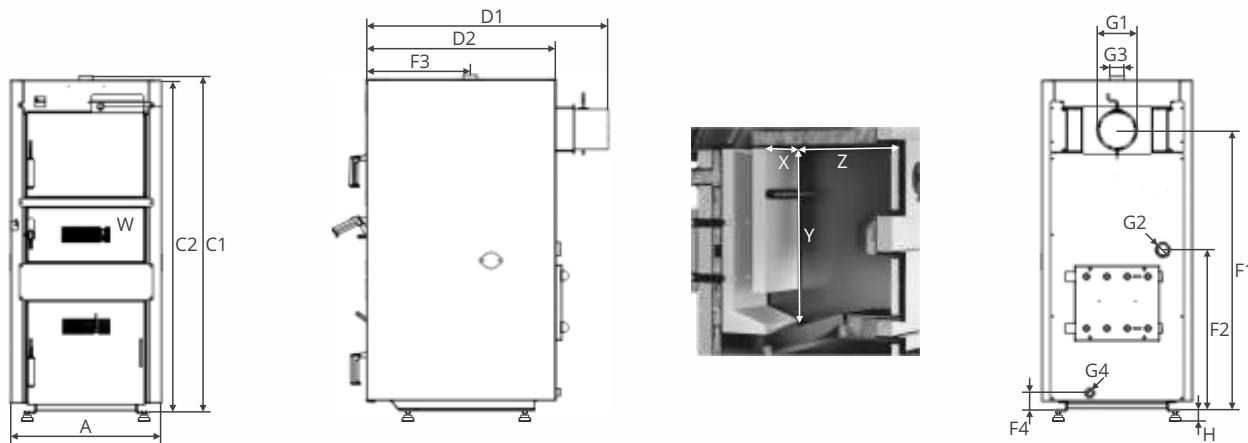
Provides optimal operating conditions for the boiler. The boiler can operate at optimal power, and excess heat is collected in the buffer. The home heating system draws as much heat from the buffer as it needs at a given moment.

■ **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 BASIC 15	SEMAX BASIC 20	SEMAX BASIC 30	SEMAX BASIC 40
Nominal power	[kW]	15	20	30	40
Heatable surface*	[m ²]	150-225	200-300	300-450	400-600
Fuel	[-]		firewood, lumps according to the 303-5:2021-09 standard		
Water capacity	[L]	71	77	99	116
Log circumference	[cm]	30-40	30-40	30-40	30-40
Log length	[cm]	34	36	34	34
Boiler weight	[kg]	342	390	415	500
Boiler class	[-]	5	5	5	5
EcoDesign	[-]	yes	yes	yes	yes
Energy class	[-]	A+	A+	A+	A+
Seasonal particulate emission	[mg/m ³]	20	18	19	19
Efficiency for nominal power	[%]	90	88,7	89,1	89,2
Nominal particulate emission	[mg/m ³]	20	17	19	19
Heat storage tank (buffer) capacity	[L]	555	780	1230	1680

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



Dimensions		SEMAX BASIC 15	SEMAX BASIC 20	SEMAX BASIC 30	SEMAX BASIC 40
A	[mm]	490	520	560	660
B1	[mm]	-	-	-	-
B2	[mm]	-	-	-	-
C1	[mm]	1275	1275	1480	1480
C2	[mm]	1255	1255	1460	1460
D1	[mm]	957	1070	1070	1065
D2	[mm]	725	835	835	835
E	[mm]	-	-	-	-
F1	[mm]	1050	1050	1240	1240
F2	[mm]	713	713	713	713
F3	[mm]	448	455	455	455
F4	[mm]	80	80	80	80
G1	[mm]	159	159	177	177
G2	[cal]	1 1/2	1 1/2	1 1/2	1 1/2
G3	[cal]	1 1/2	1 1/2	1 1/2	1 1/2
G4	[cal]	3/4	3/4	3/4	3/4
H	[mm]	30	30	30	30
W	[mm]	290x200	290x200	340x200	440x200
X	[mm]	290	290	340	440
Y	[mm]	515	515	590	590
Z	[mm]	345	445	420	420

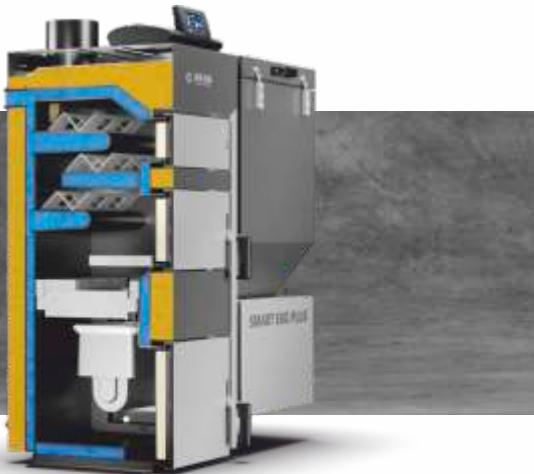
Additional equipment

Exhaust set

Electronic controller set with fan



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.

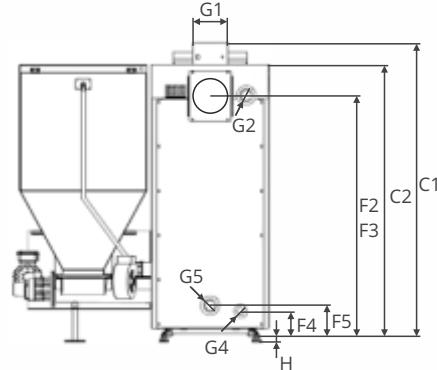
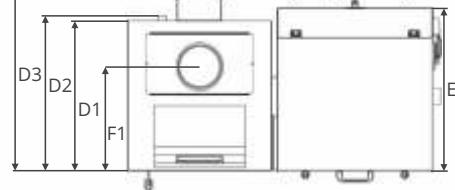
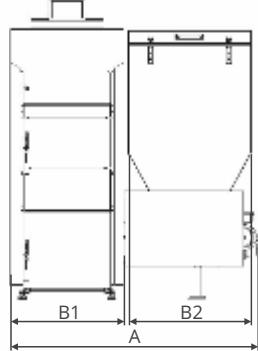
■ Ekoenergia II Cast Iron Burner | with igniter

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



Boiler model		SMART EKO PLUS 15	SMART EKO PLUS 20	SMART EKO PLUS 25
Nominal power	[kW]	15	20	25
Heatable surface*	[m ²]	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 ³]	23,35	22,58	23,19
Efficiency for nominal power	[%]	90,69	91,00	90,94
Nominal particulate emission	[mg/m ³]	28,02	30,06	28,90
Efficiency for minimum power	[%]	90,95	90,71	90,72
Minimum particulate emission	[mg/m ³]	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&C Module	The extension module can operate as a B or C module. Mode B allows you to extend the functionality of the boiler with: two additional heating circuits, 2x pumps, 2x mixer, 2x universal thermostat, output H. Mode C allows you to extend the functionality of the boiler with two additional heating circuits, 2x pumps, 2x mixer, 2x universal thermostat.



SMART EKO



■ 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 top of the boiler

The boiler design has been designed in such a way that the flue outlet is at the top. The use of such a solution in a 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 TECH ST 483 controller supports:

- Pump (DHW, C.O.1, circulation, additional),
- One C.O.1 mixing circuit with a room thermostat,
- Weather control.

■ 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.

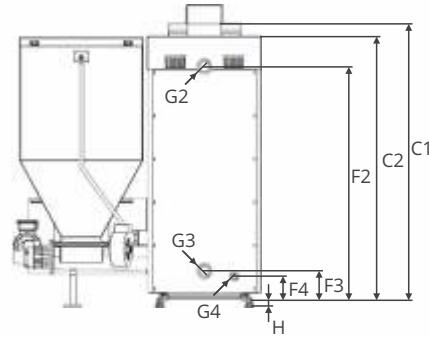
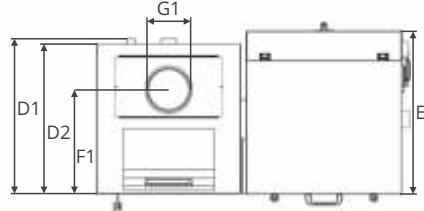
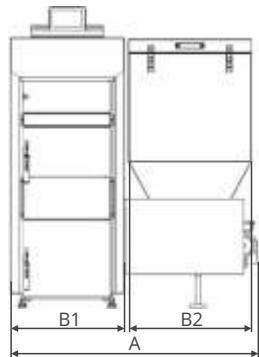
■ Ekoenergia II Cast Iron Burner

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



Boiler model		SMART EKO 12	SMART EKO 15	SMART EKO 20	SMART EKO 25	SMART EKO 30
Nominal power	[kW]	12	15	20	25	30
Heatable surface*	[m ²]	54-180	67,5-225	90-300	112,5-375	135-450
Fuel	[-]		węgiel kamienny zgodnie z normą 303-5:2021-09			
Water capacity	[L]	48	48	60	71	80
Fuel tank capacity	[L]	200	200	200	200	200
Fuel tank capacity	[kg]	146	146	146	146	146
Boiler weight	[kg]	370	380	405	480	522
Boiler class	[-]	5	5	5	5	5
EcoDesign	[-]	tak	tak	tak	tak	tak
Energy class	[-]	B	B	B	B	B
Seasonal particulate emission	[mg/m ³]	26,32	23,35	22,58	23,19	23,08
Efficiency for nominal power	[%]	90,96	90,69	91,00	90,94	91,02
Nominal particulate emission	[mg/m ³]	28,67	28,02	30,06	28,90	27,78
Efficiency for minimum power	[%]	90,74	90,95	90,71	90,72	90,88
Minimum particulate emission	[mg/m ³]	25,91	22,52	21,26	22,18	22,25

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



Dimensions		SMART EKO 12	SMART EKO 15	SMART EKO 20	SMART EKO 25	SMART EKO 30
A	[mm]	1135	1135	1135	1185	1300
B1	[mm]	535	535	535	585	585
B2	[mm]	580	580	580	580	580
C1	[mm]	1340	1340	1400	1400	1485
C2	[mm]	1240	1240	1300	1300	1395
D1	[mm]	590	590	660	750	750
D2	[mm]	560	560	630	720	720
E	[mm]	610	610	630	630	630
F1	[mm]	435	435	505	595	580
F2	[mm]	1100	1100	1155	1155	1255
F3	[mm]	140	140	140	140	140
F4	[mm]	115	115	115	115	115
G1	[mm]	160	160	160	160	180
G2	[cal]	1 ½	1 ½	1 ½	1 ½	1 ½
G3	[cal]	1 ½	1 ½	1 ½	1 ½	1 ½
G4	[cal]	¾	¾	¾	¾	¾
H	[mm]	30	30	30	30	30

Additional equipment

TECH Internet Module	Wi-Fi control, wireless connection
TECH Internet Module	Wi-Fi control, wired connection
TECH ST280 + ST260 room thermostat	Touch control, wireless connection



METAL-FACH
HEATING TECHNOLOGY

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