30 YEARS

Since 1989

METAL-FACH
HEATING TECHNOLOGY

ECO DESIGN

PN-EN 303-5 2012
CLASS 5

TÜVRheinland
CERTIFIED


# CATALOGUE Eco Design & 5 Class

CENTRAL HEATING BOILERS

Edition 2019/06/01

WWW.METALFACHTG.COM.PL/EN

ENGLISH


METAL-FACH
SMART PELLET
MF

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## COMPANY HISTORY

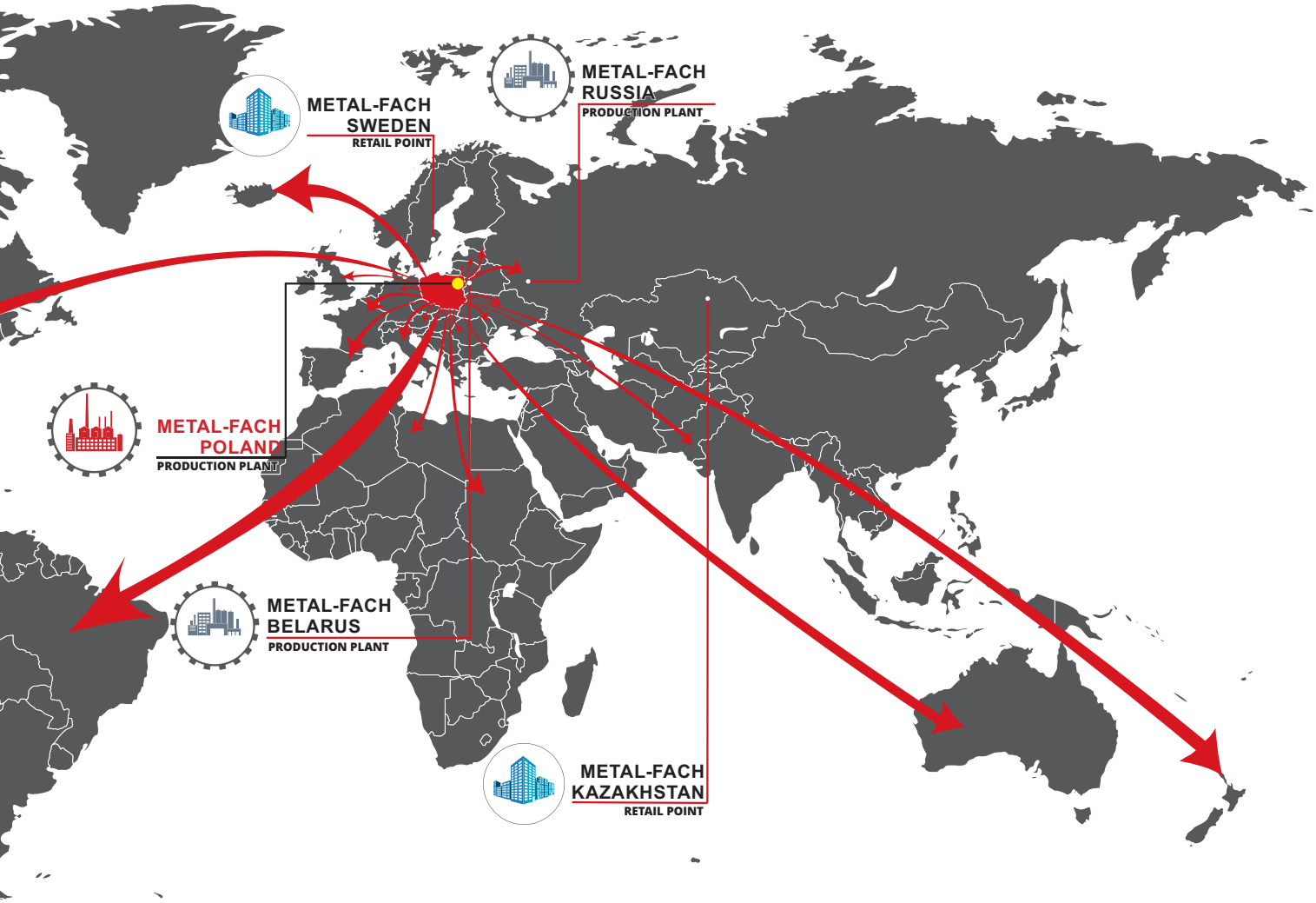
**METAL-FACH Heating Technology** is a dynamically developing Polish company and the manufacturer brand central heating boilers. The company was founded by Jacek Kucharewicz in 1989. The company's headquarters are found in the northeastern part of the country, in the Podlaskie voivodeship, in the town of Sokółka.

As a result of its many years of activity, **METAL-FACH Heating Technology** has created unique manufacturing and service conditions with the individual consumer in mind. The company's continuous modernization and improvement of its offer enables it to manufacture boilers that fulfill all of the criteria of energy and environmental standards. The central heating boilers manufactured by the company burn various type of fuels, and the automation applied in their design provides great comfort of use. All boilers have declarations of conformity. Before products are approved for sale, boilers must undergo precise technical and quality testing. Our boilers are available at sales points located in Poland, Europe and Asia.

**METAL-FACH Heating Technology** adjusts its solutions to specific need of our clients. Because of the well trained staff the company provides excellent technical support service and individual care.

In order to make our products even more available on the Polish, European and Asian markets, we are constantly expanding our distributors network.

We are happy to start co-operation with trade companies that are looking for a dependable and responsible partner.







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## Advantages of using PELLET

Due to its large number of advantages, pellet is becoming more and more popular as a heating fuel. It is valued, above all, for its good heating capacity and energetic properties, low CO2 emission, low moisture, clean burning and convenience of use.

High resistance to self-ignition is an additional feature that characterizes pellets. The granulate's smooth surface protects it from absorbing moisture from the environment, meaning that is in an ideal state for use all the time. The low amount of ash remaining after its combustion makes it possible to save the time that would have been needed to clean ash when burning a different fuel.

## Heating your home with PELLET

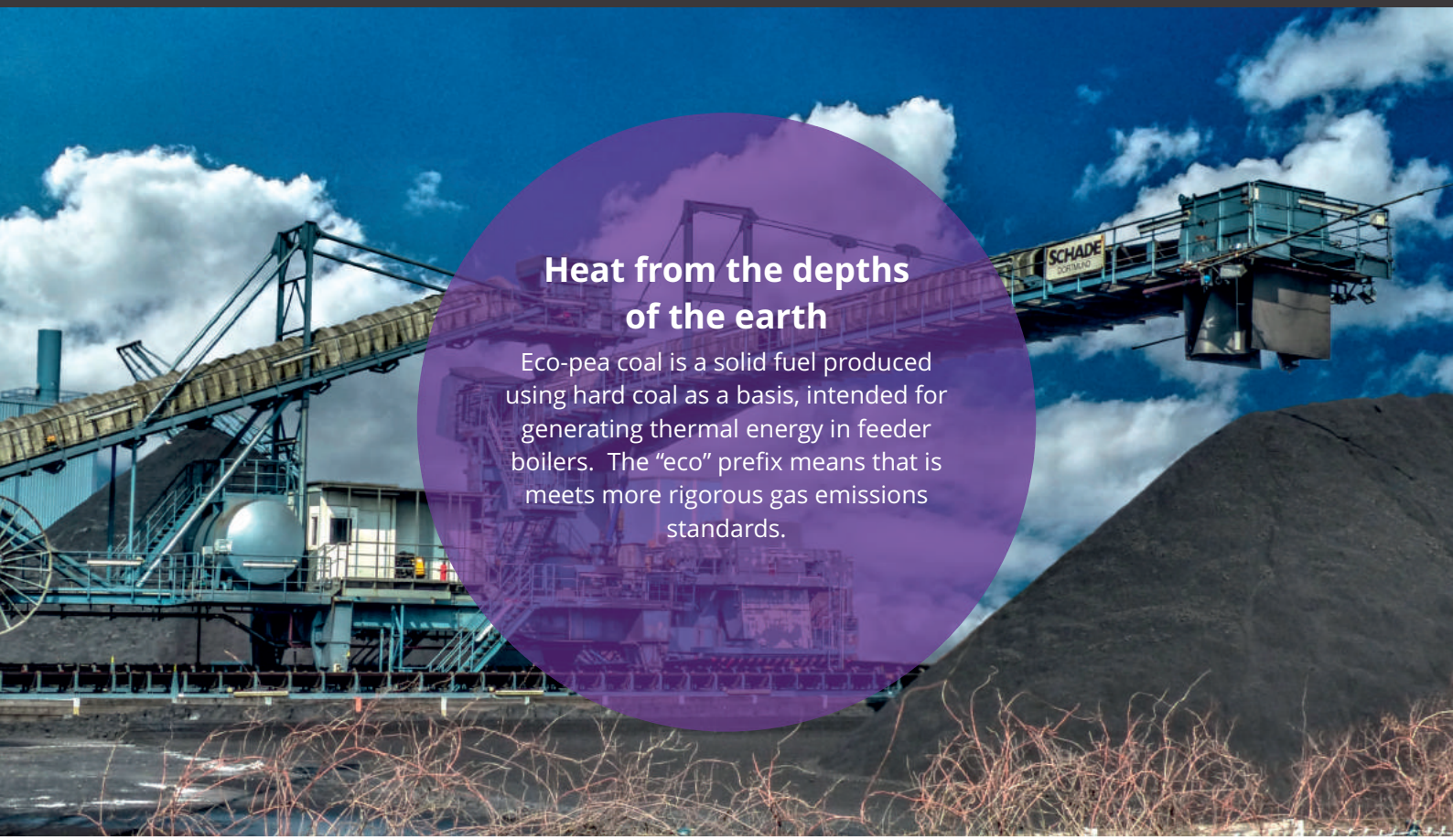
Heating of a home with wood pellets is an environment-friendly solution. The application of this type of fuel ensures cleanliness in the boiler room and a small amount of ash (approx. 20 kg per ton of burned pellet). This fuel is characterized by low moisture content and low emissions of harmful substances into the environment. The fuel is completely natural and belongs to the group of biofuels that can be used as a safe and harmless gardening fertilizer without fear. Pellets are a high-performance fuel found among the group of renewable energy sources. They are manufactured entirely from natural raw materials, including wood waste.

The pellet market is rather large, so in order to select good quality fuel, it is recommended to take note of the relevant quality certificates when making a purchase. By buying certified pellet, we have the certainty that we will achieve the heating parameters of the central heating boiler guaranteed by the manufacturer, but we can also avoid impurities such as sand or stones, which are present in fuel of poor quality.

### Heat from nature

Pellet is a natural material produced from wood waste pressed under high pressure – such as sawdust or woodchips - originating from sawmills and wood processing plants. The most popular form of pellet is granulating with a diameter of 6 or 8 mm.

# HEAT FROM THE DEPTHS OF THE EARTH




## Heat from the depths of the earth

Eco-pea coal is a solid fuel produced using hard coal as a basis, intended for generating thermal energy in feeder boilers. The "eco" prefix means that is meets more rigorous gas emissions standards.

## Advantages of using ECO-PEA COAL

Eco-pea coal is the most effective solid fuel, created for the purposes of boilers with an automatic fuel feeder. It has negligible sulfur content, generates a small amount of ash, and has low moisture content. In comparison to burning oil or ordinary coal, eco-pea coal does not emit such a high amount of pollution. Thanks to the origin of this fuel, it reaches high calorific value.

The advantage of boilers fired by eco-pea coal is the low labor-intensiveness of their operation. After the boiler is adjusted, the heating process is realized automatically, and we do not have to worry about maintaining a constant temperature in our homes.

## Heating your home with ECO-PEA COAL

Heating of homes by means of eco-pea coal is also an environment-friendly solution. The application of eco-pea coal ensures high efficiency and approx. 4-12% of ash from the loaded fuel, which is a big advantage considering the cost. It is recommended to use eco-pea coal made from hard coal of high calorific value. One should watch out for, in particular, eco-pea coal produced from coal dust and binder. This type of fuel reduces the efficiency of your boiler. When such coal is used, a significantly greater amount of ash is generated, and this also contributes to poisoning of the environment.

## Modern PLATINUM touch controller

These devices are made with advanced technology and serve to control the combustion process in boilers both with and without an igniter. The controller is adapted for supporting pumps, mixing valves, thermostats and buffer tanks. A very important advantage of this controller is remote control and changing of it working parameters by means of a computer, smartphone, or tablet via the Internet, thanks to the application of the ecoNET internet module. These devices also make it possible to program an entire week of boiler operation, synchronizing it to your daily schedule. The application makes boiler control even more intuitive.

## Room thermostat, elegant appearance, intuitive operation

The room thermostat can be installed at any location in the building. It offers easy access and optimal convenience of use.


# CONTROLLER

| FUNCTIONS | CONTROLLER | | | |
|---|---|---|---|---|
| | PLATINUM | PLATINUM PELLET | PLATINUM CARBON | MASTER 530 |
| Backdraft prevention system | V | V | V | V |
| RTC clock with week programmer | V | V | V | - |
| HTW disinfection | V | V | V | - |
| Water freezing prevention in the installation system | V | V | V | - |
| Scale in pumps prevention feature | V | V | V | - |
| Supplementary boiler service | V | V | V | - |
| Weather control | V | V | V | - |
| Igniter service | V | V | - | - |
| Lambda sensor service | V | V | V | - |
| Fuzzy Logic | V | V | V | - |
| PiD | V | V | V | - |
| Room thermostat 1 | - | V | - | V |
| Room thermostat 2 | V | - | V | - |
| Mixer actuator 1 | - | V | - | V |
| Mixer actuator 2 | V | - | V | - |
| 3 pumps (CH , HTW, additional pump) | - | - | - | V |
| 4 pumps (CH , HTW, circulation pump, additional pump) | - | V | - | - |
| 5 pumps (CH 1, CH 2, HTW, circulation pump, additional pump) | V | - | V | - |
| Paltinum B- buffer module, upper and lower sensor (2x mixer pump, 2x mixing valve, 2x thermostat) | V | V | V | - |
| Plantinum C- expanding module (2x mixer pump, 2x mixing valve, 1x thermostat) | V | V | V | - |
| Internet module | V | V | V | - |
| Fuel level indicator | V | V | V | - |
| Dedicated room thermostat | V | V | V | V |
| Controller software update | V | V | V | - |
| Touch display panel | V | V | V | - |
| Analogue display | - | - | - | V |
| |  |  |  |  |

## Real time RTC clock with week programmer

The controller feature allows for the user to programme the detailed boiler operation schedule for each weekday. The week programme enables setting the times for starting and switch off of the boiler (because of automatic igniter). It also allows to programme the operation time of the pumps (circulation and additional) and temporary lower temperature in the heating circuits and provides heating comfort in the buildings where the user can set the heating installation parametres to their liking.

## Lambda sensor

The sensor, that is installed in the boiler flue, is responsible for reading the oxygen content in the fumes. It allows for precise feeding of the fuel- oxygen mixture. Once the system recognizes the burning efficiency, it can enhance it. If the oxygen level in the boiler fumes is too low, the boiler work power will increase by the value calculated by the Fuzzy Logic unit. It is due to the correction parameter feature. It presents the internal units of the blower power changes. The Lambda sensor enhances the boiler performance, lowers the eco-unfriendly substances and gases. It improves the fuel consumption thus lowers the cost of operation. The Lambda sensor is an additional accessory and is highly recommended. During the cleaning process of the boiler, it is essential to remove the sensor from the sleeve.

## Find out about the capabilities it offers before buying the product

Ask the seller about the possibility of checking how the ecoNET 300 internet module works on the website www.econet24.com


# APPLICATION

ecoNET

## Possibility of controlling the regulator via an application

App Store Google Play

The rapid development of control systems and monitoring systems of heating installations has led us to improve and facilitate the convenience of using our equipment. Electronic monitoring of equipment has become a permanent part of our homes. It allows the user to easily control home heating from any location.

Thanks to the application of the aforementioned technology, the user is capable of controlling the work of a machine via computer, tablet or phone. Remote access enables previewing of current parameters of the heating system, modulation of temperature in selected areas such as central heating and hot domestic water. Thanks to the integrated service system, it is possible to register key parameters of boiler operation, send alarm messages automatically to an e-mail inbox, and view the history of parameter and alarm settings in the form of easy-to-read charts. The system also allows for technical inspections and consulting on configuration of equipment from the side of the company.

**PLATINUM PELLET*** controllers are very intuitive devices, allowing for fully automated and effective 24/7 boiler operation. The controller enables:
- programming of the real-time clock (RTC) for an entire week of work, in division into summer/winter work mode;
- weather control;
- Fuzzy Logic & PiD;
- expansion module*.

The controller supports:
-one mixing circulation, C.H.1 with room thermostat;
- pump: C.H.1; D.H.W.; circulating; additional.

*ADDITIONAL EQUIPMENT
***The possibility of cooperation with an exhaust fan

**Room thermostat & Internet Module*** provide the capability of installing two compatible devices operating both together with and separately from the PLATINUM controller:
- ecoNET internet module with the capability of boiler controller via application from computer, tablet and smartphone
- the room thermostat displays all information supplied by the boiler controller and makes it possible to introduce several changes from the thermostat.

**The Lambda probe*** is situated in the boiler's flue, and thanks to continuous monitoring of flue gas composition, it makes it possible to select the amount of supplied air more accurately.

* ADDITIONAL EQUIPMENT

**Safeguards in the form of a limit switch** are found in all doors. The safeguard causes immediate shutdown of boiler operation after a door is opened.

**in accordance with PN-EN 303-5 2012**



# SERIES SLIM PELLET

# SERIES SLIM PELLET

## TECHNICAL SPECIFICATIONS >>>

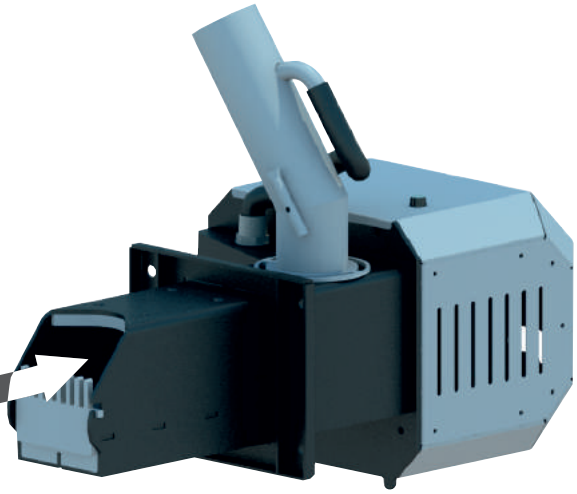

**Applied technology in boiler manufacturing.** We guarantee the quality of the materials we use to manufacture our products. We use only attested, high-grade boiler steel. Thanks to the boiler's three-section design, it is easier to install and transport directly to the boiler room. The boiler consists of a body, fuel dispenser and burner.

**Guarantee of machine serviceability****
A 5-year guarantee is provided upon purchase of a machine.

** Warranty conditions in the manual

**Self-cleaning chute burner**
this innovative solution is for burning of pellet type fuel and provides automatic cleaning. The burner is equipped with a system for automatic ash removal from the grate. Thanks to the application of an automatic, ceramic igniter, the machine becomes practically automatic. Burner parts exposed to contact with high temperature are made from heat-resistant steel. A chamotte screen is found on the wall opposite to the burner.

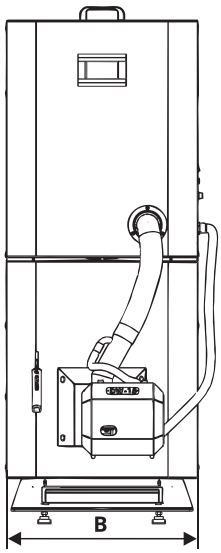
AUTOMATIC CERAMIC IGNITER AND AUTOMATIC CLEANING

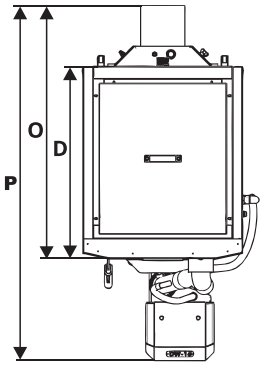


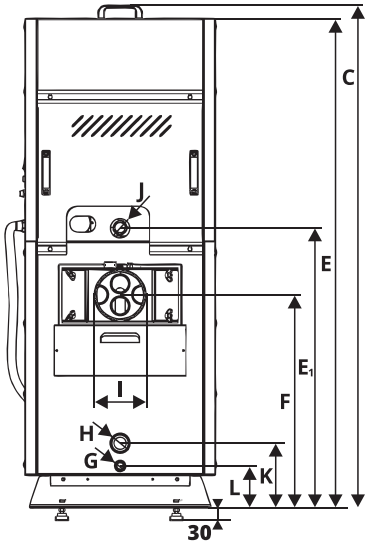
# TECHNICAL SPECIFICATIONS

| Parameters | Unit | Type of boiler | | |
|---|---|---|---|---|
| | | SLIM PELLET 10 | SLIM PELLET 15 | SLIM PELLET 20 |
| Nominal thermal output pellet | [kW] | 10 | 15 | 20 |
| Boiler power range | [kW] | 3-10 | 4,5-15 | 6-20 |
| Heatable area | [$m^2$] | 100 | 100-150 | 150-200 |
| Heating surface | [$m^2$] | 1,5 | 2,1 | 2,5 |
| Boiler water capacity | [L] | 45 | 65 | 75 |
| Maximum working pressure | [Bar] | 3 | 3 | 3 |
| Maximum working temperature | [°C] | 85 | 85 | 85 |
| Test pressure | [Bar] | 4,5 | 4,5 | 4,5 |
| EcoDesign | - | + | + | + |
| Boiler class | - | 5 | 5 | 5 |
| Boiler efficiency | [%] | ≤89,3 | ≤90,4 | ≤89,2 |
| Single fuel load | [L] | 130 | 170 | 210 |
| Single fuel load | [kg] | 78 | 102 | 126 |
| Fuel | - | pellet Φ6-8 | | |
| Power supply | - | ~230V; 50Hz | | |
| Power consumption at boiler nominal power | [W] | 115 | 115 | 115 |
| Temperature controller setting range | [°C] | 60 - 85 (1 at a time) | | |
| Required chimney flue | [Pa] | 20 | 23 | 26 |
| Boiler weight | [kg] | 240 | 290 | 340 |

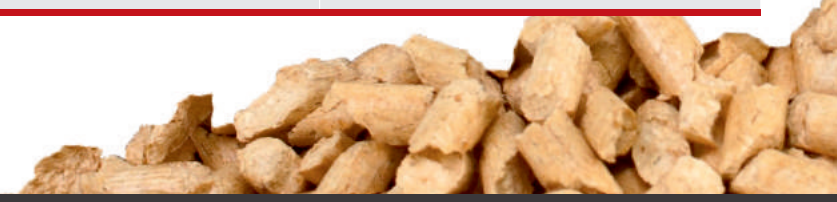
# SERIES SLIM PELLET




| TYPE | SLIM PELLET 10 | SLIM PELLET 15 | SLIM PELLET 20 |
|---|---|---|---|
| A | - | - | - |
| B | 590 | 590 | 690 |
| C | 1550 | 1550 | 1550 |
| C1 | - | - | - |
| D | 705 | 920 | 920 |
| E | 1510 | 1510 | 1510 |
| E1 | 865 | 865 | 865 |
| F | 656 | 656 | 656 |
| G | G ¾ | G ¾ | G ¾ |
| H | G 1 ¼ | G 1 ¼ | G 1 ¼ |
| I | 160 | 160 | 160 |
| J | G 1 ¼ | G 1 ¼ | G 1 ¼ |
| K | 200 | 200 | 200 |
| L | 130 | 130 | 130 |
| M | - | - | - |
| N | - | - | - |
| O | 935 | 1150 | 1150 |
| P | 1310 | 1525 | 1525 |



**PLATINUM PELLET*** controllers are very intuitive devices, allowing for fully automated and effective 24/7 boiler operation. The controller enables:
- programming of the real-time clock (RTC) for an entire week of work, in division into summer/winter work mode;
- weather control;
- Fuzzy Logic & PiD;
- expansion module*.

The controller supports:
-one mixing circulation, C.H.1 with room thermostat;
- pump: C.H.1; D.H.W.; circulating; additional.

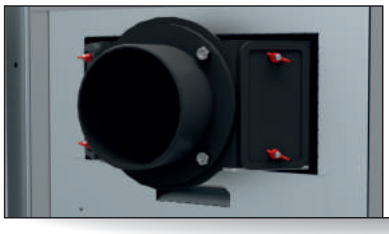
*ADDITIONAL EQUIPMENT
*** The possibility of cooperation with an exhaust fan

**Room thermostat & Internet Module*** provide the capability of installing two compatible devices operating both together with and separately from the PLATINUM controller:
- ecoNET internet module with the capability of boiler controller via application from computer, tablet and smartphone
- the room thermostat displays all information supplied by the boiler controller and makes it possible to introduce several changes from the thermostat.

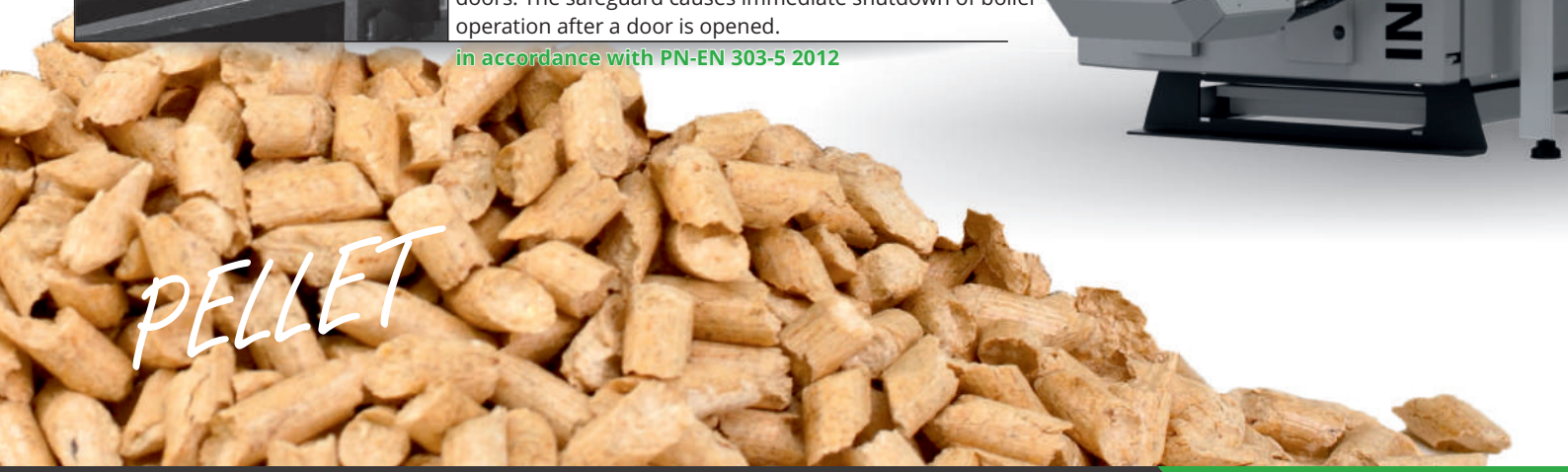
**The Lambda probe*** is situated in the boiler's flue, and thanks to continuous monitoring of flue gas composition, it makes it possible to select the amount of supplied air more accurately.

* ADDITIONAL EQUIPMENT

**Exhaust fan**
The exhaust fan effectively supports the natural exhaust of the boiler. Mounted in the flue, it improves the effects of the blower connected as an air blower. It is useful when firing the furnace in the boiler, adding fuel, but also during everyday use. In addition, the exhaust fan counteracts the escape of smoke from the boiler to the boiler room.



**Safeguards in the form of a limit switch** are found in all doors. The safeguard causes immediate shutdown of boiler operation after a door is opened.
**in accordance with PN-EN 303-5 2012**


# SERIES SLIM PELLET MINI

# SERIES SLIM PELLET MINI

## TECHNICAL SPECIFICATIONS >>>

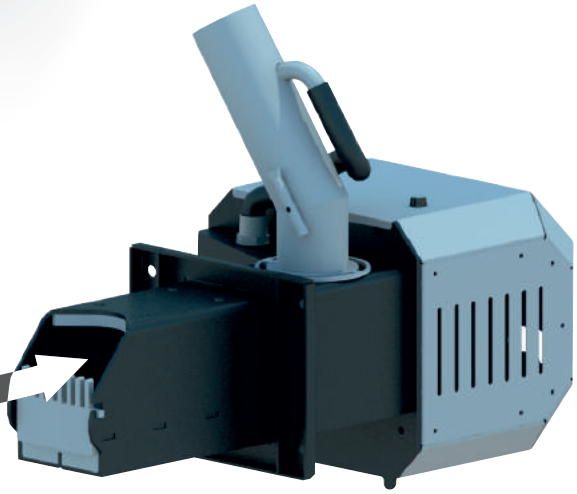
**Applied technology in boiler manufacturing.** We guarantee the quality of the materials we use to manufacture our products. We use only attested, high-grade boiler steel. Thanks to the boiler's three-section design, it is easier to install and transport directly to the boiler room. The boiler consists of a body, fuel dispenser and burner.

**Guarantee of machine serviceability****
A 5-year guarantee is provided upon purchase of a machine.

** Warranty conditions in the manual

**Self-cleaning chute burner**
this innovative solution is for burning of pellet type fuel and provides automatic cleaning. The burner is equipped with a system for automatic ash removal from the grate. Thanks to the application of an automatic, ceramic igniter, the machine becomes practically automatic. Burner parts exposed to contact with high temperature are made from heat-resistant steel. A chamotte screen is found on the wall opposite to the burner.

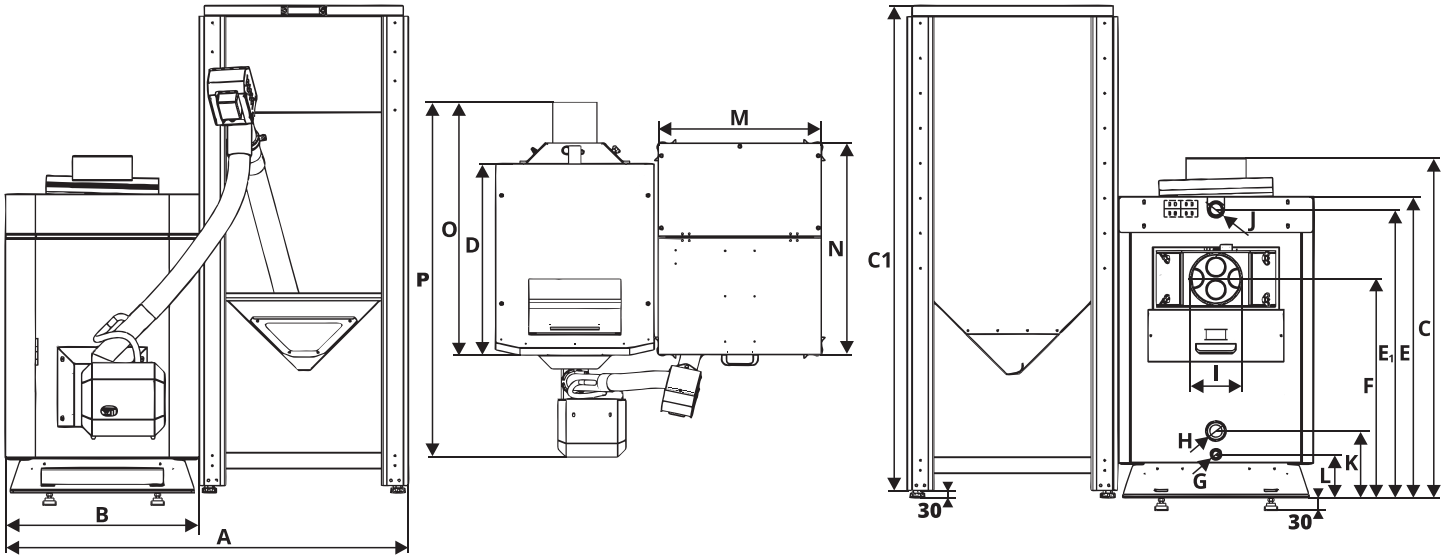
AUTOMATIC CERAMIC IGNITER AND AUTOMATIC CLEANING



# TECHNICAL SPECIFICATIONS

| Parameters | Unit | Type of boiler | | |
|---|---|---|---|---|
| | | SLIM PELLET MINI 10 | SLIM PELLET MINI 15 | SLIM PELLET MINI 20 |
| Nominal thermal output pellet | [kW] | 10 | 15 | 20 |
| Boiler power range | [kW] | 3-10 | 4,5-15 | 6-20 |
| Heatable area | [$m^2$] | 100 | 100-150 | 150-200 |
| Heating surface | [$m^2$] | 1,5 | 2,1 | 2,5 |
| Boiler water capacity | [L] | 45 | 65 | 75 |
| Maximum working pressure | [Bar] | 3 | 3 | 3 |
| Maximum working temperature | [°C] | 85 | 85 | 85 |
| Test pressure | [Bar] | 4,5 | 4,5 | 4,5 |
| EcoDesign | - | + | + | + |
| Boiler class | - | 5 | 5 | 5 |
| Boiler efficiency | [%] | ≤89,3 | ≤90,4 | ≤89,2 |
| Single fuel load | [L] | 230 | 230 | 230 |
| Single fuel load | [kg] | 138 | 138 | 138 |
| Fuel | - | pellet Φ6-8 | | |
| Power supply | - | ~230V; 50Hz | | |
| Power consumption at boiler nominal power | [W] | 115 | 115 | 115 |
| Temperature controller setting range | [°C] | 60 - 85 (1 at a time) | | |
| Required chimney flue | [Pa] | 20 | 23 | 26 |
| Boiler weight | [kg] | 240 | 290 | 340 |

# SERIES SLIM PELLET MINI




| TYPE | SLIM PELLET MINI 10 | SLIM PELLET MINI 15 | SLIM PELLET MINI 20 |
|---|---|---|---|
| A | 1220 | 1220 | 1320 |
| B | 590 | 590 | 690 |
| C | 1020 | 1020 | 1020 |
| C1 | 1270 | 1270 | 1270 |
| D | 705 | 920 | 920 |
| E | 905 | 905 | 905 |
| $E_1$ | 865 | 865 | 865 |
| F | 656 | 656 | 656 |
| G | G ¾ | G ¾ | G ¾ |
| H | G 1 ¼ | G 1 ¼ | G 1 ¼ |
| I | 160 | 160 | 160 |
| J | G 1 ¼ | G 1 ¼ | G 1 ¼ |
| K | 200 | 200 | 200 |
| L | 130 | 130 | 130 |
| M | 625 | 625 | 625 |
| N | 806 | 806 | 806 |
| O | 935 | 1150 | 1150 |
| P | 1310 | 1525 | 1525 |

**PLATINUM PELLET** controllers are very intuitive devices, allowing for fully automated and effective 24/7 boiler operation. The controller enables:
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**Room thermostat & Internet Module*** provide the capability of installing two compatible devices operating both together with and separately from the PLATINUM controller:
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**Safeguards in the form of a limit switch** are found in all doors. The safeguard causes immediate shutdown of boiler operation after a door is opened.

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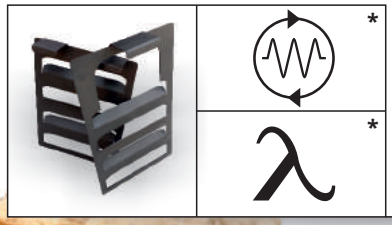


We will find **swirl vanes** in the boiler's convection channels. Thanks to their application, we increase the heat take-off from combustion gases.

**The cooling coil pipe*** is a device found inside the boiler, serving for leading off excess heat in the case where the boiler overheats.

**The Lambda probe*** is situated in the boiler's flue, and thanks to continuous monitoring of flue gas composition, it makes it possible to select the amount of supplied air more accurately.

* ADDITIONAL EQUIPMENT



# SERIES SEG PELLET

# SERIES SEG PELLET

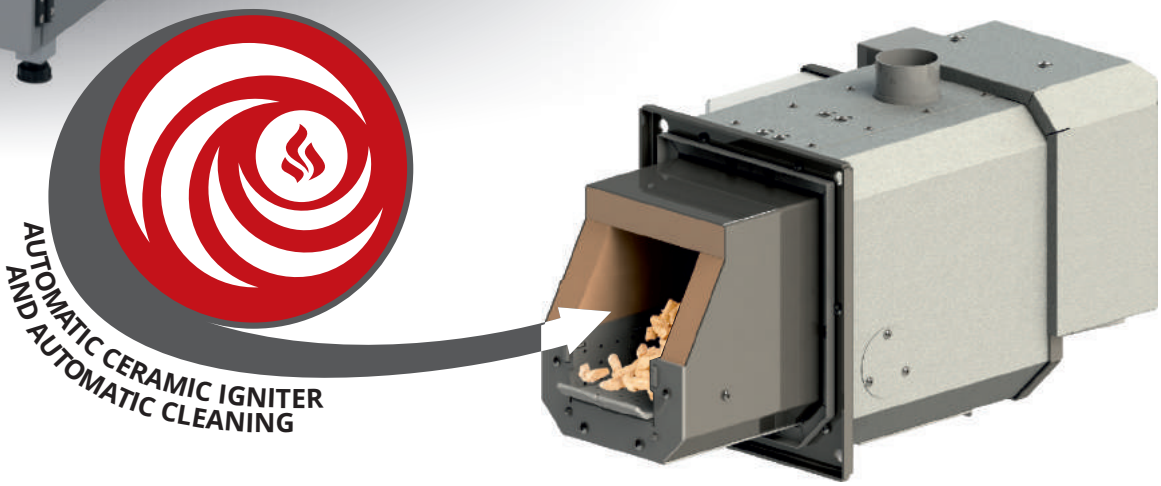
## TECHNICAL SPECIFICATIONS >>>

**Applied technology in boiler manufacturing.** We guarantee the quality of the materials we use to manufacture our products. We use only attested, high-grade boiler steel with a thickness of 6 mm in our boilers. Thanks to the boiler's three-section design, it is easier to install and transport directly to the boiler room. The boiler consists of a body, fuel dispenser and burner.

**Guarantee of machine serviceability****
A 5-year guarantee is provided upon purchase of a machine.

** Warranty conditions in the manual

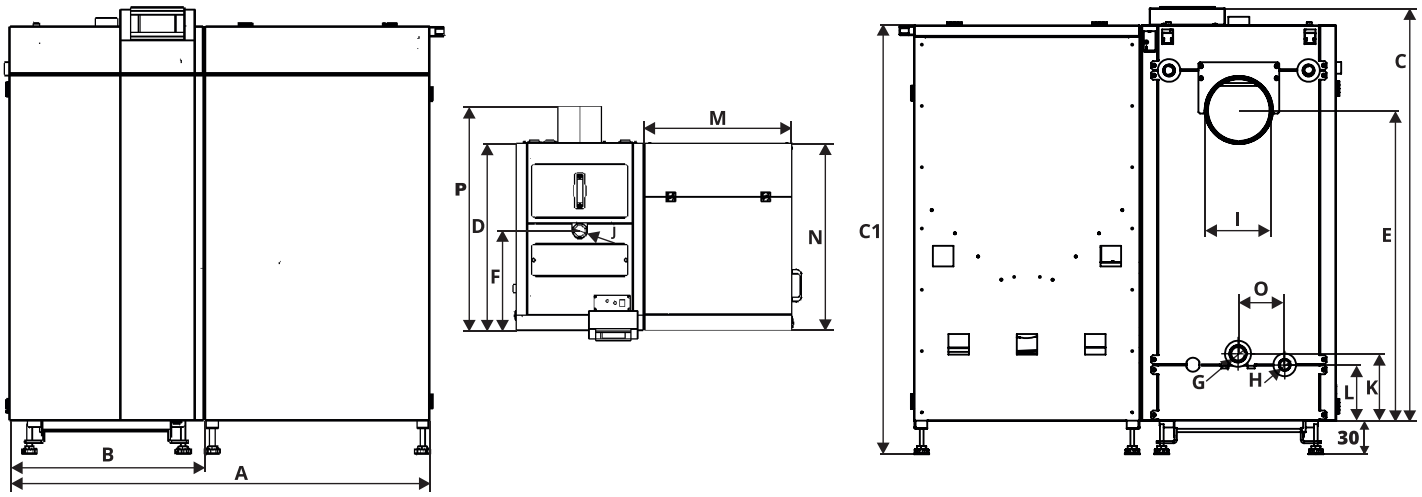
**Self-cleaning chute burner**
this innovative solution is for burning of pellet type fuel and provides automatic cleaning. The burner is equipped with a system for automatic ash removal from the grate. Thanks to the application of an automatic, ceramic igniter, the machine becomes practically automatic. Burner parts exposed to contact with high temperature are made rom heat-resistant steel. A chamotte screen is found on the wall opposite to the burner.



# TECHNICAL SPECIFICATIONS

| Parameters | Unit | Type of boiler | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | SEG PELLET 15 | SEG PELLET 20 | SEG PELLET 25 | SEG PELLET 30 | SEG PELLET 50 | SEG PELLET 75 | SEG PELLET 100 | SEG PELLET 150 | SEG PELLET 200 | SEG PELLET 300 | SEG PELLET 400 |
| Nominal thermal output pellet | [kW] | 15 | 20 | 25 | 30 | 50 | 75 | 100 | 150 | 200 | 300 | 400 |
| Boiler power range | [kW] | 4,5-15 | 6-20 | 7,5-25 | 9-30 | 15-50 | 22,5-75 | 30-100 | 45-150 | 60-200 | 75-300 | 120-400 |
| Heatable area | [$m^2$] | 150 | 150-200 | 200-250 | 250-300 | 300-500 | 500-750 | 750-1000 | 1000-1500 | 1500-2000 | 2000-3000 | 3000-4000 |
| Heating surface | [$m^2$] | 2,10 | 2,54 | 2,85 | 3,11 | 5,41 | 6,75 | 8,2 | 11,5 | 18 | 32 | 38,5 |
| Boiler water capacity | [L] | 60 | 68 | 73 | 95 | 120 | 173 | 194 | 339 | 760 | 1765 | 2315 |
| Maximum working pressure | [Bar] | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Maximum working temperature | [°C] | 85 | 85 | 85 | 85 | 95 | 95 | 95 | 95 | 95 | 95 | 95 |
| Test pressure | [Bar] | 4,5 | 4,5 | 4,5 | 4,5 | 4,5 | 4,5 | 4,5 | 4,5 | 4,5 | 4,5 | 4,5 |
| EcoDesign | - | + | + | + | + | - | - | - | - | - | - | - |
| Boiler class | - | 5 | 5 | 5 | 5 | - | - | - | - | - | - | - |
| Boiler efficiency | [%] | ≤88,2 | ≤90,3 | ≤91,2 | ≤91,1 | ≤90 | ≤90 | ≤90 | ≤90 | ≤90 | ≤90 | ≤90 |
| Single fuel load | [L] | 260 | 260 | 260 | 260 | 1000 | 1000 | 1000 | 1000 | 1000 | 2000 | 2000 |
| Single fuel load | [kg] | 156 | 156 | 156 | 156 | 596 | 596 | 596 | 596 | 596 | 1192 | 1192 |
| Fuel | - | pellet Φ6-8 | | | | | | | | | | |
| Power supply | - | ~230V; 50Hz | | | | | | | | | | |
| Power consumption at boiler nominal power | [W] | 120 | 120 | 120 | 120 | 300 | 400 | 400 | 600 | 600 | 680 | 680 |
| Temperature controller setting range | [°C] | 60 - 85 (1 at a time) | | | | | | | | | | |
| Required chimney flue | [Pa] | 20 | 25 | 25 | 30 | 35 | 38 | 40 | 45 | 50 | 50 | 65 |
| Boiler weight | [kg] | 448 | 510 | 535 | 551 | 745 | 855 | 995 | 1350 | 2100 | <3000 | 3340 |

# SERIES SEG PELLET




| TYPE | SEG PELLET 15 | SEG PELLET 20 | SEG PELLET 25 | SEG PELLET 30 | SEG PELLET 50 | SEG PELLET 75 | SEG PELLET 100 | SEG PELLET 150 | SEG PELLET 200 | SEG PELLET 300 | SEG PELLET 400 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| A | 1150 | 1150 | 1110 | 1130 | 1406 | 1505 | 1505 | 1965 | 2500 | 3140 | 4500 |
| B | 530 | 530 | 530 | 580 | 585 | 682 | 793 | 955 | 1240 | 1820 | 2100 |
| C | 1185 | 1380 | 1440 | 1440 | 1415 | 1484 | 1520 | 2200 | 2230 | 2220 | 2220 |
| C1 | - | - | - | - | - | - | - | - | - | - | - |
| D | 780 | 815 | 860 | 860 | 1003 | 1175 | 1325 | 1260 | 1690 | 2545 | 2545 |
| E | 908 | 1105 | 1162 | 1162 | 1110 | 1115 | 1215 | 2005 | 1720 | 1770 | 1770 |
| F | 413 | 423 | 472 | 472 | 535 | 545 | 695 | 515 | 890 | 1774 | 1774 |
| G | G 2 | G 2 | G 2 | G 2 | G 1 ½ | G 1 ½ | G 1 ½ | G 2 | 101,6x5 | 101,6 | 101,6 |
| H | G 1 | G 1 | G 1 | G 1 | G ¾ | G ¾ | G ¾ | G ¾ | G 1 ¼ | 1,25 | 1,25 |
| I | 90 | 90 | 90 | 90 | 180 | 220 | 220 | 250 | 350 | 254 | 254 |
| J | G 2 | G 2 | G 2 | G 2 | G 1 ½ | G 1 ½ | G 1 ½ | G 2 | 101,6x5 | 101,6 | 101,6 |
| K | 214 | 250 | 246 | 246 | 337 | 350 | 300 | 165 | 375 | 320 | 320 |
| L | 214 | 210 | 206 | 206 | 190 | 175 | 175 | 143 | 330 | - | - |
| M | 615 | 615 | 570 | 540 | 680 | 680 | 700 | 1015 | 1200 | 1100 | 1100 |
| N | - | - | - | - | 850 | 1075 | 1075 | 1105 | 1190 | 1100 | 1100 |
| O | 125 | 125 | 125 | 125 | 175 | 220 | 220 | 275 | 250 | 300 | 300 |
| P | 930 | 970 | 1020 | 1020 | 1218 | 1413 | 1570 | 1560 | 2240 | - | - |
| R | - | - | - | - | - | - | - | - | - | - | - |

**PLATINUM PELLET** controllers are very intuitive devices, allowing for fully automated and effective 24/7 boiler operation. The controller enables:
- programming of the real-time clock (RTC) for an entire week of work, in division into summer/winter work mode;
- weather control;
- Fuzzy Logic & PiD;
- expansion module*.

The controller supports:
-one mixing circulation, C.H.1 with room thermostat;
- pump: C.H.1; D.H.W.; circulating; additional.

* ADDITIONAL EQUIPMENT

**Room thermostat & Internet Module*** provide the capability of installing two compatible devices operating both together with and separately from the PLATINUM controller:
- ecoNET internet module with the capability of boiler controller via application from computer, tablet and smartphone
- the room thermostat displays all information supplied by the boiler controller and makes it possible to introduce several changes from the thermostat.

* ADDITIONAL EQUIPMENT

**Safeguards in the form of a limit switch** are found in all doors. The safeguard causes immediate shutdown of boiler operation after a door is opened.

**in accordance with PN-EN 303-5 2012**

*

We will find **swirl vanes** in the boiler's convection channels. Thanks to their application, we increase the heat take-off from combustion gases.

**The Lambda probe*** is situated in the boiler's flue, and thanks to continuous monitoring of flue gas composition, it makes it possible to select the amount of supplied air more accurately.

* ADDITIONAL EQUIPMENT



# SERIES SMART PELLET

# SERIES SMART PELLET

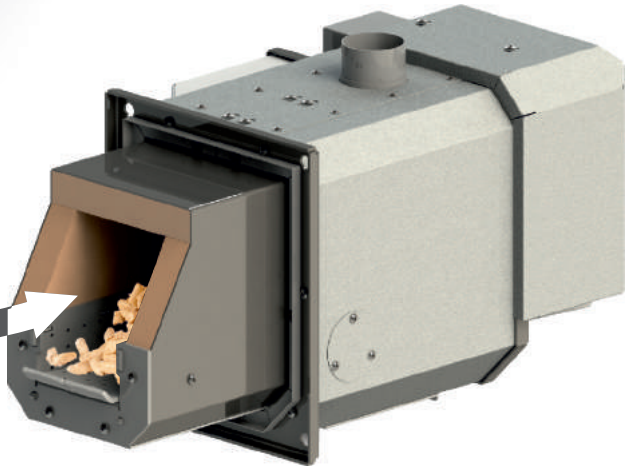
## TECHNICAL SPECIFICATIONS >>>

**Applied technology in boiler manufacturing.** We guarantee the quality of the materials we use to manufacture our products. We use only attested, high-grade boiler steel with a thickness of 6 mm in our boilers. Thanks to the boiler's three-section design, it is easier to install and transport directly to the boiler room. The boiler consists of a body, fuel dispenser and burner.

**Guarantee of machine serviceability****
A 5-year guarantee is provided upon purchase of a machine.

** Warranty conditions in the manual

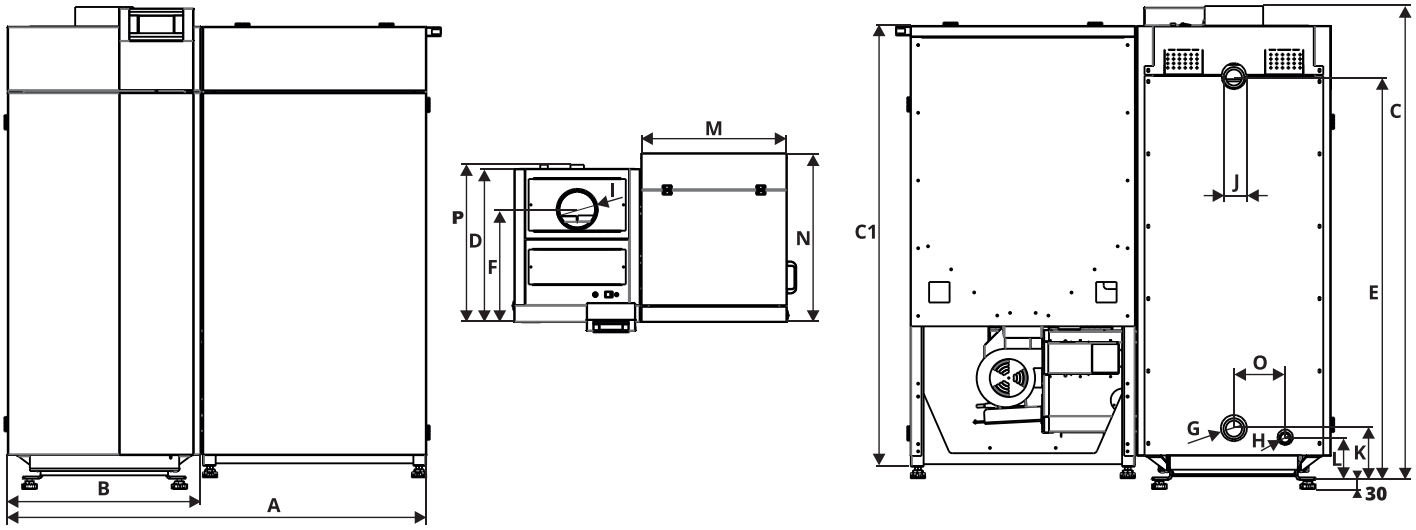
**Self-cleaning chute burner**
this innovative solution is for burning of pellet type fuel and provides automatic cleaning. The burner is equipped with a system for automatic ash removal from the grate. Thanks to the application of an automatic, ceramic igniter, the machine becomes practically automatic. Burner parts exposed to contact with high temperature are made rom heat-resistant steel. A chamotte screen is found on the wall opposite to the burner.



# TECHNICAL SPECIFICATIONS

| Parameters | Unit | Type of boiler | | | |
|---|---|---|---|---|---|
| | | SMART PELLET 16 | SMART PELLET 20 | SMART PELLET 25 | SMART PELLET 30 |
| Nominal thermal output pellet | [kW] | 16 | 20 | 25 | 30 |
| Boiler power range | [kW] | 4,8-16 | 6-20 | 7,5-25 | 9-30 |
| Heatable area | [m²] | 160 | 160-200 | 200-250 | 250-300 |
| Heating surface | [m²] | 1,63 | 2,0 | 2,6 | 3,08 |
| Boiler water capacity | [L] | 48 | 60 | 71 | 80 |
| Maximum working pressure | [Bar] | 3 | 3 | 3 | 3 |
| Maximum working temperature | [°C] | 85 | 85 | 85 | 85 |
| Test pressure | [Bar] | 4,5 | 4,5 | 4,5 | 4,5 |
| EcoDesign | - | + | + | + | + |
| Boiler class | - | 5 | 5 | 5 | 5 |
| Boiler efficiency | [%] | ≤89,7 | ≤88,8 | ≤89,1 | ≤89,9 |
| Single fuel load | [L] | 260 | 260 | 260 | 260 |
| Single fuel load | [kg] | 156 | 156 | 156 | 156 |
| Fuel | - | pellet Φ6-8 | | | |
| Power supply | - | ~230V; 50Hz | | | |
| Power consumption at boiler nominal power | [W] | 115 | 115 | 115 | 115 |
| Temperature controller setting range | [°C] | 60 - 85 (1 at a time) | | | |
| Required chimney flue | [Pa] | 24 | 25 | 24 | 24 |
| Boiler weight | [kg] | 340 | 360 | 405 | 440 |

# SERIES SMART PELLET




| TYPE | SMART PELLET 16 | SMART PELLET 20 | SMART PELLET 25 | SMART PELLET 30 |
|---|---|---|---|---|
| A | 1150 | 1150 | 1200 | 1200 |
| B | 530 | 530 | 580 | 580 |
| C | 1295 | 1350 | 1350 | 1450 |
| C1 | 1240 | 1300 | 1300 | 1400 |
| D | 646 | 716 | 806 | 806 |
| E | 1100 | 1160 | 1160 | 1255 |
| E1 | 140 | 140 | 140 | 145 |
| F | 475 | 545 | 635 | 625 |
| G | G 1 ½ | G 1 ½ | G 1 ½ | G 1 ½ |
| H | G ¾ | G ¾ | G ¾ | G ¾ |
| I | 160 | 160 | 160 | 180 |
| J | G 1 ½ | G 1 ½ | G 1 ½ | G 1 ½ |
| K | 140 | 140 | 140 | 140 |
| L | 115 | 115 | 115 | 115 |
| M | 615 | 615 | 615 | 615 |
| N | 712 | 716 | 806 | 806 |
| O | 140 | 140 | 140 | 140 |
| P | 665 | 730 | 826 | 826 |
| R | - | - | - | - |

**PLATINUM controllers** are very intuitive devices, allowing for fully automated and effective 24/7 boiler operation.
The controller enables:
- programming of the real-time clock (RTC) for an entire week of work, in division into summer/winter work mode;
- weather control;
- Fuzzy Logic & PiD;
- expansion module*.

The controller supports:
- two mixing circulations, C.H.1 and C.H.2 with room thermostat;
- pump: C.H.1; C.H.2; D.H.W.; circulating; additional.

* ADDITIONAL EQUIPMENT

**Room thermostat & Internet Module*** provide the capability of installing two compatible devices operating both together with and separately from the PLATINUM controller:
- ecoNET internet module with the capability of boiler controller via application from computer, tablet and smartphone
- the room thermostat displays all information supplied by the boiler controller and makes it possible to introduce several changes from the thermostat.

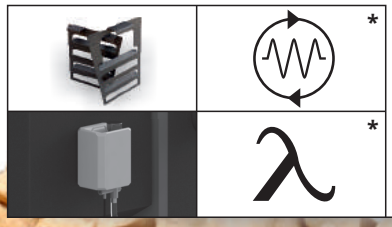
* ADDITIONAL EQUIPMENT

**Safeguards in the form of a limit switch** are found in all doors and in the fuel dispenser cover. The safeguard causes immediate shutdown of boiler operation after a door or dispenser cover is opened.

**in accordance with PN-EN 303-5 2012**

We will find **swirl vanes** in the boiler's convection channels. Thanks to their application, we increase the heat take-off from combustion gases.

**The flame safeguard** prevents ignition of fuel found in the boiler's dispenser.



**The cooling coil pipe*** is a device found inside the boiler, serving for leading off excess heat in the case where the boiler overheats.

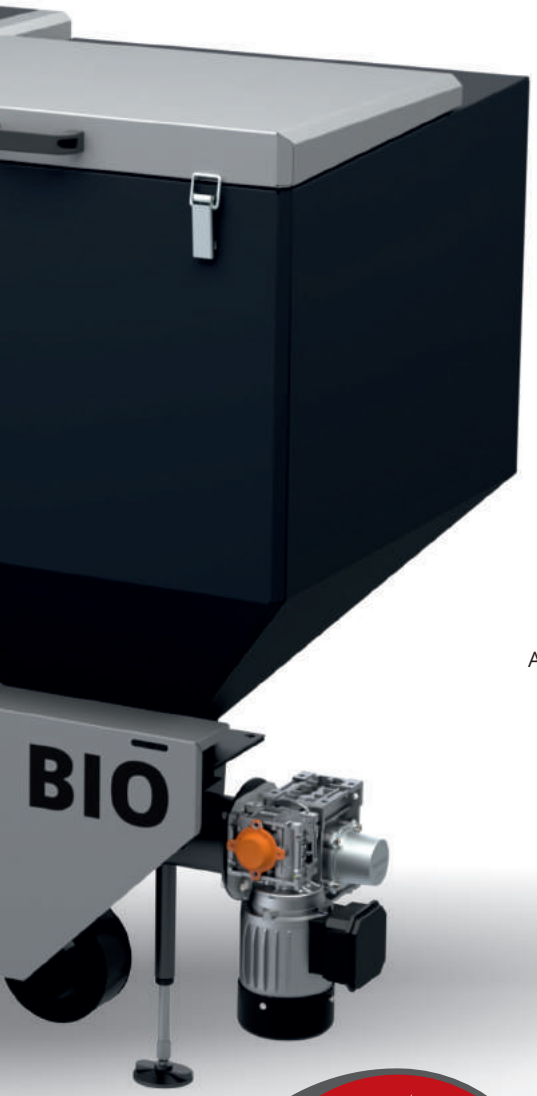
**The Lambda probe*** is situated in the boiler's flue, and thanks to continuous monitoring of flue gas composition, it makes it possible to select the amount of supplied air more accurately.

* ADDITIONAL EQUIPMENT



# SERIES SEG BIO

## TECHNICAL SPECIFICATIONS >>>



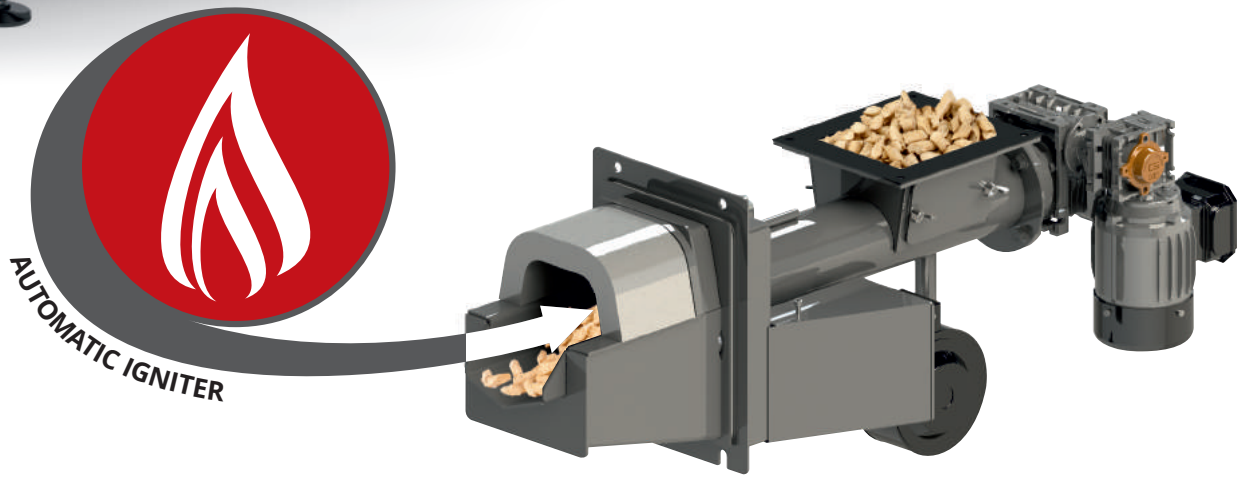


**Applied technology in boiler manufacturing.** We guarantee the quality of the materials we use to manufacture our products. We use only attested, high-grade boiler steel with a thickness of 6 mm in our boilers. Thanks to the boiler's three-section design, it is easier to install and transport directly to the boiler room. The boiler consists of a body, fuel dispenser and burner.

**Guarantee of machine serviceability****
A 5-year guarantee is provided upon purchase of a machine.

** Warranty conditions in the manual

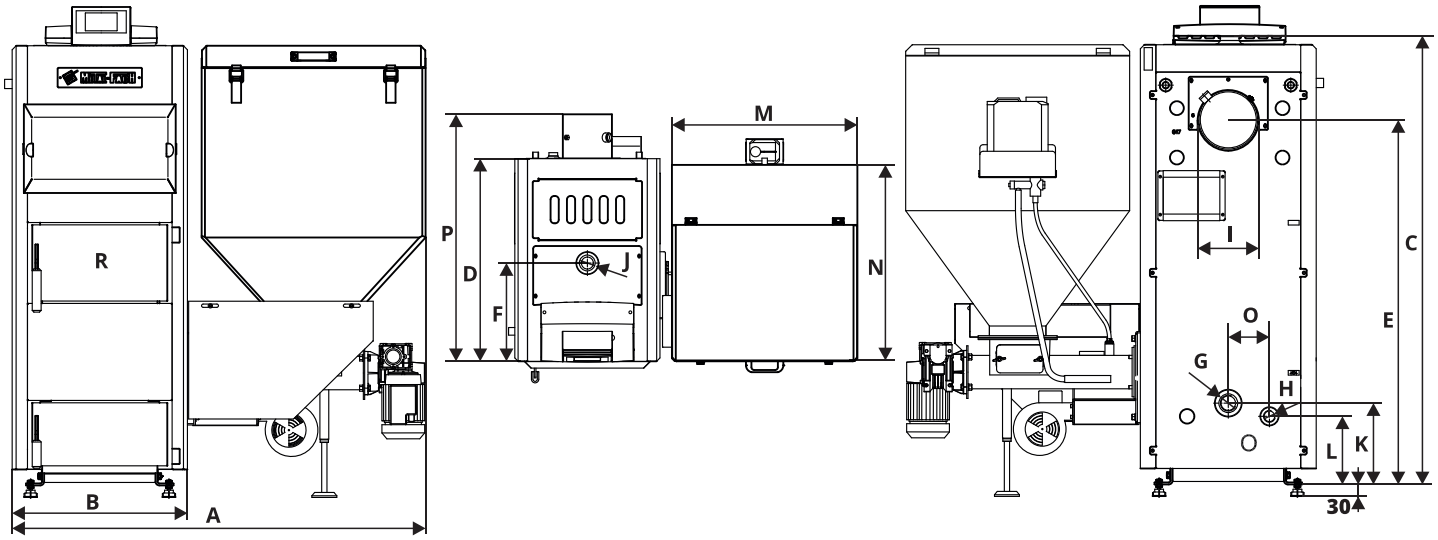
**BIO Chute Burner**
this is one of the most popular burners intended for burning of pellet-type fuel. Thanks to the application of an automatic igniter, the machine becomes practically automatic. A chamotte screen is found on the wall opposite to the burner.



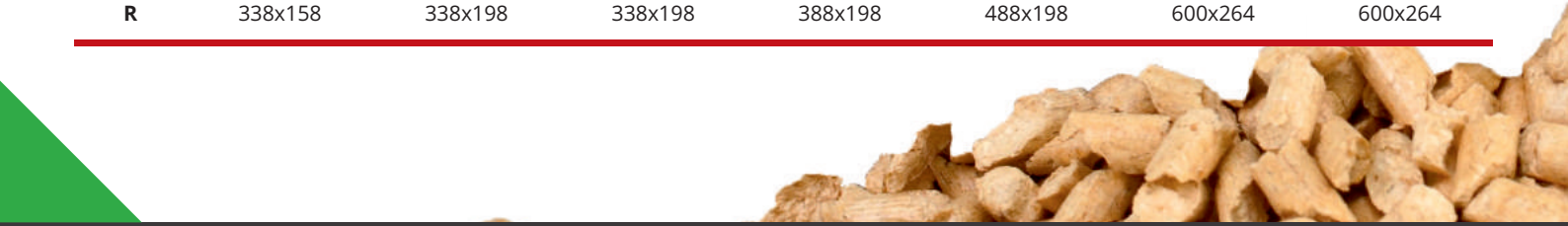
# TECHNICAL SPECIFICATIONS

| Parameters | Unit | Type of boiler | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | SEG BIO 14 | SEG BIO 19 | SEG BIO 25 | SEG BIO 38 | SEG BIO 50 | SEG BIO 75 | SEG BIO 100 |
| Nominal thermal output pellet | [kW] | 14 | 19 | 25 | 38 | 50 | 75 | 100 |
| Boiler power range | [kW] | 4,2-14 | 5,7-19 | 7,5-25 | 10,5-38 | 15-50 | 22,5-75 | 30-100 |
| Heatable area | [$m^2$] | 140 | 140-190 | 190-250 | 250-380 | 380-500 | 500-750 | 750-1000 |
| Heating surface | [$m^2$] | 2,1 | 2,54 | 2,85 | 3,11 | 5,41 | 6,75 | 8,2 |
| Boiler water capacity | [L] | 60 | 68 | 73 | 95 | 120 | 173 | 194 |
| Maximum working pressure | [Bar] | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Maximum working temperature | [°C] | 95 | 95 | 95 | 95 | 95 | 95 | 95 |
| Test pressure | [Bar] | 4,5 | 4,5 | 4,5 | 4,5 | 4,5 | 4,5 | 4,5 |
| EcoDesign | - | - | - | - | - | - | - | - |
| Boiler class | - | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| Boiler efficiency | [%] | ≤90 | ≤90 | ≤90 | ≤90 | ≤90 | ≤90 | ≤90 |
| Single fuel load | [L] | 190 | 290 | 350 | 350 | 400 | 520 | 520 |
| Single fuel load | [kg] | 114 | 174 | 210 | 210 | 240 | 310 | 310 |
| Fuel | - | pellet Φ6-8 | | | | | | |
| Power supply | - | ~230V; 50Hz | | | | | | |
| Power consumption at boiler nominal power | [W] | 300 | 300 | 300 | 300 | 400 | 400 | 400 |
| Temperature controller setting range | [°C] | 60 - 85 (1 at a time) | | | | | | |
| Required chimney flue | [Pa] | 20 | 23 | 23 | 35 | 38 | 40 | 40 |
| Boiler weight | [kg] | 415 | 475 | 510 | 530 | 745 | 855 | 995 |

# SERIES SEG BIO




| TYPE | SEG BIO 14 | SEG BIO 19 | SEG BIO 25 | SEG BIO 38 | SEG BIO 50 | SEG BIO 75 | SEG BIO 100 |
|---|---|---|---|---|---|---|---|
| A | 1256 | 1256 | 1256 | 1306 | 1406 | 1505 | 1505 |
| B | 535 | 535 | 535 | 585 | 682 | 793 | 793 |
| C | 1160 | 1355 | 1415 | 1415 | 1484 | 1520 | 1620 |
| D | 705 | 745 | 795 | 795 | 1003 | 1175 | 1325 |
| E | 910 | 1105 | 1160 | 1160 | 1110 | 1115 | 1215 |
| F | 350 | 360 | 410 | 410 | 535 | 545 | 695 |
| G | G 1 ½ | G 1 ½ | G 1 ½ | G 1 ½ | G 1 ½ | G 1 ½ | G 1 ½ |
| H | G ¾ | G ¾ | G ¾ | G ¾ | G ¾ | G ¾ | G ¾ |
| I | 180 | 180 | 180 | 180 | 220 | 220 | 220 |
| J | G 1 ½ | G 1 ½ | G 1 ½ | G 1 ½ | G 1 ½ | G 1 ½ | G 1 ½ |
| K | 213 | 247 | 245 | 245 | 337 | 350 | 300 |
| L | 213 | 207 | 205 | 205 | 190 | 175 | 175 |
| M | 680 | 680 | 680 | 680 | 680 | 680 | 700 |
| N | 707 | 720 | 776 | 766 | 850 | 1075 | 1075 |
| O | 125 | 125 | 125 | 125 | 175 | 220 | 220 |
| P | 870 | 905 | 955 | 955 | 1218 | 1413 | 1570 |
| R | 338x158 | 338x198 | 338x198 | 388x198 | 488x198 | 600x264 | 600x264 |



**PLATINUM controllers** are very intuitive devices, allowing for fully automated and effective 24/7 boiler operation.
The controller enables:
- programming of the real-time clock (RTC) for an entire week of work, in division into summer/winter work mode;
- weather control;
- Fuzzy Logic & PiD;
- expansion module*.

The controller supports:
- two mixing circulations, C.H.1 and C.H.2 with room thermostat;
- pump: C.H.1; C.H.2; D.H.W.; circulating; additional.

* ADDITIONAL EQUIPMENT

**Room thermostat & Internet Module*** provide the capability of installing two compatible devices operating both together with and separately from the PLATINUM controller:
- ecoNET internet module with the capability of boiler controller via application from computer, tablet and smartphone
- the room thermostat displays all information supplied by the boiler controller and makes it possible to introduce several changes from the thermostat.

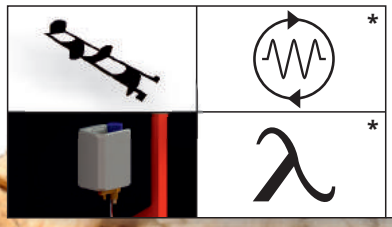
* ADDITIONAL EQUIPMENT

**Safeguards in the form of a limit switch** are found in all doors and in the fuel dispenser cover. The safeguard causes immediate shutdown of boiler operation after a door or dispenser cover is opened.

**in accordance with PN-EN 303-5 2012**

We will find **swirl vanes** in the boiler's convection channels. Thanks to their application, we increase the heat take-off from combustion gases.

**The flame safeguard** prevents ignition of fuel found in the boiler's dispenser.



**The cooling coil pipe*** is a device found inside the boiler, serving for leading off excess heat in the case where the boiler overheats.

**The Lambda probe*** is situated in the boiler's flue, and thanks to continuous monitoring of flue gas composition, it makes it possible to select the amount of supplied air more accurately.

* ADDITIONAL EQUIPMENT



# SERIES SD DUO BIO

# SERIES SD DUO BIO

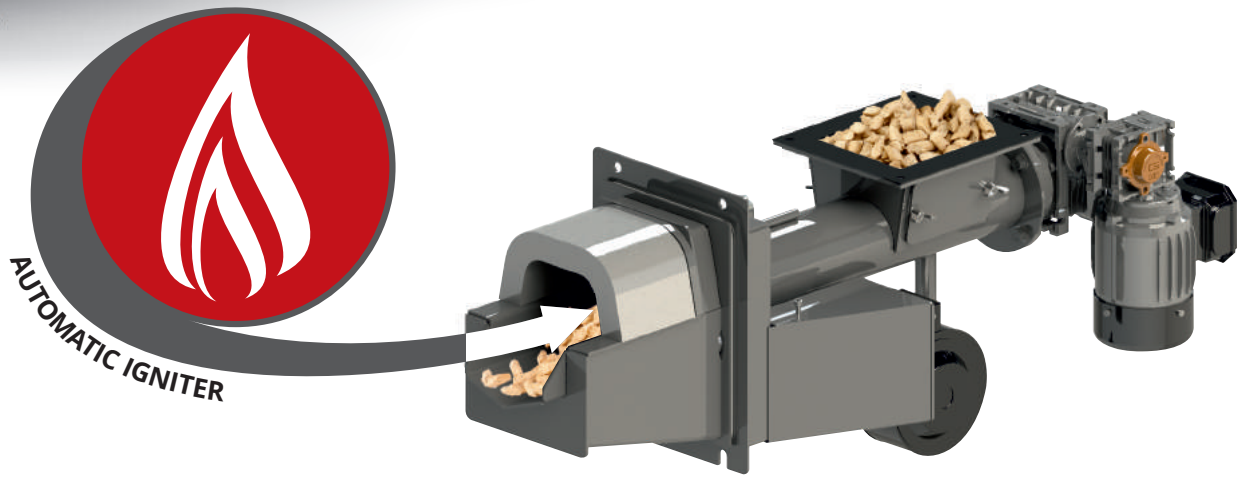
## TECHNICAL SPECIFICATIONS >>>

**Applied technology in boiler manufacturing.** We guarantee the quality of the materials we use to manufacture our products. We use only attested, high-grade boiler steel with a thickness of 6 mm in our boilers. Thanks to the boiler's three-section design, it is easier to install and transport directly to the boiler room. The boiler consists of a body, fuel dispenser and burner.

**Guarantee of machine serviceability****
A 5-year guarantee is provided upon purchase of a machine.

** Warranty conditions in the manual

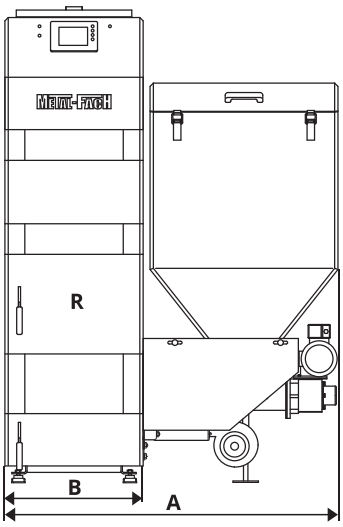
**BIO Chute Burner**
this is one of the most popular burners intended for burning of pellet-type fuel. Thanks to the application of an automatic igniter, the machine becomes practically automatic. A chamotte screen is found on the wall opposite to the burner.

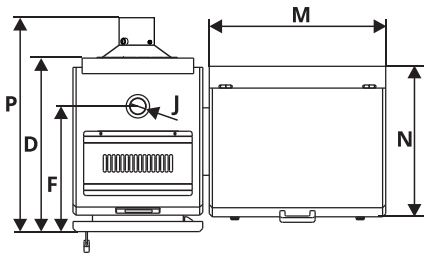


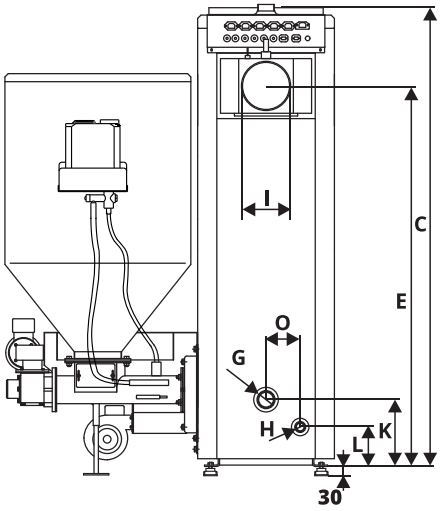
# TECHNICAL SPECIFICATIONS

| Parameters | Unit | Type of boiler | | | |
|---|---|---|---|---|---|
| | | SD DUO BIO 16 | SD DUO BIO 20 | SD DUO BIO 28 | SD DUO BIO 34 |
| Nominal thermal output pellet | [kW] | 16 | 20 | 28 | 34 |
| Boiler power range | [kW] | 4,8-16 | 6-20 | 8,4-28 | 10,2-34 |
| Heatable area | [m²] | 160 | 160-200 | 200-280 | 280-340 |
| Heating surface | [m²] | 2,33 | 2,62 | 2,85 | 3,10 |
| Boiler water capacity | [L] | 78 | 84 | 90 | 100 |
| Maximum working pressure | [Bar] | 3 | 3 | 3 | 3 |
| Maximum working temperature | [°C] | 95 | 95 | 95 | 95 |
| Test pressure | [Bar] | 4,5 | 4,5 | 4,5 | 4,5 |
| EcoDesign | - | + | - | + | - |
| Boiler class | - | 5 | 5 | 5 | 5 |
| Boiler efficiency | [%] | ≤90 | ≤90 | ≤90 | ≤90 |
| Single fuel load | [L] | 300 | 300 | 300 | 300 |
| Single fuel load | [kg] | 180 | 180 | 180 | 180 |
| Fuel | - | pellet Φ6-8 | | | |
| Power supply | - | ~230V; 50Hz | | | |
| Power consumption at boiler nominal power | [W] | 300 | 300 | 300 | 300 |
| Temperature controller setting range | [°C] | 60 - 85 (1 at a time) | | | |
| Required chimney flue | [Pa] | 20 | 23 | 23 | 35 |
| Boiler weight | [kg] | 460 | 475 | 495 | 520 |

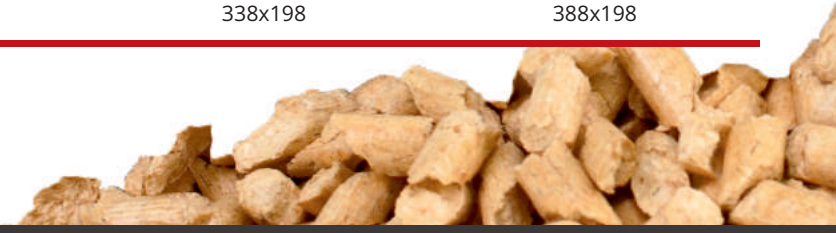
# SERIES SD DUO BIO



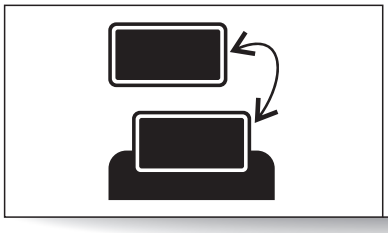




| TYPE | SD DUO BIO 16 | SD DUO BIO 20 | SD DUO BIO 28 | SD DUO BIO 34 |
|---|---|---|---|---|
| A | 1245 | 1245 | 1245 | 1300 |
| B | 541 | 541 | 541 | 591 |
| C | 1665 | 1665 | 1665 | 1665 |
| D | 653 | 703 | 753 | 753 |
| E | 1400 | 1400 | 1400 | 1400 |
| F | 442 | 487 | 537 | 537 |
| G | G 1 ½ | G 1 ½ | G 1 ½ | G 1 ½ |
| H | G ¾ | G ¾ | G ¾ | G ¾ |
| I | 180 | 180 | 180 | 200 |
| J | G 1 ½ | G 1 ½ | G 1 ½ | G 1 ½ |
| K | 244 | 244 | 244 | 244 |
| L | 144 | 144 | 144 | 144 |
| M | 680 | 680 | 680 | 680 |
| N | 595 | 595 | 595 | 595 |
| O | 125 | 125 | 125 | 125 |
| P | 830 | 880 | 930 | 930 |
| R | 338x198 | 338x198 | 338x198 | 388x198 |



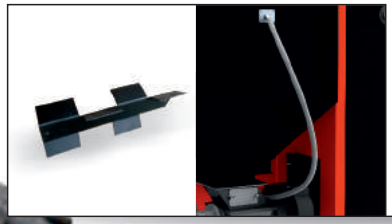
**BRONZE controllers** are devices with the most basic functions, enabling effective boiler operation.
The controller enables:
- division into summer/winter work mode;
- weather control;
The controller supports:
- one mixing circulation, C.H.1 with room thermostat;
- pump: C.H.1; D.H.W.



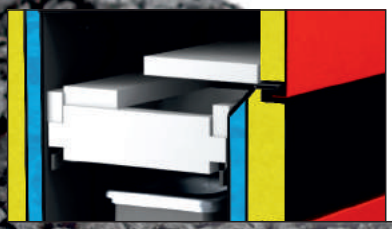
**Room thermostat ***
- the room thermostat displays information supplied by the boiler controller.

* ADDITIONAL EQUIPMENT

**Safeguards in the form of a limit switch** are found in all doors and in the fuel dispenser cover. The safeguard causes immediate shutdown of boiler operation after a door or dispenser cover is opened.
**in accordance with PN-EN 303-5 2012**



We will find **swirl vanes** in the boiler's convection channels. Thanks to their application, we increase the heat take-off from combustion gases.
**The pressure equalization system** prevents reversion of flame into the dispenser.

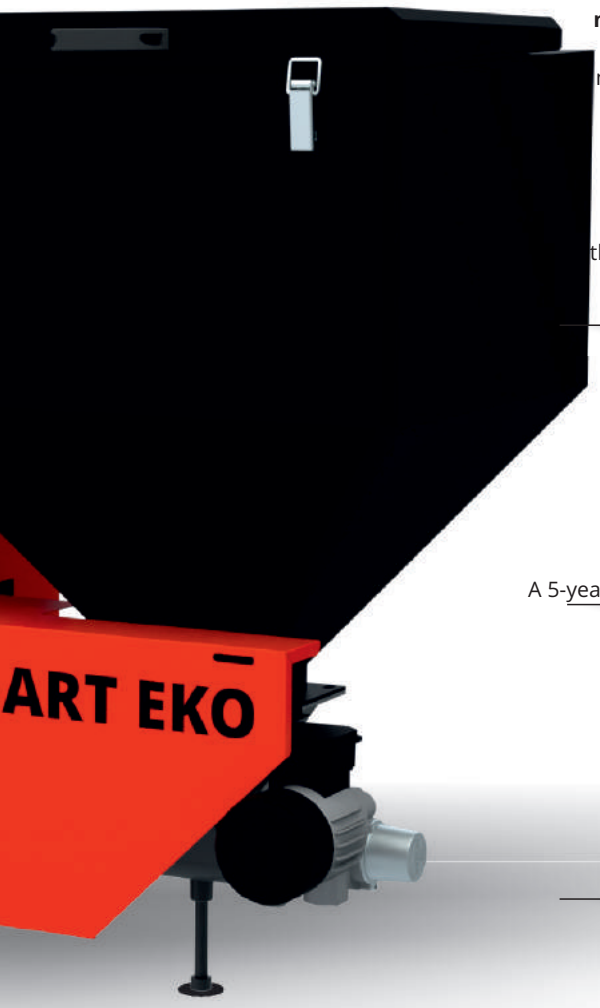


**High efficiency furnace chamber**
Thanks to the use of ceramic fittings together with a highly efficient cast iron burner, the boiler maintains high efficiency at all times and receives a minimum of 90% of the heat generated for the c.o. installation.


ECO-PEA COAL

## SERIES SMART EKO

## TECHNICAL SPECIFICATIONS >>>

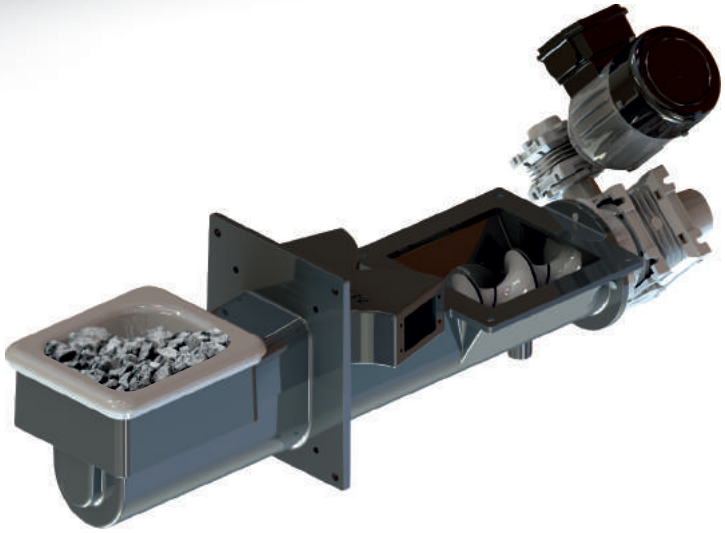



**Applied technology in boiler manufacturing.** We guarantee the quality of the materials we use to manufacture our products. We use only attested, high-grade boiler steel with a thickness of 6 mm in our boilers. Thanks to the boiler's three-section design, it is easier to install and transport directly to the boiler room. The boiler consists of a body, fuel dispenser and burner.


**Guarantee of machine serviceability****
A 5-year guarantee is provided upon purchase of a machine.

** Warranty conditions in the manual

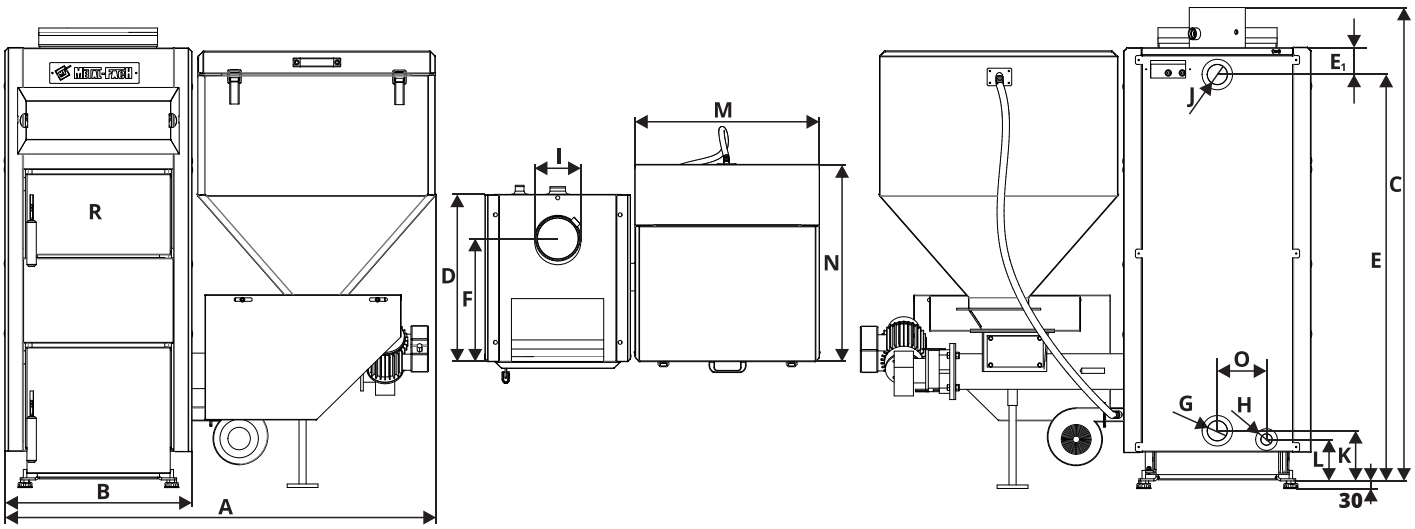
**Cast Iron Burner**
this is a tried and tested design, reliable for burning eco-pea coal fuel. The burner is made completely from cast iron resistant to corrosion, abrasion and high temperature. Fuel granulation 0-32 mm. The cast iron worm has a countercoil. A ceramic deflector is situated in the boiler above the burner.



# TECHNICAL SPECIFICATIONS

| Parameters | Unit | Type of boiler | | | | |
|---|---|---|---|---|---|---|
| | | SMART EKO 12 | SMART EKO 15 | SMART EKO 20 | SMART EKO 25 | SMART EKO 30 |
| Nominal thermal output eco-pea coal | [kW] | 12 | 15 | 20 | 25 | 30 |
| Boiler power range | [kW] | 3,6-12 | 4,5-15 | 6-20 | 7,5-25 | 9-30 |
| Heatable area | [$m^2$] | 120 | 120-150 | 150-200 | 200-250 | 250-300 |
| Heating surface | [$m^2$] | 1,63 | 1,63 | 2,0 | 2,6 | 3,08 |
| Boiler water capacity | [L] | 48 | 48 | 60 | 71 | 80 |
| Maximum working pressure | [Bar] | 3 | 3 | 3 | 3 | 3 |
| Maximum working temperature | [°C] | 85 | 85 | 85 | 85 | 85 |
| Test pressure | [Bar] | 4,5 | 4,5 | 4,5 | 4,5 | 4,5 |
| EcoDesign | - | + | + | + | + | + |
| Boiler class | - | 5 | 5 | 5 | 5 | 5 |
| Boiler efficiency | [%] | ≤88 | ≤88 | ≤88 | ≤88 | ≤88 |
| Single fuel load | [L] | 200 | 200 | 200 | 200 | 200 |
| Single fuel load | [kg] | 146 | 146 | 146 | 146 | 146 |
| Fuel | - | eco-pea coal | | | | |
| Power supply | - | ~230V; 50Hz | | | | |
| Power consumption at boiler nominal power | [W] | 350 | 350 | 350 | 350 | 350 |
| Temperature controller setting range | [°C] | 60 - 85 (1 at a time) | | | | |
| Required chimney flue | [Pa] | 22 | 23 | 26 | 28 | 30 |
| Boiler weight | [kg] | 350 | 360 | 410 | 460 | 482 |

# SERIES SMART EKO




| TYPE | SMART EKO 12 | SMART EKO 15 | SMART EKO 20 | SMART EKO 25 | SMART EKO 30 |
|---|---|---|---|---|---|
| A | 1250 | 1250 | 1250 | 1300 | 1300 |
| B | 545 | 545 | 545 | 590 | 590 |
| C | 1300 | 1300 | 1350 | 1350 | 1450 |
| D | 545 | 545 | 615 | 710 | 710 |
| E | 1100 | 1100 | 1150 | 1150 | 1250 |
| $E_1$ | 80 | 80 | 75 | 80 | 80 |
| F | 375 | 375 | 445 | 535 | 535 |
| G | G ¾ | G ¾ | G ¾ | G ¾ | G ¾ |
| H | G 1 ½ | G 1 ½ | G 1 ½ | G 1 ½ | G 1 ½ |
| I | 160 | 160 | 160 | 160 | 180 |
| J | G 1 ½ | G 1 ½ | G 1 ½ | G 1 ½ | G 1 ½ |
| K | 140 | 140 | 140 | 140 | 140 |
| L | 115 | 115 | 115 | 115 | 115 |
| M | 680 | 680 | 680 | 680 | 680 |
| N | 610 | 610 | 620 | 620 | 620 |
| O | 140 | 140 | 140 | 140 | 140 |
| P | - | - | - | - | - |
| R | - | - | - | - | - |

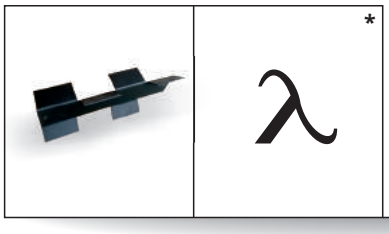
**PLATINUM CONTROLLERS** are very intuitive devices, allowing for fully automated and effective 24/7 boiler operation. The controller enables:
- programming of the real-time clock (RTC) for an entire week of work, in division into summer/winter work mode;
- weather control;
- Fuzzy Logic & PiD;
- expansion module*.

The controller supports:
- two mixing circulations, C.H.1 and C.H.2 with room thermostat;
- pump: C.H.1; C.H.2; D.H.W.; circulating; additional.

* ADDITIONAL EQUIPMENT

**Room thermostat & Internet Module*** provide the capability of installing two compatible devices operating both together with and separately from the PLATINUM controller:
- ecoNET internet module with the capability of boiler controller via application from computer, tablet and smartphone
- the room thermostat displays all information supplied by the boiler controller and makes it possible to introduce several changes from the thermostat.

* ADDITIONAL EQUIPMENT



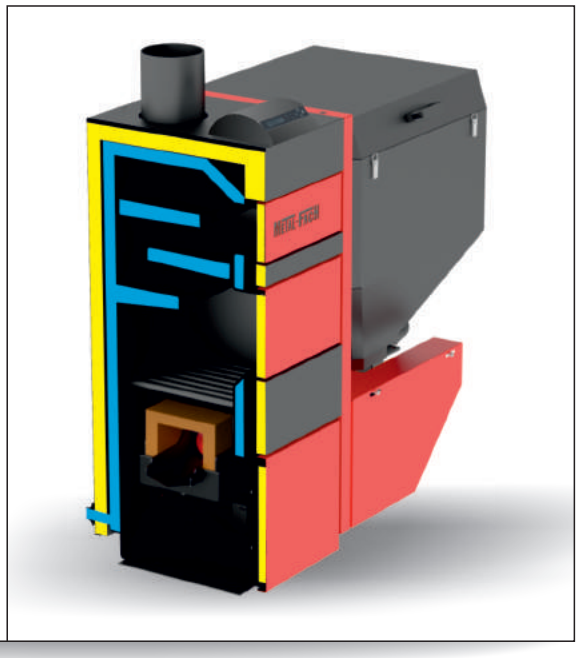
We will find **swirl vanes** in the boiler's convection channels. Thanks to their application, we increase the heat take-off from combustion gases.
**The Lambda probe*** is situated in the boiler's flue, and thanks to continuous monitoring of flue gas composition, it makes it possible to select the amount of supplied air more accurately.

* ADDITIONAL EQUIPMENT



## SERIE SMART BIO

## TECHNICAL SPECIFICATIONS >>>



**Applied technology in boiler manufacturing.** We guarantee the quality of the materials we use to manufacture our products. We use only attested, high-grade boiler steel with a thickness of 6 mm in our boilers. Thanks to the boiler's three-section design, it is easier to install and transport directly to the boiler room. The boiler consists of a body, fuel dispenser and burner.

**Guarantee of machine serviceability****
A 5-year guarantee is provided upon purchase of a machine.

** Warranty conditions in the manual

An extra steel grill allows for
a range of combustion:
- wood
- carbon

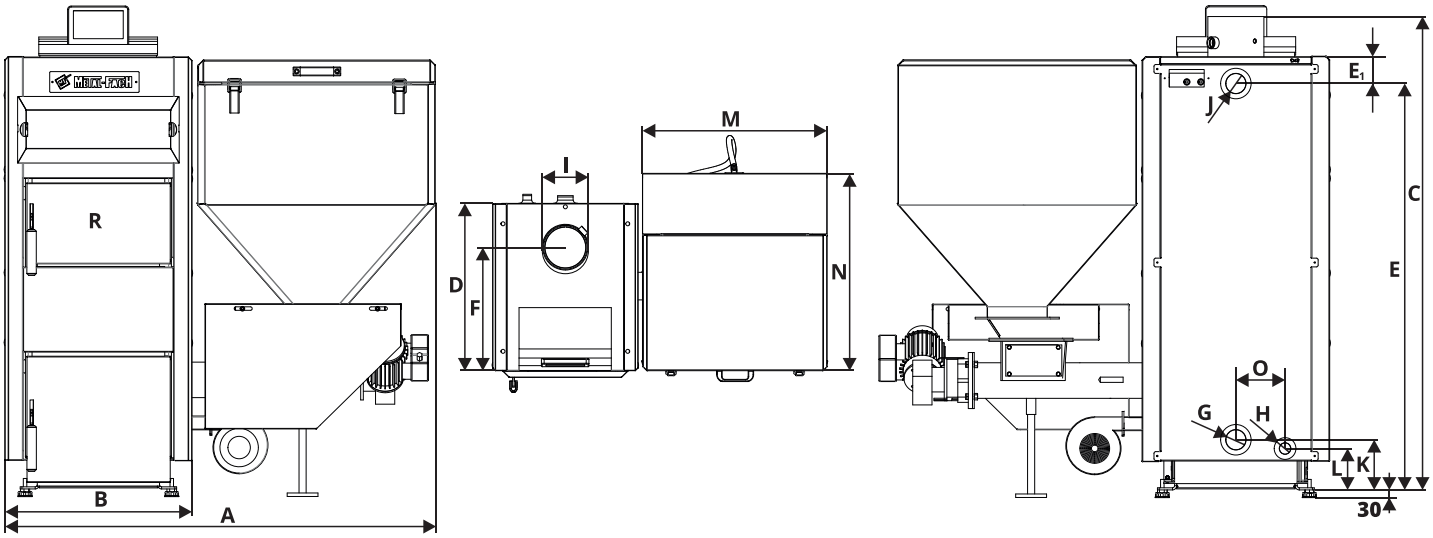
**Chute burner**
this innovative solution is for burning of pellet type fuel. Thanks to the application of an automatic, ceramic igniter, the machine becomes practically automatic. Burner parts exposed to contact with high temperature are made from heat-resistant steel. A chamotte screen is found on the wall opposite to the burner.

AUTOMATIC CERAMIC IGNITER

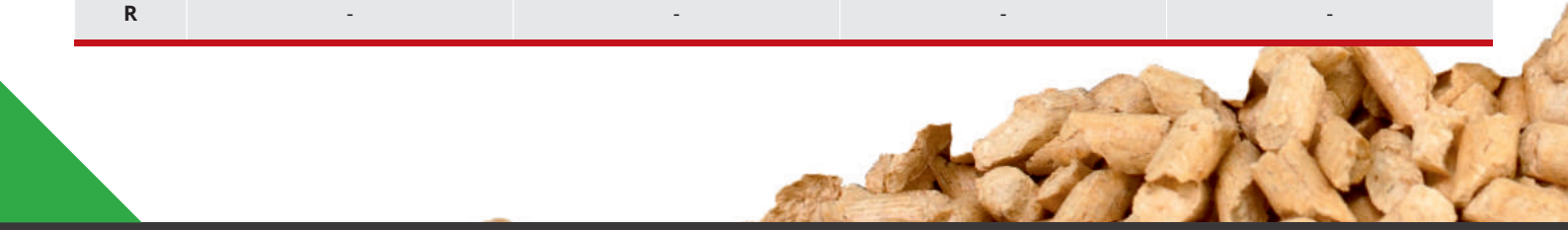
# TECHNICAL SPECIFICATIONS

| Parameters | Unit | Type of boiler | | | |
|---|---|---|---|---|---|
| | | SMART BIO 15 | SMART BIO 20 | SMART BIO 25 | SMART BIO 30 |
| Nominal thermal output pellet | [kW] | 15 | 20 | 25 | 30 |
| Boiler power range | [kW] | 4,5-15 | 6-20 | 7,5-25 | 9-30 |
| Heatable area | [$m^2$] | 150 | 150-200 | 200-250 | 250-300 |
| Heating surface | [$m^2$] | 1,63 | 2,0 | 2,6 | 3,08 |
| Boiler water capacity | [L] | 48 | 60 | 71 | 80 |
| Maximum working pressure | [Bar] | 3 | 3 | 3 | 3 |
| Maksymalna temperatura robocza | [°C] | 95 | 95 | 95 | 95 |
| Test pressure | [Bar] | 4,5 | 4,5 | 4,5 | 4,5 |
| Boiler efficiency | [%] | ≤90 | ≤90 | ≤90 | ≤90 |
| Single fuel load | [L] | 240 | 240 | 240 | 240 |
| Single fuel load | [kg] | 145 | 145 | 145 | 145 |
| Fuel | - | pellet Φ6-8, grain waste, wood, coal | | | |
| Power supply | - | ~230V; 50Hz | | | |
| Power consumption at boiler nominal power | [W] | 115 | 115 | 115 | 115 |
| Temperature controller setting range | [°C] | 60 - 85 (1 at a time) | | | |
| Required chimney flue | [Pa] | 20 | 20 | 23 | 30 |
| Boiler weight | [kg] | 340 | 360 | 405 | 440 |

# SERIES SMART BIO




| TYPE | SMART BIO 15 | SMART BIO 20 | SMART BIO 25 | SMART BIO 30 |
|---|---|---|---|---|
| A | 1250 | 1250 | 1300 | 1300 |
| B | 535 | 535 | 585 | 585 |
| C | 1300 | 1350 | 1350 | 1450 |
| D | 547 | 615 | 710 | 710 |
| E | 1100 | 1160 | 1160 | 1250 |
| $E_1$ | 80 | 75 | 80 | 80 |
| F | 380 | 450 | 545 | 530 |
| G | G 1 ½ | G 1 ½ | G 1 ½ | G 1 ½ |
| H | G ¾ | G ¾ | G ¾ | G ¾ |
| I | 160 | 160 | 160 | 180 |
| J | G 1 ½ | G 1 ½ | G 1 ½ | G 1 ½ |
| K | 140 | 140 | 140 | 140 |
| L | 115 | 115 | 115 | 115 |
| M | 615 | 615 | 615 | 615 |
| N | 710 | 710 | 710 | 710 |
| O | 140 | 140 | 140 | 140 |
| P | 220 | 220 | 220 | 220 |
| R | - | - | - | - |



**PLATINUM CARBON** controllers are very intuitive devices, allowing for fully automated and effective 24/7 boiler operation. The controller enables:
- programming of the real-time clock (RTC) for an entire week of work, in division into summer/winter work mode;
- weather control;
- Fuzzy Logic & PiD;
- expansion module*.

The controller supports:
- two mixing circulations, C.H.1 and C.H.2 with room thermostat;
- pump: C.H.1; C.H.2; D.H.W.; circulating; additional.

* ADDITIONAL EQUIPMENT

**Room thermostat & Internet Module*** provide the capability of installing two compatible devices operating both together with and separately from the PLATINUM controller:
- ecoNET internet module with the capability of boiler controller via application from computer, tablet and smartphone
- the room thermostat displays all information supplied by the boiler controller and makes it possible to introduce several changes from the thermostat.

* ADDITIONAL EQUIPMENT

**Safeguards in the form of a limit switch** are found in all doors and in the fuel dispenser cover. The safeguard causes immediate shutdown of boiler operation after a door or dispenser cover is opened.

**in accordance with PN-EN 303-5 2012**



We will find **swirl vanes** in the boiler's convection channels. Thanks to their application, we increase the heat take-off from combustion gases.

**The pressure equalization system** prevents reversion of flame into the dispenser.

**The cooling coil pipe*** is a device found inside the boiler, serving for leading off excess heat in the case where the boiler overheats.

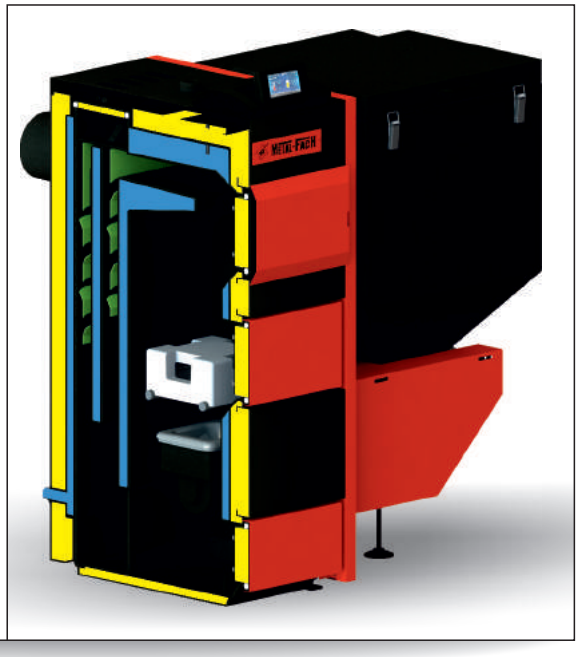
**The Lambda probe*** is situated in the boiler's flue, and thanks to continuous monitoring of flue gas composition, it makes it possible to select the amount of supplied air more accurately.

* ADDITIONAL EQUIPMENT



## SERIES SEG

## TECHNICAL SPECIFICATIONS >>>



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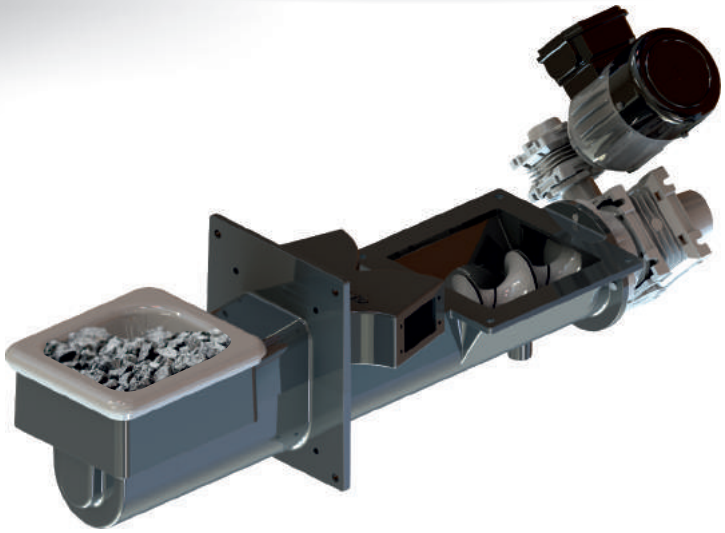
**Guarantee of machine serviceability****
A 5-year guarantee is provided upon purchase of a machine.

** Warranty conditions in the manual

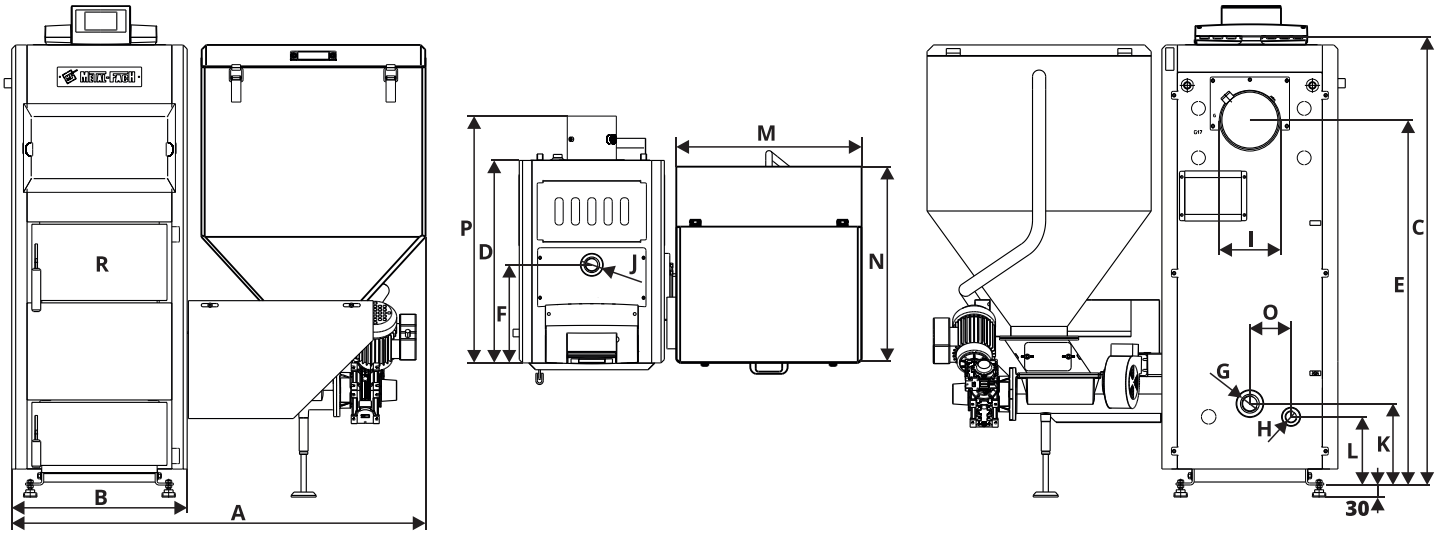
**Cast Iron Burner**
this is a tried and tested design, reliable for burning eco-pea coal fuel. The burner is made completely from cast iron resistant to corrosion, abrasion and high temperature. Fuel granulation 0-32 mm. The cast iron worm has a countercoil. A ceramic deflector is situated in the boiler above the burner.



# TECHNICAL SPECIFICATIONS

| Parameters | Unit | Type of boiler | | | | | |
|---|---|---|---|---|---|---|---|
| | | SEG 14 | SEG 17 | SEG 28 | SEG 38 | SEG 50 | SEG 75 |
| Nominal thermal output eco-pea coal | [kW] | 14 | 17 | 28 | 38 | 50 | 75 |
| Boiler power range | [kW] | 4,2-14 | 5,1-17 | 8,4-28 | 10,5-38 | 15-50 | 22,5-75 |
| Heatable area | [$m^2$] | 140 | 140-170 | 170-280 | 280-380 | 380-500 | 500-750 |
| Heating surface | [$m^2$] | 2,1 | 2,54 | 2,85 | 3,11 | 5,41 | 6,75 |
| Boiler water capacity | [L] | 60 | 68 | 73 | 95 | 120 | 173 |
| Maximum working pressure | [Bar] | 3 | 3 | 3 | 3 | 3 | 3 |
| Maximum working temperature | [°C] | 95 | 95 | 95 | 95 | 95 | 95 |
| Test pressure | [Bar] | 4,5 | 4,5 | 4,5 | 4,5 | 4,5 | 4,5 |
| EcoDesign | - | - | - | - | - | - | - |
| Boiler class | - | 5 | 5 | 5 | 5 | 5 | 5 |
| Boiler efficiency | [%] | ≤90 | ≤90 | ≤90 | ≤90 | ≤90 | ≤90 |
| Single fuel load | [L] | 190 | 290 | 350 | 350 | 400 | 520 |
| Single fuel load | [kg] | 127 | 217 | 262 | 262 | 300 | 390 |
| Fuel | - | eco-pea coal | | | | | |
| Power supply | - | ~230V; 50Hz | | | | | |
| Power consumption at boiler nominal power | [W] | 350 | 350 | 350 | 350 | 400 | 400 |
| Temperature controller setting range | [°C] | 60 - 85 (1 at a time) | | | | | |
| Required chimney flue | [Pa] | 20 | 23 | 23 | 35 | 38 | 40 |
| Boiler weight | [kg] | 448 | 510 | 535 | 551 | 785 | 935 |

# SERIES SEG




| TYPE | SEG 14 | SEG 17 | SEG 28 | SEG 38 | SEG 50 | SEG 75 |
|---|---|---|---|---|---|---|
| A | 1250 | 1250 | 1250 | 1290 | 1443 | 1505 |
| B | 535 | 535 | 535 | 585 | 681 | 793 |
| C | 1225 | 1420 | 1480 | 1480 | 1490 | 1440 |
| D | 758 | 793 | 845 | 845 | 1060 | 1175 |
| E | 910 | 1105 | 1160 | 1160 | 1110 | 1115 |
| F | 347 | 356 | 409 | 409 | 536 | 545 |
| G | G 1 ½ | G 1 ½ | G 1 ½ | G 1 ½ | G 1 ½ | G 1 ½ |
| H | G ¾ | G ¾ | G ¾ | G ¾ | G ¾ | G ¾ |
| I | 180 | 180 | 180 | 180 | 220 | 220 |
| J | G 1 ½ | G 1 ½ | G 1 ½ | G 1 ½ | G 1 ½ | G 1 ½ |
| K | 213 | 247 | 245 | 245 | 337 | 350 |
| L | 213 | 207 | 205 | 205 | 190 | 175 |
| M | 680 | 680 | 680 | 680 | 680 | 680 |
| N | 693 | 716 | 765 | 765 | 850 | 850 |
| O | 125 | 125 | 125 | 125 | 175 | 220 |
| P | 865 | 905 | 954 | 954 | 1218 | 1413 |
| R | 338x158 | 338x198 | 338x198 | 388x198 | 488x198 | 600x264 |

**CONTROLLERS ecoSTER400** are devices with the most basic functions, enabling effective boiler operation.
The controller enables:
- division into summer/winter work mode;
The controller supports:
- pump: C.H.1; D.H.W.

* ADDITIONAL EQUIPMENT

**The grate clear lever** makes it possible to quickly clear ash from the grate before it is loaded again. (SE MAX 13-35kW).
**Blow-in set** assisting burning of fuel.

* ADDITIONAL EQUIPMENT

**Draught gauge** makes it possible to adjust the draught.
**Secondary air damper** enables adjustment of air flow to the furnace.

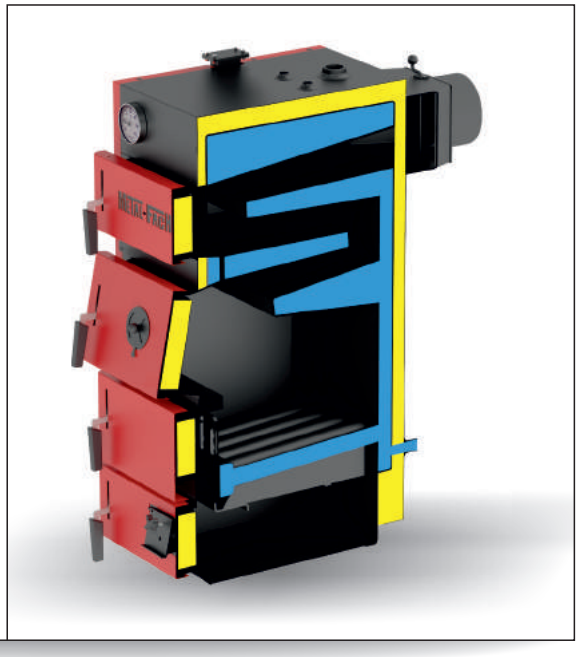
* ADDITIONAL EQUIPMENT



## SERIES SE MAX II

# SERIES SE MAX II

## TECHNICAL SPECIFICATIONS >>>



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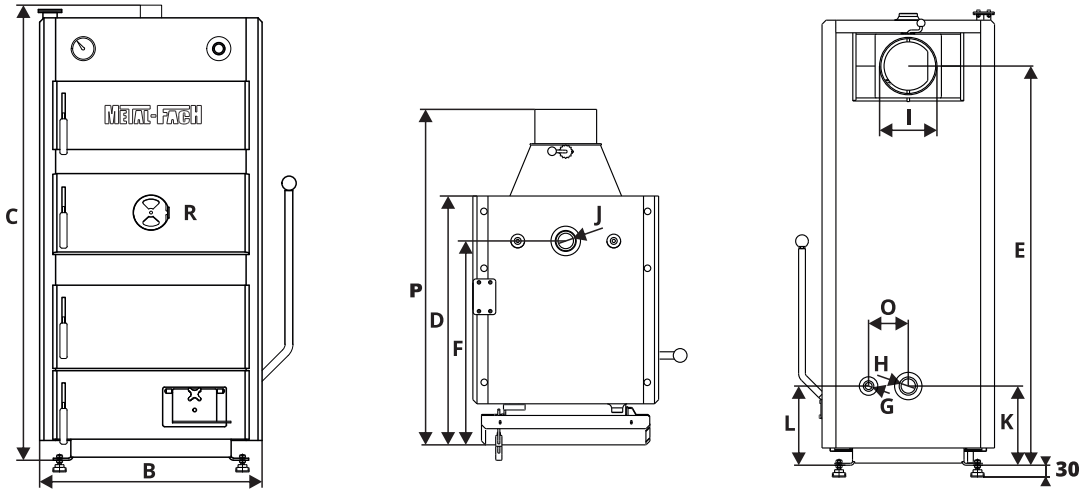
**Guarantee of machine serviceability****
A 5-year guarantee is provided upon purchase of a machine.

** Warranty conditions in the manual

**The steel water-cooled grate** makes it possible to burn fuels like wood and coal. Thanks to the large furnace chamber, which was additionally enlarged, we can fit an amount of fuel that lasts for many hours of work.

# TECHNICAL SPECIFICATIONS

| Parameters | Unit | Type of boiler | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | SE MAX II 10 | SE MAX II 13 | SE MAX II 15 | SE MAX II 20 | SE MAX II 25 | SE MAX II 30 | SE MAX II 35 |
| Nominal thermal output coal | [kW] | 10 | 13 | 15 | 20 | 25 | 30 | 35 |
| Heatable area | [$m^2$] | 100 | 100-130 | 130-150 | 150-200 | 200-250 | 250-300 | 300-350 |
| Heating surface | [$m^2$] | 0,85 | 1,15 | 1,56 | 2,19 | 2,27 | 2,48 | 2,70 |
| Boiler water capacity | [L] | 30 | 41 | 56 | 71 | 87 | 93 | 111 |
| Maximum working pressure | [Bar] | 1,5 | 1,5 | 1,5 | 1,5 | 1,5 | 1,5 | 1,5 |
| Maximum working temperature | [°C] | 85 | 85 | 85 | 85 | 85 | 85 | 85 |
| Test pressure | [Bar] | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Boiler efficiency | [%] | ≤81 | ≤81 | ≤81 | ≤81 | ≤81 | ≤81 | ≤81 |
| Fuel | - | wood, coal | | | | | | |
| Required chimney flue | [Pa] | 20 | 20 | 20 | 23 | 23 | 23 | 25 |
| Boiler weight | [kg] | 160 | 198 | 260 | 330 | 350 | 370 | 395 |




| TYPE | SE MAX II 10 | SE MAX II 13 | SE MAX II 15 | SE MAX II 20 | SE MAX II 25 | SE MAX II 30 | SE MAX II 35 |
|---|---|---|---|---|---|---|---|
| A | - | - | - | - | - | - | - |
| B | 435 | 435 | 450 | 510 | 530 | 580 | 630 |
| C | 960 | 1120 | 1205 | 1260 | 1260 | 1260 | 1260 |
| D | 560 | 615 | 695 | 805 | 805 | 805 | 805 |
| E | 770 | 915 | 1035 | 1090 | 1090 | 1090 | 1090 |
| F | 380 | 435 | 550 | 670 | 670 | 670 | 670 |
| G | G ¾ | G ¾ | G ¾ | G ¾ | G ¾ | G ¾ | G ¾ |
| H | G 1 ½ | G 1 ½ | G 1 ½ | G 1 ½ | G 1 ½ | G 1 ½ | G 1 ½ |
| I | 160 | 160 | 180 | 180 | 180 | 180 | 180 |
| J | G 1 ½ | G 1 ½ | G 1 ½ | G 1 ½ | G 1 ½ | G 1 ½ | G 1 ½ |
| K | 185 | 190 | 255 | 255 | 255 | 255 | 255 |
| L | 170 | 175 | 240 | 240 | 240 | 240 | 240 |
| M | - | - | - | - | - | - | - |
| N | - | - | - | - | - | - | - |
| O | 100 | 100 | 125 | 125 | 125 | 125 | 125 |
| P | 725 | 780 | 920 | 1030 | 1030 | 1030 | 1030 |
| R | 238x190 | 238x190 | 258x190 | 318x238 | 338x238 | 388x238 | 438x238 |

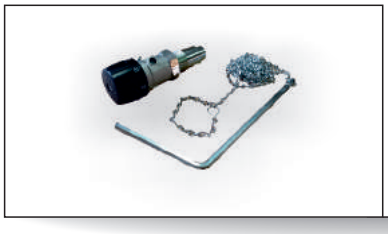
**CONTROLLERS ecoSTER400** are devices with the most basic functions, enabling effective boiler operation.
The controller enables:
- division into summer/winter work mode;
The controller supports:
- pump: C.H.1; D.H.W.

* ADDITIONAL EQUIPMENT

*

**The grate clear lever** makes it possible to quickly clear ash from the grate before it is loaded again. (SDG 11-32kW).
**Blow-in set*** assisting burning of fuel.

* ADDITIONAL EQUIPMENT



**Draught gauge*** makes it possible to adjust the draught.

* ADDITIONAL EQUIPMENT



## SERIES SDG

## TECHNICAL SPECIFICATIONS >>>


**Applied technology in boiler**
manufacturing. We guarantee the quality of the materials used in the manufacture of our products. We use only attested, high-grade boiler steel with a thickness of 6 mm in our boilers.

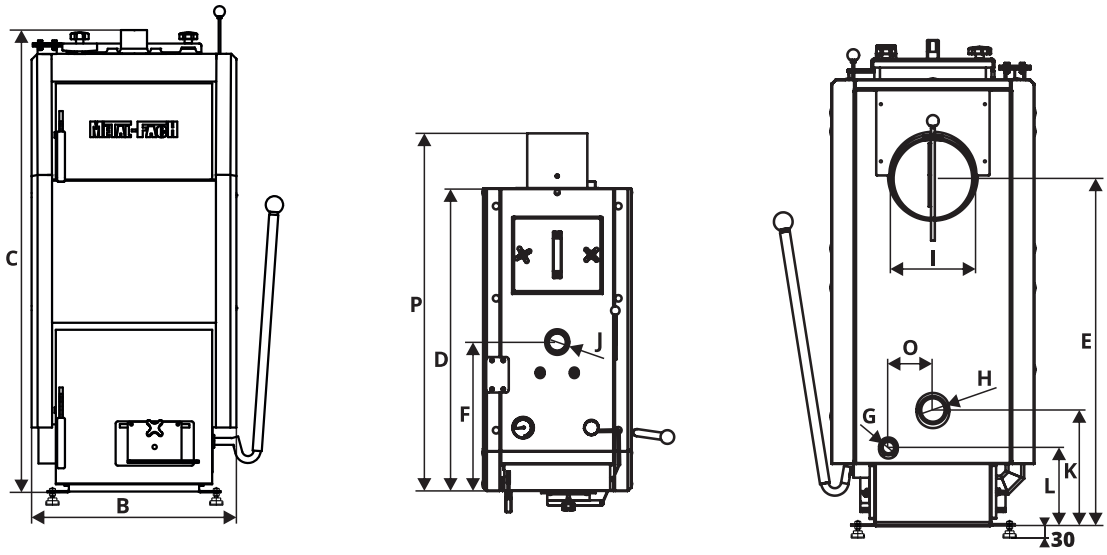
**Guarantee of machine serviceability****
A 5-year guarantee is provided upon purchase of a machine.

** Warranty conditions in the manual

**The steel water-cooled grate**
makes it possible to burn fuels like wood and coal. Thanks to the large furnace chamber, we can fit an amount of fuel enabling many hours of work.

# TECHNICAL SPECIFICATIONS

| Parameters | Unit | Type of boiler | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | SDG 11 | SDG 13 | SDG 16 | SDG 19 | SDG 25 | SDG 32 | SDG 38 |
| Nominal thermal output coal | [kW] | 14 | 16 | 19 | 23 | 30 | 40 | 45 |
| Heatable area | [$m^2$] | 140 | 140-160 | 160-190 | 190-230 | 230-300 | 300-400 | 400-450 |
| Heating surface | [$m^2$] | 1,4 | 1,65 | 1,75 | 1,85 | 2,15 | 2,4 | 2,9 |
| Boiler water capacity | [L] | 41 | 49 | 53 | 62 | 69 | 76 | 90 |
| Maximum working pressure | [Bar] | 1,5 | 1,5 | 1,5 | 1,5 | 1,5 | 1,5 | 1,5 |
| Maximum working temperature | [°C] | 85 | 85 | 85 | 85 | 85 | 85 | 85 |
| Test pressure | [Bar] | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Boiler efficiency | [%] | ≤81 | ≤81 | ≤81 | ≤81 | ≤81 | ≤81 | ≤81 |
| Fuel | - | wood, coal | | | | | | |
| Required chimney flue | [Pa] | 20 | 20 | 20 | 23 | 23 | 35 | 35 |
| Boiler weight | [kg] | 230 | 255 | 260 | 289 | 315 | 345 | 375 |




| TYPE | SDG 11 | SDG 13 | SDG 16 | SDG 19 | SDG 25 | SDG 32 | SDG 38 |
|---|---|---|---|---|---|---|---|
| A | - | - | - | - | - | - | - |
| B | 420 | 420 | 420 | 470 | 470 | 470 | 520 |
| C | 860 | 950 | 960 | 960 | 1060 | 1110 | 1160 |
| D | 840 | 840 | 900 | 900 | 900 | 960 | 1020 |
| E | 650 | 750 | 750 | 750 | 850 | 900 | 950 |
| F | 450 | 450 | 475 | 475 | 630 | 610 | 725 |
| G | G ¾ | G ¾ | G ¾ | G ¾ | G ¾ | G ¾ | G ¾ |
| H | G 1 ½ | G 1 ½ | G 1 ½ | G 1 ½ | G 1 ½ | G 1 ½ | G 1 ½ |
| I | 180 | 180 | 180 | 180 | 180 | 180 | 180 |
| J | G 1 ½ | G 1 ½ | G 1 ½ | G 1 ½ | G 1 ½ | G 1 ½ | G 1 ½ |
| K | 190 | 190 | 190 | 190 | 190 | 190 | 190 |
| L | 190 | 190 | 190 | 190 | 190 | 190 | 190 |
| M | - | - | - | - | - | - | - |
| N | - | - | - | - | - | - | - |
| O | 105 | 90 | 90 | 100 | 120 | 110 | 130 |
| P | 1040 | 1040 | 1100 | 1100 | 1100 | 1160 | 1220 |
| R | 240x200 | 240x200 | 240x200 | 290x200 | 290x200 | 290x225 | 340x250 |

**CONTROLLERS ecoSTER400** are devices with the most basic functions, enabling effective boiler operation.
The controller enables:
- division into summer/winter work mode;
The controller supports:
- pump: C.H.1; D.H.W.

* ADDITIONAL EQUIPMENT

**The grate clear lever** makes it possible to quickly clear ash from the grate before it is loaded again. (SE 45kW).
**Blow-in set** assisting burning of fuel.

* ADDITIONAL EQUIPMENT





**Draught gauge** makes it possible to adjust the draught.
**Secondary air damper** enables adjustment of air flow to the furnace.

* ADDITIONAL EQUIPMENT


## SERIES SE

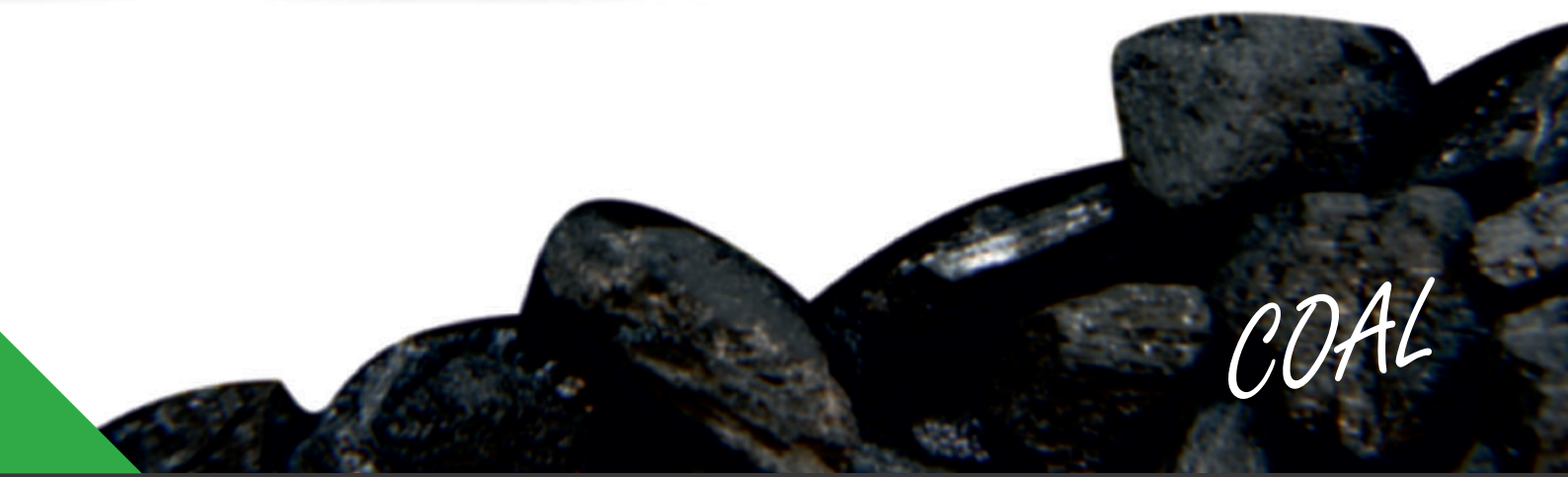
TECHNICAL SPECIFICATIONS >>>

**Applied technology in boiler** manufacturing. We guarantee the quality of the materials used in the manufacture of our products. We use only attested, high-grade boiler steel with a thickness of 6 mm in our boilers.


**Guarantee of machine serviceability****. A 5-year guarantee is provided upon purchase of a machine.

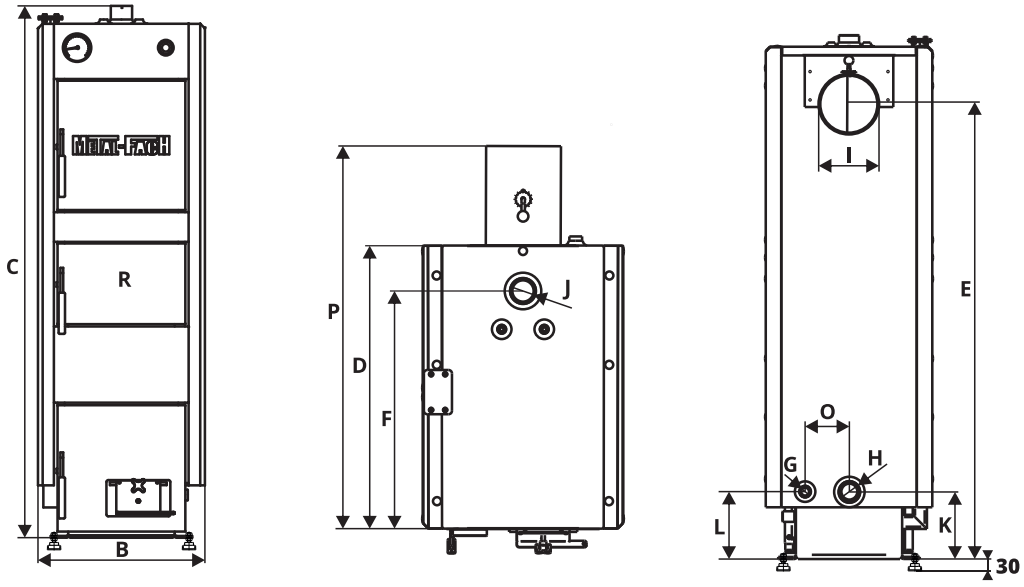
** Warranty conditions in the manual

**The steel water-cooled grate** makes it possible to burn fuels like wood and coal. Thanks to the large furnace chamber, we can fit an amount of fuel enabling many hours of work.



# TECHNICAL SPECIFICATIONS

| Parameters | Unit | Type of boiler | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | SE 45 | SE 52 | SE 60 | SE 80 | SE 100 | SE 120 | SE 150 | SE 200 |
| Nominal thermal output coal | [kW] | 45 | 52 | 60 | 80 | 100 | 120 | 150 | 200 |
| Heatable area | [m²] | 380-450 | 450-520 | 520-600 | 600-800 | 800-1000 | 1000-1200 | 1200-1500 | 1500-2000 |
| Heating surface | [m²] | 3,4 | 3,8 | 4,5 | 6,9 | 8,0 | 9,2 | 10 | 18,32 |
| Boiler water capacity | [L] | 90 | 105 | 115 | 260 | 290 | 316 | 330 | 713 |
| Maximum working pressure | [Bar] | 1,5 | 1,5 | 1,5 | 1,5 | 1,5 | 1,5 | 1,5 | 1,5 |
| Maximum working temperature | [°C] | 85 | 85 | 85 | 85 | 85 | 85 | 85 | 85 |
| Test pressure | [Bar] | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Boiler efficiency | [%] | ≤81 | ≤81 | ≤81 | ≤81 | ≤81 | ≤81 | ≤81 | ≤81 |
| Fuel | - | wood, coal | | | | | | | |
| Required chimney flue | [Pa] | 32 | 38 | 38 | 40 | 40 | 45 | 45 | 50 |
| Boiler weight | [kg] | 438 | 480 | 521 | 850 | 1015 | 1090 | 1160 | 2050 |




| TYPE | SE 45 | SE 52 | SE 60 | SE 80 | SE 100 | SE 120 | SE 150 | SE 200 |
|---|---|---|---|---|---|---|---|---|
| A | - | - | - | - | - | - | - | - |
| B | 530 | 580 | 680 | 770 | 860 | 860 | 860 | 1550 |
| C | 1530 | 1530 | 1530 | 1830 | 1910 | 2110 | 2110 | 2410 |
| D | 800 | 800 | 800 | 1120 | 1170 | 1170 | 1270 | 1700 |
| E | 1330 | 1330 | 1330 | 1690 | 1780 | 1980 | 1980 | 1915 |
| F | 584 | 584 | 584 | 480 | 660 | 655 | 655 | 1300 |
| G | G ¾ | G ¾ | G ¾ | G ¾ | G ¾ | G ¾ | G ¾ | G ¾ |
| H | G 1 ½ | G 1 ½ | G 1 ½ | G 1 ½ | G 1 ½ | G 1 ½ | G 1 ½ | G 1 ½ |
| I | 200 | 200 | 200 | 250 | 250 | 250 | 250 | 350 |
| J | G 1 ½ | G 1 ½ | G 1 ½ | G 2 | G 2 | G 2 | G 2 | 101,6 |
| K | 225 | 225 | 225 | 195 | 180 | 180 | 180 | 1080 |
| L | 175 | 175 | 185 | 100 | 155 | 155 | 155 | 170 |
| M | - | - | - | - | - | - | - | - |
| N | - | - | - | - | - | - | - | - |
| O | 130 | 160 | 210 | 185 | 234 | 234 | 234 | 560 |
| P | 960 | 960 | 960 | 1550 | 1580 | 1580 | 1580 | 2230 |
| R | 340x200 | 390x200 | 490x200 | 540x300 | 640x300 | 640x300 | 640x300 | 624x468 |

METAL-FACH
HEATING TECHNOLOGY

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CURRENT INFORMATION ABOUT PRODUCTS IS AVAILABLE AT THE WEBSITE **WWW.METALFACHTG.COM.PL**