HKS lazar ®

ecodesign *

class 5 *
Boiler class adhering to EN 303-5:2012 norms
Boiler class adhering to EN 303-5:2012 norms

Condensation *

PELLET
AND WOOD
BURNING BOILERS
modern heating appliances

SMART fire

SMART fire
INTER fire
HOLZ MASTER

* Selected models

economics

ecology

safety

comfort & modernity

www.hkslazar.com

Economy

Lambda sensor

Advanced logarithms control the boiler operation, adapting it to current conditions ensuring the highest efficiency in the full output range. Guaranteeing savings, a clean heat exchanger and simple adjustment.

Weather control

The advanced controller manages the boiler and functions, including pumps, valves, buffer tank, and additional backup boiler. This assures all the devices form an integrated system which ensures optimal efficiency.

Ecology

BAFA / MCS

The boilers are on the German BAFA and English MCS lists due to their low emission and high efficiency.

Class 5

The highest class foreseen in the EN 303-5 standard, boilers are class five with the lowest emission and highest efficiency characteristics.
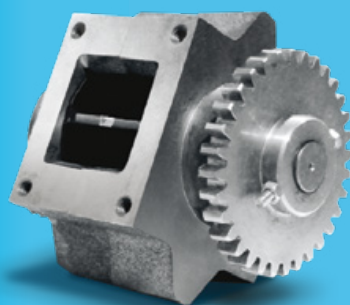
EcoDesign

The Ecodesign 2020 Directive defines restrictive requirements for seasonal emissions and efficiency which is reflected in the real use of the boiler throughout the heating season.

Safety

Stainless steel

Highest class of materials are used in production of the burner which guarantees its long-term durability and excellent operation.

Cast iron rotary valve

This eliminates the possible ignition of the fuel in the pellet store.

Condensation

The technique used for heat condensation not only uses the measurable heat that arises during fuel combustion, but also the steam in flue gases. InterFire condensing boilers are able to capture the heat contained in flue gases almost entirely and transform into useable heat.

Touch panel

The advanced controller with an intuitive interface touch panel, weather adjustment, and a weekly program, helps to adjust the boiler to individual needs.

Mechanical burner cleaning

The burner is systematically cleaned automatically which guarantees optimal combustion conditions and therefore reduces user input.

Compact construction

Small dimensions allows the boiler to fit in most boiler rooms.

Automatic ignition, automatic burner cleaning, automatic heat exchanger cleaning.

Limited user input, optimal combustion, high efficiency and measurable savings are assured by the automation of HKS Lazar boilers.

Automatic ash removal

Automatic de-ashing system removes the ash from the boiler to the external container where it is compressed. This reduces the amount of times, the user removes the ash. (Approximately every 2 months).

Automatic cleaning

Turbulators located in the heat exchanger clean the surface, increasing boiler efficiency. In addition, they create exhaust turbulence assuring heat exchanger efficiency.

Vacuum

Thanks to a pneumatic pellet transport system VACUUM, pellets are automatically fed from a larger fuel container to the boiler, which reduces user input.

Equipped with hydraulics

The boiler is equipped with a hydraulic kit so its installation time is reduced.

Remote access

Through the internal or external econet24.com server you can see the current parameters of boiler and hydraulic system, change most settings (user and service), have insight into the history of the most important parameters and receive email messages with alerts. The controller can be connected by cable or wirelessly.

Comfort & modernity

pellet boilers

SMART FIRE 11/15/22/31/41

Highly efficient pellet boiler with automatic operation, modern and convenient regulation

APPROVED PRODUCT
HETAS MCS

5 class
Boiler class ahdering to EN 303-5:2012 norms
Boiler class ahdering to EN 303-5:2012 norms

Bundesamt für Wirtschaft und Ausfuhrkontrolle
BAFA

ecodesign

Economy

Ecology

Safety

Comfort & modernity

PARAMETER:	UNIT:	SF 11:	SF 15:	SF 22:	SF 31	SF 41:
boiler class	-	5	5	5	5	5
heat efficiency	%	91,2%	92,0%	90,6%	92,5%	91,0%
nominal output	kW	11	15	22	31	41
output range	kW	3,3 ÷ 11,0	4,5 ÷ 15,0	6,6 ÷ 22,0	9,3 ÷ 31,0	12,3 ÷ 41,0
width (fuel container type - width)						
150 L	mm	985	985	985	1115	1115
240 L	mm	1180	1180	1180	1310	1310
440 L	mm	1345	1345	1345	1475	1475
height	mm	1490	1490	1490	1490	1490
depth (fuel container type - depth)						
150 L	mm	760	760	760	1015	1015
240 L	mm	805	805	805	1015	1015
440 L	mm	1015	1015	1015	1015	1015
water capacity	dm^3	37	37	49	102	102
internal / external flue diameter	mm	100 / 93	120 / 110	120 / 110	160 / 150	160 / 150
recommended chimney diameter	mm	100 ÷ 110	120 ÷ 130	120 ÷ 130	160	160
required chimney draft	Pa / mbar	1÷8/0,01÷0,08	1÷8/0,01÷0,08	1÷8/0,01÷0,08	5÷15/0,05÷0,15	5÷15/0,05÷0,15
flow and return connections	cal	1	1	1	1	1
max. operational pressure* - depending on model	bar	1,5 / 3,0*	1,5 / 3,0*	1,5 / 3,0*	1,5 / 3,0*	1,5 / 3,0*
average flue gas temperature at max. power	°C	105	120	130	100	110
average flue gas temperature at min. power	°C	50	55	60	60	65
max. recommended flue gas temperature	°C	180	180	180	180	180
maximum flue gas temperature	°C	85	85	85	85	85
recommended boiler temperature	°C	65 ÷ 80	65 ÷ 80	65 ÷ 80	65 ÷ 80	65 ÷ 80
minimum return water temperature	°C	55	55	55	55	55
Integrated pellet hopper capacity	dm^3	150, 240, 440	150, 240, 440	150, 240, 440	150, 240, 440	150, 240, 440

* SF 11, 15, SF 22

PELLET HOPPER

ROTARY SAFETY VALVE
Protects the fuel in the container from ignition.

FUEL FEEDER

AUTOMATIC IGNITER
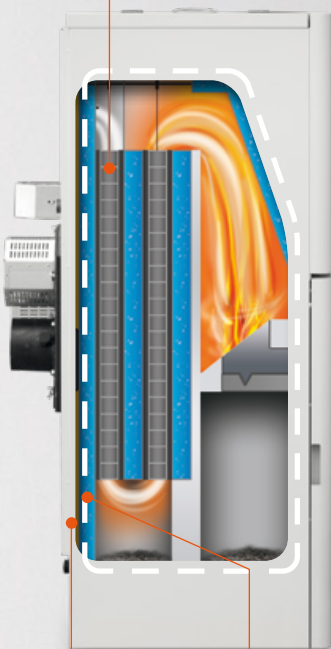
AUTOMATIC BURNER CLEANING

AUTOMATIC
ASH REMOVAL
(OPTIONAL)

STAINLESS STEEL PELLET BURNER

MANUAL HEAT EXCHANGER CLEANING /
AUTO-MATIC HEAT EXCHANGER CLEANING
(OPTIONAL)

CHIMNEY
FAN

HYDRAULIC KIT WITH
THERMOSTATIC VALVE

92-90%
heat
efficiency!

INSULATION

WATER
JACKET

HKS LAZAR Spółka z o. o.

MODEL ID:	SF 11	SF 15	SF 22	SF 31	SF 41
ENERGY EFFICIENCY CLASS:	A+	A+	A+	A+	A+
RATED HEAT OUTPUT:	11 kW	15 kW	22 kW	31 kW	41 kW
ENERGY EFFICIENCY RATIO:	119	118	116	118	119
SEASONAL SPACE HEATING ENERGY EFFICIENCY:	81%	80%	78%	80%	81%

Special precautions for assembly, installation or maintenance of the solid fuel boiler: All installation, installation and maintenance requirements contained in the device's instruction manual must be observed.

In accordance with
the regulation
UE 2015/1187

HKS lazar®

The boiler diagram is for illustrative purposes only.

pellet boilers

SMART FIRE 11/15

Highly efficient pellet boiler with automatic operation, modern and comfortable regulation

APPROVED PRODUCT *

HETAS   MCS

Boiler class ahdering to EN 303-5:2012 norms
5 class
Boiler class ahdering to EN 303-5:2012 norms

Ausfuhrkontrolle Bundesamt für Wirtschaft und
BAFA

ecodesign

Economy

Ecology

Safety

Comfort & modernity

PARAMETER:	UNIT:	SF 11:	SF 15:
boiler class	-	5	5
heat efficiency	%	91,2%	92,0%
nominal output	kW	11	15
output range	kW	3,3 ÷ 11,0	4,5 ÷ 15,0
width	mm	795	795
height	mm	1150 + 455(top extension)	1150 + 455(top extension)
depth	mm	740	740
water capacity	dm^3	37	37
internal / external flue diameter	mm	100 / 93	120 / 110
recommended chimney diameter	mm	100 ÷ 110	120 ÷ 130
required chimney draft	Pa / mbar	1÷8 / 0,01÷0,08	1÷8 / 0,01÷0,08
flow and return connections	cal	1	1
max. operational pressure* – depending on model	bar	1,5 / 3,0*	1,5 / 3,0*
average flue gas temperature at max. power	°C	105	120
average flue gas temperature at min. power max.	°C	50	55
recommended flue gas temperature	°C	180	180
maximum boiler temperature	°C	85	85
recommended boiler temperature	°C	65 ÷ 80	65 ÷ 80
minimum return water temperature	°C	55	55
integrated pellet hopper capacity	dm^3	50 + top extension (90 or 165)	50 + top extension (90 or 165)
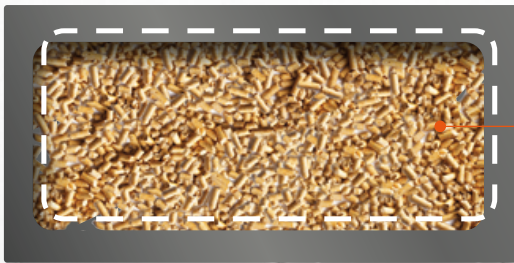
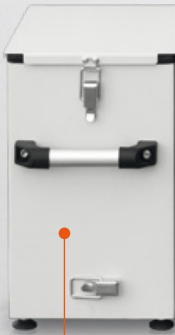PELLET HOPPER TOP EXTENSION (OPTIONAL)

PELLET HOPPER

FUEL FEEDER

ROTARY SAFETY VALVE

Protects the fuel in the container from ignition.
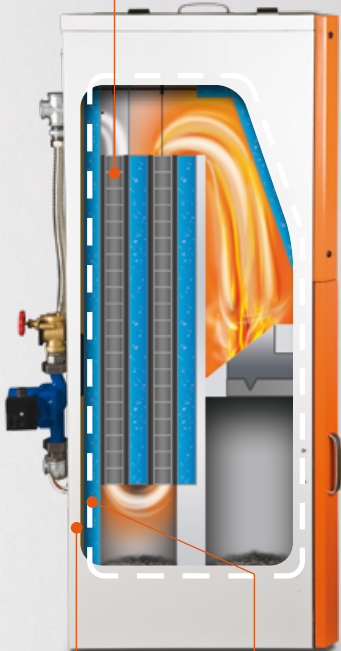
AUTOMATIC IGNITER

AUTOMATIC BURNER CLEANING

AUTOMATIC ASH
REMOVAL (OPTIONAL)

STAINLESS STEEL
PELLET BURNER

MANUAL HEAT EXCHANGER CLEANING /
AUTOMATIC HEAT EXCHANGER
CLEANING (OPTIONAL)

FUEL HOPPER TOP EXTENSION 90 L

FUEL HOPPER TOP EXTENSION 165 L

91-92%
heat efficiency!

INSULATION

WATER
JACKET

The boiler diagram is for illustrative purposes only.

HKS lazar®

SMART FIRE 11/130

Highly efficient pellet boiler with a compact and modern design

APPROVED PRODUCT *

HETAS · MCS

Boiler class ahdering to EN 303-5:2012 norms

class 5

Boiler class ahdering to EN 303-5:2012 norms

Bundesamt für Ausfuhrkontrolle und Wirtschaft
BAFA

ecodesign

Economy

Ecology

Safety

Comfort & modernity

PARAMETER:	UNIT:	SF 11/130:
boiler class	-	5
heat efficiency	%	91,2%
nominal output	kW	11
output range	kW	3,3 ÷ 11,0
width	mm	580
height	mm	1620
depth	mm	925
water capacity	dm^3	37
internal / external flue diameter	mm	100 / 93
recommended chimney diameter	mm	100 ÷ 110
required chimney draft	Pa / mbar	1 ÷ 8 / 0,01 ÷ 0,08
flow and return connections	cal	1
maximum operational pressure* – depending on model	bar	1,5 / 3,0*
average flue gas temperature at maximum power	ºC	105
average flue gas temperature at minimum power	ºC	50
maximum recommended flue gas temperature	ºC	180
maximum boiler temperature	ºC	85
recommended boiler temperature	ºC	65 ÷ 80
minimum return water temperature	ºC	55
Integrated pellet hopper capacity	dm^3	130
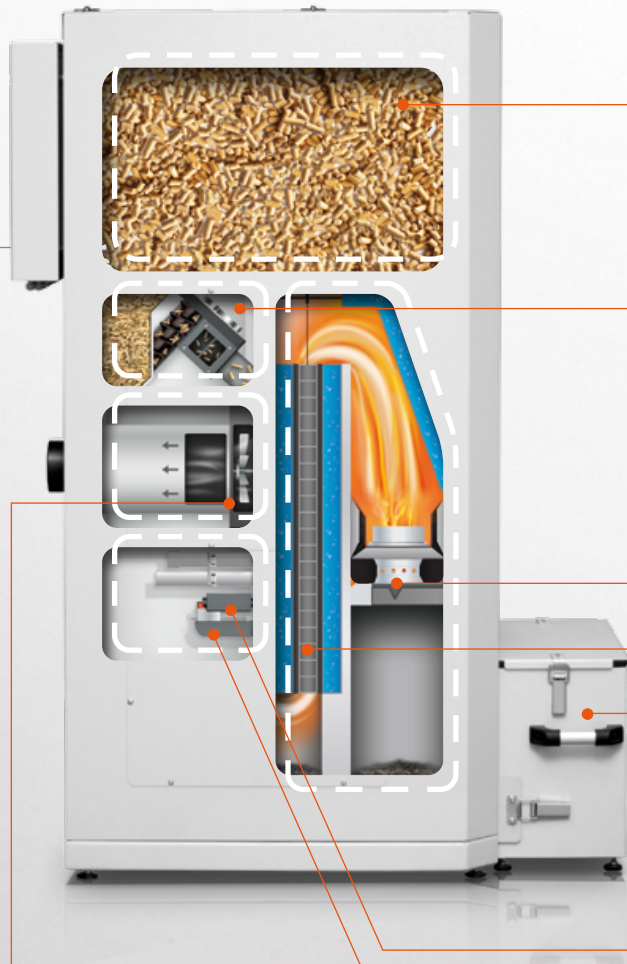
PELLET HOPPER

ROTARY SAFETY VALVE
Protects the fuel in the container from ignition.

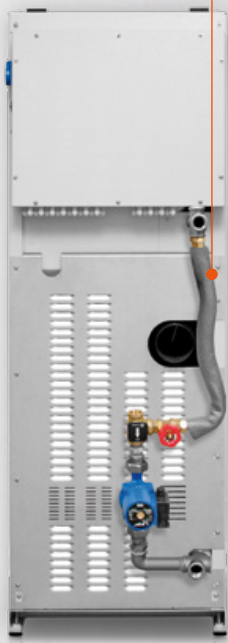**STAINLESS STEEL PELLET BURNER**

AUTOMATIC HEAT EXCHANGE CLEANING

AUTOMATIC ASH REMOVAL (OPTIONAL)

AUTOMATIC IGNITER

CHIMNEY FAN

AUTOMATIC BURNER CLEANER

HYDRAULIC KIT WITH THERMOSTATIC VALVE

SMART fire

91.2%
heat efficiency!

HKS LAZAR Spółka z o. o.

	MODEL ID:	**SF 11**
ENERGY EFFICIENCY CLASS:		A+
RATED HEAT OUTPUT:		11 kW
ENERGY EFFICIENCY RATIO:		119
SEASONAL SPACE HEATING ENERGY EFFICIENCY:		81%

Special precautions for assembly, installation or maintenance of the solid fuel boiler: All installation, installation and maintenance requirements contained in the device's instruction manual must be observed.

In accordance with the regulation UE 2015/1187

HKS lazar®

The boiler diagram is for illustrative purposes only.

pellet boilers

INTER FIRE 11

Stainless steel condensing pellet boiler with automatic cleaning and lambda sensor

104,4% condensation efficiency

ecodesign

Condensation

5 class
Boiler class ahdering to EN 303-5:2012 norms

INTER fire condens

Save pellets!
thanks to condensation!

Economy

Ecology

Safety

Comfort & modernity

PARAMETER:	UNIT:	IF 11:
boiler class	-	5
condensation efficiency	%	104,4%
nominal output	kW	12
output range	kW	3,6 ÷ 12,0
width (fuel container type - width)		
150 L	mm	1040
240 L	mm	1250
440 L	mm	1480
height	mm	1480
depth (fuel container type - depth)		
150 L	mm	885
240 L	mm	885
440 L	mm	885
water capacity	dm^3	90
internal flue diameter	mm	125
recommended chimney diameter	mm	120 ÷ 130
required chimney draft	Pa / mbar	1 ÷ 8 / 0,01 ÷ 0,08
flow and return connections	cal	1
maximum operating pressure	bar	3,0
average flue gas temperature at maximum power	ºC	60
average flue gas temperature at minimum power	ºC	30
maximum boiler temperature	ºC	85
recommended boiler temperature – * as a condensing boiler	ºC	25 ÷ 45
minimum return water temperature	ºC	5
integrated pellet store capacity	dm^3	150, 240, 440

CONDENSATION EFFICIENCY

Low exhaust temperature, ideal burning parameters with lambda sensor and condensation allows the InterFire boiler achieve 104.4% efficiency.

CONDENSATION

The technique used for heat condensation not only uses the measurable heat that arises during fuel combustion, but also the steam in flue gases. InterFire condensing boilers are able to capture the heat contained in flue gases almost entirely and transform and use for heating.

WIDE RANGE OF OUTPUT TEMPERATURES 20-85 °C

Stainless steel heat exchanger constructed with the HCC system (Heat-Cold Cassette) allows the boiler to operate at very low output temperature, even from 28 deg. C. Thanks to this the InterFire boiler will work well in new construction sites and in low temperature heating systems, such as underfloor heating.

SIMPLE INSTALLATION

The InterFire boiler does not require any return temperature protection from low temperature corrosion, thanks to this the installation is simpler and cheaper than traditional solid fuel boiler installations.

STAINLESS STEEL EXCHANGER

The InterFire boiler is built with high quality stainless steel which extends its lifetime.

AUTOMATIC ASH REMOVAL

The automatic ash removal system removes the ash from the boiler to the container where it is compressed. Thus, the user removes the ashes once every few months.

104,4%
condensation efficiency!

HKS LAZAR Spółka z o. o.
Parameters for the
non-condensing mode

MODEL ID: IF11

ENERGY EFFICIENCY CLASS:	A+
RATED HEAT OUTPUT:	10 kW
ENERGY EFFICIENCY RATIO:	118
SEASONAL SPACE HEATING ENERGY EFFICIENCY:	80%

Special precautions for assembly, installation or maintenance of the solid fuel boiler: All installation, installation and maintenance requirements contained in the device's instruction manual must be observed.

In accordance with
the regulation
UE 2015/1187

HKS lazar

HOLZ MASTER

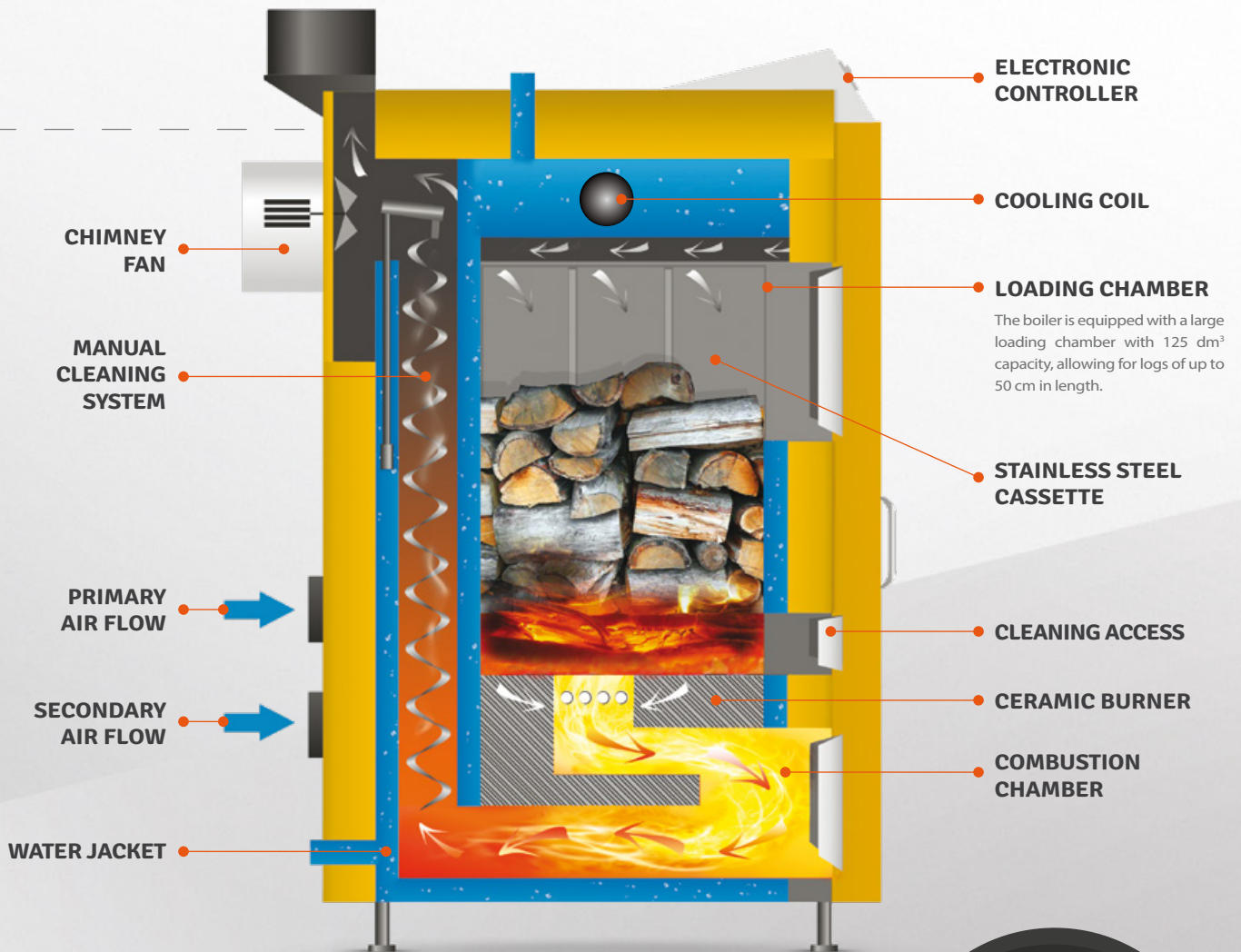## Highly efficient wood boiler with modern and convenient adjustments

Boiler class ahdering to EN 303-5:2012 norms

5 class

ecodesign

Economy

Ecology

Safety

Comfort & modernity

PARAMETER:	UNIT:	HM 20:
boiler class	-	5
heat efficiency	%	90,6 %
nominal output	kW	20
fuel consumption at nominal output	kg / h	~ 5,5
width	mm	770
height	mm	1565
depth	mm	1075
internal / external flue diameter	mm	160 / 150
flow and return connections	cal	1¼
maximum operating pressure* – depends on model	bar	1,5 / 3,0*
required chimney draft	Pa	5 ÷ 15 / 0,05 ÷ 0,15
maximum flue gas temperature	°C	80
average flue gas temperature at nominal output	°C	140
recommended boiler temperature	°C	70 ÷ 80
noise level	dB	under 75
water capacity	dm³	132

ELECTRONIC
CONTROLLER

COOLING COIL

LOADING CHAMBER

The boiler is equipped with a large
loading chamber with 125 dm³
capacity, allowing for logs of up to
50 cm in length.

STAINLESS STEEL
CASSETTE

CHIMNEY
FAN

MANUAL
CLEANING
SYSTEM

PRIMARY
AIR FLOW

SECONDARY
AIR FLOW

WATER JACKET

CLEANING ACCESS

CERAMIC BURNER

COMBUSTION
CHAMBER

90,6%
heat
efficiency!

HKS LAZAR Spółka z o. o.

MODEL ID: **HM20**

ENERGY EFFICIENCY CLASS:	A+
RATED HEAT OUTPUT:	20 kW
ENERGY EFFICIENCY RATIO:	115
SEASONAL SPACE HEATING ENERGY EFFICIENCY:	78%

Special precautions for assembly, installation
or maintenance of the solid fuel boiler: All ins-
tallation, installation and maintenance requi-
rements contained in the device's instruction
manual must be observed.

In accordance with
the regulation
UE 2015/1187

HKS lazar®

The boiler diagram is for illustrative purposes only.

Pellet transport and storage systems

VACUUM

PELLET TRANSPORT SYSTEM - VACUUM

Pneumatic pellet feeder from a larger container to the SmartFire boiler. Includes: motor, mount, independent regulator and housing.
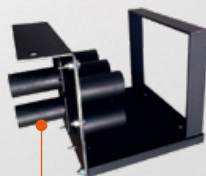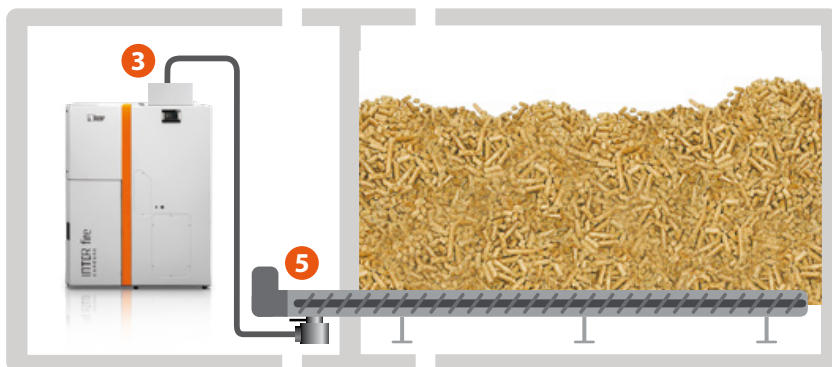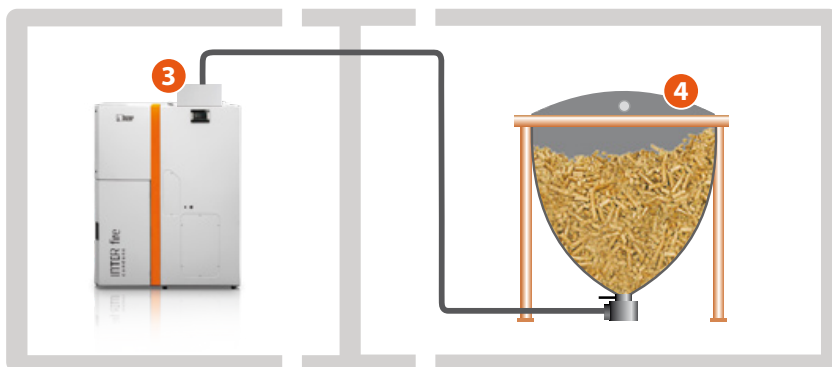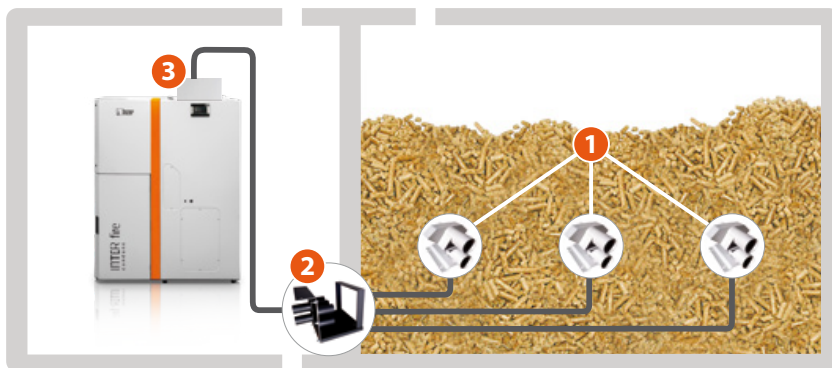
DISTRIBUTOR

This device enables the installation of several feeder sensors in the larger pellet store, making it easier to use the full capacity.
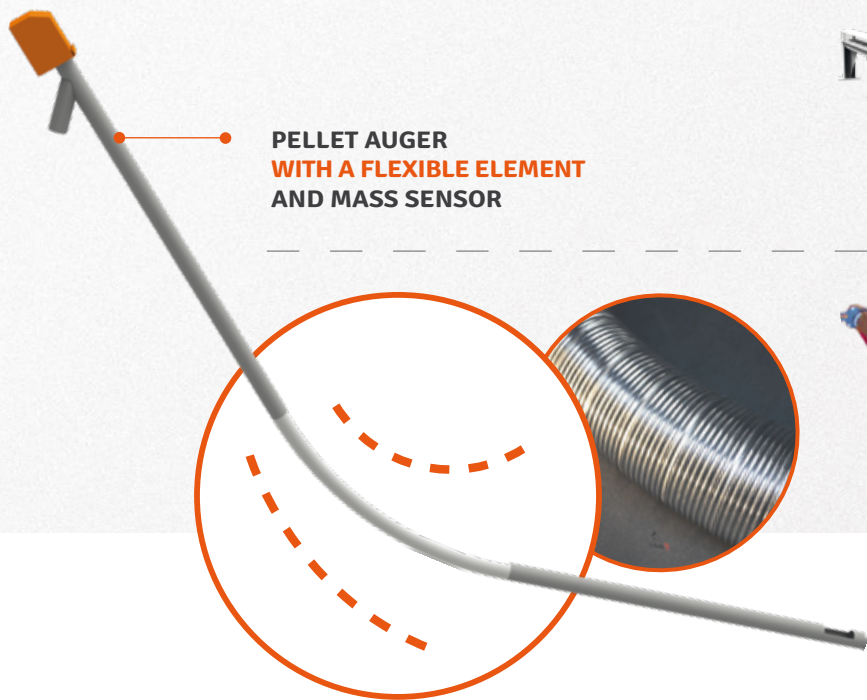
SUCTION PROBE

This device is installed in the larger pellet pellet store and is used for smooth fuel feeding.

DESCRIPTION:

1. Suction probe
2. Distributor
3. Vacuum
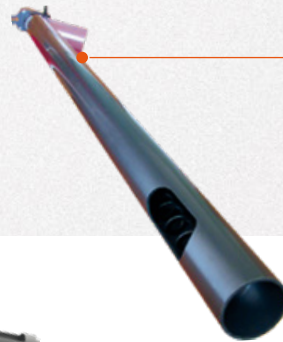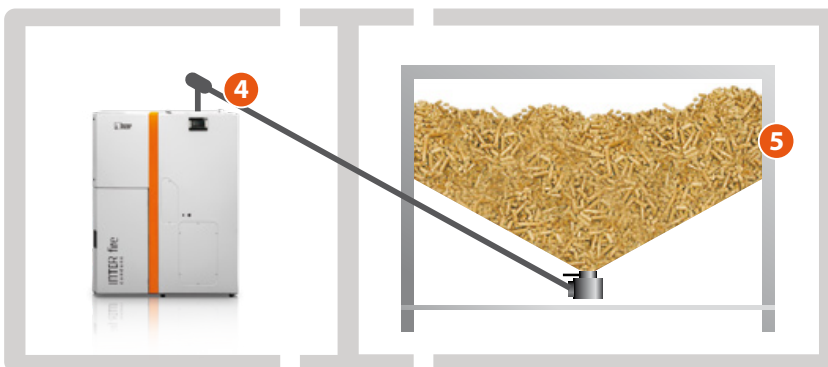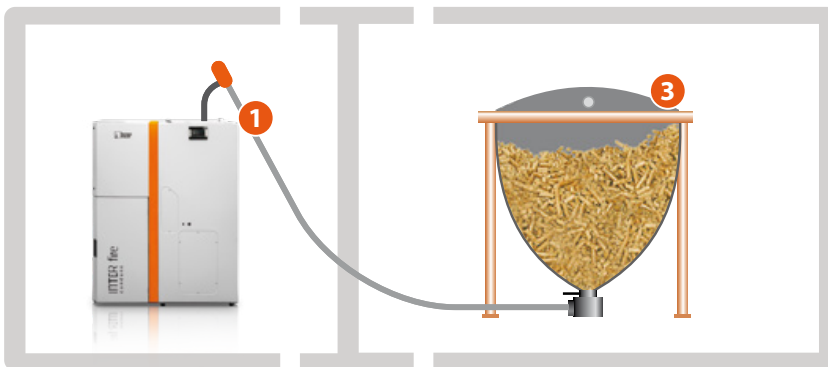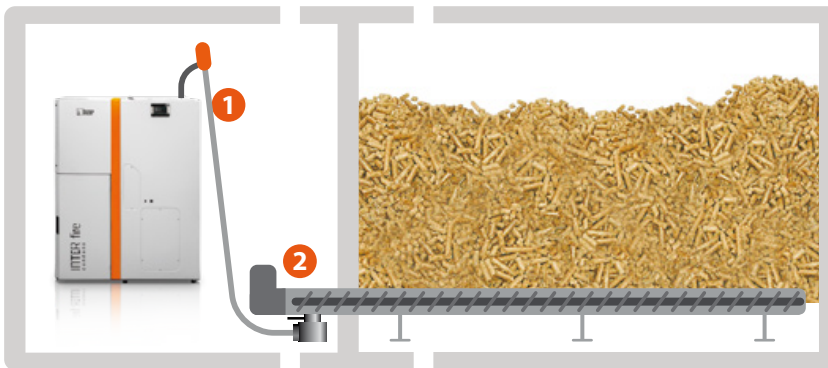4. Textile silo
5. Horizontal screw auger

Pellet auger

PELLET AUGER
WITH A FLEXIBLE ELEMENT
AND MASS SENSOR

SELF INSTALL
SCREW AUGER

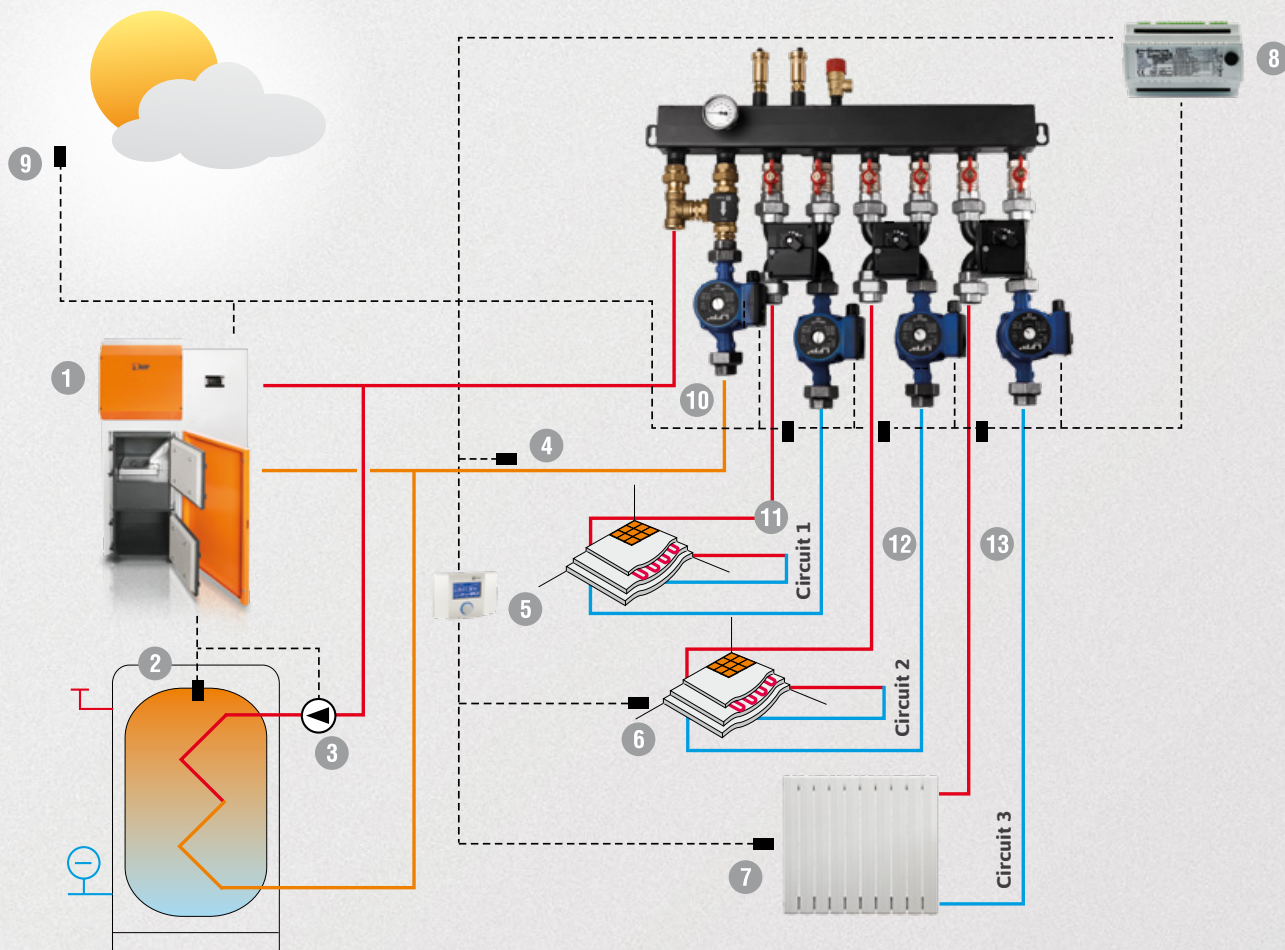PELLET AUGER
WITH MASS
SENSOR

OPTIONS:

1. Flexible screw auger
2. Horizontal screw auger
3. Textile silo
4. Straight screw auger
5. Metal pellet hopper

Three heating circuits diagram
DISTRIBUTOR 1-3 CIRCULATION.

DESCRIPTION:

1. Boiler
2. Usable warm water temperature sensor
3. Usable warm water circulation pump
4. Return temperature sensor
5. Room panel with circulation sensor 1
6. Room sensor for circulation 2
7. Room sensor for circulation 3
8. Module 800 S
9. External temperature sensor
10. Boiler circuit, pump, TV valve
11. Circuit 1 (pump, 4D valve with actuator, temperature sensor)
12. Circuit 2 (pump, 4D valve with actuator, temperature sensor)
13. Circuit 3 (pump, 4D valve with actuator, temperature sensor)

The hydraulic diagram shown does not replace the installation design and is for illustrative purposes only.

HKS **lazar** ®

Standard / Optional equipment

	PELLET HOPPER ON THE TOP	PELLET HOPPER ON THE SIDE						
	SF 11/15 COMPACT	SF 11/130	SF 11	SF 15	SF 22	SF 31	SF 41	IF 11	HM 20
TOUCH PANEL	O	S	S	S	S	S	S	S	-
WEATHER CONTROL (SMARTFIRE 2 CIRCUITS, HOLZMASTER 1 CIRCUIT)	S	S	S	S	S	S	S	S	S
SENSORS (EXTERNAL, DOMESTIC HOT WATER, CIRCUITS, BOILER)	S	S	S	S	S	S	S	S	S
2 CIRCUITS ADDITIONAL	O	O	O	O	O	O	O	O	O
BUFFER CONTROL	S	S	S	S	S	S	S	S	S
INTERNET MODULE	O/S	O/S	O/S	O/S	O/S	O/S	O/S	O/S	O/S
LAMBDA SENSOR	O/S	O/S	O/S	O/S	O/S	O/S	O/S	S	-
AUTOMATIC HEAT EXCHANGER CLEANING	O/S	O/S	O/S	O/S	O/S	O/S	O/S	S	-
SAFETY VALVE	S	S	S	S	S	S	S	S	-
HYDRAULIC KIT	O/S	O/S	O/S	O/S	O/S	O/S	O/S	- *	O/S
VACUUM	-	O	O	O	O	O	O	O	-
STAINLESS STEEL BURNER	S	S	S	S	S	S	S	S	ceramic
AUTOMATIC BURNER CLEANING	S	S	S	S	S	S	S	S	-
HEAT EXCHANER TURBULATORS	S	S	S	S	S	S	S		S
OPERATIONAL PRESSURE 1,5 BAR	S	S	S	S	S	S	S	S	S
OPERATIONAL PRESSURE 3 BAR	O/S	O/S	O/S	O/S	O/S	O/S	O/S	O/S	O/S
AUTOMATIC ASH REMOVAL	O	O	O	O	O	O	O	S	-
5 YEARS WARRANTY (FOR TIGHTNESS OF THE EXCHANGER)	S	S	S	S	S	S	S	S	S

S standard / O optional - added cost / O/S ask your distributor / - not available / * not required

HKS lazar ®

MODERN HEATING APPLIANCES

Panasonic TM-1800WGIII

Choose the
highest
quality!

NEWEST TECHNOLOGIES

HKS LAZAR has acquired a top class welding robot, from Panasonic equipped with a number of unique and innovative solutions. The „intelligent" control system of GMA welding is equipped with unique adaptation systems that are part of the robot's main control system. This means that the welder robot not only just executes a program stored in memory with a specified repeatability, but also responds to changes and interruptions in its work area and makes adjustments. Thanks to this the welding is at the highest level.

HIGHEST QUALITY COMPONENTS

In production we use only the best suppliers who provide us with the highest quality components. We use **Rauschert** ceramic igniters which have a recorded lifespan of up to 100,000 ignites. Fan producers **Ziehl-Abegg** and **AACO** are the leaders in advanced ventilation systems. Additionally, the boiler control system manufacturer **Plum** is the best manufacturer in the industry with accredited laboratories and their own certified production. The Swiss company **Belimo** provides us with the highest quality linear actuators used in burner cleaning systems. Installed in our boilers are the best **ABM Greiffenberger's** energy-efficient and dependable geared motors on the market.

BELIMO   AACO   ABM Greiffenberger
Wir treiben Ideen an

PLUM   ZIEHL-ABEGG

Rauschert

www.hkslazar.com

HKS lazar®

Our boilers
meet the latest
environmental standards

HKS lazar

MANUFACTURER

HKS LAZAR Spółka z o. o.
44-335 Jastrzębie-Zdrój
ul. Wodzisławska 15B POLAND
+48 32 47 57 123
+48 32 47 29 578
+48 32 47 51 960

DISTRIBUTOR

www.hkslazar.com

www.hkslazar.de

www.hkslazar.cz

www.hkslazar.pl

www.hkslazar.eu

www.hkslazar.it

www.hkslazar.fr

www.hkslazar.es

www.hkslazar.co.uk

e-mail: office@hkslazar.com