HKS lazar®

PELLET AND WOOD BURNING BOILERS

modern heating equipment

economy

ecology

safety

comfort & modernity

ISH

www.hkslazar.com

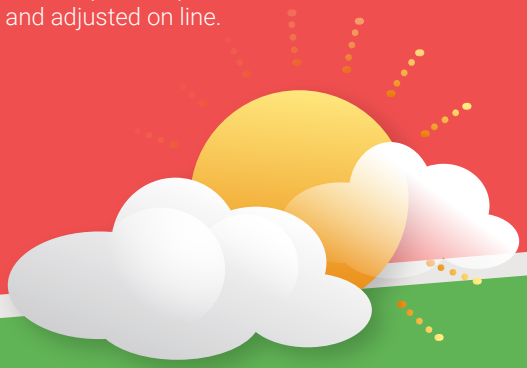
Economy

Lambda probe

Advanced logarithm controls the boiler according to present conditions which provides the best efficiency constantly. It guarantees considerable savings, cleaner heat exchanger and simple regulation.

Weather regulation

Advanced regulator controls the operation of the boiler and the entire boiler room system including pumps, valves, actuators, buffers and the boiler. This way all the devices are integrated in a coherent system where optimal operation conditions are set and adjusted on line.



Ecology

BAFA

Boiler is on German BAFA list thanks to low emission and high efficiency.

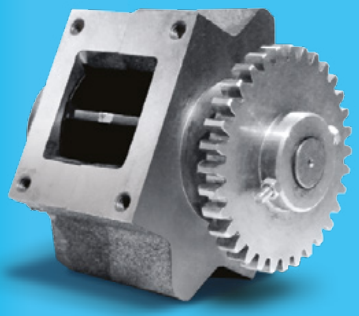
Environmentally friendly

All boilers are tested in an EU accredited laboratory, reached the highest emissions requirements.

Safety

Rotary valve

The best protection against fire in the pellet tank



Stainless steel

The top-class materials used in the burner guarantee long-lasting exploitation and combined with its special structure, they provide optimum conditions for biomass combustion in the form of pellets.

Comfort and modernity

Touch panel

Advanced regulation with touch panel, weather regulation, weekly schedule, intuitive, simple and clear. Helps to customize boilers work to individual needs.

Mechanical burner cleaning

The burner is systematically subjected to automatic cleaning which guarantees optimum conditions for fuel combustion and releases the User from this obligation.

Hydraulic equipment

Boiler is equiped with hydraulic kit so installation is quick and does not take place in the boiler room.

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

User comfort, perfect burning, hight efficiency and considerable savings are guaranteed by automation of handling.

Automatic cleaning

Stainless-steel springs placed in combustion tubes clean the exchanger, ensuring its high effectiveness. Moreover, they put the fumes into whirls which increases the level of heat exchange.

Vacum

Thanks to the VACUM pneumatic fuel transportation device, the boiler will charge the pellet from the silo on its own, making the operation even more simple.

Compact construction

Small size makes that the boiler will fit in most boiler rooms.

Internet

Regulation through internal network or external server www.econet24.com, WiFi wireless, view of present boiler parametres and hydraulic scheme, possibility of view and changing of most settings (user and service), recording of most important parametres and alarms, e-mail alarm information.

pellet boilers

SMART FIRE 11

Highly efficient pellet boiler with a compact construction and modern design.

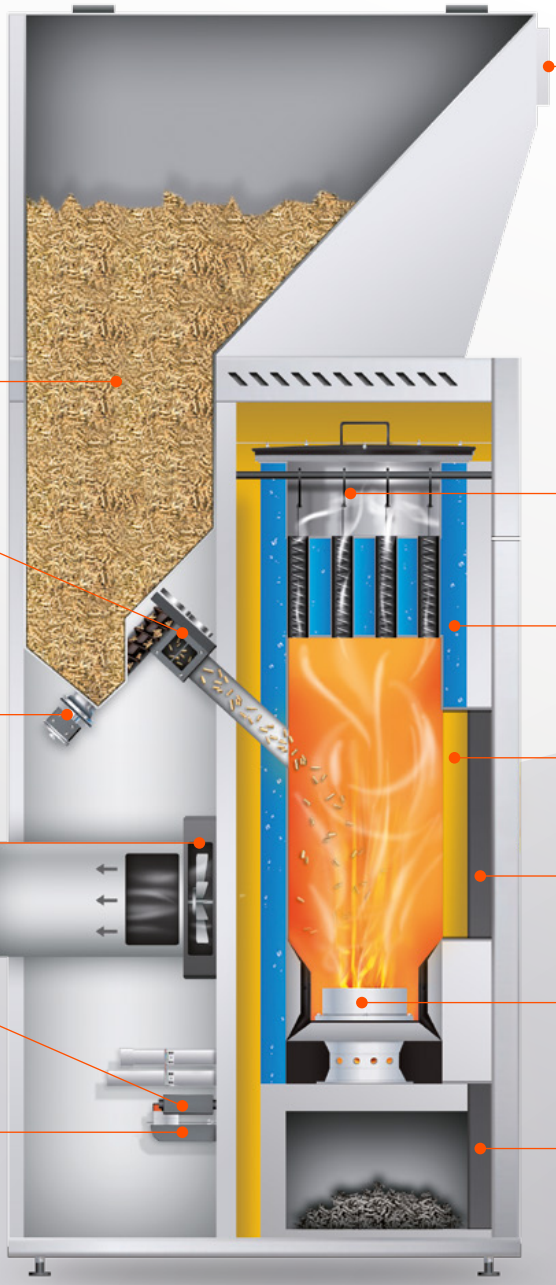
PARAMETER:	UNIT:	SF 11:
heating efficiency	%	91,1%
nominal output	kW	10,2
range of output	kW	3,0 ÷ 10,2
width (fuel container type – width)	mm	165 L - 535
height (fuel container type – height)	mm	165 L - 1660
depth (fuel container type – depth)	mm	165 L - 845
water volume	dm^3	34
exhaust outlet diameter ext./int.	mm	101 / 93
recommended chimney diameter	mm	100 ÷ 110
required chimney draught	Pa / mbar	1 ÷ 5 / 0,01 ÷ 0,05
supply and return connectors	inch	1
top operation water pressure* - depending on boiler version	bar	1,5 / 3,0*
average exhaust temperature at maximum output	°C	125
average exhaust temperature at minimum output	°C	60
maximum recommended exhaust temperature	°C	180
maximum temperature of the boiler	°C	85
recommended temperature of the boiler	°C	65 ÷ 80
minimum temperature of the returning water	°C	55
fuel container capacity	dm^3	165

Economy

Ecology

Safety

Comfort & Modernity



91,1%
heating efficiency

HKS lazar®

pellet boilers

SMART FIRE 15/22/41

Highly efficient pellet boiler with automatic handling and a comfortable and modern regulation.

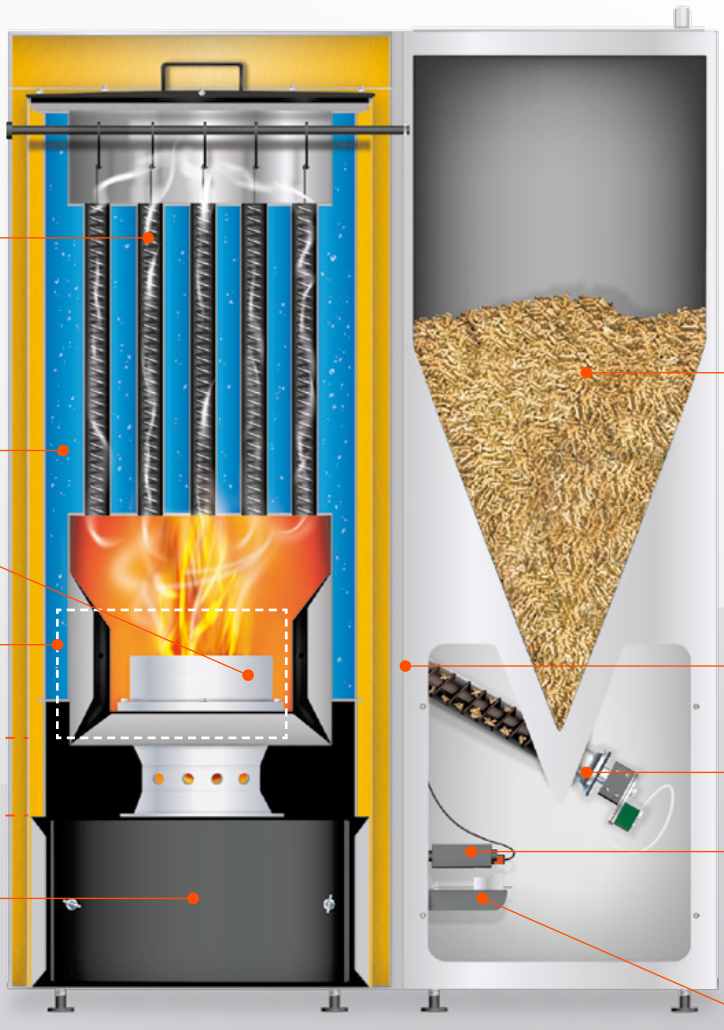
Economy

Ecology

Safety

Comfort & Modernity

PARAMETER:	UNIT:	SF 15:	SF 22:	SF 41:
heating efficiency	%	92,0%	90,6%	90,0 %
nominal output	kW	15	22	41
range of output	kW	4,5 ÷ 15	6,6 ÷ 22	12 ÷ 41
width (fuel container type – width)				
150 L	mm	860	860	1090
240 L	mm	1040	1040	1270
470 L	mm	1320	1320	1550
height	mm	1480	1480	1480
depth (fuel container type – depth)				
150 L	mm	740	740	800
240 L	mm	740	740	800
470 L	mm	835	835	835
water volume	dm^3	36	49	110
exhaust outlet diameter ext./int.	mm	120 / 110	120 / 110	160 / 150
recommended chimney diameter	mm	120 ÷ 130	120 ÷ 130	160
required chimney draught	Pa / mbar	1 ÷ 8 / 0,01 ÷ 0,08	1 ÷ 8 / 0,01 ÷ 0,08	1 ÷ 5 / 0,01 ÷ 0,05
supply and return connectors	inch	1	1	1
top operation water pressure* - depending on boiler version	bar	1,5 / 3,0*	1,5 / 3,0*	1,5 / 3,0*
average exhaust temperature at maximum output	°C	120	130	110
average exhaust temperature at minimum output	°C	55	60	65
maximum recommended exhaust temperature	°C	180	180	180
maximum temperature of the boiler	°C	85	85	85
recommended temperature of the boiler	°C	65 ÷ 80	65 ÷ 80	65 ÷ 80
minimum temperature of the returning water	°C	55	55	55
fuel container capacity	dm^3	150, 240, 470	150, 240, 470	150, 240, 470



92-90%
heating efficiency

HKS lazar®

pellet boilers

SMART FIRE 69/81

Highly efficient pellet boiler with automatic handling and a comfortable and modern regulation.

Economy

Ecology

Safety

Comfort & Modernity

PARAMETER:	UNIT:	SF 69:	SF 81:
heating efficiency	%	92,5%	91,5%
nominal output	kW	69	81
range of output	kW	20,7 ÷ 69,0	24,3 ÷ 81,0
width (fuel container type – width)	mm	300 L - 1300	300 L - 1300
height (fuel container type – height)	mm	300 L - 1980	300 L - 1980
depth (fuel container type – depth)	mm	300 L - 1560	300 L - 1560
water volume	dm^3	290	285
exhaust outlet diameter ext./int.	mm	200 / 190	200 / 190
recommended chimney diameter	mm	200	200
required chimney draught	Pa / mbar	10 ÷ 20 / 0,1 ÷ 0,2	10 ÷ 20 / 0,1 ÷ 0,2
supply and return connectors	inch	1¼	1¼
top operation water pressure* - depending on boiler version	bar	1,5 / 3,0*	1,5 / 3,0*
average exhaust temperature at maximum output	°C	95	110
average exhaust temperature at minimum output	°C	70	70
maximum recommended exhaust temperature	°C	180	180
maximum temperature of the boiler	°C	85	85
recommended temperature of the boiler	°C	65 ÷ 80	65 ÷ 80
minimum temperature of the returning water	°C	55	55
fuel container capacity	dm^3	300	300

92,5-91,5%
heating efficiency

HKS lazar®

wood-fired boilers

HOLZ MASTER

Highly efficient boiler burning wood logs with modern and comfort regulation.

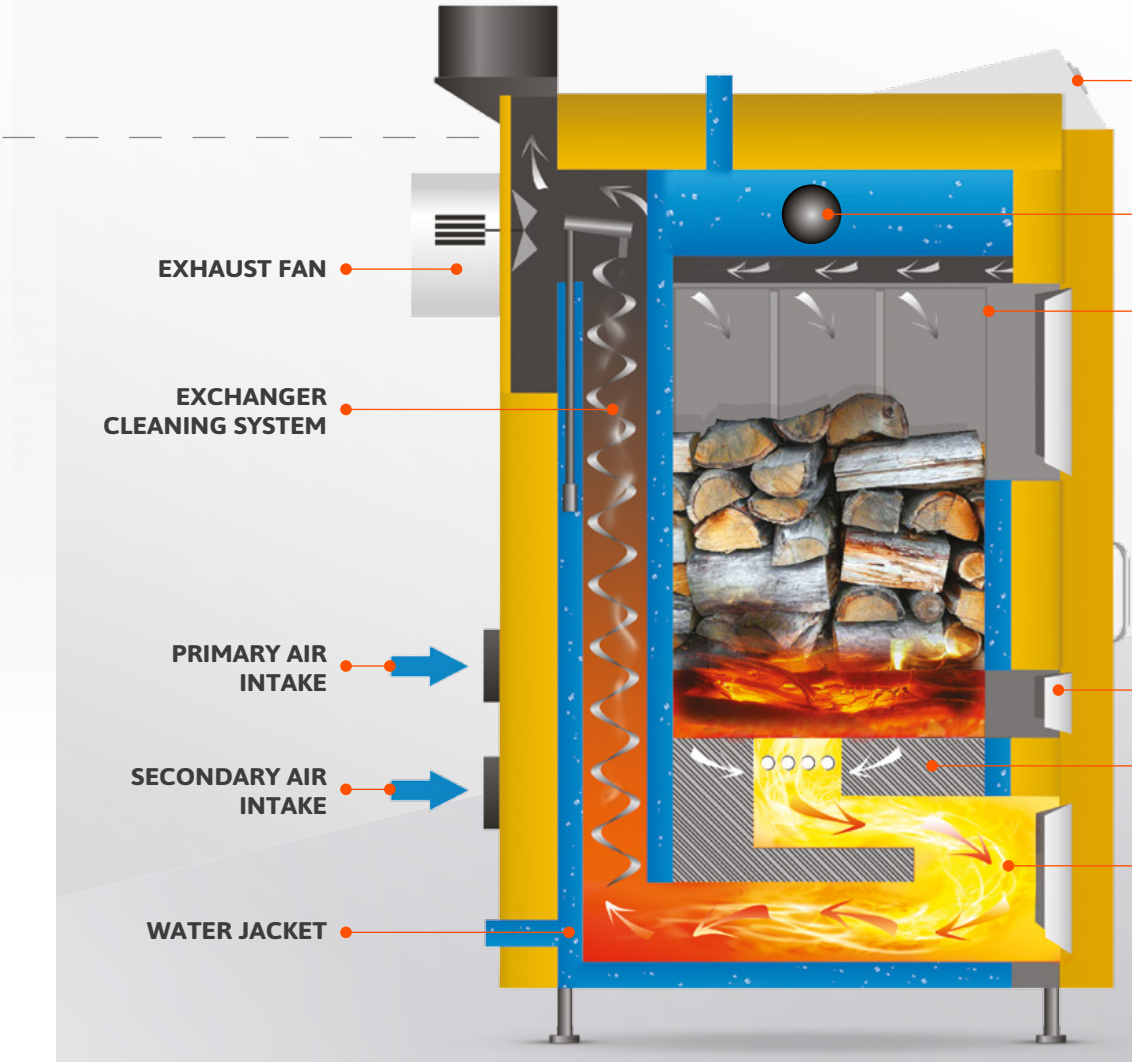
Economy

Ecology

Safety

Comfort & Modernity

PARAMETER:	UNIT:	HM 20:
heating efficiency	%	90,7 %
nominal output	kW	20
fuel consumption at nominal output	kg / h	~ 5,5
width	mm	770
height	mm	1565
depth	mm	1075
exhaust outlet diameter ext./int.	mm	160 / 150
supply and return connectors	inch	1¼
top operation water pressure* - depending on boiler version	bar	1,5 / 3,0*
required chimney draught	Pa	5 ÷ 15 / 0,05 ÷ 0,15
maximum boiler temperature	°C	80
average exhaust temperature at nominal output	°C	140
recommended boiler temperature	°C	70 ÷ 80
noise level	dB	below 75



90,7 %
heating efficiency

HKS lazar®

pellet boilers

PELLET FOCUS

Highly efficient pellet boiler with many possibilities.

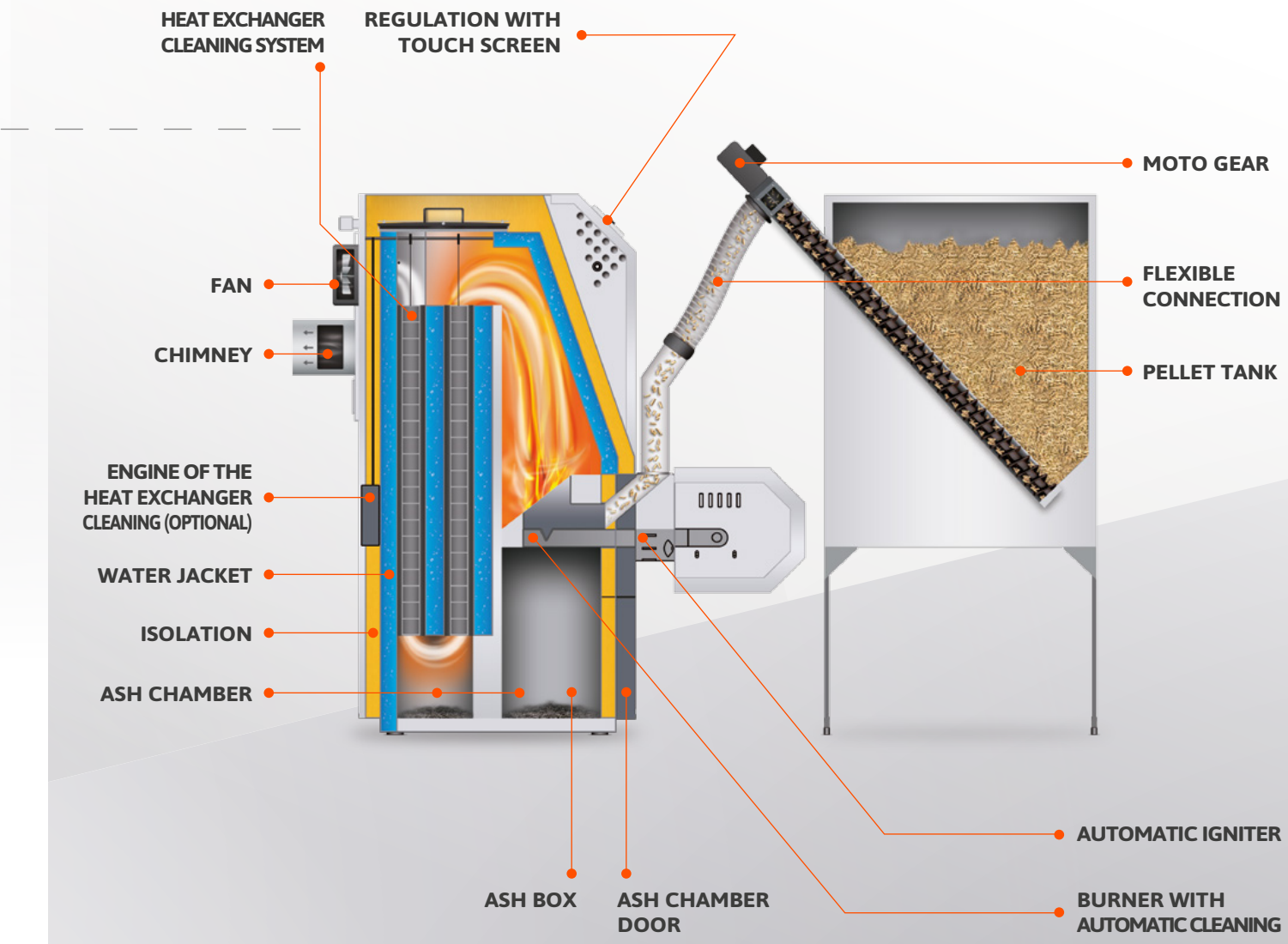
Economy

Ecology

Safety

Comfort & Modernity

PARAMETER:	UNIT:	PF21:
heating efficiency	%	91,1%
nominal output	kW	18
range of output	kW	5,4 ÷ 18,0
width (fuel container type – width)	mm	555
height (fuel container type – height)	mm	1215
depth (fuel container type – depth)	mm	1115
water volume	dm^3	53
exhaust outlet diameter ext./int.	mm	120 / 110
recommended chimney diameter	mm	120 - 130
required chimney draught	Pa / mbar	5 ÷ 10 / 0,05 ÷ 0,10
supply and return connectors	inch	1
top operation water pressure* - depending on boiler version	bar	1,5 / 3,0*
average exhaust temperature at maximum output	°C	120
average exhaust temperature at minimum output	°C	60
maximum recommended exhaust temperature	°C	180
maximum temperature of the boiler	°C	85
recommended temperature of the boiler	°C	65 ÷ 80
minimum temperature of the returning water	°C	55
fuel container capacity	dm^3	270 / 300 / 400 / 500 / 900 / 1480



91,1%
heating efficiency

HKS lazar®

pellet stove

COSTA

Modern pellet stove with a comfort regulation.

PARAMETER:	UNIT:	COSTA:
heating efficiency	%	85,5
nominal output	kW	7,5
output with reduced power	kW	4
fuel consumption at nominal output	kg/h	ok. 1,8
width	mm	500
height	mm	930
depth	mm	520
exhaust outlet external diameter	mm	80
average exhaust temperature at nominal output	°C	190
average exhaust temperature at reduced output	°C	125
exhaust gas mass flow at nominal output	g/s	7
CO emission at nominal output (13% O_2)	mg/m^3	233
required chimney draught	Pa / mbar	1 ÷ 5 / 0,01 ÷ 0,05
noise level	dB	under 75
power supply		1 PEN ~50Hz 230V TN-S
electrical insulation		IP 20
electric power consumption – fans and motoreducer	W	135
electric power consumption – lightener	W	170
ambient temperature	°C	15 ÷ 40
humidity 10-90% without condensation	%	10 ÷ 90%

Economy

Ecology

Safety

Comfort & Modernity

85,5%
heating efficiency

HKS lazar®

Standard/Optional equipment:

	SF 11	SF 12	SF 15	SF 22
TOUCH PANEL	S	S	S	S
WEATHER REGULATION (SF 2 CIRCUITS, HM 1 CIRCUIT)	S	O	S	S
SENSORS (OUTSIDE, SANITARY, BUFFER, CIRCUITS, BOILER)	S	S	S	S
2 EXTRA CIRCUITS REGULATION	O	O	O	O
BUFFER REGULATION	S	O	S	S
INTERNET MODULE	O	O	O	O
LAMBDA PROBE	O	O	O	O
AUTOMATIC CLEANING OF HEAT EXCHANGER	S	S	O	O
ROTARY VALVE	S	S	S	S
HYDRAULIC EQUIPMENT	S	S	O	O
VACUM	O	O	O	O
STAINLESS STEEL BURNER	S	S	S	S
MECHANICAL BURNER CLEANING	S	S	S	S
FLUE GAS TURBULATORS	S	S	S	S
WORKING PRESSURE 1,5 BAR	S	S	S	S
WORKING PRESSURE 3 BAR	O	O	O	O

S standard / O option extra paid / - not available

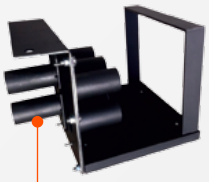
SF 41	SF 69	SF 81	PF 21	HM 20	COSTA
S	S	S	S	-	-
S	S	S	O	S	-
S	S	S	S	S	-
O	O	O	O	O	-
S	S	S	O	S	-
O	O	O	O	O	-
O	O	O	O	-	-
O	S	S	O	-	-
S	S	S	-	-	-
O	O	O	O	O	-
O	O	O	O	-	-
S	S	S	S	ceramic	S
S	S	S	S	-	-
S	S	S	S	S	-
S	S	S	S	S	-
O	O	O	O	O	-

Pellet pneumatic transport system - VACUM

PELLET PNEUMATIC TRANSPORT SYSTEM - VACUM

Pellet pneumatic transport system from the hopper to the boiler SmartFire.

Includes: engine, suspension, casing.

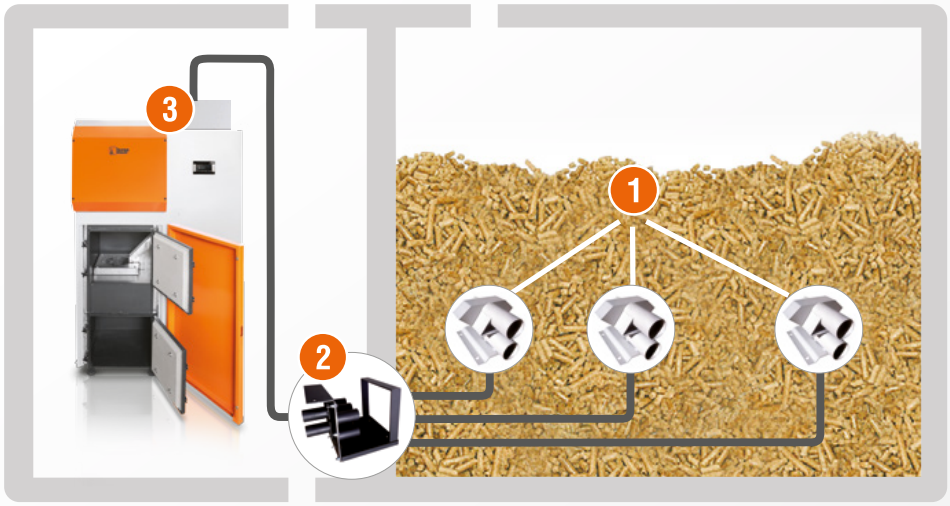


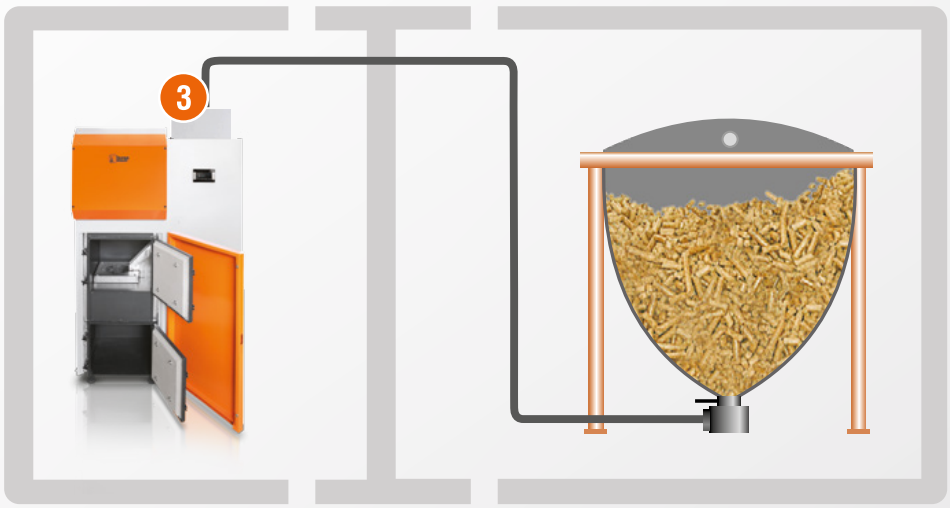
DISTRIBUTOR

The device allows the installation of a few suction probes for easy use of the entire capacity of the hopper.

SUCTION PROBE

A device installed in an additional pellet hopper, used to suck the pellets.

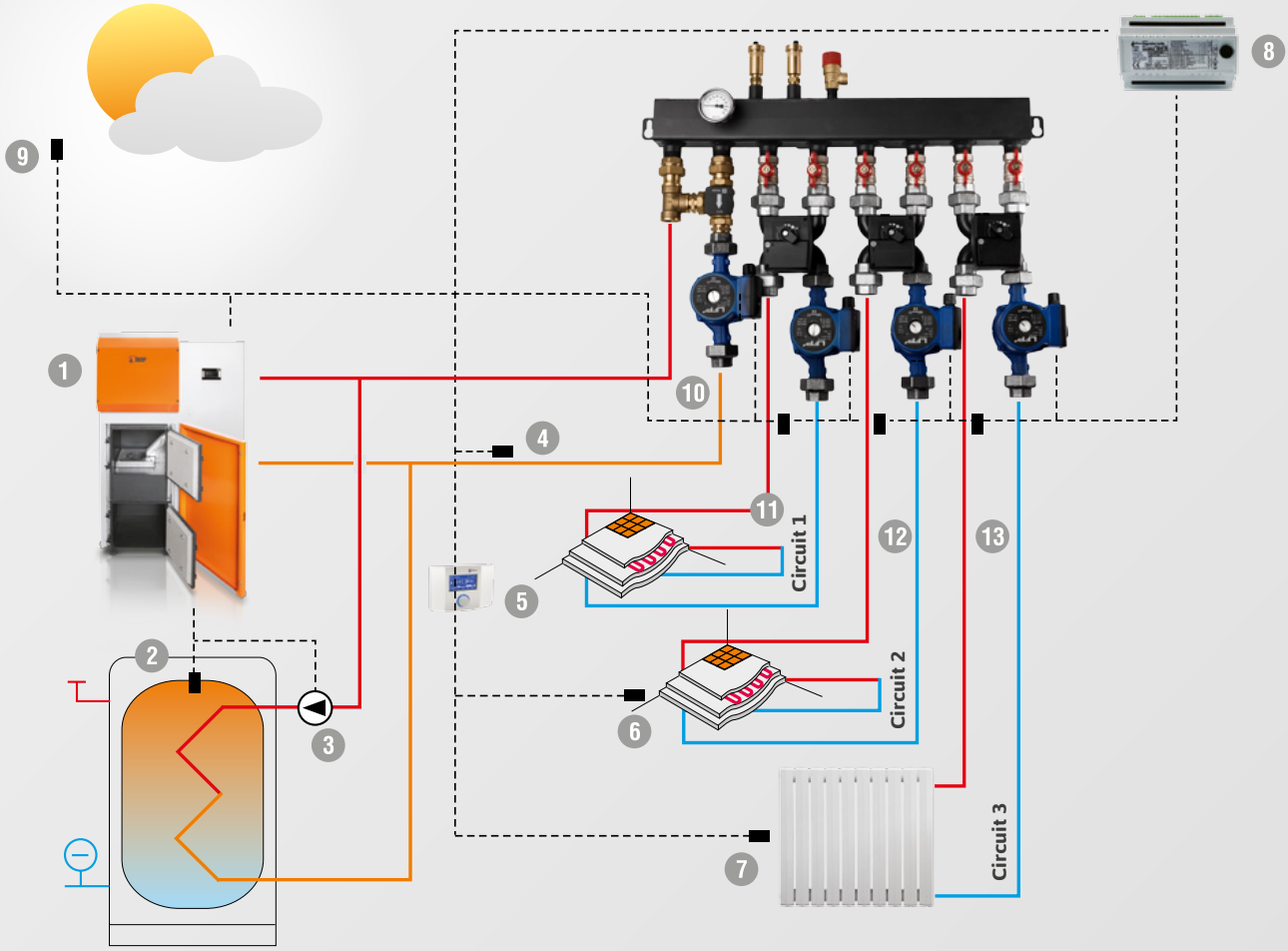




DESCRIPTION:

1. Suction probe
2. Distributor
3. Vacum

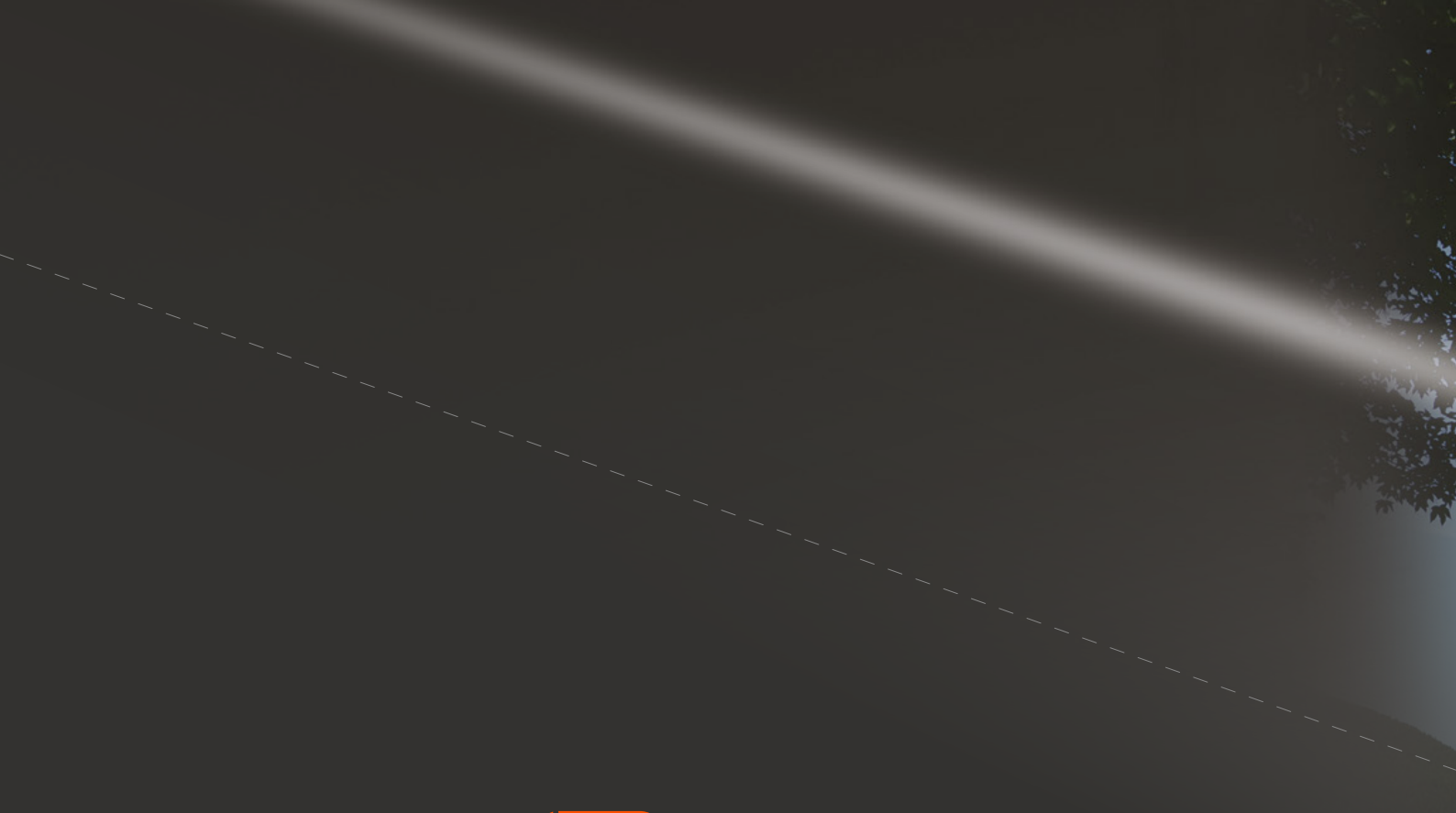
Diagram with three heating circuits using
1-3 HYDRAULIC DISTRIBUTOR



DESCRIPTION:

1. Boiler
2. Sanitary water sensor
3. Sanitary water pump
4. Return water temperature sensor
5. Room panel with sensor circuit 1
6. Room sensor circuit 2
7. Room sensor circuit 3
8. Module 800S
9. Outside temperature sensor
10. Boiler circuit, pump, TV valve
11. Circuit 1 (pump, 4-way valve with actuator, temperature sensor)
12. Circuit 2 (pump, 4-way valve with actuator, temperature sensor)
13. Circuit 3 (pump, 4-way valve with actuator, temperature sensor)

Presented hydraulic diagram does not replace the project.



MANUFACTURER

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