New Horizon Inc.

Clean, Comfortable Heating

PELLET BOILER LINE

Pellet boilers "BLACK STAR"

Fuel: Wood pellet with ¼" diameter
Output: 2 – 40 kW
Advantages of wood pellet boilers BLACK STAR:

- High efficiency up to 93 %
- Fully automatic operation
- Affordable and eco-friendly operation
- Easy operation and maintenance
- PC control capable
- Left or right connection for the burner
- Stainless steel burner
- Automatic ignition
- Feeder length up to 10ft
- Low electric power consumption
- Modern and dynamic design
- Small size and low weight
- Wide output range - 10 kW, 20 kW, 30 kW and 40 kW
- Wide range of hopper capacities

Pellet boilers "WOODY"

Fuel: Wood pellet with ¼" diameter
Output: 4 – 80 kW
Advantages of wood pellet boilers WOODY:

- High efficiency up to 94 %
- Fully automatic operation
- Affordable and eco-friendly operation
- Easy operation and maintenance
- PC control capable
- Left or right connection for the burner
- Stainless steel burner
- Automatic ignition
- Feeder length up to 10ft
- Low electric power consumption
- Modern and dynamic design
- Heat exchanger with ¼" wall thickness
- Possibility of cascade connection
- Wide output range - 16 kW, 24 kW, 30 kW, 60 kW, 80 kW
- Wide range of hopper capacities

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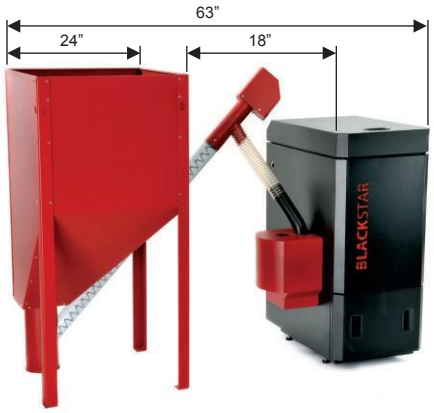
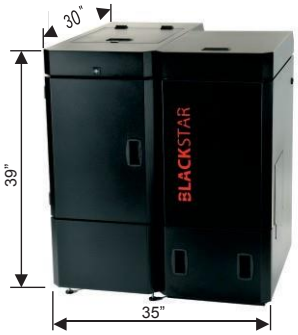
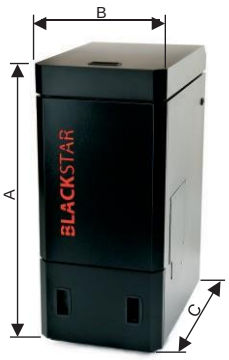
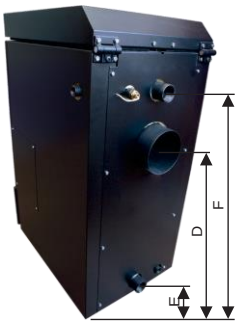
Pellet boilers "BLACK STAR"

Technical Data









Technical parameters					
Boiler type		Black Star 10	Black Star 20	Black Star 30	Black Star 40
Nominal output	kW	10	20	30	40
Minimal output	kW		2		
Fuel size			¼" diameter wood pellets		
Average fuel consumption	lb/h	1.17-4.14	1.74-7.1	3.53-12.4	5.51-19.62
Efficiency	%	91	93	92	92
Water volume	gal	10	10	12	20
Operating chimney draft	InWC		.06-.08		
Maximum working water pressure	Bar		2		
Maximum heating water temperature	°F		190		
Maximum return water temperature	°F		145		
Maximum electric power/voltage	W/V	50/220	50/220	50/220	60/220
Weight	Lb	400	400	510	340
A Height	In	39	39	39	43
B Width	In	17	17	21	26
C Depth	In	29	29	32	36
D Position of smoke flue	In	25	25	25	29
E Position of input water socket	In	4	4	4	4
F Position of output water socket	In	32	32	32	36
Connecting sockets	DN	1-1/4"	1-1/4"	1-1/4"	1-1/4"
Flue diameter	In	5	5	6	6

pellet

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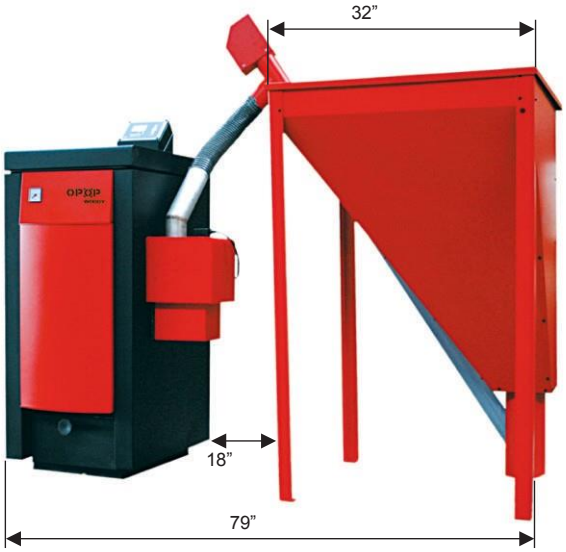
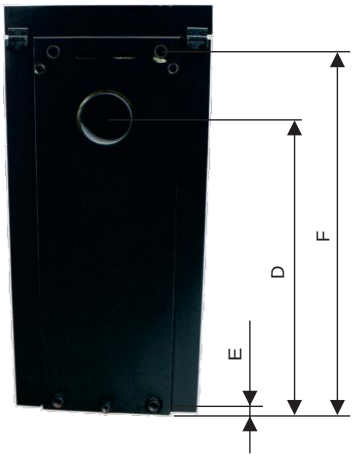
Pellet boilers "WOODY"

Technical Data





Technical parameters						
Boiler type		Woody 16	Woody 24	Woody 30	Woody 60	Woody 80
Maximum output	kW	16	24	30	60	80
Minimal output	kW		4		10 % of burner output	
Fuel size			¼” diameter wood pellets			
Efficiency	%	94	94	90	92	93
Average fuel consumption	Lb/hr	5.5	5.5	6.7	14.3	17.6
Water volume	Gal	13	13	13	25	35
Operating chimney draft	InWC			.04-.06		
Maximum working water pressure	bar			2		
Maximum heating water temperature	°F			190		
Minimum return water temperature	°F			145		
Maximum electric power/voltage	W/V	50/220		60/220	160/220	
Weight	Lb	510			850	1060
Dimensions						
A Height	In	46			50	50
B Width	In	21			26	30
C Depth	In	30			36	40
D Position of smoke flue	In	35			40	40
E Position of input water socket	In	11			11	12
F Position of output water socket	In	41			42	46
Connecting sockets	DN	3/4”			1”	1-1/4”
Flue diameter	In	5			6	7

pellet

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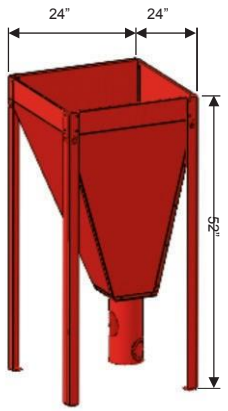
Accesories for pellet boilers

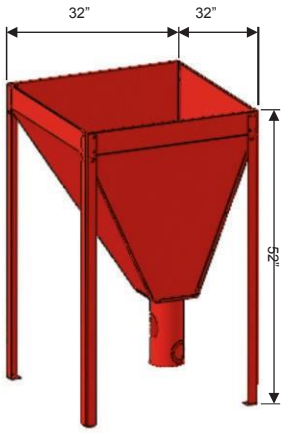
Pellet burners
Fuel: Wood pellet with ¼" diameter
Output: 4 - 200 kW
Advantages of pellet burners:

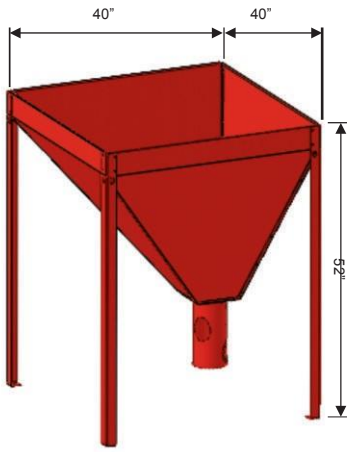
- Output range 4-200kW
- High efficiency up to 94 %
- Fully automatic system
- Made from stainless steel
- Automatic ignition
- Low electric power consumption

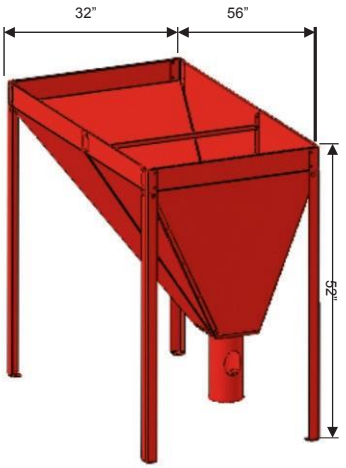
Pellet burner

Hopper parameters					
		24"x24"x52"	32"x32"x52"	40"x40"x52"	56"x32"x52"
Pellets volume	Lb	243	485	662	772
Weight	Lb	55	64	77	84



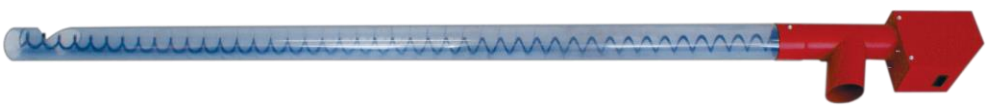






Screw - feeder parameters		
Lenght	Lb	79-118
Diameter	In	3
Slope Angle	°	50
Weight	Lb	15-27

Screw - feeder



Additional accessories for pellet boilers

1. Vacuum feeder

- It is used to transfer pellets over a longer distance. This unit operates on its own based on the user setting in the boiler control unit. The pellets are transported to a hopper from an external container and then supplied to the burner.

2. Lambda probe

- It serves to maintain the best amount of air for combustion. It optimizes the combustion process in the case of varying chimney draft and quality of pellets. The main parts are: lambda oxygen probe, electrical circuit board and connecting cables.

3. Compressor

- You can use the compressor for complete cleaning of the burner grate. The compressor is controlled from the boiler control unit, so it is possible to provide automatic operation of the compressor without requiring a manual start by the user.

4. Flue gas temperature sensor

- It reads the temperature of the flue in the chimney. Making it possible to ensure that the maximum heat generated by boiler is used and minimum amount of heat is escaping through the chimney. Once you read the flue gas temperature you can achieve the best result through the optimization of the burner operation.

5. 3 Way valve

- It is used to heat the hot water in the boiler. It is possible to engage in the boiler control unit. This valve is necessary to connect temperature sensor, which senses the return water temperature.

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6. Wireless room thermostat

- You can plug it into the boiler control unit. Instructs the boiler to turn on/off based on the temperature in the room.

7. Temperature sensor 8’ and 49’

- These sensors can be used for domestic water temperature, inlet and outlet water from the boiler, and the outdoor temperature reading.