

## FUTURA BIO PELETS/WOOD CHIPS SPECIFICATIONS SHEET

### FUTURA BIO PELETS



Futura Bio is a steel, one function boiler. It is a multifuel device with automatic feeding system, designed to burn biomass. Bio Futura can be installed in both boiler rooms new and retrofit to automate the process of burning, improve ease of use as well as due to the reduction of harmful emissions gas into the atmosphere.

#### FUEL

##### Recommended fuels:

- sawdust biomass in the form of pellet having a diameter of 6 to 10mm and 50mm

length.

The calorific value should not be less than 18MJ/kg and the humidity should not exceed 10%.

- wood chips with maximum dimensions of 30 mm.

#### Alternative fuels for Futura Bio Pellets/Wood chips:

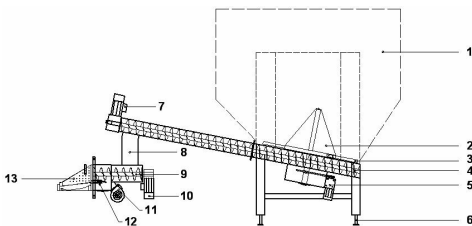
- stones cherries

#### TABLE SPECIFICATIONS

Model		Bio 25*	Futura Bio	Futura Bio	Futura Bio	Futura Bio	Futura Bio	Futura Bio	Futura Bio	Futura Bio 300-350*	
Power Range	sawdust briquette	25	38	50	75	100	150	200-250	300-350		
Efficiency		%	78-82								
Water capacity		dm <sup>3</sup>	120	155	190	260	360	470	1600	1820	
Max working pressure		bar	2								
Min. outlet temperature		°C	65								
Min. Outlet temperature		°C	90								
Fluegases temperature at nominal power		°C	180-340 °C								
Fluegases temperature at minimal power		°C	100-140								
Boiler Class PN-EN – 303-5			3								
Water-side resistance; Δt=10K		mbar	2+20								
Water-side resistance; Δt=20K			0,5+5								
Chimney pressure		Pa	15-20	15-20	20-25	20-25	25-30	25-30	25-30	30-35	
Recommended chimney height		m	8	8	8	8-10	8-10	12	14	14	
Recommended chimney section		cm <sup>2</sup>	400	400	400	600	600	600	1500	1500	
Fuel tank capacity		dm <sup>3</sup>	The an individual order of 1.15 to mm3								
Fuel consumption	Nominal Power: sawdust briquettes	kg/h	6,9	10,5	13,8	20,7	27,6	41,4	55,2	82,9	
Approximate working time at one load		h	51,2	33,7	25,6	31,1	23,3	15,6	11,7	-	
Power consumption (for. since version)		W	850	850	850	850-2250	850-2250	850-2250	850-2250	850-2250	
Powerconsumption of the heater (optional)		W	400								
CO Emission (O2=10%)		mg/m <sup>3</sup>	2100-2610								-
OGC Emission (O2=10%)		mg/m <sup>3</sup>	85-94								-
Dust Emission (O2=10%)		mg/m <sup>3</sup>	95-130								-

#### Construction of the biomass combustion in the boiler Futura Bio Pellets/Wood chips

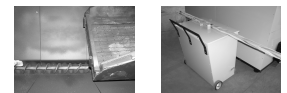
Installation of the fuel tank for the boiler Futura Bio Pellets is performed on individual orders adjusting capacity and dimensions to customer needs.

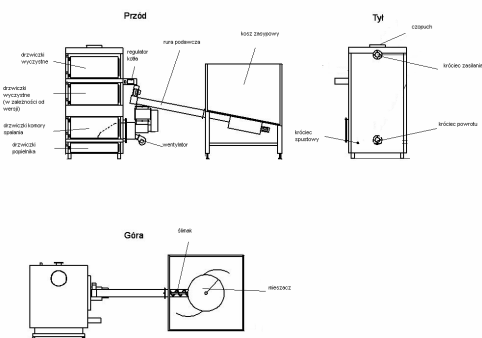


1. Fuel tank
2. Mixer
3. Mixer blades
4. Feeder
5. Mixer motor gear
6. Height regulation
7. Feeder motor gear
8. Chuke connector
9. Feeder burner
10. Feder motor gear
11. Fan
12. Igniter
13. Burner with iron grate

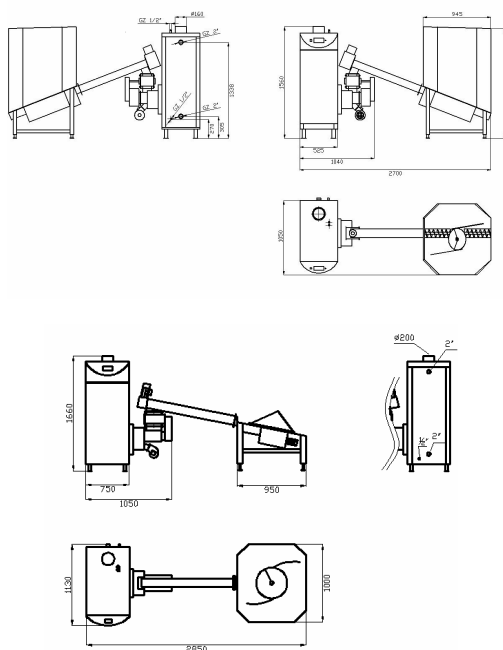


In options there is also the possibility of making an automatic ash removal.

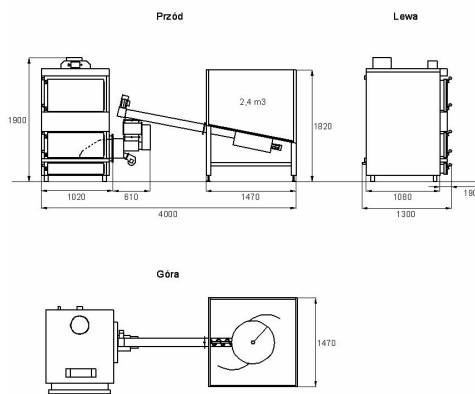
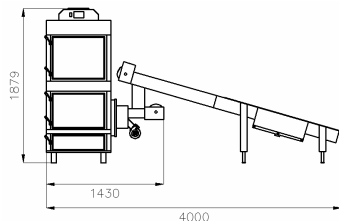




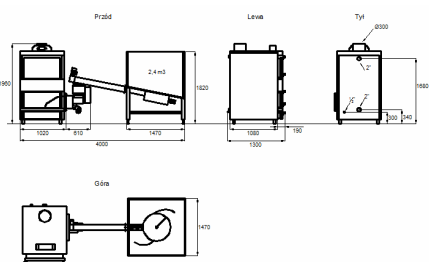
### BIO Pellet 25, 50



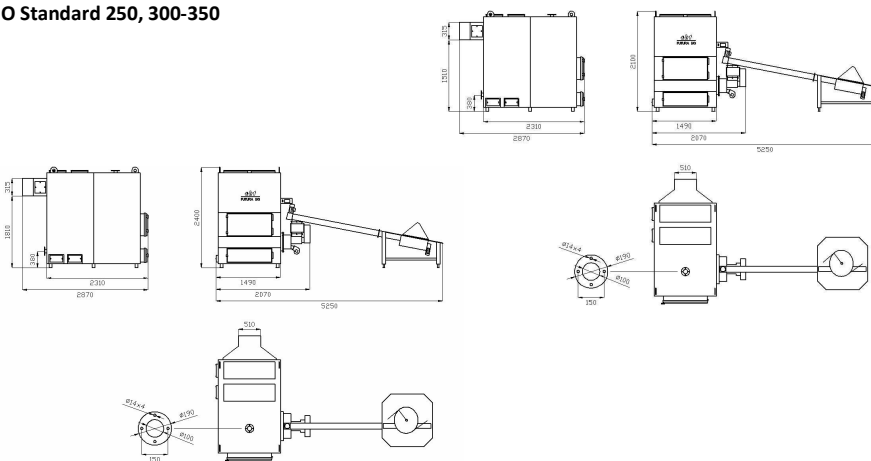
### BIO Pellet 75, 100



### BIO Pellet 150



### BIO Standard 250, 300-350



### AUTOMATION



#### RK2006 L2P

Supports the feeder, fan, domestic hot water pump and central heating pump and cooperates with a room thermostat. It has a double thermal protection, autodiagnostic system and total bacteria control process in hot water tank

#### ADVANTAGES OF THE THE BOILER

- Automatic combustion control
- Electric ignition
- Large fuel tanks
- Possibility to arrange your own tank
- Can be installed ash removal system