CICHEWICZ
kotły c.o.

product catalog **2014**

The most awarded central heating boilers in Poland

FOR MANY YEARS OUR COMPANY ACTIVELY SUPPORTS MANY ECOLOGICAL PROJECTS TO PROTECT THE ENVIRONMENT AND REDUCING THE COST OF HEATING AND ENERGY. THE NAME CICHEWICZ FOR MORE THAN 40 YEARS WAS ASSOCIATED WITH THE HEATING EQUIPMENT FOR COMBUSTION OF ALTERNATIVE FUELS TO GAS.

The company based on the family venture cares primarily about the environment and ecology. That's why we were a precursor of boilers and burners for pellets on the Polish market. So far we produce and import heating equipment for biomass burning, which represent the highest level of ecology. Most of our products are combined as bi or multi fuel units – to burn : wood, woodchips, straw, coal, pellets, corn, fruit waste, grain.

Ecologic activity of our company is focus on many important fairs – specially green energy exhibitions (fe. ISH Franfkurt) and many other local events. We organize also many trainings and seminars about biomass heating and biomass use. Renewable energy we present also during many presentation in technical schools and local authorities places.

Our green energy activity is also combined with mutual cooperation with many press titles and tv programs.
Our products or biomass advisory was presented f.e in Murator, Business Pulse, TVP television or other magazines like Polish Installer, Instalreporter …..

Our products designed for combustion of wood, woodchips, wood waste, biomass, straw, grain, pellets are sold in many countries in Europe: Germany, Portugal, France, Romania, Ukraine, Hungary, Slovenia, Croatia, Lithuania and may others.

All our export partners are carefully trained, we support them with our technical advisory and service. We take also part in many international exhibitions.

Most of our products were developed with specialists from Sweden, Germany and Poland. Many of our boilers were tested by TUV and are subsided by local authorities f.e: Futura Pel lets is placed on BAFA list and Clear skies list.

Best quality of our products is not only effect of search and development work but also our technology – we produce heating boilers of boiler steel, welded by automatic robots, tested with norms more strict then EN 303-5 – fe. EN 303-5 norm recommend pressure test for 45 minutes – we make it minimum 4 hours ! Best recommendation for our products is fact, that for 7 years we deliver also products to Bosch group to Buderus companies in several countries in Europe.

The most awarded central heating boilers in Poland

01/ ULTIMA II

8-35 kW

3 year warranty

Ultima II is water standing heating solid fuel boiler.
Models 21, 24, 35 are equipped with an outlet for mounting the pellet burner MOC they can also be equippedwith a blower package (controller + fan).

RECOMMENDED FUEL:

Stone/brown coal
Wood with humidity up to of 20%. In the version with pellet burner - pellets with a diameter of 6-8mm.

ADVANTAGES OF THE BOILER

- Possibility of installation blower package or pellet burner.
- The lower combustion, 2 way heat exchanger
- Compact dimensions
- Expandable controllers with Fuzzy Logic or PiD versions

EMISSION / MODEL	Ultima II 21	Ultima II 24	Ultima II 35
CO Emission (O2=10%)/(O2=13%) [mg/m^3]	3695	3680	3920
OGC Emission (O2=10%)/(O2=13%) [mg/m^3]	252	230	250
Dust Emision (O2=10%)/(O2=13%) [mg/m^3]	100	87	126/92
VERSION WITH PELLET BURNER			
CO Emission (O2=10%)/(O2=13%) [mg/m^3]	180-260		
OGC Emission (O2=10%)/(O2=13%) [mg/m^3]	60-80		
Dust Emision (O2=10%)/(O2=13%) [mg/m^3]	40-60		

MODEL	Ultima II 10	Ultima II 21	Ultima II 24	Ultima II 35
Power range: [kW] coal(>27MJ/kg) substitute fuel wood (16MJ/kg)	10 8	21 16	24 20	35 30
The efficiency on coal [%]	77-78%			
Water capacity [dm^3]	45	60	70	80
Loading chambers capacity [dm^3]	15	25	37	43
max. pressure [bar]	2			
Test pressure [bar]	4			
Water-side resistance; Δt=10K [mbar]	2÷20			
Water-side resistance; Δt=20K [mbar]	0,5÷5			
Min outlet temperature [°C]	55			
Min. outlet temperature [°C]	90			
Flue gases temperature at nominal power [°C]	200-250			
Chimney pressure [Pa]	15-20			
Recommended chimney heigt [m]	8			
Recommended chimney section [cm^2]	400			
Power consumption [V/kW]	230/0,08÷115			

OPTIONS:

Ultima II boilers are equipped with a hole for installation the pellet burner, which you can buy and installed at any time during operation in order to automate the process of burning. Can be installed blower package with electronic controller.

02/ KUMULATOR EKO 25-40 kW

Kumulator Eko is the lower combustion log wood fired boiler. This system provides slower and more precisely an economical combustion of wood. Exhaust gas boiler circulate by three hot gas flues, which can significantly extend their path and thus to increase heat transfer efficiency.

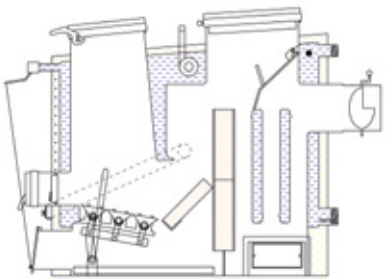
KUMULATOR EKO BOILER IS RECOMMENDED FOR LOG WOOD COMBUSTION

Humidity max. 15-20%, diameter 10-20 cm.
Wood should be from deciduous trees like:
Oak, Bebech, Acacia, Hornbeam, Ash. or softer wood like birch or poplar.

CONTROLLING

The temperature is controlled by means of mechanical control hearth, which depending on the temperature that opens and closes the air supply under the grate.

EMISSION / MODEL	EKO 25	EKO 40
CO Emission (O2=10%)/(O2=13%) [mg/m^3]	1033/1479	4554/3312
OGC Emission (O2=10%)/(O2=13%) [mg/m^3]	103/75	115/84
Dust Emision (O2=10%)/(O2=13%) [mg/m^3]	110/80	121/88



OPTIONS:

Kumulator Eko boilers are equipped with a hole for mounting the Pellets burner, that can be purchased and installed at any time to automate the process of burning.

MODEL	EKO 25	EKO 40
Power range: Wood [kW]	25,8	43
Efficiency [%]	83	83
Water capacity [dm^3]	90	105
Max working pressure [bar]	2	
Min outlet temperature [°C]	65	
Min. inlet temperature [°C]	55	
Max uutlet temperature [°C]	90	
Flue gases temperature at nominal power [°C]	180-250	
Class PN-EN – 303-5	3	
Water-side resistance; Δt=10K [bar]	3,5-4,0	
Water-side resistance; Δt=20K [bar]	1,4-2,0	
Chimney pressure [Pa]	20	20-25
Recommended chimney height [m]	8	
Recommended chimney section [cm^3]	400	
Max. Wood length [cm]	35	50
Loading chamber capacity [dm^3]	101	134
Fuel consumption [kg/h]	7,9	13,2
Approximate working time at one loadn [h]	2,4	
Loading hole dimensions [mm]	**400x290**	**530x290**
Approximate heating area [m^2]	150-260	350-450

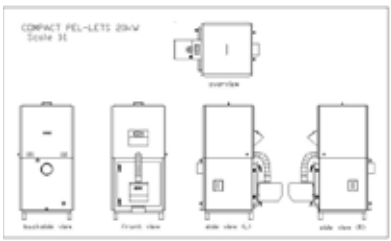
03/ COMPACT PELLET 20 kW

Pellets fired boilers type – Compact Pellets are designed for those customers, who don't have enough space in the boiler room for biomass boiler . Thanks compact structure – which contains boiler and tank integrated in one unit heating boiler with installed in pellets burner with controller of combustion.

RECOMMENDED FUEL:
Pellets 19MJ/kg DIN/PLUS

THANKS SUCH STRUCTURE, WE HAVE MANY ADVANTAGES OF THIS BOILER:

- Boiler with integrated tank saves place in boiler room
- We can easy split tank and boiler and comfortable transport them to the boiler room
- Thanks pipe structure and 3 way heat exchanger we archive thermal efficiency over 90 % and 5 class of emission
- Modern controller of the boiler and burner with self cleaning system ensure comfort of daily operation
- Controller is offered in 2 versions: basic and extended with Internet/LAN connection and LCD display
- Pipe heat exchanger and ash drawer helps in boiler cleaning



Boiler compact pellets contains:
pipe 3 way heating exchanger with combustion chamber, ash draw, integrated tank and feeder. In front doors we have pellet burner with self cleaning and controller of the boiler and burner.

MODEL	Compact Pel-let 20
Power output Pellet 19MJ/kg [kW]	8-20
Heating surface of exchanger [m^2]	2,6
Thermal efficiency [%]	< 91%
Water volume [dm^3]	60
Working pressure [bar]	2
Min. outlet temperature [°C]	55
Min. outlet temperature [°C]	90
Flue gasses temp by max power outputr [°C]	140-180
Flue gasses temp by min power output [°C]	100-130
Class of emissions	V
Water-side resistance; Δt=10K [bar]	2-20
Water-side resistance; Δt=20K [bar]	0,5-5
Chimney pressure [Pa]	15-20
Chimney diamater [cm^2]	400
Pellets tank volume / Pellety 19MJ/kg [kg/h]	4,2
Eletricity consumption [kW]	0,45-0,6

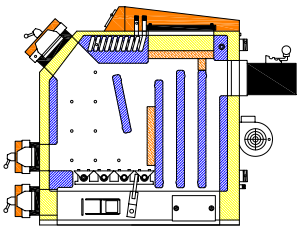
NEW!

GPS AND INTERNET BOILER CONTROLLER

04/ LOGICA

17-38 kW

common air® Standard 3 year warranty and optional 12



OPTIONS:
Optionally models 17-20 and 20-27 can be equipped on pellet burne

LOGICA boilers are devices with low-upper combustion and four vertical convection channels.
Thanks to the air flow „Common Air" it is possible burn different fuel fractions and emissions to air is relatively low.

RECOMMENDED FUEL:

Coal humidity up to 12%, and fine vicariously, and firewood humidity up to of 20%.

AUTOMATION:

Controllers support the standard - typical installations, domestic hot
water pomp, central heating pomp or mixing pump also cooperate with
room thermostats.

ADVANTAGES OF THE BOILER

- Large capacity loading chamber
- System the airflow „common air"
- Expandability automation
- The simple installation
- Movable iron grate

MODEL	Logica 17-20	Logica 20-27	Logica 30-38
Power range: Coal OI [kW]	20,8	27	38
Efficiency [%]		78-80	
Water capacity [dm^3]	80	95	110
Max working pressure [bar]		2	
Min outlet temperature [°C]		65	
Min. inlet temperature [°C]		55	
Max. Outlet temperature [°C]		90	
Fluegases temperature at nominal power [°C]		180-240	
Class PN-EN – 303-5		3	
Water-side resistance; Δt=10K [mbar]		2,0-20	
Water-side resistance; Δt=20K [mbar]		0,5-5	
Chimney pressure [Pa]	15-20	15-20	20-25
Recommended chimney height [m]		8	
Recommended chimney section [cm^2]		400	
Dimensions of the loading chamber [mm]	210x290	210x340	210x390
Loading chamber capacity [dm^3]	50	60	120
Fuel consumption [kg/h]	3,9	5,1	7,3
Approximate working time at one load [h]	12,5	12,5	15,5
Power consumption [W]	90	90	160
Heating surface [m^2]	150-230	200-270	300-380

05/ LOGICA OPTIMUM 350-600 kW

common air® STB 2 year warranty

Logica boilers with power of from 350 kW has tube made heat exchanger of thick-walled seamless pipes which increases the strength and durability of the product.

RECOMMENDED FUEL:
Coal humidity up to 12%, You can use the alternative wood: humidity up to of 20%.

AUTOMATION
Controllers support the standard - typical installations, domestic hot water pomp, central heating pomp or mixing pump also cooperate with room.

ADVANTAGES OF THE BOILER
- Extended loading chamber
- Water /cast iron grate
- Easy to operate and service
- Expandable controllers with Fuzzy Logic or PiD versions and GPS/LAN modul

LOGICA OPTIMUM 350

MODEL	Logica 350	Logica 470	Logica 600
Power range: Coal/ wood [kW]	350 300	430 470	550 600
Efficiency [%]	76-79		
Water capacity [dm³]	1830	1935	2080
Max working pressure [bar]	2		
Min outlet temperature [°C]	60		
Min. inlet temperature [°C]	85		
Fluegases temperature at [°C]	220-280		
Class PN-EN – 303-5	3		
Water-side resistance; Δt=10K [mbar]	2,0-20		
Water-side resistance; Δt=20K [mbar]	0,5-5		
Chimney pressure [Pa]	35-40		
Recommended chimney height [m]	14		
Recommended chimney [cm²]	1500	2300	2300
Dimensions of the loading [dm³]	700	800	800
Dimensions of the loading chamber [mm]	210x290	210x340	210x390
Loading chamber capacity [dm³]	50	60	120
Fuel consumption: Coal/ Wood [kg/h]	60,7 35,42	81,45 47,6	104 80,6
Approximate time: Coal/ Wood [h]	10 7	10 6	8 6

06/ DUAL G

25-35 kW

Dual G boiler is multifuel device with automatic combustion of coal with a diameter of 5-25 mm or as version Dual P whit pellet burner for combustion pellets. Both models are equipped with a solid cast iron grate and cleaning mechanism for easy operation boiler.

AT WORK WITH THE FEEDER RECOMMENDED FUEL IS:
Coal having a diameter of 8-25 mm. In the version of the pellet burner DUAL P: pellet with a diameter of 6-8mm. Burning the coal on grates: 20 - 40 mm, wood.

EMISSION / MODEL	Dual 25 G/P	Dual 35 G/P
CO Emission (O2=10%) [mg/m^3]	585/372	895/385
OGC Emission (O2=10%) [mg/m^3]	65/45	76/67
Dust Emision (O2=10%) [mg/m^3]	55/48	64/53

MODEL	Dual 25 G/P	Dual 35 G/P
Power range: Coal 8-25mm [kW]	8-25	12-38
Heat exchange surface [m^2]	2,9	3,3
The efficiency of the burner [%]	85-87%/89-90%	83-85%/89-90%
Water capacity [dm^3]	130	140
Max working pressure [bar]	2	
Min. outlet temperature [°C]	55	
Min. outlet temperature [°C]	90	
Fluegases temperature at nominal power [°C]	140-180	160-220
Fluegases temperature at minimal power [°C]	100-130	100-150
Class wg. PN-EN – 303-5	3	
Water-side resistance; Δt=10K [bar]	2-20	
Water-side resistance; Δt=20K [bar]	0,5-5	
Chimney pressure [Pa]	8	
Recommended chimney section [cm^2]	400	
Cavity capacity loading [dm^3]	52/35	65/52
Fuel tank capacity[dm^3]	220	
Fuel consumptionat thenominalpower [kg/h] Coal26MJ/kg Pellets 19MJ/kg wood on grates	4,07 /44 5,3 7,1/min 2h	6,19 /26 7,5 10,67/min 2h
Power consumption [kW]	0,27/0,48	

07/ SIGMA

20-50 kW

Standard 3 year warranty and optional 12

Sigma boilers boilers are design to burn wood with gasification process. Modern wood gasifying boilers are up to two times more efficient than traditional combustion system and emission is much lower. Boiler Sigma has extended 50 cm log wood or timber loading chamber and suction fan to avoid smoke during operation of the boiler from front doors.

RECOMMENDED FUEL:

chunk of wood. Humidity max. 15-20% ,
diameter 10-20 cm and length do 50 cm.
Wood should be from deciduous trees like:
Oak, Bebech, Acacia, Hornbeam, Ash.
or softer wood like birch or poplar. As substitude can be use wood from coniferous trees.

VARIOUS CONTROLLERS

– from simple devices with central heating and domestic hot water pumps operatem, to the complex controller using lambda sensor and several heating circuits with mixers and buffer tank.

Gasifying wood boilers Sigma meets ecological requirment of german BAFA or english CLEAR SKIES.

MODEL	Sigma 20	Sigma30	Sigma 50
Power range: Wood [kW]	23,2	30	50
The efficiency of the burner [%]	91	90	86
Water capacity [dm^3]	145	165	180
Max working pressure [bar]	2		
Min outlet temperature [°C]	65		
Min. inlet temperature [°C]	55		
max. Outlet temperature [°C]	90		
Fluegases temperature at nominal power [°C]	120-160		140-200
Boiler class. PN-EN – 303-5	3		
Water-side resistance; Δt=10K [bar]	3,5-4,0		
Water-side resistance; Δt=20K [bar]	1,4-2,0		
Chimney pressure [Pa]	15-20		20-25
Recommended chimney heigt [m]	8		
Recommended chimney section [cm^2]	400		
Max. Wood length [cm]	50		
Loading chamber capacity [dm^3]	115	162	
Fuel consumption [kg/h]	6.52	8,7	14,8
Approximate working time at one load [h]	2-4		
Power consumption [W]	90	90	170
Approximate heating area [m^2]	150-230	250-350	450-600

NEW!

GPS AND INTERNET BOILER CONTROLLER

08/ FUTURA ECONO

20-500 kW

Standard 3 year warranty and optional 12

Futura Econo is a steel heating boiler with automatic burner, designed for combustion of pea coal or coal pellet. Equipped with an automatic fuel feeding system, Futura econo boiler are modern source of heating with lowest emission during coal combustion. Boilers are equipped with iron cast grates to burn also log wood or timber.

RECOMMENDED FUEL:

pea coal having of 8-25 mm or coal/wood pellet .
On additional grate:
log wood

ADVANTAGES OF THE BOILER

- Fully automatic combustion of pea coal
- Iron cast burner
- Fuel tank for 3-5 days of boiler's operation
- Expandable controllers with Fuzzy Logic or PiD versions and GPS/LAN modul

BURNERS

In models 25 and 38 kW is installed iron retortburner
In models 50 and 75 kW is installed steel retort burner
In models 100 and 150 kW is installed elements retort burners

AUTOMATION

Standard RK 2006 L Supports domestic hot water pomp and central heating pomp and cooperates with a room thermostat.

Optional Controller Ecomax 250 Supports domestic hot water pomp and central heating pomp and cooperates with a room thermostat.

Optional Controller Ecomax 800R Supports domestic hot water pomp and central heating pomp, mixer and mixer pump. Cooperates with a room thermostat.

EMISSION / MODEL	Futura Econo 25
CO Emission (O2=10%) [mg/m^3]	830
OGC Emission (O2=10%) [mg/m^3]	40
Dust Emision (O2=10%) [mg/m^3]	85

NEW!

GPS AND INTERNET BOILER CONTROLLER

08/ FUTURA ECONO

MODEL	Futura econo 25	Futura econo 38	Futura econo 50	Futura econo 75	Futura econo 100	Futura econo 150
Power range: [kW]	8-25	12-38	18-50	25-75	30-100	50-150
The efficiency of the burner [%]	83-85					
Water capacity [dm³]	105	130	180	250	315	370
Max working pressure [bar]	2					
Min. outlet temperature [°C]	recommended 55					
Max. Outlet temperature [°C]	90					
Min. inlet temperature [°C]	45					
Water-side resistance; Δt=10K [bar]	2-20					
Water-side resistance; Δt=20K [bar]	0,5-5					
Flue gas temperature [°C]	> 180					
Chimney pressure [Pa]	20	20-25	25	25	25-30	25-30
Recommended chimney height [m]	8		8-10		10	
Recommended chimney section [cm²]	400		600		800	
Fuel tank capacity [dm³]	220		335		555	
Power consumption [W]	0,28-0,4			0,28-0,55		

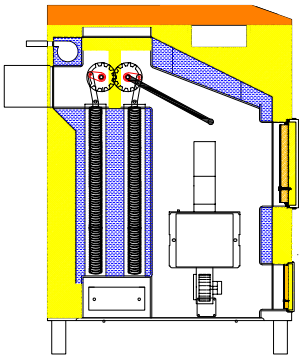
comfort heating

09/ FUTURA PELLETS

15-300 kW

2 year warranty

Futura Pellets boilers are devices with automatic pellet combustion, and additional grate for burning wood. Futura Pellets B is a central heating boiler with built in special pellets burner, suitable for burning pellets in an automatic way. The product is aimed at users looking for an alternative to gas or oil heating wishing to burn solid fuel with a minimum of handling and high thermal comfort. Pellet burner mounted in the boiler has an automatic ignition and power modulation system. Heat exchanger of the boiler is profesionally welded and check in high pressure. Burner is made from cast iron parts to prolong his operation life. Installed pellet burner has special cleaning system and 2 screws - one for feeder and second inside burner



RECOMMENDED FUEL:
pellets with a diameter of 6-8 mm, grain, granulated bio fuels .On grate: log wood

ADVANTAGES OF THE BOILER

- High efficiency
- Additional grates
- Modern controller
- Automatic burning process- minimum service

NEW!

GPS AND INTERNET BOILER CONTROLLER

MODEL	FUTURA Pel-letS 15	FUTURA Pel-letS 40	FUTURA Pel-letS 60
Power range: Pellets 6-8mm [kW]	8-24,4	15-40	20-60
The efficiency of the burner [%]	91.7	>90.0	>89,00
Water capacity [dm^3]	60	90	130
Max working pressure [bar]	2		
Min outlet temperature [°C]	65		
Max. outlet temperature [°C]	85		
Flue gas temperature [°C]	150-200	150-220	160-220
CO2 [Vol%]	12,39	14,32	15,53
The noise level [dB]	52 -60dB (A)		
Chimney pressure [Pa]	10-20		15-25
Recommended chimney height [m]	8		
Recommended chimney [Ø mm]	>160		>200
Cavity capacity loading [L]	300 / 700		
Dimensions of the fuel tank (optional) [cm]	300L = 67 x67 x 125 700L = 80 x 80 x 145		
Power consumption [W]	635	693	795

09/ FUTURA PELLETS B 15-300 kW

Futura Pellets B is a device with automatic pellet combustion, and cleaning system. Both models are equipped with a permanent cast iron grate and cleaning mechanism for easy operation boiler.

RECOMMENDED FUEL:

Recommended fuel: pellet with a diameter of 6 to 8mm, a length of 5-30mm (20% up to 45mm) and a maximum ash content of up to 2%.
Maximum humidity pellets should not exceed 10%.
The calorific value of the pellets should be greater than 17.5 MJ / kg.

AUTOMATION

RK 2006 L Supports domestic hot water pump and central heating pump and cooperates with aroom thermostat. Controller FUZZY LOGIC Ecomax 800P Supportsdomestic hot water pump and central heating pump and cooperates with a room thermostat. It can cooperate with mixers and buffer tank

ADVANTAGES OF THE BOILER

- Automatic combustion system
- Modulating boiler power
- Exchanger cleaning system
- Expandability automation

MODEL	Pellets B 15	Pellets B 40	Pellets B 60	Pellets B 100
Power range: Pellet 19MJ/kg [kW]	8-25	15-40	20-60	40-100
Heat exchange surface [m²]	2,5	4,0	5,2	9,1
Efficiency [%]	89-91.5		88-89	
Water capacity [dm³]	130	145	230	315
Max working pressure [bar]	2			
Min outlet temperature [°C]	55			
Min. inlet temperature [°C]	90			
Max. Outlet temperature [°C]	140-180		160-220	
Flue gas temperature at nominal power [°C]	100-130		100-150	
Boiler class. PN-EN – 303-5	3			
Water-side resistance; Δt=10K [mbar]	2-20			
Water-side resistance ; Δt=20K [mbar]	0,5-5			
Chimney pressure [Pa]	20			
Recommended chimney heigt [m]	8			
Recommended chimney section [cm²]	400			
Fuel tank capacity [dm³]	300, 700 or else an individual order			
Fuel consumption at nominal power [kg/h]	5,59	8,94	13,42	21,3
Power consumption [kW]	0,45-0,6		0,6-0,8	

10/ FUTURA BIO

25-300 kW

2 year warranty

RECOMMENDED FUEL:

- 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 Pelets/Wood chips:

Futura Bio is a steel, biomass fired boiler. The Futura Bio boilers are designed for burning biomass in the form of briquettes, sawdust and woodchips of proper size and, as a substitute, grains or cherry stones. The Bio Pellets version is designed for burning of pellets, i.e. granulated sawdust, with diameter of 6 – 10 mm and up to 4 cm. Also, sawdust can be burnt as a substitute. For special orders the boiler in this version can be adopted for burning of wood chips as large as 30 mm. The boiler may be installed both in new and revamped boiler rooms with the aim of combustion process automation, improving the operating comfort and reducing of harmful emissions to atmosphere. The Futura Bio boilers with built-in biomass burner can be used for heating of residential buildings, commercial buildings, shops, detached houses and so on.

NEW!

GPS AND INTERNET BOILER CONTROLLER

ADVANTAGES OF THE THE BOILER

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

AUTOMATION

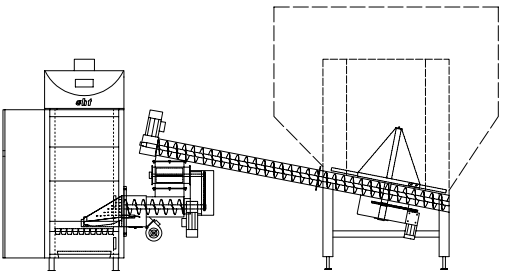
jRK2006 L2P Supports the feeder, fan, domestic hot water pomp and central heating pomp and cooperates with a room thermostat.
It has a double thermal protection, autodiagnostic system and total bacteria control process in hot water tank

10/ FUTURA BIO

MODEL	Bio 25*	Futura Bio 38	Futura Bio 50	Futura Bio 75	Futura Bio 100	Futura Bio 150	Futura Bio 200	Futura Bio 300-350*
Power range: sawdust briquette [kW]	25*	38*	50*	75*	100*	150*	200-250	300-350
Efficiency[%]	78-82							
Water capacity [dm³]	120	155	190	260	360	470	1600	1820
Max working pressure [bar]	2							
Min outlet temperature [ºC]	65							
Min. Outlet temperature [ºC]	90							
Fluegases temperature at nominal power [ºC]	180-340							
Fluegases temperature at minimal power [ºC]	100-140							
Boiler Class PN-EN – 303-5	3							
Water-side resistance; Δt=10K [mbar]	2-20							
Water-side resistance ; Δt=20K [mbar]	0,5-5							
Chimney pressure [Pa]	15-20		20-25			25-3		30-35
Recommended chimney heigt [m]	8			8-10		12	14	
Recommended chimney section [cm²]	400			600			1500	
Fuel tank capacity [dm³]	The an individual order of 1.15 to mm³							
Fuel consumption [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. sinceversion) [W]	850			850-225				
Powerconsumption of the heater (optional) [W]	400							

Newest reference object in Poland.
Other objects on WWW.CWD-GROUP.COM

BOILER AWARDED WITH GOLD MEDAL DURING MANY AGRO FAIRS IN EUROPE



5 YEARS WARRANTY CICHEWICZ

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