

hot water boilers for wood chips

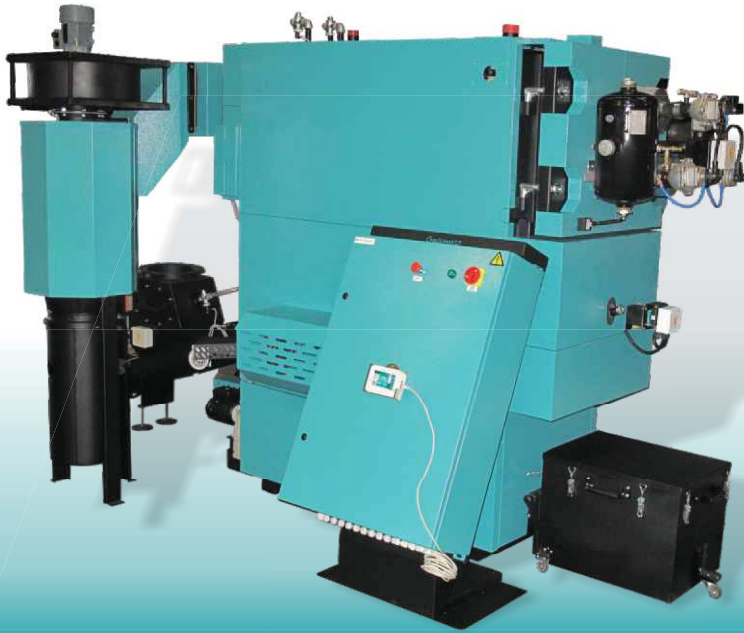


EKO-CKS Multi Plus



Steel warm water boilers **EKO-CKS Multi Plus** with 170 - 580 kW efficiency are designed to be fired by wood chips and wood pellets. They can be installed in both closed and open central heating systems in medium and large facilities. Automatic operation of these systems provides the user with enviable comfort and makes the system suitable for wide application.

Boilers are equipped with a moving grate for fuel burning, a lambda probe, an automatic fuel feeding system, automatic ignition, thermal protection, automatic ash removal from the combustion chamber and cyclone to extricate particles from flue gasses. They are distinguished by a successful combination of modern technologies and quality construction materials as well as simplicity of installation and use. Proven technical solutions make these boilers safe and reliable in operation.



CHARACTERISTICS OF EKO-CKS Multi Plus BOILER:

- Class 5 boiler.
- They are designed to be powered by P16A/P16B - P45A, M35 (G30-G50, W35) class wood chips and E ENplus A1 and A2 class wood pellets.
- They can be installed in both closed and open central heating systems.
- After a change in type, size or moist content of the fuel it is necessary to adjust the settings of the system. There is an option of pre-adjusting the parameters for some fuel types.
- Required power supplies: 380/400 V.
- Equipped with:
 - digital boiler control with a touch screen display which controls the operations of the boiler, fuel supply transporter and has an option to control up to two additional fuel transporters and a mixer in fuel storage.
 - moving grate for fuel combustion.
 - lambda probe.
 - automatic fuel supply to burner by means of screw transporter, automatic ignition and automatic ash removal from the boiler.
 - Flue gas extraction fan and cyclone for flue gas particles extrication.
 - Flue pipes turbulators, thermal protection against overheating, protection against backfire into the fuel storage (overfilling sensor, flap).
- Obligatory additional equipment:
 - connecting fuel transporter.
 - fuel storage: wood chips with mixer and transporter / wood pellets with transporter.
 - hydraulic separator or accumulation tank.
- Additional equipment:
 - automatic flue pipes cleaning system (pneumatic).
 - CM2K (module for steering 2 heating circuits using outdoor temperature, max. 4 x CM2K), CMNET (cascade manager) CAL (light and sound alarm), CMGSM (alarm message and boiler start/stop by SMS).
 - system for monitoring the boiler operation via PC, tablet or mobile phone.
- Corresponding burner with moving grill provides for high boiler efficiency level which makes it economical.
- Maximal work pressure of the boiler is 4 bar which makes it possible to be installed in bigger heating systems.
- Separate delivery of boiler body, cyclone with fan, automatic ash removal boxes, thermally insulated casing, power distribution cabinet with digital boiler control and cleaning set which enables easy transport, installation in the boiler room and lower damage risk.
- The boiler is manufactured in accordance with the standard EN 303-5:2012.



DELIVERY AND ADDITIONAL EQUIPMENT:

EKO-CKS Multi (170-580 kW)

Basic delivery	Required equipment	Additional equipment
<ul style="list-style-type: none"> - body of the boiler with burner and retort - supply fuel screw transporter into the boiler with a connection for an external supply fuel transporter, return flame protection and backfilling sensor - Steel casing with thermal insulation - Cyclone with an ash box - Cyclone fan - Automatic ash removal system with ash box (screw conveyor) - Electrical distribution panel with digital boiler controller - Control unit 	<ul style="list-style-type: none"> - wood chip tank with a mixer and feeder 	<ul style="list-style-type: none"> - System for automatic cleaning of the flue gas pipes (pneumatic) - CM2K (module for steering 2 heating circuits using outdoor temperature, max. 4 x CM2K), CMNET (cascade manager), CAL (light and sound alarm), CM-GSM (alarm message and boiler start/stop by SMS). - Connecting screw transporter between the tank transporter and boiler transporter



Wood chips storage (room) with the mixer connected to the transporter



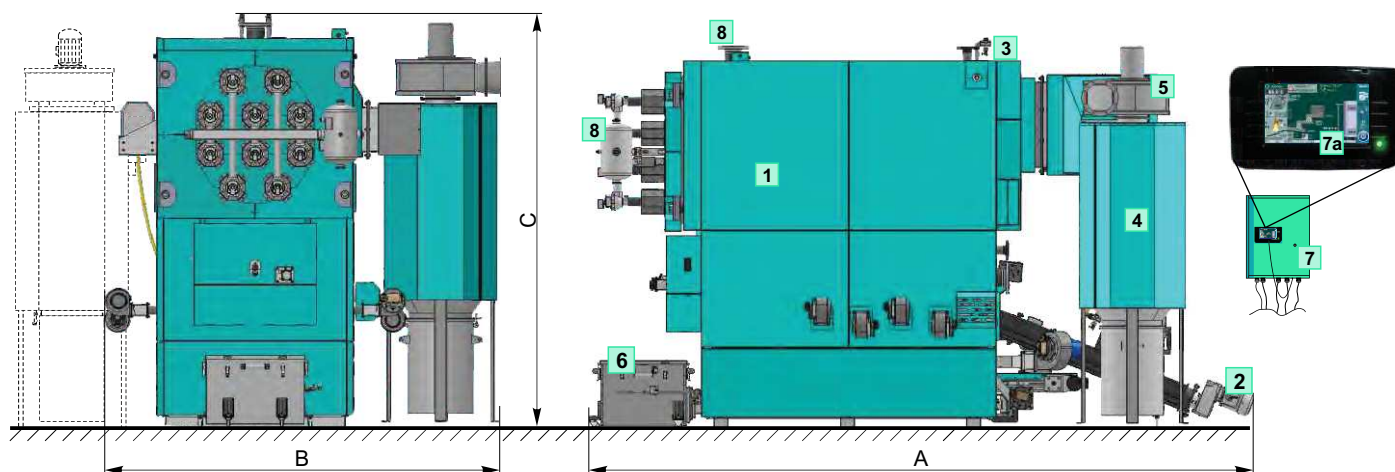
Wood chips storage with the mixer connected to the screw conveyor



Automatic flue pipes cleaning system

BASIC DIMENSIONS:

- 1** - Body of the boiler with burner with moving grate and thermal insulation
- 2** - Supply screw transporter of fuel to boiler with a port for connecting supply transporter 2, protection against backfire and overfilling sensor
- 3** - Ports for thermal protection of the boiler
- 4** - Cyclone with ash box (can be installed on left or right side)
- 5** - Cyclone fan
- 6** - Automatic ash extraction system with ash boxes (pužem)
- 7** - Electric box with digital boiler controller
- 7a** - Control unit
- 8** - System for automatic cleaning of flue gas pipes (pneumatic) (additional equipment)



EKO-CKS Multi Plus		170	250	340	450	580
Nominal heat output	(kW)	170	250	340	320	580
Heat output range	(kW)	51 - 170	75 - 250	102-340	135 - 450	174 - 580
Inlet / Outlet	(R)/(DN)	2"	80	80	100	100
Max. working temperature	(°C)	95	95	95	95	95
Max. working pressure	(bar)	4	4	4	4	4
Total depth A	(mm)	3885	3885	4235	4720	4720
Total width B	(mm)	2010	2170	2260	2555	2655
Total height C	(mm)	2270	2520	2520	2595	2775