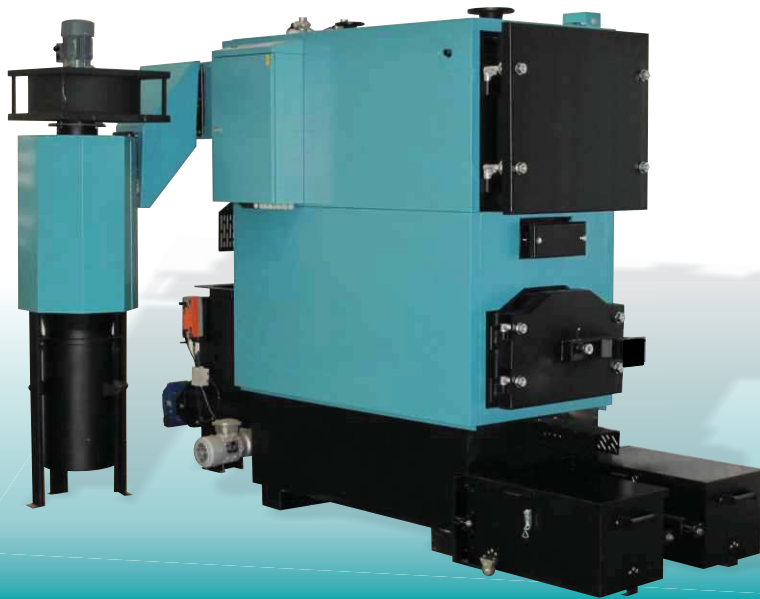




EKO-CKS Multi

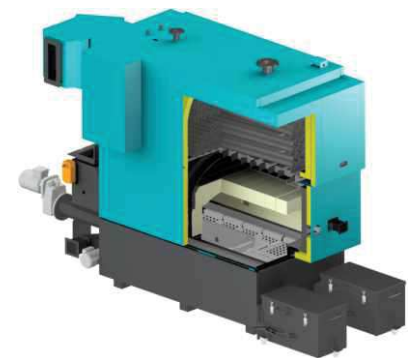
Steel hot water boilers for central heating systems **EKO-CKS Multi** with rated output **160-580 kW** are designed to burn wood chip. They are designed for installation in closed or open heating systems for medium and large objects. Automatic operation of the system provides the user with an enviable comfort and makes the system suitable for widespread use. Boilers have inbuilt lambda probe, automatic fire start, thermal protection, automatic cleaning of ash and cyclone with the fan for separation of particles from the flue gases. They are recognizable by the successful combination of modern technology and high quality building materials and simple installation and use. A series of proven technical solutions makes these boilers safe and reliable in operation. Used fuel is one of the renewable energy resources and is very environmentally friendly.



CHARACTERISTICS OF EKO-CKS Multi BOILER:

- They are designed to be powered by wood chips sized P16A-P45A (G30-G50).
- The maximum permissible moisture content of the fuel is 35% (M35).
- They are designed for installation in closed or open central heating systems.
- Heat output range: 160-580 kW.
- After changing the type, size, or fuel moisture, necessary is to make correct adjustment of the system, there is a possibility of presetting parameters for different types of fuels.
- Requires electricity 380/400 V.

- Boilers are equipped with:
 - Digital boiler controller that controls boiler operation, conveyors for fuel supply to the boiler and ability to manage up to two additional conveyors and fuel mixer in the fuel tank.
 - Lambda probe.
 - Automatic fuel supply to the burner with conveyor, automatic start and ash extraction from the boiler.
 - Flue gas exhaust fan and separation of particles from flue gases using a cyclone.
 - Turbulators in the flue gas pipes, boiler thermal protection against overheating, protection from return flame to the fuel tank (backfilling sensor, flap).
- Required (obligatory) accessories:
 - wood chips storage with mixer connected to the transporter
- Accessories:
 - System for automatic cleaning of flue gas pipes (pneumatic).
 - Additional control unit to monitor the operation of the boiler, it is possible to connect to PC
 - Connecting screw conveyor between the fuel tank conveyor and boiler conveyor.
- Corresponding burner provides for high boiler efficiency level which makes it economical.
- Maximal work pressure of the boiler is 3 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.



Fuel transporter connection with return flame protection



Cyclone with a fan for flue gases



Gearmotor of automatic ash removal system



Ash box of automatic ash removal system

DELIVERY AND ADDITIONAL EQUIPMENT:

EKO-CKS Multi (160-580 kW)

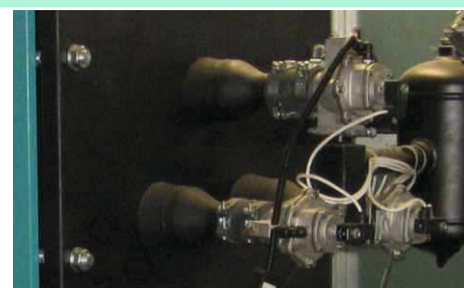
Basic delivery	Required equipment	Additional equipment
<ul style="list-style-type: none"> - body of the boiler with burner and retort - supply fuel screw transporter into the boiler with a connection for an external supply fuel transporter, return flame protection and backfilling sensor - Steel casing 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) - Additional control unit to monitor the operation of the boiler, possible to connect to PC - Connecting screw transporter between the tank transporter and boiler transporter



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



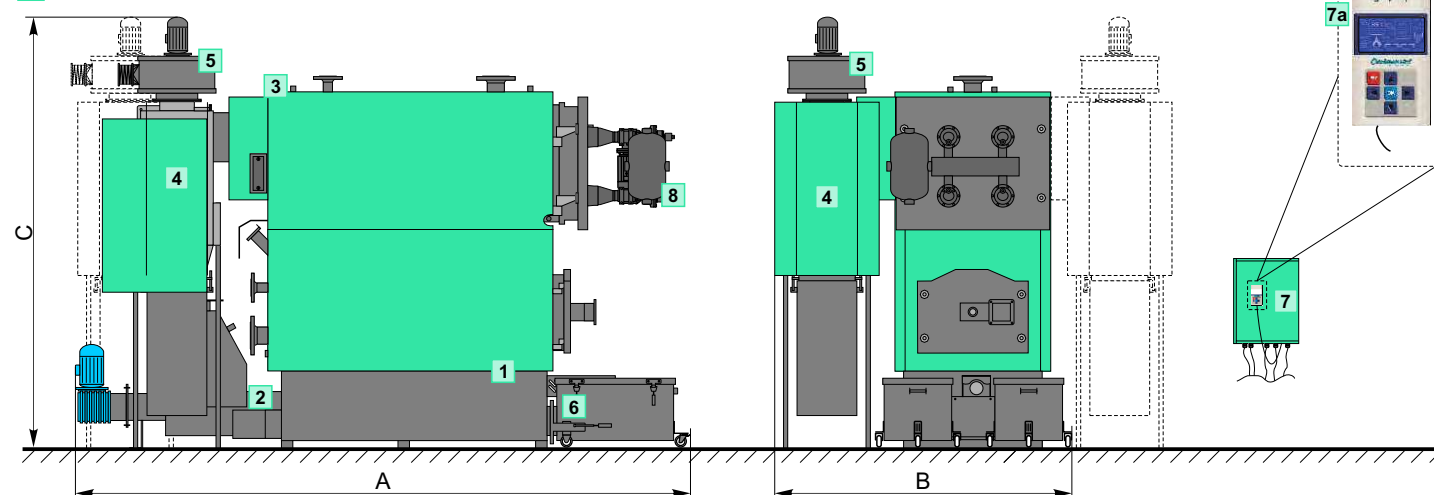
Wood chips storage with the mixer connected to the screw conveyor



Automatic flue pipes cleaning system

BASIC DIMENSION:

- 1** - Body of the boiler with burner with moving grate and thermal insulation
- 2** - fuel screw conveyor in the boiler with connection to the outer fuel conveyor, return flame protection and backfilling 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		160	210	260	320	440	580
Nominal heat output	(kW)	160	210	260	320	440	580
Heat output range	(kW)	48 - 160	63 - 210	78 - 260	96 - 320	132 - 440	174 - 580
Inlet / Outlet	(R)/(DN)	2"	2"	80	80	100	100
Max. working temperature	(°C)	90	90	90	90	90	90
Max. working pressure	(bar)	3	3	3	3	3	3
Total depth A	(mm)	3670	3670	4020	4020	4500	4500
Total width B	(mm)	1800	1905	2000	2145	2470	2470
Total height C	(mm)	2140	2400	2460	2460	2570	2870