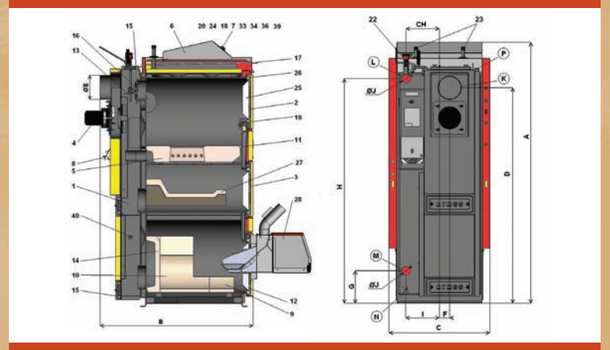
NATURE ENERGY

1. Body of boiler
2. Charging door (wood)
3. Ash door (wood)
4. Suction fan (except for DC 15 EP)
5. Fire resistance jet
6. Control panel
7. Safety thermostat
8. Regulation flap
9. Fire resistance element – lengthening of spherical space (Kombi)
10. Fire resistance element – lengthening of spherical space (Kombi)
11. Sealing of jet – 12 x 12
12. Door – burner for pellets
13. Fire-up damper
14. Fire resistance element – back face of spherical space (Kombi)
15. Cleaning cover
16. Curtain
17. Fire-up damper bar
18. Thermometer
19. Furnace curtain
20. Switch
22. Output controller – Honeywell FR 124
23. Cooling loop
24. Control thermostat
25. Door filling - Sibral
26. Seal for door – cord 18 x 18
27. Ceramics – roof
28. Burner for pellets, natural gas or light fuel oil
29. Fire resistance element – spherical space (D 15)
30. Fire resistance element – lining of spherical space (DC 15 E)
31. Fire resistance element – spherical space - wood
32. Fire resistance element – back face of spherical space – wood
33. Thermostat of pumping device
34. Safety-fuse (6,3 A)
35. Burnt-gas thermostat (except for DC 15 EP)
36. Changeover switch
37. Press-button limit switch
40. Point of measurements for burnt-gas analyzer



DIMENSIONS	DC 15 EP (L)	DC 18 SP (L)	DC 25 SP (L)	DC 32 SP (L)
A	1695	1695	1695	1772
B	694	757	957	957
C	643	643	643	678
D	1375	1375	1375	1448
E	152	152	152	152
F	65	65	65	70
G	207	207	207	183
H	1436	1436	1436	1505
CH	212	212	212	256
I	212	212	212	240
J	6/4"	6/4"	6/4"	6/4"

TECHNICAL DATA:

TYPE ATMOS		DC 15 EP (L)	DC 18 SP (L)	DC 25 SP (L)	DC 32 SP (L)
POWER OUTPUT RANGE - WOOD	kW	14,9	20	25	35
POWER OUTPUT RANGE - PELLETS	kW	4,5 - 15	4,5 - 15	6 - 20	6 - 20
POWER OUTPUT RANGE - LFO, NATURAL GAS	kW	15 - 20,5	15 - 20,5	15 - 30	15 - 30
COMBUSTIBLE - WOOD		DRY WOOD CALORIC VALUE 15 - 18 MJ/kg, ∅ 70 - 150 mm, 12 - 20 % OF HUMIDITY			
COMBUSTIBLE - PELLETS		QUALITY WOOD PELLETS ∅ 6 - 8 mm (WHITE PELLETS)			
COMBUSTIBLE - LFO, NATURAL GAS		GAS FUEL VALUE 34 MJ/m^3, OIL FUEL VALUE 42 MJ/m^3			
MAXIMUM WOOD LENGHT	mm	330	330	530	530
VOLUME OF HOPPER	dm^3	66	66	100	140
BOILER WEIGHT	kg	424	429	506	571
VOLUME OF WATER	l	78	78	109	160
TYPE OF BURNER FOR PELLETS		IWABO VILLA S / ATMOS ERATO GP 20			
BURNER TYPE, LFO OR NATURAL GAS		ANY BURNER EQUIPPED WITH MECHANICALLY CONTROLLED AIR FLAP			
PELLET SILO		EXTERNAL - 250, 500, 1000 LITERS			
CONNECTING VOLTAGE	V/Hz	250/50			
POWER DEMAND JOIN STARTUP	W	1120	1120	1120	1120
POWER DEMAND AT THE OPERATION	W	120	120	120	120
CLASS OF BOILER EN 303-5		3	3	3	3

Boilers for wood gasification combined with natural gas or light fuel oil combustion are marked by a postfix L (e.g. DC 18 SPL) in the denomination of boiler.

THE EUROPEAN REGIONAL DEVELOPMENT FUND AND THE MINISTRY OF INDUSTRY AND TRADE OF THE CZECH REPUBLIC SUPPORT INVESTMENT IN YOUR FUTURE.

ATMOS

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01/09 ENG

ATMOS

Wood, Pellets

Wood, LFO

Wood, Natural Gas

NATURE ENERGY

Boiler for pellets and wood gasification ATMOS
DC 15 EP, DC 18 SP, DC 25 SP, DC 32 SP

TRADITION AND QUALITY

FUNCTIONALITY

The new range of combined boilers **ATMOS DC 15 EP (L), DC 18 SP (L), DC 25 SP (L), DC 32 SP (L)** makes it possible for wood combustion - based on wood gasification principle – in combination with burner for pellets, natural gas or extra light fuel oil. Such boilers allow changing the variety of fuel; it is possible to burn pellets, natural gas or light fuel oil - depending on the type of the built-in burner. If required, it is possible to purchase the boiler without burner, to choose the burner later on, or to use the burner from the old (previous) boiler.

REGULATION

- Draught regulator HONEYWELL
- Regulation thermostat
- Waste gas thermostat
- Thermostat for pumping device
- Changeover switch

BOILER CONSTRUCTION

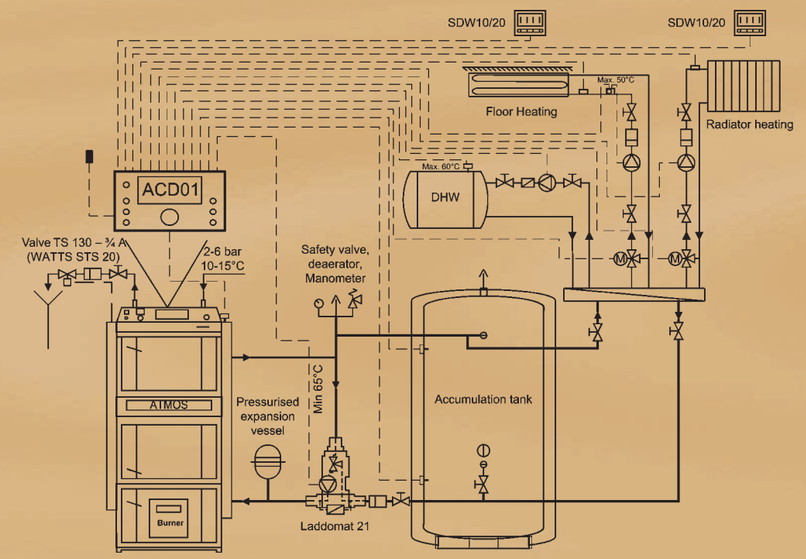
The boiler is constructed as a body with three chambers placed one above the other. The upper two chambers serve for wood gasification – which is usual in classic gasification boilers being normally produced in our factory. In the bottom chamber there is a built-in burner in front and the chamber is lined by ceramics in order to reach the optimal quality of burning process. Two systems are separated by the water jacket one on the other, the systems practically do not interact and boilers have a very high efficiency. The flue gas exhausting is solved through one outlet branch so that only one flue-gas chimney is sufficient.

ADVANTAGES OF ATMOS BOILERS

- Combination of combustibles is possible – fuel changing without any complication
- Replacement of burners – it is possible to change the combustible any time
- High efficiency – it is practically the same if compared with special boilers for light fuel oil, natural gas or wooden pellets (up to 92.3 %)
- Cheaper solution - costs for installation of two special boilers are higher slightly more expensive. It is therefore economically more advantageous.
- Smaller building volume – two special boilers compared with the combined one.
- One flue gas ducting and one chimney
- Ecological operation – with all kind of combustibles

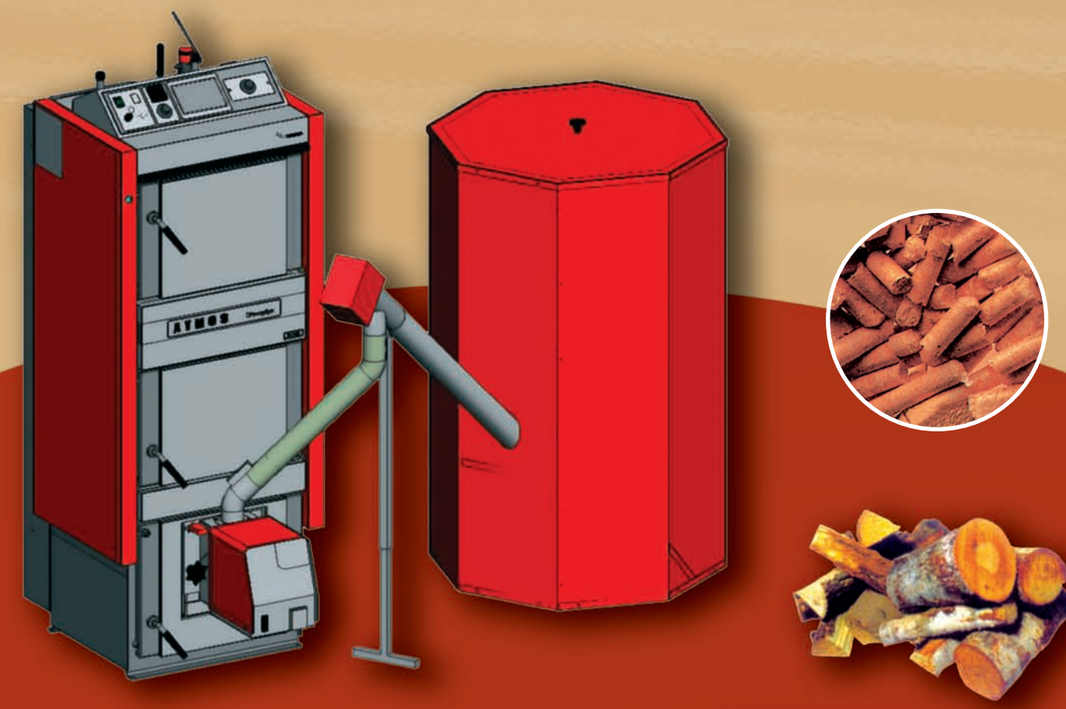
Boiler for LFO or natural gas and wood gasification ATMOS
DC 15 EPL, DC 18 SPL, DC 25 SPL, DC 32 SPL

ATMOS



The installation recommended - installation of boiler with Laddomat 21 or with thermoregulation valve and with the equalization reservoir of 500 – 1000 litres is recommended. There is another possibility to install the boiler with storage tank (for ex. 2000 litres) which gives the possibility to utilize and combine electric water heating and solar water heating, as well. If necessary, it is possible to install the boiler without storage tank – especially when we choose natural gas (propane) or light fuel oil as the second fuel medium.

Laddomat 21 is substituting a classic installation of single elements. It consists of cast-iron body, thermoregulation valve, pumping device, backflow valve, globe valves and thermometer. The temperature for thermoregulation valve opening is 78 °C or 72 °C – depending on the type of thermoregulation cartridge.



Boiler with burner, conveyor and a pellet tank