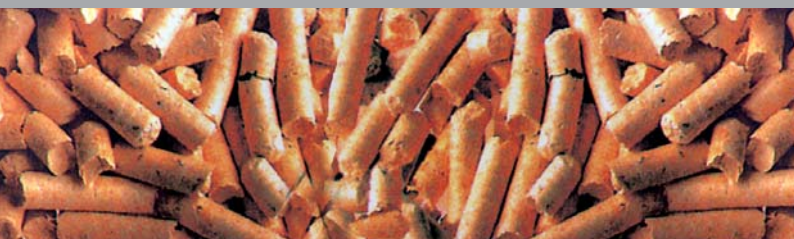


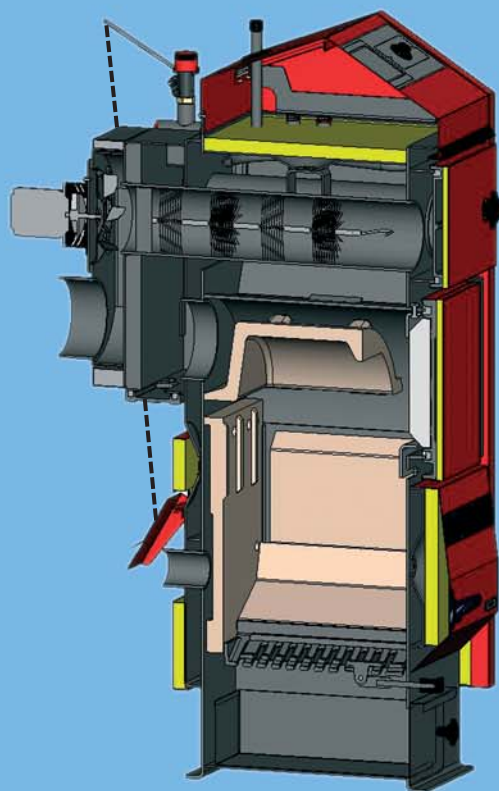


ATMOS



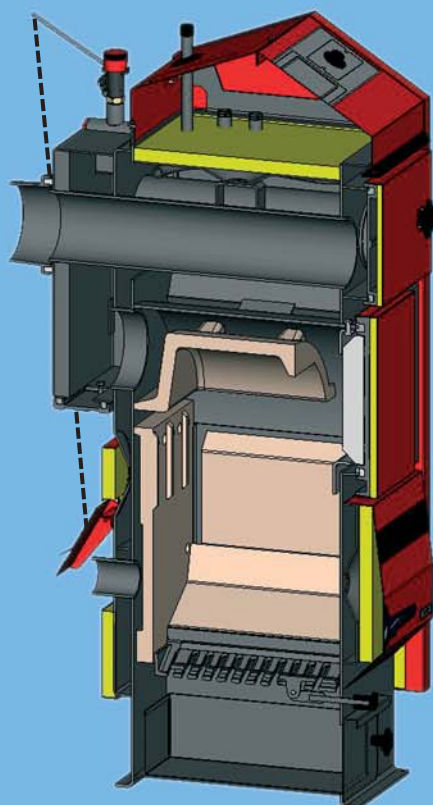
COMBI BOILERS





Pellet boilers D 20 P, D 30 P, D 45 P

Boilers with suction fan with power output in range 6,5 kW – 48 kW



Pellet boiler D 15 P

Without suction fan with power output 4,5 kW – 15 kW

Hot water boilers - D 15 P, D 20 P, D 30 P, D 45 P

are for comfortable heating of family houses with pellets and wood as an alternative fuel in emergency.

Pellet ATMOS boilers are designed for burning pellets and as an alternative fuel you can use log wood. The boilers are designed in such a way that the burner can be installed into either the left or right side of the boiler. The boiler body is constructed from 6 mm thick welded sheet plates. The lower part of the hopper is equipped with a moving grate for easy cleaning. The upper part of D 20 P, D 30 P and D 45 P is a tube plate construction and brushes through which the waste gas leaves the boiler. The brushes serve as an air-brake for maximum efficiency and for easy cleaning of the boiler. The D 15 P boiler has the same tube plate as D 20 P but without air-brake brush and without suction fan. All the combustion chamber is lined with ceramic parts for clean burning with highest efficiency.



ATMOS A 25

Power output 4 - 24 kW



ATMOS A 45

Power output 8,5 - 49 kW

On the top of the boiler you will find a control panel with switches and thermostats. The panel is equipped and pre-wired for fitting an electronic unit for controlling a three zone heating system and solar control. At the rear side of the boiler you can find a draught regulator Honeywell FR124 which serves for regulating the air intake when burning log wood. The boiler is equipped with a cooling loop to prevent the boiler against overheating. The possibility to burn wood is only in emergency case and helps the customer not to depend only on pellets.



Pellet burners ATMOS A 45 and ATMOS A 25 are able to burn only good quality white pellets from soft wood without bark \varnothing 6 - 8 mm, length 10 - 25 mm with heating power 16 - 19 MJ.kg⁻¹. The burners burn pellets with efficiency over 90 % and with maximal comfort for customer. The operation is controlled by an electronic unit on the burner which controls firing up, operation and burning down processes.



**Pellet boiler D 30 P with
built pellet burner A 45**



*Boiler with burner
and the auger conveyor
with a pellet silo*



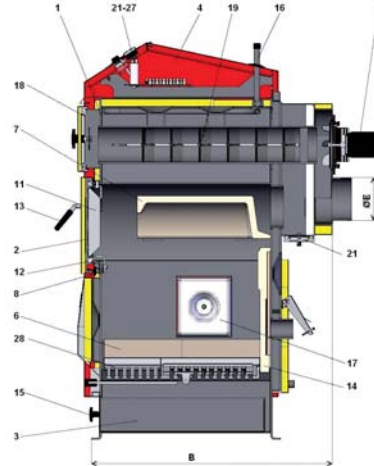
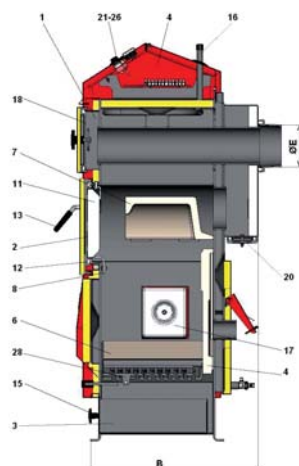
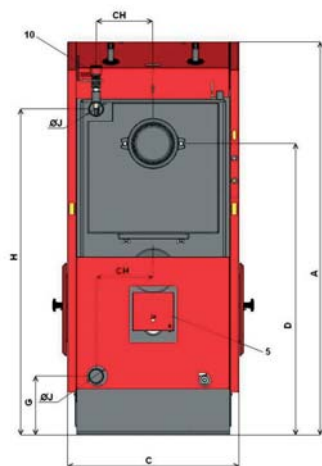
AUTOMATIC ASH REMOVAL FOR BOILERS D 15 P, D 20 P, D 30 P, D 45 P

As an optional extra you can purchase an ash removal system with an external ash pan which can be fitted to every pellet boiler made since 1. 3. 2007. It does not require any special threading.

The boiler is cleaned automatically by the auger conveyor with gearbox. It cleans the ash space in the boiler in regular intervals depending on type of used fuel. Carefully choose the capacity of the ash pan based on ash content and the fuel used.



1. Body of boiler
2. Door
3. Ash pan
4. Upper cover
5. Regulatory valve
6. Refractory bricks - bottom of combustion chamber
7. Refractory bricks - dome-shaped chamber
8. Screen
9. Control panel
10. Draught controller Honeywell FR 124
11. Door lining
12. Sealing cord – 18x18 mm
13. Closure
14. Refractory bricks - rear part of dome-shaped chamber
15. Fire resistance element – back plate of combustion chamber
16. Cooling loop
17. Burner slot
18. Cleaning cover of tube plate
19. Brake valve
20. Cleaning cover of back canal
21. Suction ventilator (type D 20 P, D 30 P and D 45 P)
23. Furnace grate



DIMENSIONS	D 15 P	D 20 P	D 30 P	D 45 P
A	1405	1405	1405	1405
B	589	652	852	1052
C	606	606	606	606
D	1040	848	848	848
E	152	152	152	152
G	211	211	211	211
H	1163	1163	1163	1163
CH	202	202	202	202
J	6/4"	6/4"	6/4"	6/4"

TECHNICAL DATA:

TYPE ATMOS		D 15 P	D 20 P	D 30 P	D 45 P
POWER OUTPUT RANGE	kW	4,5 - 15	6,5 - 22	8,9 - 29,8	13,5 - 45
BOILER WEIGHT	kg	259	305	370	430
SPECIFIED FUEL		QUALITY WOOD PELLETS Ø 6 - 8 mm (WHITE PELLETS), LENGHT 10 - 25 mm			
SUBSTITUTE FUEL		DRY WOOD CALORIC VALUE 15 - 18 MJ/kg, Ø 50 - 150 mm, 12 - 20 % OF HUMIDITY			
VOLUME OF HOPPER	dm³	70	70	105	140
MAXIMUM WOOD LENGHT	mm	300	300	500	700
VOLUME OF WATER	l	65	82	91	117
PELLET BURNER		ATMOS A25		ATMOS A 45	
PELLET SILO			EXTERNAL - 250, 500, 1000 LITERS		
CONNECTING VOLTAGE	V/Hz	250/50			
POWER DEMAND JOIN STARTUP	W	522	572	530	530
POWER DEMAND AT THE OPERATION	W	42	92	97	97
EFFICIENCY IN THE WHOLE RANGE OF POWER OUTPUT	%	> 90	> 91	> 90	> 90
CLASS OF BOILER EN 303-5		3	3	3	3





DC 18 SP, DC 25 SP, DC 32 SP

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 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



Warm-water gasification boilers **COMBI ATMOS**

FUNCTIONALITY

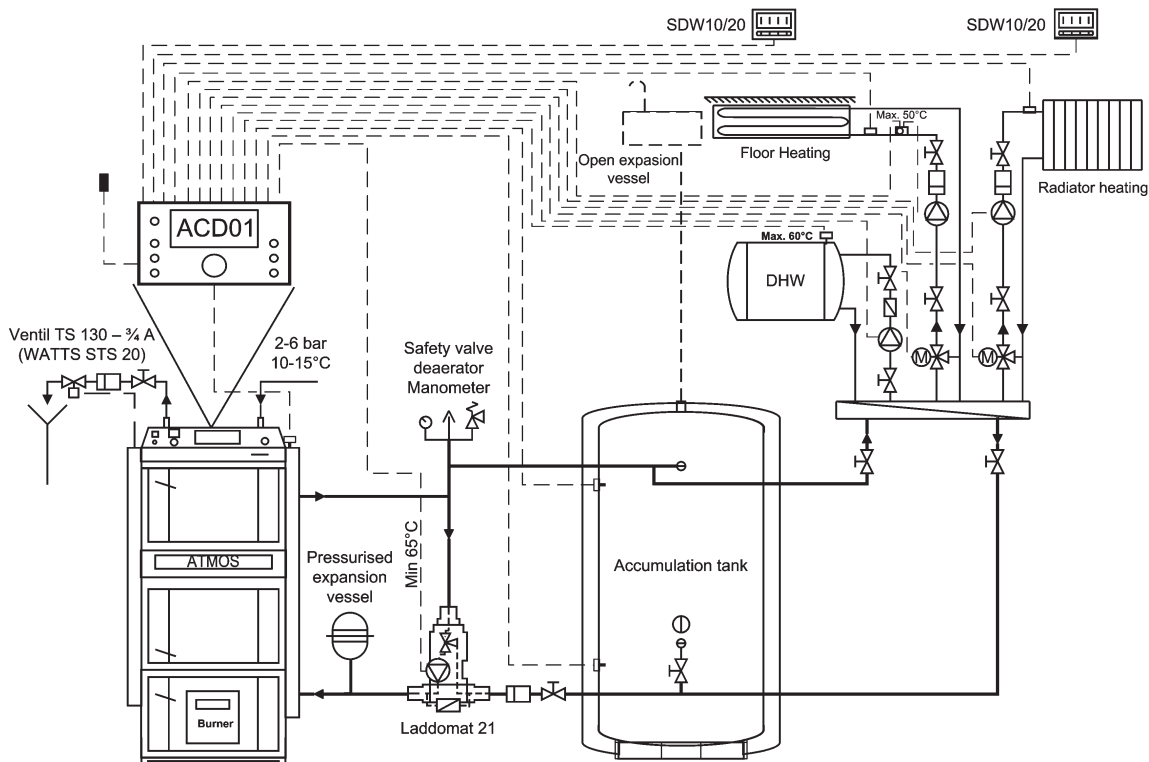
The new range of combined boilers **ATMOS DC 18 SP (L), DC 25 SP (L), DC 32 SP (L)** makes it possible for wood combustion - based on wood gasification principle – in combination with burner for pellets or extra light fuel oil. Such boilers allow changing the variety of fuel; it is possible to burn pellets 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

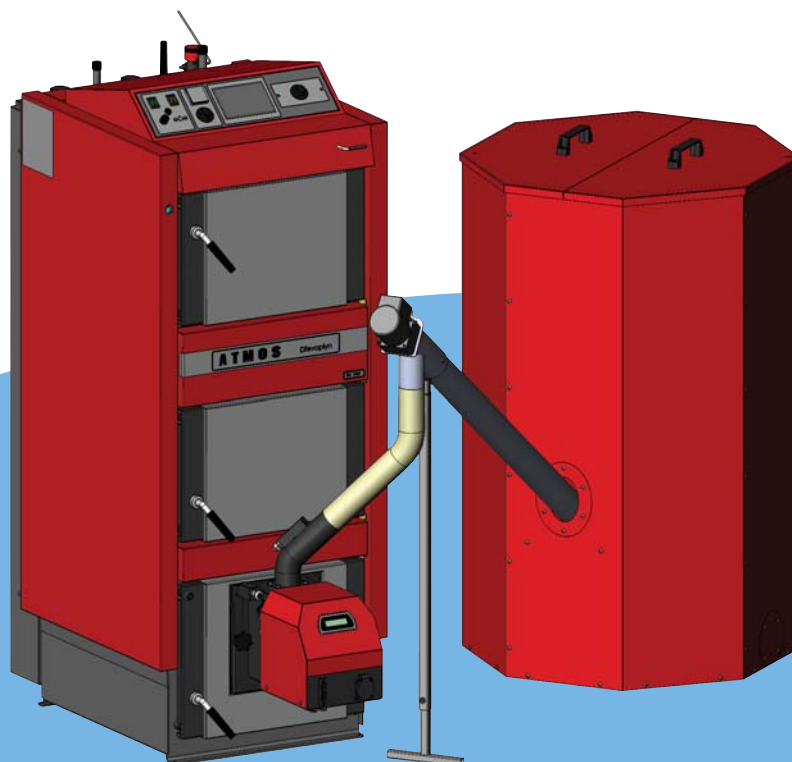


DC 18 SPL, DC 25 SPL, DC 32 SPL

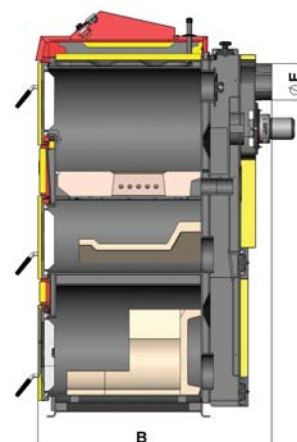
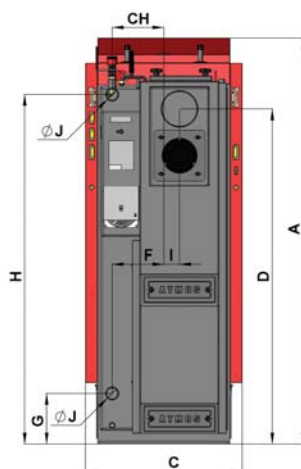


The installation recommended - installation of boiler with Laddomat 21 or with thermoregulation valve and with the equalization reservoir of 500 – 1000 litres is recommended. There is another possibility to install the boiler with storage tank (for ex. 2000 litres) which gives the possibility to utilize 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 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



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

TECHNICAL DATA:

TYP ATMOS		DC 18 SP (L)	DC 25 SP (L)	DC 32 SP (L)
POWER OUTPUT RANGE - WOOD	kW	20	25	35
POWER OUTPUT RANGE - PELLETS	kW	4,5 - 15	6 - 24	6 - 24
POWER OUTPUT RANGE - LFO, NATURAL GAS	kW	15 - 20,5	15 - 30	15 - 30
REQUIRED DRAUGHT OF CHIMNEY	Pa	20	23	24
COMBUSTIBLE - WOOD		DRY WOOD CALORIC VALUE 15 - 18 MJ/kg, Ø 70 - 150 mm, 12 - 20 % OF HUMIDITY		
COMBUSTIBLE - PELLETS		QUALITY WOOD PELLETS Ø 6 - 8 mm (WHITE PELLETS)		
COMBUSTIBLE - LFO		OIL FUEL VALUE 42 MJ/m ³		
MAXIMUM WOOD LENGHT	mm	330	530	530
VOLUME OF HOPPER	dm ³	66	100	140
BOILER WEIGHT	kg	429	506	571
VOLUME OF WATER	l	78	109	160
TYPE OF BURNER FOR PELLETS		ATMOS A 25		
PELLET SILO		EXTERNAL - 250, 500, 1000 LITERS		
CONNECTING VOLTAGE	V/Hz	250/50		
POWER DEMAND JOIN STARTUP	W	572	572	572
POWER DEMAND AT THE OPERATION	W	92	92	92
CLASS OF BOILER EN 303-5		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.





ATMOS

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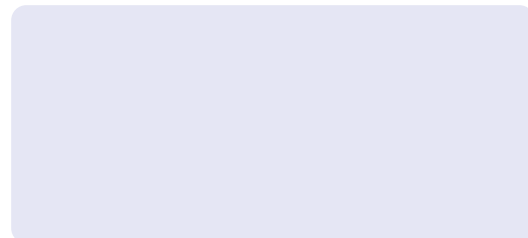
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