

Automatic pellet boilers



They are designed for perfect combustion of pellets, so that a pellet burner is built into the left or right side of the boiler, according to the customer's needs, which removes the pellets from the hopper fully automatically using a screw conveyor. The fuel tank is usually located next to the boiler or in an adjoining room and can be of any size (standard 250, 500 or 1000 l). A part of the boiler room is often used as a fuel tank, which is then sufficient for the entire heating season.

The operation of the pellet burner itself works completely automatically. If the burner is instructed to start or there is a need to heat, the conveyor pours the pellets into the burner nozzle and is itself switched on by the heating element (spiral). After sufficient burning of the pellets, the burner starts at the set power, in which it remains until the system (house) is heated. Then the burner is switched off and the pellets in the burner chamber burn out. The burner is thus ready for a new start. The whole cycle is always repeated in case of further needs.

Boiler output and other burner functions are controlled by electronic regulation, which allows the boiler operation to be adapted to the specific conditions of the entire system. We refill the pellets, clean the combustion chamber of the burner and remove the ash, once every 1 – 30 days, depending on the quality of the pellets and the size of the hopper. If necessary, the boilers can be equipped with an automatic ash removal system for comfortable heating with minimal maintenance.




Thanks to these features, these boilers are just as comfortable in terms of operation and utility properties as gas heating. The main advantage, however, is that, unlike natural gas, they burn renewable energy sources.

Advantages of ATMOS pellet boilers

- **Great heating comfort**
- **High efficiency 90.2 to 92.4 % depending on type – low fuel consumption**
- **Ecological combustion – boiler according to EN 303-5:2012 class 5 and EKODESIGN 2015/1189**
- **Automatic operation and shutdown of the boiler after the fuel burns out**
- **Automatic ash removal – with built-in ash removal**




D20P

Automatic pellet boiler

-  **Rated power 22 kW**
-  **Boiler efficiency 91,1 %**
-  **Emission class nr. 5 (Eco-design)**




D40P

Automatic pellet boiler

-  **Rated power 40 kW**
-  **Boiler efficiency 91 %**
-  **Emission class nr. 5 (Eco-design)**




D30P

Automatic pellet boiler

-  **Rated power 29,8 kW**
-  **Boiler efficiency 92,4 %**
-  **Emission class nr. 5 (Eco-design)**

D50P

Automatic pellet boiler

-  **Rated power 45 kW**
-  **Boiler efficiency 91,1 %**
-  **Emission class nr. 5 (Eco-design)**



DxxP boilers meets 5th emission class (Energy efficiency class A+), Ekodesign.

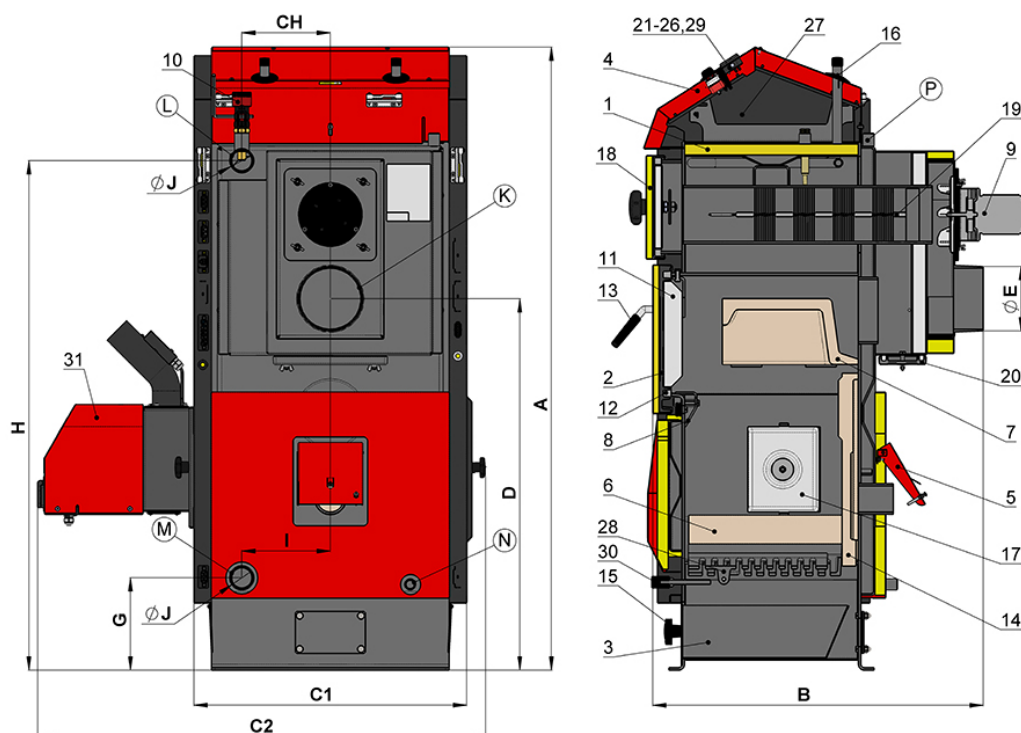
ATMOS D 20 P, D 30 P, D 40 P and D 50 P hot water pellet boilers are designed for convenient heating in residential houses.

A pellet burner with a conveyor is fitted to the left or right side of the boiler. The boiler drum is manufactured as a welded structure of 3 – 6 mm thick steel sheets. The burning chamber has a cast iron grill in the lower section to allow you to easily clean the chamber with an ash bin underneath. Above the door of the D 20 P, D 30 P, D 40 P and D 50 P boilers there is a tube heat exchanger fitted with brush air turbulators and in the rear part of boiler you can find the suction ventilator. These all allow clear and perfect ash cleaning.

The burning chamber is **fitted with a shaped heat proof fixture for optimal operation** at high efficiency and for easy cleaning.

At the top of boiler, you can find a control panel which regulates and controls the boiler and heating system.

Boilers D20P, D30P, D40P, D50P



Description of the boiler drawing D20p, D30P, D40P, D50P

- | | |
|--|--|
| 1. Boiler body | 19. Air decelerator (type D20P – 3x brush, D30P, D40P a D50P – 1x brush + 2x steel) |
| 2. Filling door | 20. Cleaning lid of the rear drain |
| 3. Ashtray | 21. Thermometer |
| 4. Control panel | 22. Main switch |
| 5. Regulating air damper – only for wood heating | 23. Control (boiler) thermostat |
| 6. Heat-resistant fitting – bottom of the combustion chamber | 24. Pump thermostat |
| 7. Heat-resistant fitting – upper spherical space | 25. Safety thermostat |
| 8. Frame screen | 26. Fuse T6,3A/1500 – H type |
| 9. Exhaust fan | 27. Condenser for exhaust fan – 1μF |
| 10. Draught regulator – HONEYWELL FR124 | 28. Grate |
| 11. Door filling – Sibrall | 29. Double switch for automatic ash removal and pellet burner |
| 12. Door seal – cord 18 x 18 mm | 30. Grate pipe |
| 13. Closure – handle | 31. Pellet burner |
| 14. Heat-resistant fitting – rear part of spherical space | K – the flue-gas duct neck |
| 15. Ashtray cap – nut | L – water outlet from the boiler |
| 16. Cooling loop against overheating | M – water inlet to the boiler |
| 17. Burner hole cover | N – filling valve pipe sleeve |
| 18. Tube cover cleaning lid | P – socket for the sensor of the valve controlling the cooling loop (TS 131, STS 20) |

Boiler dimensions (mm)				
	D20P	D30P	D40P	D50P
A	1405	1405	1405	1405
B	652	954	954	1052
C	606	606	606	606
D	848	848	848	848
E	150/152	150/152	150/152	150/152
G	211	211	211	211
H	1163	1163	1163	1163
CH	202	202	202	202
I	–	–	–	–
J	6/4"	6/4"	6/4"	6/4"

TYPE ATMOS DP		D 20 P	D 30 P	D 40 P	D 50 P	D 85 P
POWER OUTPUT FOR PELLETS	kW	6,5 – 22	8,9 – 29,8	8.9 – 40	13,5 – 45	24 – 80
WEIGHT OF BOILER	kg	315	386	386	455	695
SPECIFIC DRAFT OF CHIMNEY	Pa	15	21	21	22	25
SPECIFIC (PREFERRED) FUEL		HIGH QUALITY WOOD PELLETS OF 6 – 8 mm DIAMETER, LENGTH 10 – 25 mm, CALORIC POWER 15 – 18 MJ/kg				
VOLUME OF BURNING HOPPER	dm³	70	105	105	140	180
VOLUME OF WATER	l	82	91	91	117	185
TYPE OF PELLET BURNER		ATMOS A 25	ATMOS A 45			ATMOS A 85
SIZE OF EXTERNAL PELLET SILO		240, 250, 300, 400, 500, 1000 litres				
ELECTRIC CONNECTION	V/Hz	230/50				
ELECTRIC INPUT BY START	W	572	530	530	530	635
ELECTRIC INPUT BY OPERATION		92	97	97	97	142
EFFICIENCY	%	91,1	92,4	91,0	91,1	91,2
CLASS OF BOILER UNDER EN 303-5		5	5	5	5	5
ECODESIGN EU 2015/1189 COMPLIANT		●	●	●	●	●
ENERGY EFFICIENCY CLASS		A+	A+	A+	A+	A+