ATMOS

GASIFICATION BOILERS

2022

Since 1935

wood

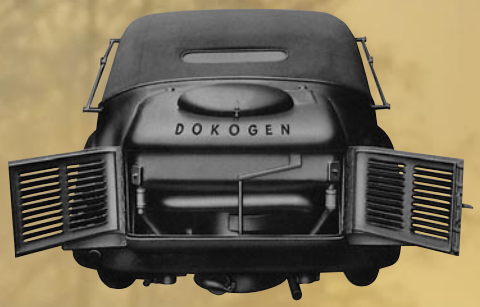
coal

Meet limits of **ECODESIGN**

ECO DES IGN

5th class

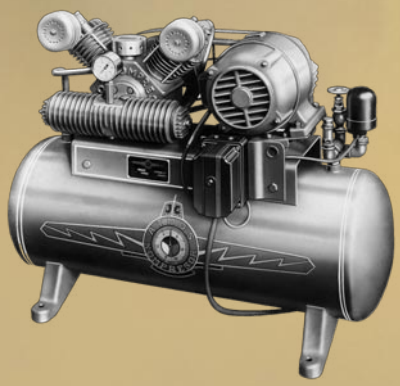
Production and sale of gasication units DOKOGEN



Skoda SUPERB with gas generator DOKOGEN, year 1943

ARO 240 with gas generator DOKOGEN, year 1985

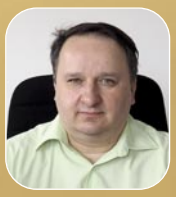
Air compressors ATMOS 1945



Compressor ATMOS PV2, year 1950

Museum 2021 / boilers – compressors – motors

TRADITION AND EXPERIENCE 1935 – 2022



Three generations of the Cankař family

87 Years
Since 1935

*Family company **ATMOS** was established in Bohemia in **1935 by Jaroslav Cankař senior**.*

In the beginning, the production was focused on gasification units for cars and ships with a trademark of DOKOGEN. They used the same principle as that used for modern ATMOS boilers run on wood.

In 1942, the company started development and production of compressors Atmos that were exported to the entire world until nationalisation. Even after nationalisation, the production of wood-fuel boilers, gasification sets and compressors was still running.

In 1980, the company presented at Pragoterm exhibition its first gasification boilers burning log wood and wood waste.

In 1985 the development was focused on gas generators for cars or ships engines and also development of wood gasification boilers.

*Company **ATMOS** was re-establihed in **1991 by Jaroslav Cankař junior** who started with his father the production of boilers. It was enabled by changes in the political system in the Czech Republic. By intensive development of new products, production expansion, buying and implementing of modern technologies company ATMOS has become one of the biggest manufactures of gasification boilers in Europe. To this day, the company has developed over 140 types of hot-water boilers with 15 pending patents. One of the first boilers was EKONOMIK developed in 1962.*

*Actually, three generations of the **Cankař family** are working on supplying the European market with quality boilers that are environment friendly and energy saving.*

The boilers are exported into 49 countries. Currently we produce 132 types of boilers. The whole company area consits of 75 000 m^2 includes 32 000 m^2 production area.

Boiler EKONOMIK, year 1968

Boiler EKONOMIK, year 1970

Boiler EKONOMIK, year 1985

WE MANUFACTURE HIGH QUALITY

ADVANTAGES OF ATMOS BOILERS

- Modern construction
- Full ceramic laid gasification chamber
- High efficiency up to 92 %
- Ecological parametres
- Controlled exhaust fan – pressure (DC 70 S)
- Large fuel chamber
- Easy fire-up
- Easy operation and cleaning
- Dust-free ash removal
- Small dimensions and low weight
- Cooling loop protecting against overheating
- Boiler works in low output
- Ceramic with steel lining
- The gasification chamber made from steel plates 6 mm
- Rottating cast iron grates for easy ash cleaning
- Clear burning from fire-up

ATMOS your sureness for today and tomorrow...

Training centre and museum – ATMOS 2

AND RELIABLE PRODUCTS

ACTUAL PRODUCTION PROGRAM

- wood gasification boilers in range
  15 kW – 150 kW
- coal gasification boilers
  15 kW – 50 kW
- coal briquettes gasification boilers
  18 – 45 kW
- pellet boilers
  5 kW – 80 kW
- combination boilers
  15 kW – 35 kW
  wood – pellets
- pellet burners A 25, A 45, A 85
  from 5 to 80 kW

FUNCTION

Gasification of wood (inverse burning) with subsequent combustion of wood gas in ceramic fire chamber. Air supply is controlled by suction fan. It allows fast fire up of boiler and clear bruning from start of fire. Temperature of flame keeps in between 1 000 – 1 200 °C. The burning chamber of boiler is made from 6 mm steel plates.

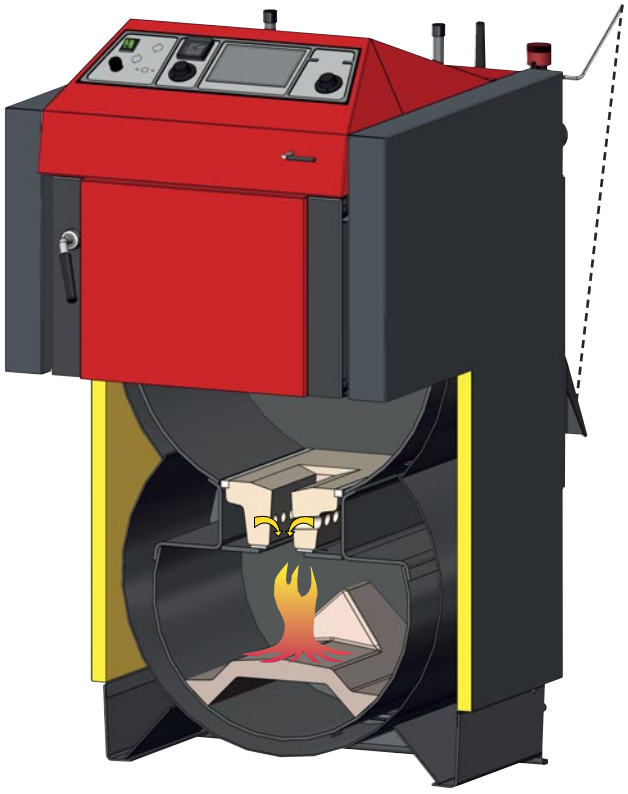
ENVIRONMENT

Inverse burning (gasification) and ceramic combustion chamber enable practically complete combustion with a minimum of harmful exhalations.

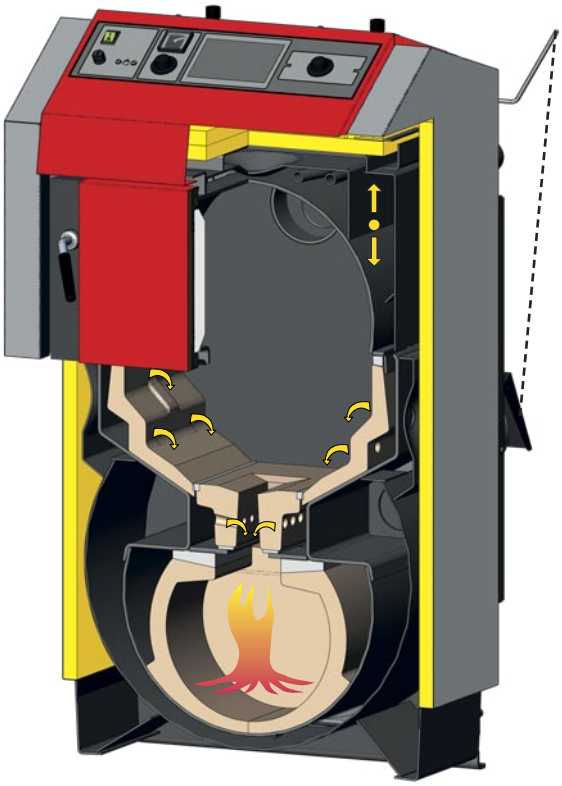
The boilers meet limits of European regulations for environmental friendly product and belong to 4 and 5 class of boiler under EU standard CSN EN 303-5 and Ecodesign 2015/1189.

ATMOS WOOD GASIFICATION BOILERS DC 18 S – DC 70 S

The boilers are made of round gasification chamber with rear inlet of pre-heated primary and secondary air. Contain ceramic nozzle and in lower chamber with ceramic shaped parts.



ATMOS Drevoplyn
DC 18 S – DC 50 S



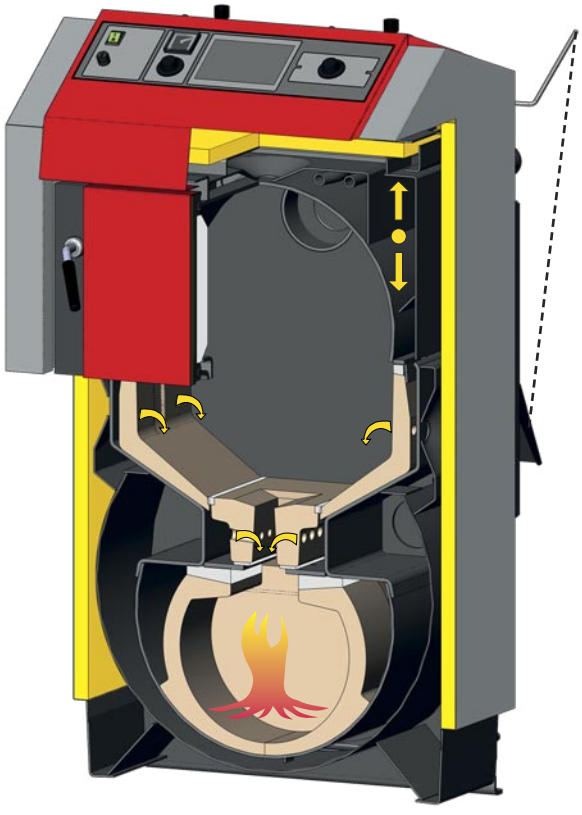
ATMOS Generator
DC 15 GS, DC 20 GS, DC 25 GS

WOOD GASIFICATION BOILERS

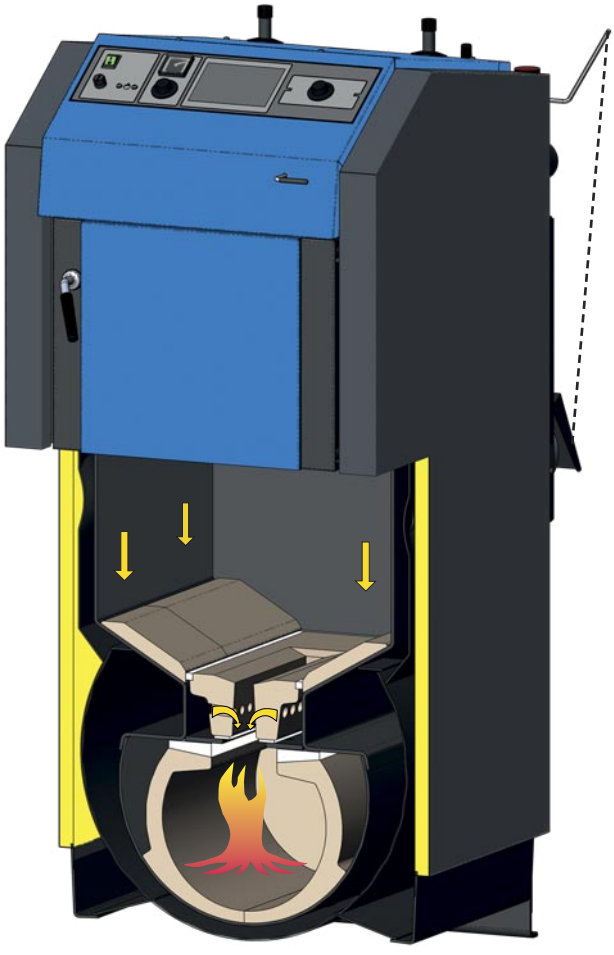
ATMOS WOOD GASIFICATION BOILERS DC 15 GS – DC 70 GSX

The boilers are made of rectangular gasification chamber which is laid with special ceramic shaped parts with primary air inlets in the lower section and with ceramic nozzle and in lower chamber with spherical ceramic parts.
DC 50 GSX and DC 70 GSX are not laid with special ceramic shaped parts in gasification chamber.

CERAMIC SHAPED PARTS IN GASIFICATION CHAMBER = IDEAL COMBUSTION



ATMOS Generator
DC 32 GS, DC 40 GS



ATMOS Generator
DC 50 GSX, DC 70 GSX

INSTALLATION

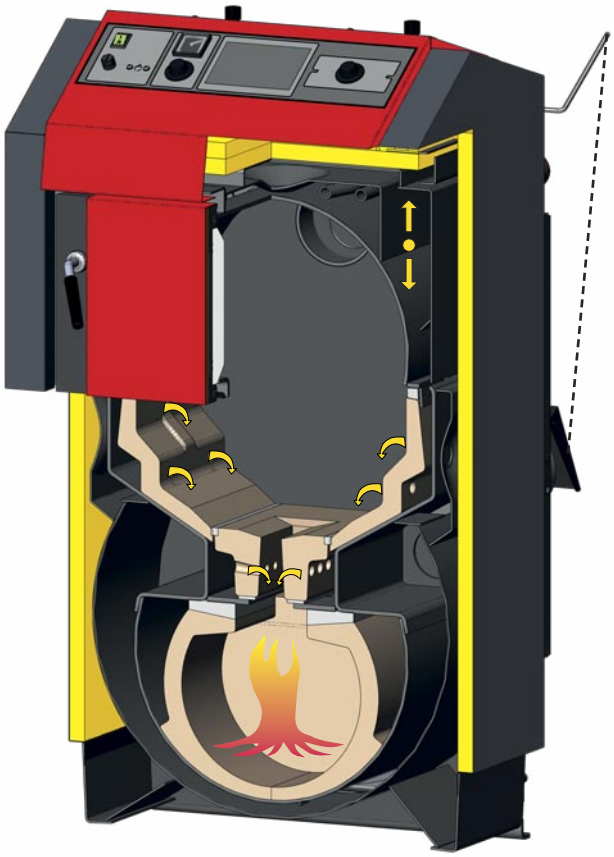
The main features of ATMOS boilers are small dimensions and low weight with simple regulation. The boiler must be fitted with a mixing valve or Laddomat 22 at the return pipe into the boiler keeping minimum temperature into the boiler 65 °C. The operation temperature of the boiler must be maintained within 80 – 90 °C.

We recommend installation with accumulation tanks. The boilers are not allowed to be installed in habitable rooms. They are supposed to be installed in well ventilated rooms.

ATMOS GENERATOR – THE BEST CHOICE FOR WOOD BURNING

The boilers were developed based on experience from development of wood gas generators (gasification units under mark **DOKOGEN**).

- Boilers **Generator DOKOGEN** contain special lay out of burning chamber for wood gasification.
- **The burning chamber** is made from **heatproof shaped pieces** at the sides with holes for primary air inlet.



ATMOS Generator – DOKOGEN

WOOD GASIFICATION BOILERS

- The heatproof shaped piece (nozzle) with longitudinal opening at bottom of top chamber is equipped with holes for secondary air inlet which preheats the air for high temperature
- The bottom chamber is equipped with **ceramic shaped pieces** (spherical space) which allows burning in high tempereratures 1100–1300 °C which assure clear and ecological burning.
- There is a vertical flue channel in the rear part of the boiler which contains turbulators for taking energy from waste gas.

AUTOMATIC WOOD IGNITION

The automatic wood ignition is used for the planned ignition of the boiler. The ignition of the fuel is **very fast (using electric heating element)**.

Fuel ignition can be set and **scheduled on the ACD04 controller** according to time (weekly program), according to the requirements of the heating system or according to the temperature in the accumulation tank. Such version is offered for boilers type DC 18 GD, DC 25 GD and DC 30 GD.

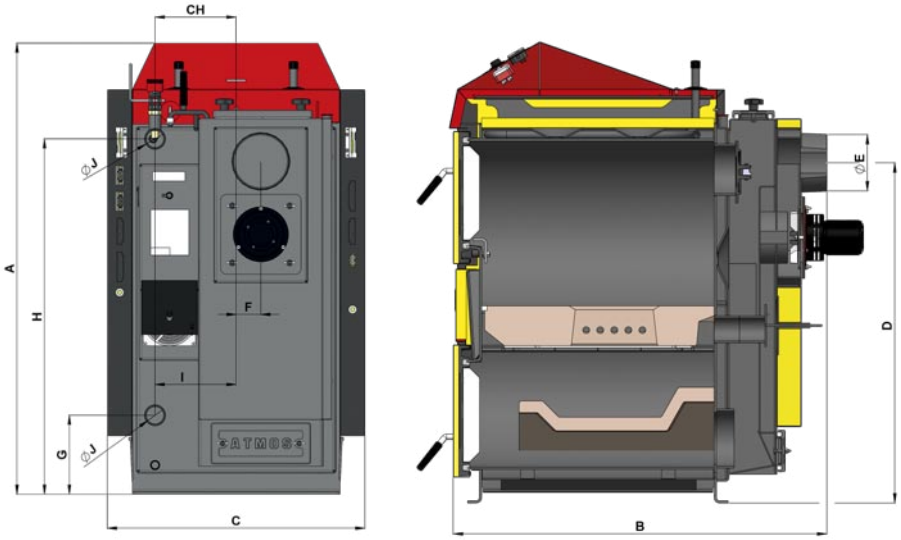
NEW

ATMOS Generator – DOKOGEN DC 18 GD, DC 25 GD, DC 30 GD

DC xx S/SX

Power output range 20 – 49 kW

DREVOPLYN – S



DC 18 S – DC 50 S

DIMENSIONS	DC 18 S	DC 22 S	DC 25 S	DC 30 SX	DC 32 S	DC 40 SX	DC 50 S
A	1185	1185	1185	1185	1260	1260	1260
B	758	959	959	959	959	959	1160
C	675*	675*	675*	675*	678	678	678
D	874	874	874	874	950	950	950
E	150 (152)	150 (152)	150 (152)	150 (152)	150 (152)	150 (152)	150 (152)
F	65	65	65	65	69	69	69
G	208	208	208	208	185	185	185
H	933	933	933	933	1008	1008	1106
CH	212	212	212	212	256	256	256
I	212	212	212	212	256	256	256
J	6/4"	6/4"	6/4"	6/4"	6/4"	6/4"	2"

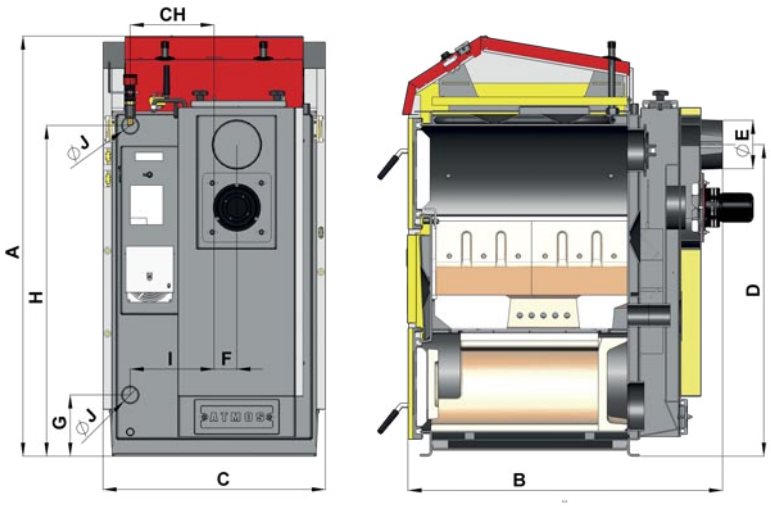
**wide of boiler after side panels disassembly 555 mm*

TYPE ATMOS DREVOPLYN		DC 18 S	DC 22 S	DC 25 S	DC 30 SX	DC 32 S	DC 40 SX	DC 50 S
POWER OUTPUT	kW	20	22	27	30	35	40	49
SPECIFIC DRAFT OF CHIMNEY	Pa	20	23	23	24	24	25	25
BOILER WEIGHT	kg	285	324	326	332	366	368	433
VOLUME OF WATER	l	45	58	58	58	80	80	89
VOLUME OF HOPPER	dm^3	66	100	100	100	140	140	180
MAXIMUM WOOD LENGHT	mm	330	530	530	530	530	530	730
SPECIFIED FUEL		**DRY WOOD** – CALORIFIC VALUE 15 – 17 MJ/kg, DIAMETER 80 – 150 mm, 12 – 20 % HUMIDITY						
MINIMUM TEMPERATURE OF RETURN WATER		65 °C						
CLASS OF BOILER UNDER EN 303-5		5	5	5	5	5	5	4
MEET LIMITS OF ECODESIGN EU 2015/1189		●	●	●	●	●		
ENERGY EFFICIENCY CLASS		A+	A+	A+	A+	A+	A+	A+

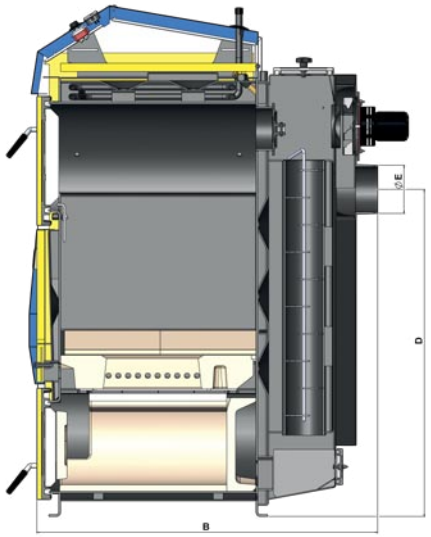
DC xx GS/GSX

Power output range 15 – 70 kW

GENERATOR – GS ■ GSX



DC 15 GS – DC 40 GS



DC 50 GSX, DC 70 GSX

DIMENSIONS	DC 15 GS	DC 20 GS	DC 25 GS	DC 32 GS	DC 40 GS	DC 50 GSX	DC 70 GSX
A	1280	1280	1280	1280	1434	1563	1686
B	670	758	959	959	959	1042	1268
C	678	678	678	678	678	678	678
D	950	950	950	950	1099	997	1086
E	150 (152)	150 (152)	150 (152)	150 (152)	150 (152)	150 (152)	180
F	69	69	69	69	69	70	58
G	185	185	185	185	185	184	184
H	1008	1008	1008	1008	1152	1287	1407
CH	256	256	256	256	256	256	256
I	256	256	256	256	256	256	256
J	6/4"	6/4"	6/4"	6/4"	2"	2"	2"

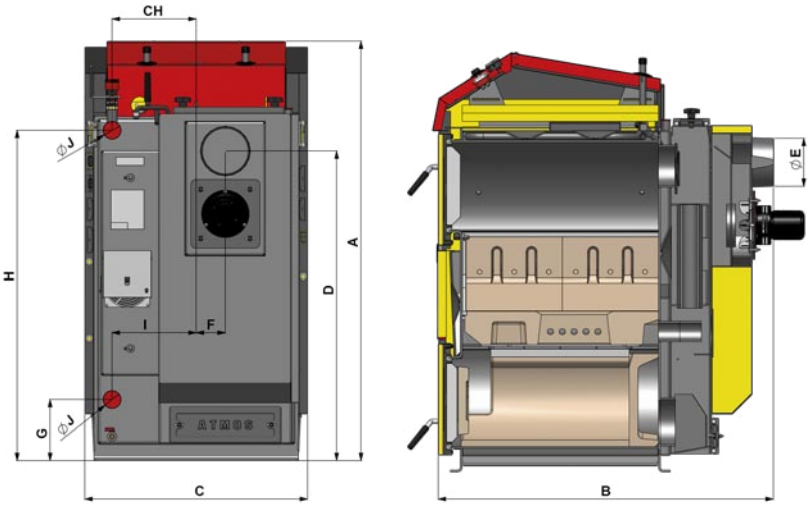
TYPE ATMOS GENERATOR		DC 15 GS	DC 20 GS	DC 25 GS	DC 32 GS	DC 40 GS	DC 50 GSX	DC 70 GSX
POWER OUTPUT	kW	15	20	25	32	40	49	70
SPECIFIC DRAFT OF CHIMNEY	Pa	16	20	23	24	25	25	26
BOILER WEIGHT	kg	302	343	431	436	485	538	690
VOLUME OF WATER	l	56	64	80	80	90	120	170
VOLUME OF HOPPER	dm^3	66	80	120	125	160	210	280
MAXIMUM WOOD LENGHT	mm	250	330	530	530	530	530	730
SPECIFIED FUEL		**DRY WOOD** – CALORIFIC VALUE 15 – 17 MJ/kg, DIAMETER 80 – 150 mm, 12 – 20 % HUMIDITY						
MINIMUM TEMPERATURE OF RETURN WATER		65 °C						
CLASS OF BOILER UNDER EN 303-5		5	5	5	5	5	5	5
MEET LIMITS OF ECODESIGN EU 2015/1189		●	●	●	●	●	●	●
ENERGY EFFICIENCY CLASS		A+	A+	A+	A+	A+	A+	A+

DC xx GD

Power output range 19 – 49 kW

GENERATOR – DOKOGEN – GD

Tube heat exchanger



DC 18 GD – DC 50 GD

DIMENSIONS	DC 18 GD	DC 25 GD	DC 30 GD	DC 40 GD	DC 50 GD
A	1281	1281	1281	1435	1435
B	820	1020	1020	1120	1120
C	680	680	680	680	680
D	945	945	945	1095	1095
E	150 (152)	150 (152)	150 (152)	150 (152)	150 (152)
F	87	87	87	82	78
G	185	185	185	185	185
H	1008	1008	1008	1152	1152
CH	256	256	256	256	256
I	256	256	256	256	256
J	6/4"	6/4"	6/4"	2"	2"

TYPE ATMOS GENERATOR – DOKOGEN		DC 18 GD	DC 25 GD	DC 30 GD	DC 40 GD	DC 50 GD
POWER OUTPUT	kW	19	25	29,8	40	49
SPECIFIC DRAFT OF CHIMNEY	Pa	16	18	20	22	24
BOILER WEIGHT	kg	376	469	466	548	565
VOLUME OF HOPPER	dm^3	80	120	125	160	160
MAXIMUM WOOD LENGHT	mm	330	530	530	530	530
VOLUME OF WATER	l	73	105	105	112	128
MINIMUM TEMPERATURE OF RETURN WATER		65 °C				
SPECIFIED FUEL		**DRY WOOD** – CALORIFIC VALUE 15 – 17 MJ/kg, DIAMETER 80 – 150 mm, 12 – 20 % HUMIDITY				
CLASS OF BOILER UNDER EN 303-5		5	5	5	5	5
MEET LIMITS OF ECODESIGN EU 2015/1189		●	●	●	●	●
ENERGY EFFICIENCY CLASS		A+	A+	A+	A+	A+

C xx S/ST / AC xx S

Power output range 16 – 48 kW

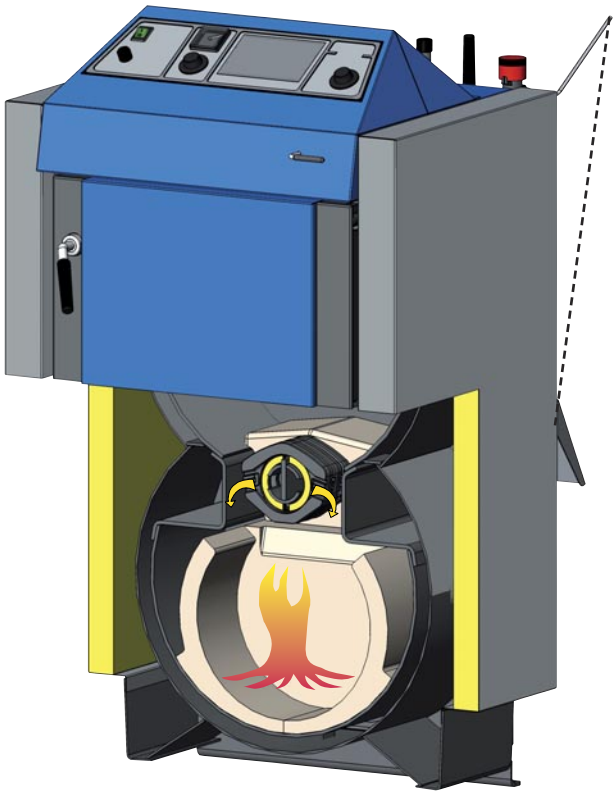
GASIFICATION BOILERS
FOR COAL AND COAL-BRIQUETTES

ADVANTAGES OF BOILERS

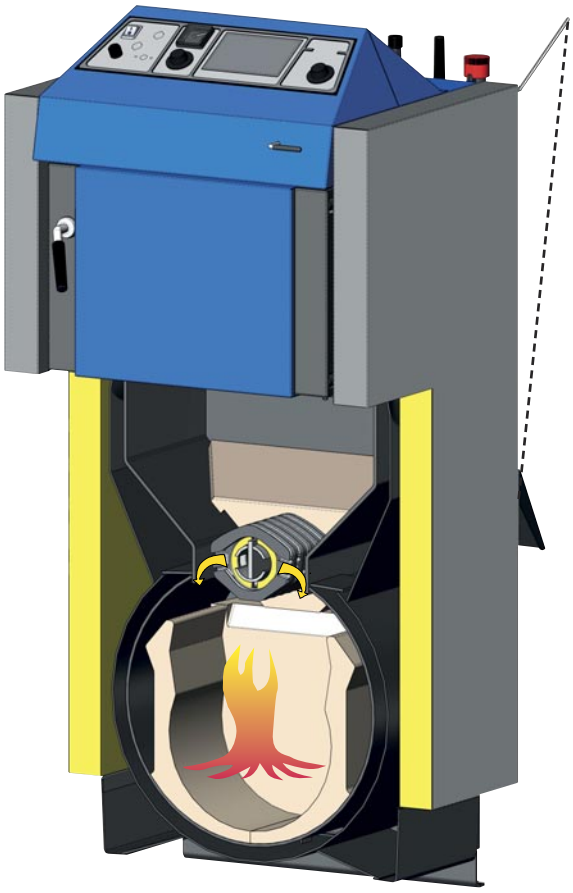
ATMOS KOMBI
C 15 S – C 50 S

The boilers type KOMBI are made of rectangular gasification chamber with a special turning grate with secondary air inlet.

The turning cast iron grates replaces by its function ceramic nozzle in wood gasification boilers. The lower chamber is equipped with spherical ceramic parts. Gasification boilers **ATMOS** Kombi brings a new view at coal burning. They made coal a fuel of future. **Wood can also be used for burning but only in limited amount and for achieving optimal burning process.**



ATMOS Kombi
C 15 S, C 18 S – BROWN COAL
AC 25 S – COAL-BRIQUETTES, BLACK ANTHRACITE COAL



ATMOS Kombi
C 25 ST, C 32 ST, C 40 S, C 50 S – BROWN COAL

ECOLOGICAL VIEW

The coal gasification process in new boiler ATMOS KOMBI achieves very low emission of polution.
Regular power ouput regulation together with high efficiency have a goal in fuel saving. Reversible burning in burning chamber allows practically perfect burning of polutions. Ecological parametres are guaranteed in operation of boiler by nominal output.

Boiler comply with **Ecodesing EU 2015/1189** and are in **class 4 and 5 under EN 303-5**.

OPERATION AND MAINTANANCE

Specific fuel is brown coal size 1 or coal-briquettes. The fuel is loaded in frequency 2–4 times a day and ash can be cleaned once in 1–7 days based on quality of fuel. Exhaust ventilator allows easiers fire-up and lower the smoke leaving into the boiler room for its minimal.

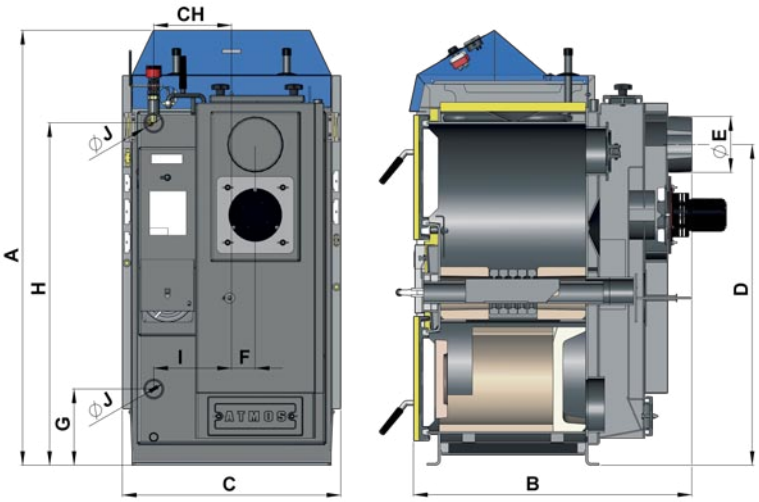
CHOOSING THE RIGHT BOILER

■ **Do you plan burning mainly coal?**
– choose coal gasification boiler.

■ **Do you plan burning log wood?**
– choose gasification boiler **ATMOS DREVO-PLYN** or **ATMOS GENERATOR** or **ATMOS DOKO-GEN** – they are maximally equiped for wood burning. Have big hopper which allows burning longer wood logs.

KOMBI C

Cast iron grate allowing gasification



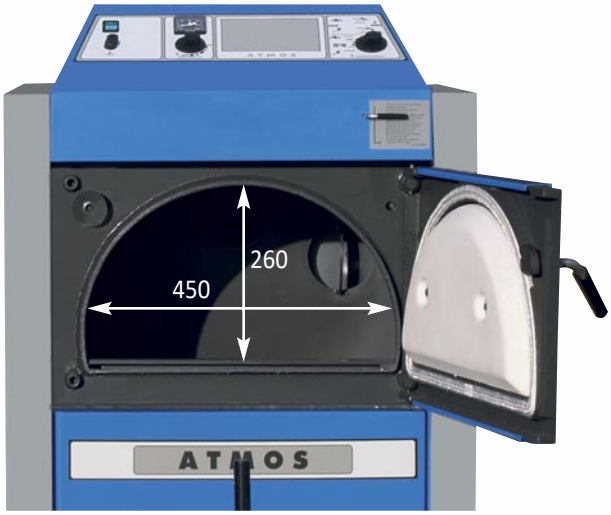
DIMENSIONS	C 15 S	C 18 S	C 25 ST	C 32 ST	C 40 S	C 50 S
A	1185	1185	1435	1435	1435	1435
B	658	758	758	858	1117	1117
C	595	675*	675*	675*	675*	675*
D	874	874	1121	1121	1121	1115
E	150 (152)	150 (152)	150 (152)	150 (152)	150 (152)	150 (152)
F	65	65	65	65	78	78
G	210	210	210	210	210	210
H	933	933	1177	1177	1177	1177
CH	212	212	212	212	212	212
I	212	212	212	212	212	212
J	6/4”	6/4”	6/4”	6/4”	2”	2”

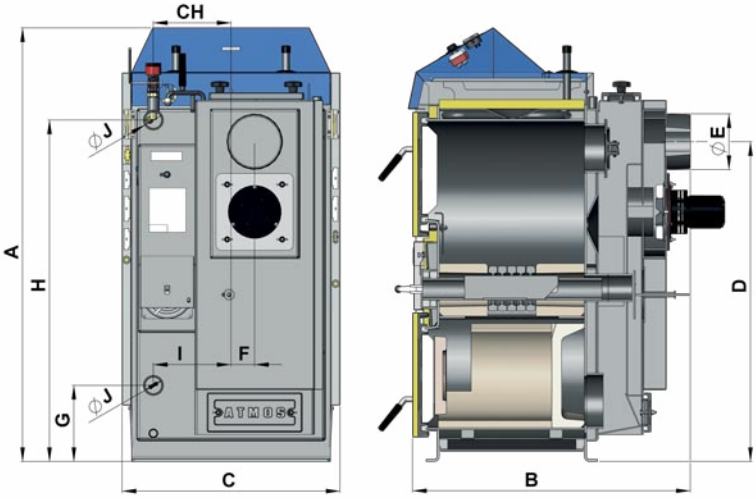
**wide of boiler after side panels disassembly 555 mm*

TYPE ATMOS KOMBI – BROWN COAL		C 15 S	C 18 S	C 25 ST	C 32 ST	C 40 S	C 50 S
POWER OUTPUT	kW	16	20	25	32	40	48
SPECIFIC DRAFT OF CHIMNEY	Pa	16	20	23	25	28	28
BOILER WEIGHT	kg	273	295	379	415	434	492
VOLUME OF WATER	l	37	45	68	74	77	105
VOLUME OF HOPPER	dm^3	50	65	100	125	150	150
SPECIFIED FUEL		**BROWN COAL SIZE 1** – CALORIFIC VALUE 17 – 20 MJ/kg					
COMPENSATORY FUEL		**DRY WOOD** – CALORIFIC VALUE 15 – 17 MJ/kg, DIAMETER 80 – 150 mm, 12 – 20 % HUMIDITY					
MAXIMUM WOOD LENGHT	mm	250	330	330	430	530	530
MINIMUM TEMPERATURE OF RETURN WATER		65 °C					
CLASS OF BOILER UNDER EN 303-5		5	5	5	5	4	5
MEET LIMITS OF ECODESIGN EU 2015/1189		●	●	●	●	●	●
ENERGY EFFICIENCY CLASS		B	C	C	C	C	B

KOMBI AC

Cast iron grate allowing gasification





NEW

DIMENSIONS	AC 16 S	AC 25 S
A	1185	1185
B	658	758
C	595	675*
D	874	874
E	150 (152)	150 (152)
F	65	65
G	210	210
H	933	933
CH	212	212
I	212	212
J	6/4"	6/4"

TYPE ATMOS KOMBI – COAL-BRIQUETTES, BLACK ANTHRACITE COAL		AC 16 S	AC 25 S
POWER OUTPUT	kW	18	26
SPECIFIC DRAFT OF CHIMNEY	Pa	16	20
BOILER WEIGHT	kg	273	297
VOLUME OF WATER	l	37	45
VOLUME OF HOPPER	dm^3	45	60
SPECIFIED FUEL		**COAL-BRIQUETTES, BLACK ANTHRACITE COAL**	
COMPENSATORY FUEL		**DRY WOOD** – CALORIFIC VALUE 15 – 17 MJ/KG, DIAMETER 80 – 150 MM, 12 – 20 % HUMIDITY	
MINIMUM TEMPERATURE OF RETURN WATER		65 °C	
CLASS OF BOILER UNDER EN 303-5		5	5
MEET LIMITS OF ECODESIGN EU 2015/1189		●	●
ENERGY EFFICIENCY CLASS		B	C

**wide of boiler after side panels disassembly 555 mm*

GASIFICATION BOILERS WITH BURNER FOR PELLETS IN TOP DOOR

DC xx S / C xx S/ST / AC xx S

Power output range 3 – 45 kW

GASIFICATION BOILERS

ADVANTAGES OF BOILERS ATMOS WITH MODIFICATION FOR PELLET BURNER IN TOP DOOR

- boilers with exhaust fan
- boilers with hole for burner in top door
- the top door contains hole for fitting burner
- the door heat insulating cover for hole of burner contains sealing cord
- the burning chamber door contain cover with two screw nuts
- any existing boiler can be modified into pellet burning (left or right oversion)
- easy pellet burner cleaning
- easy boiler chamber cleaning
- high efficiency of burning
- automatic fire-up of pellets
- pellet silo 240 – 500 l
- meet limits of Ecodesign EU 2015/1189 and class 5

WITH BURNER FOR PELLETS IN TOP DOOR

***Standard installation** boiler **DC 25 S** with conveyor DA2000 – 2 m conveyor with 500 litre silo*

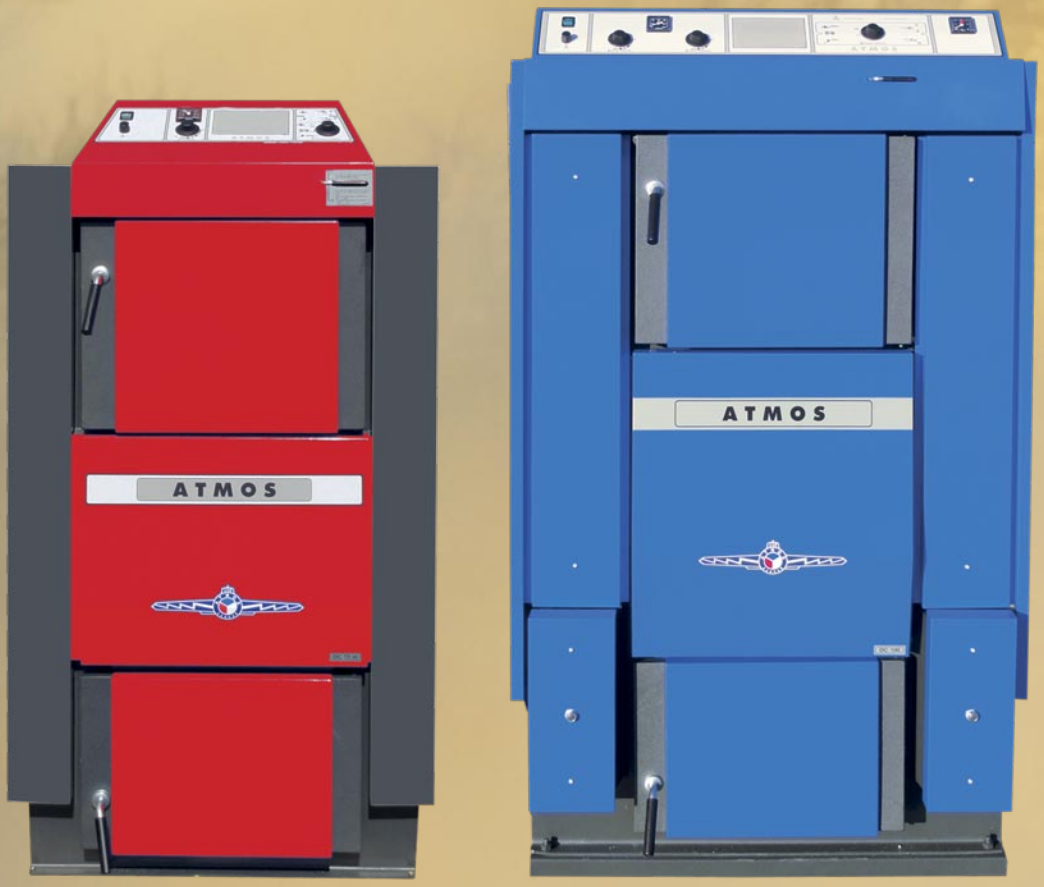
***Compact installation** of boiler **DC 32 S** with set AZPU 240M – 240 litres silo*

***Compact installation** boiler **C 18 S** with set – AZPU 240M – 240 litres silo*

TYPE ATMOS **KOMBI**	C 15 S	C 18 S	C 25 ST	C 32 ST	AC 25 S
POWER OUTPUT FOR PELLETS (kW)	3 – 12	6 – 20	7 – 24	7 – 24	6 – 20
SPECIFIC FUEL	pellets	pellets	pellets	pellets	pellets
BOILER CLASS UNDER EN 303-5	5	5	5	5	5
MEET LIMITS OF ECODESIGN EU 2015/1189	●	●	●	●	●
ORIGINAL FUEL	brown coal	brown coal	brown coal	brown coal	coal-briquettes, black anthracite coal
BOILER CLASS UNDER EN 303-5 FOR ORIGINAL FUEL	5	5	5	5	5
ENERGY EFFICIENCY CLASS	A+	A+	A+	A+	A+

TYPE ATMOS **DREVOPLYN**	DC 18 S	DC 25 S	DC 30 SX	DC 32 S	DC 50 S
POWER OUTPUT FOR PELLETS (kW)	6 – 20	7 – 24	7 – 24	7 – 24	13 – 45
SPECIFIC FUEL	pellets	pellets	pellets	pellets	pellets
BOILER CLASS UNDER EN 303-5	5	5	5	5	5
MEET LIMITS OF ECODESIGN EU 2015/1189	●	●	●	●	●
ORIGINAL FUEL / POWER OUTPUT	wood / 20 kW	wood / 27 kW	wood / 30 kW	wood / 35 kW	wood / 49 kW
BOILER CLASS UNDER EN 303-5 FOR ORIGINAL FUEL	5	5	5	5	4
ENERGY EFFICIENCY CLASS	A+	A+	A+	A+	A+

BOILERS WITH BIGGER OUTPUTS



DC xx S

Power output range 70 – 150 kW

GASIFICATION BOILERS FOR WOOD 100 – 150 kW

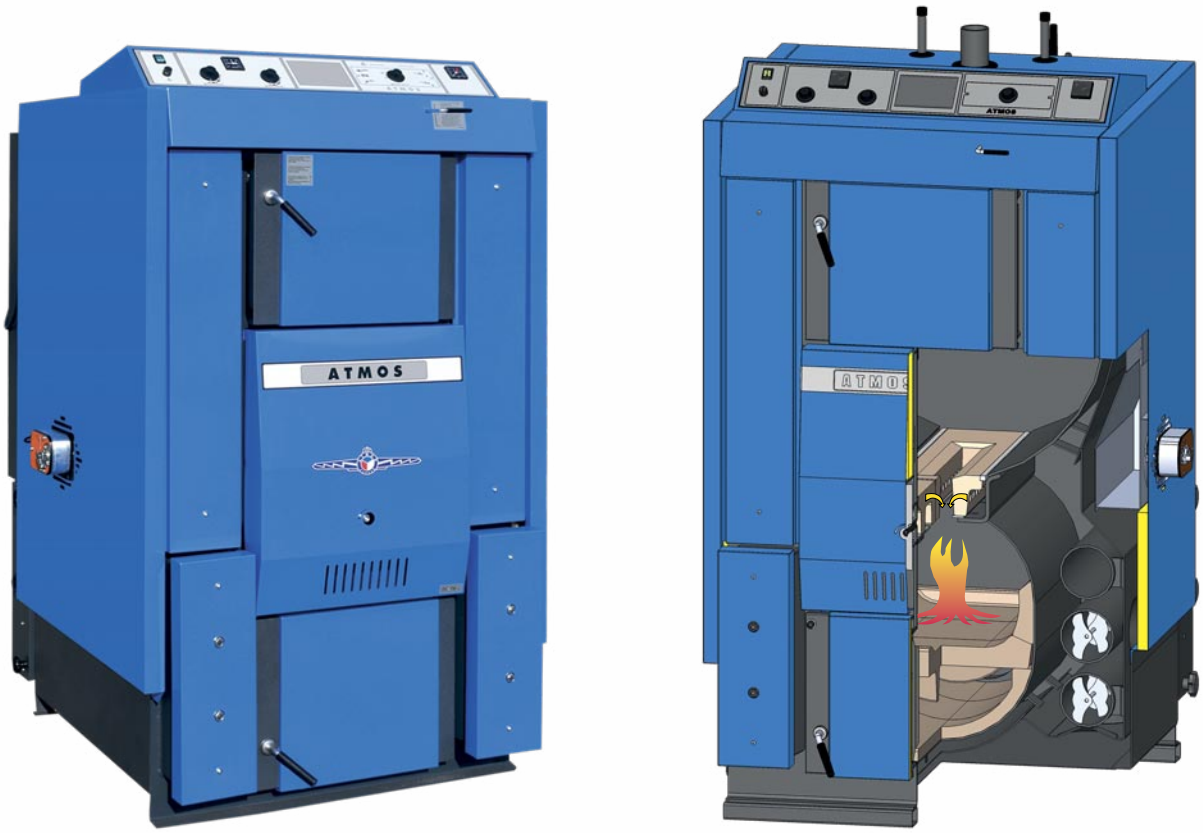
USAGE

The ecological boilers ATMOS DC 70 S, DC 100, DC 105 S and DC 150 S are intended for heating in big family houses, gardening centres, various workshops, business premises and similar buildings. The boilers are designed for burning wood pieces only. Dry wood may be used for heating. Wood logs and wood splits of 530 – 730 mm maximum length and diametre 80 – 150 mm (depending on boiler type) may be burnt.

Larger diameter logs may be used as well. The boiler's nominal output may decrease and the combustion time may increase.

The boilers are not intended for burning saw dust or small-particle wood waste. it may be burnt only in mixing with log wood (i amount 10 %).

Due to their huge feeding hopper, it saves the user a lot of laborious wood splitting and treating operations. It saves both – the physical effort and also the time dedicated to these operations.



ATMOS DC 105 S, DC 150 S

GASIFICATION PROCESS

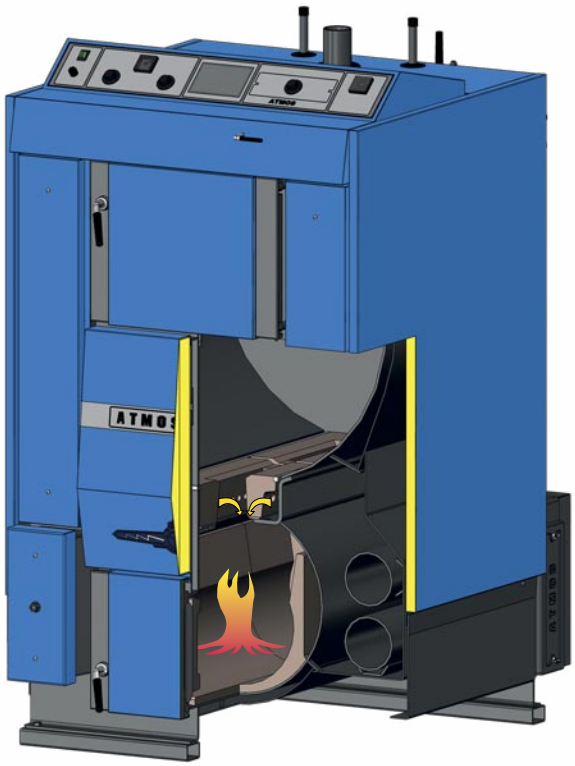
The boilers are designed for burning wood based on generator gasification principle utilising two extraction fans (ventilators), which extracts the flue gas from the boiler. The produced gas is mixed with secondary iar in the nozzle and fires into the bottom chamber. Such process allows burning of all burnable particals with high efficiency (81 – 90 %) and high comfort of burning.

NEWS

- **boilers DC100 have two blowing fans**

- **Boilers DC105S and DC150S have two exhaust fans.**

There are two primary air inlets at both sides of the boiler. the air inlet is controlled by Belimo servo actuators.



ATMOS DC 100

GASIFICATION BOILERS FOR WOOD 70 – 100 kW

ECONOMY

Boiler for wood ATMOS have high efficiency. Low fuel consumption and competitive price. The burning chamber is mae from 6mm steel plates. The boilers allows burning fuels which in future are still supposed to be one of cheapest due to this the boilers become the most economiest comparing to other boilers.

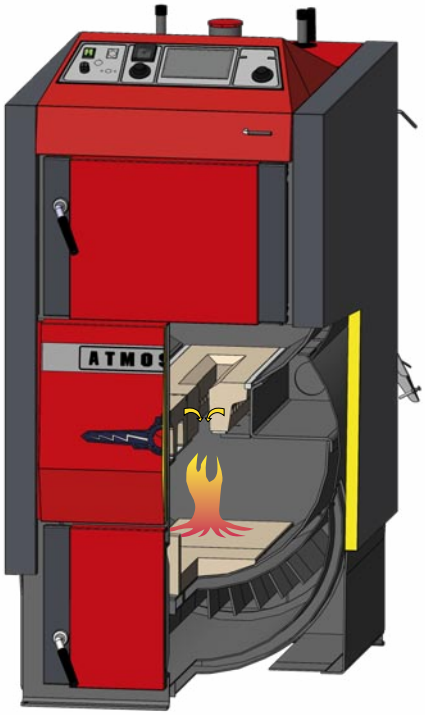
High efficiency = low fuel consumption.

INSTALLATION

ATMOS boilers must be installed with termore-gulating mixing valve or electronically controlled mixing valve which keep minimal temperature at the return pipe into the boiler 65 °C. The boilers must always be uinstalled with buffer tank with minmal volume 1000 litres so the potential output of boiler was maximally used.

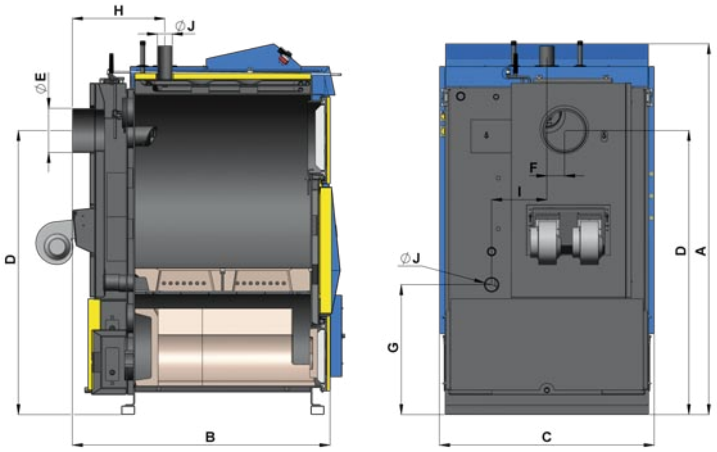
We recommend installation with even bigger buffer tank volume of **5000 – 6000 litres**. It decreases fuel consumtion and higher the comfort of burning. The boilers comply with EU regulation EN 303-5 and are in class 4–5.

INSTALLATION WITH ACCUMULATION TANKS BRINGS THE HIGHEST EFFICIENCY AND LONGEST LIFETIME OF BOILER WITH ECOLOGY BURNING.

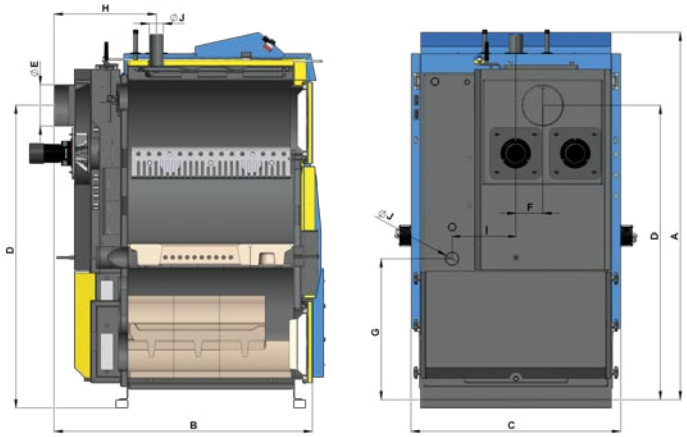


ATMOS DC 70 S

DREVOPLYN – S

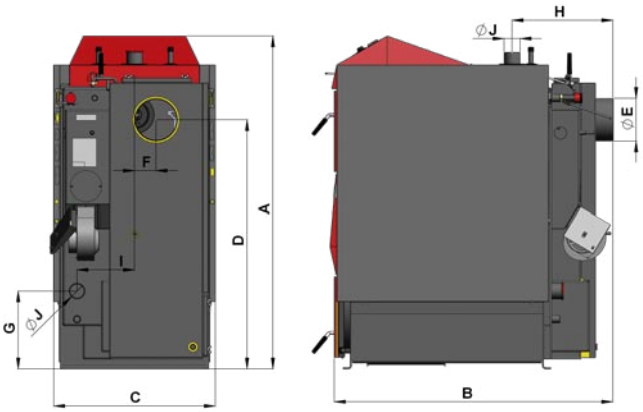


DC 100



DC 105 S, DC 150 S

DIMENS.	DC 70 S	DC 100	DC 105 S	DC 150 S
A	1399	1690	1813	1813
B	1166	1170	1095	1295
C	678	970	1010	1010
D	1047	1290	1459	1459
E	180	200	200	200
F	90	80	129	129
G	325	590	721	721
H	1230	420	492	492
CH	–	–	–	–
I	240	330	307	307
J	2”	2”	2”	2”



DC 70 S

TYPE ATMOS DREVOPLYN		DC 70 S	DC 100	DC 105 S	DC 150 S
POWER OUTPUT	kW	70	99	105	150
VOLUME OF HOPPER	l	180	400	300	400
MAXIMAL LENGHT OF WOOD	mm	730	730	530	730
SPECIFIC FUEL		**DRY WOOD** – CALORIFIC VALUE 15 – 17 MJ/KG, DIAMETER 80 – 150 MM, 12 – 20 % HUMIDITY			
MAXIMALL WATER PRESSURE	kPa	250	250	250	250
ELECTRIC INPUT	W	50	100	185	185
WEIGHT OF BOILER	kg	515	820	900	1030
SPECIFIC DRAFT OF CHIMNEY	Pa	30	35	25	25
MINIMUM TEMPERATURE OF RETURN WATER		65 °C	65 °C	65 °C	65 °C
TYPE OF VENTILATOR		BLOWING	BLOWING	EXHAUST	EXHAUST
CLASS OF BOILER UNDER EN 303-5		4	5	5	5
ENERGY EFFICIENCY CLASS		A+	A+	A+	A+
MEET LIMITS OF ECODESIGN EU 2015/1189		●	●	●	●

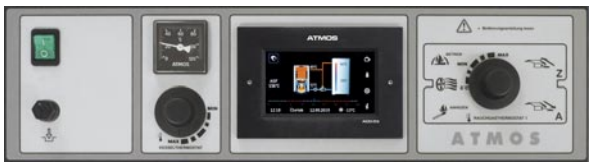
CONTROLL / INSTALLATION

CONTROL PANEL WITH BASIC REGULATION

- main switch
- safety thermostat
- thermometre
- operating thermostat
- waste gas thermostat

Models DC 18 S, DC 25 S, DC 25 GS, DC 32 S, DC 32 GS and DC 40 SX are supplied in version with integrated eqvithermal electronic unit ACD 04 including basic sensors.

CONTROL PANEL OF THE BOILER WITH INBUILT ELECTRONIC REGULATION UNIT ACD 03



CONTROL PANEL OF THE BOILER WITH INBUILT ELECTRONIC REGULATION UNIT ACD 04

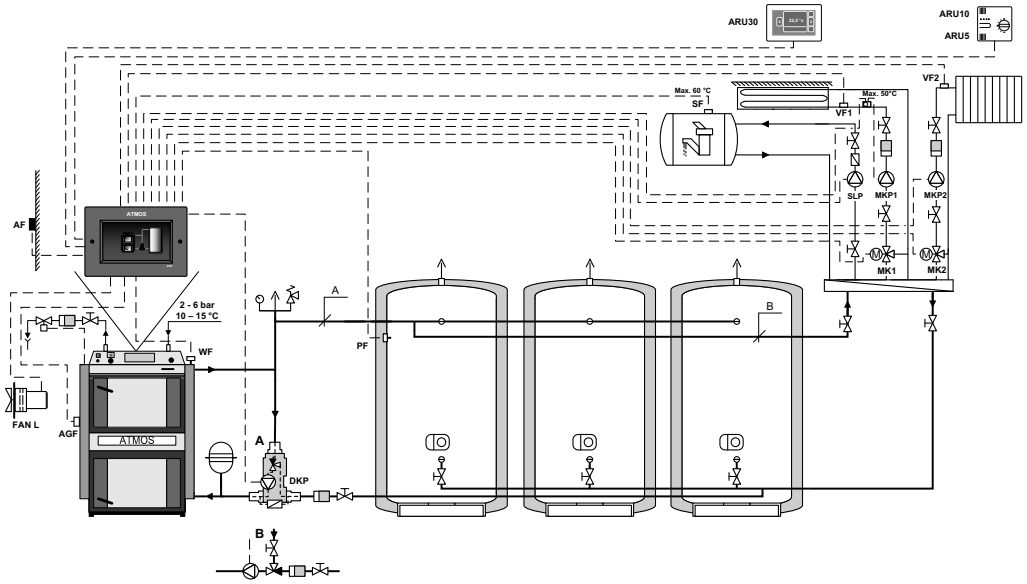
The unit controlls:

- complete function of the boiler
- boiler circuit
- three mixing circuits (two heating circuits + one return mixing circuit)
- charging of accumulation tank
- charging DHW tank
- solar heating

Regulation ACD03 allows installation in top panel of all boilers.

Regulation ACD04 is fitted in top panel of boiler.

INSTALLATION OF BOILER WITH LADDOMAT 22



Laddomat 22

With its construction, **Laddomat 22** replaces the traditional connection composed of individual parts. It is composed of a cast-iron body, thermoregulatory valve, high efficiency pump, nonreturning flap, ball valves and thermometers. When the water temperature reaches 78 °C (72 °C), the thermoregulatory valve opens the water supply from the storage tank.

EQUITHERMAL CONTROLLER ACD 03 ■ 04

Regulator ACD 03/04

Room thermostat ARU30 with touch display

Room thermostat ARU10

Room temperature sensor ARU5

Equithermal controller **ATMOS ACD 03 ■ 04** is a new regulating device with touch color display allowing easy control of the boiler and heating system by intuitive ways and the latest trends.

Regulation ACD03 allows installation in top panel of all boilers. Regulation ACD04 is fitted in top panel of boiler.

THE REGULATION CAN CONTROLL FOLLOWING PERIPHERIES:

1. **three mixing circuits** (eg. two heating circuits radiator + one heating circuit for floor heating) based on required temperature in the room, outside temperature (equithermal curve) and times by information from 3 types of room sensors
   or
   one return mixing circuit and two heating circuits – boiler circuit serves to keep minimal temperature of water returning into the boiler at 65°C by controll of threeway valve with servoactuator and pump and two heating circuits (eg. clasic radiators or floor heating) based on required temperature in the room, outside temperature (equithermal curve) and times by information from 3 types of room sensors
2. **heating of water for washing** (DHW tank) for required temperature (eg. 55°C)
3. **solar heating** from solar collectors
4. **optimal charging and discharging of accumulation tanks** based on requires of the customer
5. **automatic switch between two sources (boilers)**, eg. boiler for wood and natural gas/wood and pellets
6. **complete operation of the boiler** based on requirement of the heating system and the exhaust fan on boiler

Electronic regulation **ATMOS ACD 03** is delivered as a **set** with all necessary sensors allowing easy installation into top panel of boiler:

Equithermal controller recommended **for boilers with manual loading** (with flue gas sensor) set ACD 03 AGF, order code S0106
Equithermal controller recommended **for pellet boilers** (without flue gas sensor) set ACD 03, order code S0103

For **optimal and energy saving heating** of your house we recommend to buy extra accessories **(for each heating circuit) one of room thermostat** unit either ARU5, ARU10, ARU30 with touch display for better controll of heating circuit. In case of using the regulation for solar heating it is necessary to buy a solar sensor FF00–75P65 (-20 – 300 °C) and one more sensor KTF20.

BOILER WITH AUTOMATIC IGNITION AND REGULATION ACD 04

***Installation** for boiler ATMOS*
with manual feeding up to 40 kW output

ATMOS

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DISTRIBUTED BY:

01/22 ENG

Technical changes Boiler dimensions and design during the year are possible.