



COMBINED BOILER
ATTACK WOOD & PELLET 
FOR SOLID FUEL AND PELLETS



WWW.ATTACK.SK



ABOUT THE COMPANY ATTACK, S.R.O.

- *The largest Slovak producer of heat technology with purely Slovak capital and sole owner.*
- *Company has been operating on the market for 17 years. Within this period, it has managed to us to reach more than 46 countries of the world.*
- *The widest assortment of products for solid fuel, pellets (biomass), natural gas and LPG – propane.*

The main purpose and philosophy of the company ATTACK, s.r.o. is to develop top products of the best quality, functionality and design, achieving the highest combustion efficiency by respecting the environment and keeping the favourable price.

PRODUCT PORTFOLIO

The product portfolio of the ATTACK, s.r.o. company is characterized by wide assortment of the ATTACK® products, classified by concrete product type, output and kind of fuel – natural gas, LPG propane, solid fuel or pellets (biomass).

Recently, there is the widest product portfolio of the ATTACK, s.r.o. company. By every product group there are many options of modifications and outputs.

PRODUCTS:

- *2 lines of wood gasifying boilers ATTACK DP and ATTACK DPX – 32 models*
- *Pellet boilers, pellet burners – 4 models*
- *Indoor pellet stoves (warm-air and warm-water) – 30 models*
- *Cast iron boilers for solid fuel and pellets – 22 models*
- *Accumulation tanks – 74 models*
- *Solar technique – 18 solar sets*
- *Wall hung gas condensing boilers – 6 models*
- *Wall hung gas atmospheric boilers – 6 models*
- *Floor standing cast iron gas boilers – 92 models*
- *D.H.W. tanks (directly and indirectly heated) – 4 models*
- *Wall hung electric boilers – 4 models*
- *Radiators – 855 models*
- *Other accessories and spare parts – 32 models*

AWARDS



The ATTACK, s.r.o. company struggles to make every product to be among the best in its class. Almost all our product groups have achieved plenty of awards at domestic and international exhibitions, given by the committee of specialists.

CERTIFICATES

The ATTACK, s.r.o. company is holder of the quality certificate ISO 9001 for:

- *boiler design and development*
- *boiler manufacturing*
- *service of boiler and appliances*



All the ATTACK® articles are approved and tested for the CE, TÜV, and GOST certificates, granted by prestigious test institutes.

RESEARCH AND DEVELOPMENT

The ATTACK, s.r.o. company has its own research and development center. The company emphasizes development of sophisticated and innovative products of high quality, competitive on the European as well as on the world markets.

All the ATTACK® products are designed and developed in conformity with appropriate norms, specifications, juridical and other prescriptions.

Suitable components are selected under the strictest criteria. For assembly of the ATTACK® boilers can be used only reliable and by long-time utilization approved components and materials from prestigious suppliers.

The ATTACK, s.r.o. does not cooperate in development with other producers, but struggles to be a step before the competition.

THE ATTACK PRODUCTION PLANT

Assembly of floor standing and wall hung boilers

The ATTACK, s.r.o. manufactures their products in the own production halls. Production is divided into the manufacture of biomass boilers from cast iron and steel, wall hung gas boilers and floor standing cast iron boilers.

Production of the biomass boilers

The ATTACK, s.r.o. disposes with the newest and the most modern technology for boiler production (robotized welding workstations, laser workstation, CNC workstation, bending with active angle measuring, ...), which exceeds the actual European standard in many ways and markedly increases quality of the final products.

Technology of the biomass boilers production

There are the highest requirements for the ATTACK® product quality. The boilers are made from the special boiler sheet metal.



WHY TO CHOOSE THE ATTACK, S.R.O. COMPANY?

- *More than 500.000 products manufactured within 17 years of the company operation*
- *The most modern production technologies used to manufacture the ATTACK® products*
- *Innovative solutions*

- *Excellent customer and emission values of the products*
- *Complete technical support*
- *Top products of the best quality, functionality and design*
- *Training organized for customers and partners anywhere in the world*
- *Wide assortment of products for biomass and gas and solar technique from one manufacturer*

EXPORT ACTIVITIES

Export activities of the ATTACK company have been developed in more than 46 countries of the world and this number is still increasing. Nowadays we export our products to all EU countries, Russia, USA, Canada, Australia and New Zealand. The modern wood gasifying and pellet boilers have gained the biggest interest and they are demanded in Europe and in America as well. Our floor standing gas boilers represent us even in the far Siberia.

In different countries there is demand for different products. Personal approach to every customer helps us to fulfil particular requirements and to achieve more and more customers in



new countries. The ATTACK, s.r.o. company is able to satisfy everyone thanks to the wide product offer.

COMBINED BOILER FOR SOLID FUEL AND PELLETS – THE ATTACK WOOD & PELLET

If you are looking for a boiler with low operating costs and comfort comparable with usage of a gas boiler, you have just found it. We are introducing you the ecological **combined boiler ATTACK WOOD & PELLET, suitable for burning of several types of fuel, especially soft and hard wood, briquettes and pellets.** The boiler is intended for heating of family houses, huts, small plants, workrooms and similar objects.

DESCRIPTION

To provide the **high comfort**, the boiler is equipped with the feeding chamber of big volume. Thereby there is an option of the **continuous burning at full output for 6 hours.** Moreover, if the boiler detects signal for heating, it can automatically start the pellet burning process, after the wood in the wood-gasifying boiler part burns out, without any action into the boiler operation.

Thereby you can easily use advantages of the cheapest heat source – wood, in combination with the comfortable and also very cheap heat source – pellets.



BOILER ADVANTAGES

- *Innovative, ecological and high efficient boiler – maximal comfort of the customer*
- *High combustion efficiency: 92,2 % (wood) – 93,8 % (pellets)*
- *Modern electronics with the Lambda probe*
- *Graphical and well-readable touch display*
- *Automatic cleaning of turbulators and pellet chamber – the highest comfort of cleaning*
- *By the wood burning at full output, there is a continuous period of burning of 6 hours*
- *Automatic change from the operation with wood to the operation with pellets – flexible fuel selection*
- *Very low operating costs*
- *High quality components – verified quality*
- *Long life*
- *Multi-level safety concept – pleasant feeling of safety*
- *Big volume of the feeding chamber*



TECHNICAL PARAMETERS

Parameter	ATTACK WOOD & PELLET
Output by wood	25 kW
Output by pellets	30 kW
Volume of feeding chamber	160 l
Width x height x depth	940 x 1 620 x 1 220 mm
Boiler width without covering	760 mm
Efficiency	92,2 % by wood, 93,8 % by pellets
Max. length of wood logs	560 mm
Flue gas temperature	150 °C
Prescribed chimney draught	25 Pa
Boiler weight	840 kg



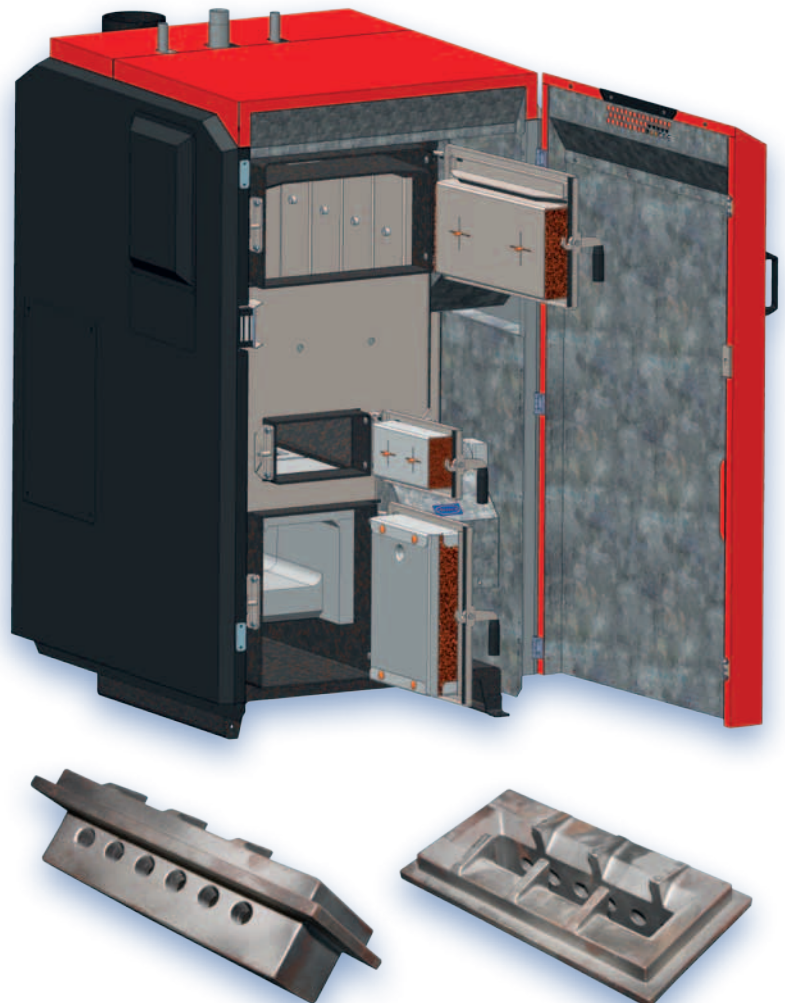
CHARACTERISTICS

The **ATTACK WOOD & PELLET** boiler is equipped with the flue gas fan and the horizontal flue exhaust from the feeding chamber. After opening the door of the chamber, the flue gas is taken into the chimney to ensure clean and dustless environment in the boiler room.

It is only necessary to fully load the chamber and to light the space by the middle door – heating up can be done within 10 minutes, without any smoke. High precision of the combustion process is ensured by the modern electronics with the Lambda probe, which enables regulation of the boiler output and setting of many useful parameters.

Combustion of pellets is ensured by the **burner made from the best quality refractory steel. Burner operation is fully automatic.** Boiler body is welded from the high quality **boiler steel of 6 mm thickness**, ensuring long life. Refractory concrete parts are made from the best quality material, strengthened by the refractory reinforcement. Furthermore, the most strained **nozzle is treated by a special refractory cast iron, prolonging the boiler's life**, because it is resistant to scoring. Boiler cleaning is very easy.

Turbulators and pellet combustion chamber are cleaned automatically. Boiler electronics can be supplemented with the additional modules, enabling control of accumulation tank, mixing circuits, D.H.W. storage tank, solar panels and other heat sources. Boiler state can be also controlled via the LAN internet connection. Electronics is able to provide a month record of the information about operation.





BOILER SAFETY

The boiler is equipped with the **integrated after-cooling circuit**, connected to the cold water and ensuring the safe cooling down of the boiler in the case of its overheating.

The **emergency thermostat** is the next safety element. In the case of overheating, it stops electrical power supply into the all electrical parts of boiler, except of the pump to cool the boiler down as soon as possible.

If the boiler gets overheated, the **electronics warns the user by a sound signal**. If the boiler works under the pellet mode, it is able to lock the main door by the **electrical lock**, not to leave the door imperfectly closed or partly open.

The boiler has a **double protection against the backward burning** – the high efficient turnstile feeder and the self-extinguishing hose.

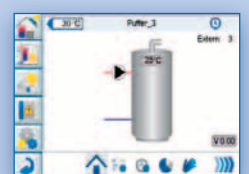
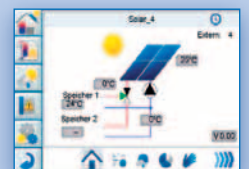
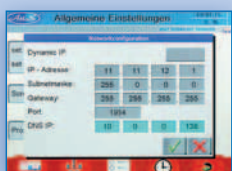
HIGH EFFICIENT COMBUSTION

The boiler achieves particularly high efficiency, exceeding **92,2 % by wood and 93,8 % by pellet combustion**. This has been reached also thanks to the vertical **tubular exchanger with extraordinary heat exchange area and special, automatically moved turbulators**. Thereby is the declared efficiency ensured for the whole boiler's life.



BOILER ELECTRONICS

- Option to select the modes: Wood, Combi, Testmode
- Automatic pellet burner start after the wood is burned-out in the feeding chamber, under the Combi mode
- Wood is lighted manually or automatically by the burner – immediately or with time delay
- Precise burning control by the Lambda probe
- Reliable control of the flame by the photocell
- Colour touch display of 5,7"
- Option to update the boiler's regulation anytime with the newest software – easily by the USB key
- Option to start, watch, control and stop the boiler via the internet
- Ability to keep the actual time and the parameters set, even after the power failure
- Time programs of the boiler operation
- Micro SD card of 512 MB to record the information about the boiler operation
- Option of control by the external thermostat
- Option to add the external modules to control accumulation tank, heating circuits including the floor heating, D.H.W. circuit, solar circuit and switching the other automatic boiler
- Adjustable screensaver
- Approach to the service settings by code
- Record of the error messages
- Option to control the boiler by application in the cell phone (Smartphone)





DESCRIPTION OF THE BURNER

The burner is made from **the best quality refractory steel**, ensuring the long life and reliability.

The burner is fully automatic, accessorized with the reliable system for pellet ignition, advanced combustion regulation, modulation, precise control of the flame, high efficient automatic cleaning, control of fan rotations and protection against overheating. The burner is separated from the feeding and combustion chamber for wood gasification by its own combustion chamber. Thereby it is minimally thermally strained, when it is out of order. If it is necessary to clean the burner, it can be easily shifted out of the combustion chamber on a pantograph, enabling easy manipulation.



FUEL

In the wood gasifying part of the **ATTACK WOOD & PELLET** it is possible to burn the soft and hard wood with relative humidity of **12–20 %**. and max. length of **560 mm**.

To burn the wood briquettes together with the wood it is necessary to keep the appropriate ratio.

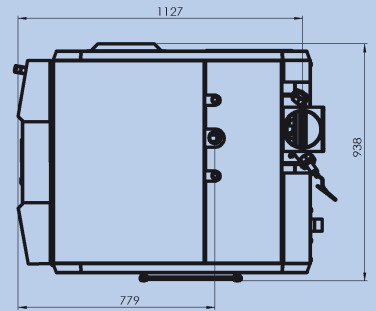
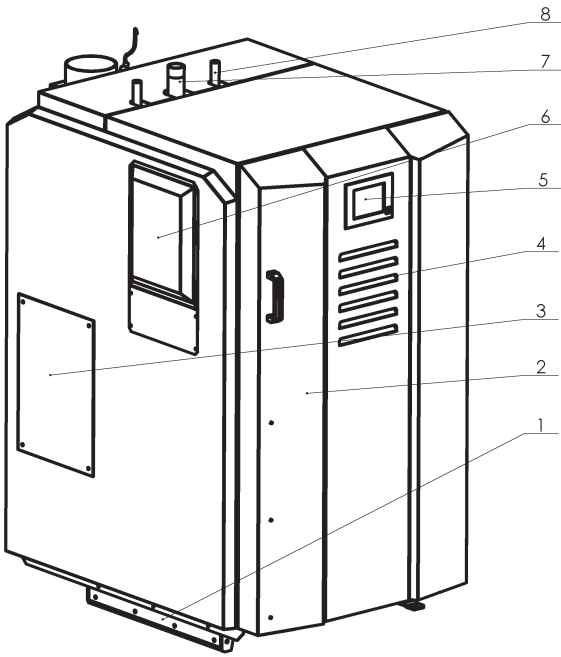
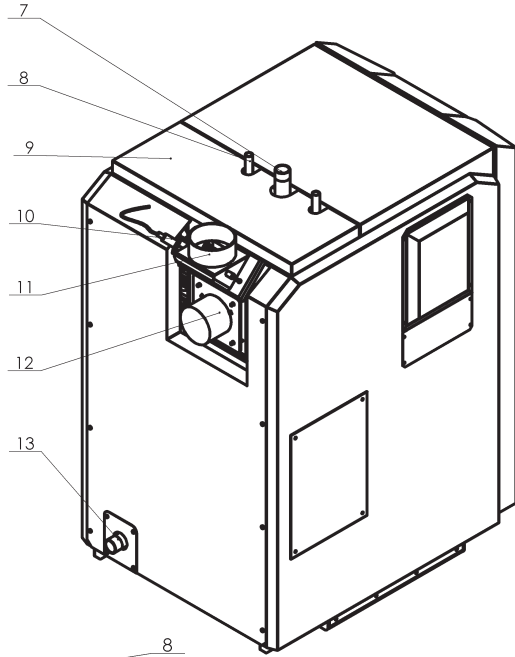
The **ATTACK WOOD & PELLET** stainless steel burner is intended for combustion of the wood pellets with diameter of **6 mm**, length up to **35 mm** and max. humidity of **12 %**.



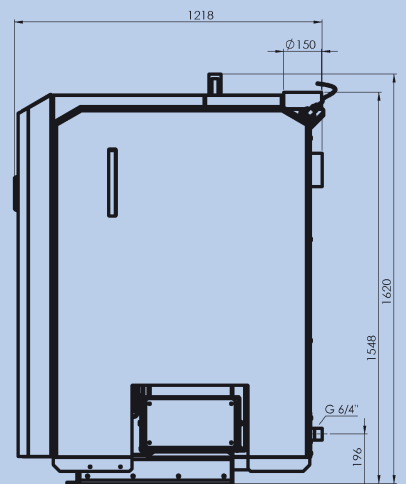
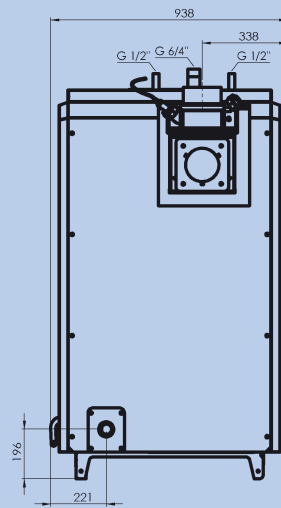
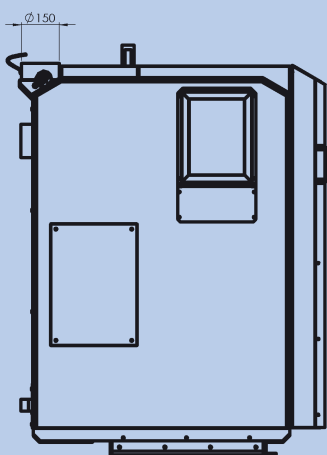
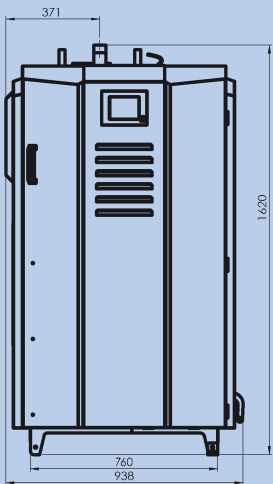
DESCRIPTION OF THE ATTACK WOOD & PELLET BOILER

KEY:

1. Boiler body
2. Main door
3. Cover of the inlet of the primary and secondary air
4. Openings for cooling of electronics
5. Boiler electronics
6. Cover of boiler electronics
7. Flow connection
8. Aftercooling circuit
9. Cover of turbulator cleaning
10. Lambda probe
11. Adjustable chimney
12. Exhaust fan
13. Return connection



DIMENSIONS



THE WAY TO PROTECT AND PROLONG THE BOILER'S LIFE

REGUMAT ATTACK-OVENTROP

When the temperature of the return water flowing into the boiler is low (under 50°C), it comes to production of harmful acids, condensate and tar on the steel walls of boiler, and thereby to their damage. **Suitable protective solution to eliminate this harmful effect and to extend life of the boiler is to use the mixing device – Regumat ATTACK-OVENTROP.** By installation of device, the boiler and the heating circuit are created. The mixing device Regumat ATTACK-OVENTROP keeps constant temperature of the return heating water flowing into the boiler over 65°C, when the thermostatic head is set on the level 5–6 and prevents damage of the steel walls. **The mixing device ATTACK-OVENTROP guarantees significantly longer life of the boiler.**

The regumat consists of three-way mixing valve, thermostatic head with capilar, bypass, valve for self-force circulation (alt. natural circulation), three-grade circulating pump, closing valves, thermometers and isolation. **This solution is advantageous, because it is compact, enables simple operation and ensures protection of the steel boiler's heat exchanger.**

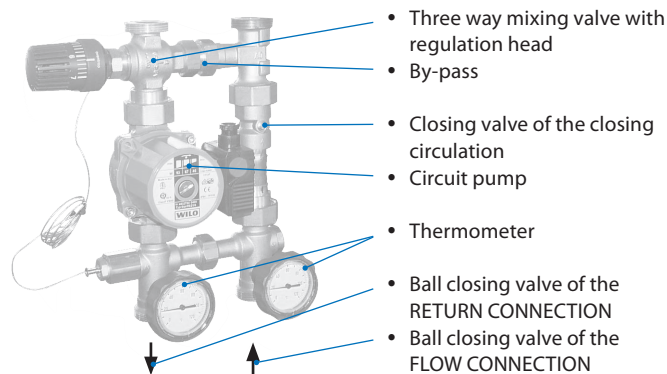
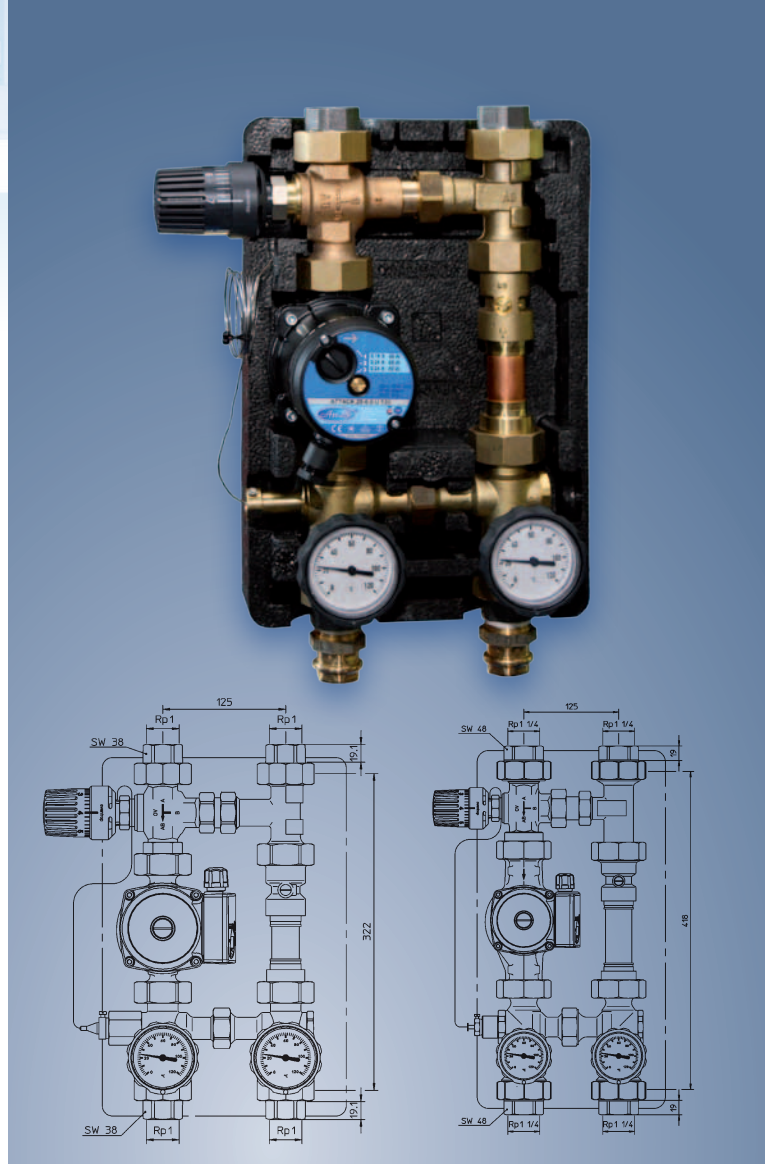
Regumat ATTACK-OVENTROP for the boiler:

ATTACK DP, DPX 15, 25, 35, ATTACK PELLET 30 Automatic Plus, ATTACK WOOD & PELLET – DN25 / available with the low-energetic pump
ATTACK DP, DPX 45–95 – DN32



Regumat ATTACK – OVENTROP

Calibre	DN25	DN32
Max. pressure	10 bar	10bar
Max. temperature	120°C	120°C
Value of Kvs	3,9	5,3
Construction height of insulation	365 mm	472 mm
Width of insulation	250 mm	250 mm
Axial distance	125 mm	125 mm



ACCESSORIES FOR THE ATTACK WOOD & PELLET BOILERS

ACCUMULATION TANKS ATTACK

The **ATTACK, s.r.o.** is the biggest manufacturer of the accumulation tanks in the Slovak republic with the widest offer of these articles.

ATTACK AK, AS

The accumulation tanks **ATTACK AK, AS** made from the quality steel serve for accumulation and subsequent distribu-



tion of the heat energy from the biomass boiler (e.g. **DP, DPX, PELLET 30 Automatic Plus, WOOD & PELLET**).

The **ATTACK AS** model is accessorized with an extra exchanger to be connected to the solar system.

ATTACK AK: 9x socket G 1 1/2", 4x socket G 1/2"

ATTACK AS: 9x socket G 1 1/2", 4x socket G 1/2", 2x socket G 1" – solar circuit



ATTACK HR, HRS

The accumulation tanks **ATTACK HR, HRS** are made from the quality steel and serve for accumulation of the heating water as well as for preparation of the D.H.W. by an internal enameled exchanger. The **ATTACK HRS** model is accessorized with an extra exchanger to be connected to the solar system.

Tanks of this type have a built-in magnesium anode in the D.H.W. tank to increase resistance against corrosion.

ATTACK HR: 10x socket G 1 1/2", 6x socket G 1/2", 2x socket G 1" – D.H.W.

ATTACK HRS: 10x socket G 1 1/2", 6x socket G 1/2", 2x socket G 1" – solar circuit, 2x socket G 1" – D.H.W.

ATTACK TUV, TUVS

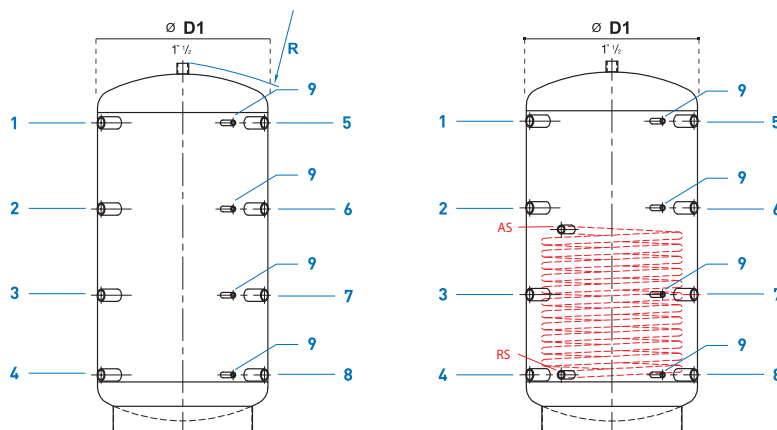
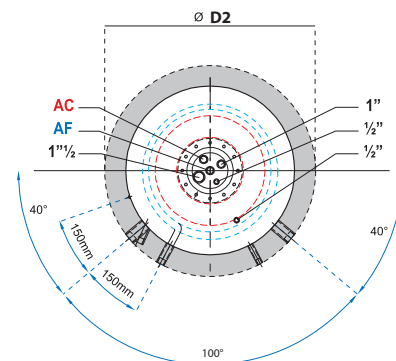
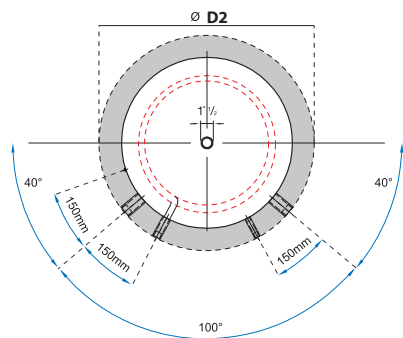
The accumulation tanks **ATTACK TUV, TUVS** are made from a quality steel and they serve for accumulation of the heating water as well as for the D.H.W. preparation in a built-in instantaneous copper coil. The **ATTACK TUVS** model is accessorized with an extra exchanger for connection to the solar system.

ATTACK TUV: 8x socket G 1 1/2", 5x socket G 1/2", 2x socket G 1" – D.H.W.

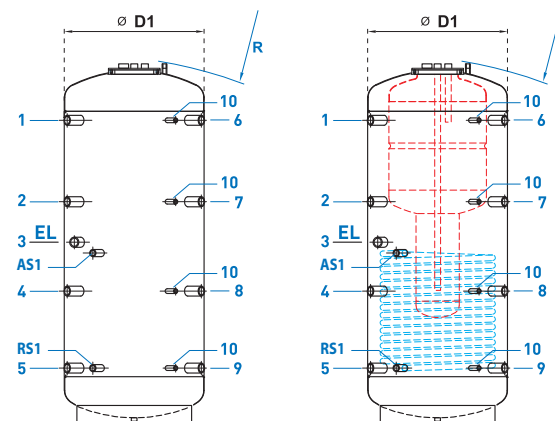
ATTACK TUVS: 8x socket G 1 1/2", 5x socket G 1/2", 2x socket G 1" – solar circuit, 2x socket G 1" – D.H.W.

STRATIFIED STORAGE TANKS ATTACK S, SS

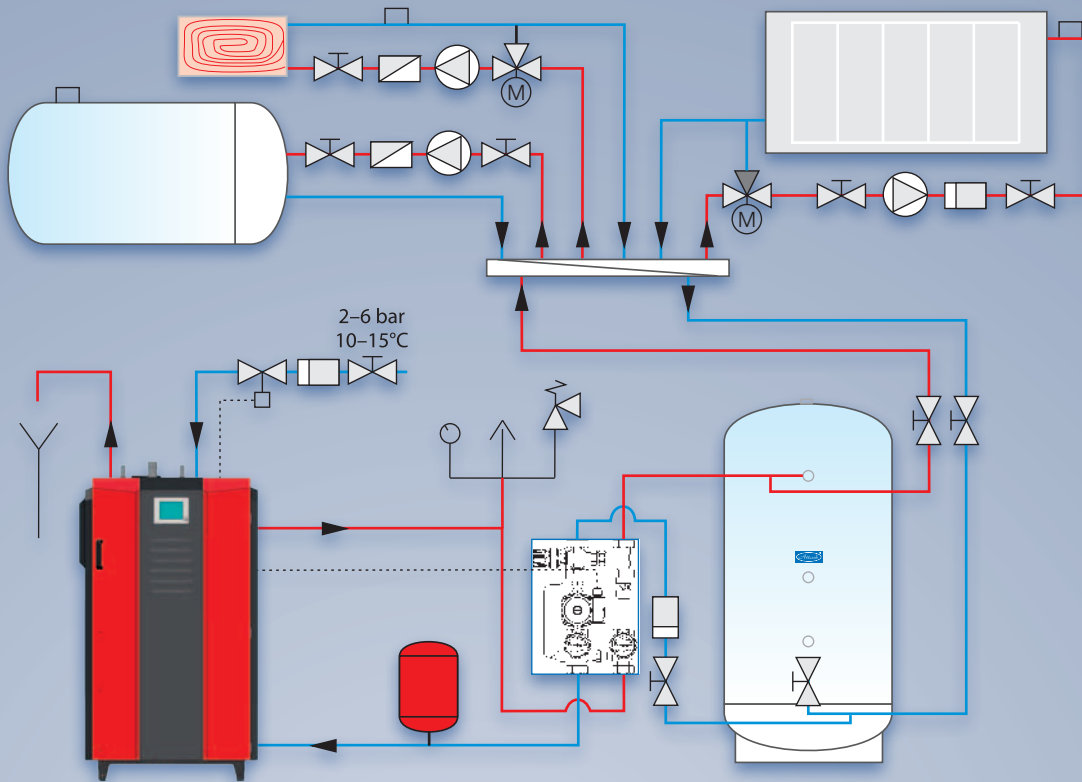
ATTACK S – is based on the **ATTACK AK** type. Disk and stratified pipe installed in the exchanger enable creation of water layers according to the temperature. This construction ensures different temperature layers at the inlets and outlets. **ATTACK SS** – is based on the **ATTACK AS** and the **ATTACK S** types. It is accessorized with an extra exchanger for connection to the solar circuit.



ATTACK AK / ATTACK AS



ATTACK HR / ATTACK HRS

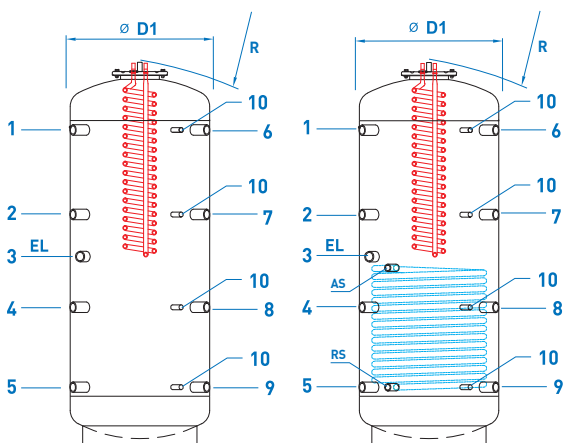
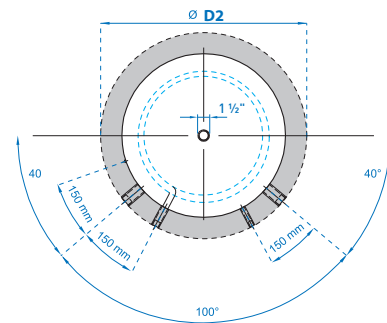
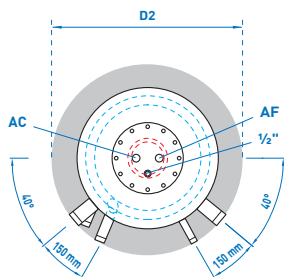


KEY FOR THE ACCUMULATION TANKS

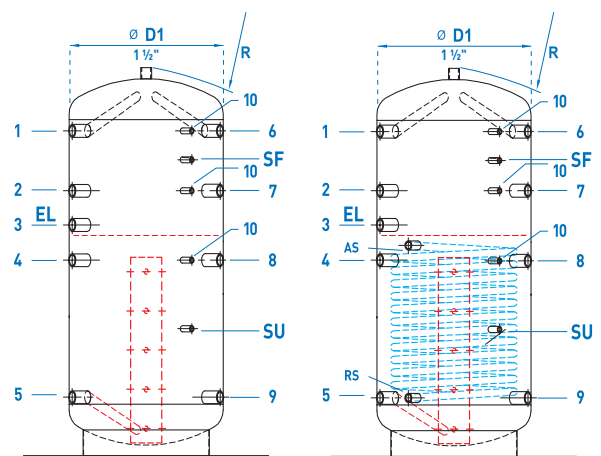
- 1 – Flow connection – boiler
- 2 – Freely disposable
- 3 – Electrical heating coil
- 4 – Freely disposable
- 5 – Return connection – heating circuit
- 6 – Flow connection – heating circuit (radiators)
- 7 – Flow connection – heating circuit (floor)
- 8 – Return connection – gas, oil and pellet boiler
- 9 – Return connection – wood boiler
- 10 – Sensor for solar or heating
- AS1 – Flow connection – solar
- RS1 – Return connection – solar
- SF – Upper solar sensor
- SU – Bottom solar sensor
- D1 – Diameter without isolation
- D2 – Diameter with isolation

ADVANTAGES OF INSTALLATION WITH THE ACCUMULATION TANKS:

- equalisation of an unequal boiler output and higher comfort
- lower fuel consumption – boiler works at full output, i.e. with optimal efficiency
- long life of the boiler and chimney – minimum production of tars and acids at full output
- option to combine with another means of heating (solar devices)
- option to combine radiators with underfloor heating
- higher comfort of operation



ATTACK TUV / ATTACK TUVS



ATTACK S / ATTACK SS



ATTACK, s.r.o.
Dielenská Kružná 5020
038 61 Vrútky
Slovakia

Tel: +421 43 4003 103
Fax: +421 43 4003 116
E-mail: export@attack.sk
Web: www.attack.sk



Výrobca ATTACK s.r.o. si vyhradzuje právo technických zmien výrobkov bez predchádzajúceho upozornenia. • ATTACK, s.r.o. producer reserves the right to change technical parameters and dimensions of boilers without previous warning. • Der Hersteller ATTACK, s.r.o. behält sich das Recht der technischen Veränderungen an Produkten ohne eine vorige Warnung. • Изготовитель ATTACK оставляет за собой право изменения технических параметров и размеров котла без предыдущего предупреждения. • Le producteur ATTACK Sàrl. réserve le droit des modifications techniques sans l'avertissement précédent. • Productor ATTACK, s.r.o. reserva el derecho de cambios técnicos sin advertencia anterior.



ATTACK, s.r.o. – 08/2013