SOLARFOCUS

makes you independent

productdesign by aka buna
www.akabuna.com

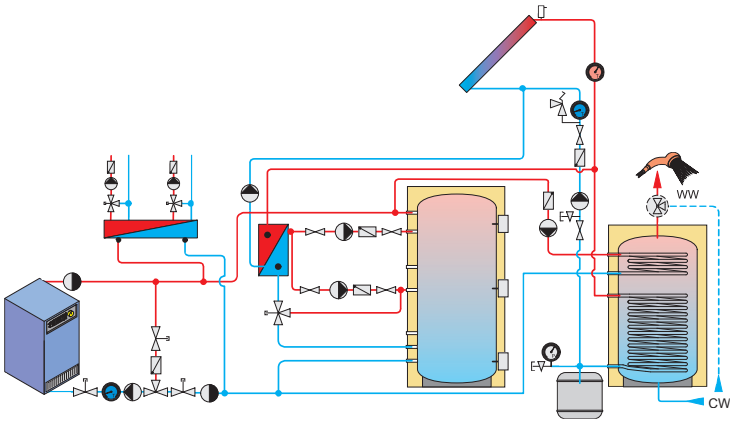
pelletplus

- SOLARFOCUS Solar & Pellets

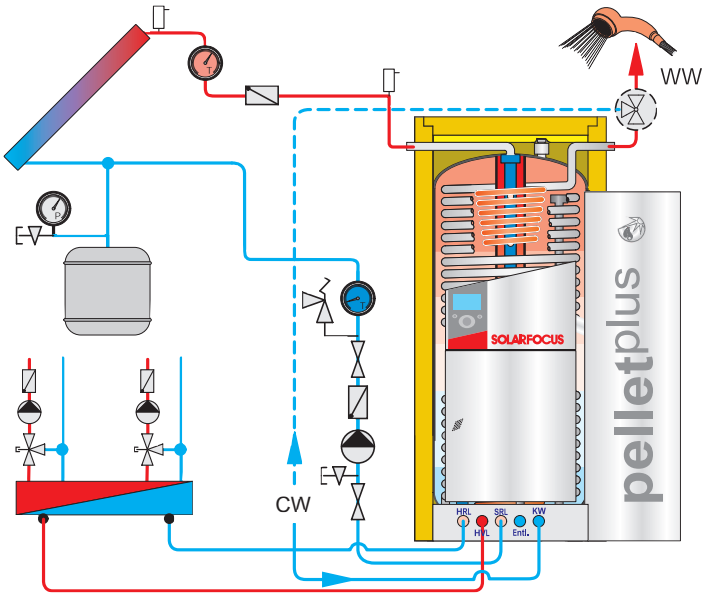
... simple hydraulics

The **pellet**plus - make “ONE” out of “FOUR” - storage tank, tap water tank, solar components and pellet tanks are one unit in the **pellet**plus. Enormous expenses are already saved during the installation due to a far lower material and assembly volume.

Connection diagram standard



Connection diagram of the **pellet**plus



Capacity and firing control

The induced draft fan:

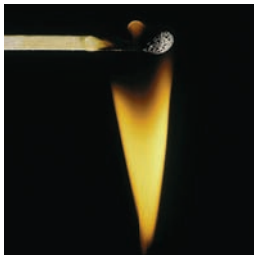
The combustion air needed in various areas is vacuumed by the speed-controlled induced draft fan. It is controlled by the microprocessor which is built-in in the control and/or by the measuring values determined by the lambda sensor.

The lambda sensor:

This technological advance was continuously expanded as the first user of the lambda sensor in boiler construction (since 1981). The best combustion values and especially a long service life of the lambda sensor have only been achieved by arranging the lambda sensor in the combustion chamber (patent).

The downburn technique:

A perfect combustion is achieved by the downburn technique.
There are no movable parts in the combustion chamber.



- Your personal bio-power plant

Combustion efficiency

GEPRÜFT

SENSATIONAL

Partial load: **97.5%**

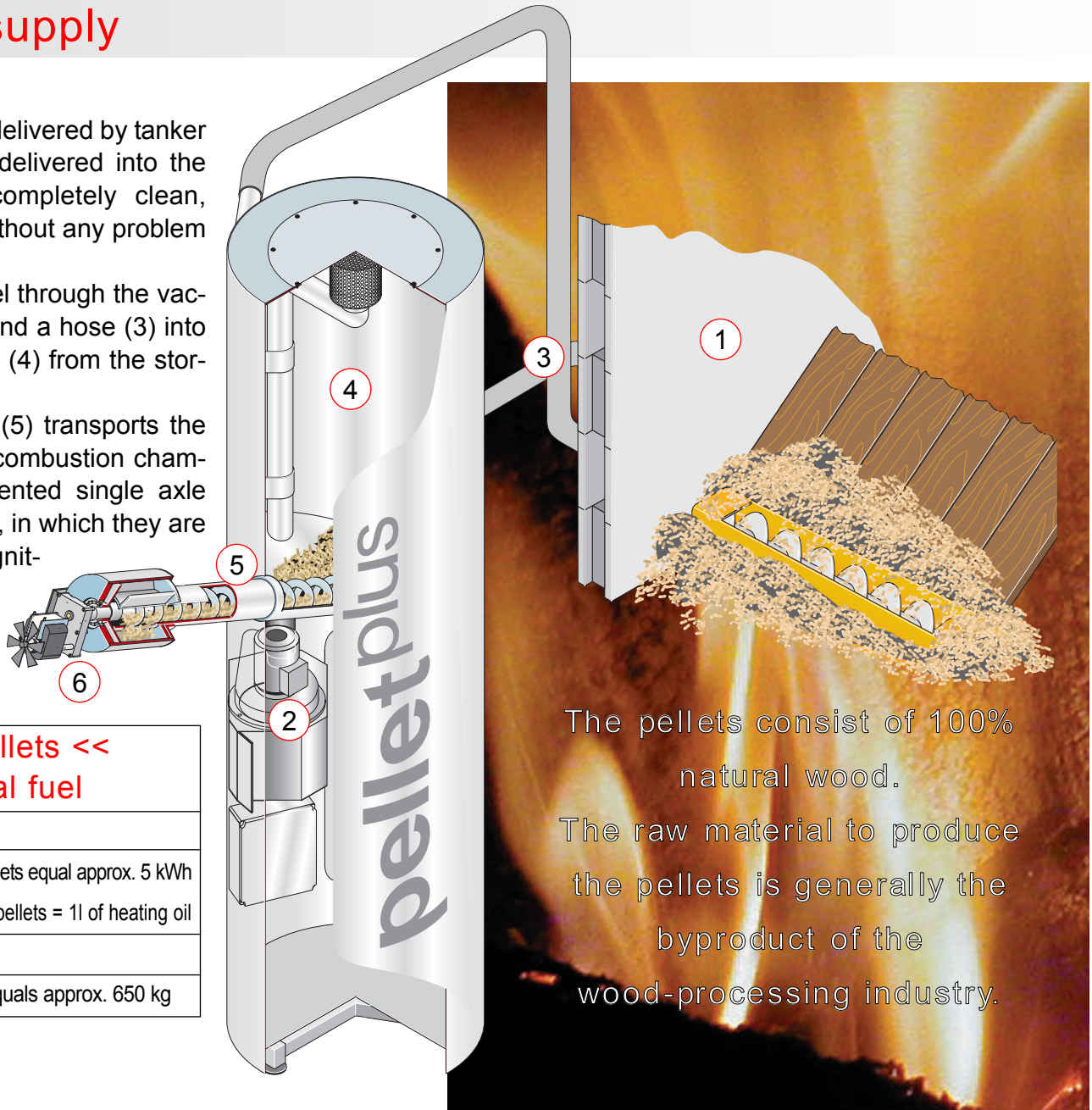
Full load: **96.0%**

System efficiency: **94.2%**

0% EFFICIENCY 100%

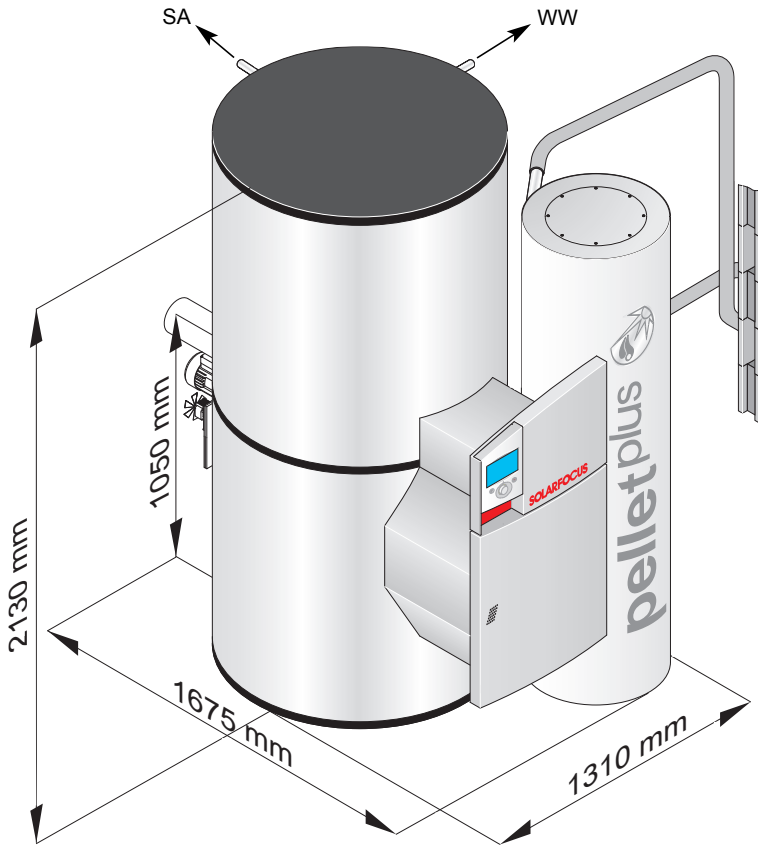
Pellet supply

The pellets are delivered by tanker trucks and are delivered into the storage area completely clean, dust-free and without any problem odors.
The pellets travel through the vacuum motor (2) and a hose (3) into the storage tank (4) from the storage area (1).
The pellet feed (5) transports the pellets into the combustion chamber via the patented single axle rotary feeder (6), in which they are automatically ignited.

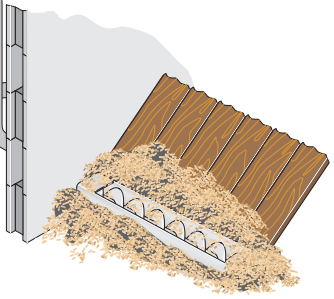


>> Pellets << Local fuel	
Heating value:	
	1 kg pellets equal approx. 5 kWh 2 kg of pellets = 1l of heating oil
Storage volume:	
	1 m^3 equals approx. 650 kg

Technical data of the pelletplus



Storage area



Stainless steel burner 10 years Warranty Pass

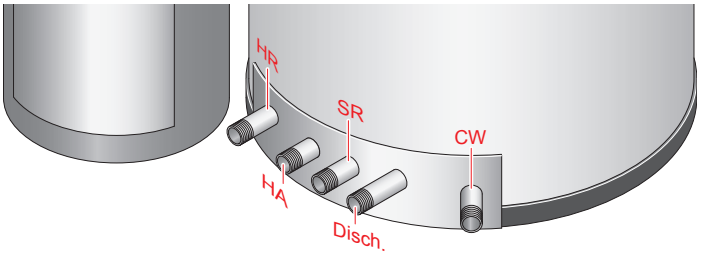
+

Full warranty 5 years Warranty Pass

	SISP-T	SISP-H
Capacity (kW)	3,9 - 14	
Fire tube ø (mm)	130	130
Weight approx. (kg) Layered tank	460	370
Weight approx.(kg) Pellet tank with vacuum motor	65	65
Water content (l)	800	800
Storage volume (l)	100	100
Tank ø (mm) without insulation	790	790
Tapping capacity (l/h) Hot water temperature 45°C at a tank temperature of 60°C Capacity of 53 kW	1300	—-
Tapping capacity (l/h) Hot water temperature 45°C at a tank temperature of 70°C Capacity of 62 kW	1500	—-
NL (DIN 4708)	2,5	—-

Precise technical data are listed separately in a data sheet.
We retain the right for technical modifications.

Clear connecting plate



SA = Solar- advance (1") (TOP)
WW = Warm water (1") (TOP)
HR = Heater - return (1")
HA = Heater - advance (1")

SR = Solar return (1")
Disch.= Discharge (1")
CW = Cold water (1")

... tested high technology

GEPRÜFT

Umweltschutzpreis des Landes Oberösterreich

AUSTRIA

EDELSTAHL Rost frei

EN 303-5 CEN/TC 57

>> EVERYTHING FROM ONE LOCATION <<

SOLARFOCUS solar systems - SOLARFOCUS biomass heating - SOLARFOCUS storage technology

Your dealer

Solar systems Biomass heater Storage technology SOLARFOCUS

Kalkgruber Solar- und Umwelttechnik GmbH
A-4451 St. Ulrich/Steyr • Werkstraße 1
Telephone: +43 (0)7252 50002-0 • Fax: DW 10
E-Mail: verkauf@solarfocus.at • export@solarfocus.at
web: www.solarfocus.at

07/2005

pellet plus perfectly combined

SOLARFOCUS Control engineering

The heart of your new heating system

>> ecomanager **<<**

The control has special significance in order to provide daily comfort. You determine when and how warm it will be.

The **eco**manager assists in the measurement and control.

The changing outdoor temperatures are considered along with your personal living habits. The burner only starts when the required heating energy cannot be completely provided by the solar system. Any unnecessary uneconomical burner start is prevented. **eco**manager provides individual adjusting options.

Control **eco**manager:

- Full graphic display with high lighting.
- Simple control with a control knob.
- Clear illustration of the system parameters (system values are resolved graphically).
- Integrated solar control.
- Weather-controlled heating cycle control for 2 separate heating cycles. (Optionally expandable to 4 or 6 heating cycles).
- 32 Bit processor.
- Completely digital combustion control.
- System can be updated (software can be updated via the telephone line).
- Remote monitoring and system control are possible via an ISDN connection.
- A maximum 5 Watt power consumption in standby mode.
- Control part can be assembled on the unit or in the living area.

... “smart” layered - great savings!

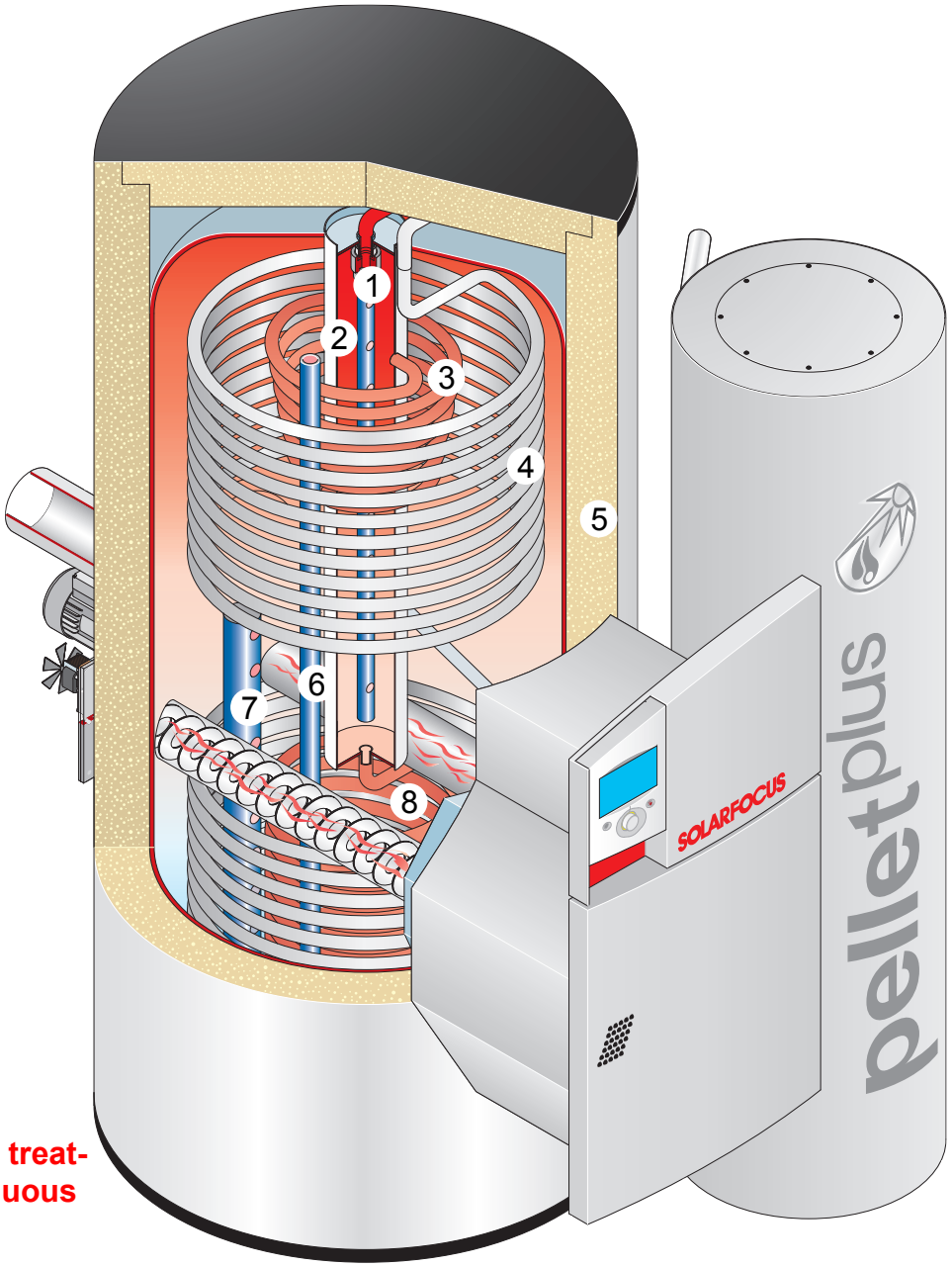
90 °C
70 °C
60 °C
50 °C
40 °C
30 °C

SIMPLY INGENIOUS - INGENIOUSLY SIMPLE !

... hot water in the hot zone - warm water in the warm zone.

Legend:

1 Thermo layer charging lance
2 Solar Layer tube heat exchanger
3 Solar LOW FLOW heat exchanger
4 Tap water heat exchanger of stainless steel
5 90 mm, shell insulation with aluminum
6 Heater advance
7 Layer charging lance (heater return)
8 Solar HIGH FLOW heat exchanger



Hygienic hot water treatment in the continuous principle.

The tank loading management:

The heated solar fluid flows thermo-oriented into the layered tube heat exchanger (2) through the thermo layer loading lance (1). This projects the energy yield to the surrounding storage medium. The LOW FLOW heat exchanger (3) in the upper tank area allows the shortest heating times.

- Quick availability of usable temperatures, even during short days of sunshine!
- Optimum use of low temperatures due to the HIGH FLOW heat exchanger (8) installed in the lower area.

Partially solar room heater:

Heat is removed from the layered tank by the heater advance tube (6) for the room heater. In order to avoid mixing the storage medium during heating, a layered charging lance (7) is installed in the heater return. The different return temperatures of the heating cycle are returned to the appropriate temperature zones of the tank.