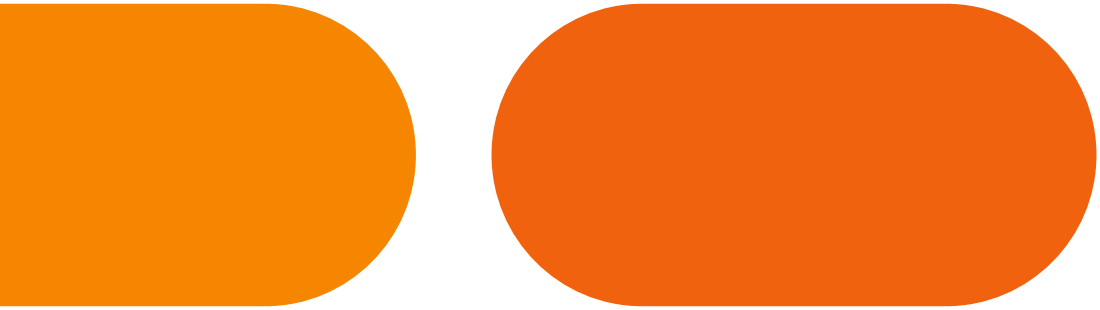
Janfire
pellets heating

Pellet heating systems – made easy



swedish quality

Janfire

Expertise acquired through years of experience

Janfire is a Swedish company that has been developing pellet fired heating systems since 1983. Pellet heating systems are ecologically sound and function automatically, and the local fuel used offers a degree of independence from global factors. Thousands of customers are already profiting from these advantages and, what is more, making considerable money savings with their Janfire pellet heating systems.

Thanks to our experience as the oldest company in the pellet burner industry, you may fully rely on our proven products. To date, we have supplied more than 25,000 pellet heating systems. We have been selected by a number of Swedish energy providers as their exclusive supplier, which provides further proof of the quality and excellence of our company and products. A very high level of efficiency, very low emissions and excellent operating safety – these are the most important factors in favour of Janfire pellet heating systems.

Since 1998 we have also been able to supply a number of systems in Germany via our sales partners. Janfire GmbH – a 100% subsidiary of Janfire AB – was established at the beginning of 2006 with the aim of actively supporting the wholesale and installation trade in Germany.

This brochure provides you with an overview of our range.

swedish quality

Turn-key systems really make things easy

Our turn-key solutions cover everything – from pellet storage to the boiler – and not forgetting, of course, the professional know-how for the full system. We can offer turn-key solutions for just about any requirement. A heating system with a pellet burner is an economic, future-oriented and ecologically sound heating system. It ensures healthy and comfortably warm room temperatures.

Using the Janfire Integral Comfort Package you only need to refill with pellets twice a year (for a normal family house). This type of heating is equally suited to town or country use. You order the pellets by phone and get them delivered by tanker – so it is just as easy to top up your supply as it would be for fuel oil deliveries. The boiler has enough room for ash, meaning that this does not need to be removed more than twice a year in an average family house.

Using the Janfire Varioflame System it is easy to switch between firewood and pellet firing.

You can loosen the soot on the inside by operating a lever on the boiler. There are also boiler versions where this function is fully automated. Either way there is no dirty work involved.

Both systems, Integral and Varioflame, carry top certification (EN 303-5) with system efficiencies in excess of 90% and they therefore meet requirements for state or local authority grants.

Our PelliStore™ pellet tank offers an automated and user-friendly solution to pellet storage. It is generally installed in the same place where the oil tank used to be, but, for instance, with the right kind of protective enclosure it can also be erected outdoors.

“Integral” heat accumulator

Functions without buffer storage

Fully self-cleaning boiler and burner

> 90% efficiency – maximum feed capacity

EN 303-5

Janfire Integral™

Complete future-proof unit

A complete pellet boiler with integrated self-cleaning burner unit. Quick and easy installation.

No time-consuming decarbonisation or maintenance! No external buffer storage needed!

With its automatic smoke removal cleaning system as an accessory, you can reduce the time needed for maintenance to less than 1 hour per year. The boiler can also be provided with an automatic ash discharge unit. The storage area for the ash is so large that a family house which would previously have used 4000l of oil annually will not need ash to be emptied more than twice a year.

Thanks to the large amount of hot water in the boiler (not domestic water), no additional buffer storage is needed. The boiler itself contains sufficient buffer water volume.

Technical data:

- Smoke removal connection: Above or to the rear
- Convection section: Upright pipes
- Decarbonisation lever: On the left or right-hand side of the boiler
- Weight: 295 kg
- Water capacity: 150 l
- Combustion chamber/ash storage area capacity: 120 l
- Electronic operating thermostat with stop interval/hysteresis, can be regulated up to 15°
- Flue gas thermometer: Integrated with digital display and draught regulator
- Touch screen display

Technical data for burner unit:

- 230 V/50 Hz/40 W
- Self-cleaning burner unit with motor drive, 40 W
- Heat output: 20 kW max.
- Internal metering motor, 14 W
- Combustion blower: 7 W, speed controlled
- Speed monitor
- Internal metering unit: Capacity approx. 3 l
- User-friendly display, can be set for summer and winter operation.

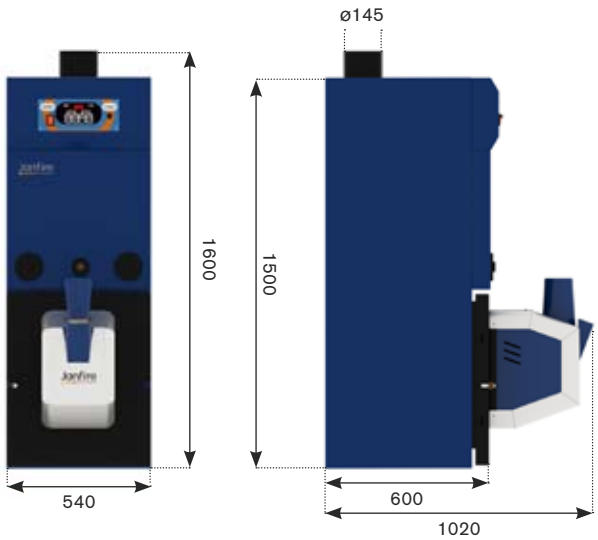
Accessories:

- Automatic decarbonisation lever with pre-programmed time intervals
- Automatic ash removal

The burner is fully automatic and self-cleaning and can be operated for six months without interruption or maintenance, irrespective of pellet quality (slag). A patented moving base in the burner scrapes away slag and other impurities and moves them into the ash area. The burner is automatically cleaned if the boiler thermostat reaches the stop position; otherwise at preset intervals.

Function description:

- Automatic cleaning of the burner unit due to the moving base.
- Automatic ignition. Long-life ignition coil.
- By means of the metering auger, feed is possible directly from the large fuel tank.
- The burner pan is made of heat-resistant stainless steel.
- Practical quick-release locks make cleaning and ash-removal easy.
- Horizontal flame



Combination boiler for pellet and firewood firing

Ideal in combination with solar heating

> 90% efficiency

Available in Germany since 1998

EN 303-5

Janfire Varioflame

Complete system for wood and pellet firing

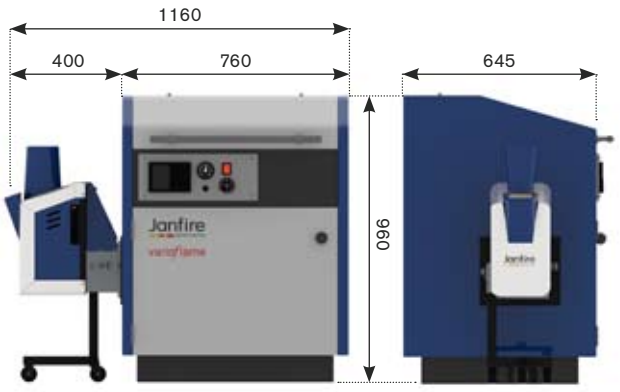
Janfire Varioflame is a proven combination boiler that has been on sale in Germany since 1998. It gives easy switchover between firewood and pellet firing. The boiler is both easy to clean and maintain.

Functional description - Burner

- The display and operating unit is easy to access and extremely user-friendly.
- A single turn of the switch switches the heating on or off. A summer and a winter position ensure optimum efficiency throughout the year.
- Burner performance can be set to match the season, the size of house and energy consumption. The performance levels are pre-programmed and are set on installation to match the relevant requirements. Burner performance is very easy to set to the most efficient operating mode.
- Combustion of equal consistency, both a high level of efficiency and low emissions, can be easily controlled via a small internal metering auger, which meters the pellet fed from the burner store unit. With the feed augur, feed is possible directly from the large fuel tanks without any intermediate container.
- Automatic ignition. Long-life ignition coil.
- The burner cup is designed so that as little fuel as possible leaves the combustion area without first being fully combusted. There is no “overflow” of uncombusted fuel to land in the boiler.
- The burner pan is made of heat-resistant stainless steel.
- The firing grate can be easily removed and cleaned.
- The burner is on a wheeled stand. This means the boiler can quickly and easily be switched from pellet to firewood mode. It can just be pushed out of the way, and there is no heavy lifting involved.
- Practical quick-release locks make cleaning and ash-removal easy.

Technical data:

- Burner: 230V/50Hz/80W
- Pellet heat output: 4.5 to 14.7/23 kW
- Firewood nominal output: approx. 12-14 kW
- Supplied as standard: 4.5 to 14.7 kW
- Boiler system for underpressure with minimum required flue draught of 0.15 hPa (mbar). The flue draught must be kept constant and limited via a draught regulator.
- Automatic ignition, ignition unit 230 V/1100 W.
- Water capacity 48 litres.
- Weight of boiler and flange: 205 kg
- Weight of burner: 23 kg
- Blower: 60 W, speed controlled.
- Metering motor: 15 W, integrated overload protection.
- Safety: Meets P-mark requirements to SP (Sweden), certified to European EN 303-5 standards.
- Efficiency: Meets EN 303-5 requirements by over 90%, as well as the highest European standards.



Pellet store

“Pellet tank instead of oil tank”

1. Still approx. 800 kg pellets available. The feed auger does not make contact.

2. Now air cushions press the pellets against the auger.

3. Pellets are dispensed from PelliStore.

	DIMENSIONS (M)	LITERS	KG	FILL
PelliStart	W=0.6ø H=0.85	300	180	1-2 times/week
K-silo	W=0.83ø H=1.1	230	145	1-2 times/week
PelliStore (small)	L=1.51 + 0.3 (delivery box) W=1.51 H=2.0 (1.9)	4,600	2,500	1-3 times/year
PelliStore (large)	L=2.2 + 0.3 (delivery box) W=1.51 H=2.0 (1.9)	6,300	3,500	1-2 times/year

PelliStore™

PelliStore is a patented solution for storing pellets, giving you the option of having your pellets delivered in bulk and loose to save money. The pellets are delivered by tanker once or twice a year (this is on the basis of an average famliy house), and feed to the burner is automatic. PelliStore comes in two sizes. The container is of space-saving design and is almost completely emptied by the air cushion pressing the last pellets against the feed auger once the pellet level is almost zero. PelliStore takes up almost the same amount of space as a standard oil tank of 3 m3 capacity. PelliStore is flexible as regards its location.

Simple indoor assembly!

You san set up your supply container up against the boiler or further away, even outside the house.

If you want to build you own pellet store, you can buy the PelliStore base auger with automatic dispenser separately.

Technical data for PelliStore:

- Easy assembly and easy-to-follow user manual
- Base auger
- Automatic control system
- Feed connection for flexible installation
- Exhaust air pipe for flexible installation
- Automatic pneumatics
- Inspection hatch with robust chain attachment
- Single phase, 230 V
- The container is made of strong marine tarpaulin and is dustproof.
- It is height adjustable over 1900-2000 mm

Accessories:

- Extended supply and exhaust air pipe.

PelliStart

Mini-silo from strong corrugated cardboard for manual filling – included as standard with the burner. (See table)

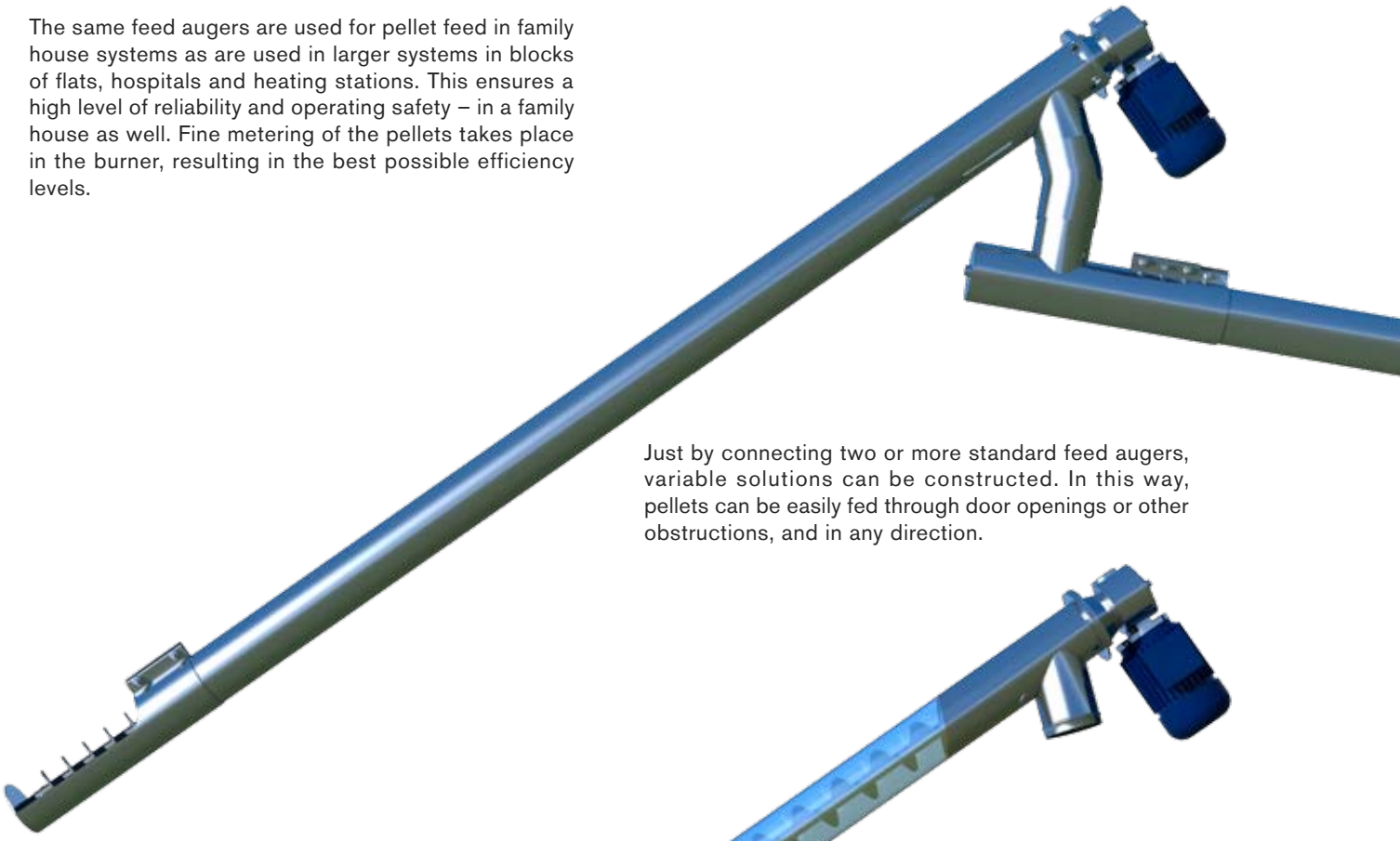
K-silon

Mini-silo for manual filling. (See table)

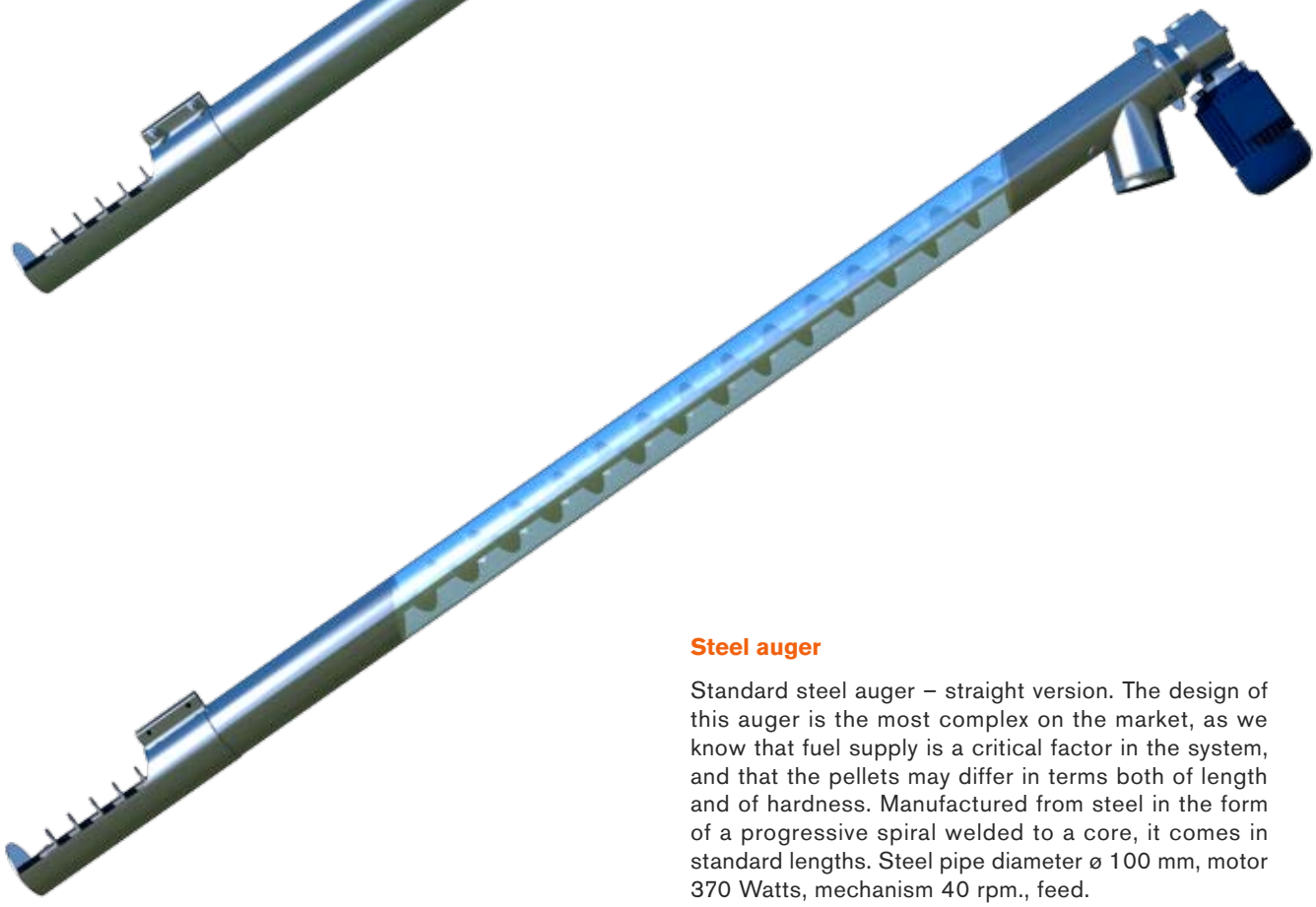
Feed system/feed augers

“Excellent operating safety”

The same feed augers are used for pellet feed in family house systems as are used in larger systems in blocks of flats, hospitals and heating stations. This ensures a high level of reliability and operating safety – in a family house as well. Fine metering of the pellets takes place in the burner, resulting in the best possible efficiency levels.



Just by connecting two or more standard feed augers, variable solutions can be constructed. In this way, pellets can be easily fed through door openings or other obstructions, and in any direction.



Steel auger

Standard steel auger – straight version. The design of this auger is the most complex on the market, as we know that fuel supply is a critical factor in the system, and that the pellets may differ in terms both of length and of hardness. Manufactured from steel in the form of a progressive spiral welded to a core, it comes in standard lengths. Steel pipe diameter ø 100 mm, motor 370 Watts, mechanism 40 rpm., feed.

Economy

Pellets give the lowest overall heating costs* at very low pollution levels. *excl. wood

A comparison of various heating energy sources:

Before deciding on a given energy source, you should first compare both the investment costs and the fuel costs, and consider also how they are likely to develop in the future.

If you have any questions relating to the use of energy in your house, please contact your Janfire dealer or an energy consultant in your area.

Simple calculation

This is how you can simply calculate the rough energy need and cost of your pellet heating system.

- 1 kilo of pellets contains approx. 4.8 kWh energy
- 1 m^3 oil is equivalent to approx. 2.1 tonnes of pellets
- 2.1 tonnes of pellets are equivalent to approx. 8-10 m^3 of firewood pieces

But the real beneficiaries are the environment and generations in years to come. As a rule, in an average family house you save 35% by switching from oil and gas to pellets.

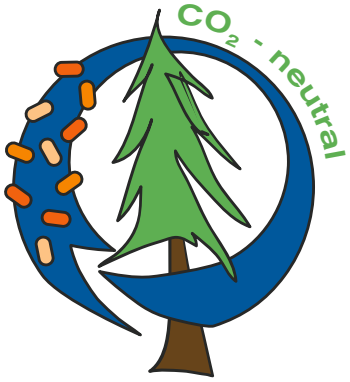
You can easily get our website to make some automatic calculations for you.

The saving compared to oil and gas is around EUR 650 – 700 on an average family house.

We have made allowance for interest and fuel/electricity costs.

Environment

Carbon dioxide from petroleum combustion and electricity generation contributes to the greenhouse effect and climate change. Pellet heating does not contribute to the greenhouse effect, as the net emission of CO_2 into the atmosphere is negligible.



Consumer safety

Warranty

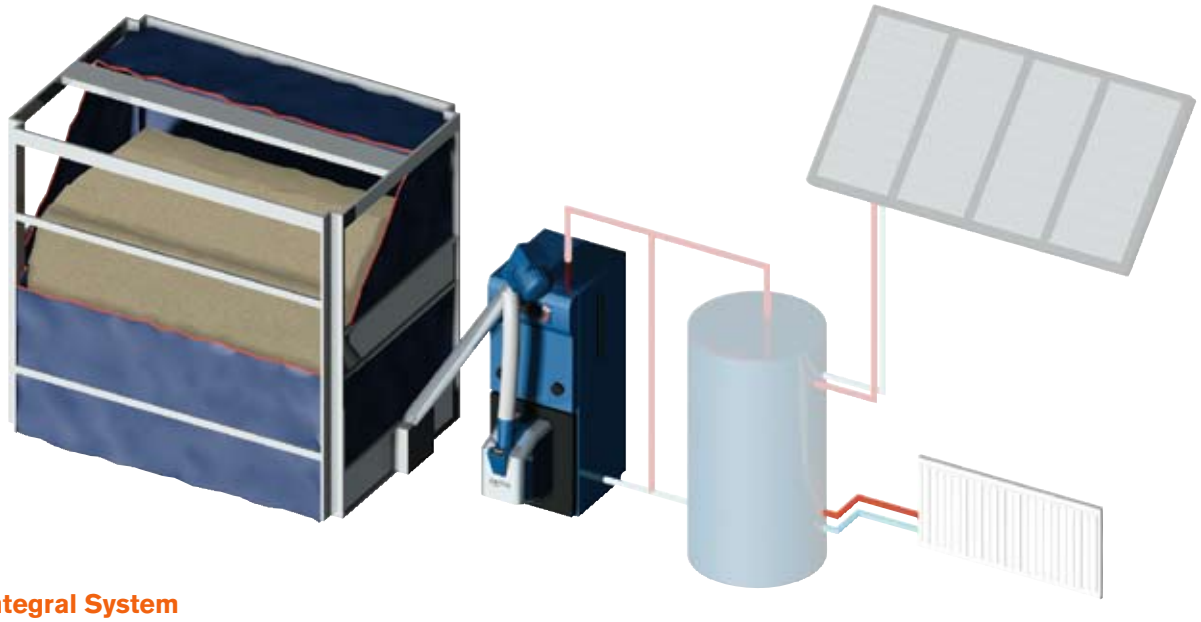
3 years, provided the system is accepted in combination with installation carried out by an authorised installer.

Janfire Outstanding in European comparative studies

The German Agency of Renewable Resources (Fachagentur Nachwachsende Rohstoffe e. V.) has compared the most popular pellet heating systems for family houses available on the market.

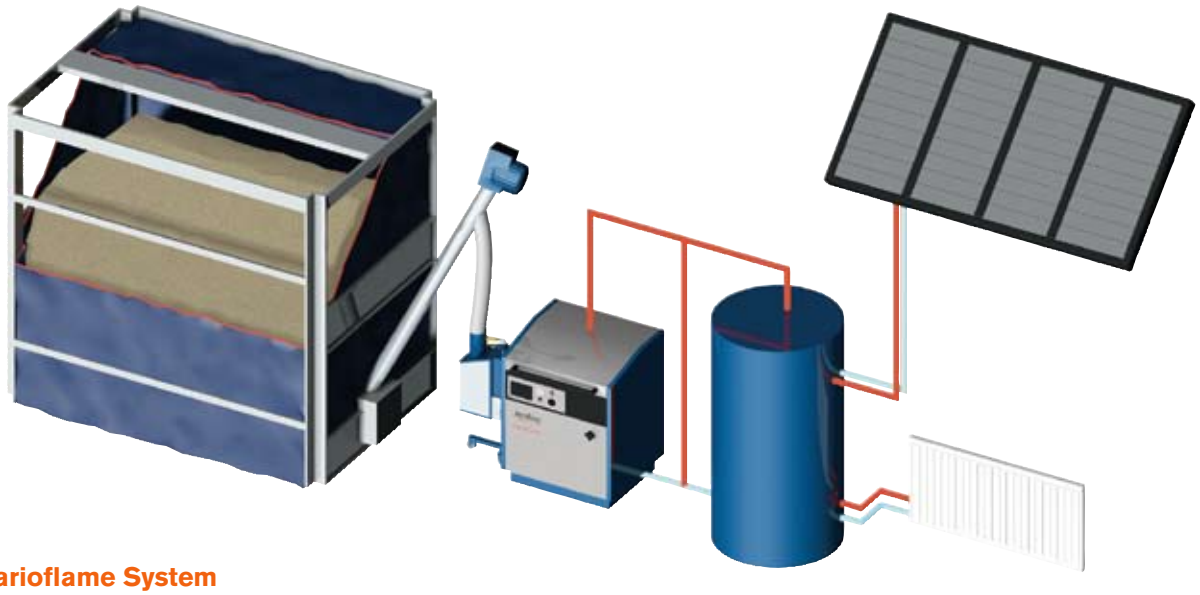
Janfire, used in combination with the Axiom Varioflame combination boiler, comes out as one of the best, with an efficiency level in excess of 90%, both at low and peak periods.

System overview



Integral System

Space-saving solution without solar heating. No external hot water buffer tank required. Can be later extended to include solar heating.



Varioflame System

Also ideal in combination with solar heating. External storage water buffer tank required.

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www.janfire.com

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Janfire
pellets heating

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