

J|Ä|S|P|I®

**Jämä**  
Ground source  
heat pumps and  
water heaters

# Ground source heating

*a worthwhile investment  
for homes and properties*



**Jämä ground source heating solutions for all types of sites:**

- newbuilds and renovation projects
- integrated system and hybrid solution
- large properties

**Did you know that ground source heating saves both energy and the environment?**

Ground source heating is clean, renewable energy. Ideally, a ground source heating system can save as much as 80% on heating costs.

# Ground source heating is an energy-efficient solution for new homes



Nearly half of all new single-family homes in Finland are heated with ground source heating. The popularity of ground source heating is due to its energy and cost efficiency as well as its environmental-friendliness. In newbuilds, the energy efficiency of a ground source heat pump make it the best heat pump solution.

## **Rock solid Jämä Star ground source heat pumps**

The Jäspi Jämä Star ground source heat pump is a state-of-the-art, responsible and long-lasting heating solution. They are energy efficient, stylishly designed, extremely quiet and compact appliances.

Jämä Star ground source heat pumps are built with the best components in the industry. As a result, Jämä ground source heat pumps boast a coefficient of performance (COP) of up to 5.03. This means that the heat pump generates five times more energy than it consumes.

## **Easy to install and use**

Jämä Star ground source heat pumps are easy to install. Once fully installed, starting up the equipment and using it are as easy as can be. Automation includes simple, user-friendly menus, a timer feature and ready-to-use water use profiles.

## **Monitor and manage remotely**

The user-friendly MyUpway remote management service comes standard with all Jäspi heat pumps. A market electricity feature can also be included in the service.

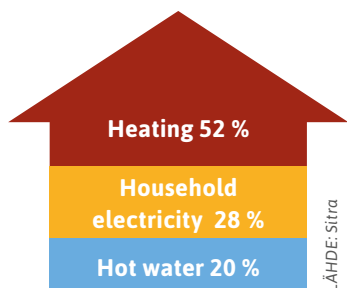
## **Financing**

Ask our dealers about Jäspi's flexible financing for purchasing and installing a ground source heating system.

## **Cooling offers comfort**

You can increase your summertime living comfort by adding the wall or roof-mounted Jäspi Cool cooling unit, which keeps the indoor air nice and comfortable.





LAHDE: Sitra

## Ground source heating saves on heating costs

Heating accounts for a lion's share of household energy costs.

With a ground source heat pump, you'll be able to cut your heating bills by as much as 80%.



**Additional living comfort:**  
Set the temperature as needed – even with a mobile device.

**New home builders Sanna och Johan:**

## An efficient and trouble-free alternative

"We first considered other alternatives, but ultimately the choice was an easy one, because many of our friends had positive experiences with ground source heating. Compared to other types of heat pumps, ground source heating offers the highest energy efficiency. Not only that, it's easy to use and, with the cooling feature, it's also possible to keep your house cool when it gets hot outside.

The system has three settings for household water and changing the temperature is easy. The operating system is clearly set up and user-friendly. We are also going to take advantage of the myUpway remote management service.

In the future, we'll also be able to add solar energy to the mix, because the system is set up for solar power."

**New single-family home in Southwest Finland**

- Area to be heated 150 m<sup>2</sup>
- heating system Jämsä Star RST Inverter 6 ground source heat pump



# From electric or oil heating to ground source heating

*On renovation projects, a ground source heat pump is an energy efficient way to replace old, high-consumption forms of energy, such as oil, wood or electric heating. The greater the need for heating energy, the bigger the savings on energy bills. What's more, this compact appliance doesn't take up a lot of space.*

## **Investment in clean energy**

With a ground source heat pump, you'll not only bring your heating system up to date, you'll also be getting a future-proof solution. Based on renewable energy, this solution is both economical in terms of operating costs and an environmentally-friendly heating method. In other words, it's good for the environment in all sorts of ways.

## **Experienced partner for heating your home**

Finnish company Kaukora has manufactured Jäspi and Jämä heating equipment in Finland for decades. Thanks to our many years of experience, we know what is required of heating systems in the north. We deliver over 50,000 pieces of heating equipment each year, so we can confidently call ourselves the heater of Finnish homes.

## **In-house product development guarantees quality**

We are constantly developing our products. The feedback we receive from our users directly affects the features we put into our products. This is why they are exceptionally well suited to highly demanding conditions and even dramatic fluctuations in weather.

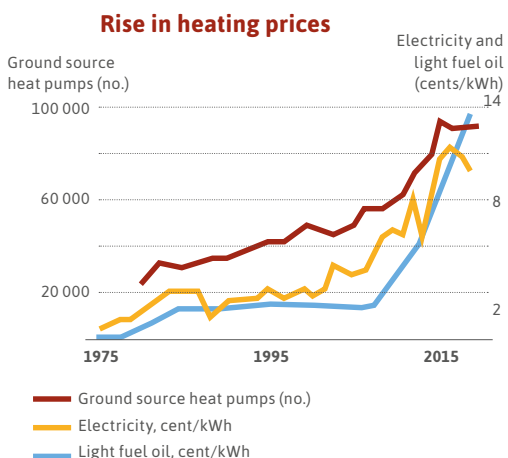
## **Financing for your investment**

Our dealers can tell you about our Jäspi financing options for purchasing and installing a ground source heating system.

## Renovation projects



The popularity of ground source heating is growing as the price of heating energy increases.



Source: Finnish Heat Pump Association (SULPU) and Energy Prices, Statistics Finland

The Laaksonen family from Raisio switched to ground source heating:

## No more ordering oil

“Our oil boiler had reached the end of its useful life, and the price of energy is also going up. We compared several different alternatives and talked with acquaintances in the same situation. We have five people in our family and a big house, so we began to have doubts about relying solely on an air to water heat pump. We went with ground source heating for its low maintenance and space savings. The fact that everything would be out of sight, with no trace of the system in the yard, also influenced our decision.

The professional skill of local installation firm Lämpö Nurmi Oy and Jäsپی experts made the installation a breeze.

We’ll be saving roughly 2,000 euros a year at current prices and consumption levels. We are also considering the cooling function.”

**Single-family home built in 1991 in Raisio**

- Area to be heated 225 m<sup>2</sup>
- Jämä Star Inverter 6 kW ground source heat pump and Jäsپی VLM Star 300 water heater.



# Heating and domestic water in a single package

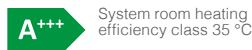
**Jämä Star RST** ground source heat pumps generate both heating and hot domestic water. The integrated stainless steel water heater holds 180 litres. These compact ground source heat pumps are suitable for use in both newbuilds and on renovation projects.

## Efficient ground source heat pump with water heater

The Jämä Star RST Inverter comes with an inverter-driven compressor, which automatically controls the water heater output based on the heating needs for the household and domestic water. Thanks to the wide adjustment range, heat can be set evenly while saving energy, thus keeping the COP optimal all year long.

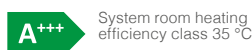
## Jämä Star RST Inverter 6/12/16 kW

- Power output 6, 12 and 16 kW
- The inverter-driven compressor ensures max savings
- Outstanding annual coefficient of performance, up to 5.4 (SCOP)
- User-friendly and versatile colour display
- 180-litre integrated stainless steel domestic water heater
- MyUpway remote management (standard)



## Jämä Star RST 5-12 kW

- Power output 5-12 kW
- 180-litre integrated stainless steel domestic water heater
- User-friendly colour display
- Compact size
- MyUpway remote management (standard)



You can also add solar power to the ground source heating system!



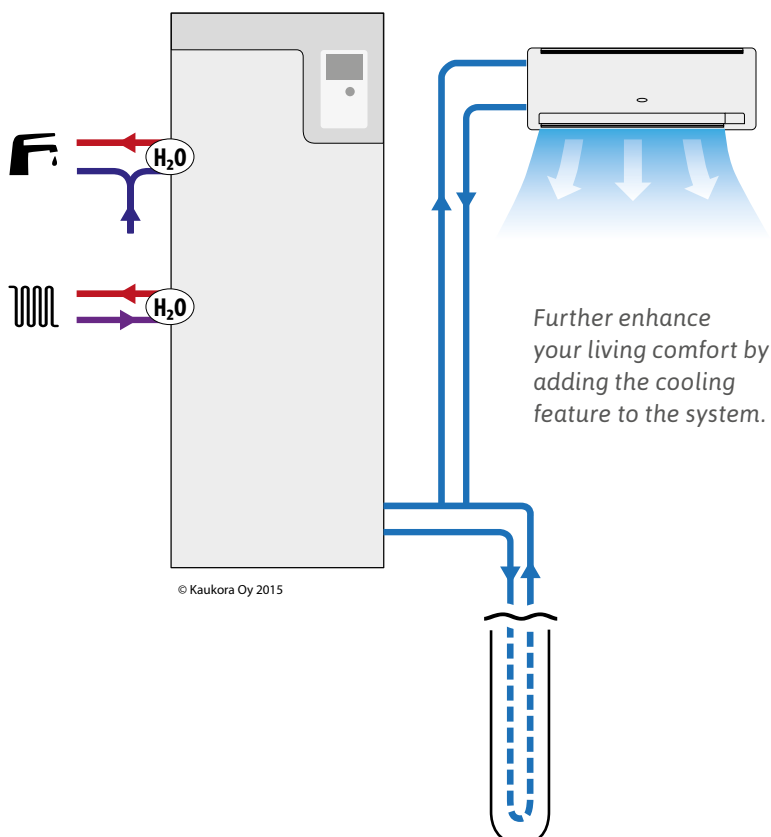
## Enhance your living comfort with cooling

**Jäspi Cool** cooling convectors can use your thermal well for cooling power to tame the summer heat.

The unit is easily installed, as the ventilation duct requires no modification. The cooling convector does not need any outdoor unit, as all connections are made directly to the ground source heat pump. Convectors can be mounted on the wall or roof and are conveniently controlled by a remote unit. The Jäspi Cool connection package optimises the cooling function and makes work easier for the installer.

**Cool W3 and W4 wall-mounted convectors**  
**Cool R5 roof-mounted convector**  
**Cool connection package**

- Silent operation
- User-friendly
- Minimalist design
- Eurovent-certified
- Power output 3-5 kW





# Heat and hot water in tandem

## Ground source heat pump and water heater - an unbeatable combination

The **Jämä Star** ground source heat pump is connected to the **Jäspi VLM Star** domestic water heater. All connections are made on top of the units. This solution saves space and creates a stylish set-up with the heat pump. Together, the ground source heat pump and water heater guarantee a high hot water output and affordable heating costs.

### Jämä Star 6-17 kW

Ground source heat pump connected with a water heater

- Power output 6-17 kW
- User-friendly and versatile colour display
- Domestic water is heated in a separate water heater
- For sites requiring a large volume of domestic water and/or with a low installation space.
- MyUpway remote management (standard)
- All connections are made on top of the units.

**A+++** System room heating efficiency class 35 °C

**A+++** System room heating efficiency class 55 °C

### Jämä Star 6/12/16 kW Inverter

Equipped with a speed controlled inverter-driven compressor, which automatically adjusts the water heater output to meet the user's needs, thus keeping the COP optimal all year long.

- Power output 6-12-16 kW
- Outstanding annual coefficient of performance
- User-friendly and versatile colour display
- For sites requiring a large volume of domestic water and/or with a low installation space.
- MyUpway remote management (standard)

**A+++** System room heating efficiency class 35 °C

**A+++** System room heating efficiency class 55 °C

 myUpway™







## Water heaters for Finnish conditions

Jäspi VLM Star 300-500 water heaters were developed to work specifically with ground source heat pumps to use geothermal energy in producing hot domestic water. They are manufactured in Finland of top grade stainless steel, which is especially well suited to Finnish tap water, which is generally acidic.

### Jäspi VLM Star 300-500

- Volume 300 or 500 litres (parallel connection possible)
- Sensor well runs the entire length of the water heater
- Solar coil option
- Optimal exterior dimensions: fits into even the lowest spaces
- For sites requiring a large volume of domestic water and/or with a low installation space.



### Enhancing ease of use:

Popular with users, the myUpway (standard) remote management service allows you to control and monitor your equipment no matter where you are.



## Buffer store optimises heat pump operation

The purpose of the buffer store is to optimise ground source heat pump operation. In newbuilds, a buffer store increases the water volume of the heating system, thus optimising the ground source heat pump compressor run times all year round. On renovation projects, buffer stores also ensure steady radiator heating.

### Jäspi Buffer buffer store

Thanks to the higher water volume allowed by the Jäspi Buffer buffer store, the ground source heat pump run times can be longer and there are fewer equipment starts, which tend to wear the equipment down. The buffer store extends the service life of ground source heat pumps. Its design makes the Jäspi Buffer easy to place.

- Jäspi Buffer 50 (stainless steel), 100 (stainless steel), 200 (stainless steel), 270 and 500
- Sensor well runs the entire length of the water heater
- Back-up/extra heating couplers in models 270 and 500



New design!

# This is how a building corporation switches to ground source heating

*The Jämä Star property ground source heat pump is a solution for larger properties that helps building corporations save on energy costs. In addition to savings, the benefits provided by Jämä Star are its low maintenance, reliability, environmental-friendliness, affordable operating costs and long service life.*

## **Savings for large properties**

Jämä Star ground source heat pumps are known for their high coefficient of performance and efficiency. The Jämä Star 24-60 kW is designed as a cost-efficient heating system for larger properties as well as for the heating of domestic water. The compressor units turn on according to the power needs, thus enhancing operational reliability and increasing the service life of the unit. The myUpway remote management service comes standard with the equipment. The highly esteemed Finnish manufacturer ensures that technical support is always on hand when the need arises.

## **Jämä Star 24-60 kW property ground source heat pump**

- Power output 24-60 kW
- As many as nine ground source heat pumps can be connected in series up to 540 kW
- Extremely easy to install and extremely quiet operation
- Refrigerant in a single compressor unit less than 3 kg
- Five-year product warranty
- MyUpway remote management (standard)
- Ready for connection to the building automation system (modbus)
- New model: Jämä Star Inverter 28 kW

**A+++** System room heating efficiency class 35 °C

**A++** System room heating efficiency class 55 °C



Simple automation allows the connection of up to nine property ground source heat pumps.

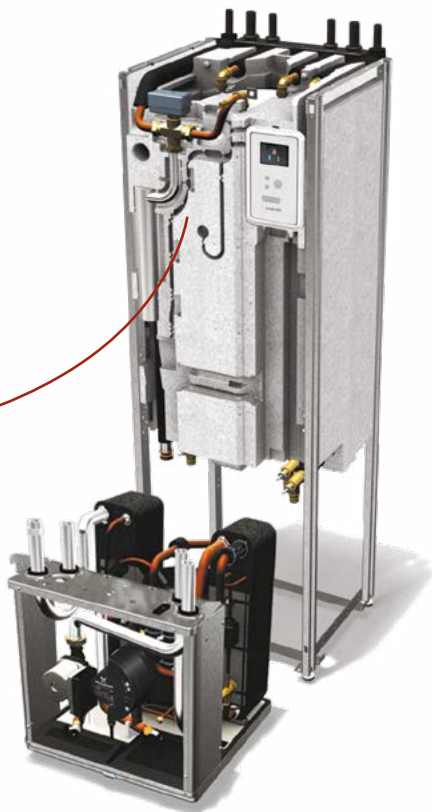


 myUpway™



Large properties

*Ground source heating is also an energy efficient solution for halls and warehouses!*



**Our experts and dealers all over Finland are at your service when you are looking for the right heating solution**

*Jäspi and Jämä Star heat pumps are sold all over Finland through an extensive dealer network. We deliver over 50,000 pieces of heating equipment each year, so we can confidently call ourselves the heater of Finnish homes. Visit our website to see where you can find the nearest professional dealer and installer of Jäspi products. [Jaspi.fi](http://Jaspi.fi)*

# JÄSPI®

Experienced  
Finnish  
heater of homes



## Ground source heating solution for your property, starting at 216 €/month

**Jäspi financing** is credit specifically intended for the purchase and installation of heating equipment. It allows you to pay for your purchase in instalments suitable for your own needs. Below is a sample calculation. Please contact your nearest dealer for additional information.

**Ground source heating for a newbuild. Price of the investment: 16,000 € (VAT 24%). 10-year financing/192 €/month**

\* Financing given in the form of one-off credit, whose actual annual interest rate on a 16,000 € loan is 8.19%, when the loan interest rate is OP Prime + 6.95%, (7.20 % 01/19), a 0 € establishment fee and a monthly invoicing fee of 7 €. Estimated total cost of the loan is 23,270.05 €. This calculation is based on the assumption that the loan is taken as a lump sum, with the interest, fees and charges remaining the same for the entire loan period and repayment being made in 192 € minimum instalments (1.2% of the loan amount) on a monthly basis, thus making the credit period 122 months. The credit is issued by OP Corporate Bank plc, Gebhardinaukio 1, 00510 Helsinki.

**Finnish Jäspi products are  
manufactured by Kaukora Oy**

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tel. +358 (0) 2 4374 600  
kaukora@kaukora.fi

Find the nearest dealer: [www.jäspi.fi](http://www.jäspi.fi)

**Ground source heating for a renovation project. Price of the investment: 18000 € (VAT 24%). 10-year financing/ 216 €/kk**

\* Financing given in the form of one-off credit, whose actual annual interest rate on a 18 000 € loan is 8,09 %, when the loan interest rate is OP prime + 6,95%, (7,20 % 01/19), a 0 € establishment fee and a monthly invoicing fee of 7 €. Estimated total cost of the loan is 26 017,51 €. This calculation is based on the assumption that the loan is taken as a lump sum, with the interest, fees and charges remaining the same for the entire loan period and repayment being made in 216 € minimum instalments (1,2 % of the loan amount) on a monthly basis, thus making the credit period 121 kk. The credit is issued by OP Corporate Bank plc, Gebhardinaukio 1, 00510 Helsinki.

**sulpu**



Lämmitysenergia  
Yhdistys

\*We work in cooperation with industry associations