

# Ground and Air Source Heat Pump (GSHP) (ASHP)

Do you have a high energy requirement?

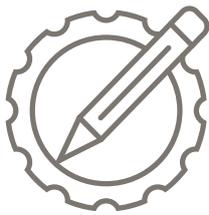
A Calibrate Ground or Air Source Heat Pump is the answer...



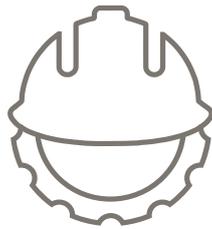
## About Calibrate

We are a leading provider of intelligent, low cost and worry free 'hands off' heating, chilling and power-generating solutions designed to provide maximum energy and cost savings. Our expertise lies in harnessing the natural energy resources surrounding a building, to provide reliable heating and chilling as a part of our innovative process.

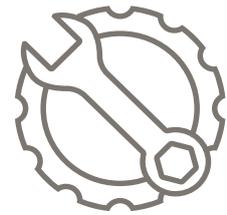
Our Ground or Air Source Heat Pump solution will transform your business in many ways. We will design the system around your business needs and install with minimal disruption to your day-to day. Our extended warranty and maintenance package provides peace of mind for up to 20 years.



**Design**



**Install**



**Maintain**

## About heat pumps

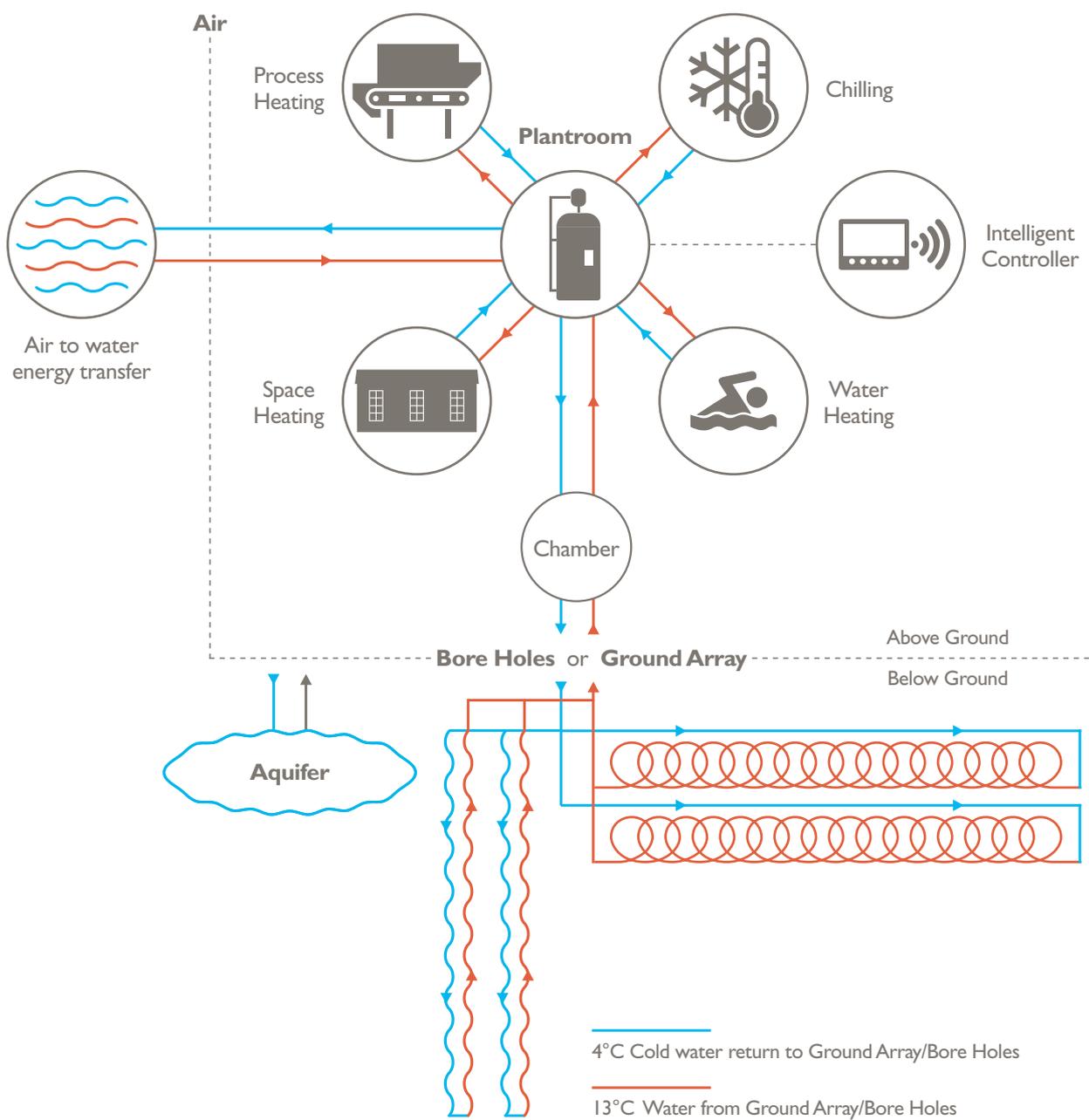
- They are designed to take naturally occurring energy from the air, ground or water to produce heating and chilling simultaneously in two separate hydraulic circuits.
- The energy is then passed either through a system of pipes or a heat exchanger to the heat pump.
- The heat and chill produced by the heat pump is then used for your required process.
- The cold fluid is sent to the ground, water or through the air to be heated naturally again. The chill process recovers the waste energy, increasing the efficiency of the system by taking heat from the product and boosting the ground with this waste energy.
- This clever combination of recovered energy and naturally occurring energy is used to run the heat pump system and boost its efficiency.

All formulas and calculations are derived from industry suppliers and MCS guidelines, it is advisable to have the calculations and formulas checked by a certified mechanical engineer, and as such, Calibrate Inc. Ltd (Company # 08277206) will not be held liable for any incorrect formulas or calculations or any accidental misrepresentation.



**Calibrate**  
Energy Engineering

## How does a heat pump work?



Calibrate have installed **58%** of the total Ofgem certified Ground Source Heat Pump projects in the UK.

## What are the benefits of a heat pump?

- They save money as well as the environment
- There are no fuel storage requirements therefore they save space
- They do not emit any potentially dangerous gases so are extremely safe
- They are the only kind of renewable energy technology that can benefit from the thermal energy storage properties of the ground and air to recycle heat from summer to winter
- They provide heating during winter but can also provide chilling during summer
- They are safe, silent, unobtrusive and out-of-sight
- They help to lower your carbon footprint as it uses a renewable, natural source of heat – the ground or air
- They can reduce the use of fossil fuels as these are not imported. Making the heat pumps a high efficiency heating and cooling system
- Our systems are modularised and delivered to site in a customised plant room for minimal disruption
- Our bespoke controller operates the system remotely.



## Which industries are they best suited to?

Any high energy-use industry could benefit from a heat pump as it has different functions for different industrial applications.

- **Agriculture & Horticulture**  
e.g. Grain drying, space heating, daffodil drying or any other type of agricultural product drying. Chill is used to chill products like potatoes and milk.
- **Food & Drink**  
e.g. Drying, processing and preserving food products.
- **Chemical & Life Sciences**  
e.g. Process heating, chilling and sterilisation.
- **Hotel & Leisure**  
e.g. Swimming pools, spa, guest houses, heating radiators.
- **Schools & Education**  
e.g. Educational buildings and accommodation, classroom, gym and swimming pool heating and cooling.
- **and many more industrial and commercial processes and applications...**



**We remain focussed on helping commercial businesses to meet the Government's goal to reach net zero carbon emissions by 2050 for a more sustainable future.**

## What our customers say

“When we made the decision to invest in heat pump technology, we looked at various companies who offered this service, we narrowed these companies down to Calibrate due to their professional approach and because they were able to carry out the full bespoke design, installation and also support the system with a comprehensive long term maintenance agreement. We were not disappointed with Calibrate and would highly recommend them.”

**Ian Douglas**  
WL Douglas & Son

“We commissioned Calibrate to design and install the system that suited our heat and cooling requirements within our business. The project has progressed efficiently and is now complete and in full operation. The installation process ran smoothly with good communication and work quality from Calibrate staff and engineers. We look forward to the overall benefits of the project.”

**Peter Allan**  
East Reston Farm

“Calibrate created an innovative design that reduced fossil fuel costs and streamlined our systems and processes. It is great to see that this design was seen to fruition with great communication, I would happily recommend Calibrate.”

**Tom Cargill**  
Coldstream Farm

### Contact:

[jack@calibrate ltd.co.uk](mailto:jack@calibrate ltd.co.uk) / 07719 330 616

[www.calibrateenergy.co.uk](http://www.calibrateenergy.co.uk)



Calibrate  
Energy Ltd



Calibrate Energy  
Engineering



@energycalibrate



@calibrate ltd



**Calibrate**  
Energy Engineering

Design | Install | Maintain