

# HeatWork®

industrial heating solutions

# Hydronic heating

Norwegian design and quality

HeatWork  
Concept



## Unique competence on hydronic technology

HeatWork AS is a family owned company in Narvik, Norway, which through years of experience in the construction industry, has acquired unique competence on hydronic heating technology.

With genuine focus on quality, design, performance and environment, the company has patented several technologies and protected brand names.

HeatWork is well known for being the market's most effective frost thawing, but has also become a significant supplier to several industries. Today, the products and solutions are also used for curing concrete, frost protection, heating and drying in building, district heating, damage restoration, pest control.

HeatWorks customers include machine contractors, construction industry, district heating companies, rental companies, pest companies, oil and gas industry and many more.

HeatWork's headquarter and factory are located in Narvik, Norway, with 3300 m<sup>2</sup> state of the art production facilities. HeatWork is represented in several countries and has a customer portfolio ranging from Antarctica in the south to Svalbard in the north.

## Mobile heating solutions for use year-round – anywhere!

The heart of our solutions is HeatWorks mobile hydronic heating technology. By using patented technology as an energy carrier in a closed system, most tasks are solved all year long.

HeatWork's mobile heating solutions has an extremely high efficiency, up to 94%. By supplying only the required energy, you achieve high energy efficiency and minimize environmental impact.

The closed system does not supply water or moisture, which provides excellent results, both through contact heat and air heating. The system can also be operated on biodiesel, which further minimizes the impact.

The temperature can be adjusted between 0-100 degrees, which makes our technology unique.

Low weight and high mobility allow the equipment to be transported easily with regular vehicles, construction machines, helicopters, etc.

*PS! Same equipment for a lot of tasks!*



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### Areas of application:

#### Thawing and frost protection:

- Water supply and sewage systems
- Cable trenches
- Sumps, foundations and floor areas
- Roofs and coverings
- Thawing frozen ground, ice and snow
- Pavement surfaces
- Sand and levelling material
- Backfill
- Pipelines

#### Heating/dehumidifying:

- Buildings under construction/-rehabilitation
- Storage and multi-purpose halls
- Water damage
- Work tents

#### Curing of concrete/preheating of concrete:

- Areas for cast concrete
- Supply heat by curing concrete
- Formwork and casting frames
- Hollow core slabs
- Rock and bedrock in anchorage work

#### FrostHeater

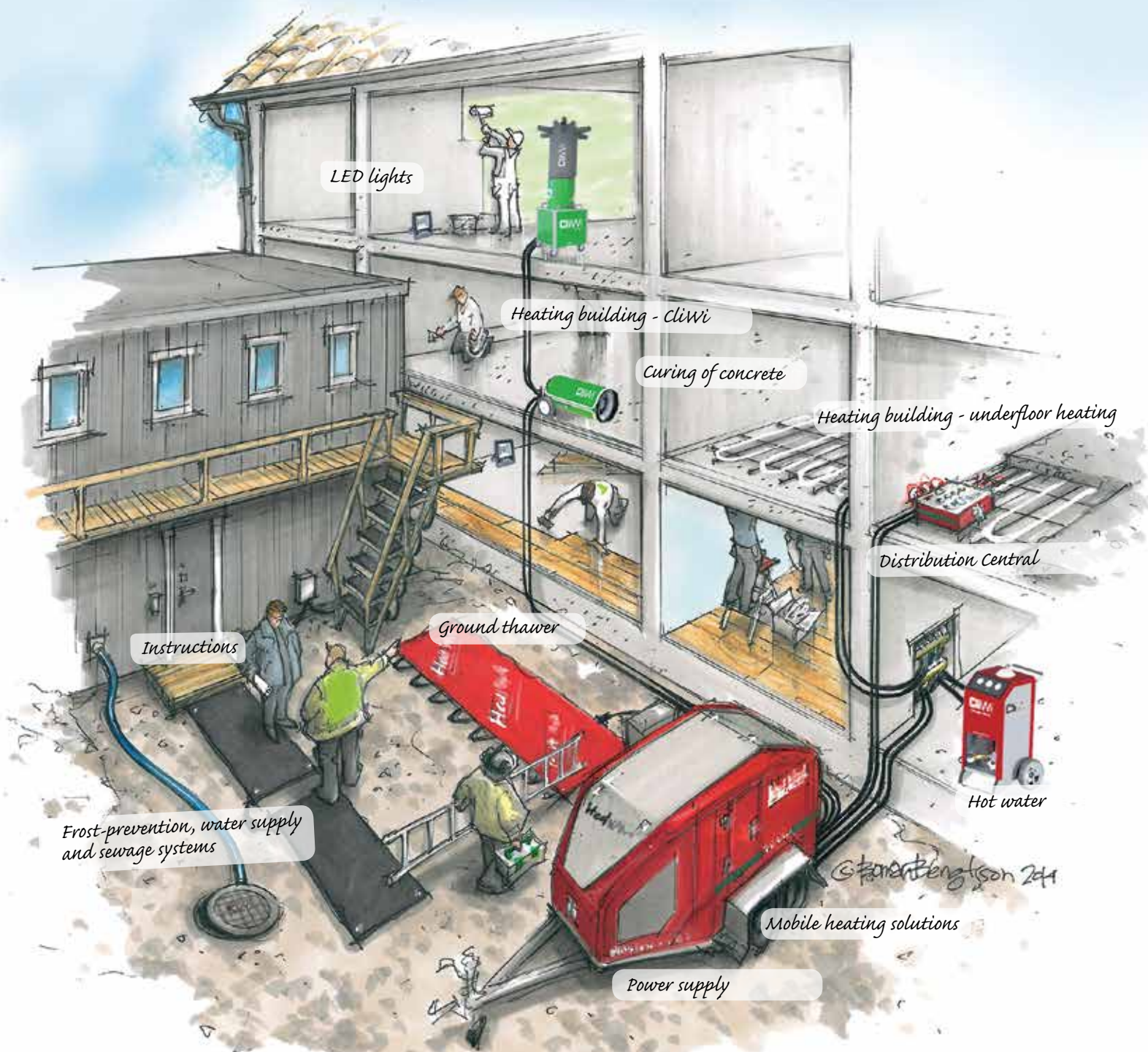
HW 3600 - HW 1800 - MY35



#### ADDITIONAL PRODUCTS:

CliWi  
HW Winter-Insulation  
HW Tarpaulin  
HW Xtra Reel  
HW Ice Guard Systems



**Mobile heating solutions****100°C HYDRONIC HEATING**

- Self-propelled and mobile
- 94% efficiency
- Low weight
- Autostart
- Power supply

**CliWi****HEATING/DRYING BUILDING**

- High effect
- Low weight
- Ideal for continual air treatment
- No emissions, air, moisture or fire danger
- Clean air, safe working environment

**Winter Insulation****FROST PROTECTION, THAWING, INSULATION**

- 3 or 7-layers
- Extremely durable
- Non-absorbent
- Can be reused several times

**Hot water****CliWi 100 kW**

- Temporary supply - underfloor heating - district/central heating
- Hot water for consumption
- Preparedness

**Concrete work****CONCRETE SYSTEMS**

- Controlled and effective curing of concrete
- Ensure quality
- Temperature control

**Thawing****FROST HEATER**

- Ground thawing
- Thawing cable trenches
- Thawing before paving
- Water supply and sewage systems
- with more



## The market's most efficient ground thawer

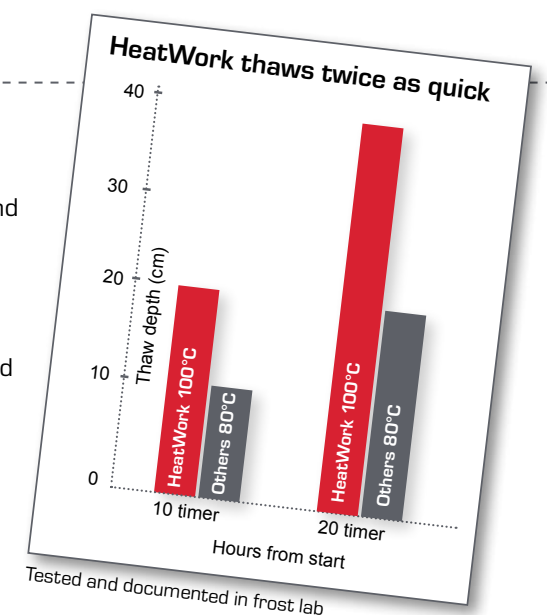
### HW 3600 | HW 1800 | HW MY35

Winter has traditionally been a "waiting period" in the construction industry. Using HeatWork, you gain a competitive advantage, and can work year-round, regardless of weather conditions. Our customers avoid stopping production and layoffs of their employees.

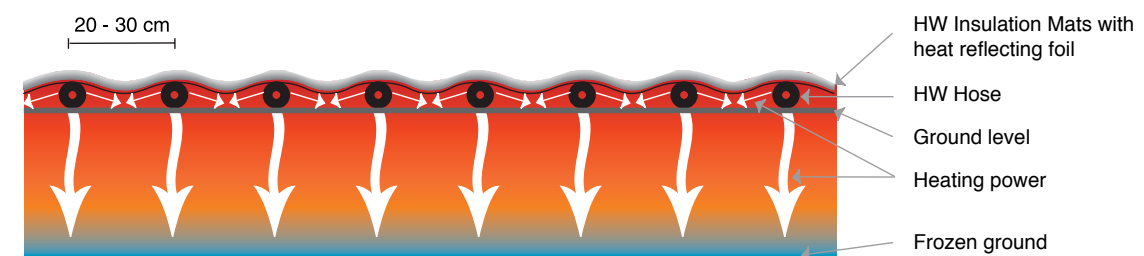
**HeatWork thaws twice as quick!**

In a day, you thaw 40 to 80 cm, depending on the masses. This is user-friendly and efficient machines with low operating costs, which have set a new standard for winter work.

- The market's most environmentally friendly and profitable ground thawer
- Low weight, mobile and self-propelled
- 100°C on our machines



### This is how ground thawing works



- 1 Flexible heating hoses are laid down across the area you need to thaw, cure or protect from frost
- 2 HW heat-transporting fluid (VTV) circulates in a closed system, transferring heat directly to the ground.
- 3 The hoses are covered with reflective HW insulation mats to maximize heat transfer and minimize heat loss.
- 4 The moisture in the ground heats up and melts, thawing the ground out quickly and efficiently, at a depth of 20-80 cm per day, depending on the composition of the material.
- 5 The machine can operate unattended until the job is complete. With the help of a GSM monitoring unit, operators will be notified if there is a problem.





## Concrete work year-round

**HW Concrete Systems** | Correct temperature of the concrete all the way

HW Concrete Systems is a highly flexible and efficient solution to ensure progress, quality and economy in concrete projects - regardless of season!

The result for our customers is great, they are saving both of time and cost in their projects. This, combined with the full control of the quality during curing, makes more and more customers

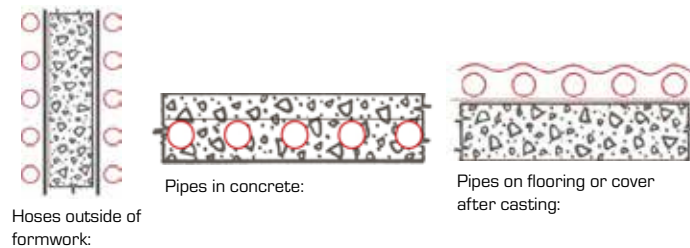
choose our concrete solution. The method makes it easy to document compliance with the requirements. HeatWork's versatile hydronic technology means you can introduce and distribute energy in the form of heat exactly where you need it.

A research project involving Statnett, the Northern Research Institute (Norut) and HeatWork yielded remarkable results.

By including HeatWork's system of hydronic heating in the casting process, it is possible to cast concrete and ensure high-quality results regardless of the outside temperature.

«It shows the extreme control that is possible with the hydronic heat system»

**Winter Construction of tower foundations in concrete, Coldtech/Norut/Statnett**



### Areas of application:

- Pre-heating rock and bedrock in connection with anchorage work
- Melting snow and ice from foundations, formwork and reinforcement
- Controlled curing of concrete
- Pre-heating formwork and structural components
- Cooling/heat distribution in large structures



## Frost protection, thawing and insulation

**HW Winter Insulation** | Unique insulation with extreme durability

Our self-developed and reflective 3- and 7-layer mats are available in different sizes and can therefore be used for many tasks.

- 3 or 7 layers of insulating material
- Extremely durable
- Non-absorbent
- Can be reused several times

The unique heat reflection makes the mats effective for thawing and curing processes, as well as frost protection where needed.

Our winter mats can be used for a long time and can withstand tough use. They are fitted and have reinforced surfaces, for unparalleled durability and

flexibility of use. They will also be used even after perforation.

A separate series of slim fitted products with Velcro, enables quick and safe hose/tube/pipe insulation.

### Areas of application:

- Thawing frozen ground
- Insulating water and drainage pipes
- Insulating trenches
- Frost-prevention for excavated areas
- Frost-prevention for building materials
- Covering insulation concrete works





Norwegian National Rail Administration (NNRA): Using HeatWork to frost protect railway culvert

Statkraft Varmer: Heating and hot water to major apartment complexes in Trondheim, Norway.

Drying concrete before laying the floor coverings. Project retirement village, Nilsen and Haukland AS

## Frozen culverts and trenches

**HW Ice Guard Systems** | thaw frozen culverts in less than 1 minute

HW Ice Guard Systems from HeatWork is a patented solution for fast, easy and safe opening of frozen culverts and waterways. The solution is currently used by the Norwegian Public Roads Administration and Bane NOR.

The system works by permanently installing pipes in culverts and trenches known to have problems with ice.

With the Ice Guard System, customers save both time and costs when clearing frozen waterways. It also dramatically improves working conditions for

those involved in solving ice problems near roads and railways.

The solution is environmentally friendly and makes better use of the available manpower, in that several locations can be serviced in one day.



The Norwegian Public Roads Administration, in collaboration with Mesta, HeatWork and Narvik University College, has tested and documented results from operations with the HW Ice Guard System.

Read the report on [heatwork.com](http://heatwork.com)

### Ice Guard Systems



### Areas of application

- Thawing and clearing trenches and culverts in connection with roads and railways
- Keep rivers/trenches open
- Spot-thawing of foundations/wells/signposts, etc.



## Hot water on wheel

Designed to provide hot water for various purposes

HW HydroHeater and CliWi 100 kW are an excellent choice for anyone who needs to heat large quantities of water quickly.

User-friendly and innovative solutions allow the machine to be quickly and easily connected to auxiliary exchanges or heat exchanges in buildings, without end users experiencing interruptions or inferior quality in their supply of water or heating.

Both are designed for use summer and winter. The water components are easily protected from frost by a self-draining feature after use. Water temperatures can be adjusted as needed between 0 and 100°C.



**HydroHeater**  
HW 3600

**CliWi exchanger**  
100 kW



### TILLEGGSPRODUKTER:

CliWi  
HW Winter-Insulation  
HW Tarpaulin  
HW Xtra Reel

### Areas of application

- Temporary supply of energy to buildings when the district heating system has to be shut down for interruptions or maintenance.
- Preheat district heating pipes to compensate for theme/expansion
- Underfloor heating - temporary heating
- Operating radiators and heating fans
- Production of hot water for ingestion or consumption



Achieve fossil-fuel and emissions-free  
**Construction sites**  
 with the newest in hydronic heating



CliWi HC-300 Heat Canon

CliWi HB-300 Heat Box

CliWi HC-500 Heat Canon

CliWi HB-500 Heat Box

## CliWi | New patented technology hydronic heating

Building heating, drying, heat treatment, pest control, damage restoration, dehumidification

CliWi is short for "Climate Winner" and is an extremely environmentally friendly, smart and effective way of exchanging energy, from liquid to air.

All you need is CliWi and a hydronic energy source, such as district heating or a HeatWork machine.

The new generation CliWi delivers high effect while being lightweight. The design is carefully planned and tested in relation to the applications. Compared with other solutions in the market, this is a revolution in heat exchanger technology.

CliWi is already used as fossil and emission-free heat in the construction industry in the Nordic region. The environmentally friendly

technology is also used for pest control, in countries such as France, Mauritius, Norway and Sweden.

The system requires minimal maintenance and monitoring, and is extremely reliable.

### HSE

HeatWork complies with stringent requirements for indoor environments and provides energy-efficient heating without introducing humidity, odours or fumes to the indoor environment or fire hazard.

### This makes CliWi unique

#### Hydronic heating

100% environmentally friendly drying and heating

#### Energy efficient heat exchange

High efficiency and low energy consumption reduce costs

#### Green energy

Pure and continual heat distribution without exhaust, odor, moisture or fire hazard

#### Low weight and user-friendly design

CliWi is small, easy to use with great performance

#### Heat has never looked better

Modern design and color in addition to high effect



*Clean air, safe working environment and cost-effective heat*

### Areas of application

- Building heating
- Building drying
- Damage restoration
- Heat treatment
- Drying
- Heat treatment pests
- Dehumidification building

- ✓ High effect
- ✓ Low weight
- ✓ Low sound levels
- ✓ Ideal for continual air treatment





**1 DONE**  
and it's  
**GONE!**



## Extermination of pests

Achieving high temperature quickly and efficient, with hydronic heat

HeatWorks environmentally friendly technology are already used in pest-control by several leading companies worldwide. The results are very satisfying and the system is considered as an innovative development to an increasing problem.

HW Xtreme 103 HH is a specially developed machine for use in heat treatment. The machine is fitted with components and solutions that meet the requirements of pest industry sets. The machine together with the newcomer CliWi, is an innovative system for extermination of pests.

The system delivers an effective extermination temperatures of 50 to 60 degrees Celsius. This method is an effective and environmentally-friendly alternative to the use of poison or electrical methods

This is a completely non-toxic/poison-free method where heat kills pests from egg to finished adult individual. The method is

unique because it saves the environment in a whole new way, both unnecessary emissions from generators and adverse substances found in insect toxic preparations.

Increased flexibility, high efficiency and low energy consumption reduces operating costs considerable. The method does not burn harmful dust and particles, and it provides a better working environment.

Customers have increased the bottom line by over 20% after using this method. In addition, CliWi contributes to an HSE friendly working environment.



Hydronic heat treatment  
1 HeatWork 103 HH machine can run up to 8 CliWi units



## Specially developed machine

for building heating, drying, concrete works, damage restoration, heat treatment, pest control...

HW 103 HH is a specially developed machine with high capacity, low weight and many good adaptations to run small and large heat tasks for several industries. It is built to add large amounts of energy through CliWi products into buildings which has temporary heating requirements.

HW 103 HH is self-driven and mobile machine. It delivers up to 105°C of hydronic heat with an efficiency of 94%.

The machine with extra equipment is meant for work in construction, drying, damage restoration, concrete, and pest control. The extra equipment includes heat exchangers, fans, hoses, insulation mats, wagons, etc. There are room for 2 hose wagons in the machine.

HeatWorks machines use diesel or 2nd generation biodiesel to heat up the fluid circulating, and electricity for operation of the pump and control system.

Stepless regulation of flow temperature provides economical and flexible use. Easy transport, connection and wireless control make this machine unique.

*Environment and economy in focus*

Clean air, safe working environment and cost-effective heat

### HW Xtreme 103 HH



#### TILLEGGSPRODUKTER:

CliWi

HW Winter-Insulation

HW Tarpaulin

HW Xtra Reel

HW Ice Guard Systems

### Areas of application

- Building heating/drying
- Heat treatment of buildings, halls, apartments, objects
- Concrete Work
- Concrete Work
- Damage restoration





## We have placed environmentally friendly heating on the world map!

HeatWork delivers the best environmental performance through 100% hydronic heat. With this heating solution, you can meet today's environmental requirements. For example through efficient thawing, zero emissions during heating, using CliWi and district heating, clean and even heat distribution and 85% faster curing time.

Our technology has secured more of our customers good overall economy. In addition to our customers meeting new and stricter environmental requirements, they have managed to reduce operating costs and diesel consumption by 2/3 and increased bottom line per project by 20%.

<p>Hydronic heat <b>100%</b> environmentally friendly</p>	<p>We promote a green workplace</p>	<p>No fumes, toxic substances, smells or humidity <small>Does not burn harmful dust/particles</small></p>	<p>Energy efficient heating <b>100°C</b></p>	<p><b>94%</b> Efficiency</p>									
<p>Effective temperature increase <b>90°C</b></p>	<p>No risk of fire or explosion</p>	<p>Long lifetime of our quality products</p>	<p>Bio-fuel ready</p>	<p>Faster thawing</p> <table border="1"> <thead> <tr> <th>Company</th> <th>10 hours</th> <th>20 hours</th> </tr> </thead> <tbody> <tr> <td>HeatWork</td> <td>10</td> <td>20</td> </tr> <tr> <td>Others</td> <td>20</td> <td>40</td> </tr> </tbody> </table> <p>HeatWork thaw twice as fast!</p>	Company	10 hours	20 hours	HeatWork	10	20	Others	20	40
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## Strong focus on proximity to customer service and quality

Like our products, we also emphasize quality and availability in our service and after-sales activities.

Our experienced service technicians perform anything from service and maintenance to troubleshooting and repairs. We assist our customers with advice, solutions and deliveries.

Our machines are equipped with GSM and GPS control monitoring.

At all times, our factory keeps a full selection of original spare and expendable parts, manufactured to meet our specifications and standards.

Efficient procedures and state-of-the-art warehouse and logistics systems mean orders are processed immediately.

Our central location, in one of Norway's primary logistics hubs, means we have immediate access to shipping options – road, rail, air or sea, direct to our customers.

HeatWork has a 24-hour service line. Contact us at tel.: **+47 488 93 271**.

We provide service and have complete stock. Examples of parts and equipment

### HW Filters



Misc. filters:

- Diesel particulate filter
- VTV
- Diesel fuel pump filter

### HW Hoses



Use original hoses. This is important for safety and results.

### HW X-tra reel



For use when thawing large areas using the HW 3600. Each reel extends the thawing area by 200 m<sup>2</sup>

### HW VTV-fluid



Use original fluid only. HW VTV fluid has been designed and tested for use in the machine. Review the material data sheet on our website: [heatwork.com/products](http://heatwork.com/products)

### HeatWork cover



Protects against sun, rain, snow, etc. UV-treated, durable polyester. Safety strap with clips. Supplied with storage case.

### Quick coupling



Drip-free quick coupling  
No mess  
Long lifetime  
Easy to connect





HeatWork headquarter and production site in Narvik, Norway – 3300 m² state of the art production facilities.

## For almost 15 years, HeatWork has produced and developed under the toughest conditions

HeatWork develops, manufactures and tests its machines in rough winter conditions, north of the Arctic circle in Norway. Technology and expertise are key components in the development of high-quality products and efforts to satisfy our customers' needs.

HeatWork strives to be at the forefront of technology development in our focus area. Our designs are characterized by high performance, high quality and user-friendliness.

More and more customers are finding new areas of application for HeatWork machines, year-round, all over Europe. Our developments are the result of patented technology and a strong focus on R&D.

In addition, we always pay attention to the feedback we get from customers. Your opinion matters to us!

After many years of development, the patented CliWi technology was launched, and HeatWork continues to offer hydronic heating solutions, which is driving in the green shift.

Our central location, in one of Norway's primary logistics hubs.



HeatWork provides technology that has earned EU's top score for energy efficiency.

*The new standard – expect only the **best!***