

Heaters



**WACKER
NEUSON**



These reasons speak for heaters from Wacker Neuson.

1. Uncompromising economic efficiency! With innovations for optimal heating performance.

A great deal of power, low consumption, every detail well-thought-out to absolute practical suitability. Easy operation from the first application. Clearly: True heating specialists have introduced their expertise here so that you can advance your projects more quickly – for more planning security, regardless of the outside temperature.

2. Reliable operation! With proven quality from heating specialists.

Switch on. Heat up. Switch off. And then go to the next job site. With the amount of orders that allows you less and less time for breaks, you have to be able to fully rely on your heaters. That is why we also provide you with our wide range of various services – from maintenance to the rapid availability of spare parts.

3. Your needs in focus! With the right heater selection.

The wide offering of heaters is not only tailored to your different application areas, but the heaters are also exemplary in their operation and maintenance. We will gladly advise you about which solutions best heat up your projects – and to help you with financing.

Heater expertise to the last detail.



More safety

You work worry-free thanks to flame monitoring, overheating protection and other safety features.



Huge potential for savings

Save time, resources and operating costs through our highly efficient technologies.



Easy transport

With the bottom-mounted trailers, integrated wheels, lifting eyes and forklift pockets, you can easily bring the heaters to the site of application.



Comprehensive range

Thanks to the different performance categories, you will always find the right heater and heating technologies for every project.

telematic

Keeping equipment in view from a distance

With the Global Monitoring System, you can always precisely locate your HSH 380.



Excellent performance

You can identify particularly economical or environmentally friendly products by the ECO label.

All Wacker Neuson heaters at a glance.



HS700



- 74 kW gross output
- Diesel

HS650



- 74 kW gross output
- Diesel



HS380



- 38 kW gross output
- Diesel or gas



HP252



- 252 kW gross output
- Diesel

> Page 04

> Page 05

Hydronic heater



HI260

- Indirect air heater
- 260 kW gross output
- Diesel or gas



HI120 / HI190 / HI160 / HI135

- Indirect air heater
- 32–117 kW gross output
- Diesel



HD70 / HD50

- Direct air heater
- 46–65 kW gross output
- Diesel



HDR45

- Infrared heater
- 45 kW gross output
- Diesel

> Page 13

> Page 12

Air heater



Hydronic heater for surfaces and spaces.

Climate-induced down times between fall and spring are a thing of the past with hydronic heaters for surfaces and spaces. The mobile, high performance heating sources create ideal working conditions at any outdoor temperature. With all benefits for you:

- Greater and more uniform utilization of your business
- Planning security throughout the year
- Significantly lower energy costs and environmental pollution
- Higher productivity of your employees due to the optimal working atmosphere

Highly efficient, thanks to the closed heating liquid circuit.

Powerful burners heat the heating liquid, which uses a pump to circulate within the heating circuit.



1. Connection of hoses through which heating liquid flows, e.g. for:

- Thawing frozen ground
- Curing concrete
- De-icing utility lines and machines



2. Connection of heat exchangers for air heating, e.g. for:

- Drying structural works, wall plaster and paint
- Heating industrial buildings and tents
- Drying rooms or basements after flooding

Up to 70 hours running time for you during applications.

Make no compromises in terms of reliability and heat transfer!

Complete your projects on time – regardless of the weather.

telematic

Dry clean heat in large working areas – create ideal working conditions in no time.

The heat exchangers are housed in the equipment's body to save space.

WEIGHT UNDER 3 tons

AVAILABLE IN 4 VERSIONS



HS700

Your powerhouse for large projects.

- Large diesel tank
- 700 meters of hose length
- For thawing surfaces up to 400 m²
- Integrated generator for all electrical components

HS650

In use for you with power and mobility.

- Large diesel tank for up to 55 operating hours
- 650 meters of hose length
- For thawing surfaces up to 380 m²
- Integrated generator for all electrical components

HS380

The compact performer in your team.

- Either operated with diesel or gas
- 380 meters of hose length
- For thawing surfaces up to 350 m²
- Either with or without a generator
- Also available without a trailer

* Accessories required

HP252

Creates heat wherever it is needed.

- For the connection of up to 16 heat exchangers for supplying large work areas with dry clean heat
- The heat exchangers can be set up to 60 meters away from the heater – at a height of up to 30 meters*
- 252 kW gross heat output
- Central heating unit saves up to 50% in fuel compared to decentralized heaters

* Accessories required

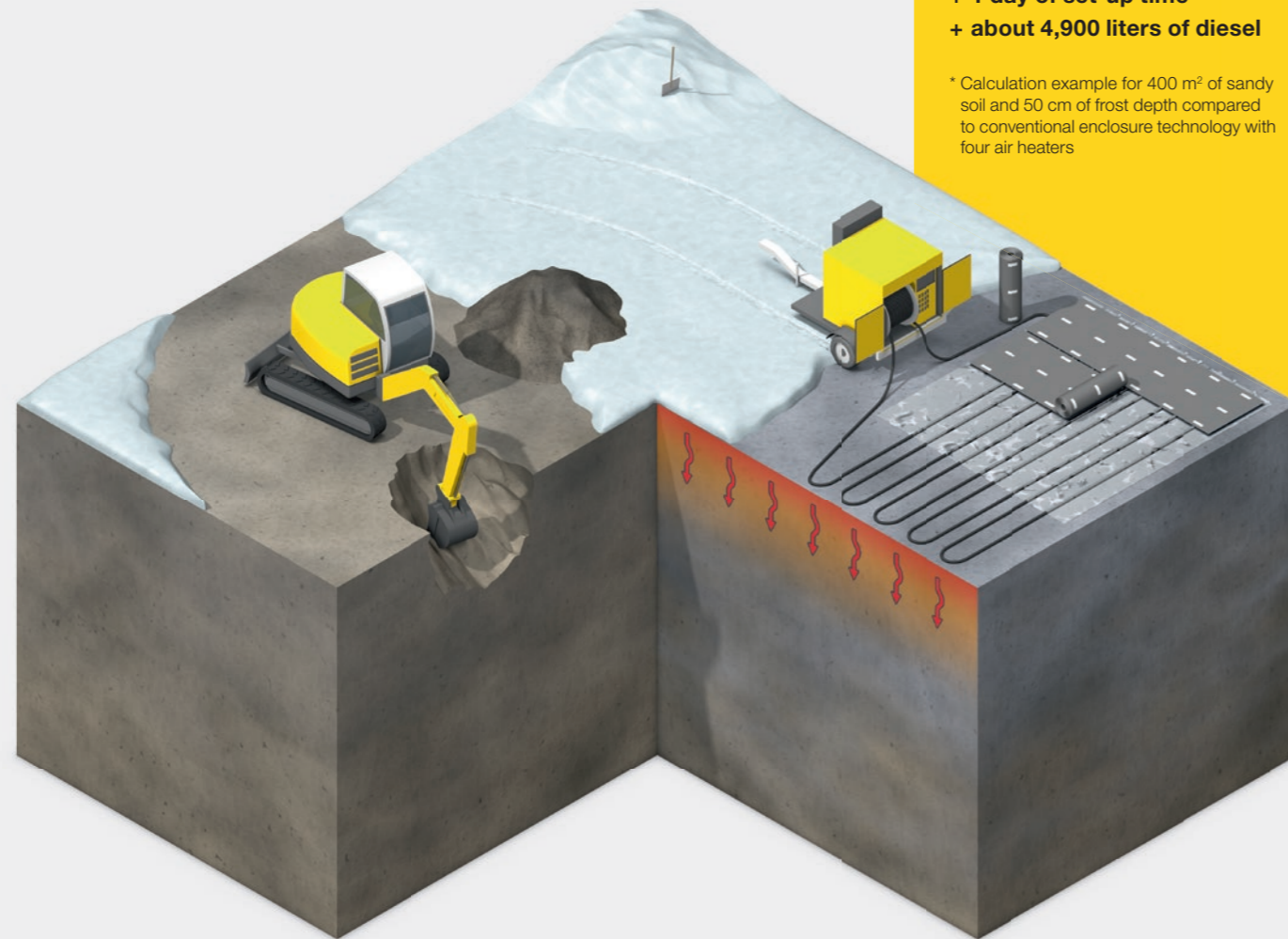


Digital control panel with simple error diagnosis.

1. Heat frozen ground in a short period of time.



Hydronic heater application examples



You save*:
8.5 days of thawing time
+ 1 day of set-up time
+ about 4,900 liters of diesel

* Calculation example for 400 m² of sandy soil and 50 cm of frost depth compared to conventional enclosure technology with four air heaters

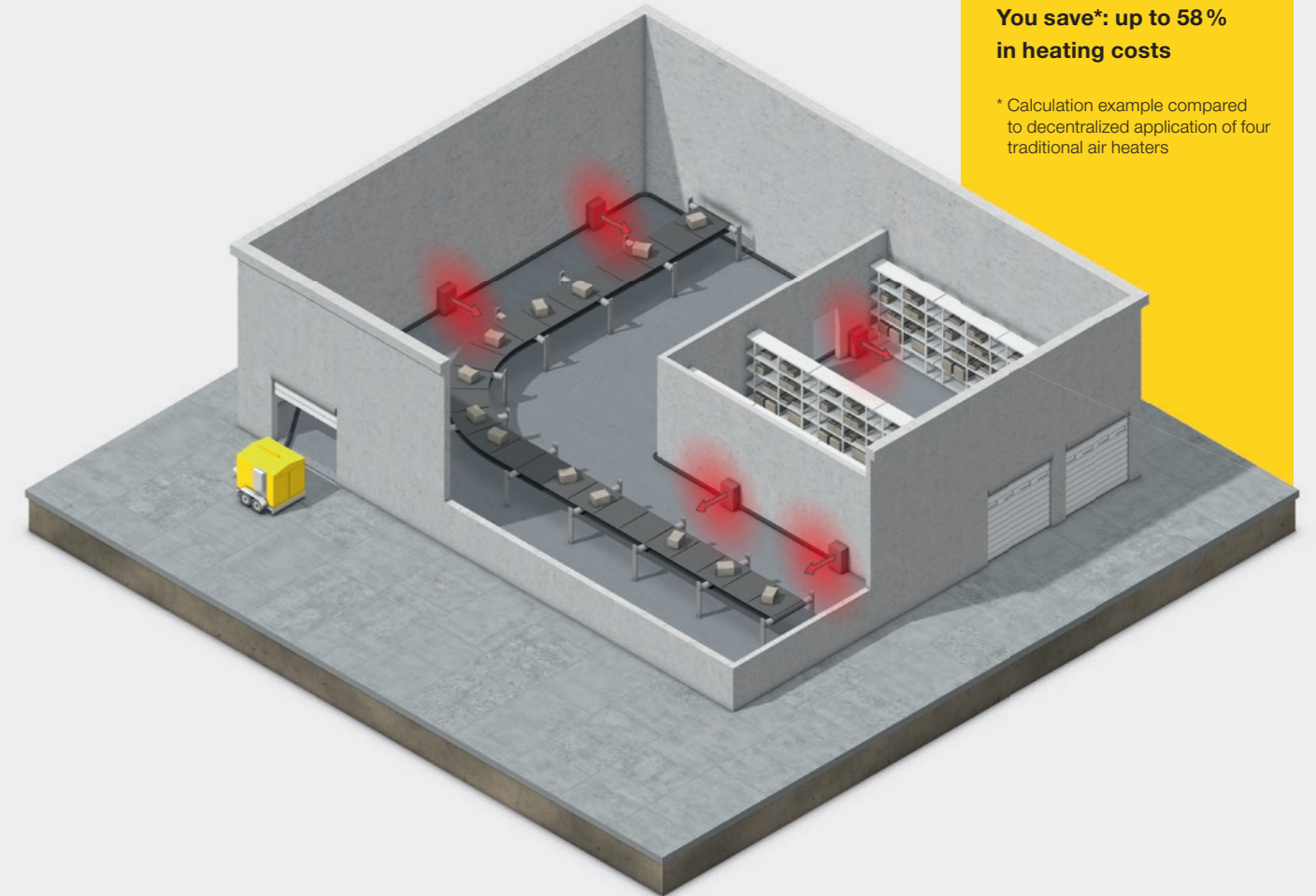
Your challenge

Onset of winter when building a house. The frosty ground makes earthwork impossible on the large property. Since you cannot expect higher temperatures in the foreseeable future, the timely completion of the project is in danger.

Our solution

You decide to use a surface heater and therefore choose the most efficient way to keep your project on schedule without blowing the budget. For this purpose, you lay the heating hose in a snaking pattern over the frozen surface, spread the vapor barrier as well as the insulating mats over the heating hose and then switch on the surface heater. Already **after one to two days, the ground (depending on the depth of the frost) is thawed** and you can continue your work.

2. Create an optimal working atmosphere in large spaces.



You save*: up to 58%
in heating costs

* Calculation example compared to decentralized application of four traditional air heaters

More information about the applications can be found at:
www.wackerneuson.com

Your challenge

Christmas business at a large mail order business: In order to compensate for peak loads, an additional warehouse is temporarily rented. Due to the outside winter temperatures, the inside temperatures fall significantly below the legally prescribed minimum temperature for working areas – staff cannot be employed here.

Our solution

With the HP 252, turn the cold warehouse into an ideal working area in a short period of time. Distribute the flexible heat exchangers evenly in the stock rooms and work areas and neatly lay the hoses along the wall in a space-saving manner. The heating system remains outside in front of the building and therefore does not require any additional space in the industrial building. The innovative heating system now produces clean warm air and creates an environment in which your employees can optimally work.

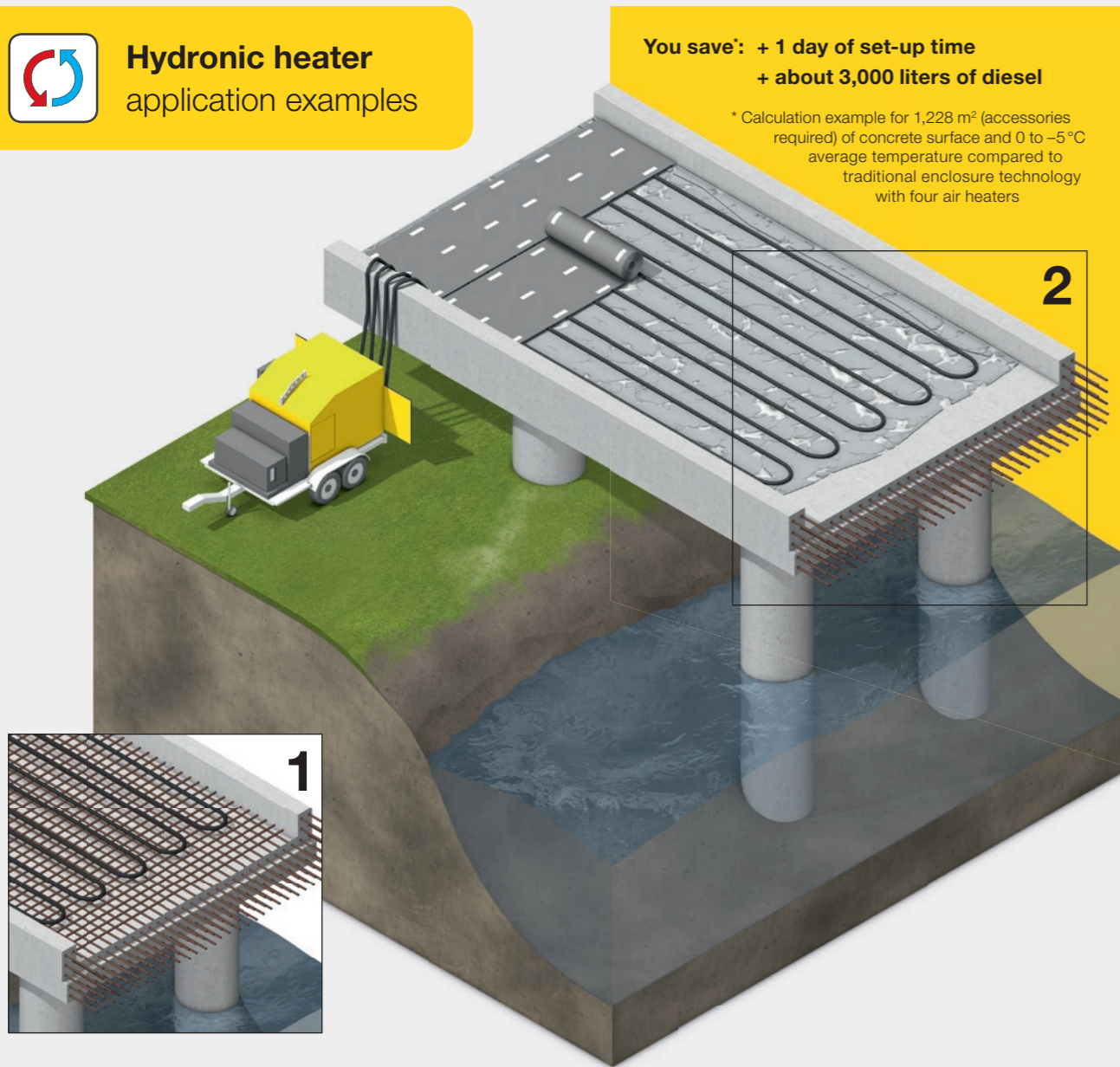
3. Cure concrete – and build faster.



Hydronic heater application examples

You save: + 1 day of set-up time
+ about 3,000 liters of diesel

* Calculation example for 1,228 m² (accessories required) of concrete surface and 0 to -5 °C average temperature compared to traditional enclosure technology with four air heaters



Your challenge

Building a bridge in the cold season: Temperatures around 0 °C make for difficult conditions for successfully pretreating and curing concrete. Logically: If the temperature of the concrete falls to below 5 to 10 °C during processing, the curing process only sets in very slowly or not at all. Now you need a process accelerator that keeps the concrete at a constant temperature.

Our solution

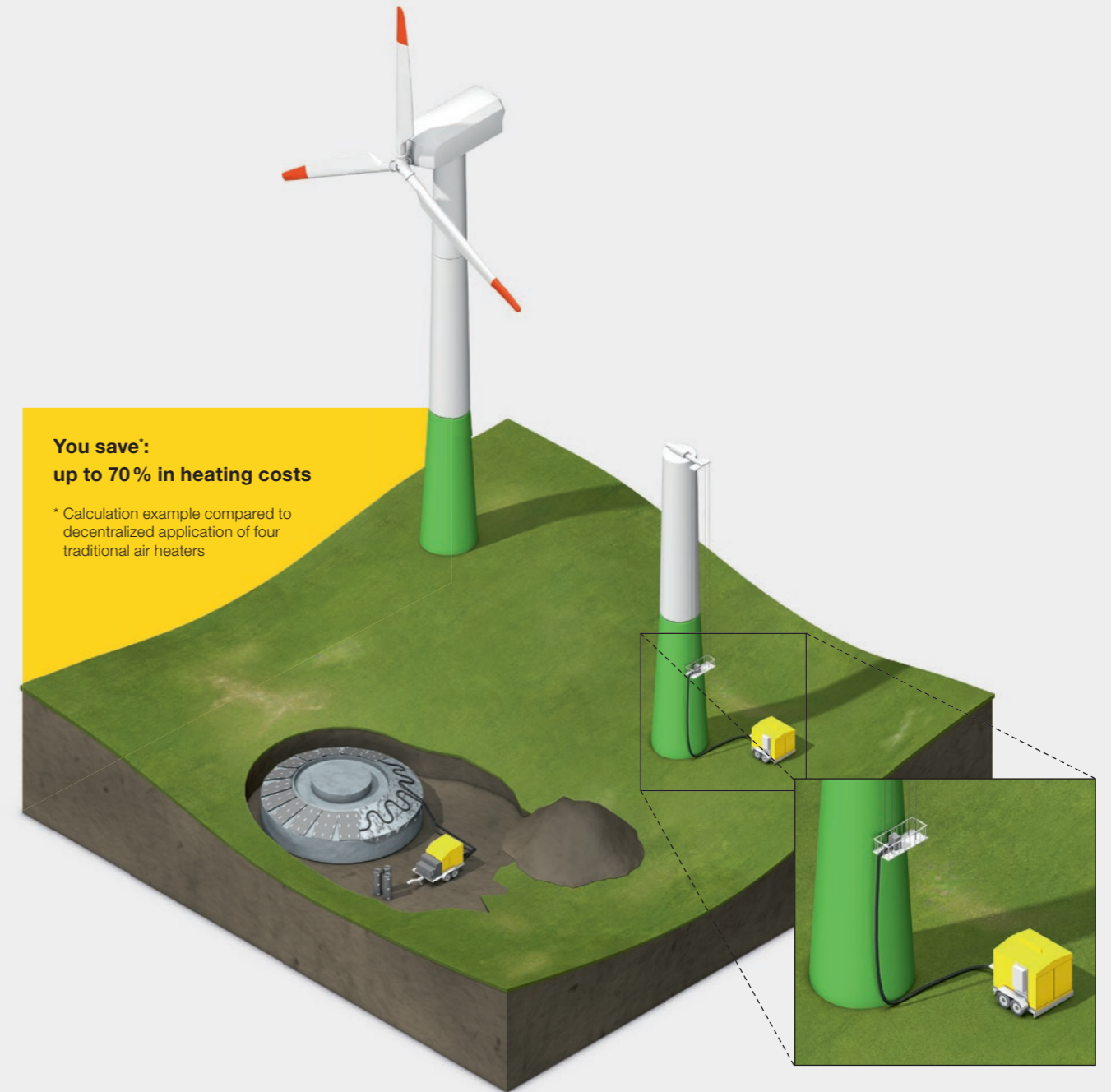
With the HSH 700, you create the ideal environment so that the concrete can run through its chemical process.

- 1 Once the reinforcement has been brought to the correct temperature by using the surface heater, the concrete can be poured easily.
- 2 Curing the concrete then becomes a breeze: Simply spread the vapor barrier on top of the concrete surface, place the heating hoses in a snaking pattern over the top and cover with the insulating mat. In this way you will keep the surface permanently heated and already after a few days you will achieve up to a 75 % cured concrete floor.

4. Support the setup of wind power plants.

You save:
up to 70 % in heating costs

* Calculation example compared to decentralized application of four traditional air heaters



Your challenge

The construction of a wind farm takes significantly longer than planned due to numerous delays. Now we need to make the best of the situation to stay on schedule and complete the wind farm on time.

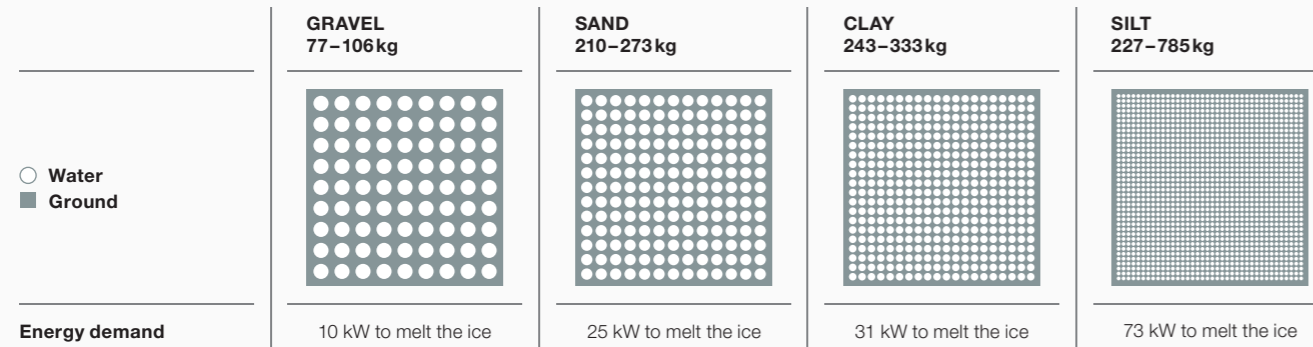
Our solution

Rely on the efficiency output of our heating systems: With the HSH 700, you prepare the concrete foundation of the wind power plant for its further processing as best as possible. Put the vapor barrier, heating hoses and insulating mats on the fresh concrete surface in order to obtain a stable foundation for your wind power plant already after a few days. The HP 252 is ideally suited for drying the freshly painted tower in no time. Done! After only a short time, the wind power plant will be completely erected.

More information about the applications can be found at:
www.wackerneuson.com

Information about thawing that is worth knowing.

This much water is bound in 1 m³ of ground:



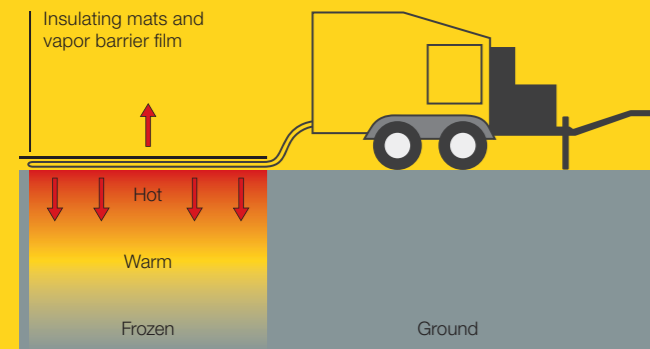
Ground thaw time in days*

| THAWING TIMES* | FREEZE DEPTH | | 30 cm | | 60 cm | | 90 cm | | 120 cm | | 150 cm | |
|----------------|--------------|------|-------|-------|-------|-------|-------|-------|--------|-------|--------|-------|
| | HOSE SPACING | UNIT | 45 cm | 30 cm | 45 cm | 30 cm | 45 cm | 30 cm | 45 cm | 30 cm | 45 cm | 30 cm |
| | Sand | Days | 1 | 0.75 | 2 | 1.5 | 3 | 2.25 | 4.5 | 3.25 | 6 | 4.5 |
| Gravel | Days | 1 | 0.75 | 2.5 | 2 | 4 | 3 | 6 | 4.5 | 8 | 6 | |
| Clay | Days | 1.75 | 1.25 | 3.5 | 2.5 | 5.5 | 4 | 8 | 6 | 11 | 8.5 | |
| Silt | Days | 2 | 1.5 | 4.5 | 3.5 | 7 | 5.5 | 10.5 | 7.5 | 14 | 10 | |

* Depends on water content and insulation of the soil.

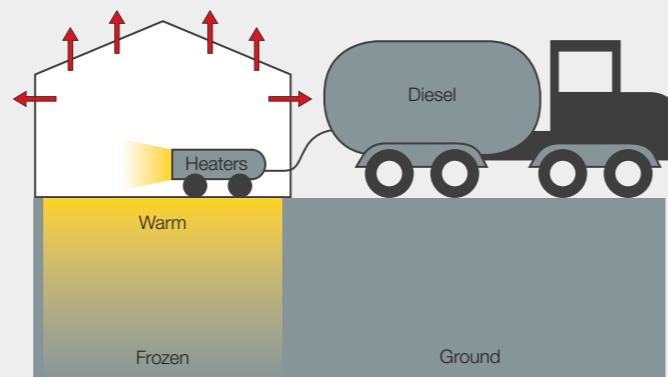
Thawing methods in an efficiency comparison.

Wacker Neuson surface heater HSH 700:
94% THERMAL EFFICIENCY



- Thaw duration: **1.5 days**
- Insulation with **Wacker Neuson insulating mats**
- Time spent for assembly and disassembly: **7 hours**
- Diesel consumption: **234 liters**

Heated enclosure:
15% THERMAL EFFICIENCY



- Thaw duration: **10 days**
- Insulation by using **enclosure**
- Time spent for assembly and disassembly: **10 hours**
- Diesel consumption: **5,174 liters**
(4 oil direct heaters with 70 kW heat output)



Your accessories for hydronic heaters.

Do you want to use your surface heater as a space heater to heat your building? Or do you want to use your space heater to heat your frozen ground to a working temperature? No problem: With the right accessories, both types of heaters can be used as space and surface heaters.



You can find details about our accessories here:
www.wackerneuson.com

Hose reel

Enlarge your action area or save even more time through closely arranged hoses.

Pump unit

Necessary when using an additional hose reel: Achieve optimal results by connecting each hose element with a pump.

Insulating mat

Extremely high insulating effect for maximum efficiency: The multi-layer mats reflect the heat and distribute it evenly over the entire surface.

Heat exchanger

Makes your surface heater into a space heater in a few steps. Warm and dry air is directed exactly to the area of the construction site where it is needed. Hydronic heat exchangers are available in three sizes: HX 15 (12.9 kW), HX 30 (25 kW), HX 60 (43.5 kW).



Air heater for all kinds of spaces.

Every project is different. Heating competence therefore means having the right heating solution ready for different requirements. We can guarantee you that you will ensure the right working conditions in any environment with our wide range of indirect, direct, and infrared heaters. With all benefits for you:

- flexible heat to the right place quickly
- no interruptions to your project due to the cold
- faster drying processes
- lower energy costs
- Higher productivity of your employees due to the optimal working atmosphere

HI 120
convinces with strong performance
and simultaneously high level of safety.



HI 260
with a clearly arranged
digital control panel.



Direct air heater –
sophisticated design
with convincing
performance and easy
operation.

Infrared heater –
maximum heat
output in any position.



Indirect air heater
Heating without combustion chamber deposits.



HDR45

Targeted heating and drying without an air flow.

- **Targeted infrared radiant heat**, without heating the ambient atmosphere
- The best in its class with **45 kW**
- **15 hours of running time** with one full diesel tank
- **Active cooling system** keeps the housing much cooler than with comparable models
- **Optional thermostat remote control** for a constant optimal construction site temperature

HD70/HD50

Easy operation, strong performance.

- Well ventilated spaces quickly **provided with warm air**
- High level of safety thanks to **temperature safety limiters** and **flame monitors**
- Long service life due to **high quality elements** such as the stainless steel combustion chamber and solid processing

HI120/HI90/HI60/HI35

Solid heat sources in four performance categories.

- **Healthy heat** without combustion chamber deposits or moisture
- **4 performance categories** from 32–117 kW
- Large diesel tank **for up to 24 operating hours**
- **Heavy duty version** with sturdy steel frame, central lifting point and forklift pockets, can be used up to **-40 °C**
- **Large pneumatic tires** for easy movement on the construction site

HI260

Your secure hot air supplier.

- **Healthy heat** without combustion chamber deposits or moisture
- **Sophisticated concept** with closed air circulation, lower consumption and even temperatures
- With the **optional plug-and-play burner**, switch very easily between diesel, natural gas or propane gas
- **Heat output up to 260 kW**
- **9,000m³ air output**

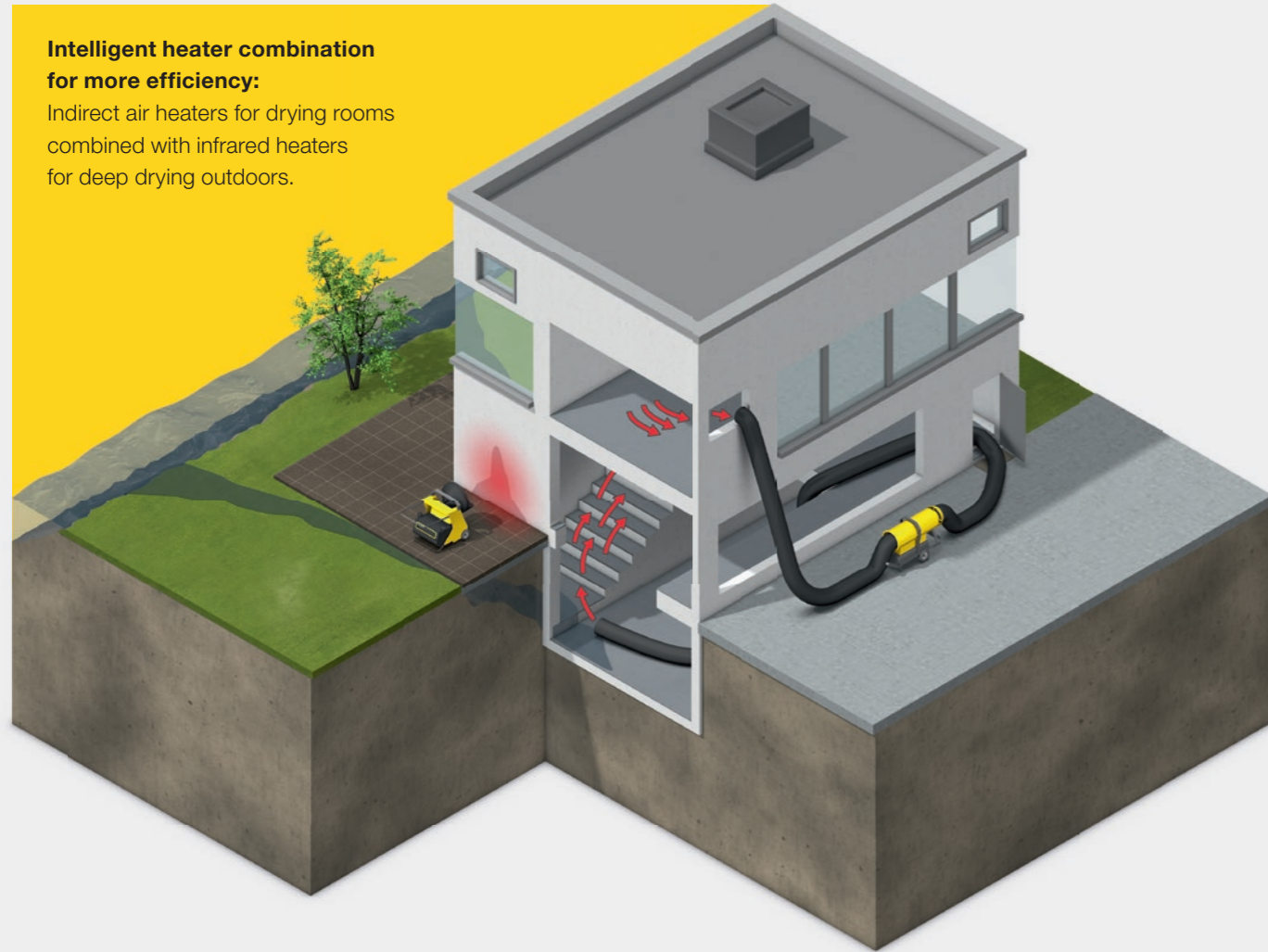
1. Efficiently eliminate water damages in residential homes.



Indirect Air Heater application examples

Intelligent heater combination for more efficiency:

Indirect air heaters for drying rooms
combined with infrared heaters
for deep drying outdoors.



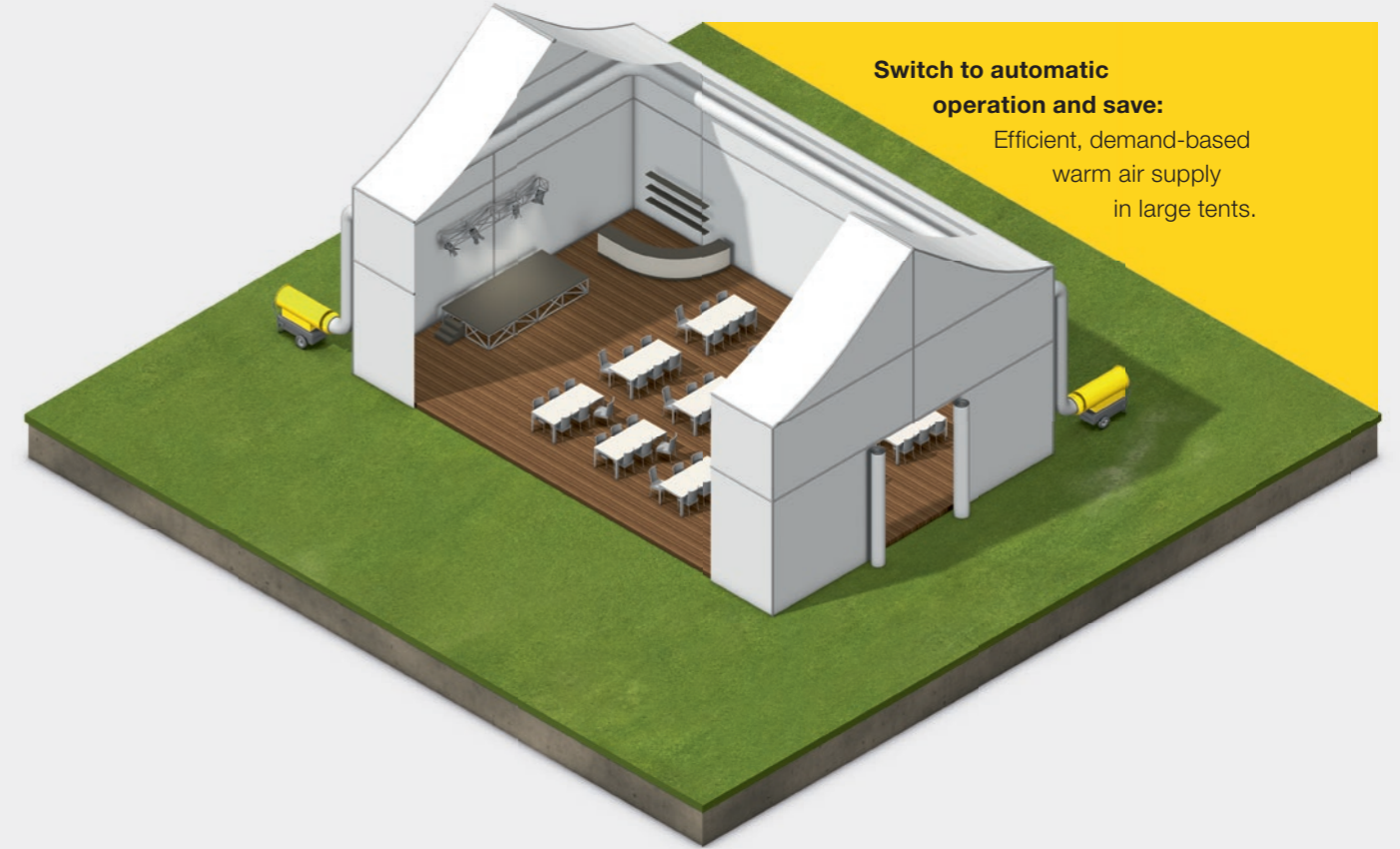
Your challenge

Water damage in a home after severe flooding: Once the water has been pumped out, the moisture remains in the walls and floor. In order to prevent mold and other damage to the basic structure of the building, the building must be dried as quickly as possible.

Our solution

Put the drying process into high gear by using the indirect heater and the infrared heater: Position the HI 120 on the ground floor on the outer wall of the house and direct the heat into the house with two hoses through the door and window. Through the supply and exhaust air mechanics of the heater, the air circulates through several floors and quickly ensures dry conditions. Put the HDR 45 in position on the terrace of the house and accelerate the drying process of the outer walls in this way.

2. Bring events up to the right temperature.



Switch to automatic operation and save:

Efficient, demand-based
warm air supply
in large tents.

More information about the applications can be found at:
www.wackerneuson.com

Your challenge

Company anniversary of a medium-sized industrial business in March: The 50-year anniversary of the company is to be befittingly celebrated in a large festival tent. To make the guests feel comfortable and so that the event is a complete success, a constant temperature must be ensured.

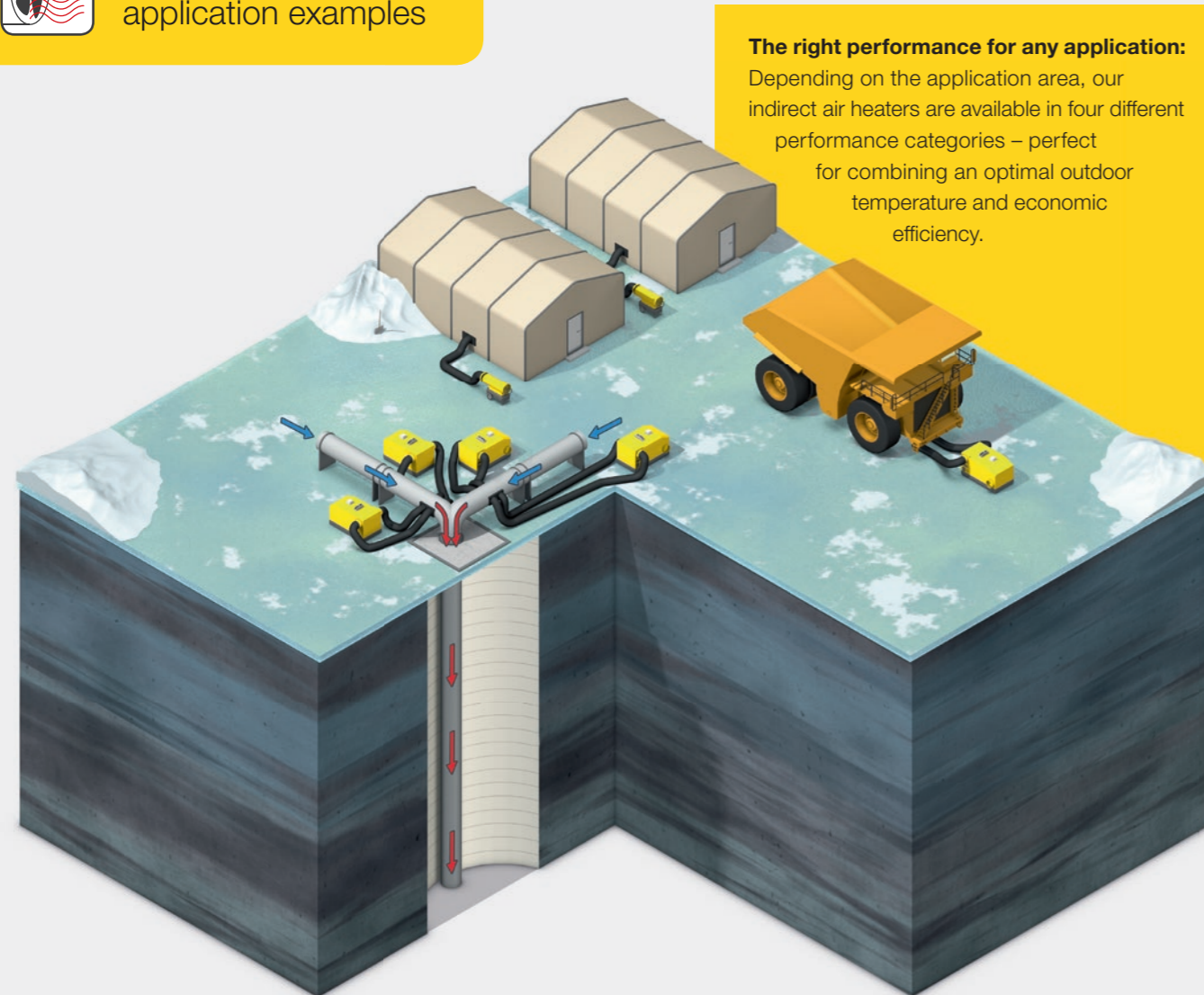
Our solution

By using the HI 90, you create the best conditions for a lavish celebration and happy guests: With a tent size of 1,600 m³, set up two HI 90 outside the tent and discreetly and inconspicuously lay warm air hoses alongside the tent ceiling. With the secure automatic operation, the heaters take care of the rest and spread the heat through small air outlets in the hoses – for up to 20 hours thanks to the large fuel tank of the HI 90.

3. Work with dry warm air in mining.



Air heater application examples



The right performance for any application:
Depending on the application area, our indirect air heaters are available in four different performance categories – perfect for combining an optimal outdoor temperature and economic efficiency.

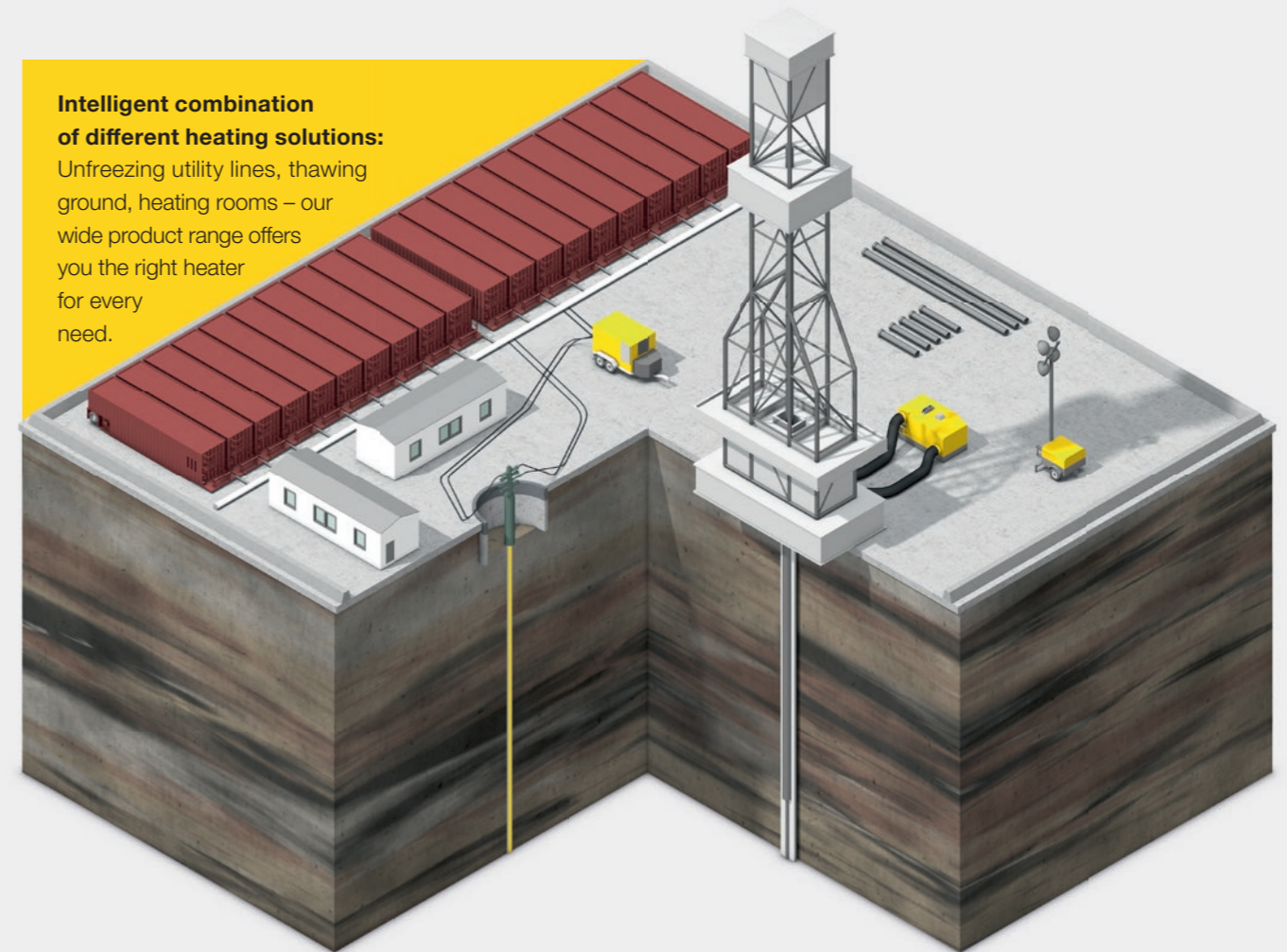
Your challenge

To extract mineral resources from the ground even in cold regions, the highest demands are placed on machines and equipment. Extremely low temperatures impede the reliable use of any technology. Processing and industrial maintenance buildings must be kept warm. Storage facilities for technology and working liquids must at least be protected from freezing. In a tunnel in permafrost, the working environment becomes a burden for man and machine.

Our solution

With the indirect air heaters, you will realize the ideal conditions in various application areas in mining. You safely keep heavy machinery at operating temperature and thereby reduce wear. You reliably displace cold and moisture from warehouses and industrial buildings. And even in deep tunnels, you can have oxygen-rich warm air circulate and thus create the perfect climate for mining.

4. Safe heat in oil and gas production.



Intelligent combination of different heating solutions:
Unfreezing utility lines, thawing ground, heating rooms – our wide product range offers you the right heater for every need.

Your challenge

The exploitation and mining of oil and gas reserves during cold winter months is only possible with the appropriate heating technology. The requirements for all of the technical equipment are extreme – from the low temperatures to the strong winds and snowfall. There are also rigorous safety provisions.

Our solution

You create the ideal conditions in any working area with various heating systems. With hydronic heaters, for example, you can keep utility lines free of ice by placing heating hoses around the tubes. In this way, you also protect the pumps, the safety valves and the area around the bore hole from freezing. With indirect heaters, safely create a pleasant working environment. The heat also protects moving parts, such as the work hydraulics, from excessive wear, because the optimal lubricity of the oils and grease is preserved.

More information about the applications can be found at: www.wackerneuson.com

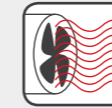


Technical data Hydronic heater.

| SPECIFICATION | UNIT | HSH700 | HSH650 | HSH380 | HSH380 |
|---|----------------|-------------------|-------------------|-------------------|----------------------|
| | | | | operated with gas | operated with diesel |
| LxWxH | mm | 5,450x2,000x2,310 | 4,880x1,990x2,270 | 3,400x1,880x1,910 | 3,400x1,880x1,910 |
| Weight with fuel | kg | 3,346 | 2,950 | 1,799 | 1,799 |
| Thawing capacity | m ² | 204-409 | 194-388 | 115-230 | 115-230 |
| Performance with concrete curing (standard) | m ² | 409 | 388 | Up to 230 | Up to 230 |
| Performance with concrete curing (with accessories) | m ² | 1,128 | 1,107 | 770 | 770 |
| Electrical requirements | | 2x 12Ax230 V1~ | 2x 12Ax230 V1~ | 1x 16Ax230 V1~ | 1x 16Ax230 V1~ |
| Tank capacity (fuel) | l | 568 | 435 | 280 | 280 |
| Fuel consumption at full load (with generator) | l/h | 8.3 | 8.3 | 5.8 | 4.7 |
| Heating hose length | m | 700 | 650 | 380 | 380 |
| Integrated generator | | ● | ● | ○ | ○ |
| Trailer | | ● | ● | ○ | ○ |

| HP252 | | |
|---|------|-----------------------------|
| SPECIFICATION | UNIT | |
| LxWxH | mm | 4,400x2,400x2,400 |
| Weight (without fuel, without trailer) | kg | 2,881 |
| Heating hose length | m | 300* |
| Heat exchanger that can be integrated into HP | pcs. | 16xHX15 o. 8xHX30 o. 4xHX60 |
| Gross output | kW | 252 |
| Fuel consumption at full load | l/h | 23 |
| Trailer | | ○ |

● Standard ○ Option * 300 overall = 4x15m + 8x30m



Technical data Air heater

| SPECIFICATION | UNIT | HI260 | HI260 | HI120 | HI120HD |
|----------------------------|----------------|-------------------|-------------------|-----------------|-----------------|
| | | Without tank | With tank | | |
| LxWxH | mm | 3,531x1,189x1,664 | 3,531x1,189x2,075 | 1,918x731x1,220 | 2,159x864x1,245 |
| Weight with fuel | kg | 1,050 | 1,800 | 264 | 413 |
| Heat output | kW | 260 | 260 | 117 | 117 |
| Efficiency | % | 87.0 | 87.0 | 90.0 | 90.0 |
| Space heating volume | m ³ | 34,400 | 34,400 | 16,525 | 16,525 |
| Drying volume | m ³ | 12,250 | 12,250 | 5,520 | 5,520 |
| Tank capacity (fuel) | l | / | 740 | 135 | 216 |
| Fuel consumption | l | 21.6 | 21.6 | 9.7 | 9.7 |
| Lowest ambient temperature | °C | -35 | -40 | -35 | -40 |

| SPECIFICATION | UNIT | HI90 | HI90HD | HI60 | HI60HD | HI35 |
|----------------------------|----------------|--------|--------|-----------------|-----------------|---------------|
| | | LxWxH | mm | 1,740x700x1,143 | 1,740x700x1,143 | 1,435x711x965 |
| Weight with fuel | kg | 245 | 245 | 175 | 175 | 120 |
| Heat output | kW | 85 | 85 | 55 | 55 | 32 |
| Efficiency | % | 88.5 | 88.5 | 89.5 | 89.5 | 87.3 |
| Space heating volume | m ³ | 11,585 | 11,585 | 6,500 | 6,500 | 4,260 |
| Drying volume | m ³ | 4,300 | 4,300 | 2,050 | 2,050 | 1,750 |
| Tank capacity (fuel) | l | 135 | 135 | 105 | 105 | 65 |
| Fuel consumption | l | 7.1 | 7.1 | 4.6 | 4.6 | 2.7 |
| Lowest ambient temperature | °C | -25 | -35 | -25 | -35 | -25 |

| SPECIFICATION | UNIT | HD50 | HD70 | HDR45 |
|----------------------------|----------------|-------|-------|---------------|
| | | LxWxH | mm | 1,075x440x630 |
| Weight with fuel | kg | 79 | 119 | 127 |
| Heat output | kW | 46 | 65 | 45 |
| Efficiency | % | N/A | N/A | N/A |
| Space heating volume | m ³ | 6,000 | 8,500 | 5,800 |
| Drying volume | m ³ | N/A | N/A | N/A |
| Tank capacity (fuel) | l | 46 | 65 | 65 |
| Fuel consumption | l | 3.8 | 5.4 | 3.7 |
| Lowest ambient temperature | °C | -25 | -25 | -25 |

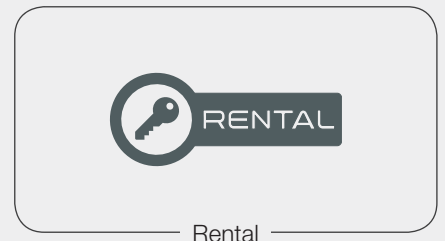
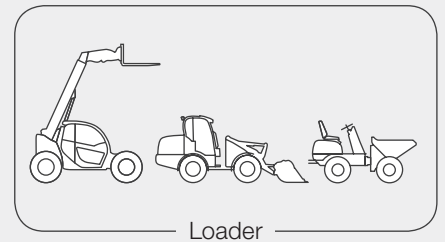
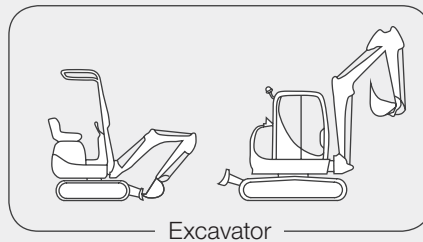
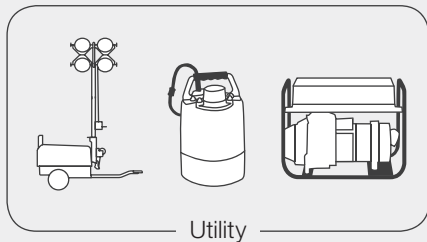
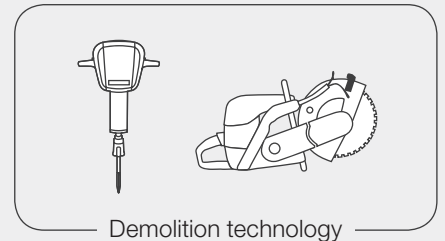
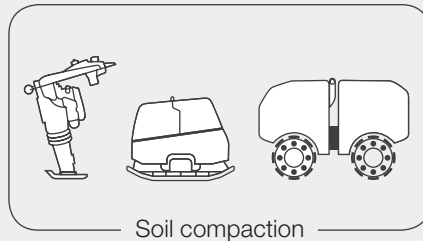
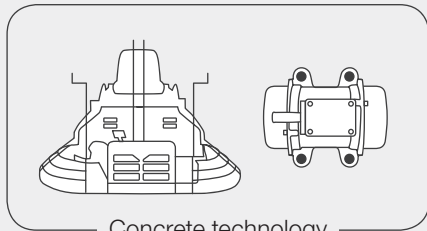
HD: Heavy Duty = sturdy product design

Everything for your project.



**WACKER
NEUSON**

Wacker Neuson offers you a comprehensive range of solutions of powerful quality products combined with services that support you in any situation.



www.wackerneuson.com