

**SAVE  
WATER  
B[U]Y  
VDH**



**VAN DER HEIJDEN**  
Labortechnik GmbH

### Precision from the Beginning

Only specially trained experts are responsible for the manufacturing of the devices in our production department. An order only goes to the production department after all the design instructions have been prepared.

Consistent stock-keeping makes it possible to assemble all the components individually in order to build the required piece of equipment.

State of the art computers at every production workplace document the most important information and transmit all the required parameters for every cooler to the controller.

Every piece of equipment undergoes individual testing with a test report for performance and function.

Take advantage of our experience!

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The following trademarks are registered trademarks of Van der Heijden Labortechnik GmbH in Dörentrup, Germany:  
MINORE®, PARALAQUA® and COOL-CARE®

# ABOUT US

## THE DEVELOPMENT - VAN DER HEIJDEN LABORTECHNIK GMBH

In 1974 the company was founded by Pieter van der Heijden as a laboratory specialist in a small mixed area in Dörentrup (Lippe district, North Rhine-Westphalia). This resulted in a production facility for circulating coolers in 1985. We have been among the market leaders for customized solutions for many years.

From 2001 Christoph Plagens took over the management as a long-standing employee. The company became a GmbH and Christoph Plagens later became the company owner.

In 2012 the new production place in the Humfeld industrial area was completed and occupied.

In 2017, Peter Huber Kältemaschinenbau AG took over Van der Heijden and opened up new opportunities in markets and industries. As a company that continues to operate independently on the market, Mirko Laskowski and Andrej Kepler took over the management. Christoph Plagens continues to support as sales manager.

The expansion of the current production facility will follow in 2020.



### Mirko Laskowski

Mirko Laskowski is CEO since 2017. He is working for Van der Heijden for many years. Now he is leading the company together with Andrej Kepler and is responsible for the production.



### Andrej Kepler

Andrej Kepler is CEO since 2017. He is working for Van der Heijden for many years. Now he is leading the company together with Mirko Laskowski and is responsible for the service.



### Christoph Plagens

The former CEO and company owner Christoph Plagens will continue to support the company for another 3-4 years as a mentor and sales manager.

Growth and development with the endeavor to achieve the perfect solution for the customer through high-quality product and manufacturing quality as well as innovation and the desire to constantly improve. Always protecting the environmental values and offering an economical solution for the customer has always been a top priority at Van der Heijden.

Professional support from initial contact to after-sales service ensures long-term, satisfied customer relationships.

Van der Heijden sees the takeover of Huber very positively. We are very happy to have found a strong partner on the market. The sales and service network has been greatly expanded through the sale. It is a mutual win-win situation where the first effects were felt quickly.

Van der Heijden is also very active locally. Not only with the location that has deliberately remained in Dörentrup, but also e.g. at local social institutions through regular fundraisers or through participation in the location initiative Lippe for regionality.

### Lipper are icecold - but really cool guys!



# SUSTAINABILITY

## WATER IS PRECIOUS!

The provision of drinking water requires a great deal of effort for extraction, treatment and distribution. This also applies to wastewater.

So that it can be returned to the natural water cycle, an enormously high cleaning effort is necessary. Protect not only your instrument to be cooled with clean water, without limescale residues, with the right pressure and constant temperature, but also protect the environment.

Every drinking water saving by a cooler is a contribution.

We are a recognized specialist for refrigerant disposal and device disposal (EAR system) and are monitored according to the water balance law.

**A Van der Heijden cooler always pays off!**



Low energy lamps thanks to the latest LED technology



Heat recovery in the test room



Our test room for system separators and WC-systems

## The environment is important to us!

This does not only apply to the products themselves, which are all recyclable and optimally designed for energy. For the production facility, we have also committed ourselves to this.

We also focus on sustainability in the administrative area.

In addition, the introduction of DIN ISO 14000 started in 2019. This should also demonstrate the increase in sustainability in all areas.

Van der Heijden lives energy saving and constantly monitors processes to ensure that the products, premises and production are as environmentally friendly as possible. This is done with the help of solar cells, light sensors, recycling of materials and using the waste heat generated during the testing of products. The recycling of old devices is also part of it.

## You are welcome to look around with us!

- Latest thermal insulation values
- Complete roof covering with photovoltaics
- Heat recovery of all energy during test runs of the products
- Energy supply to the building through a biogas plant
- Consistent separation of residual materials
- Constant adaptation and improvement of processes in all areas
- Introduction of DIN ISO 14000



Ecological electricity generation

Our customers want to save water and energy, we develop our laboratory coolers to maximize this and at the same time try to keep prices competitive.

# FLEXIBILITY

## ACCORDING TO YOUR SPECIFICATIONS

Outside of our standard product range, each cooler is specially manufactured according to the desired customer requirements.

We are particularly strong in the area of custom-made products!

Our range includes air-cooled versions as well as water-cooled versions - with and without active chillers, system separators, split versions or mobile complete units. Combination devices such as our *COOL-Hybrid* are also possible.

Do you have special voltages or other frequencies? We are happy to adapt the cooler. Do you have cooling water in the laboratory or in the building and would you like to use it? Check out our system separators!

An accuracy of 0.02 K/h is now also possible with the system separators. Inform yourself!

**In the end, a higher purchase price pays off due to the long service life and low failure rate.**



Part of the manufacturing facility



Examples of special construction

Very high quality, powerful, reliable and robust low-cost liquid coolers, made specifically for your application (from a flexible range of options), of high quality at an affordable price.

We specialize in the implementation of special solutions, in addition to a wide range of standard products.

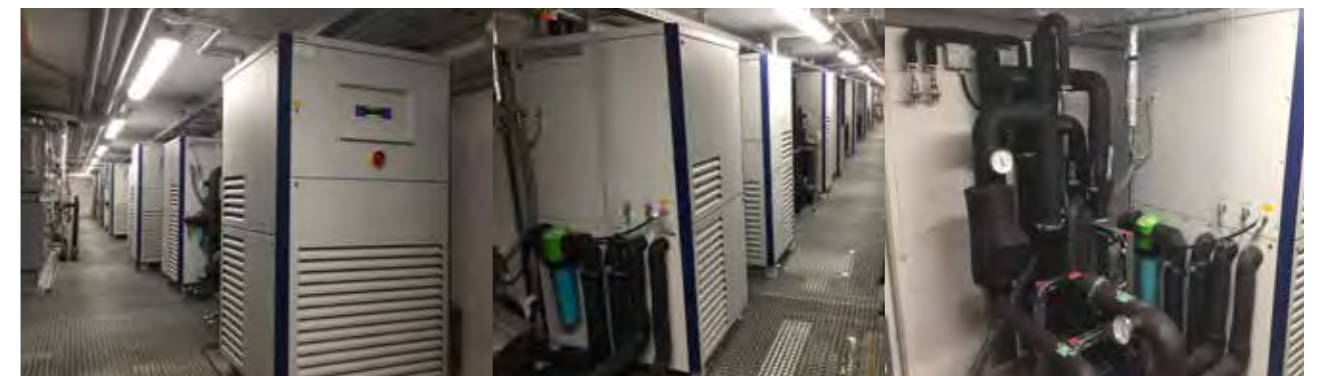


Our particular strength is comprehensive advice and individual configuration with regard to your requirements.

Whether special solutions with multiple distribution on the device or temperature control units made of stainless steel with ramp function - we modify our coolers in such a way that they exactly match your application and the conditions on site!



General delivery for Huber USA



Customer project - technical center with system separators

# PRODUCT RANGE

## VDH Standard Chiller

The Van der Heijden standard chillers are called KÜHLMOBIL. The smallest chillers with castors are called MINORE® and mark the entry level into the world of KÜHLMOBILS. The compact dimensions makes them suitable for a lot of standard applications.

The chillers are available in different standard case sizes.



### Advantages



#### Budget Friendly

Van der Heijden chillers offer very high value due to the competitive pricing, amount of delivered cooling power and the very short payback period compared with running water costs. A 2 year minimum warranty which may be extended to 3, gives reassurance of the high quality and life expectancy of the chillers.



#### Eco-friendly Cooling

Our chillers save 100% water when compared to using running water cooling. Maximum energy efficiency is achieved by only using the compressor when needed. Water to water chillers do not need a compressor, delivering even more savings. Water cooled chillers do not discharge waste air to the ambient room.



#### Company Experience

Van der Heijden have been manufacturing for over 40 years and has extensive knowledge and experience of cooling technology. Having developed many chiller models in close collaboration with world leading instrument manufacturers, you can be assured that we understand your requirements. German design and manufacturing but with a global service support network.



#### Customised Solution

Our chillers are fully customisable with almost infinite options even for a single unit or multiple manufacture.

E.g. models are available as system separators up to 150 kW cooling power, increased stability control, and many more.

Very high quality components and construction can prevent the formation of condensation on pipework during the Summer.



#### Easy Operation

The units are ready to use and easy to set up. The menu shows understandable text descriptions of warnings or fault conditions and no codes.

All models are equipped with a hinged lid for easy coolant refill and easy access at service and castors for easy manoeuvrability. The temperature setting as required (can be factory set).



#### High Quality

Our robust air and water-cooled chillers with a 2 mm epoxy coated metal case are suitable for 24/7 use.

A high-pressure pump feed allows good flow rates. Constant supply of water quality, temperature and pressure. Low or no noise and vibration, no fan and very low heat generation on water-cooled units. No compressor on water-water chillers.

# OUR TECHNOLOGY - YOUR ADVANTAGE!

## VDH Standard Chiller

- Robust air and water-cooled chillers
- 2mm epoxy coated metal case
- Cooling power from 180W up to 50kW / system separators up to 150 kW
- Constant supply of water quality, temperature and pressure
- Very low heat generation on water-cooled units
- Set values as required (can be factory set)
- Low or no noise and vibration - no fan on water-cooled units, no compressor on water-water units
- Easy to use, ON/OFF/SET,
- Hinged lid for easy coolant refill, easy access
- High-pressure pump feed for good flow
- Text descriptions of warnings or fault conditions, no codes
- Castors for manoeuvrability

## Value Propositions

- ✓ 100% water saving and eco-friendly
- ✓ Short payback period vs water costs
- ✓ High cooling power up to 150kW
- ✓ Fully customisable with almost infinite options
- ✓ Very high quality components and construction
- ✓ Suitable for 24/7 use
- ✓ Ready to use, easy to set up, simple set and on/ off
- ✓ Very competitive market price vs. cooling power
- ✓ 2 year warranty extendable to 3 years
- ✓ Over 40 years of experience in cooling technical and service support
- ✓ German design and manufacture
- ✓ Single unit or multiple manufacture



# AS TIME GOES BY

**2007**



**2001**



**1994-1995**




**1987**



**1986**




**2004**




**1994-1996**




**1986**




# COOL-SOLUTIONS



## COOL-CARE®

Van der Heijden designed the COOL-CARE® to avoid cooling water consumption in the areas of application mentioned.

The COOL-CARE® works on the principle of a recirculating cooler. A cooling unit cools the circulating water or antifreeze mixture in a small plastic container from which it is sucked off by means of a circulation pump and transported to the unit to be cooled.

The container is filled on the top of the device and is easily accessible.

The lid can be screwed on. If it is not necessarily about saving water, but about high temperature constants in a certain temperature range, the COOL-CARE® is also available with a counter heating. A wear-free microprocessor control regulates a tank heating and ensures high accuracy of the water outlet temperature.

## RANGE OF APPLICATION

- HPLC
- Electrophoresis
- Micro-Rotis
- Soxleth
- Water baths
- and other more

## COOL-AIR

Air-only cooling is the most economical method of cooling.

Due to physical restrictions, the cooling water temperature cannot be brought below the ambient temperature.

The units can be used very easily in combination with water distillation units or certain AAS units.

A prerequisite for this cooling model is a permissible water inlet temperature for the device to be cooled, which is above the ambient temperature. The temperature is regulated by a fan control.

We deliver these chillers as standard versions with 500 watts or 3000 watts capacity.

Outdoor placement coolers can also be supplied with higher capacities.

## COOL-CARE®/COOL-AIR - ADVANTAGES

- 100 % water savings
- Temperature of cooling water can be set as required
- Minimal space requirements on any laboratory table
- Virtually silent in operation
- Exceptionally easy to use
- Suitable for wide range of uses

# WATER-WATER CHILLERS (SYSTEM SEPARATORS)



## WATER-WATER CHILLERS FROM 1 KW UP TO 150 KW

Water-water coolers from Van der Heijden are available in the same performance variants as the standard coolers.

All models are specially designed for the existing water circuits and can be supplied with outputs up to 150 kW.

The standard models are equipped with a bypass, manometer and sensor for flow monitoring. The units switch off when a fault occurs. The temperature is controlled via the secondary circuit. A motor valve in the primary circuit automatically regulates the amount of water. The stepper motor works in fine stages to ensure high temperature consistency.

In order for these devices to be designed specifically, the following data must be specified in advance:

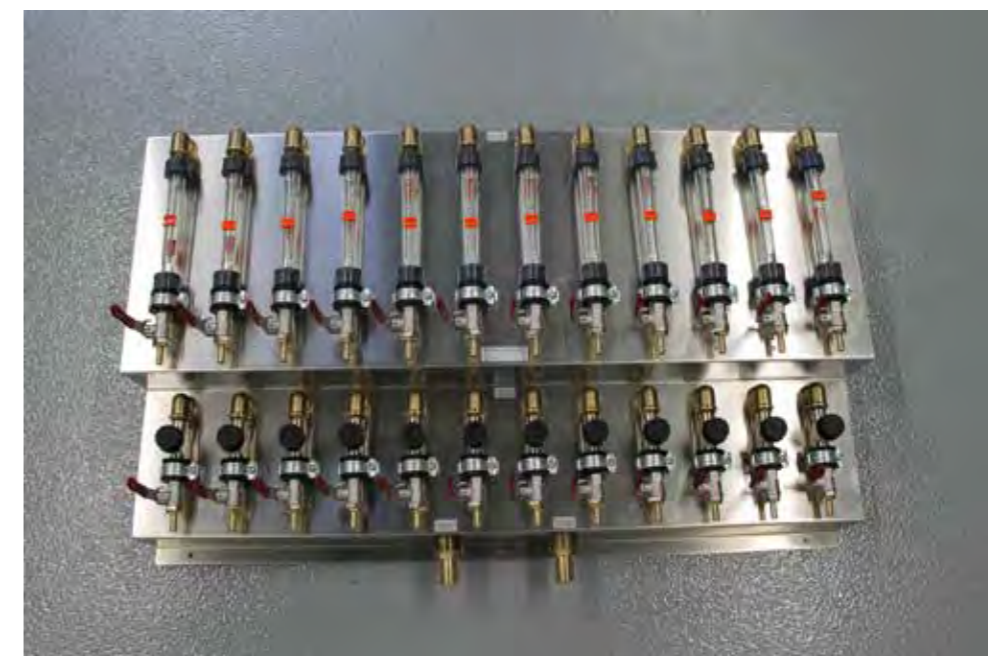
- Water outlet temperature on the domestic water side and / or the inlet temperature to the cooling unit
- The pressure difference across the domestic water side
- How much water is available?

These cooler models are always cheaper than compressor units, the higher the performance. This also applies to the size and the noise level. The devices offer particularly good noise insulation, are relatively quiet and extremely compact at high outputs.

The heat emission to the environment is negligible. There are no problems with condensation because the primary circuit is essentially isolated. If these models are to be piped permanently, feet are available instead of rollers.

The picture on the right shows the back of water-water coolers in different sizes and capacities. All systems are equipped with 3-way motor valves as standard.

**Please call us. We would be happy to design an individually fitting device for you!**



External 12-way distributor to a 50 kW system separator



## WATER-WATER CHILLER (SYSTEM SEPARATOR)



30 kW split system for roof mounting

Many institutes already have their own domestic cooling water supply. This cooling water is generally too cold to cool a laser or an electron microscope, or the water quality is simply too poor.

As a system separator, the water-water cooler offers the ideal solution for such problems and it has relatively small dimensions. The device works without a compressor and thus without refrigerant - only the feed pump requires energy because the cooling capacity uses the cooling water system.

These systems can achieve much higher cooling capacities (up to 150 kW) and are much quieter (hardly any vibrations) and have very low operating costs, especially when the cooling capacity increases. The devices are very compact because there is no compressor.



80 kW system separator with filter on the secondary side

## COOL-HYBRID COMBINATION DEVICE

**YOU HAVE ALL OPTIONS: A COMBINATION DEVICE, AIR-, WATER-COOLED WITH ACTIVE COOLING AND AS A SYSTEM SEPARATOR WITHOUT ACTIVE COOLING FEASIBLE**

Since many laboratories and institutes are now equipped with cooling water pipes, but this can often not be used directly for cooling analyzer equipment, so-called system separators are used as water-cooled systems.

A particular problem is posed when the radiator or system separator (for whatever reason) is no longer supplied with cooling water or e.g. the temperature of home cooling has increased significantly.

This inevitably leads to a disturbance and thus to a no longer sufficient cooling of an analyzer.

Weekly test series can be interrupted or sample processing can no longer be carried out due to these failures.

In order to ensure trouble-free operation with high reliability, Van der Heijden-Labortechnik GmbH has designed a so-called combination device precisely for these situations.

Faults in the cooling water network are registered by the cooler and a built-in active cooling, as an air-cooled version, automatically takes on the task of cooling.

This ensures an uninterrupted cooling process and allows the user to continue working normally. With an air-cooled version, you are independent of the cooling water network, which is why cooling is still guaranteed. Also, the combination devices represent an advantage over a pure water-cooled version, since they can still be used when moving to another laboratory or institute, even if there is no cooling water network or vice versa.

We offer these combination devices with a power of 1 kW to 40 kW.

If the situation on the ground makes it possible, combination units with larger outputs are also possible.

This should be checked in advance by a consultation. Externally and also in terms of operation, these devices do not differ from our standard coolers.



There are only two more water connections on the back of the unit, which are used to connect to the existing house cooling or water pipes.



System Separator 9 kW

# SPLIT DEVICES



## POSSIBILITIES OF DIFFERENT SPLIT SOLUTIONS

There are various ways in which the waste heat and the noise level in the laboratory can be reduced. The waste heat from coolers is annoying for the user and also not always sensible for energy reasons in the premises (air conditioning system must work against this).

### Version 1

Here the condenser is removed from the air-cooled cooler and mounted on the outside (see pictures on the right). The heat generated by the cooler is thus dissipated to the outside. In this case, the heat is no longer inside the room. Only the noise from the compressor is heard in the laboratory, but the use of soundproofing tries to keep it as low as possible.



### Version 2

In this variant, a complete refrigeration unit is installed on the outside (see pictures above). Thus, a smaller housing can be used and the noise and heat pollution are no longer in the laboratory. As with the first version, the housing is provided with sound insulation



# SPLIT DEVICES

## OUR STRENGTH - YOUR ADVANTAGE: CUSTOMIZED COOLING SOLUTIONS

### Version 3

This solution (see picture on the left) is an outdoor installation for the entire cooler. It is important to ensure that an anti-freeze (e.g. glycol) is used to ensure anti-freeze. There is the possibility of placing a cooler freely outside, then a rain cover is mounted on the housing. If there is a covered possibility, then it will not be used.

Here is any noise outside of the lab.

Depending on the application, a suitable cooler is configured.

There are applications that must not be operated with antifreeze as the coolant. We offer special solutions for these cases. Contact us!

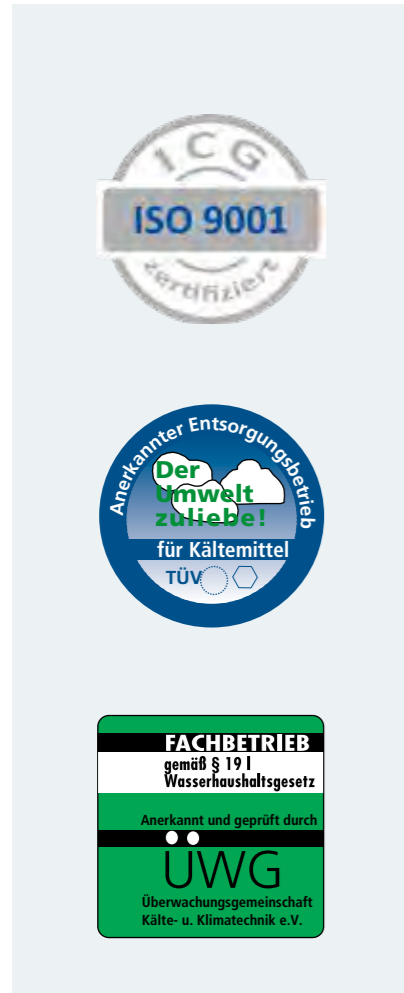
In versions 1 and 2, the systems must be installed and commissioned by specialist personnel.

We prepare the systems for installation on site as well as possible. We can also offer you installation on site.



Remote control for outdoor installation

# CERTIFIED SAFETY



- DIN EN 61010-1 VDE-0411-1
- VDE 0100
- EG-Maschinenrichtlinie 2006/42/EG
- EMV-Richtlinie 2014/30/EU
- Niederspannungs-Richtlinie 2014/35/EU
- DIN EN ISO 9001:2015
- DIN EN ISO 12100:2010
- EN 60204-1:2006
- EN 61000-6-2:2016
- EN 61000-6-4:2011
- DIN EN ISO 13849-1
- DIN EN 82079-1
- EN ISO 13732-1+2
- EN 378-1+2+3
- UVV
- ChemKlimaschutzV
- RoHS-Konformität



# CUSTOMIZED SOLUTIONS

... FOR CUSTOMERS WHO TRUST US.



AND MANY MORE ...

# SUPPORT & SERVICE

## What can you expect?

- ✓ **SPECIAL-PURPOSE SOLUTION**  
We are specialized in manufacturing special-purpose solutions, beside a wide standard product range. Our particular strength is providing comprehensive advice and individual configurations to meet your requirements.
- ✓ **PRODUCT TRAINING**  
This training can be delivered to you locally or via webinar, whichever is easiest for you.
- ✓ **SERVICE TRAINING**  
If required you and your team can come over to Van der Heijden for a personalized service training.
- ✓ **2-YEAR WARRANTY**  
Service and repairs are initiated on the first day of return to Van der Heijden' factory, alternatively, spare parts and service manuals can be despatched.



- ✓ **PROMPT AND THOROUGH RESPONSE**  
to your enquiry to you and/or your end user, sometimes on more technical queries. We always aim to respond within 24 hours.

## COOL SOLUTIONS - YOUR ADVANTAGE



# CONTACT & REPRESENTATIVES



YOU CAN FIND THE CONTACT DETAILS OF OUR REPRESENTATIVES WORLDWIDE ON OUR WEBSITE [WWW.VDH-ONLINE.COM](http://WWW.VDH-ONLINE.COM)

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