



Intelligent Evaporation

Leading Safety Standards

Superior Ease of Use

Reduced Cost of Ownership

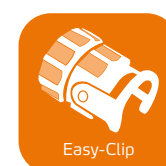
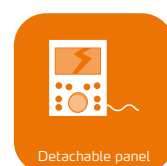
 **heidolph**
research made easy



Do you demand the highest safety standards, perfectly engineered ease of use and reduced cost of ownership?

Intelligent Evaporation...

... stands for an overheat protection design that prevents water baths running dry, provides a detachable panel for superior ease of use from outside closed fume hoods and offers a proven vacuum seal and vapor tube system guaranteed for years of operation!



Leading Safety Standards

- Two independent safety circuits **avoid an overheat situation** of your heating bath: If bath temperature overshoots by 5 °C and if your water bath runs dry, heating will be switched off automatically
- To avoid** an overtemperature situation and potential **thermal damage** to your sample, you can individually pre-program a maximum temperature on the Hei-VAP Precision, at which the bath powers off
- In case of a power cut, all motor lift models will remove the flask from the heating bath **preventing safety hazards** and potential thermal damage to your sample
- To protect you from splashes and scalding**, the Hei-VAP heating bath features an integrated pour spout to remove bath fluid safely
- Heating bath is constructed with a **double wall** for your protection against burns and scalding
- The guard hood **covers the entire bath completely** even if the heating bath is adjusted horizontally to its most extreme limit
- A **metal support** between the heating bath and the base unit **prevents bath instability**
- To **protect** your heating bath **against short-circuits and systematic corrosion**, the cable coupling complies with the protection class IP 67
- For your protection, the operating panel is located near the base so as to **keep your hands out of the dangerous zone** of rotating flasks, steam and splashing bath fluids
- All heating baths feature **non-slip handles** with safety grip to protect you from scalding bath liquids and allow for easy installation/removal of the bath
- A separate on/off switch for heating **prevents unintentional heat-up**. The button is illuminated for visual control
- In case of an overshoot of any parameter setting, all models will show a **warning on the operating panel**
- Glassware assemblies are optionally available with **transparent plastic safety coating** ensuring ultimate protection while allowing visual control at all times
- IQ-OQ documentation** is available for Hei-VAP models on request

Hei-VAP heating bath



YOUR ADVANTAGES

- Only the Hei-VAP heating bath reaches a temperature of 210 °C
- The universal heating bath can even accommodate 5-liter flasks
- The heating bath can be adjusted horizontally up to 200 mm
- To prevent short circuits and corrosion, the cable coupling complies with the protection class IP 67
- Non-slip handles for safe transportation eliminate the risk of scalding
- An integrated pour spout to remove bath fluid safely

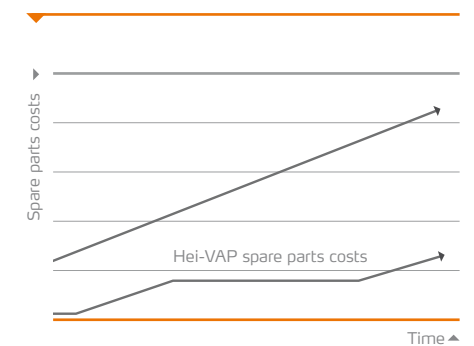


Superior **Ease of Use**

- The detachable operating panel can be attached via velcro or with a special suspension at eye level for your convenience from **outside closed fume hoods**
- The patented evaporating flask **clamp Easy-Clip cannot be lost** due to a connection to the vapor tube coupling ring
- The integrated screwed ring allows you to **remove sticking evaporating flasks** from the vapor tube **just in seconds** in a safe manner
- The universal heating bath can be adjusted horizontally up to 200 mm and offers efficient space to **accommodate even 5-liter flasks**
- For your convenience, the **height of 160 mm** and the **angle** of the evaporating flask can be **adjusted easily from 20° to 80°**
- The optional automatic module Distimatic Bench-top allows for **continuous and unattended automatic operations**

Reduced **Cost** of Ownership

- **Reduce your process times** up to 30 %
- The chemical-resistant vacuum seal **reduces your spare parts budget** up to 75 % with prolonged operational lifespan
- The patented clamping sleeve ensures a **long life performance of the vapor tube**
- Increase your range of applications by using 5-liter flasks in the universal bath at **no additional cost**
- Maintenance-free and non-sparking motors **reduce repairs and down times significantly** to ensure years of continuous operation
- The flange on the condenser side of the drive is made of PPS (Polyphenylene sulfide), a robust industrial-designed resin with **superior chemical resistance** which provides more chemical resistance than stainless steel or welded aluminum. This reduces corrosion to a minimum which results in additional savings on maintenance and replacement components
- Only Hei-VAP heating baths reach a temperature of 210 °C which is 30 °C higher than other evaporators on the market and allow for a **broader range of applications** which previously could not be performed on any rotary evaporator (for example bitumen distillation). Thus, increasing the range of applications eliminates the need for investment in other equipment
- Spend your working hours more effectively on other challenges which require your attention and **evaporate large quantities continuously** with the automatic module Distimatic Bench-top
- Maximize your initial investment significantly: the automatic module Distimatic Bench-top is an **affordable and more flexible alternative** to large-scale rotary evaporators
- Reduce your maintenance costs. The sealed housing protects your rotary evaporator from aggressive fumes, liquids and vapors to prevent internal corrosion. This results in an **increased lifespan of 10 years** on average at a reduced maintenance and repair cost



Intelligent Evaporation



Leading Safety Standards

Superior Ease of Use

Reduced Cost of Ownership

The average operational **lifespan of 10 years** is backed by a **3 year warranty** and makes your purchase a worthwhile investment.

YOUR ADVANTAGES

- The patented clamping sleeve system allows easy removal of the vapor tube from the drive
- Years of performance life reduce your spare parts budget up to 75 %
- The Hei-VAP vapor tube does not get stuck in the drive, thus eliminating the risk of broken glass
- Immediate removal of the vapor tube from the drive facilitates your work

YOUR ADVANTAGES

- Easy-Clip can't get lost due to a direct connection to the drive
- The integrated screw thread allows an easy removal of sticking flasks
- The Easy-Clip is made of highly resistant synthetic material which ensures a long life performance

YOUR ADVANTAGES

- Changing all parameters from outside closed fume hoods guarantees the highest safety level
- Standard for all models is a panel with 1 m cable connection. Thus data security is guaranteed at any time
- Immediate access to the panel ensures ultimate control of the process while increasing your ease of use
- A separate on/off switch for heating prevents unintentional heat-up – the button is illuminated for visual control

Chemical-resistant **vacuum seal** allows for **years of operation** and reduces spare parts budget up to 75 %

The flange made of **chemical-resistant PPS** reduces corrosion, maintenance and spare parts cost to a minimum

Non-sticking vapor tube with patented clamping sleeve eliminates broken glass and reduces spare parts cost significantly

The **patented Easy-Clip** provides an **easy removal** of sticking flasks and **can't get lost** due to the direct connection to the drive

Bath power cable coupling complies with protection class IP 67 to **prevent corrosion and short circuits**

Safety bath will power off if temperature overshoots by 5 °C or runs dry

210 °C heating bath with safety handles and pour spout accommodates **5-liter flasks**

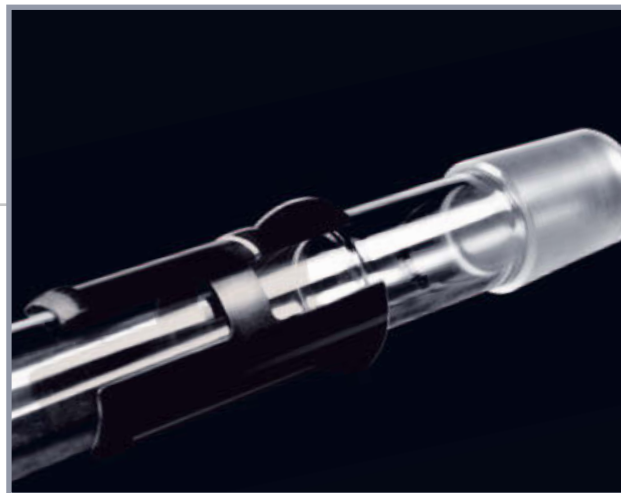
Detachable panel allows for the **highest operational safety** from outside closed fume hoods

Continuous unattended evaporation without limits - the automatic module Distimatic Bench-top with automatic drainage of residue is an affordable and more flexible alternative to large-scale rotary evaporators

A separate on/off switch for heating **prevents unintentional heat-up** – the button is illuminated for visual control

A metal support between the heating bath and the base unit **prevents bath instability**

Vapor tube with patented clamping sleeve



Patented flask clamp Easy-Clip



Operating panel



➤ Hei-VAP Value / Hei-VAP Value Digital

Affordable model with hand lift for all standard applications

Includes leading safety standards and features for superior ease of use and reduced cost of ownership, plus:



- The convenience of large dial controls for adjustment of rotation speed and bath temperature
- For limited budgets, we recommend the optional Manual vacuum controller
- **Hei-VAP Value Digital** models come with a digital display for set and actual heating bath temperature
- **Hei-VAP Value** models have no digital display

Adjust the required angle of the evaporating flask individually according to your needs

Limit the height of your evaporating flask in just seconds

The patented flask clamp Easy-Clip cannot get lost due to a connection to the vapor tube coupling ring

For your protection the detachable operating panel is located below the bath and thus outside the dangerous zone

Hei-VAP Value Digital HL/G3
P/N 560-01302-00

Model	Hei-VAP Value hand lift (HL)		Hei-VAP Value Digital hand lift (HL)	
	standard	coated	standard	coated
G1 Diagonal	560-01100-00	560-01110-00	560-01102-00	560-01112-00
G3 Vertical	560-01300-00	560-01310-00	560-01302-00	560-01312-00
G5 Dry Ice Condenser	560-01500-00	560-01510-00	560-01502-00	560-01512-00
G6 Vertical for Reflux	560-01600-00	560-01610-00	560-01602-00	560-01612-00

➤ Hei-VAP Advantage

For your routine distillation applications and reproducible results

Includes leading safety standards and features for superior ease of use and reduced cost of ownership, plus:



- Available in hand lift or motor lift configurations
- Experience the advantages of our large digital 3.5" LCD display which indicates rotation speed, heating bath and vapor temperature
- We recommend the optional Manual vacuum controller
- Experience the advantages of the automatic process timer which turns off your evaporator at a pre-programmed time and removes evaporating flasks from bath on motor lift models
- Upgrade your Hei-VAP Advantage to a Hei-VAP Precision:

Upgrade-KIT
Advantage Precision-HL
P/N 569-30009-00

Upgrade-KIT
Advantage Precision-ML
P/N 569-40009-00

Large digital LCD display which allows you to monitor all parameters even from a distance

Convenient motor lift adjusts height by the press of a button

Hei-VAP Advantage ML/G3
P/N 562-01300-00

Model	Hei-VAP Advantage hand lift (HL)		Hei-VAP Advantage motor lift (ML)	
	standard	coated	standard	coated
G1 Diagonal	561-01100-00	561-01110-00	562-01100-00	562-01110-00
G3 Vertical	561-01300-00	561-01310-00	562-01300-00	562-01310-00
G5 Dry Ice Condenser	561-01500-00	561-01510-00	562-01500-00	562-01510-00
G6 Vertical for Reflux	561-01600-00	561-01610-00	562-01600-00	562-01610-00

➤ Hei-VAP Precision

Most demanding applications and the finest integrated vacuum control capabilities
Includes leading safety standards and features for superior ease of use and reduced cost of ownership, plus:

- Available in hand lift or motor lift configurations
- Experience the advantages of our large 4.3" color graphic display which features all parameters, integrated vacuum controller and includes programs for automated distillations
- Make your life easier by utilizing the integrated software support which leads you through the capabilities of the evaporator
- For data management Hei-VAP Precision models feature a USB interface
- Save time by configuring the unit - all connected devices will be recognized by the evaporator, which eliminates the need to configure the unit manually
- Now you can manage even the most demanding applications easily and prevent foaming, excessive bubbling or bumping
- Save time with your individualized pre-programmed parameter settings for your 30 most common applications used on a daily basis by saving them in a "Favorites" section
- Each ramp offers 20 separate steps for demanding applications
- Apply an individual name to those ramps to avoid a mix-up
- Experience the advantages of the automatic process timer which turns off your evaporator at a pre-programmed time by raising the flask on motor lift models and releasing vacuum
- Control your process individually by pre-programming vacuum gradients
- Hei-VAP Precision models feature a built-in vacuum controller as a standard

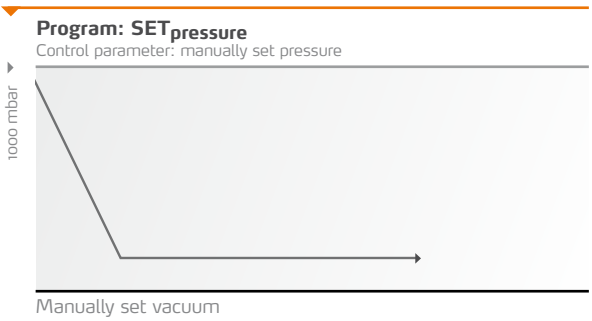


For increased safety all bath temperature adjustments can be limited

Even from a distance you will be able to monitor the numbers on the display easily

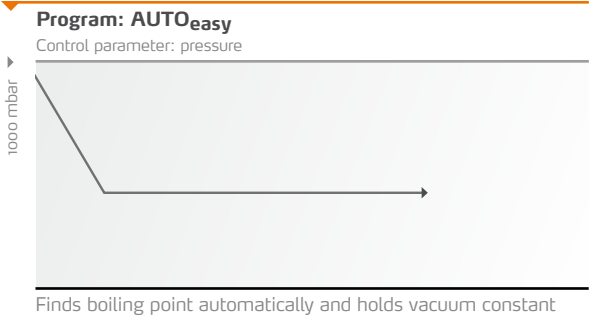
Large color graphic display for all parameters and automated programs

Programs facilitate process control
Reduce your process times significantly by using these three programs for automated distillation



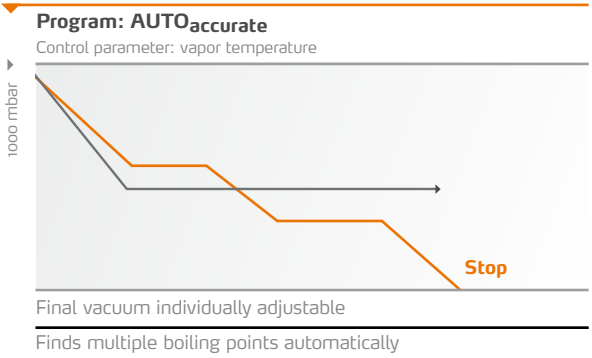
SET_{pressure}
Program for solvent separations

This program holds a pre-set vacuum constant. During the evacuation you have the full flexibility to choose another level of vacuum by the press of a button



AUTO_{easy}
Supports the automatic pressure control for solvent separations

The pressure level for the first boiling point is found automatically. This program can be used with all Heidolph glassware assemblies and does not require any accessories



AUTO_{accurate}
Supports very precise automatic pressure control for solvent separations

This program works similar to AUTO_{easy} but in addition is able to identify multiple boiling points automatically by reducing vacuum accordingly. Also the AUTO_{accurate} program delivers the finest and most precise vacuum control. To take advantage of this program, the optional AUTO_{accurate}-sensor is required. This program cannot be used on Heidolph G1 and G5 glassware assemblies. Leading parameter of this program is the vapor temperature

➤ **Reduce your process times via automated distillation programs**

Model	Hei-VAP Precision hand lift (HL)		Hei-VAP Precision motor lift (ML)	
	standard	coated	standard	coated
G1 Diagonal	563-01100-00	563-01110-00	564-01100-00	564-01110-00
G3 Vertical	563-01300-00	563-01310-00	564-01300-00	564-01310-00
G5 Dry Ice Condenser	563-01500-00	563-01510-00	564-01500-00	564-01510-00
G6 Vertical for Reflux	563-01600-00	563-01610-00	564-01600-00	564-01610-00