

Rotary Evaporators Hei-VAP Series

Leading safety standards – Intelligent Distillation

- 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 over temperature situation and potential thermal damage to your sample, you can pre-program on the Precision model a max. SET temperature individually at which the bath shuts 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 a 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
- To prevent short-circuits and systematic corrosion from your heating bath, the electrical cable coupling complies with the high protection class IP 67
- For your protection the operating panel is located near the base and keeps your hands out of the dangerous zone of rotating flasks, steam and spashing 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 an unintentional heat up. If heating is switched on the on/off 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

Superior ease of use

- The detachable operating panel enables convenient handling from outside closed fume hoods
- The integrated screwed ring allows you to remove sticking evaporating flasks from the vapor tube just in seconds in a safe manner
- The innovative ventilation and replenishment valves no longer have ground joints, which enables maximum tightness and grease-free operation
- 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 patented Easy-Clip provides an easy removal of sticking flasks and cannot get lost due to the direct connection to the vapor tube coupling ring
- All components in direct or indirect contact with the medium are equipped with FDA-compliant materials for an extended application range

Reduced cost of ownership

- Achieve significant higher evaporation rates due to unique tightness and industry-leading condensing surface of 2.200 cm² with the XL condenser
- The high resistant and durable FKM vacuum seal achieves maximum tightness and reduces spare part budgets
- 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 added costs
- 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 investments in other equipment
- Maintenance-free and non-sparking motors reduce repairs and down times significantly to ensure years of continuous operating
- 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

The Hei-VAP series provides the mentioned advantages, a 3 year warranty and an average 10 year operational lifespan - this makes your purchase a worthwhile investment



① Hei-VAP Value with hand lift

The Hei-VAP devices with hand lift are optimally suited for all standard applications. Controlling parameters is done so with the simple turn of a knob

- The convenience of large dial controls for adjustment of rotation speed and bath temperature

Article	Version	Glassware	Order No.
Hei-VAP Value G1	diagonal condenser	standard	10 41 00110
Hei-VAP Value G3	vertical condenser	standard	10 41 00130
Hei-VAP Value G3 XL	vertical condenser	standard	10 41 01305
Hei-VAP Value G5	condensate trap	standard	10 41 00150
Hei-VAP Value G6	reflux condenser	standard	10 41 00160
Hei-VAP Value G1B	diagonal condenser	coated	10 41 00111
Hei-VAP Value G3B	vertical condenser	coated	10 41 00131
Hei-VAP Value G3B XL	vertical condenser	coated	10 41 01315
Hei-VAP Value G5B	condensate trap	coated	10 41 00151
Hei-VAP Value G6B	reflux condenser	coated	10 41 00161

② Hei-VAP Value Digital

Hei-VAP Value Digital models come with a digital display for set and actual heating bath temperature

- The convenience of large dial controls for adjustment of rotation speed and bath temperature

Article	Version	Glassware	Order No.
Hei-VAP Value Digital G1	diagonal condenser	standard	10 41 01102
Hei-VAP Value Digital G3	vertical condenser	standard	10 41 01302
Hei-VAP Value Digital G3 XL	vertical condenser	standard	10 41 01307
Hei-VAP Value Digital G5	cooling trap	standard	10 41 01502
Hei-VAP Value Digital G6	reflux condenser	standard	10 41 01602
Hei-VAP Value Digital G1B	diagonal condenser	coated	10 41 01112
Hei-VAP Value Digital G3B	vertical condenser	coated	10 41 01312
Hei-VAP Value Digital G3B XL	vertical condenser	coated	10 41 01317
Hei-VAP Value Digital G5B	cooling trap	coated	10 41 01512
Hei-VAP Value Digital G6B	reflux condenser	coated	10 41 01612

Hei-VAP Advantage with hand lift

With the Hei-VAP Advantage you have a direct view on all parameter settings and are able to expand your application range. For more complex distillation applications and reproducible results.

- Available in hand lift or motor lift configurations
- The digital 3.5" LCD display indicates rotation speed, heating bath and vapor temperature
- Experience the advantages of the automatic process timer which turns off your evaporator at a pre-programmed time and removes evaporator flasks from bath on motor lift models
- Upgrade your Hei-VAP Advantage to a Hei-VAP Precision:
Upgrade-KIT Advantage Precision – ML
Upgrade-KIT Advantage Precision – HL

Article	Version	Glassware	Order No.
Hei-VAP Advantage HL/G1	diagonal condenser	standard	10 41 10110
Hei-VAP Advantage HL/G3	vertical condenser	standard	10 41 10130
Hei-VAP Advantage HL/G3 XL	vertical condenser	standard	10 41 10135
Hei-VAP Advantage HL/G5	condensate trap	standard	10 41 10150
Hei-VAP Advantage HL/G6	reflux condenser	standard	10 41 10160
Hei-VAP Advantage HL/G1B	diagonal condenser	coated	10 41 10111
Hei-VAP Advantage HL/G3B	vertical condenser	coated	10 41 10311
Hei-VAP Advantage HL/G3B XL	vertical condenser	coated	10 41 10132
Hei-VAP Advantage HL/G5B	condensate trap	coated	10 41 10151
Hei-VAP Advantage HL/G6B	reflux condenser	coated	10 41 10161
Upgrade-KIT Advantage-Precision HL			10 41 69309

③ Hei-VAP Advantage with motor lift

Article	Version	Glassware	Order No.
Hei-VAP Advantage ML/G1	diagonal condenser	standard	10 41 20110
Hei-VAP Advantage ML/G3	vertical condenser	standard	10 41 20130
Hei-VAP Advantage ML/G3 XL	vertical condenser	standard	10 41 20132
Hei-VAP Advantage ML/G5	condensate trap	standard	10 41 20150
Hei-VAP Advantage ML/G6	reflux condenser	standard	10 41 20160
Hei-VAP Advantage ML/G1B	diagonal condenser	coated	10 41 20111
Hei-VAP Advantage ML/G3B	vertical condenser	coated	10 41 20131
Hei-VAP Advantage ML/G3B XL	vertical condenser	coated	10 41 20135
Hei-VAP Advantage ML/G5B	condensate trap	coated	10 41 20151
Hei-VAP Advantage ML/G6B	reflux condenser	coated	10 41 20161
Upgrade-KIT Advantage-Precision ML			10 41 69409



Hei-VAP Precision with hand lift

Maximum capabilities due to integrated vacuum control:

The Hei-VAP Precision provides you with the maximum range of parameters, including but not limited to, reproducible applications and fully automated processes. Even solutions with different boiling points can be identified and distilled.

- The 4.3" colour graphic display shows all application parameters and automation programs at a glance
- Save time by configuring the unit - all connected devices will be recognized by the evaporator, which eliminates the need to configure the unit manually
- Use the USB connection to document reproducible results
- 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 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
- Benefit from the timer function to terminate your application automatically
- Control your process individually by freely programming pressure gradients in gradient mode
- You do not need to invest in a vacuum controller as one is already integrated in your Precision model

Programs facilitate process control

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

SETpressure program for solvent separations. This program holds a set vacuum constant. During the evacuation you have the full flexibility to choose any other level of vacuum by the press of a button

AUTOeasy 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.

AUTOaccurate supports very precise automatic pressure control for solvent separations. This program works similar to AUTOeasy but in addition is able to identify multiple boiling points automatically by reducing vacuum accordingly. Also the AUTOaccurate program delivers the finest and most precise vacuum control. To take advantage of this program the optional AUTOaccurate-sensor is required.

Also this program can not be used on Heidolph G1 and G5 glassware assemblies. Leading parameter of this program is the vapor temperature

Article	Version	Glassware	Order No.
Hei-VAP Precision HL/G1	diagonal condenser	standard	10 41 30110
Hei-VAP Precision HL/G3	vertical condenser	standard	10 41 30130
Hei-VAP Precision HL/G3 XL	vertical condenser	standard	10 41 30132
Hei-VAP Precision HL/G5	condensate trap	standard	10 41 30150
Hei-VAP Precision HL/G6	reflux condenser	standard	10 41 30160
Hei-VAP Precision HL/G1B	diagonal condenser	coated	10 41 30111
Hei-VAP Precision HL/G3B	vertical condenser	coated	10 41 30131
Hei-VAP Precision HL/G3B XL	vertical condenser	coated	10 41 30135
Hei-VAP Precision HL/G5B	condensate trap	coated	10 41 30151
Hei-VAP Precision HL/G6B	reflux condenser	coated	10 41 30161



④ Hei-VAP Precision with motor lift

Article	Version	Glassware	Order No.
Hei-VAP Precision ML/G1	diagonal condenser	standard	10 41 40110
Hei-VAP Precision ML/G3	vertical condenser	standard	10 41 40130
Hei-VAP Precision ML/G3 XL	vertical condenser	standard	10 41 40132
Hei-VAP Precision ML/G5	condensate trap	standard	10 41 40150
Hei-VAP Precision ML/G6	reflux condenser	standard	10 41 40160
Hei-VAP Precision ML/G1B	diagonal condenser	coated	10 41 40111
Hei-VAP Precision ML/G3B	vertical condenser	coated	10 41 40131
Hei-VAP Precision ML/G3B XL	vertical condenser	coated	10 41 40135
Hei-VAP Precision ML/G5B	condensate trap	coated	10 41 40151
Hei-VAP Precision ML/G6B	reflux condenser	coated	10 41 40161

All glassware assemblies are also available with completely transparent synthetic coating (order number „coated“). The scope of delivery comprises one 1,000 ml evaporation and one 1,000 ml receiving flask each in standard cut NS 29/32. Other versions available on request.

XL Glass cooler

For maximum evaporation power

The new XL coolers with a best-in-class cooling area of 2,200 cm² attain significantly higher evaporation rates.

Available as G3 XL and G9B* XL variants (G9B for use with the automatic module Distimatic for automated continuous operation 24/7, see page XXX)



Chillers

Chiller RotaChill Large

Highest cooling capacity of any application

- Temperature range from -20°C to +40°C
- Temperature control accuracy of $\pm 0.1^\circ\text{C}$
- Digital display for temperature settings and reading our actual temperature
- Cooling capacity at +20°C; 1290 W
- Footprint of chiller (LxWxH): 607 x 254 x 483 mm

Chiller Rotacool Mini

Ideal for standard applications

- Chiller for all standard applications
- Temperature range from -10°C to +40°C
- Temperature control accuracy of $\pm 1^\circ\text{C}$
- Digital display for temperature settings and reading our actual temperature
- Cooling capacity at +20°C; 580 W
- Footprint of chiller: (LxWxH): 360 x 310 x 520 mm

Chiller RotaChill Small

The affordable model

- Temperature range: 0°C to +100°C
- Temperature control: $\pm 0.2^\circ\text{C}$
- Footprint of chiller: 210 x 450 x 570 mm
- Cooling capacity at +20°C; 200 W
- The RotaChill should be placed directly besides the evaporator to ensure a sufficient pump performance



Article	Order No.
⑤ Chiller RotaChill Large	56 41 00200
Chiller Rotacool mini	10 41 10021
Chiller RotaChill Small	10 41 91022

Vacuum pumps

Vacuum pump Rotavac Valve Control

- Two-stage diaphragm pump made from chemically resistant materials
- High suction capacity of 2.0 m³/h for fastest evacuation
- Suction capacity for up to 3 rotary evaporators at the same time
- The Rotavac Valve Control achieves an ultimate vacuum of 7 mbar
- The Rotavac Valve Control can be combined with a condenser
- Power input 180 W, Weight 12.8 kg
- Dimensions without condenser (l x w x h): 245 x 195 x 310 mm

Vacuum pump Rotavac Vario Control

- Even with the gas ballast valve open, a very good final vacuum is achieved when working with easily condensing vapours. This allows for evaporation at lower temperatures of high-boiling substances such as DMF or DMSO
- Suitable for Hei-VAP Precision
- Three-stage diaphragm pump is made for chemically resistant materials
- High suction capacity of 1.7 m³/h for fastest evacuation
- The Rotavac Vario Control achieves an ultimate vacuum of 2 mbar
- The Rotavac Vario Control can be combined with a condenser
- Power input 160 W, Weight 5.4 kg
- Dimensions without condenser (l x w x h): 236 x 167 x 196 mm

Vacuum pump Rotavac Valve Tec

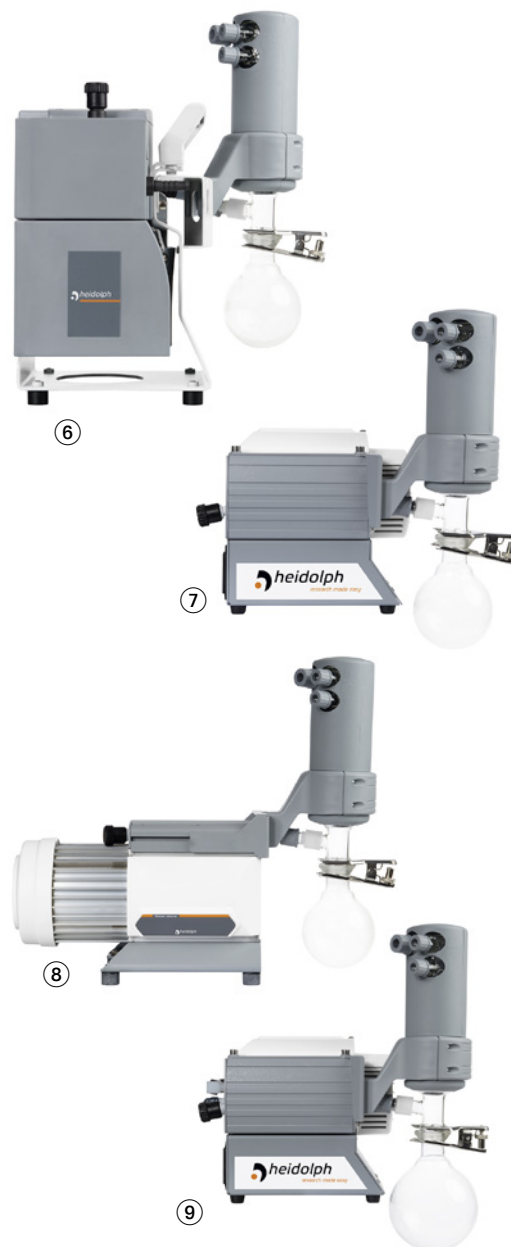
- Two-stage diaphragm pump made from chemically resistant materials
- Recommended for solvents with low or medium boiling points
- Vacuum can be controlled manually or via valve operated vacuum controllers
- Suction capacity of 0.75 m³/h
- The Rotavac Valve Tec achieves an ultimate vacuum of 12 mbar
- The Rotavac Valve Tec can be combined with a condenser
- Power input 80 W, Weight 6.0 kg
- Dimensions without condenser (l x w x h): 315 x 145 x 169 mm

Vacuum pump Rotavac Vario Tec

- Two-stage diaphragm pump is made for chemically resistant materials
- Suction capacity of 1.0 m³/h
- The Rotavac Vario Tec achieves an ultimate vacuum of 12 mbar
- The Rotavac Vario Tec can be combined with a condenser
- Recommended for solvents with low or medium boiling points
- Power input 160 W, Weight 4.3 kg
- Dimensions without condenser (l x w x h): 236 x 156 x 196 mm

Pumping unit Rotavac Vario

- Individually adjustable pumping unit, consisting of vacuum pump and vacuum controller - suitable for Hei-VAP Value and Hei-VAP Advantage
- Three-stage diaphragm pump is made from chemically resistant material
- High suction capacity of 1.7 m³/h for fastest evacuation
- The Rotavac Vario pumping unit achieves an ultimate vacuum of 5 mbar
- The Rotavac Vario pumping unit can be combined with a condenser
- Power input 160 W, Weight 6.0 kg
- Dimensions without condenser (l x w x h): 263 x 193 x 299 mm
- The exact vacuum regulation prevents boiling retardation and avoid loss of sample volume
- The continuous automatic adjustment of the vacuum to the process parameters saves time you can dedicate to more important tasks



Article	Order No.
⑥ Rotavac Valve Control	56 41 10130
⑦ Rotavac Vario Control	56 41 10140
Condensate cooler for Rotavac Vario pumping unit, Rotavac Vario Tec, Rotavac Vario Control	56 41 10082
⑧ Vacuum pump Rotavac Valve Tec	10 41 10016
⑨ Vacuum pump Rotavac Vario Tec	10 41 10017
Condensate cooler for Rotavac Valve Control, Rotavac Valve Tec	10 41 10008
⑩ Rotavac Vario pumping unit	10 41 91142

Accessories

Switchbox

Connect up to 3 rotary evaporators to one pump and control vacuum individually.

- Suitable for Hei-VAP Precision models
- Vacuum pump switches off automatically when no vacuum required
- Reduces energy consumption of pump
- Increases pump performance life
- Vacuum valve and check valve are required for every evaporator if you work with different pressures at the same time
- Delivery includes 3 non-return valves
- Weight: 0.6 kg
- Dimensions (W×H×D): 80 × 45 × 160 mm

Vacuum valve

Required for Hei-VAP models with valve regulated pumps.

- Position specifically designed for easy cleaning
- Can be combined with the Woulff Bottle to make one unit (optional)
- Not required with manual valve control

Woulff Bottle

- Additional recovery of solvent to protect vacuum valve and vacuum pump
- Compatible with all Hei-VAP configurations
- Direct connection to the vacuum valve
- Features connection to vacuum controller
- Volume of 250 ml

Article	Order No.
Switch box	56 41 00040
Manual vacuum controller for Hei-VAP Value and Hei-VAP Advantage	10 41 59126
Vacuum valve	56 41 00024
Woulff bottle	56 41 00070

Complete packages Hei-VAP Silver

Standard equipment for your labor

Article	Order No.
Hei-VAP Silver 1	10 41 09130
Hei-VAP Value with hand lift and vertical glassware G3, vacuum pump Rotavac Valve Tec, manual vacuum controller, tube set	

Article	Order No.
Hei-VAP Silver 2	10 41 08131
Hei-VAP Value with hand lift and coated vertical glassware set G3B, vacuum pump Rotavac Valve Control, manual vacuum controller, tube set	

Article	Order No.
⑪ Hei-VAP Silver 3	10 41 09139
Hei-VAP Value with hand lift and vertical glassware set G3, vacuum pump Rotavac Valve Tec, manual vacuum controller, chiller RotaChill Small, tube set	

Complete packages Hei-VAP Gold

For standard distillations with vacuum control

Article	Order No.
Hei-VAP Gold 1	10 41 14130
Hei-VAP Advantage with hand lift and vertical glassware set G3, vapor temperature sensor, vacuum pump Rotavac Valve Tec, manual vacuum controller, tube set	

Article	Order No.
Hei-VAP Gold 2	10 41 21131
Hei-VAP Advantage with motor lift and coated vertical glassware set G3B, vapor temperature sensor, vacuum pump Rotavac Vario pumping unit, tube set	

Article	Order No.
⑫ Hei-VAP Gold 3	10 41 29130
Hei-VAP Advantage with motor lift and vertical glassware set G3, vacuum pump Rotavac Valve Tec, manual vacuum controller, chiller Rotacool Mini, tube set	



Complete packages Hei-VAP Platinum

Automated distillation with Hei-VAP Precision motor lift models and speed regulated vacuum control

Article	Order No.
Hei-VAP Platinum 1	10 41 36130
Hei-VAP Precision with hand lift and vertical glassware set G3, vapor temperature sensor, vacuum valve, vacuum pump Rotovac Valve Tec with condenser, tube set	

Article	Order No.
13 Hei-VAP Platinum 2	10 41 35131
Hei-VAP Precision with hand lift and coated vertical glassware set G3B, AUTOaccurate-sensor, vacuum valve, vacuum pump Rotovac Valve Control with condenser, tube set	

Article	Order No.
Hei-VAP Platinum 3	10 41 42130
Hei-VAP Precision with motor lift and vertical glassware set G3, AUTOaccurate-sensor, vacuum pump Rotovac Vario Tec with condenser, woulff bottle, tube set	

Article	Order No.
Hei-VAP Platinum 4	10 41 43131
Hei-VAP Precision with motor lift and coated vertical glassware set G3B, AUTOaccurate-sensor, vacuum pump Rotovac Vario Control with condenser, woulff bottle, tube set	

Article	Order No.
14 Hei-VAP Platinum 5	10 41 43138
Hei-VAP Precision with motor lift and coated vertical glassware set G3B, AUTOaccurate-sensor, vacuum pump Rotovac Vario Control with condenser, woulff bottle, chiller RotaChill Large, tube set	

Article	Order No.
Hei-VAP Platinum 5 XL	10 41 43139
• Hei-VAP Precision with motor lift and coated vertical glassware set G3B XL • AUTOaccurate-sensor • Vacuum pump Rotovac Vario Control with condenser • Woulff bottle • Chiller RotaChill Large • Tube set	

Hei-VAP Safety Upgrade

For highest safety

Article	Order No.
Hei-VAP Safety Upgrade	10 41 90031
Additional guard hood and coating of glassware for your Hei-VAP Package	

