Intelligent Evaporation



Premium Safety Standards





Intelligent Evaporation...

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

Premium 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 Precision model, 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
- 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 electrical cable coupling complies with the high 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

Safety heating bath



YOUR ADVANTAGES

- Only the Hei-VAP heating bath reaches a temperature of 210 °C
- The heating bath can be adjusted horizontally up to 200 mm
- The universal heating bath can even accommodate 5-liter flasks
- To prevent short circuits and corrosion, the electrical cable coupling complies with the high protection class IP 67
- Non-slip handles for safe transportation eliminate the risk of scalding
- 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 outside of closed fume hoods
- The evaporating flask clamp cannot be lost due to a connection to the vapor tube coupling ring
- A flask ejector feature of the vapor tube coupling 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°

Reduced Cost of Ownership

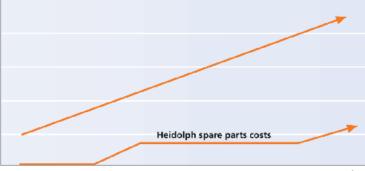
- Reduce your process times depending on your model and periphery up to 30 %
- The chemical-resistant vacuum seal reduces your spare parts budget up to 75 % with prolonged operational lifespan
- Savings at the same high level are possible due to the long service-life vanor tube
- Increase your range 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 associated with corrosion effects of moisture condensation from condenser coupled with common corrosive reagents used in daily laboratory activities

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

 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

Spare parts costs



Time

Vapor Tube

Are safety, convenience, cost savings and time top priorities for you? The vapor tube of the Hei-VAP series offers all in one.



YOUR ADVANTAGES

- The vapor tube can easily be removed from the drive and is designed for years of service life.
- Years of performance life reduce your spare parts budget up to 75 %
- Highest safety: 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

Operating Panel

Are safety, convenience and flexibility top priorities for you? The detachable operating panel offers all in one.



YOUR ADVANTAGES

- Changing all parameters outside the closed fume hood 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
- Hei-GUIDE, the button with a turn and push function navigates you easily through the menu
- Immediate access to the panel ensures ultimate control of the process while increasing your ease of use

Intelligent Evaporation

Premium 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 truly worthwhile investment.

short circuits

Hei-VAP Value

Affordable model with hand lift for all standard applications

Includes premium 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 models have no digital display



Model

	Glassware	standard	coated
Hei-VAP Value	G1 Diagonal	560-01100-00	560-01110-00
Hei-VAP Value	G ₃ Vertical	560-01300-00	560-01310-00
Hei-VAP Value	G5 Dry Ice Condenser	560-01500-00	560-01510-00
Hei-VAP Value	G6 Vertical for Reflux	560-01600-00	560-01610-00

Hei-VAP Advantage

For your routine distillation applications and reproducible results

Includes premium 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



Hei-GUIDE control knob to navigate the menu and confirm parameters

Models		Hand lift (HL)		Motor lift (ML)	
	Glassware	standard	coated	standard	coated
Hei-VAP Advantage	G1 Diagonal	561-01100-00	561-01110-00	562-01100-00	562-01110-00
Hei-VAP Advantage	G ₃ Vertical	561-01300-00	561-01310-00	562-01300-00	562-01310-00
Hei-VAP Advantage	G5 Dry Ice Condenser	561-01500-00	561-01510-00	562-01500-00	562-01510-00
Hei-VAP Advantage	G6 Vertical for Reflux	561-01600-00	561-01610-00	562-01600-00	562-01610-00

Hei-VAP Precision

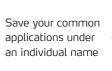
Most demanding applications and the finest integrated vacuum control capabilities

Includes premium 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 components and periphery 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 as a ramp in "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

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



Hei-VAP Precision ML/G₃ P/N 564-01300-00

For increased safety all bath temperature adjustments can be limited

Programs facilitate process control

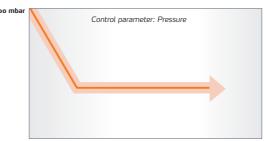
Reduce your process times significantly by using these three programs for automated distillation

SETpressure

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

Program: SET pressure Control parameter: manually set pressure Manually set vacuum

Program: AUTO_{easy}



Finds boiling point automatically and holds vacuum constant

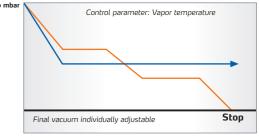
AUTOeasy

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 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. Also, this program cannot be used on Heidolph G1 and G5 glassware assemblies. Leading parameter of this program is the vapor temperature (AUTO_{accurate} is a combination of the previous programs Tauto and Pauto)

Program: AUTOaccurate



Finds multiple boiling points automatically

Reduce your process times via automated distillation programs

Models	Hand lift (HL)		Motor lift (ML)		
	Glassware	standard	coated	standard	coated
Hei-VAP Precision	G1 Diagonal	563-01100-00	563-01110-00	564-01100-00	564-01110-00
Hei-VAP Precision	G ₃ Vertical	563-01300-00	563-01310-00	564-01300-00	564-01310-00
Hei-VAP Precision	G ₅ Dry Ice Condenser	563-01500-00	563-01510-00	564-01500-00	564-01510-00
Hei-VAP Precision	G6 Vertical for Reflux	563-01600-00	563-01610-00	564-01600-00	564-01610-00

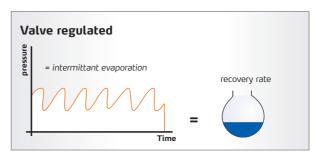
The Modular Concept

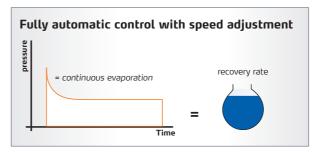
The Modular Concept consists of rotary evaporator, vacuum pump, controller and chiller



Reduce your process times up to 30 %

Most precise vacuum due to fully automatic speed control



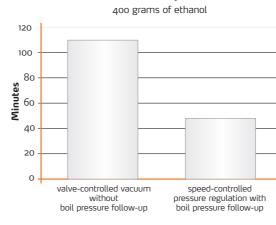


- 30 % reduced process times
- Cost reduction
- Superior ease of use

Your advantages

- The integrated vacuum controller exactly controls pressure by the specific boiling point → no hysteresis
- The evaporating process is increased significantly
- The solvent recovery rate is close to 100 %
- High efficiency as the time saving will cut down process times, and hence cost
- Reduced process times lead to sustainable economic benefits and measurable increased efficiency

Time to evaporate

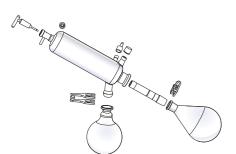


The figures prove significant time saving when using a speed-controlled system with boil pressure follow-up in comparison with a conventional "open/close" valve control system. Used configuration:

Hei-VAP Precision with program AUTOaccurate

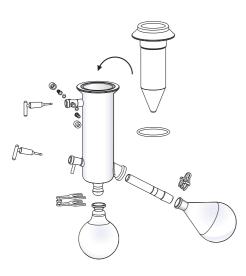
Glassware - Hei-VAP Series

- Glassware set includes one 1,000-ml evaporating flask and one 1,000-ml receiving flask
- All glassware sets are also available with transparent plastic coating (Surlyn[®]-coated) for added safety, except for glassware set G₅ which is Halar-coated
- Evaporating flasks and vapor tubes which come with a standard NS 29/32 joint size are also available with NS 24/29 ground joints (available upon request)



Glassware set G1

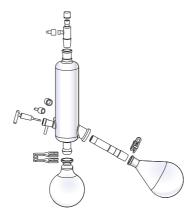
 Diagonal condenser for all standard distillations; the option with the most affordable price



Glassware set G5

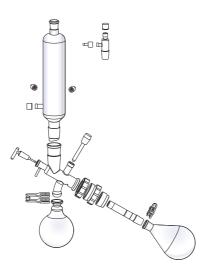
Dry Ice Condenser for low-boiling solvents

- Also available upon request: glassware sets for Soxhlet extraction and descending condenser system
- All glassware sets feature GL 10 thread; the inlet tube can be connected with a threaded fitting
- Glassware G₃ and G6 allow for the automated distillation program AUTO_{accurate} on Hei-VAP Precision models



Glassware set G₃

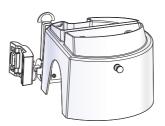
 Vertical condenser for all standard distillations; the option with the smallest space requirement



Glassware set G6

 Vertical condenser; centerpiece with valve for reflux distillation

Accessories - Hei-VAP Series



Guard hood

Strong and super-transparent guard hood to protect you from implosions. Excellent visibility to flask. Provides easy and immediate access to flask and bath P/N 569-00010-00



Vapor temperature sensor

For Hei-VAP Advantage and Hei-VAP Precision models P/N 569-00030-00



Spare PTFE vacuum seal

P/N 23-30-01-01-30



Heating bath liquid (5 l)

Heating bath liquid for temperatures up to 240 °C, mixes with water P/N 515-31000-00



Guard shield

Strong and super-transparent guard shield for your protection while changing flasks.

Attached at the edge of the bath

P/N 569-00020-00



AUTO_{accurate}-sensor

For Hei-VAP Precision models, only in combination with glassware set G₃ and G₆ P/N 569-00040-00



Tube se

6.25 meter vacuum tubing and 6.25 meter water tubing P/N 591-35000-00



Spare clamping sleeve

P/N 23-30-01-05-31

Spare vapor tube NS 29/32

P/N 514-00000-01

Aqua-Stop

Safety mechanism - in the event of a water leakage the valve closes and thus avoids flooding in your laboratory (can only be used in combination with the chiller model Rotacool)
P/N 569-00500-00

Accessories - Hei-VAP Series



Evaporating flasks	NS 29/32
Evaporating flask* 50 ml	514-70000-00
Evaporating flask 100 ml	514-71000-00
Evaporating flask 250 ml	514-72000-00
Evaporating flask 500 ml	514-73000-00
Evaporating flask 1,000 ml	514-74000-00
Evaporating flask 2,000 ml	514-75000-00
Evaporating flask 3,000 ml	514-76300-00
Evaporating flask 5,000 ml	514-78000-00

^{*} Evaporating flask NS 14.5 incl. adapter (NS 29 or NS 24)



Receiving flasks	standard	coated
Receiving flask - NS 35/20 100 ml	514-81000-00	514-81000-02
Receiving flask - NS 35/20 250 ml	514-82000-00	514-82000-02
Receiving flask - NS 35/20 500 ml	514-83000-00	514-83000-02
Receiving flask - NS 35/20 1,000 ml	514-84000-00	514-84000-02
Receiving flask - NS 35/20 2,000 ml	514-85000-00	514-85000-02
Receiving flask - NS 35/20 3,000 ml	514-87000-00	514-87000-02

NS 24/29

514-70000-01

514-71000-01 514-72000-01 514-73000-01

514-74000-01 514-75000-01

514-76300-01 514-78000-03



Powder flasks	NS 29/32	NS 24/29
Powder flask 500 ml	514-73200-00	514-73200-01
Powder flask 1,000 ml	514-74200-00	514-74200-01
Powder flask 2,000 ml	514-75300-00	514-75300-01



	NS 29/32	NS 24/29
Spider with 6 distillation sleeves NS 14.5 20 ml	15-300-005-09	15-300-005-12
Spider with 12 distillation sleeves NS 14.5 20 ml	15-300-005-10	15-300-005-13
Spider with 20 distillation sleeves NS 14.5 20 ml	15-300-005-11	15-300-005-06



	NS 29/32	NS 24/29
Spider with 5 flasks NS 24 50 ml	15-300-005-04	15-300-005-08
Spider with 5 flasks NS 24 100 ml	15-300-005-07	15-300-005-05



	NS 29/32	NS 24/29
Evaporating cylinder 500 ml	514-00070-00	514-00070-01
Evaporating cylinder 1,500 ml	514-00071-00	514-00071-01



	NS 29/32	NS 24/29
n brake with flask clamp	514-00004-00	514-00005-00

Vacuum Accessories - Hei-VAP Series

Switchbox

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

- Pump switches off automatically at required vacuum
- Reduces energy consumption of pump
- Increases performance life of the pump due to a complete switch-off if vacuum is reached
- Vacuum valve and non-return 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: 80 x 160 x 45 (l x w x h / mm)
- Designed for all Hei-VAP models with valve-regulated vacuum pumps



Switchbox P/N 569-00400-00

Manual vacuum controller

For Hei-VAP Value and Hei-VAP Advantage models

- Control your house vacuum or any other vacuum source
- Pressure range from o to 1,020 mbar
- Scaling on display in steps of 50 mbar
- Adapter for the tube with 8 mm inner diameter
- Support rod included
- Attaches safely to evaporator
- Dimensions: 80 x 80 x 150 (l x w x h / mm)
- A vacuum valve is not required

Manual Vacuum Controller P/N 591-26000-00

Vacuum valve

Required to control vacuum for Hei-VAP models with valve regulated pumps

- External attachment design for easy cleaning
- Can be combined with the Woulff Bottle to one unit
- Not required if you utilize a manual vacuum controller

Woulff Bottle (optional)

- Additional recovery of solvent to protect vacuum valve and vacuum pump
- Direct connection to the vacuum valve
- Features connection to vacuum controller
- Volume of 250 ml



Vacuum valve P/N 569-00060-00

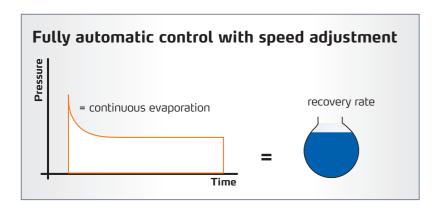
Woulff Bottle P/N 569-00070-00

General advantages of all chemical-resistant diaphragm vacuum pumps

- All components which come in contact with media are built from chemically resistant fluoropolyemer
- The durable PTFE sandwich design guarantees an exceptional diaphragm lifespan
- The head cover and clamping disc have a stable core made of metal which offers unsurpassed long-term performance of your operational parameters
- The direct pump drive (without belt) is exceptionally quiet, creates a very low vibrational environment and reduces the need of wear and tear parts to a minimum
- The gas ballast valve has been optimized, prevents media condensing in the pump

RPM Regulated Vacuum Pumps

RPM regulated pumps adjust their speed individually and come to a complete stop when the required vacuum level is reached



Your advantages

- Speed adjustment stops completely if vacuum is reached and runs intermittently at very low speed to hold vacuum constant
- Increased diaphragm performance life due to periods of non-operation
- Significant noise and vibration reduction due to periods of non-operation
- Low energy consumption due to intermittent operation
- Operates without vacuum valve
- Most precise vacuum level at all times
- Highest distillation rates possible while reducing process time by 30 %
- Stable distillation conditions accounts for solvent recovery up to 100 %
- Significant time and energy savings

Rotavac Vario Control

For all Hei-VAP Precision models

- Three-stage diaphragm pump is made from chemical-resistant material
- High suction capacity of 1.7 m³/h for fastest evacuation
- Achieves an ultimate vacuum of 2 mbar
- Even if the gas ballast valve is open an excellent ultimate vacuum is reached when working with easily condensable vapors. This makes distilling high boiling point solvents such as DMF or DMSO possible at low bath temperatures
- Can be combined with a condenser
- Power input: 160 W, Weight: 5.4 kg
- Dimensions: 167 x 236 x 196 (l x w x h / mm)

Rotavac Vario Control P/N 591-00141-00

(not shown)





Rotavac Vario Tec

For all Hei-VAP Precision models

- Two-stage diaphragm pump is made from chemical-resistant material
- Recommended for solvents with low or medium boiling points
- Suction capacity of 1.0 m³/h
- Achieves an ultimate vacuum of 12 mbar
- Can be combined with a condenser
- Power input: 160 W, Weight: 4.3 kg
- Dimensions: 156 x 236 x 196 (l x w x h / mm)

Rotavac Vario Tec P/N 591-00171-00 Condenser P/N 591-00084-00



Rotavac Vario Pumping Unit

Fully controllable stand-alone pumping unit including vacuum controller – for all Hei-VAP Value and Hei-VAP Advantage models

- Three-stage diaphragm pump is made from chemical-resistant material
- Precise vacuum control avoids bumping and eliminates foaming of your evaporation solution
- Due to automatic vacuum supply to the process parameters you have more time for important laboratory activities
- 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: 263 x 193 x 299 (l x w x h / mm)

Rotavac Vario Pumping Unit P/N 591-00142-00 Condenser

(not shown)

P/N 591-00084-00

Valve-Regulated Vacuum Pumps

Standard vacuum pumps which close a valve when the required vacuum level is reached

Rotavac Valve Control

For all Hei-VAP models

- Two-stage diaphragm pump made from chemical-resistant material
- High suction capacity of 2.0 m³/h for fastest evacuation
- Suction capacity for up to 3 rotary evaporators at the same time
- Achieves an ultimate vacuum of 7 mbar
- Vacuum can be controlled manually or via valve operated vacuum controllers
- Depending on your application you can switch on and off the vacuum pump via switchbox
- Can be combined with a condenser
- Power input: 180 W, Weight: 12.8 kg
- Dimensions: 195 x 245 x 310 (l x w x h / mm)



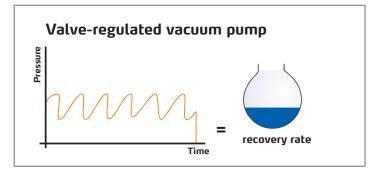
Rotavac Valve Control P/N 591-00130-00 Condenser P/N 591-00083-00

Rotavac Valve Tec

For all Hei-VAP models

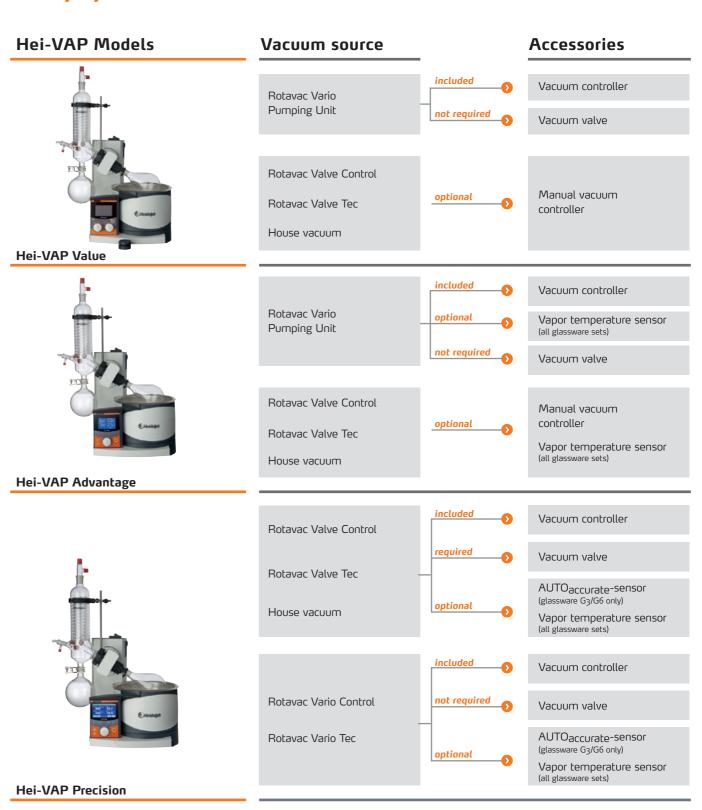
- 2-gear diaphragm vacuum pump made of chemically-resistant material guarantees working with solvents of low to medium boiling temperature
- Vacuum can be controlled manually or via valve operated vacuum controllers
- Suction capacity of 0.75 m³/h
- Achieves an ultimate vacuum of 12 mbar
- Can be combined with a condenser
- Power input: 80 W, Weight: 6 kg
- Dimensions: 145 x 315 x 169 (l x w x h / mm)





Rotavac Valve Tec P/N 591-00160-00 Condenser (not shown) P/N 591-00083-00

Equipment Combinations









Control







Pumping Unit controller





with Woulff Bottle



AUTO_{accurate}



temperature sensor

O Chillers

Rotacool

High cooling capacity - minimal bench space

- The only chiller designed specifically for rotary evaporators
- Minimal bench space due to unique "L-shape design"
- Long-lasting service life
- Footprint of chiller: 470 x 580 x 443 mm
- Provides space of 470 x 405 mm for evaporator
- Temperature range: -10 °C to +40 °C
- Small quantity of circulating coolant required due to innovative technology
- Precise temperature control of ± 0.5 °C
- Display for setting temperature and reading out actual temperature



Rotacool

P/N 591-00200-00

Rotacool Mini

Ideal for routine applications

- Chiller for all bench-top evaporators
- Small footprint of chiller: 225 x 450 x 400 mm
- Cooling temperature: 7 °C (not adjustable)
- Cooling capacity at 7 °C: 370 W
- No digital display



Rotacool Mini P/N 591-00210-00

RotaChill

RotaChill

The affordable model

- Temperature range: o °C to +100 °C
- Temperature control: ± 0.2 °C
- Footprint of chiller: 210 x 450 x 570 mm
- No digital display

	Rotacool	Rotacool Mini	RotaChill
[°C]	-10° to +40°	7° (constant)	o° to +100°
[L]	2	3	6
[W]	420	370	200
	350		140
	220		100
	[L]	[°C] -10° to +40° [L] 2 [W] 420 350	[°C] -10° to +40° 7° (constant) [L] 2 3 [W] 420 370 350

^{*} at 20 °C ambient temperature



Complete Packages at a special price

Complete Packages BASIC

Standard equipment for your lab

Hei-VAP Value with a 210 °C heating bath and hand lift incl. coated glassware set G1B, vacuum pump Rotavac Valve Tec and tube set P/N 560-91110-00

BASIC 1

Hei-VAP Value with a 210 °C heating bath and hand lift incl. coated glassware set G1B, vacuum pump Rotavac Valve Control and tube set

P/N 560-81110-00

Complete Packages STANDARD

For standard distillations without vacuum control

STANDARD 3 T

Hei-VAP Advantage with a 210 °C heating bath and hand lift incl. glassware set G1, vapor temperature sensor, vacuum pump Rotavac Valve Tec and tube set P/N 561-91100-00

STANDARD 4

Hei-VAP Advantage with a 210 °C heating bath and hand lift incl. coated glassware set G₃B, vapor temperature sensor, vacuum pump Rotavac Valve Control and tube set P/N 561-81310-00

Complete Packages SUPERIOR

Automated distillation with Hei-VAP Precision hand lift models and valve-regulated vacuum control

SUPERIOR 1 T

Hei-VAP Precision with a 210 °C heating bath incl. coated glassware G₁B, vapor temperature sensor, vacuum valve, vacuum pump Rotavac Valve Tec with condenser and tube set

P/N 563-61110-00

SUPERIOR 1

Hei-VAP Precision with a 210 °C heating bath incl. coated glassware set G₃B, AUTO_{accurate}-sensor, vacuum valve, vacuum pump Rotavac Valve Control with condenser and tube set

P/N 563-51310-00

Complete Packages PREMIUM

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

Rotary evaporator with motor lift, a 210 °C heating bath, glassware set, vacuum pump Rotavac Vario Control with condenser, AUTO_{accurate}-sensor and tube set

PREMIUM 7 Hei-VAP Precision with glassware set G₃ P/N 564-71300-00

PREMIUM 10 Hei-VAP Precision with coated glassware set G₃B P/N 564-71310-00

PREMIUM 10 cool Same as PREMIUM 10, but with chiller Rotacool P/N 564-71318-00

PREMIUM 12 Hei-VAP Precision with coated glassware set G6B P/N 564-71610-00

Technical Specifications - Rotary Evaporators

Model	Hei-VAP Value (HL)	Hei-VAP Advantage (HL)	Hei-VAP Advantage (ML)	Hei-VAP Precision (HL)	Hei-VAP Precision (ML)
Hand / Motor lift	hand lift	hand lift	motor lift	hand lift	motor lift
Height adjustment speed	manual	manual	30 mm/s	manual	30 mm/s
Height adjustment (mm)	155	155	155	155	155
Rotation speed (rpm)	20 - 280	20 - 280	20 - 280	20 - 280	20 - 280
Rotation speed setting	scale	3.5" LCD display	3.5" LCD display	4.3" LCD color graphic display	4.3" LCD color graphic displa
Drive		brushless DC motor	with electronic speed contro		
Heating capacity (W)	1,300	1,300	1,300	1,300	1,300
Temp. range heating bath (°C)	20 - 210	20 - 210	20 - 210	20 - 210	20 - 210
Temperature accuracy bath (°C)	±1	±1	±1	±1	±1
Overheat protection bath (°C)		cut-off at 5 °C over s	et temperature via separate	PT 1000	
Bath temperature setting	scale	3.5" LCD display	3.5" LCD display	4.3" LCD color graphic display	4.3" LCD color graphic displa
Heating bath temperature control	electronic/digital	electronic/digital	electronic/digital	electronic/digital	electronic/digital
Secondary overtemp. cut-off (°C)	250	250	250	250	250
Material heating bath	stainless steel AISI 316L	stainless steel AISI 316L	stainless steel AISI 316L	stainless steel AISI 316L	stainless steel AISI 316L
Diameter heating bath (mm)	255	255	255	255	255
Volume heating bath (l)	4.5	4.5	4-5	4.5	4.5
Display vapor temperature required accessories	no	yes vapor temperature sensor	yes vapor temperature sensor	yes vapor temperature sensor	yes vapor temperature senso
Integrated vacuum controller	no	no	по	yes	yes
Timer	no	yes	yes	yes	yes
Vacuum program Set _{pressure} **	no	no	no	yes	yes
Vacuum program AUTO _{easy} **	no	no	no	yes	yes
Vacuum program AUTO _{accurate} ** requires AUTO _{accurate} -sensor	no	no	no	yes	yes
Remote control function					
- Lift - Start rotation	no yes	no yes	yes yes	no yes	yes yes
- Start vacuum - Start heating bath	no yes	no yes	no yes	yes yes	yes yes
Programmable ramps	no	no	no	yes	yes
Supply power (W)	1,400	1,400	1,400	1,400	1,400
Weight (w/o glass assembly) (kg)	16	16	16	17	17
Dimensions (l x w x h) (mm)	395 × 490 × 430	395 x 490 x 430	395 × 420 × 430	395 x 490 x 430	395 x 420 x 430
Protection class**** (DIN EN 60529)	IP 20	IP 20	IP 20	IP 20	IP 20
Operating conditions (°C)	o - 40 at 80 %	o - 40 at 80 %	o - 40 at 80 %	o - 40 at 80 %	o - 40 at 80 %
——————————————————————————————————————	rel. humidity	rel. humidity	rel. humidity	rel. humidity	rel. humidity
Rate of evaporation* (L/h)	_	_	_	_	_
- Toluene - Acetone	8.5 5.8	8.5 5.8	8.5 5.8	8.5 5.8	8.5 5.8
- Ethanol	3.5	3.5	3.5	3.5	3.5
- Water	1.2	1.2	1.2	1.2	1.2
Condensing surface (cm²)	1,200	1,200	1,200	1,200	1,200
Supply voltage * * * (V/Hz)	230 / 50/60	230 / 50/60	230 / 50/60	230 / 50/60	230 / 50/60



Certificate

To confirm the ability for continuous operation of the Hei-VAP Series Rotary Evaporators

Hei-VAP Series Rotary Evaporators feature overtemperature safety circuits according to DIN EN 61010-1:2001 and DIN EN 61010-2-010:2003 and therefore, are designed for continuous operation.

This statement is made under the precondition that all units are operated in accordance with the operation manual and in accordance with good practice standards for safety in laboratories, rules for accident preventions, and compliance with directions on hazardous materials.

Schwabach, October 2011

i. V. Stefan Richter **Quality Control Director**



Heidolph Instruments GmbH & Co. KG

Walpersdorfer Str. 12 • 91126 Schwabach/Germany Phone +49 (o) 91 22/99 20 68 • Fax +49 (o) 91 22/99 20 65 sales@heidolph.de • www.heidolph.com



MANEKO, spol. s r. o. Na Pískách 71 16000 Praha 6 www.maneko.cz maneko@maneko.cz TEL: 23333 5638-9

FAX: 23333 2656