

# EVAPORATION

MADE *easy*





# HEI-VAP

Hei-VAP Rotary Evaporators represent a cutting-edge solution for efficient solvent evaporation in laboratory and industrial settings. These versatile devices are designed to simplify the separation of solvents from sample compounds while maintaining precise temperature control and vacuum levels. The Hei-VAP excels in a wide range of applications, from routine distillations to more complex processes like reflux reactions, crystallization, and concentration of solutions.

Key features of Hei-VAP rotary evaporators include digital displays for easy monitoring and control of essential parameters, such as rotation speed and heating bath temperature. They offer robust construction and safety features, including adjustable safety stops and overheat protection, ensuring user confidence and reliable operation. With various models and accessories available, Hei-VAP rotary evaporators cater to diverse laboratory needs, offering the flexibility and performance required for efficient solvent removal and concentration in scientific research and industrial applications.

## ELEVATE YOUR EVAPO- RATOR



### MAXIMUM TIGHTNESS

Highly resistant and durable PTFE vacuum seals for many years of continuous operation.



### SOLVENT LIBRARY

Integrated solvent library with pre-loaded settings to optimize your process.



### PARAMETER CONTROL

Option to upgrade to control parameters on touch screen including chiller & vacuum pump.



### UNIQUE EASY-CLIP

Our Easy-Clip is made of highly resistant synthetic material, which ensures a long life.



### NO STUCK GLASSWARE

The patented clamping sleeve allows easy removal and eliminates the risk of becoming stuck or broken.



### SAFETY FEATURES

The universal heating bath is isolated and double-walled to prevent heat loss and burns, and two independent safety circuits avoid an overheating situation of your bath



HEI-VAP  
CORE

Designed for the Essentials



HEI-VAP  
EXPERT

The Precise Classic



HEI-VAP  
ULTIMATE

Leveled Up Evaporation



HEI-VAP  
EXPERT  
CONTROL

Control at Your Fingertips



HEI-VAP  
ULTIMATE  
CONTROL

The Ultimate Control

Display Type	3.5" LCD Display	5" LCD Color Display	7" LCD Color Display	5" LCD Color Display	7" LCD Color Display
Solvent Library	N/A	✓	✓	✓	✓
Dynamic Auto Accurate (DAA)	N/A	✓	✓	✓	✓
Ramp Programming	N/A	✓	✓	✓	✓
Vacuum & Chiller Control	N/A	N/A	N/A	✓	✓
Vapor Temperature Settings Display	N/A	✓	✓	✓	✓
Residual Heat Indicator	✓	✓	✓	✓	✓
Data Logging	N/A	N/A	N/A	✓	✓
Software Connectivity	N/A	N/A	✓	N/A	✓
Glassware Pictured	G3 Vertical - Standard/Coated	G5 Dry Ice - Standard/Coated	G3XL Vertical - Standard/Coated	G1 Diagonal - Standard/Coated	G6 Reflux - Standard/Coated



# TECHNICAL PROPERTIES



## ROTATION SPEED

10 to 280 RPM

## HEATING CAPACITY

Up to 1,300 Watts

## HEATING BATH

4.5 Liter Stainless Steel AISI 316L

## SUPPLY POWER

1,400 Watts

## PROTECTION CLASS

Unit: IP20 | Heating Bath Connection IP67

Other Cables: IP42

## SAFETY CERTIFIED

Certified by OSHA’s National Recognized Testing Laboratory (NRTL) Program.

## DRIVE

DC motor with electronic speed control

# THE HEI-VAP CONTROL PRINCIPLE

Hei-VAP Expert Control and Hei-VAP Ultimate Control allow central control of all process parameters, including vacuum, cooling temperature, rotation, and heating bath temperature.

- ✓ Customizable solvent library with the ability to save processes as favorites easily.
- ✓ Automatically find boiling points with Dynamic AUTOaccurate



\* A subsequent upgrade is possible: simply connect the “plug and play” control box and enjoy all benefits.

Hei-VAP Rotary Evaporator

Description	Hei-VAP Core		Hei-VAP Expert		Hei-VAP Ultimate	
	Hand-Lift	Motor-Lift	Hand-Lift	Motor-Lift	Hand-Lift	Motor-Lift
G1 Diagonal - Standard	036040050	036040060	036041000	036041010	036041040	036041050
G3 Vertical - Standard	036040051	036040061	036041001	036041011	036041041	036041051
G3 XL Vertical - Standard	036040052	036040062	036041002	036041012	036041042	036041052
G5 Dry Ice - Standard	036040053	036040063	036041003	036041013	036041043	036041053
G6 Vertical for Reflux - Standard	036040054	036040064	036041004	036041014	036041044	036041054
G1B Diagonal - Coated	036040055	036040065	036041005	036041015	036041045	036041055
G3B Vertical - Coated	036040056	036040066	036041006	036041016	036041046	036041056
G3B XL Vertical - Coated	036040057	036040067	036041007	036041017	036041047	036041057
G5B Dry Ice - Coated	036040058	036040068	036041008	036041018	036041048	036041058
G6B Vertical for Reflux - Coated	036040059	036040069	036041009	036041019	036041049	036041059

Hei-VAP Rotary Evaporator Control

Description	Hei-VAP Expert Control		Hei-VAP Ultimate Control	
	Hand-Lift	Motor-Lift	Hand-Lift	Motor-Lift
G1 Diagonal - Standard	036041020	036041030	036041060	036041070
G3 Vertical - Standard	036041021	036041031	036041061	036041071
G3 XL Vertical - Standard	036041022	036041032	036041062	036041072
G5 Dry Ice - Standard	036041023	036041033	036041063	036041073
G6 Vertical for Reflux - Standard	036041024	036041034	036041064	036041074
G1B Diagonal - Coated	036041025	036041035	036041065	036041075
G3B Vertical - Coated	036041026	036041036	036041066	036041076
G3B XL Vertical - Coated	036041027	036041037	036041067	036041077
G5B Dry Ice - Coated	036041028	036041038	036041068	036041078
G6B Vertical for Reflux - Coated	036041029	036041039	036041069	036041079

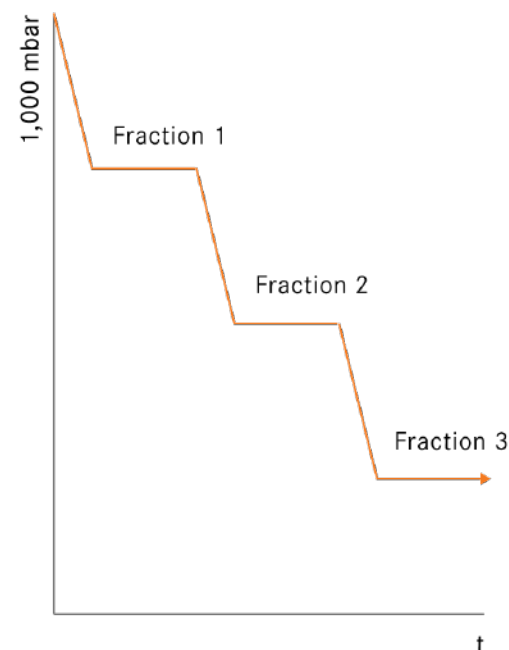
# AUTOMATIC EVAPORATION

With Dynamic Auto Accurate (DAA)

- ✓ The boiling points of one or more fractions are identified through the steam temperature gradation of the mixture during continuous automatic pressure control.
- ✓ Freely set whether one or more fractions will be distilled and if the vacuum control is fully automated.
- ✓ Control the evaporation speed by adjusting the ratio of steam temperature to the cooling temperature.

The DAA allows you to start a fully automated distillation process during the heat-up phase of the heating bath. The system vacuum is dynamically adjusted to the changing heating bath temperatures until the heating bath has reached its defined temperatures.

System Requirements: The automatic process control requires a Hei-VAP Expert Control or Hei-VAP Ultimate Control with the AutoAccurate-sensor as well as the configuration with compatible glassware (G3, G3 XL, G6)



# FAVORITES & RAMPS

- ✓ Solvent library with pre-set, customizable processes and solvents. It can be saved as a favorite anytime and directly on the smart screen.
- ✓ Evaporate with a tap: the Smart DAA Program.
- ✓ Individual Settings: adjust hysteresis (from gentle to highest performance), limit maximum pressure or temperature, multilingual menu with format settings, various calibrations, and assign heating temperature or vacuum to the right knob.



# APPLICATIONS

## SOLVENT RECOVERY

Many chemistry and industrial processes, from chromatography to transistor cleaning, use solvents that can be difficult or costly to source in large quantities. The Hei-VAP and Hei-VAP industrial provide an in or post-process method of recovering this solvent and purifying it for reuse thanks to the ability to separate by boiling point efficiently. This can be taken a step further and completely automated thanks to the Distimatic Pro, where all external factors of filling and emptying of the evaporator can be controlled via the system.



## PRODUCT DRYING

The Hei-VAP provides a tight system and multiple glassware configurations for optimal product drying. Ultimate system tightness allows efficient solvent removal from the product to ensure purity. At the same time, Evaporation Cylinders and Powder flasks provide increased speed and ease of use by removing solvent from solids and powders.



## CULINARY

Molecular cooking uses rotary evaporators that evaporate liquids with minimal to no heat, particularly with a dry ice condenser or low-temperature chiller. This process helps retain the volatile aromatics in foods usually lost through heating.



## ASPHALT RECYCLING

Recycling of asphalt requires testing of the material to ensure it is high enough quality for reuse. This particularly pertains to the binding agent known as bitumen. Testing the bitumen requires specialized equipment to clean the asphalt, remove the gravel, and extract the bitumen directly. After this process, rotary evaporation separates the solvent used for extraction so the pure bitumen can be analyzed.



## CHROMATOGRAPHY

Substance separations in the pharmaceutical, biochemistry, and agrochemical industries are typically done through chromatography. After the separation process, the chromatographic fractions are present at very high dilution. Due to the high dilution, solvent removal could take multiple days or require various pieces of equipment. When lab space is limited, a large-scale evaporator may also not be feasible. The Distimatic Pro allows us to fully automate and run our benchtop Hei-VAP continuously, completing our process over one day instead of multiple.





# GLASSWARE

- Glassware set includes one 1,000 ml evaporating flask and one 1,000 ml receiving flask.
- Evaporating flasks and vapor tube come standard with 29/32 join size and are also available with 24/29 ground joints.
- Ventilation cap without ground joints for easy handling and grease-free operation included.
- A venting valve with refill function is optionally available
- G3/G3 XL or G6 glassware is required for using DAA on Hei-VAP Expert/Ultimate Control models.
- All glassware is also available with transparent plastic coating (for temperature ranges up to a maximum 80° C

See page XX for glassware options.

Evaporation Rate	Toluene	Acetone	Ethanol	Isopropanol	Water
G3 Vertical	6.5 Liters/Hour	6.0 Liters/Hour	2.5 Liters/Hour	4.0 Liters/Hour	1.4 Liters/Hour
G3 XL Vertical	8.5 Liters/Hour	7.5 Liters/Hour	3.5 Liters/Hour	4.9 Liters/Hour	1.4 Liters/Hour
Improvement with XL Condenser	31%	25%	40%	23%	System Limit Reached with 1.4 Liters/Hour



## EVAPORATING FLASK NS 24/40

Flask Size	PN		
50 ml	036302270	1,000 ml	036301160
100 ml	036302290	2,000 ml	036302370
250 ml	036302310	3,000 ml	036302390
500 ml	036302330	5,000 ml	036305000



## POWDER FLASK NS 24/40

PN 500 ML: 036302210  
PN 1,000 ML: 036302230  
PN 2,000 ML: 036302250



## SPIDER NS 14.5

NS 24/40 | 20 ML  
Distillation Sleeves

PN 6 Sleeves: 036302610  
PN 12 Sleeves: 036302630  
PN 20 Sleeves: 036302650



## SPIDER NS 24

NS 24/40

PN Five 50 ML Flasks:  
036302750  
PN Five 100 ML Flasks:  
036302770



## FOAM BRAKE

Foam brake with flask clamp  
NS 24/40  
PN: 036302470



## RECEIVING FLASK NS 24/40

Flask Size	Standard	Coated
100 ml	036302480	036302490
250 ml	036302500	036302510
500 ml	036302520	036302530
1,000 ml	036301170	036301180
2,000 ml	036302570	036302580
3,000 ml	036302590	036302600



# ACCESSORIES



**GUARD HOOD**

Strong and transparent guard hood to protect from implosions; provides easy and immediate access to flask and bath; application range up to 130°C.

PN 036305040



**GUARD SHIELD**

Strong and transparent quart shield to protect from implosions; provides easy and immediate access to flask and bath.

PN 036305050



**SPARE VAPOR TUBE & SLEEVE**

Standard joint size: NS 24/40

Vapor Tube: 036301110  
Clamping Sleeve: 036308030



**VENTILATION & REPLENISHMENT VALVE**

Ground-free for precise refilling during the process. With ventilation function.

PN 036210761  
Replacement Cap: 036210497



**HEATING BATH LIQUID**

Heating bath liquid for up to 220°C (5 Liters)

PN 036300941



**WOULFF BOTTLE**

For separating condensate to protect the valves of the vacuum pump. Screw connection for easy emptying and cleaning  
PN 036302940



**TUBING**

Tubing set with 12 meter tubing and hose clamp for vacuum and water connection

PN 036302180  
By the meter: 036294800



**VACUUM SEAL**

Special PTFE seal, with FKM seal ring, highest chemical resistance, long lifespan, highest density, FDA-Complaint

PN 036210032



**AUTO<sup>ACCURATE</sup> SENSOR**

For Hei-VAP Expert & Ultimate Control only, and in combination with glassware sets G3, G3 XL or G6

PN 036308020



**VAPOR TEMP SENSOR**

For Hei-VAP Expert & Ultimate as wells as the control models

PN 036308010



**EXTENSION CABLE**

Allows quick and easy operation even outside closed fume hoods, 1.5 meters in length  
PN 036210769



**HOLDING DEVICE**

For all Hei-VAP operating panels: can be positioned next to the device or on the wall.  
PN 036210771



**UPGRADE & HAVE COMPLETE CONTROL AT YOUR FINGERTIPS**

Subsequent upgrade for Hei-VAP Expert and Hei-VAP Ultimate with Control function and the ability to control peripheral devices (vacuum and Hei-CHILL recirculation chiller)

PN 036000026







# HEI-VAP INDUSTRIAL

The Heidolph Hei-VAP Industrial large-scale evaporators are versatile and suitable for various distillation processes, ranging from standard evaporation without vacuum control to complex distillation processes with vacuum control. These evaporators prioritize safety, convenience, and cost-effectiveness in their design, resulting in several unique advantages.

By choosing Heidolph evaporators, you can distill solvents safely and efficiently, and optional automatic modules enable continuous operation for solvent distillation, even overnight and on weekends. With the Hei-VAP Industrial series, you can trust in a smooth and secure automated distillation process, significantly reducing the time spent on solvent evaporation tasks.

## SCALE UP ON DISTILL- ATION



### HIGH IMPACT DOORS

High-impact transparent PMMA doors protect the condenser and receiving flasks.



### WATER LEVEL SENSORS

The water level regulation system prevents water from spilling over the bath and potentially flooding the lab.



### ILLUMINATED GUARD HOOD

An illuminated guard hood with a glass window provides clear and visible monitoring.



### EASY LOCK FLASK ATTACHMENT

Easy-Lock flask attachment and self-aligning flask support system allow single users to exchange the flask safely.



### ENERGY SAVING

Achieve increased throughput at reduced energy consumption due to an industry-leading leak-proof vacuum.



### NRTL CERTIFIED

The Hei-VAP Industrial Large-Scale Evaporator has been tested and certified by OSHA's National Recognized Testing Laboratory (NRTL) Program.



# TECHNICAL PROPERTIES



## ROTATION SPEED

6 to 180 RPM

## HEATING CAPACITY

Up to 4,000 Watts

## TEMPERATURE RANGE

20° TO 180°C

## HEATING BATH

18 Liter (for water)/14 Liter for oil Stainless Steel AISI 316L

## MAX FLASK SIZE

20 Liters (expandable with automation)

## SUPPLY POWER

4,600 Watts - 230V Single Phase

## PROTECTION CLASS

Unit: IP20 | Panel: IP67

## SAFETY CERTIFIED

Certified by OSHA's National Recognized Testing Laboratory (NRTL) Program.

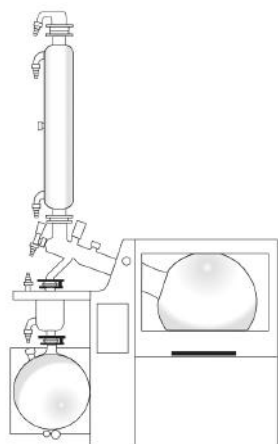
## DRIVE

EC Motor

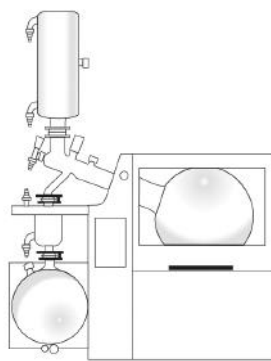
Display	7" Touch Display
Temperature Accuracy	±1°C
Overheat Cut-off Protection	110 (H <sub>2</sub> O)/210(Oil)
Automatic Heating Bath Control	Micro Processor
Indicating Range Vapor Sensor	0 to 200°C (accuracy 0.1°C)
Integrated Vacuum Control	✓
Timer	✓
Vacuum Control Program SETpressure <sup>2</sup>	✓
Vacuum Control Program AUTOaccurate <sup>2</sup>	✓
Programmable Ramps	✓
Dimensions (W x H x D)	998 x 2,225 x 694 mm
Glassware R - Single	036072000
Shorty R - Single	036072010
Glassware R - Dual	036072005
Shorty R - Dual	036072015
Glassware A - Single	036072020
Glassware AC - Dual	036072025
Glassware A1 - Single	036072400
Glassware A1C - Dual	036072402
Glassware A2 - Single	036072030
Glassware A2C - Dual	036072035
Glassware K - Single	036072040
Glassware KC - Dual	036072045



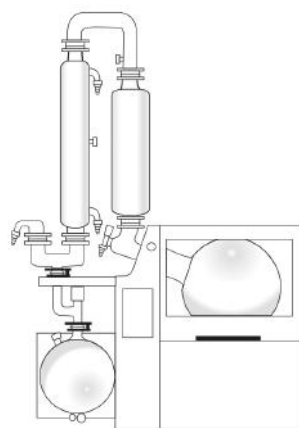
# GLASSWARE



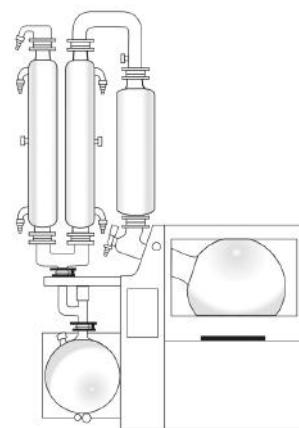
Glassware R



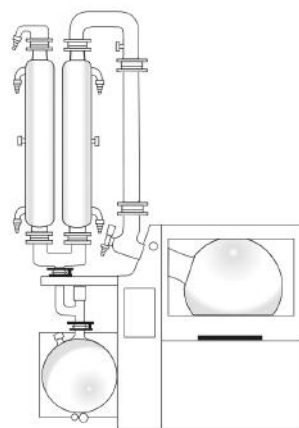
Glassware Shorty R



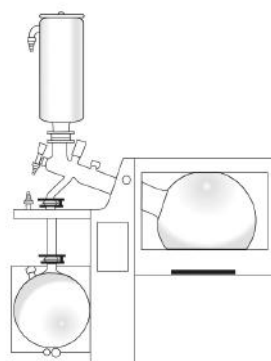
Glassware A



Glassware A2



Glassware A1



Glassware K

## GLASSWARE R

This glassware assembly includes one ascending condenser, on 20 liter evaporating flask and is recommended for all standard distillations.

## GLASSWARE SHORTY R

- Identical to glassware R, but features a condenser that is 320mm shorter.
- Distillation capacity remains the same. This assembly is ideal in laboratories for hood applications or where height is restricted.

## GLASSWARE A

This glassware assembly includes one descending condenser, one expansion vessel, one 20 liter evaporating flask, on 10 liter receiving flask and is recommended for solvents that tend to splash and foam.

## GLASSWARE A2

- This glassware assembly includes one ascending, one descending condenser and one expansion vessel, one 20 liter evaporating flask, and one 10 liter receiving flask.
- For low boiling solvents and highest recovery rates

## GLASSWARE A1

- This glassware assembly includes one ascending, one descending condenser, one 20 liter evaporating flask, and one 10 liter receiving flask.
- For low boiling solvents and highest recovery rates.

## GLASSWARE K

- Condensate trap for low boiling solvents; cooling by dry ice
- Comes with 20 liter evaporating flask and one 10 liter receiving flask.

# ACCESSORIES



## EVAPORATING FLASK

6 Liter: 036303015  
10 Liter: 036303005  
20 Liter: 036302995



## POWDER FLASK

10 Liter: 036303035  
20 Liter: 036303025



## RECEIVING FLASK

With drain valves, 10 liter (standard for all Industrial models)  
PN 036303040



## AMBER EVAPORATING FLASK

Protect your light-sensitive media with the dark color of this 20 liter evaporator flask  
PN 036302996



## HEATING BATH LIQUID

Heating bath liquid for up to 220°C (5 liters)

PN 036300941



## TUBING

Tubing set with 6 meter of vacuum and 10 meter of enforced cooling tube incl. hose clamps

16 Meters: 036303100  
By Meter: 036294800



## BASE CART

For all Hei-VAP Industrial models

PN 036303090





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# APPLICATIONS

## MINING

Many mining techniques involve using solvents to extract precious metals from mined rocks. This will involve Hydrochloric acid, Nitric Acid, and, in the end, stage aqua regia. The process of further refining the precious metals out of solvent extraction can require shipment to refining operations, leading to large hazardous shipping costs. Hei-VAP Industrial and distimatic provide a solvent-resistant, high throughput, and safe method of concentrating the precious metals within the solvent, whether to fully crash out the precious metals or to create a more reasonable volume for shipping.

## CHROMATOGRAPHY

Substance separations in the pharmaceutical, biochemistry, and agrochemical industries are typically done through chromatography. After the separation process, the chromatographic fractions are present at very high dilution. With the help of large-scale rotary evaporators, the solvent mixture is separated from the synthetic intermediates and active ingredients contained within. Hei-VAP industrial and distimatic allow for fully automating the process and thoroughly refining the solvent back to HPLC grade in cases such as methanol.

## SOLVENT RECOVERY

Many industrial-scale processes use solvents to clean, prepare, or finish products. Many of these solvents can vary in scale from standard grade to high-grade purity. The Semiconductor industry may use IPA for cleaning their printed boards, the auto industry has cleaning fluids that can be refined, and the pharmaceutical has leftover material from chromatography or equipment cleaning that can be recycled. These materials can be purified within the Hei-VAP industrial and distimatic to make large quantities of solvents and fluids reusable. This reduces waste and allows for less expenditure on new solvents.

## PLANT EXTRACTION

When extracting plant substances, large volumes of extraction solution are produced. If the end product is to be suitable for consumption later on, ethanol is often the solvent of choice. This is used in many industries, from food and beverage to essential oils, pharmaceuticals, and cannabis. To efficiently remove the solvent in a manner that also makes the solvent reusable, rotary evaporation is the most effective choice. The Hei-VAP industrial paired with the Distimatic Pro enables continuous evaporation to fit extract concentration into your workflow.







# HEI-VOLUME DISTIMATIC

Saves time. Increases throughput. Reduces costs. Dealing with large volumes does not have to be time-consuming: The Hei-VOLUME Distimatic module allows you to fully automate the filling and emptying of your Hei-VAP Benchtop or Industrial large-scale rotary evaporator.

Whether you are tight on lab space or need to increase throughput without purchasing additional rotary evaporators, the Distimatic Pro module can be added to a new or existing Hei-VAP or Hei-VAP industrial rotary evaporator. Automating your process so your chemists can focus on their chemistry and pushing your workflow into 24 hours, seven days a week.

## 24/7 NO HANDS EVAPO- RATION



### SENSOR CONTROLLED AUTOMATION

Program to begin your evaporation automation with minimal input.



### 24-HOUR AUTOMATION

Designed to work unattended, even overnight.



### TIMER CONTROLLER AUTOMATION

This an option for those who wish to fine-tune every aspect of their process.



### AUTOMATED CLEANING

A rinse cycle to enable cleaning in place



### 7-INCH TOUCH SCREEN PANEL

Easy-to-use interface to influence every aspect of your automation.



### AUTOMATIC CUTOUT

Safety Cutouts to protect equipment, operator, and chemistry.



# DISTIMATIC PROCESS

The Distimatic Pro operates through a series of sensors, valves, overpressure, and vacuum pressure to facilitate automated liquid transfer and continuously run your evaporation process.

Internal Vacuum pulls product/solvent mix into the evaporation.

The evaporation flask fills until the mixture reaches the sensor.

Evaporation begins

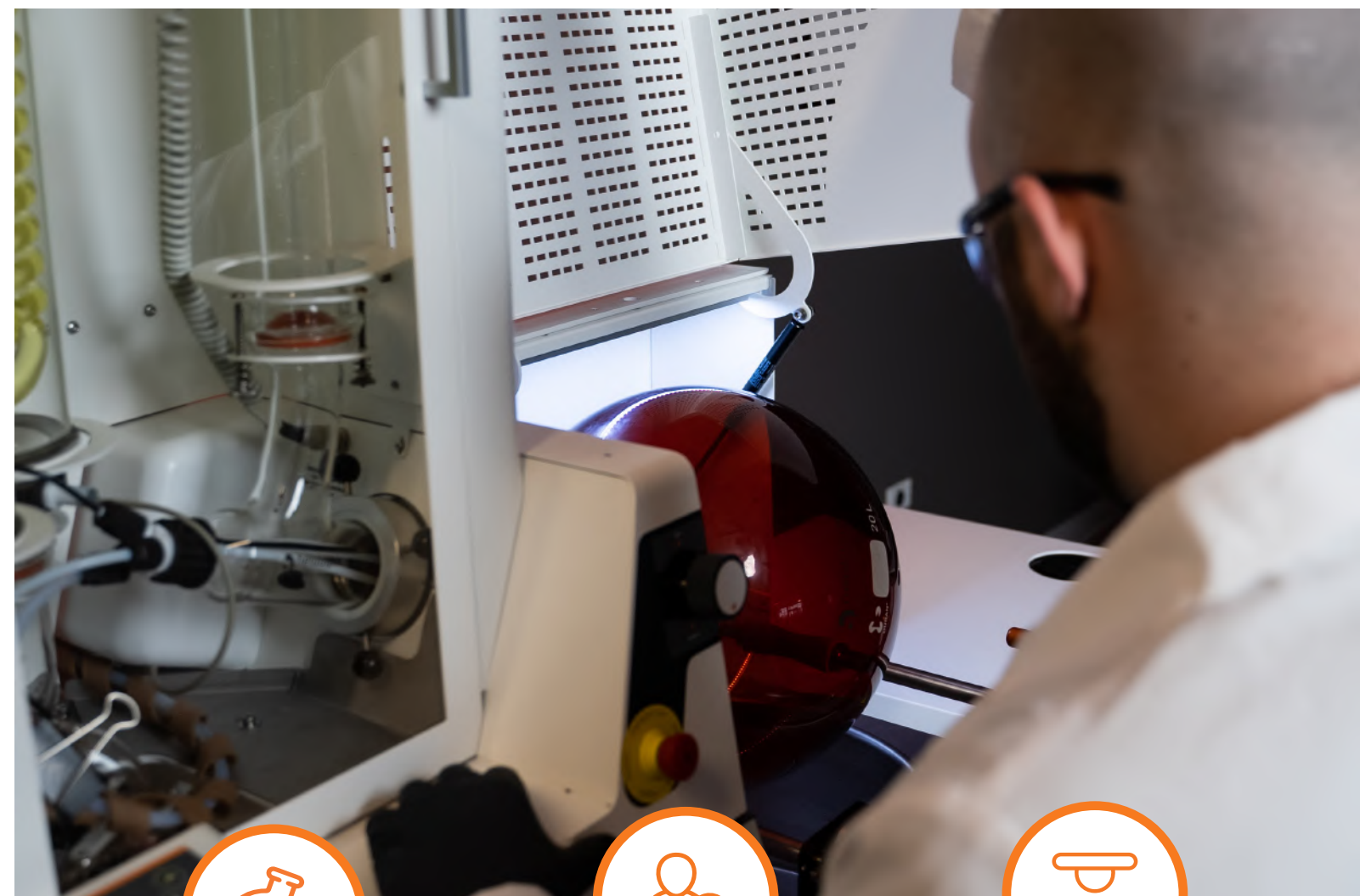
- Mixture refills when the level drops below the sensor
- Evaporated solvent gets collected in the valve matrix below the condenser.

When the valve matrix fills, overpressure transfers solvent into a container.

The process repeats until all solvent is removed from the product at a predetermined amount, until we have no more material to feed, or until the product level without solvent reaches the level sensor.

The overpressure process begins inside the evaporator to remove residual product from the evaporator into a container of your choice.

Process Repeats.



## REDUCED WORK LOAD THROUGH AUTOMATION

The Hei-VOLUME Distimatic automates critical tasks, such as flask filling, distillate drainage, and residue overpressure handling. They also provide safety with an automatic shutdown and an automatic cleaning program for hassle-free maintenance, making lab work more efficient and convenient.



## USER-FRIENDLY INTERFACE & PROGRAMING

The Distimatic excels in user-friendliness, featuring an intuitive interface with push rotary knobs, a 7" touchscreen, and guided menu navigation for easy parameter setup and storage. The process flow display uses pictograms and colors for precise progress tracking, and a removable control panel allows remote adjustments.



## EFFICIENCY & SAFETY THROUGH SMART SENSORS

The Distimatic's smart sensors improve lab efficiency and safety. They maintain constant conditions for increased distillation rates, offer versatile operation modes, and allow unattended 24/7 use. These systems are space-saving and cost-effective compared to more significant alternatives.

	Distimatic Industrial Without Drainage of Residue	Distimatic Industrial Including Drainage of Residue
Compatibility Rotary Evaporators	Hei-VAP Industrial	Hei-VAP Industrial
Separate Control Panel	✓	✓
Display	Digital	Digital
Automatic Refill of Sample	✓	✓
Automatic Discharge of Condensate	✓	✓
Automatic Discharge of Residue	N/A	✓
Power Input Control Box	50 VA	50 VA
Noise Level	< 80 dB (A)	< 80 dB (A)
Total Power Multiple Switched Socket	3,500 W	3,500 W
Permissible Ambient Conditions	5 - 31° C at 80% rel. humidity 32 - 40° C decreasing linearly up to max of 50% rel. humidity 0 - 2,000 m a.s.l., Contamination level 2, Over-voltage Category 2	5 - 31° C at 80% rel. humidity 32 - 40° C decreasing linearly up to max of 50% rel. humidity 0 - 2,000 m a.s.l., Contamination level 2, Over-voltage Category 2
Protection Class	IP 54	IP 54
A Glassware   R Glassware	036064400   036064200	036064500   036064300

### DISTIMATIC BENCH-TOP INCLUDING DRAINAGE OF RESIDUE

Compatibility Rotary Evaporators	Hei-VAP	Power Input Control Box	50 VA
Separate Control Panel	✓	Noise Level	< 80 dB (A)
Display	Digital	Total Power Multiple Switched Socket	3,500 W
Automatic Refill of Sample	✓	Permissible Ambient Conditions	See Above
Automatic Discharge of Condensate	✓	Protection Class	IP54
Automatic Discharge of Residue	✓	PN	036294902



“  
With Heidolph you can  
tell that it’s a premium  
product with it’s quality.  
With the features, with  
how user-friendly it is.



# VACUUM PUMPS

## VALVE-REGULATED VS. RPM-REGULATED

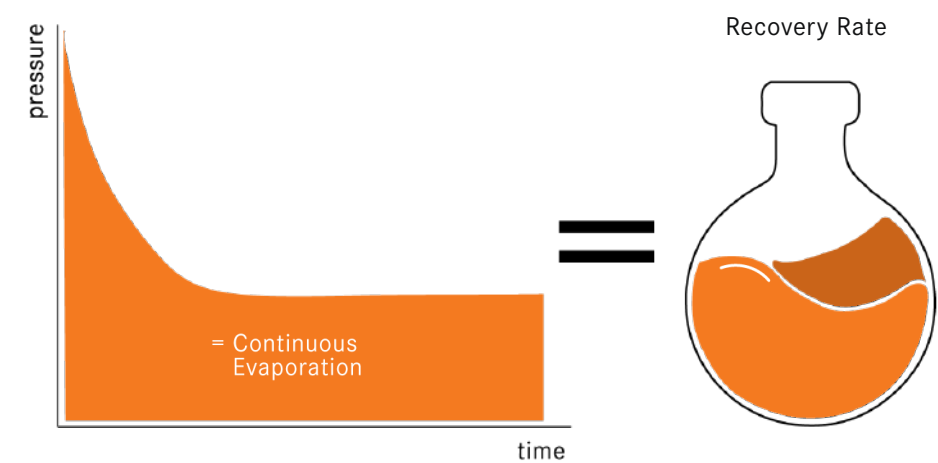
### Valve-Regulated Vacuum Pumps

- ✓ All components that come in contact with media are made from chemically resistant fluoropolymer.
- ✓ The durable PTFE design guarantees a superior diaphragm lifespan.
- ✓ The head cover and clamping disc have a stable core made from metal that offers unsurpassed long-term performance.
- ✓ The direct pump drive (without belt) has no wear parts, is exceptionally quiet, and creates a very low vibration environment.
- ✓ The physically optimized glass ballast valve prevents condensate collecting in the pump.

### RPM-Regulated Vacuum Pumps

- ✓ Highest distillation rates possible and reducing process time by 30% and solvent recovery of up to 99%.
- ✓ Minimized runtime saves energy and significantly increases the lifespan of the diaphragm.
- ✓ Guarantees minimum noise and vibrations during operation
- ✓ Achieve the most precise vacuum
- ✓ Once the required vacuum is reached, the pump automatically stops and reliably keeps the vacuum at the desired level.

### Fully Automatic Control with Speed Adjustment



## VALVE-REGULATED



ROTAVAC  
VALVE TEC

Ideal for low to medium boiling point solvents, offering precise vacuum control via valves or manual controllers. Essential with Hei-VAP Control models for enhanced performance, it's a must-have for researchers working with volatile solvents.



ROTAVAC VALVE  
CONTROL

Efficiently handles multiple rotary evaporators with flexible vacuum control via valves or manual controllers. Enhance compatibility and efficiency with Hei-VAP Control models using a vacuum valve. Ideal for labs needing precise vacuum control.

Diaphragm Pump

Two-Stage

Two-Stage

Suction Capacity

0.75 m³/h

2.0 m³/h

Ultimate Vacuum

12 mbar

7 mbar

Combinable with  
Condenser



Power Input

80 Watts

180 Watts

Weight

6.0 kg

12.8 kg

Dimensions  
with no condenser

145 x 315 x 185 mm

195 x 245 x 310 mm

PN

036394780

036302830

# RPM-REGULATED



## ROTAVAC VARIO TEC

Tailored for Hei-VAP Control models, enabling direct control through the rotary evaporator. It's an ideal choice for solvents with low to medium boiling points, simplifying and enhancing efficiency in various laboratory processes.



## ROTAVAC VARIO CONTROL

For Hei-VAP Control models, it enables efficient distillation of high boiling point solvents at lower heating bath temperatures, even with the gas ballast valve open. Ideal for precise and efficient distillation.



## ROTAVAC VARIO PUMPING UNIT

A versatile standalone unit with a vacuum pump and controller for precise vacuum control, preventing sample loss. It automates vacuum supply based on process parameters, freeing up time for critical lab tasks.



## ROTAVAC 20

This vacuum system can be applied in many fields to evacuate, evaporate, and pump out gases and vapors. Thanks to the emission condenser, it is possible to achieve a chemical recovery of almost 100%.

Diaphragm Pump

Two-Stage

Three-Stage

Three-Stage

Two-Stage

Suction Capacity

1.0 m³/h

1.7 m³/h

1.7 m³/h

3.0 m³/h

Ultimate Vacuum

12 mbar

2 mbar

5 mbar

2 mbar

Combinable with Condenser



Power Input

160 Watts

160 Watts

160 Watts

250 Watts

Weight

4.3 kg

5.4 kg

6.0 kg

19.9 kg

Dimensions with no condenser

156 x 236 x 196 mm

167 x 236 x 196 mm

193 x 299 x 299 mm

350 x 275 x 495 mm

PN

036308100

036308090

036308310

036304775

# FOR INDUSTRIAL



## VACUUM VALVE

It is required for Hei-VAP Control models with valve-controlled vacuum pumps. It can be positioned for easy access and cleaning, not required for a manual vacuum pump.

PN 036308071



## MANUAL VACUUM CONTROLLER

Control the house vacuum or any other vacuum source manually with a pressure range of 0 to 1,020 mbar.

PN 036308000



## HEI-VAC CONTROL

Creates accurate vacuum control with an integrated ceramic diaphragm, vacuum sensor, regulation valve, and venting valve. Ready for use with power supply and user manual.

PN 036308001



# HEI-CHILL CHILLERS



HEI-CHILL  
250



HEI-CHILL  
350



HEI-CHILL  
600



HEI-CHILL  
1200



HEI-CHILL  
PELTIER

Display	7-Segment, LED	7-Segment, LED	7-Segment, LCD	7-Segment, LCD	2.83" Touch Display
Temperature Range	-10° to +40°C	-10° to +40°C	-10° to +40°C	-10° to +40°C	-10° to +70°C
Thermal Fluid Volume	2 to 4 Liters	4 to 7 Liters	4 to 8 Liters	7 to 14 Liters	5.5 Liters
Cooling Capacity at 20°C	250 Watts	350 Watts	600 Watts	1,200 Watts	600 Watts
Cooling Capacity at 0°C	150 Watts	200 Watts	360 Watts	750 Watts	200 Watts
Cooling Capacity at -10°C	90 Watts	120 Watts	150 Watts	400 Watts	100 Watts
Temperature Accuracy	±0.5K	±0.5K	±0.5K	±0.5K	±0.05K
Pump Pressure Maximum	0.35 mbar	0.35 mbar	1.3 mbar	1.3 mbar	1.1 mbar
Pump Flow Maximum	9 Liters/min	9 Liters/min	20 Liters/min	20 Liters/min	3 Liter/min
PN	036306516	036306517	0363006518	036306519	036306533

# LARGE-SCALE EVAPORATION



## HEI-CHILL 35

Display	Color LED Touchscreen
Temperature Range	-20° to +15°C
Thermal Fluid Volume	11 Liters
Cooling Capacity at 20°C	
Cooling Capacity at 0°C	
Cooling Capacity at -10°C	
Temperature Accuracy	±1.5K
Pump Pressure Maximum	4 mbar
Pump Flow Maximum	30 Liters/min
PN	07000009



**RS 232 CABLE**  
To connect a Hei-CHILL to a Hei-VAP Control model  
PN 036306014



**COOLING TUBE**  
For cooling inside Ø 8 mm, sold by meter, for operating temps -20° to 60°C  
PN 036306512



**KRYO-30 LIQUID**  
Non-flammable thermal fluid for Hei-CHILL recirculating chillers  
10 Liters: 036306513  
20 Liters: 036306507

# NOTES





## INTERNATIONAL

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