

HBX EVAPORATION GUIDE



Benchtop Evaporation

Our new generation of Hei-VAPs raise efficiency, flexibility and performance to a new, unprecedented level – allowing you to spend less time evaporating, and more time on your application. Hei-VAP achieves up to 40% higher evaporation rates due to its new XL condenser, vacuum seal, and ventilation valve.



Hei-VAP

5L Benchtop

Leading Safety Standards

- If bath temperature overshoots by 5°C and your water bath runs dry, **heating will be switched off automatically**
- **To protect you from splashes and scalding**, the Hei-VAP heating bath features an integrated pour spout
- To **protect** your heating bath against **short-circuits and corrosion**, the cable coupling complies with **IP 67**

Superior Ease of Use

- The detachable operating panel enables **safe handling from outside closed fume hoods**
- Ventilation and replenishment valves replace ground joints, **enabling maximum tightness and grease-free operation**
- The swing clamp allows easy **removal of sticking evaporating flasks** from the vapor tube, **in just seconds**

Reduced Cost of Ownership

- The **highly resistant PTFE vacuum seal** with FKM O-ring achieves maximum tightness and **reduces spare part budgets**
- Maintenance-free motors **reduce repairs and down times** significantly to ensure years of continuous operation
- The **patented clamping sleeve** ensures performance and longevity of **your vapor tube**

Up to 40% Higher Evap Rates

IP 67

Patented Clamping Sleeve

Easy-Clip

5 L Benchtop Evaporation

Optimized Packages for Benchtop Ethanol Extraction



HBX Green | 036400002

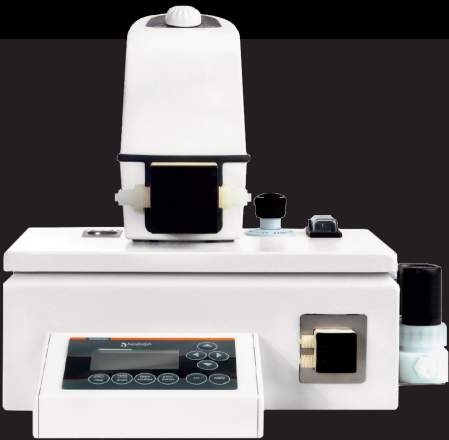
	Hei-VAP Ultimate		Hei-CHILL 600		Valve Tec Vacuum Pump	
Product Number	036000020		036306518		036304780	
Specs	Evap / Rec Flask Size	5L / 3L	Cooling Capacity	600 W	Ultimate Vac	12 mbar (9 torr)
	Glassware Config.	G3 XL	at -10°C		Max Pump Speed	.75 m³/hr
Dimensions (in) (LxWxH)	15.5 x 25 x 36		9.5 x 23.5 x 19		5.75 x 12.5 x 6.6	
Electrical Reqs	115 V 12 A 60 Hz		115 V 12 A 60 Hz		115 V 12 A 60 Hz	

HBX Platinum | 036400005

	Hei-VAP Ultimate		Hei-CHILL 600		Vario Tec Vacuum Pump	
Product Number	036000020		036306518		036308100	
Specs	Evap / Rec Flask Size	5L / 3L	Cooling Capacity	600 W	Ultimate Vac	12 mbar (9 torr)
	Glassware Config.	G3 XL	at -10°C		Max Pump Speed	1 m³/hr
Dimensions (in) (LxWxH)	15.5 x 25 x 36		9.5 x 23.5 x 19		6.1 x 9.2 x 7.7	
Electrical Reqs	115 V 12 A 60 Hz		115 V 12 A 60 Hz		115 V 12 A 60 Hz	

Continuous 24/7 Evaporation

Save time by using the automatic module Distimatic and distill large volumes in a continuous and unattended manner overnight and during the weekend.



24/7 Operation



Automatic Discharge of Condensate



Automatic Refill



No Bumping



Automatic Drainage of Residue

For use with
Benchtop and Industrial Evaporation

Industrial Evaporation

Scaling-up to Hei-VAP Industrial is simple. With Hei-VAP Industrial's unique integrated evaporating flask support system, one person operation is possible and removing the flask takes just minutes. Heidolph will professionally install your equipment and ensure you are able to utilize Hei-VAP Industrial to its maximum potential.



Hei-VAP

20L Industrial

3 Year Warranty

20 L Industrial Evaporation

Optimized Packages for
Industrial Ethanol Extraction



HBX A1C Industrial | 036400026

	Hei-VAP Industrial		Base Cart	Tube Set	Rotavac Vacuum Pump		Hei-Chill 5000	
Product Number	036072402		036303090	036303100	036304775		036400026	
Specs	Heating Bath Volume	24 L H2o 22 L Oil	For all Hei-VAP Industrial Models	ID 8 mm OD 13 mm	Ultimate Vacuum	2 mbar (1.5 Torr)	Max. Chiller Water Pressure	46.41 psi
				18 Hose Clamps	Suction Capacity	3 m³/hr (50 Lpm)	Cooling Capacity at -10°C:	1700 W
	Evap / Rec Flask Size	20L / 10L					Includes	2x 20L water glycol fluid 2x 1/2 bar adapters w/ 3/4 screw cap, 3x cooling water tubes 4x tube clamps
	Glassware Config.	A1C					050000110	
Dimensions (in) (LxWxH)	With Base & Cabinet 38 x 27 x 85		48 x 35 x 35	16 meters	13.7 x 10.8 x 19.5		22.5 x 25.5 x 38	
Electrical Reqs	220V / 20 A / 60 Hz Single Phase Note: Hei-VAP Industrial and Chiller need to be on independent circuits				120V / 60 Hz / 15 A Single Phase		220V / 60 Hz / 15 A 3 Phase Includes 2 buck boost transformers	

HBX A1C Industrial | 036400025

"	"	"	"	"	Hei-Chill 3000	
					Cooling Capacity at -10°C:	1030 W
					Electrical Reqs	Single Phase

Leading Safety Standards

- A **temperature sensor** powers off the bath in case of any uncontrolled heat-up
- Excellent user safety** is achieved by a transparent high impact PMMA door covering the main glassware assembly

Superior Ease of Use

- Intuitive touch-screen control** for easy operation
- Easy Lock flask attachment for **quick and easy flask changes**
- Self-aligning flask support** allows for one-person operation

Reduced Cost of Ownership

- All components to control vacuum **come standard**
- Increased throughput at reduced energy consumption** due to an industry leading vacuum seal

Removing Bulk Ethanol from Cannabis Oil with 20L Hei-VAP Industrial

In the following example, the total volume of Ethanol-cannabis oil, was 94 liters containing 1.5 kilos of hash oil. The solution of cannabis oil in ethanol was placed in a carboy by the base of the Heidolph 20L Industrial Rotary Evaporator. The feed tube was placed in the carboy and all systems were turned on.

The Process

- Set the hot water bath to 60 °C
- Set the flask rotation speed to 80 RPM.
- Set the pressure in the vessel to 100 millibar.
- Set the chiller temp to -10 °C and pressure to 1 bar.
- Once the bath is up to temperature, the vacuum is established and the chiller is cold, you can begin. Loosen the feed valve stopcock to allow for your solution to be drawn up through the feed tube into the evaporating flask. Fill the evaporating flask with between 5 – 10 Liters. Then close the feedtube stopcock.
- At this point condensation will form in the condenser coils and you will begin to remove solvent from the evaporation flask. Proceed until the viscosity has changed and the drip rate on the condenser slows. Field tests indicate that this will take less than an hour for 10 Liters. In an 8-hour period, more than 100 Liters was easily evaporated.
- Remove the condensate and continue evaporating until the condensation has nearly stopped completely. At this point the oil is ready for trace solvent removal in a Cascade Vacuum Oven or in a Heidolph Hot Plate with Overhead Stirrer.



Ducted/Total Exhaust Safety Enclosures

Operator exposure to chemical fumes and vapors has long been a concern when using a rotary evaporator. Many laboratories simply place the rotary evaporator into a standard exhaust hood, which takes up valuable lab space, that could be used for other critical manipulations. These enclosures introduce the most user-friendly safety interface for use with both Industrial and benchtop evaporators.



Self-filling
water bath



Touch-Panel



One-person flask
changes



Transparent
PMMA Doors

Testimonials



"For a company like Moxie where your success is predicated on being best in class, you have to use best in class equipment to go with that... Heidolph is by far the most luxury form of laboratory equipment available."



"When it comes to building my business it's always been about quality since the very beginning. That's one of the main reasons I began growing 12 years ago, I wanted a quality product that I could trust. When it came time to purchase equipment for our extraction lab I wanted the same, nothing but the best. After a few months of research, and speaking with some of my respected colleagues it was made clear, Heidolph was just that. Heidolph is leading the industry with the highest standards, performance, quality and some of the best customer service in the game. It's beyond a great investment, it's a partnership that will ensure the highest quality outputs for years to come."



"At Cascade, we provide all your extraction needs under one roof. Cascade is proud to partner with Heidolph North America because of their expert advice in the field of rotary evaporation, along with their German made quality equipment. Our customers demand a product that will allow them to perform at their best, which is why Heidolph is our exclusive supplier for rotary evaporators, after all better equipment leads to better medicine."



"We chose Heidolph for their top of the line construction and quality. Large scale cultivation requires large scale processing and durability of equipment. Professional Lab grade equipment for our "growing" industry."



Heidolph North America | [HeidolphNA.com](https://heidolphna.com)

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