## Mash/ Sake / Brandy / Gin / Whiskey Combined with reduced pressure / normal pressure

# Multi-stage Vacuum Distillation Equipment Type



It is characterized by high vacuum, high-efficiency condenser, split

type receiving tank and good cleanability. The multi-stage cap tray

### is integrated to support high-concentration distillation.

Stable distillation operation is possible by automatic distillation temperature control (optional).

The condenser is a shell and tube type, which greatly improves efficiency and good cleanability.

It is especially effective in "mash distillation".

Since the design safety factor is high, there is no reinforcement ring of the kettle as is usually seen, and it is difficult to get dirty.

Since a high vacuum is achieved, low-temperature distillation (40° C or lower) can obtain a more refreshing shochu without a burning smell.

Atmospheric distillation is possible with only a few options.

We have a wide variety machines from 50 liters of test machines to large machines of 10.000 liters or more.

By adding a cap tray and our original reflux system to the conventional SE type, it is now possible to efficiently harvest an average of 50% or more distilled spirits in a single distillation, even if the raw liquor has a low alcohol content of 10% or less.

Compared to conventional machines, which required distillation at least twice, it is possible to save more than 30% of steam energy.



type-VD-1000-X

### Short description

Since it can be distilled under reduced pressure (-0.09Mpa), it boils at a low temperature of 40° C or less, and shochu with a magnificent flavor without burning smell or oil can be obtained with simple operations.

The operation time is 3 hours after the start of distillation (including preparation, etc.), and for example, from mash with an alcohol content of 15%, shochu with an average alcohol content of 50% or more can yield about 200 liters (an example of the VD-1000-X model. It depends on the terms and conditions).

It is possible to increase the "reflux ratio" of low-concentration alcohol raw liquor and concentrate up to a maximum alcohol content of 85%.

Since a partition plate can be attached to the inside of the receiving tank to separate the first and second retains from the main retainer, there is no need for two receptacles and does not take up much space. The carving ratio can be changed in advance (standard is 3:2).

The simple design makes it easy to clean both inside and outside, and it is highly functional and low-cost.

Copper demisters and bubble caps can produce mellowness due to catalytic action.

We also provide various information on enzyme utilization technology and refrigeration filtration after distillation.



Internal split type receiver and liquor detector

Pure copper special cap tray

# Versatile options

- Variable pressure reduction mechanism by inverter (the degree of decompression can be changed freely)→In other words, distillation is possible at the target temperature range
- Atmospheric distillation is also possible (live steam blowing nozzle, degassing)
- Mash distillation is also possible (rotary cleaning nozzle, mesh demister)
- Cooling water savings: Cooling tower and circulation pump
- Evaporative connecting pipes and condensation are made of copper (Appearance & Catalysis)
- Vacuum degree analog control (using high-precision pressure sensor)
- A wide range of liquor can be tested with two types of liquor meters.
- Automatic control of the steam valve for programmatic control of the liquid temperature
- Attach a stirrer (for highly viscous liquids) to the evaporation kettle
- Attaching fillings such as Raschig rings and bubble cap trays to the evaporation column to increase the return effect (Right photo)
- Can be used as a fermentation tank



2 points alcohol meter

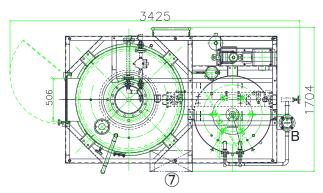


Pure copper turbofins and wire mesh demister



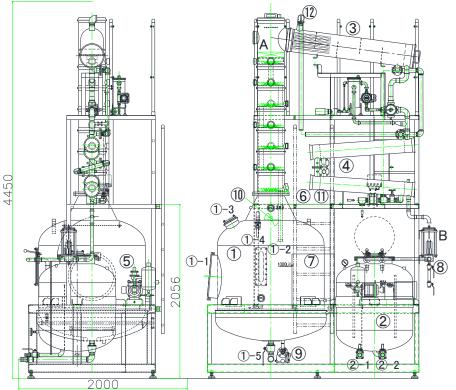
# Vacuum distillation equipment type VD-X

- \* We will also make custom models other than standard sizes
- \* Both the first and second condensers use a shell and tube type, which has excellent cleanability and efficiency
- \* All models can be fractionated (Head, Heart, and Tails)
- \* We can also handle special specifications (material, heating method, repatriation/purification, etc.)
- \* Thanks to the rectification shelf and automatic reflux control, even low-concentration alcohols can be concentrated up to 85% in a single distillation.





Boiling state inside the kettle



type VD-1000-X					
No.	Name	Materials	Qty		
1	Distillation Kettle	SUS304 SS400	1		
1)-1	Manhole(∮400)	SUS304	1		
1)-2	Viewing Window		1		
1)-3	Light Window		1		
1)-4	Undiluted Inlet		1		
1)-5	Waste Outlet		1		
2	Split Receiving Vessel	SUS304	1		
<b>2</b> -1	Outlet for Head,Tail		1		
<b>2</b> -2	Outlet for Heart		1		
3	First Condenser	SUS304	1		
4	Second Condenser	SUS304	2		
(5)	Vacuum Pump		1		
6	Multi-layer Work trestle	SS400	1		
7	the Control panel		1		
(8)	Sample Cock		1		
9	Drain Trap		1		
10	Shower Nozzle	SUS304	2		
(11)	Cooling water Inlet				
(12)	Cooling water Outlet				
~Optional Accessories~					
Α	Wire Mesh Demister	COPPER	1		
В	Alcohol Meter		1		

### Summary

Specifications/Model (SE type)	VD-1000-X	VD-2000-X	VD-3000-X
Throughput(L/1time)	1000	2000	3000
Steam(kg/h)	150	300	450
Power Consumption (kW 200V)	1.5	2.2	3.7
Gooling water(ton ∕h)(below 15°C)	2.7	5.3	7.8
External dimensions	3500*2000*4450H	4300*2250*5400H	4800*2500*6000H

■Due to product improvement, there is a possibility of specification change without notice.

Design/Production/Distributor

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