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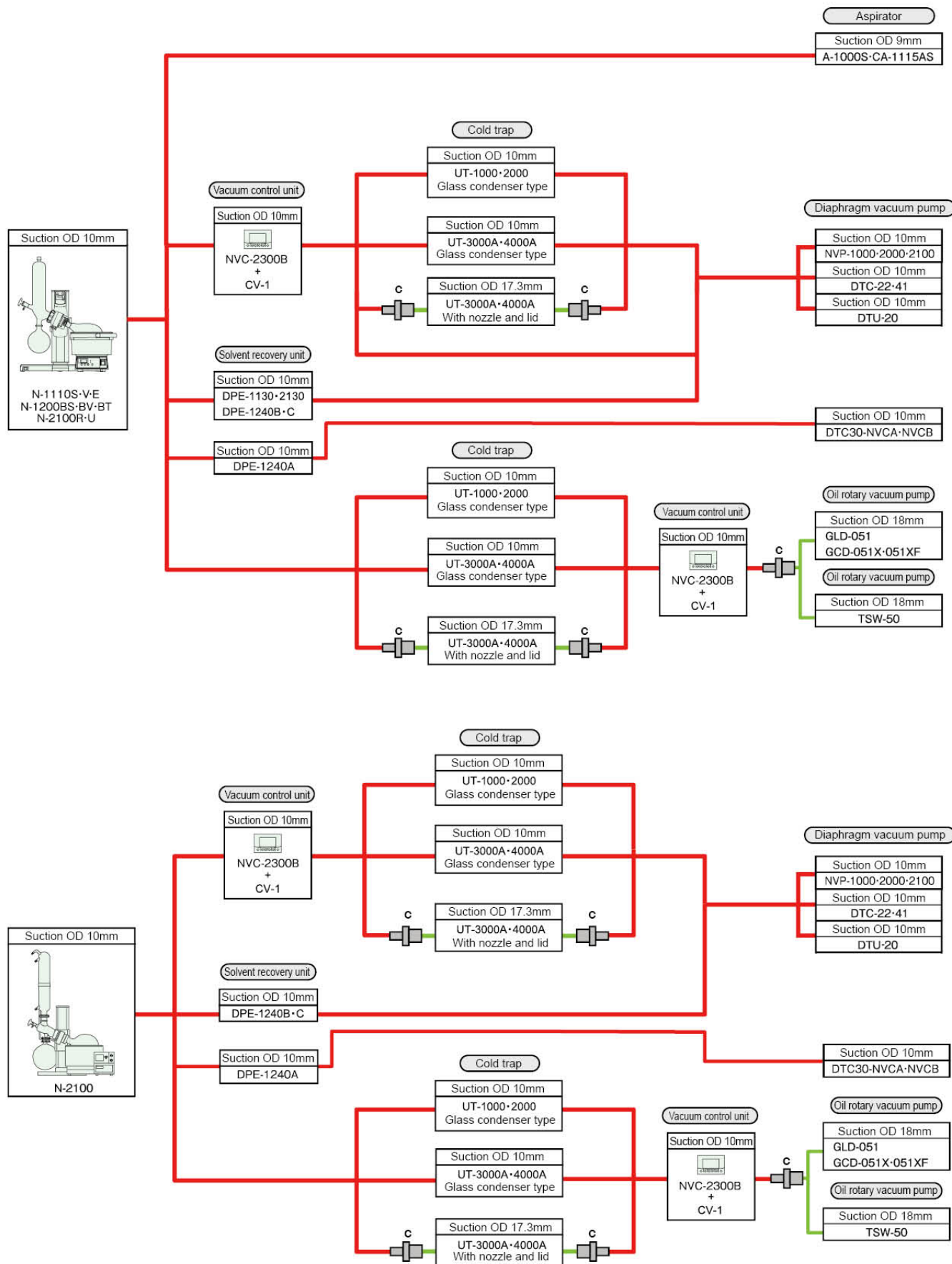
Vacuum Pump & Aspirator

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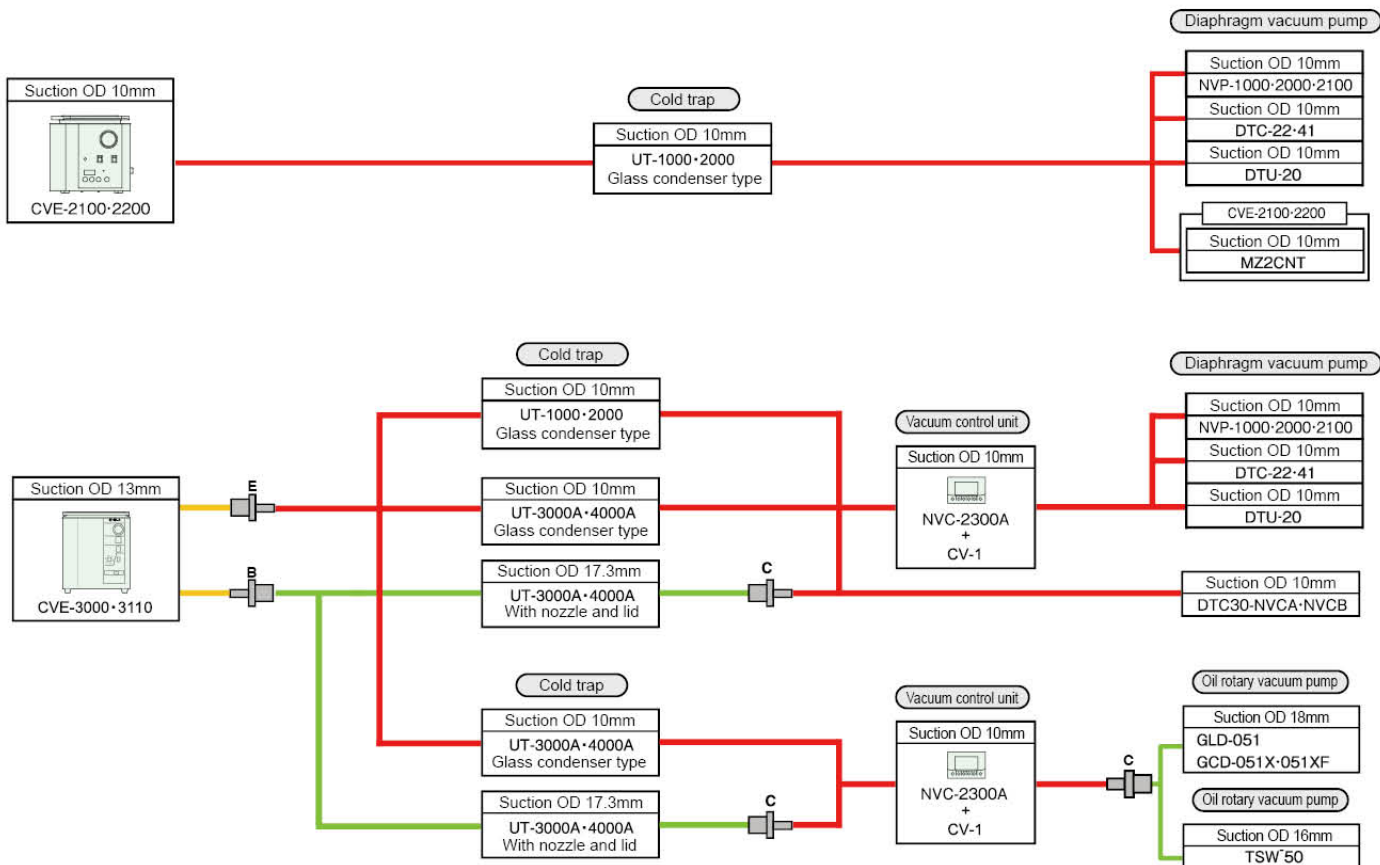


System combination

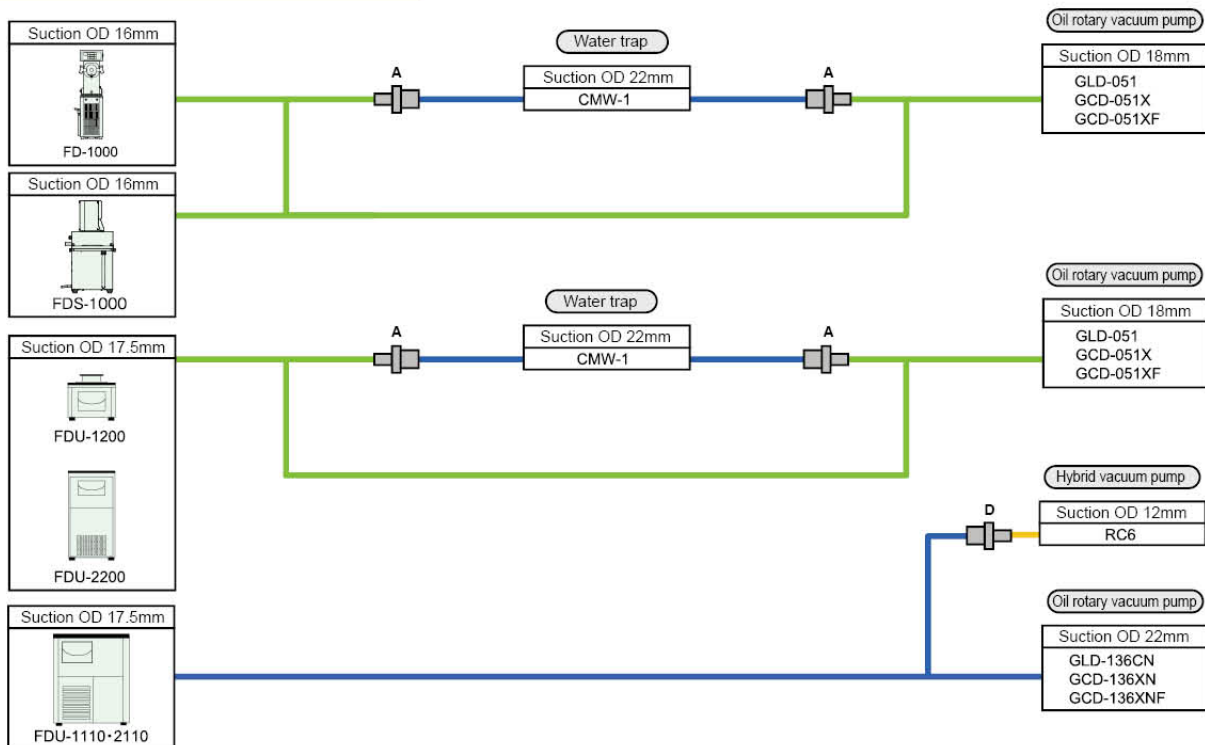
System with rotary evaporators



System with centrifugal evaporators



System with freeze dryer



Rotary Evaporator 1

Vacuum Pump & Aspirator 2

Organic Synthesizer 3

Freeze Dryer, Spray Dryer 4

Shaker 5

Stirrer 6

Tube Pump 7

Low Temperature Cooler 8

Cold Trap 9

Constant Temperature Bath 10

Incubator 11

Oven 12

Fermentor 13

Diaphragm Vacuum Pump NVP-1000•2000•2100

Corrosion proof, dry vacuum pump made wholly of Teflon[®], and Karlez[®].



NVP-1000

NVP-2000

NVP-2100

Features

- NVP-1000: 20L/min, 10hPa standard type
NVP-2000: 30L/min, 10hPa large capacity type
NVP-2100: 20L/min, 2hPa high vacuum type suitable for high boiling point sample evaporation.
- Compact, space saving with carrying handle.
- Dry type vacuum pump which does not require water or oil.
- Condenser for solvents recovery is available (Option).
- Suction and exhaust valve are made of Karlez[®] and diaphragm head is made of Teflon[®] (PTFE).
The unit is suitable for exhausting corrosive gases.

System Example



Evaporator
Low temperature circulator
Solvent recovery unit
NVP

Specifications

Product name	Diaphragm Vacuum Pump		
	NVP-1000	NVP-2000	NVP-2100
Model	266009/266002	266019/266012	266029/266022
Cat. No.	266009/266002	266019/266012	266029/266022
Evacuation speed (High•Low)	30L/min•20L/min	40L/min•30L/min	30L/min•20L/min
Ultimate vacuum	10hPa (7.5Torr)		2hPa (1.5Torr)
Safety function	Motor malfunction detector		
Motor	90W		
Cylinder	2 step	2 step x 2	4 step
Suction/exhaust nozzle	OD 10mm at hose end		
Dimensions (mm) & Weight	138W x 206D x 180H 6kg	138W x 206D x 252H 8kg	
Power source	115VA AC115V/220VA AC220V	230VA AC115V/440VA AC220V	

Point!

Silencer is equipped



Noise during vacuuming is reduced.

Nozzle rotation



Suction/exhaust nozzle rotates freely to reduce fixation on piping.

Exhaust speed selection



Can select High or Low speed

Vacuum controller can be integrated



Vacuum controller can be integrated.
Two evaporators can be controlled by adding second vacuum controller.

Options



NVC-2300B

Vacuum Control Unit NVC-2300A

Cat. No. 245010

Vacuum Control Unit NVC-2300B

Cat. No. 245020

Vacuum controller mounting plate

Cat. No. 261830 (for NVC-2300A)

Vacuum controller mounting plate

Cat. No. 261840 (for NVC-2300B)



Exhaust trap set

Consisting of: Condenser, receiving flask (300mL) clamp, nozzle set

Cat. No. 261460

Condenser fixing metal

Cat. No. 262970

Pole for fixing condenser

Cat. No. 262960

System example

(For small volume multiple samples)



Product name	Model	Cat. No.
Rotary evaporator	N-1200BV-W	243200
Low temp. circulator	CCA-1112	259910
Vacuum control unit	NVC-2300B	257260
Electro magnetic valve	CV-1	196910
Vacuum controller mounting plate	NVC•B-NVP	261830
Vacuum control cable A	NC-0.5M	245110
Diaphragm vacuum pump	NVP-1000	261800
Cooling hose set OD10mm	2m x 2	244940
Vacuum Hose ID6xOD15mm	5m	119170

Oil Rotary Vacuum Pump GLD·GCD

Small sized, high-performance vacuum pump.

Highly anti-corrosive model (GCD).

With oil filtration cassette (GCD-F).

Small, high performance model (GLD).



GLD-136CN



GLD-201BN



GCD-051X



GCD-136XN



GCD-136XNF

Features

- Safety features include; Reverse flow prevention valve, Forced oil supply, Gas ballast valve, Overcurrent protection and Forced cool air circulation.
- Oil condition can be confirmed through observation window.
- GCD parts are treated by non-electrolytic coating and realize high anti-corrosion.
- GCD F series are with oil filtration cassette. Oil change is only by exchanging cassette.

Specifications

Product name	Oil Rotary Vacuum Pump			
Model name	GLD-051	GLD-136CN	GLD-201BN	GLD-201AN (200V)
Cat. No.	190840/190848	200540/200548	200560	200550
Evacuation speed (50Hz)	50L/min	135L/min	200L/min	200L/min
Ultimate vacuum	0.67hPa (5×10^{-3} Torr)			
Safety functions	Thermal protector, Reverse flow prevention valve			Reverse flow prevention
Motor	200W	400W	550W	
Suction nozzle	OD 18mm hose end	OD 22mm hose end		
Dimensions (mm)	150W x 390D x 247H	170W x 478D x 256H	170W x 506D x 256H	170H x 505D x 256H
Weight	13.9kg	27.0kg	29.0kg	26.0kg
Power source	560VA AC100V/1.23kVA 220V		820VA AC100V	600VA AC200V 3Φ

Product name	Oil Rotary Vacuum Pump				
Model name	GCD-051X	GCD-136XN	GCD-201XN	GCD-136XN (200V)	GCD-201XN (200V)
Cat. No.	190850/190858	189160/139168	189190	189170	181980
Pumphead treatment	Special surface treatment for anti-corrosion				
Evacuation speed (50Hz)	50L/min	135L/min	200L/min	135L/min	200L/min
Ultimate vacuum	0.67hPa (5×10^{-3} Torr)				
Safety functions	Thermal protector, Reverse flow prevention valve			Reverse flow prevention	
Motor	200W	400W	550W	400W	750W
Suction nozzle	OD 18mm hose end	OD 22mm hose end			
Dimensions (mm)	150W x 390D x 233H	170W x 466D x 257H	170W x 514D x 256H	170H x 437D x 256H	170H x 482D x 256H
Weight	14kg	25kg	29kg	22kg	26kg
Power source	560VA AC100V/1.2kVA AC220V	770VA AC100V/1.6kVA AC220V	800VA AC100V	380VA AC200V 3Φ	720VA AC200V 3Φ

Product name	Oil Filtration Vacuum Pump		
Model name	GCD-051XF	GCD-136XNF	GCD-201XNF
Cat. No.	191080	191090	191100
Evacuation speed (50Hz)	50L/min	135L/min	200L/min
Ultimate vacuum	0.67hPa (5×10^{-3} Torr)		
Oil filtration cassette	2 (UFS-003)		
Oil	Oil for vacuum pump (SM-O)		

Rotary Evaporator 1

Vacuum Pump & Aspirator 2

Organic Synthesizer 3

Freeze Drier-Spray Drier 4

Shaker 5

Stirrer 6

Tube Pump 7

Low Temperature Circulator 8

Cold Trap 9

Control Temperature Bath 10

Incubator 11

Oven 12

Fermentor 13

Aspirator A-1000S



A-1000S

Options



Cooling coil CCU
(copper)
Cat. No. 119050



Cooling coil CCS
(SUS 394)
Cat. No. 119060



Nozzle with vacuum
gauge
VG-1000
Cat. No. 210550



Vacuum regulator
with vacuum gauge
VG-1000V
Cat. No. 212380

Features

- Highly recommended for use in an area lacking water service or where it is difficult to obtain constant water supply pressure.
- Transparent lid cover makes it easy to check water level in the bath. Bath structure is made to be removable and easy for cleaning.
- Precisely processed metal aspirators are equipped so that the displacement is stable.
- Since the unit circulates water in the aspirator at constant pressure by pump, it assures constant suction.
- Highly chemical resistive Teflon aspirator is also available (AS-2, AS-3, AT-1B)

Specifications

Product name	Aspirator
Model	A-1000S
Cat. No.	210539/210538/210537(240V)
Exhaust system	Pressurized circulation by water pump
Displacement	16/19L/min. (50/60Hz) with 6°C water
Safety functions	Check valve, Thermal protector
Motor	Induction motor 150W
Aspiration element	Metal aspirator x 2 (Nickel coated brass)
Bath dimensions (mm)	246W x 341D x 211H 10L
Bath material	Polypropylene
Suction nozzle	OD9mm x 2
Drain nozzle	Φ13mm
Overflow nozzle	Φ17.5mm
Dimensions (mm) & Weight	255W x 351D x 406H 6.7kg
Power source	322VA AC115V/616VA AC220V

■ Ultimate vacuum (using tap water)

Water temp.		5°C	10°C	20°C	30°C
Evaporation pressure	hPa	9.2	12.9	23.7	41.8
	Torr	6.9	9.7	17.8	31.4

AS-2・3 (Metal), AT-1B (Teflon) Aspirator

- AS-2 type can be directly hooked up to tap water.
- AS-2 and AS-3 suction air flow is Max. 13L/min. and can reach ultimate vacuum in short time.
- AT-1B is Teflon made and is strong against chemical corrosion.

Specifications

Product name	Metal Aspirator		Teflon Aspirator
	AS-2	AS-3	AT-1B
Model	AS-2	AS-3	AT-1B
Cat. No.	119100	119110	119130
Displacement	13L/min.		6L/min.
Ultimate vacuum	—		5°C 1.33hPa (10 Torr)
	10°C 16hPa (12 Torr)		10°C 20hPa (15 Torr)
	15°C 26.6hPa (20 Torr)		15°C 33.3hPa (25 Torr)
Safety functions	Check valve		
Tap diameter	ID10 x OD14mm		—
Connection to tap	Adapter	R1/4 with screw	R1/4 with screw
Suction dia. & length	OD9mm•180mm	OD9mm•140mm	OD10mm•68mm

Metal Aspirator and Teflon Aspirator



AS-2

AS-3

AT-1B