



**ALP** Co.,Ltd.  
TOKYO JAPAN

Horizontal

# AUTOCLAVE

Laboratory use

# MCY-40

series

40~127°C, Sterilizing ..... **MCY-40 & 40L** models

Sterilizing & Drying ..... **MCY-40DP & 40LDP** models



Big size for laboratory

40φ × 65cm ( 82 ℓ )

40φ × 83cm (105 ℓ )

Even 2 or 3 pcs. of 5 ℓ conical flask can be held on the drawer tray, so unnecessary to lift up the heavy basket holding many objects as vertical autoclaves.

# Full Automatic, (Water Supply), Sterilization, Warming

## 82 or 105 litres Inner Volume

Even 2 or 3 pieces of 5 l conical flask can be put directly on the lower drawer tray.

## Drawer Trays with Sliding Rollers

When you set or take out the objects, you need not reach your hand into the deep chamber, and you can put the heavy objects easily and safely on the trays drawn out of the chamber.

## 6 Operation Patterns

- A : Sterilization→Auto.exhaust ..... Glassware&tools
- B : Sterilization→Natural cooling ..... Liquid
- C : Sterilization→Natural cooling→Warming..... Culture medium
- D : Dissolution→Natural cooling (→Warming)..... Culture medium
- E : Sterilization→Auto.drain→Air circulating drying (DP models)
- F : Air circulating drying ..... (DP models)

By only pushing the start key, you can get full automatic operation.

## Soft and Safe Lid System with Safety Cover

The lid can be opened and closed securely due to the four handles and the self-closing silicone rubber gasket. Operation does not start if all handles are not placed surely in the lock-position.

## Graphic Display

The current process is indicated clearly.  
At setting, the set process is illuminated ON~OFF.

## Timed Free Steaming

This reliable automatic air exhaust system guarantees always sure sterilization under pure steam exposure.

## Adjustable Auto. Exhaust

After sterilization process, steam is slowly released or cooled by the key set especially for liquid bottles.

## Warming & Dissolving of Culture Medium

Warming after sterilization and dissolving of culture medium.

## Start-Timer by Calendar

You can set operation start by month, day, hour and minute.  
For example if you set on Friday evening, operation will start before your arrived at your office on Monday morning and you can quickly take out the objects at your work-start.

Model	MCY-40	MCY-40L	MCY-40DP	MCY-40LDP
Use	Sterilization·Warming	Sterilization·Warming	Sterilization·Drying	Sterilization·Drying
Chamber	40cmφ×65cm depth (82l)	40cmφ×83cm depth (105 l)	40cmφ×65cm depth (82l)	40cmφ×83cm depth (105 l)
Ability	Usable max. 127°C			
Elec.	AC220~240V, 1φ, 3.6kW	AC220~240V, 1φ, 4.0kW	AC220~240V, 1φ, 3.6kW	AC220~240V, 1φ, 4.0kW

Outer look



MCY-40  
(Cabinet wagon : option)



MCY-40LDP  
(Cabinet wagon : option)

# ng, Hot Air Circulating Drying, Rapid Cooling System

## Warm Air Circulating Drying through Micro-Filter (-DP models)

In order to dry the sterilized wet objects leaving the lid close, clean air is poured into the chamber through micro-filter by air pump, heated by drying heater, and exhausts out together with inner humidity. So, sterilized objects can be dried cleanly, and you can use them soon after take out. The operation is full automatic from the sterilization-start to the drying-end.



## Automatic Water Supply System (Option)

Instead of troublesome check and manual supply of water at every operation-start, proper quantity of water is automatically supplied, by means of the water level sensor in the chamber and the supply controller, through the water supply hose from distilled or soft city water faucet.

Even when the chamber is empty of water for cleaning or inspecting its bottom and the start-key is pushed, the heater is operated only after water is supplied to the proper level.

Especially on pattern E, you can get great labor-saving if this supply system will be adopted, because water is drained out at every operation from sterilization to drying.

## Pre-heat System (Option with auto.water supply)

In order to complete required sterilization in shorter time, this pre-heat system keeps always the chamber at 60°C and shorten much the time from sterilization-start to arrival at the set-temperature.

## Rapid Cooling System (Option)

...greatly shorten the take-out-time

In case of sterilizing bottles of culture medium, natural cooling takes long time. The cooling fans operate after the sterilization-end, and force the chamber and bottles to cool down to 80°C, then they can easily be taken out. It takes half shorter time than natural cooling.

## Safety

- ① Highly reliable chamber and lid  
Shiny polished SUS-304 stainless steel chamber and pressed lid with reasonable reinforcements, and passed through water pressure test (0.36 MPa...twice as high pressure as safety valve pour-out).
- ② In case of abnormal conditions or faults, the safety devices operate, cut electricity source and exhaust the pressure out.  
Water lack, over pressure, abnormal of lid lock system or sensor trouble etc, are indicated on the panel by Er.-signal and electronic sound.
- ③ Heat protect cover of the lid
- ④ Compliance with EMC

Safe and easy to work

## Drawer Trays with Sliding Rollers

When you set or take out the objects, you need not reach your hand into the deep chamber, and you can put the heavy objects on the trays drawn out of the chamber directly, easily and safely. (You need not lift up the heavy basket holding many objects as vertical autoclaves.)

Every tray stops at this side stopper and even then, it is designed strong enough for heavy sterilized objects. And also, as it can be taken out of the chamber, you can use this autoclave for many purposes as shown below.

For 5 ℓ conical flask (only the lower tray)



5 ℓ conical flask...2 (3) pcs. can be held  
3 ℓ conical flask...3 (4) pcs. can be held

Size of tray: Lower W24×D61 (79)×H3cm  
Middle W30×D66 (84)×H3cm  
Upper W36×D61 (79)×H3cm

For vial bottle (the lower & middle tray)



500mℓ vial bottle...20 (28) pcs. can be held  
1 ℓ conical flask...8 (12) pcs. can be held

Recorder & floating sensor for sterilized objects : option

For many small objects (2~3 trays)



100mℓ conical flask...85 (100) pcs. can be held

( ) : for MCY-40L

Lower & Upper trays are with sliding rollers.

		MCY-40	MCY-40L	MCY-40DP	MCY-40LDP
<b>Chamber</b> (inner dia×depth)		40φ×65cm (82 ℓ)	40φ×83cm (105 ℓ)	40φ×65cm (82 ℓ)	40φ×83cm (105 ℓ)
<b>Ability</b>	<b>Usable max. press.</b>	0.16MPa			
	<b>Usable max. temp.</b>	127°C			
	<b>Sterilization</b>	40~127°C			
	<b>Warming &amp; dissolving</b>	Warming : 40~60°C, Dissolving : 40~99°C			
	<b>Timer</b>	Sterilization, Dissolving : 1min.~10hrs.00min. Warming : 1min~48hrs.00min. Drying: 1min~99hrs.00min.			
<b>Operation controller</b>	<b>Controller</b>	Microprocessor controller , graphic display Temperature···3digits, PID control Timer···2digits hours : 2digits minutes, down count (Temperature/Time integration system)			
	<b>Operation pattern</b>	A : Sterilization → Automatic exhaust B : Sterilization → Natural cooling C : Sterilization → Natural cooling→Warming D : Dissolving → Warming		} ······ Exhaust - start after sterilization is adjustable by temperature set	
		—————		E : Sterilization → Drain → Air circulating drying F : Air circulating drying	
	<b>Operation</b>	(Automatic) water supply→Start key→Auto. air exhaust→Sterilization→(Drying)→Completion···full automatic			
	<b>Start timer</b>	Able to set the operation-start by calendar···month, day, hour and minute.			
	<b>Ster.system</b>	<b>System</b>	Saturated steam generating system by stainless pipe heater & air exhaust device		
<b>Air exhaust device</b>		Electronic & magnetic system (Temperature & time free steaming system)			
<b>Drain valve</b>		Automatic magnetic valve (DP models) & manual valve			
<b>Drying.system</b>	<b>System</b>	Hot air circulating by drying heater and air pump			
	<b>Micro filter</b>	————— 0.2μm cartridge HEPA filter			
	<b>Drying Temp.</b>	60~180°C adjustable (standard···130°C)			
<b>Option</b>	<b>Auto. water supply</b>	Automatic water supply system from distilled or soft city water faucet by level sensor & controller			
	<b>Pre-heat system</b>	To shorten the come-up time, setable at 55~60°C. Provided only with auto. water supply			
	<b>Rapid cooling system</b>	Chamber cooling system by 1~2 fans			
<b>Safety</b>	<b>Safety devices</b>	Over pressure safety switch, Over temperature detector, Water lack preventor, Sensor break indicator, Abnormal time indicator, Memory of power failure, Safety valve			
	<b>Lid lock monitor</b>	For all 4 handles···Operation starts only after checking all lid handles in rock position			
	<b>Lid safety cover</b>	Heat-resisting molded resin			
	<b>Electric safety</b>	Breaker for slight leakage & over current, Insulation : 100MΩ~, Voltage resistance : 1,500V-1min.			
	<b>Safety valve</b>	0.18MPa			
<b>Water test press.</b>		0.36MPa			
<b>Press.vessel standard</b>		〔Small Pressure Vessel〕 by Japan Pressure Vessel Law			
<b>Material</b>		Chamber & lid : SUS304, Lid gasket : Silicon rubber, Outer panel : Steel with baked enamel finish			
<b>Electricity (50/60Hz)</b>	220~240V, 1φ, 3.6kW	220~240V, 1φ, 4.0kW	220~240V, 1φ, 3.6kW	220~240V, 1φ, 4.0kW	
<b>Outer size W×D×H</b>	58×87×77 (146) cm	58×105×77 (146) cm	58×87×77 (146) cm	58×105×77 (146) cm	
	92 (128) kg	106 (146) kg	102 (138) kg	116 (156) kg	
<b>Accessories</b>	<b>Trays</b>	Drawer trays with sliding rollers (Lower & Upper) 2 pcs. & Middle tray 1 pc.			
	<b>Others</b>	Stainless drain hose, Water supply hose(-W models), Lid drain receiver			
	<b>Cabinet wagon</b>	(Option) W58×D76 (94) ×H71cm, Closed structure, Outer total height(146)cm 4 casters & level adjusters, 1 shelf			

● Specifications subject to change without notice for improvement.



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