Laboratory Equipment Manufacturer
www.mrclab.com

Technical Data Sheet

Pulse Vacuum Steam Sterilizer

Model: ICLAVE-240DD-A

The picture is for reference only, which shall not be taken as standard for machine acceptance. For details, it is subject to technical descripti on.

1 Technical data

1. Sterilizing program

The system has **32 built-in preset programs**, more than 10 kinds of program stage can be flexibly configured according to the needs to meet the requirements of different sterilization process.

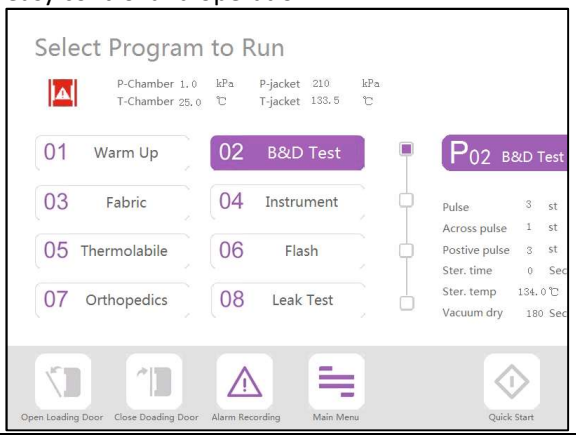
Name	Ster. Temp.	Ster. Time	Dry time	Applicable items type
Warm up	134℃	0min	3min	Empty loading, for preheat the device
B&D test	134℃	3.5min	4min	B&d test package or a device
Fabric	134℃	5min	10min	Fabric package, weight ≤7.5kg/pack
Instrument	134℃	5min	15min	Conventional instrument box or basket loading, weight≤ 7.5kg/pack
Thermolabile	121℃	20min	15min	Items can't bear 134℃, weight ≤ 7.5kg/pack
Flash	134℃	4min	1min	Unwrapped instruments
Orthopedics	134℃	6min	15min+10min	Orthopedics instruments, weight ≤14kg/pack
Leak test	———	———	———	Empty loading，leak rate ≤ 0.13kpa/min
Prion	134℃	30min	15min	Special items such as prions
Optical	134℃	7min	15min+5min	Inner diameter ≥ 2mm, length ≤ 1500 times inner diameter from the opening side to end
Heavy load	134℃	6min	15min+10min	Heavy loading items
Small load	134℃	5min	8min	loading capacity ＜ one standard sterilization unit, weight ≤7.5kg/pack
Open liquid	121℃	30min	———	Unsealed bottled liquid, volume ≤ 500ml / bottle
Gravity	121℃	20min	———	Gravity steam discharge, non-vacuum

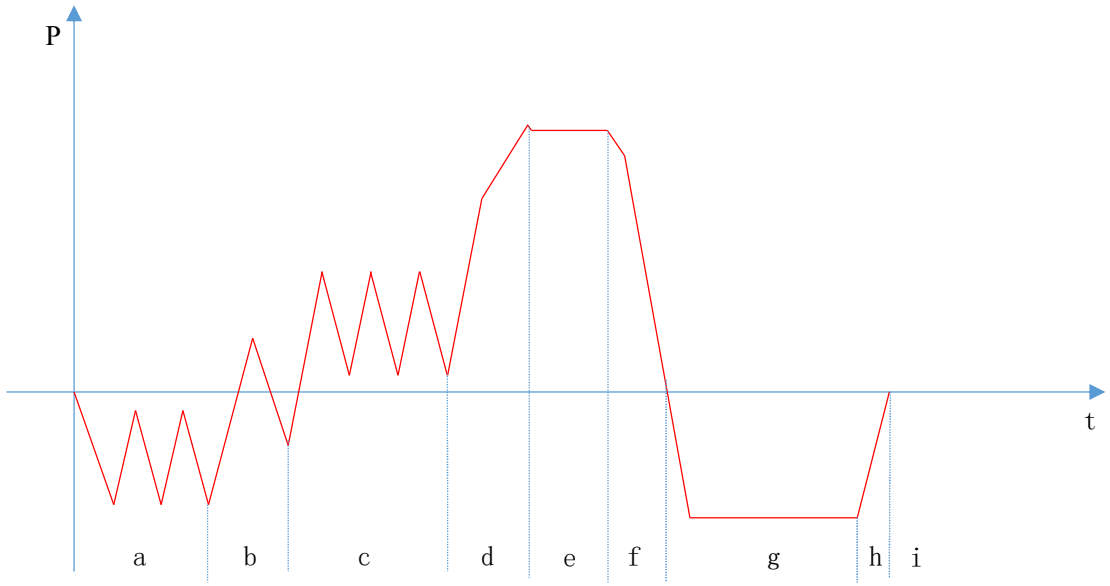
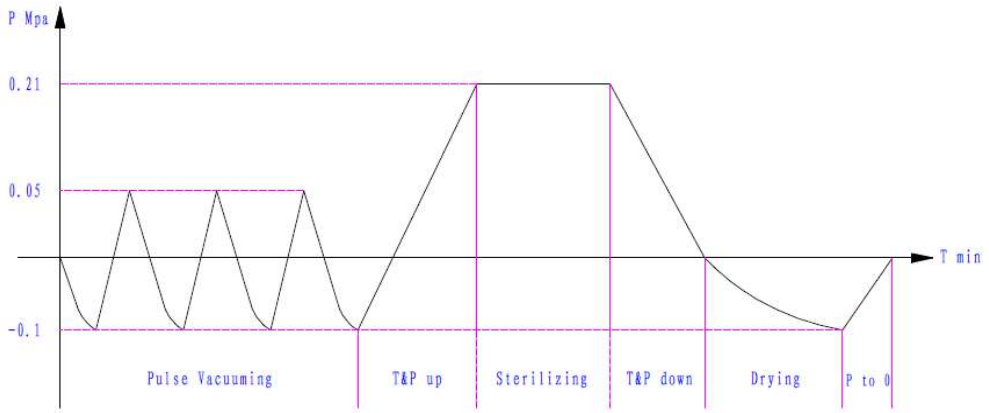
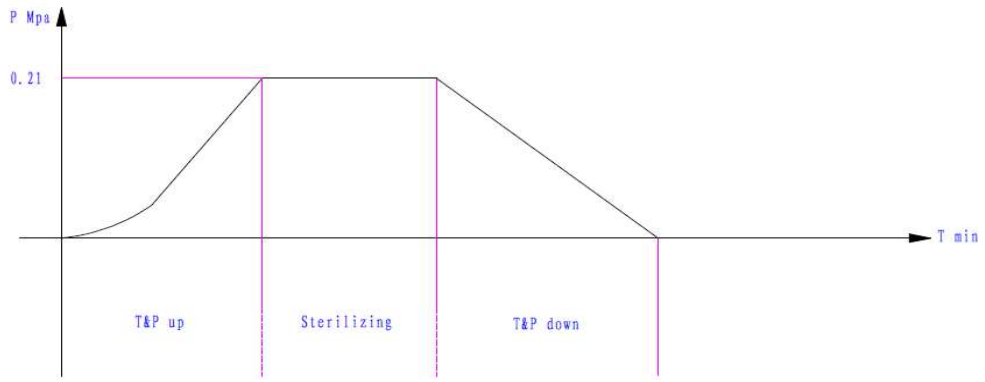
		Positive	**134℃**	**7min**	**10min**	**Items needs positive pressure replacement and vacuum drying**

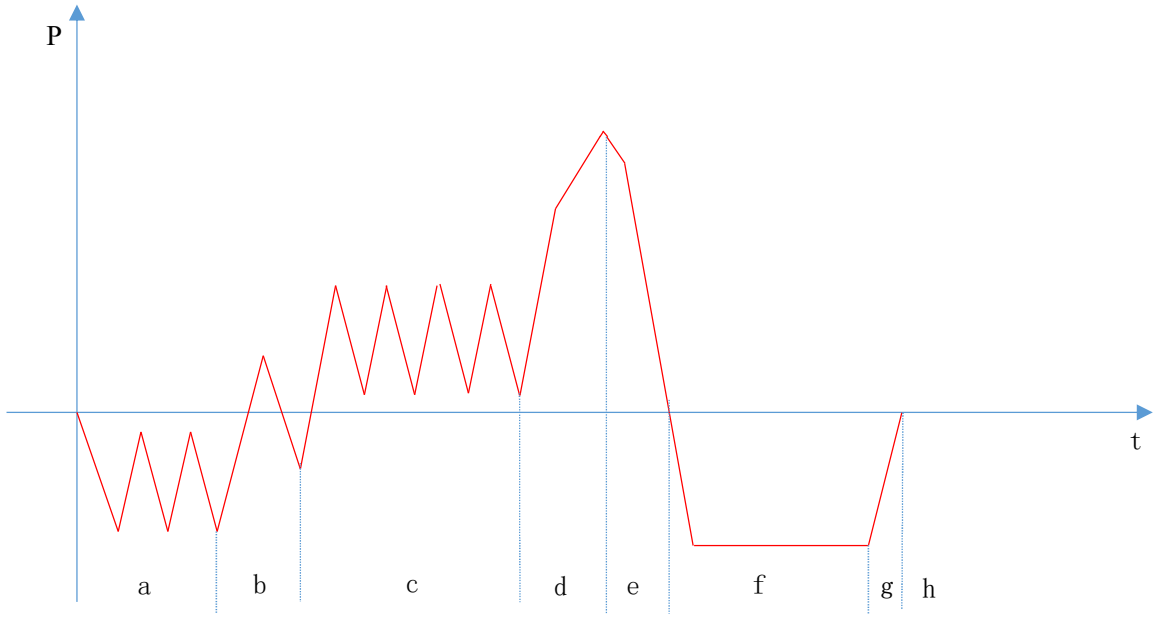
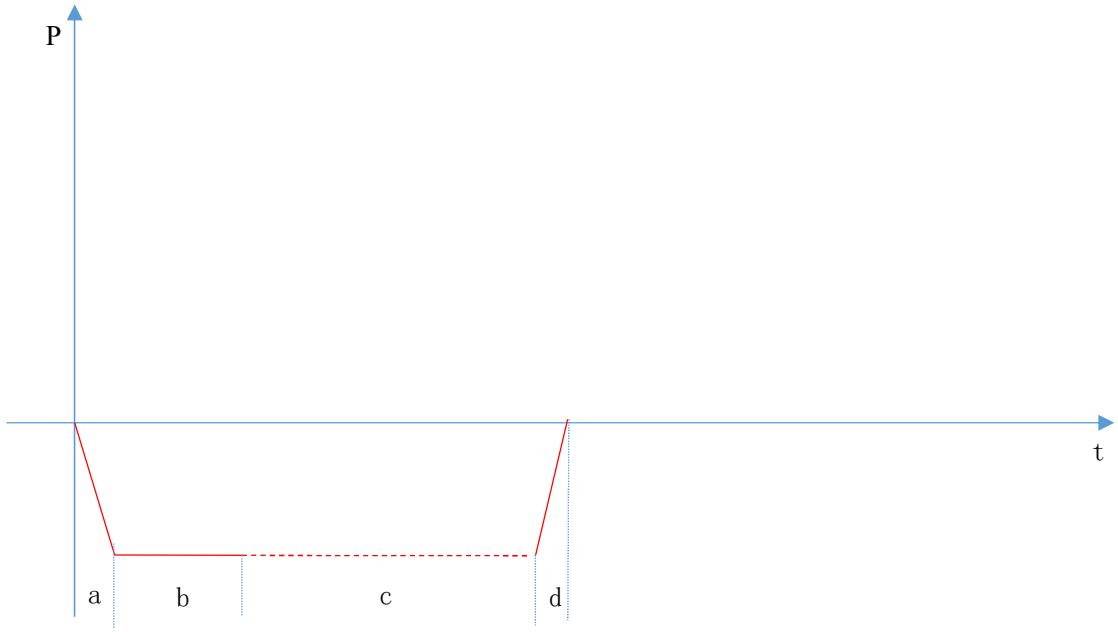
2.	Designed pressure	-0.1~0.3 MPa	
3.	Rated working pressure	0.25 MPa	
4.	Vacuum low limit	-0.09 MPa	
5.	Vacuum pulses counts	0~99 Times	
6.	Designed temperature	150℃	
7.	Rated working temperature	134℃	
8.	Maximum working temperature	139℃	
9.	Chamber structure	Rectangular	
10.	Chamber dimension (W*H*D)	600×600×670mm / 241Liters	
11.	Overall dimension (W*H*D)	1370×1880×950mm	
12.	Weight	660Kg	
13.	Installation form	Installation on the ground	
14.	Door opening method	Hanged door with motor driving	
15.	Quantity of doors	Single door	
16.	Door opening direction	Up and down	
17.	Door sealing method	By compressed air with a door gasket sealing	
18.	Controller and screen	Front side 8'' inch color touch screen, 5 level authorization user	
19.	Pure water and water consumption	0.3~0.5MPa	Must be pure water， 0.03m^3/cycle
20.	Tap water and water consumption	0.15~0.3 MPa	Soft water, 0.4m^3/cycle
21.	Cleaned compressed air	0.4~0.7 MPa	Oil free & water free
22.	Power supply	Driving power: AC 380 V ± 10% 3 phases 50 Hz	
		Control power: AC 220V ± 10% single phase 50Hz	
23.	Pressure display	Analogue pressure gauge for chamber and jacket on the front panel	
24.	Temperature display	Digital Temperature Display on the front panel (touch screen)	
25.	Built-in steam generator	24 kW, working pressure: 0.3MPa	
26.	Fittings on built-in steam generator	Safety valve, Analogue pressure gauge, Water level gauge, water level electric cut out, Automatic air ventilate, Control Switch	
27.	Water pump:	Not less than 3 bar should be fitted with a protection against overload and phase failure.	
28.	Data record	Built-in micro printer	
29.	Loading mothed	By Internal shelfs x 2	
30.	Safety system	Over pressure protect, water level protect, door cannot open in case of pressure, door obstacle system, overload protect, and alarming system	
31.	certification	MDD 93/42 EEC ISO ASMA EMC	

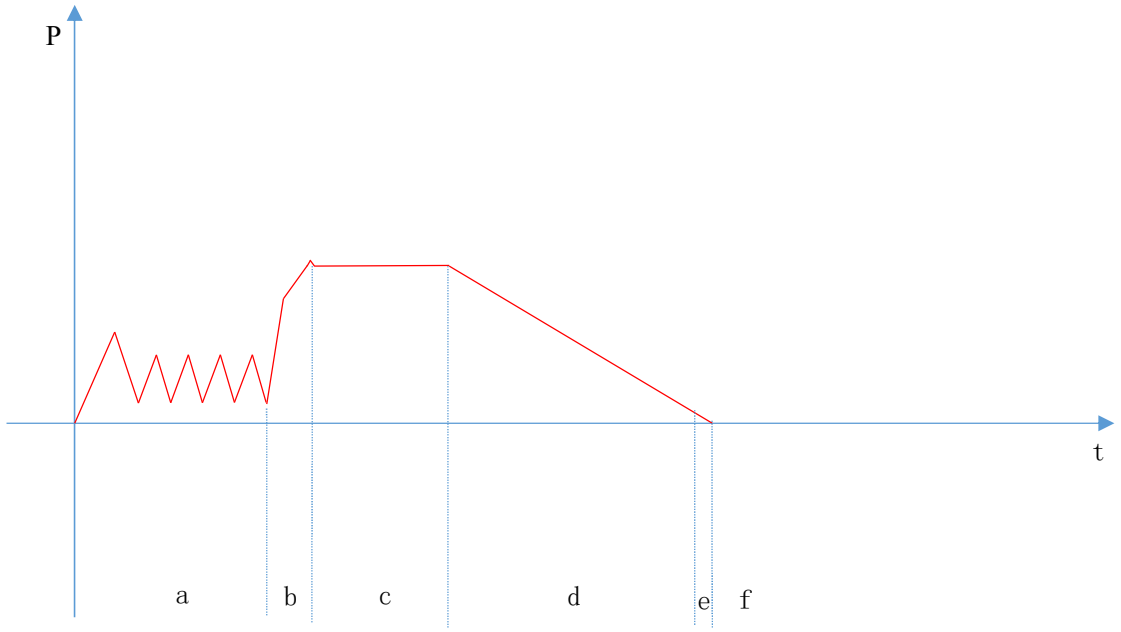
2 Component material

	Component	**Material**
1.	Chamber	SUS304
2.	Jacket	SUS304
3.	Chamber insulation material	Rock wool
4.	Chamber insulation cover	Embossed aluminum sheet
5.	Parts in chamber	SUS304
6.	Door plate	SUS304
7.	Door seal	Silicon rubber
8.	Chamber support frame	Carbon steel
9.	Pipeline system	SUS304
10.	Built-in steam generator	SUS304

11.	Internal loading rack		SUS304	
12.	External transfer trolley		Not Apply	
3	**Configuration List**			
No.	**Name**	**Model**	**Brand**	**Remark**
1.	Main Chamber body	XG1.HW.01	MRC	Class Ⅰ pressure vessel. Welding by robot Inner chamber is adopted 304 stainless steel; The jacket is 304 steel.
2.	Door	XG1.HW.03	MRC	The door inner face is adopted 304 stainless steel; It is electric sliding and compressed air sealing, equipped with safety interlocking and manually controlled open equipment.
3.	Door control switch	MLCA12-TH	OMRON, Japan	Operating Reliably, heat resistant, long service life
4.	PLC	XPC39160	MRC	Strong function，advanced performance，high reliability, Multi communication mode.
5.	Touch screen	NSC08-60	MRC	8 inch color touch screen, display working process parameters，easy control and operation. 
6.	Sterilization software	Wincc flexible	MRC	Multi programs, program modularization management.
7.	thermal printer	WH4008A	MRC	Core made in Japan; multrecord channels, sterilizing parameter record, long service life.
8.	Pressure transmitter	ECO-1-ABS	WIKA, Germany	Original import from Germany，High precision, high reliability, stable output.
9.	Pressure gauge	-0.1~0.4MPa	WIKA , Germany	High precision
10.	Temperature sensor	Pt100	WIKA , Germany	High precision, mini-measurement error.
11.	Pneumatic valve	554 series	GEMU, Germany	Powerful switch valve, no action error, remote compressed air control.
12.	Vacuum pump	2BV series	Nash Elmo, American	Running stable, no water leakage, high reliability, low noisy.
13.	Air filter	CHL0.2	MRC	Ultra-fine sterile filtration, bacterial eliminating rate ≥99.97%
14.	Safety valve	0.3MPa	MRC	
15.				
4	**Programs（some of）**			

Fabric Program	
Instrument Program	
Liquid Program	

Warm up	
Leak test	

Gravity	

3, Hagavish st. Israel 58817 Tel: 972 3 5595252, Fax: 972 3 5594529 mrc@mrclab.com