



# Technical Data Sheet

## Pulse Vacuum Steam Sterilizer

Model: ICLAVE-140SD-A

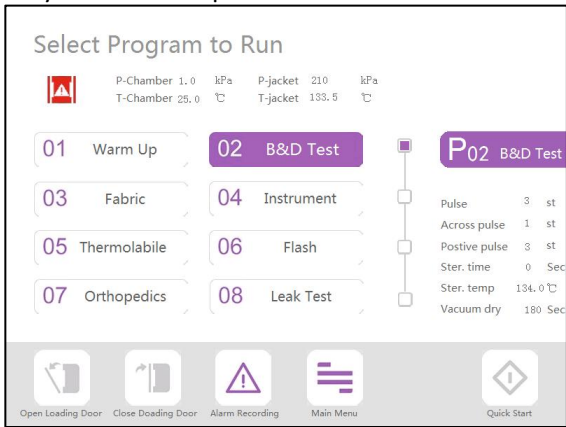


The picture is for reference only, which shall not be taken as standard for machine acceptance. For details, it is subject to technical description.

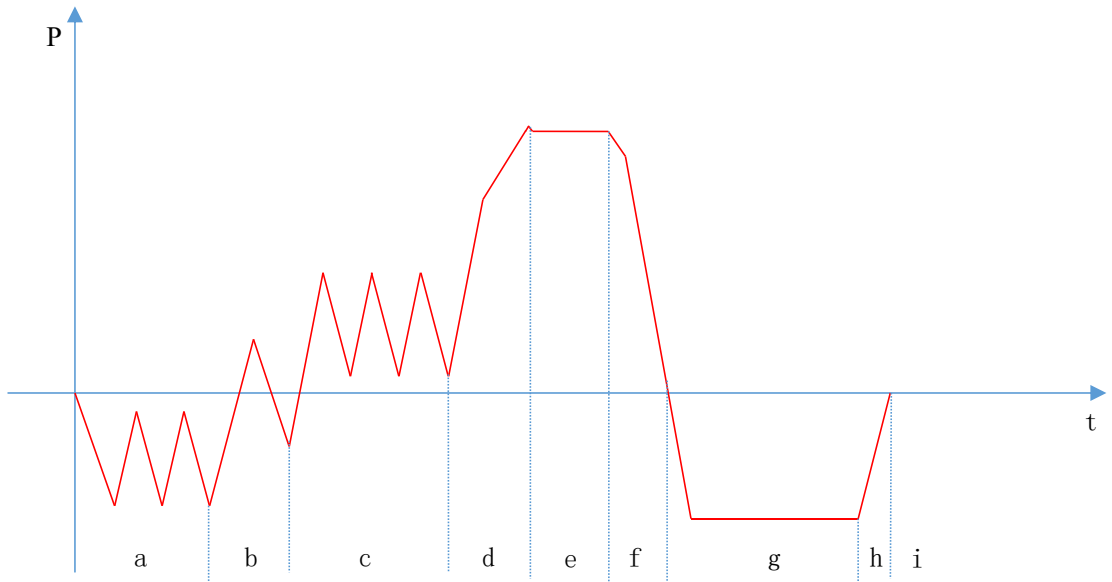
### 1 Technical data

1.	Sterilizing program	The system has <b>32 built-in preset programs</b> , 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°C	0min	3min	Empty loading, for preheat the device
		B&D test	134°C	3.5min	4min	B&d test package or a device
		Fabric	134°C	5min	10min	Fabric package, weight ≤7.5kg/pack
		Instrument	134°C	5min	15min	Conventional instrument box or basket loading, weight ≤ 7.5kg/pack
		Thermolabile	121°C	20min	15min	Items can't bear 134°C, weight ≤ 7.5kg/pack
		Flash	134°C	4min	1min	Unwrapped instruments
		Orthopedics	134°C	6min	15min+10min	Orthopedics instruments, weight ≤14kg/pack
		Leak test	---	---	---	Empty loading, leak rate ≤ 0.13kpa/min
		Prion	134°C	30min	15min	Special items such as prions
		Optical	134°C	7min	15min+5min	Inner diameter ≥ 2mm, length ≤ 1500 times inner diameter from the opening side to end
		Heavy load	134°C	6min	15min+10min	Heavy loading items
		Small load	134°C	5min	8min	loading capacity < one standard sterilization unit, weight ≤7.5kg/pack
		Open liquid	121°C	30min	---	Unsealed bottled liquid, volume ≤ 500ml / bottle
Gravity	121°C	20min	---	Gravity steam discharge, non-vacuum		

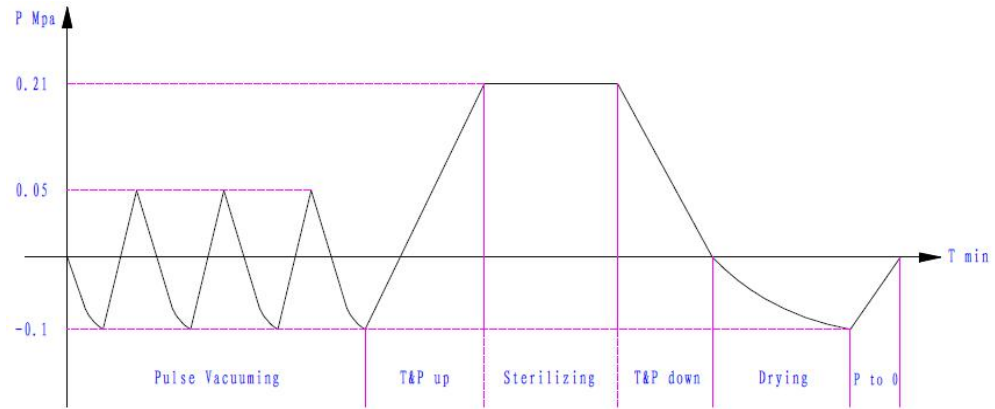
		Positive	134°C	7min	10min	Items needs positive pressure replacement and vacuum drying
2.	Designed pressure					-0.1~0.3 MPa
3.	Rated working pressure					0.25 MPa
4.	Vacuum low limit					-0.09 MPa
5.	Vacuum pulses counts					0~99 Times
6.	Designed temperature					150°C
7.	Rated working temperature					134°C
8.	Maximum working temperature					139°C
9.	Chamber structure					Rectangular
10.	Chamber dimension (W*H*D)					420×420×830mm / 146Liters
11.	Overall dimension (W*H*D)					1290×1680×1100mm
12.	Weight					525Kg
13.	Installation form					Installation on the ground
14.	Door opening method					Hanged door with motor driving
15.	Quantity of doors					Double doors
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 <sup>3</sup> /cycle
20.	Tap water and water consumption			0.15~0.3 MPa		Soft water, 0.4m <sup>3</sup> /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 method					By Internal shelves 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
<b>2 Component material</b>						
	<b>Component</b>	<b>Material</b>				
1.	Chamber	SUS316L				
2.	Jacket	SUS316L				
3.	Chamber insulation material	Rock wool				
4.	Chamber insulation cover	Embossed aluminum sheet				
5.	Parts in chamber	SUS316L				
6.	Door plate	SUS316L				
7.	Door seal	Silicon rubber				
8.	Chamber support frame	SUS304				
9.	Pipeline system	SUS316L				
10.	Built-in steam generator	SUS316L				

11.	Internal loading cart		SUS316L	
12.	External transfer trolley		Not Apply	
<b>3 Configuration List</b>				
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 316L 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; multi record 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.				
<b>4 Programs (some of)</b>				

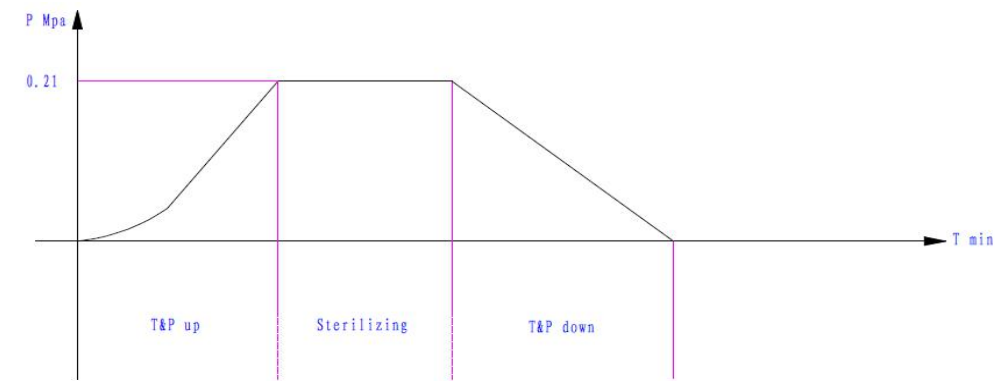
Fabric Program



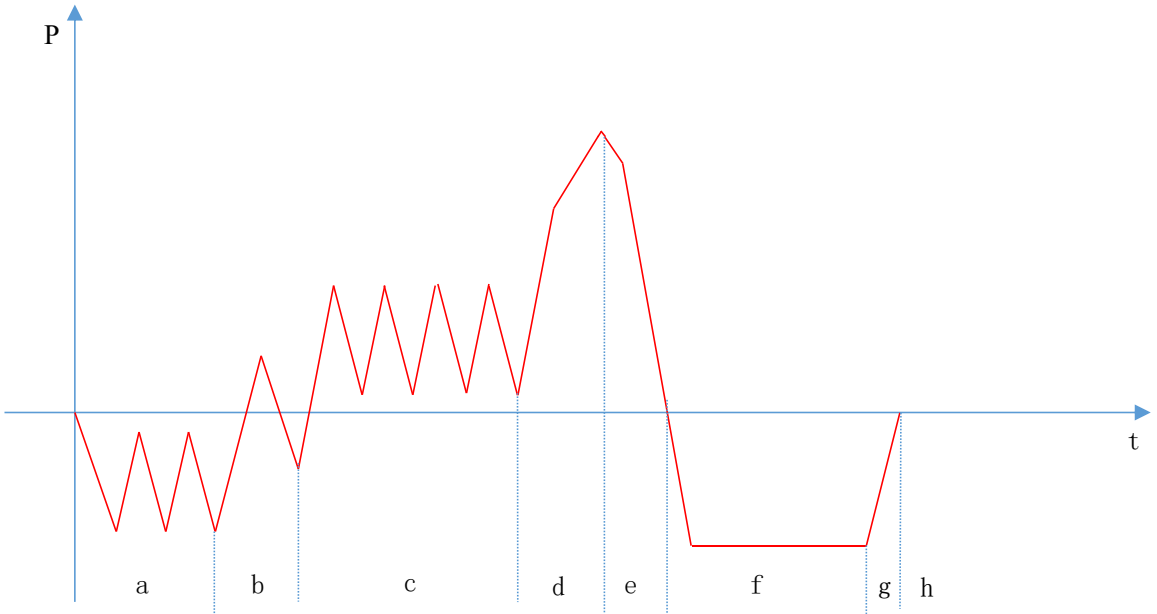
Instrument Program



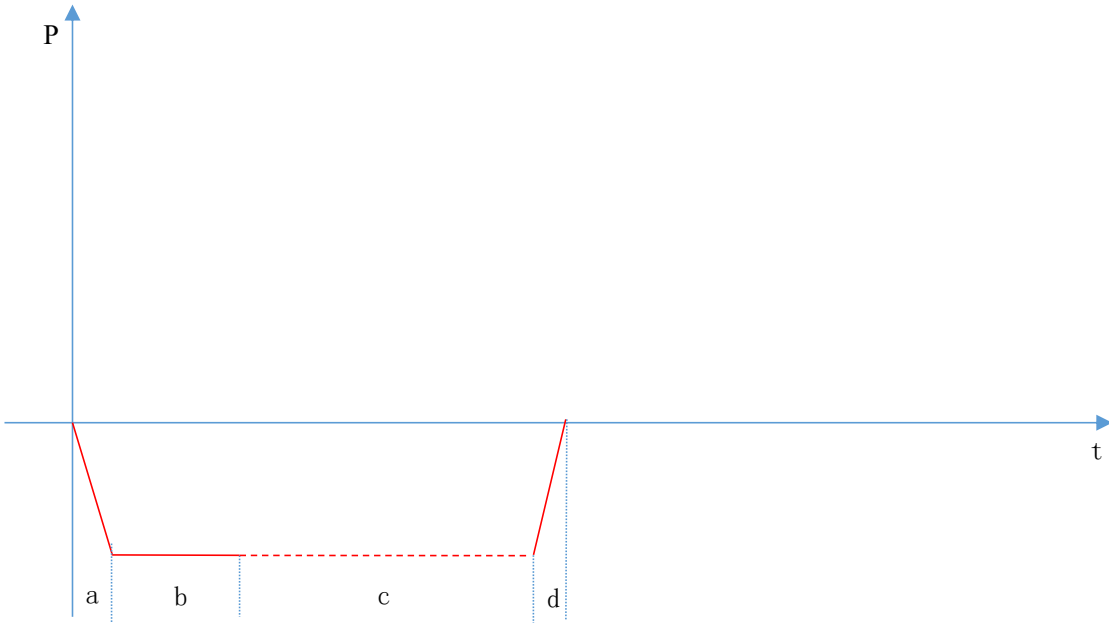
Liquid Program



Warm up



Leak test



**Gravity**

