



# TRIPLE WALLED VERTICAL AUTOCLAVE

MODEL NO. - Acm-32063- A



# Triple Walled Vertical Autoclave

We are manufacturers of triple walled vertical autoclave India since 1990. Our triple walled vertical autoclave are widely used for day to day sterilization procedures and in various laboratory applications, where dryness of the sterilized medium is of paramount importance, given the fact that semi dry sterilized media is prone to various micro-bacterial and viral infections. We specialize in both standard and customized models, specifically designed to meet the challenging demands of various scientists for individual and specialized research applications. Over a short period of time Weiber brand have been established as reliable exporters of triple walled vertical autoclave in India, catering to the vast markets in South East Asia, Middle East, Africa and Europe. Apart from that we are supplying our autoclave in India , catering to a variety of customers ranging from Defence Installations, Research Laboratories, Educational Institutes and various R and D laboratories of leading national and multinational companies.

## Salient Features

- Steam Stock Provision
- Versatile usage
- Stainless steel construction
- Ergonomic Design
- Energy Efficient
- Double Safety Radial Locking Arrangement
- Double Safety Valve Protection
- Hydraulic Testing Upto 2.5 times the working pressure
- Calibration And Protocol Documentation

## Construction

Our dry vertical autoclave are triple walled units. Outer body of our autoclave is constructed out of thick gauge stainless steel sheet of SS-304 grade. The inner chamber is also made of heavy gauge stainless steel sheet of SS-304 grade. The middle wall is also constructed from the strong and sturdy stainless steel sheet of ss-304 grade s stainless steel sheet. These are steam stocking models connected with a three way valve to control the sterilization cycle inside the autoclave. Our autoclaves are air insulated from inside, however we may incorporate mineral glass wool insulation if the customer desires so. The strong lid constructed out of thick stainless steel plate has a double safety radial locking arrangement , which ensures an easy and smooth opening and closing operation for all our autoclaves. Our deluxe vertical autoclaves are ideally suited for hospitals and research labs where safety is the first priority of the users, since it is equipped with a double safety steam release valve. At the same time we test all our autoclaves for up to 2.5 times the standard working pressure to ensure maximum safety and protection from any unfortunate incident. All our triple walled vertical autoclaves are supplied complete with pressure gauge, pressure release valve and stainless steel basket as a standard feature.

## Heating

The heating process in our triple walled vertical autoclave is done through specially designed water heaters of suitable wattage to ensure optimum sterilization time in every sterilization cycle.

## Working Temperature / Pressure

As per the international standards and guidelines our triple walled vertical autoclave have a working temperature of 121oc. ,however for specific requirements our autoclaves can be upgraded to be used for up to 134o c.

## Working Pressure

Working pressure for our standard dry sterilization model vertical autoclave is 15 psi, however this can be upgraded to be used for higher pressures of up to 30 psi..

## Pressure Range

The normal pressure range of our autoclave is 5 psi to 20 psi

## Pressure Control

The pressure inside our vertical autoclave is controlled through a semi automatic electro mechanical device called piezostat, which controls the pressure inside the chamber and cuts of the current from the heater whenever the pressure exceeds the set pressure value of the autoclave, thus making it very safe and energy efficient.



## Technical Feature

- Hi-tech radial lock locking mechanism for ultimate ease of operation and safety.
- Steam Release valve of Stainless Steel ensuring a long life of the equipment.
- Huger grade spring loaded safety valve of brass, duly chrome plated.
- Water Indication Gauge with stainless steel enclosure
- High accuracy and reliable pressure gauge.
- Lid opening mechanism: Foot operated (Paddle) lift

## Standard Models (Inner Dimensions)

<b>DIA x HEIGHT</b>	<b>Capacity</b>	<b>LOAD</b>
250 x 450 mm	22 ltrs	1.5 KW
300 x 500 mm	35 ltrs	2.0 KW
350 x 550 mm	50 ltrs	3.0 KW
400 x 600 mm	78 ltrs	4.0 KW
450 x 600 mm	98 ltrs	4.0 KW
550 x 750 mm	152 ltrs	5.0 KW

## Note

The above mentioned sizes are of our standard triple walled vertical autoclave. However we are fully capable to cater to the demand of any customized size for any special application.

## Upgrades (Standard)

- **Low Water Protection Device:** This automatic system can be incorporated with our vertical autoclaves to give protection against the low water scenario under prolonged usages.
- **Timer With Alarm System:** This semi automatic device can be incorporated with the standard models of our vertical autoclave which helps the user to set the sterilization time of the system and do other tasks without bothering to monitor the sterilization cycle. This device cut off the current from the main system when the set value for a given sterilization cycle is attained and gives a loud audio alarm.
- **Digital Temperature Indicator:** A solid state digital temperature controller cum indicator can be incorporated with our basic vertical autoclave models for ease of monitoring the temperature of the autoclave from a distance through its large LED display, which is visible from quite a distance.
- **Programmable Temperature Controller:** A programmable micro processor based temperature controller cum indicator can be incorporated in our basic vertical autoclave models to pre program the sterilization cycle temperature with high amount of accuracy and reliability
- **Chart Recorder:** This a semi automatic self contained easy to use recording device, which permanently records the temperature is any given sterilization cycle of our vertical autoclave on a graph sheet., with the help of a bimetallic strip transducer chip incorporated in the unit
- **Technical Features:** Chart size:4" dia Accuracy:2% (FSD) Response time: 12 minutes

## PLC control system

Our standard plc control system is based on the hi-tech state of the art micro-processor circuit technology, ensuring a complete automatic operations along with high efficiency and great reliability. This computerized logic control system ensures a 100% automatic operation throughout the sterilization cycle of our vertical autoclave. No intermediary human intervention is necessary after choosing the parameters and initiating the sterilization process in our autoclaves.. The primary cycle phase and the actual parameters of our vertical autoclave and along with set values are displayed on the LCD panel during the entire cycle progress.

The main parameters of the process such as, temperature, pressure, time are controlled and displayed, on the LCD panel of the system. The ergonomically designed keyboard located on the front level enables the user to choose the desired program, initiate and terminate the cycle, and allows a trained technician to preset the main parameters using an access code. Our PLC control system is extremely easy to use, user friendly and fully programmable.



For an elaborate and presentable documentation of cycle process, our logic control unit is provided with a diligent wipro/epson dot matrix printer, which is connected to the central microprocessor system. The printer generates a hard copy of the printout of the relevant or desired information relating to the cycle operation like the pressure, sterilization time, temperature at any given/pre set time interval, vacuum, and drying time, number of cycles, number of pulsing etc.

The standard vertical autoclave with PLC control system is designed to operate up to six standard sterilization programs between 105°C and 137°C and two test programs optional. The desired programs can be easily selected by using the numeric keypad, provided at the front level. Apart from that other parameters such as air removal, sterilization and drying stages can be programmed with utmost ease.

## Universal Digital Data Recorder with Computer

Data Acquisition And Control System For Vertical Autoclave

This is a unique module which can be incorporated with our vertical autoclave to log in temperature and environment related data with the help of a data logger unit which has a PC connectivity by means of RS 232 C interface. This data is then analyzed and formatted with the help of our unique user friendly analysis software to enable the user to get a formatted and analyzed report of various inputs during the full operation cycle of the equipment. This is an ideal module for pharmaceutical laboratories, process control applications and high research projects where maintaining a viable record of the performance of the equipment is very essential.

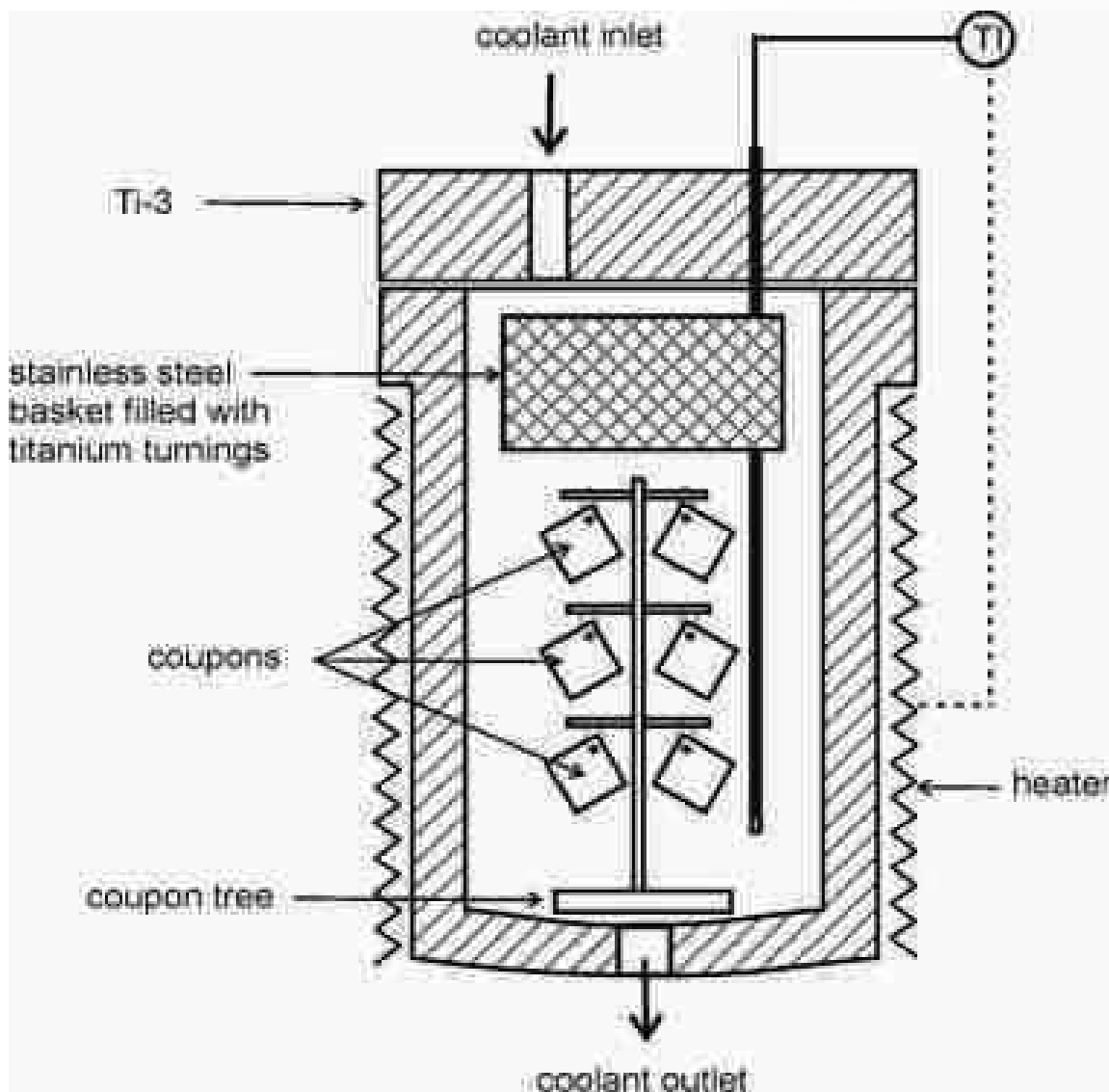
## Features

- Our system incorporates multiple devices such as in line process indicators, environment scanners and temperature or humidity controllers.
- Provides Astech cable for direct interface to any dot matrix or laser printer for online or offline data records printing
- It has bulk data storage capacity with high data retention life.
- Facility to obtain nicely formatted printout of the logged data or records with proper headers.
- Our system provided facility to program recording interval with various options to suit individual requirements.
- It is provided with the feature to adjust or select baud rate for any serial communication port.
- Our system is provided with user friendly custom developed software which obtains and analyzes the data and facilitates the user to generate reports and graphs etc.

We manufactures both

**Standard And Customized**

# Autoclaves





An ISO 9001 : 2208 | ISO 14001 : 2008 | ISO 13485

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