

Horizontal autoclave HST 20x12x16

ZiRBUS

TECHNOLOGY

For use in research laboratories, pharmaceutical and food industries

- Fully automatic and with high-strength, square sterilization chamber with double jacket
- **Usable chamber volume: 3,840 litres**
- Free usable space: (H) 2.005mm x (W) 1.200mm x (D) 1.670mm
- Ergonomic loading height of 400mm for easy loading and unloading
- Chamber and door completely made of stainless steel 1.4404/AISI316L
- Design and calculation according to AD2000 and DGRL 2014/68/EU
- Permissible operating pressure: 3.8 bar absolute
- Permissible operating temperature: 140° C
- Door locking according to DIN 58946 Part II and TRB 402, by means of control-independent pressure switch and safety bolt
- The entire chamber and door is insulated with mineral wool and covered with a removable aluminium jacket to prevent heat loss.
- For precise control, the autoclave is equipped with an electronic absolute pressure sensor and a fixed temperature sensor PT100 Kl. A at the coldest point of the chamber.
- The procedure can be validated according to DIN EN ISO 17665-1 and DIN EN ISO 554.
- The exhaust steam produced during the process is automatically cooled down by means of cold water.
- This process is thermostatically controlled to save water. Condensate drain is pressureless, maximum outlet temperature: <60° C



SQUARE STERILIZATION CHAMBER;
CHAMBER VOLUME = USABLE VOLUME



ALSO AVAILABLE AS "PASS-THROUGH
VERSION" WITH GAS-TIGHT
PARTITION ("BIOSEAL")



HOUSING COMPLETELY MADE OF
STAINLESS STEEL



7-INCH TOUCHSCREEN CONTROL FOR
INTUITIVE OPERATION

EXPLANATION OF THE INDIVIDUAL COMPONENTS

+ ANSCHLUSS AN EINE ZENTRALE DAMPFVERSORGUNG

Alternatively or additionally, the autoclave can be connected to a central steam supply. Version including all required fittings

+ GAS-TIGHT PARTITION WALL (BIOSEAL) FOR PASS-THROUGH VERSION

This (gas)tight partition wall is required if the autoclave is installed between two rooms with different pressure and safety classes. This ensures that there is no air exchange (diffusion) between the rooms.

+ WATER SAVING DEVICE FOR JACKET COOLING AND VACUUM PUMP

To save cold water, the active cooling and the vacuum pump can be connected to a cooling water circuit provided by the customer. This results in a reduction in water consumption of up to 95 percent.

+ STEAM-AIR MIXTURE PROCESS (SAMP)

With this process, thermolabile and pressure-sensitive packaging, e.g. blister packs and closed bottles, can be gently sterilized.

+ SPRAY COOLING

The sterilization material to be cooled is cooled down extremely quickly and evenly to the set extraction temperature. Cooling is achieved by direct spraying of the product with cold water including support pressure control.

+ HOT-WATER SPRINKLING PROCESS (HWSP)

The product is sprinkled with hot water instead of steam and sterilized. This is done via the spray nozzles in the chamber. The process is especially suitable for the sterilization of closed vessels and large quantities of liquid.

+ STERILIZABLE SUPPLY AIR FILTER

The filter element is mounted in a stainless steel housing and is automatically "inline" sterilized with each sterilization cycle. The temperature is monitored by an additional PT100 class A temperature sensor.

+ SPECIAL PROGRAMS

Through our own software development, we design customer-specific special programs ourselves.

This includes, for example:

- ISO 4802
- ATF filter program
- Durham programme

+ AUTOMATIC INTEGRITY TEST OF THE FILTER (WIT-TEST)

This test is recommended for increased safety. It is also used to check the function of the supply air or exhaust air filter. The checking of the intervals can be defined via the software. This is a validated procedure.

+ CONTROL VALVES FOR RAMP PUNCTURE

This results in further setting options in the program control:

- Evacuating speed adjustable by means of vacuum pump in mbar/min
- Heating speed adjustable in °C/min
- Pressure relief speed adjustable in mbar/min.