



LABOKLAV 25

The compact laboratory autoclave.
For crystal clear results.

A compact table top unit with high loading capacity and the performance of a big laboratory autoclave. The concept of LABOKLAV 25 is offering new technical solutions and a brand new design. The unit has a chamber lid made from temperature resistant safety glass, a transparent front cover made from safety glass, LED chamber illumination and coloured LED front lightning to visualize the cycle progress.



Steriltechnik AG
-Mit Sicherheit führend-

dijkstra
vereenigde

Postbus 2151
8203 AD Lelystad
Tel: 0320-266171

Pascallaan 9
8218 NJ Lelystad
Fax: 0320-257354

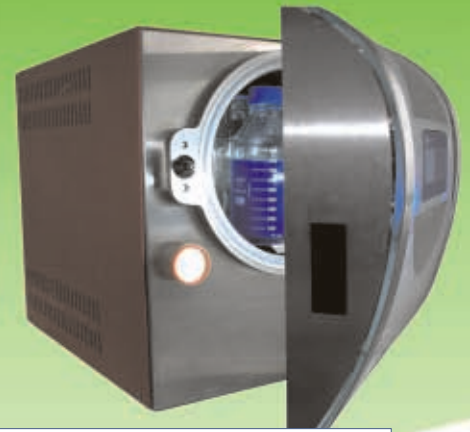
email: laboratorium@dijkstra.net
www.dijkstra.net



LABOKLAV 25

LABOKLAV 25 is extremely compact and space saving, but still offering the performance of a big laboratory autoclave:

- sterilisation of liquids in open and slightly closed vessels
- instrument sterilisation, also available with vacuum option offering pre-vacuum and drying vacuum
- waste sterilisation at 134° C



Available in the following variants:

LABOKLAV 25 B	basic unit
LABOKLAV 25 M	with fast cooling system
LABOKLAV 25 V	with vacuum system
LABOKLAV 25 MV	with fast cooling system and vacuum system

LABOSECURE - the secure closing system with thermo locking device

- fully automatic, motorized closing system
- thermo locking device to avoid over-boiling and to protect the operator

By pressing the relevant key on the control panel the lid is automatically closed by the drive motor. The lid seal, a T profile silicone seal, is keeping the system closed both under pressure and in vacuum. Various safety chains make sure that the lid is not opened under pressure or at high temperature (thermo locking device). This system is save against manipulation and power cuts. When activating a liquid programme the reference temperature is monitored by a flexible PT 100 sensor, also this is included into the basic model. The lid will swing open after the motor is releasing the locking spindle in two steps. Step one is opening half way to allow remaining steam leaving the chamber, in step two the lid is fully opened.

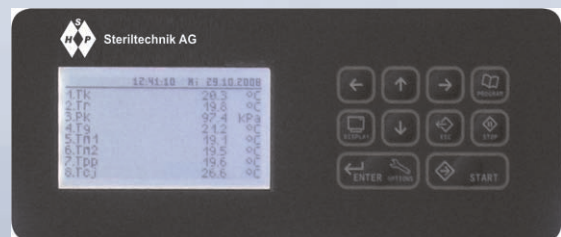
LABOHOT - steam generation according the principle of a „hot stone“

- heating capacity 2 kW
- heating elements are not placed inside the water resulting in extended lifetime cycle of heating elements

The basic working principle is that of a "hot stone". The complete element is heated up and water is sprayed onto the hot metal block. By using a hot and compact metal body less energy is required to maintain the source of steam generation. The steam generator is not permanently filled with water allowing the use of dry heating elements. Since they are in no direct contact with water the expected life time cycle is estimated as double the life span of common heating elements.

LABOSELECT - one controller for all types

- foil key pad with clear and easy to understand symbols
- large LCD Display
- process data are displayed during programme run
- up to 20 pre-configured programmes
- code protected access level to programmes
- Programmes can be individualized



A clear, easy to read and understand foil key pad eliminates operation errors and increases safety. Clear symbols guide through the menu, programmes can be opened fast. The structured big LCD display informs permanently during a programme cycle of all relevant process and programme parameters. In case of any error a message is displayed and informs the operator.

LABOARCHIVE - data storage and recording made simple

- RS 485 integrated
- 4 MB storage chip for storing process data integrated

The autoclaves can be equipped with different cycle recording systems. Data can be printed out with the integrated build-in printer (optional) or can be transferred onto a PC via the integrated interface (optional software required). Already the basic version of LABOKLAV has an integrated storage chip with 4 MB storage capacity. The cycle data is automatically stored and can be printed out or transferred to a PC at a later stage. A minimum of 100 cycles are stored, more is possible but depends on the data volume per cycle.

LABOBLUE - air cooling, Version M

- air cooling
- for open vessels and slightly closed vessels

The unit is equipped with a high efficient recooling system to dramatically reduce cooling down times when sterilizing liquids. As a result the cooling down time can be reduced up to 50% (depending on loading volume and vessel size).

LABOVAC - the complete vacuum system

- single pre-vacuum
- fractionated pre-vacuum
- drying vacuum
- additional heating during vacuum drying is integrated into the option



When sterilizing hollow items and mixed waste fractions a complete deaeration of the chamber is usually difficult to achieve. But the principles of steam sterilisation require saturated steam conditions, meaning the part of not condensable gases (e.g. air) should not be more than 2%. A vacuum system is required.

Integrated into the compact housing of the unit is a high performance membrane vacuum pump. The capacity of the pump is suitable to evacuate the chamber and the sterilisation goods fast and reliable. Depending on the sterilisation goods programmes with single pre-vacuum or fractionated pre-vacuum can be selected. During the drying vacuum the chamber is heated to increase the drying results. This is extremely useful when drying pipette tips, glassware or packed instruments. The function is always included into the vacuum option.

Technical information:

chamber volume/ chamber size	25 l useable , Ø 265 x 465 mm,
loading capacity	chamber illumination by white LED light, 5 x 1 l laboratory flasks, up to 5 kg instruments
dimension (w x h x d) space requirement on the table	440 x 540 x 660 mm 440 x 550 mm + 110 mm for door overhang
weight	ca. 65 kg
max. permissible pressure (PS)	2.8 bar/-1 bar
max. permissible temperature (TS)	138° C
chamber material	stainless steel, chamber lid made from temperature proof safety glass
housing	powder coated, red, front cover from transparent safety glass, process illumination (LED) in blue, red and green
steam generation	integrated steam generator with dry heating elements
heating power	2 kW
electrical connection	230V ~ 50 Hz, 16 A
lid closing system	motorized closing system
sterilisation temperature	98-135° C, adjustable
feed water supply	integrated feed water tank with manual filling
exhaust steam condensing	included, discharge into integrated condensate tank
thermo locking as per IEC 61010-2-43 (TRB402)	integrated with flexible reference temperature sensor, opening temperature adjustable
control	micro processor with LCD display, code protected access to programming levels, serial interface RS 485, internal storage chip to store cycle data of approx. 100 cycles, visualisation and print out at a later stage is possible
programmes	up to 20 programmes, depending on the integrated option, all programmes can be individualized, special programmes on request
timer function	serial function
fast cooling, optional	air cooling by two separate on to the chamber mounted fans
vacuum system, optional	membrane vacuum pump, single and fractionated pre-vacuum, drying vacuum incl. heating of the chamber during, vacuum to increase the drying performance
norms and regulations	manufactured in Germany in full compliance with the relevant norms and regulations, serial approval by German TUV CE marking according Pressure Device Directive
accessories	integrated needle printer, software „DOKUMENTATOR“, insert with 4 trays



Steriltechnik AG
- Mit Sicherheit führend -

**dijkstra
vereenigde**
Postbus 2151 Pascallaan 9
8203 AD Lelystad 8218 NJ Lelystad
Tel: 0320-266171 Fax: 0320-257354
email: laboratorium@dijkstra.net
www.dijkstra.net