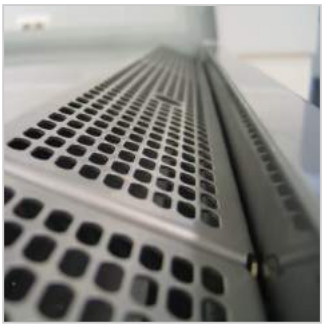
OPERATOR, ENVIRONMENT,
PRODUCT PROTECTION

LAMSYSTEMS



BIOLOGICAL SAFETY CABINET CYTOS:

– Protection of the personnel from the impact of cytostatics and cytotoxics.

– Aseptic production of antineoplastic agents.

– Physical isolation (containment and controlled removal from the work zone) of pathogenic biological agents (PBA) and microorganisms to prevent airborne infection of the personnel and contamination of the air in the work room and the environment.

– Minimization of risk of contamination and cross-contamination of the product.

– Equipment of individual work places in medical, pharmaceutical and other institutions working with pathogenic biological agents and microorganisms.

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CYTOS

MICROBIOLOGICAL SAFETY CABINETS

Class II Type A2

LAMSYSTEMS

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THE CABINET CYTOS IS DESIGNED FOR WORK WITH CYTOSTATICS AND CYTOTOXICS
MANUFACTURED IN ACCORDANCE WITH EN 12469:2000 AND DIN 12980:2017-05

LAMSYSTEMS BIOLOGICAL SAFETY CABINET CYTOS **provides for specifics of work with cytotoxic agents and chemotherapeutic drugs**.

In contrast to the standard Class II type A2 cabinets, the CYTOS is equipped with additional safety system: preliminary filters that clean the air exhausted from the work chamber and are installed under the tabletop.

The reason for this is the fact that cytotoxic agents cannot be deactivated with decontamination and, thus, are highly hazardous for an operator or maintenance personnel.

To further enhance the protection efficiency of the cabinet for work with cytotoxics, LAMSYSTEMS specialists improved the exhaust filtration system. Previously used panel filters were replaced with cylindrical ones. Moreover, the number of filters was increased from two to four.

The four cylindrical HEPA filters H14 are installed under the work tabletop. The FILTERS shall be REPLACED within the work zone when the fans are on. This way, the personnel protection is guaranteed and the risk of environment contamination is minimized.

Cylindrical filters are easily disposed. Furthermore, thanks to the high quality of the filtering material, the level of noise of the operating cabinet became significantly lower and, thus, the overall consumer performance of the cabinet was improved.

Watch video

FILTERS REPLACEMENT

! In case of work with low amounts of toxic chemical gases and radionuclides, the cabinet SHALL be connected to the individual active exhaust system via an exhaust hood supplied with the cabinet.

HIGH MAINTENANCE ACCURACY OF PRESET AIRFLOW VELOCITY at any level of filter clogging and in changing ambient conditions (humidity, temperature, pressure).

MICROPROCESSOR CONTROL SYSTEM

The cabinet is provided with a microprocessor control system which immediately informs the operator about reducing of the protective properties of the cabinet showing an alarm message on the display and activating the audible-visible system.

The fan motor control system **SintelL-1** allows to minimize the power consumption of the cabinet, to reduce the level of acoustic and electromagnetic noise.

The system of air consumption static regulation **AIS LS** automatically regulates air balance in the working chamber changing the number of fan revolutions according to the level of filter contamination. Reaching the threshold value of contamination, the system activates the warning system.

The system of monitoring the cabinet working modes and the audible-visible indication warns about the air flow imbalance in the working chamber.

CYTOS Class II Type A2

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DESIGN

– LED lighting of the work chamber.

– Aerosol supply and air sampling fittings are installed in the working chamber for HEPA filter integrity testing.

– Tabletop made of stainless steel, front window made of laminated safety glass, side walls made of tempered glass.

– Tray under the tabletop made of stainless steel; easy to clean configuration preventing any leakage into the cabinet or on the preliminary HEPA filters.

IMPORTANT! When using chlorine compounds, remember of their corrosive property including the effect on stainless steel.

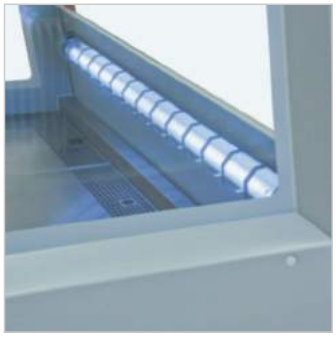
TOUCH SCREEN made displaying modes more demonstrative, the cabinet control easier and provided the user with more service information.
Suited for wet cleaning with disinfectants. Allows work in gloves.

A PULLOUT UV UNIT IS A UNIQUE CONFIGURATION

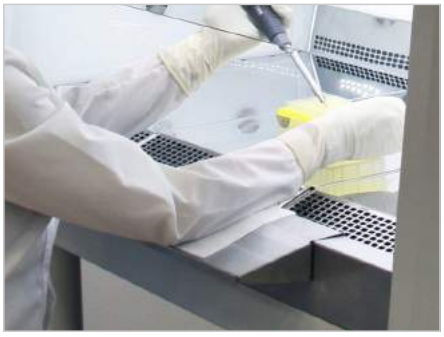
– Does not disturb the laminar airflow.
– Does not require a special place for storage.
– Reliable and easy-to-use.
– Well-adapted for cleaning.
– Completely covers the front opening of the cabinet at downtime.
– Controlled by optical sensor.
– Certified by TUV NORD.

When inoperative, the PULLOUT UNIT is stored under the work chamber outside of the contamination area.
UV light is featured with protective metal grille.

Automatic switching-off of the UV light in case of opening the front window or UV unit screen.



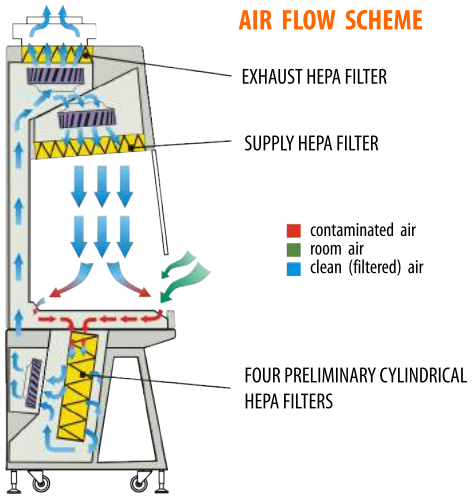
The cabinet is equipped with hydraulic dampers ensuring smooth closing of the front window and pullout UV unit and providing comfortable operation.

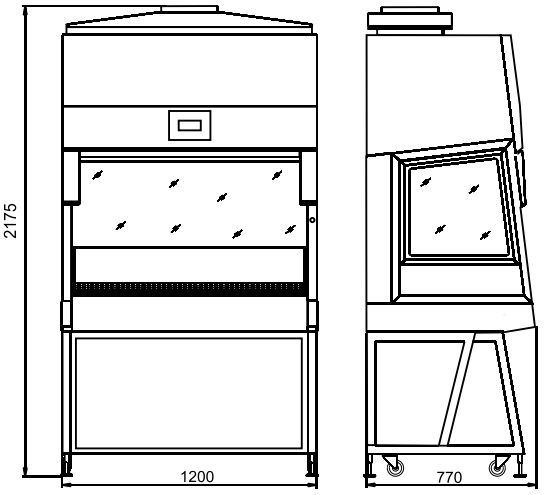


A removable armrest ensures reliable elbow support preventing operator's arms from hanging. Suitable for thorough disinfection and autoclave sterilization. Stored in a special compartment of the pullout UV unit.

The front sash lifting gas springs are designed in accordance with EN 12469 ensuring simple access to all of the work surfaces for cleaning and disinfection.

LAMSYSTEMS CYTOS MICROBIOLOGICAL SAFETY CABINETS





MAIN CHARACTERISTICS

Air cleanliness class in the working chamber of the cabinet in terms of concentration of airborne particles (aerosols) according to ISO 14644-1	5 ISO
Cabinet class according to EN 12469, NSF/ANSI 49	II
Cabinet type according to NSF/ANSI 49	A2
Cabinet classification according to DIN 12980	safety cabinet for cytotoxic substances
Class of the installed HEPA filters according to EN 1822-1	H14
Average velocity of the inflow through the work opening, m/s	0,47±0,03
Average downflow velocity in the working chamber, m/s	0,35+0,01
Illuminance level in the working zone, lux, not less than	2000
Air recirculation rate in the cabinet, %	≈70

MAIN PARAMETERS AND DIMENSIONS

BMB-II-"Laminar-S" CYTOS	Article: 1E-B.005-12.0
Dimensions of the cabinet with exhaust hood (WxDxH), mm	1200x770x2175
Dimensions of the working chamber (WxDxH), mm	1105x610x660
Weight of the cabinet, kg, not more than	270
Power consumption (without the built-in outlets load), W, not more than	810/140*
Total acceptable load on the built-in outlets*, W, not more than	1000
Air volume supplied to the working chamber, m^3/h	795–817
Noise level at 1m distance from the cabinet, dBA, not more than	58

ADDITIONAL OPTIONS

– Extra outlets
– ULPA-filters

** Power consumption with newly installed (uncontaminated) HEPA filters.*

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