Casa Álvarez
Material Científico desde 1912

EXPERTS & LEADERS IN GROSSING ROOMS

GROSSING
ROOMS

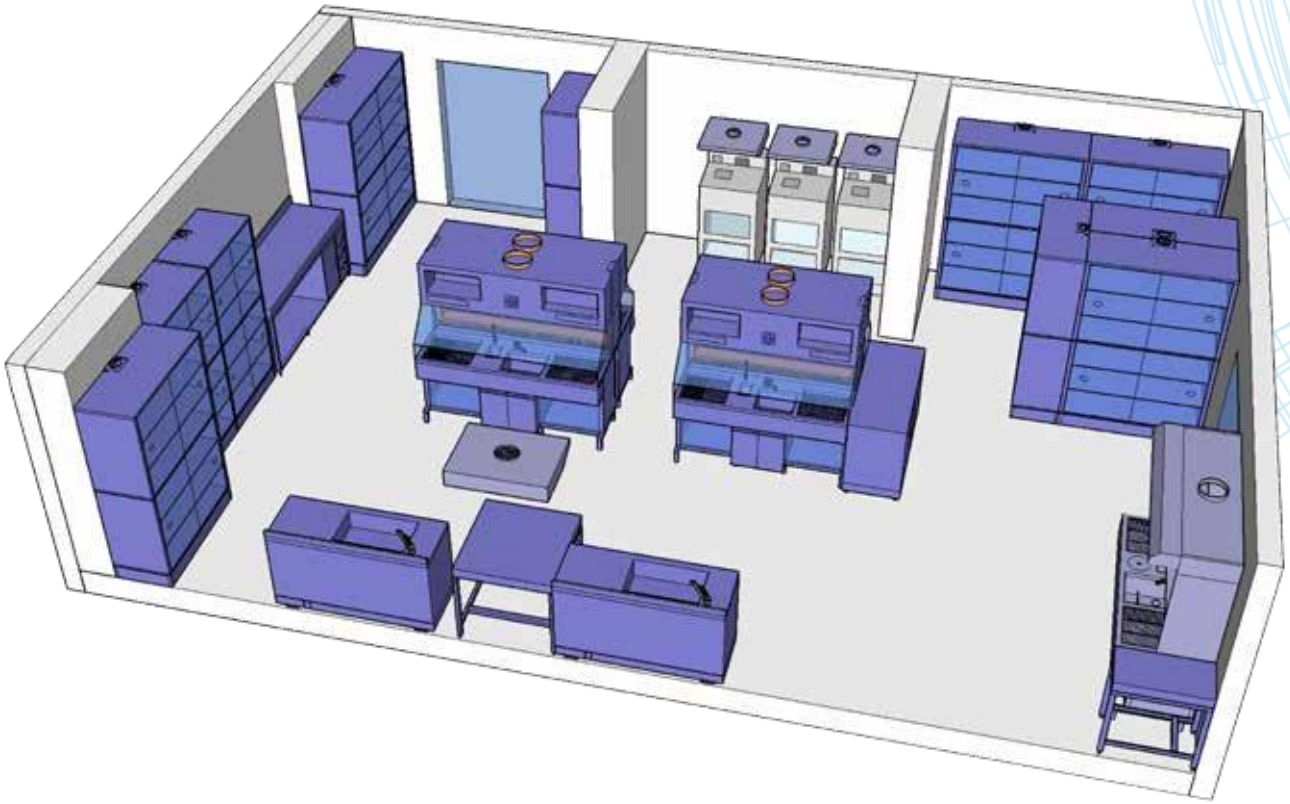
According to regulation (EU) 605/2014, the formaldehyde classification has been amended, as it is now considered carcinogenic. According to regulation RD665/1997 on the protection of workers from exposure to carcinogens, certain measures should be considered.

SOME OF THESE MEASURES FOR REDUCING AND MANAGING RISK INCLUDE:

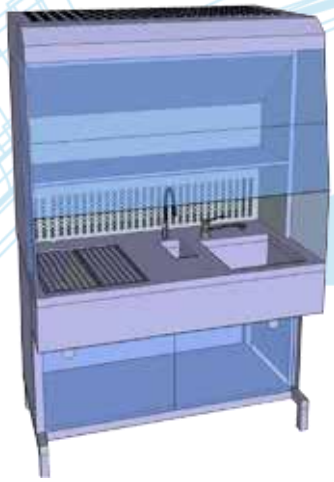
- Use of special grossing tables fitted with localised extraction to prevent the dispersion of formaldehyde fumes.
- General ventilation to provide a suitable number of air changes in the room per hour.
- Correct design and distribution of the work area. It is important to combine jobs that may release formaldehyde into the atmosphere in one single area or adjacent areas, that is, to restrict the number or employees exposed.
- Efficient management of waste.

WE DESIGN YOUR ROOM WITH DYNAMIC 3D DRAWINGS SO THAT YOU CAN TAKE A VIRTUAL TOUR.

At Casa Álvarez we stand out due to great versatility of our grossing tables. We make available a wide range of grossing table options, both standard and custom, so that you can choose which ones are best suited to your space and requirements.

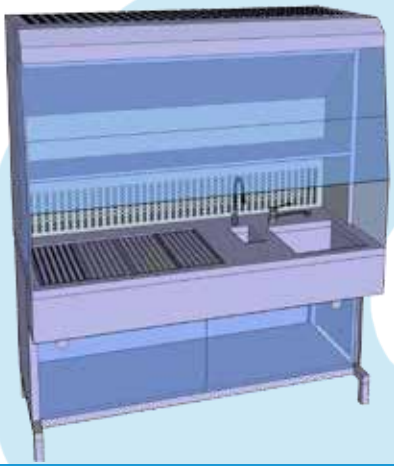


VARIOUS 3D DESIGNS



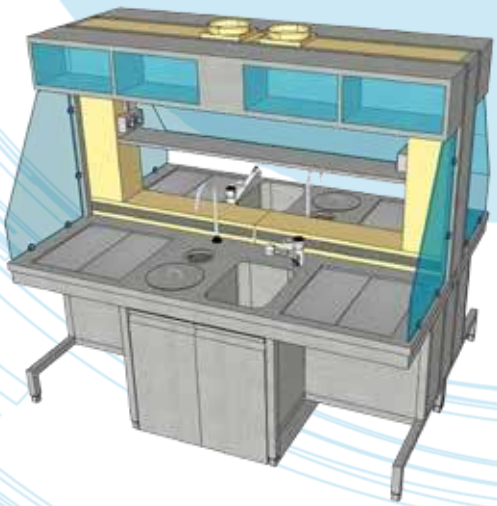
UCSA 1300 grossing station

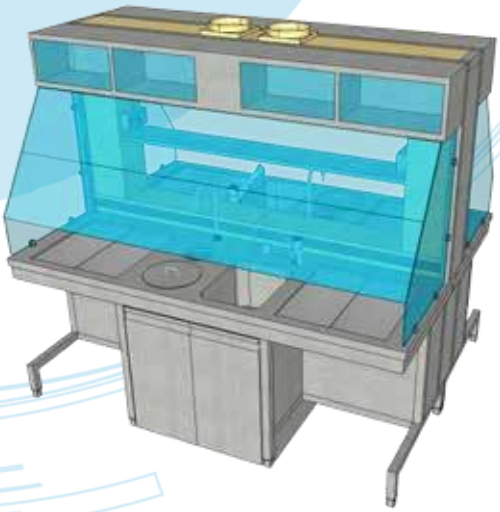
UCSF 1500 grossing station



UCSA 1800 grossing station

UCSF 1800 grossing station for two users





Grossing station for four users (2 to 2) in island form

GROSSING STATIONS

UCSF 1800 Station 1 USER

UCSF/UCSA GROSSING STATIONS.

EXIT TO THE OUTSIDE OR CIRCULATING AIR SYSTEM, WITH OR WITHOUT FILTERS, FOR ONE OR TWO OPERATORS.

The UCSF Universal stainless steel grossing stations guarantee a clean atmosphere in the workplace, while preparing and carving the sample. For one or more users, with various accessories and dimensions. Standard measurements or those provided by the user.

- The special development of the front and downwards absorption system provides a clean atmosphere in the workplace.
- The UCSF/UCSA grossing station operates with a gas exhaust system to the outside, with a circulating air system through built-in filters and fans with extraction power control.
- This means that air containing harmful formalin fumes (formaldehyde gas) is absorbed into the rear part and downwards through the work surface, and depending on the model, is propelled, by turbine fans, through the filter cartridges that capture the harmful molecules of formalin, so that clean air can then be blown back into the room or to the outside.

UCSF/UCSA 288 AF
grossing station

The development of **the front and downward ventilation system** maintains a clean atmosphere in the workplace.

RECIRCULATING AIR SYSTEM

Twin turbine extraction system with extraction power control. Maximum flow rate 1,150 m^3/h. and air capture speed of 0.3- 0.4 /1–1.2 m/sec.

Extraction is effected horizontally through the perforated front panel, downwards through the perforated cover sections of the work surface, thereby favouring the intake of contaminated air (formalin is heavier than air) and the air is projected through the **PURATEX** filter. Once regenerated, it is sent again to the room according to the principle of air circulation.

EXIT SYSTEM TO THE OUTSIDE

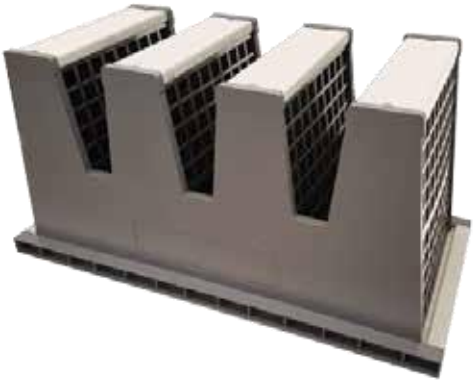
Instead of an upper air outlet grille, a cover is installed with a collar for connecting the outlet tube to the outside or connection of the separate forced extraction system.

FILTERED AIR

In situations of extraction to the outside with filters in the grossing station, or even in the recirculation of filtered air from the station itself, the arrangement of the filters is of the utmost importance. Due to the latest safety requirements, current air capture speeds above 0.7m3/s cause the horizontally-arranged filters to become saturated very quickly and become ineffective long before the end of their expected useful life. Our filters are placed in the vertical position, facilitating a gradual saturation, and have eight filtration sides. This provides a useful life of 800-900 hours of effective filtering.

POLYHEDRON FILTER IN 4"V" SHAPE

ACTIVATED CARBON WITH 12% POTASSIUM PERMANGANATE



Filter case

Particle filter

FORMALDEHYDE FILTER, WITH PRE-FILTER.

Activated carbon filter cartridge with 12% Potassium Permanganate, with pre-filter for larger particles.

Polyhedral design with eight filtration sides in vertical/inclined layout, provides a much more efficient filter compared with flat filters, and a long useful life of the filter, consistent with the large air flows and air capture speeds required nowadays.

Using diluted formalin at 4% replacing is recommended after 800 - 900 hours of work.

Presentation: Plastic frame (moulded polystyrene with 25mm flange on one side) and protective grilles on air output side, with 8 trays containing granular activated carbon in 3mm cylindrical pellet form, composed of mineral clay "impregnated with potassium permanganate at 12%". Includes disposable surface filter, folded in zigzag with galvanised steel frame for larger particles.

REFERENCE: FC-CARB-2.1

Using the filter housings (optional), with spheres of **potassium permanganate activated carbon,** better filtering is achieved than that established in the MAK standard.

12% POTASSIUM PERMANGANATE ACTIVATED CARBON FILTER TECHNICAL DATA

Type: 4 “V” polyhedron shape with 8 very high capacity filtration sides, reduced pressure drop, long useful working life.

Density (Ks/m³)	840+20 according to Method ASTM 2854
Hardness (Ks/m³)	3+20 according to Method ASTM 3802
Absorption capacity of formaldehyde	Up t 8% in weight according to Nobrac Method
Flow rate (m³/h):	611 - 1553 (at face velocity 1 - 2.54 m/s)
Pressure Drop (Pa)	15 - 95 (at air face velocity of 1-2.54 m/s)
Average Filtering Weight (Kg)	8
Moisture (%)	10-15
Contact time (seconds):	0.105 - 0.041 (according to air speed)
Active ingredient	**12% Potassium Permanganate**
Performance	Up to: 99.9%
Quality control (Is subject to the following):	Visible Colorimetric // KMnO4 remaining
Gas removal process	Chemisorption
Dimensions	592 x 287 x 292 mm

PARTICLE PRE-FILTER

Type	Disposable broken surface filter, folded in zigzag.
Frame	Galvanised steel.
Grille	Metallic galvanised on two sides.
Medium	Synthetic.
Average yield % (Am):	92% ≤
Average efficiency % (AE):	40% AE 60%
Class EN 779:	G4 and M5
Final Recommended Pressure Drop:	250 Pa.
Temperature:	100ºC

GROSSING STATION
ACCESSORIES

Continuous rinsing under perforated panels

Collection of formalin with level alarm

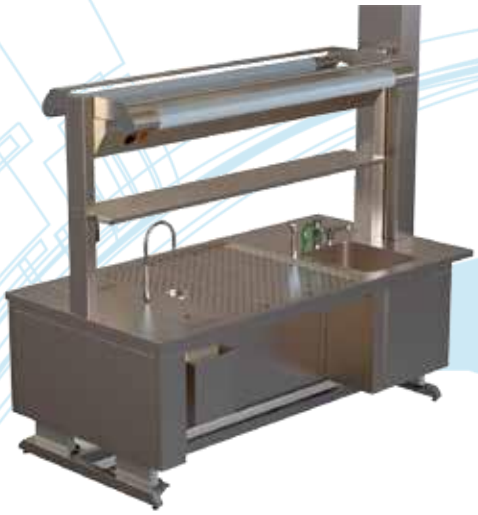
Space for legs and removable drawer

The photographs are not indicative, and the accessories described do not form part of the equipment; they are optional.

Waste-holding tank

Pedal and drum for dispensation of fresh formalin

Auxiliary furniture



Grossing station for two positions facing each other.

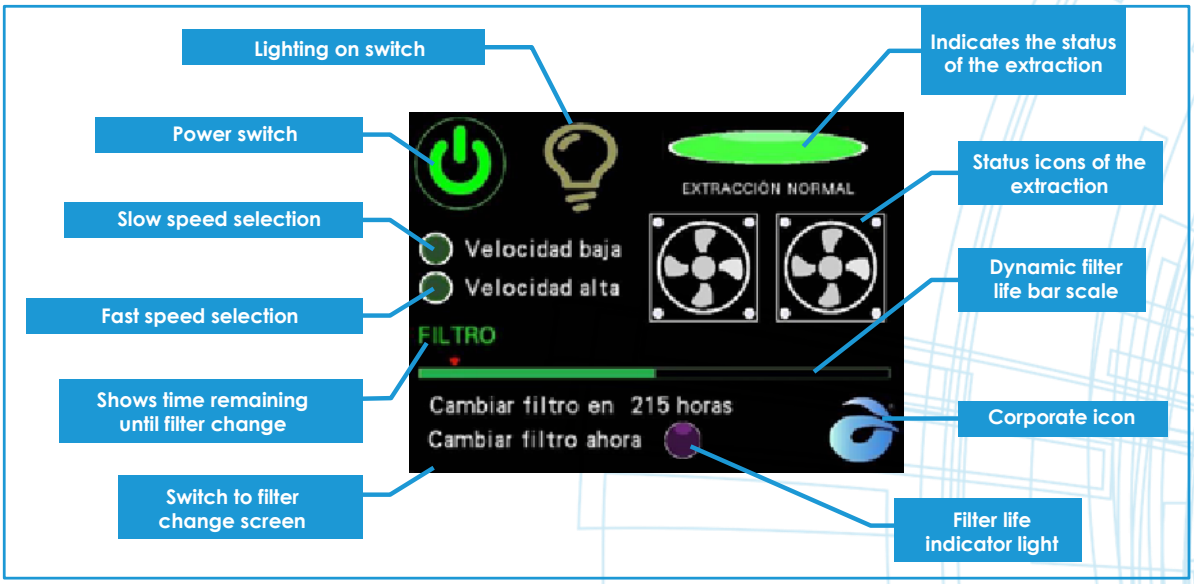
- Dictation system.
- Scales.
- Paper towel roll holder.
- Wheeled trolley with drawer for containers for fresh and discarded formalin.
- Folding table for documents.
- Chair with backrest and wheels.
- All kinds of auxiliary furniture (shelves, side tables, worktops, etc).
- Touch panel.
- Disposable grossing blades and handles of various sizes.
- Grossing tables with moulds, presses and millimetre ruler.
- Side and front folding protection panels.
- Formalin dispenser using pump commanded by pedal.
- Solid waste deposit on work surface and intake area (depending on station model).
- Water curtain around the edge of the tray under the perforated surface.
- LED swivel spotlights.
- Magnifier with LED light and swivel arm.
- Macro photography camera Full HD 1080.
- Full articulated brackets for monitor and keyboard/mouse.
- Waste disposer.
- Dual tube LED lighting system of 15 W, 20 W or 25W depending on model.
- Hour meter of filter consumption.
- Washing sink 400x400x250mm.
- Broad top shelf for work tools.
- Air outlet nozzle for extraction from the room to the outside, or to the centre's gas removal system.

UCSF 1800 grossing station for 2 users

GROSSING STATION
ACCESSORIES

MAIN SCREEN OR HOME SCREEN OF THE FUNCTIONS TOUCH PANEL

Very intuitive menu. Visual and audible alarms on screen will inform you of any changes and the condition of the station.



MACRO PHOTOGRAPHY CAMERA

Built-in camera (optional) for High Resolution, Full HD 1080p macro photography. Automatic focus and 30x zoom, both high-speed. Option for 1080 monitor up to 24".

Integration via universal stand for optimal positioning of the camera above the sample at the required working height. Auxiliary panel with main camera functions such as automatic or manual focus, zoom, light, and manual or automatic modes. Pedals for controlling zoom, automatic and manual focus, and brightness control. Separate pedal for image capture.

Includes a PC with management program for the camera and the images obtained.

Articulated brackets for monitor and keyboard/mouse built in to the side of the station. Its positioning and articulations make the work of the user easier.

Built-in Optilia Macro Camera (optional)

TECHNICAL DATA

Length:	1,300 mm 1,500 mm 1,800 mm 2,000 mm 2,500 mm
Also according to the requirements of the client	
Depth:	750 mm 800 mm 850 mm
Height	2,050 mm 2,250 mm
Working height:	900 mm
Ventilated grossing surface:	600 mm wide 700 mm wide 900 mm wide 500 deep according to model
Lighting 1300 Station	2xLED Power Strip 15W 1500 lm
Lighting 1500 Station	2xLED power strip 20W 2000 lm
Lighting 1800 Station	2xPower Strip LED 25W 2500 lm

CE

Intake:	Front, lower and upper outlet.
Air velocity in perforated surface:	=/>0.7m^3/s
Material:	AISI 316/304
Washing sink:	400x400x250 mm
Formalin disposal sink:	120 mm Ø
Hot and cold water:	Intake ½”
Drainage:	AW-DN50
Total current consumption:	CA 5-8 Amps
Water pressure:	CA 4-5 BAR
Diameter of pipe work area:	DN40

PROJECTS UNDERTAKEN

Two UCSA 1800 grossing stations

UCSF/UCSA 1800 grossing station with macro camera and magnifier.

Grossing room with cabinets for samples in containers with formalin, wheeled-type cabinets, grossing stations and side tables in stainless steel.

Casa Álvarez, with over 100 years' experience, has installed hundreds of grossing stations and cabinets, with made-to-measure projects designed for each client according to the needs of their grossing room or laboratory.

We conduct 3D custom-made projects with no obligation.
We provide all types of auxiliary furniture for your laboratory and we advise you on the best way to arrange it.
Ask for a quote.

VENTILATED
CABINETS

VENTILATED STAINLESS STEEL CABINETS FOR HISTOLOGICAL SAMPLES IN CONTAINERS WITH FORMALIN

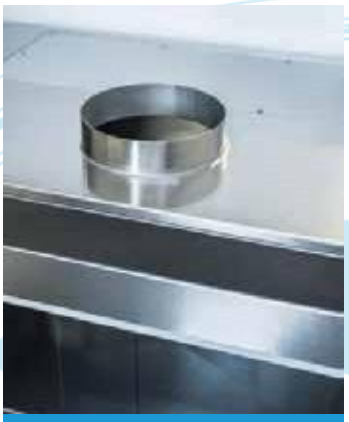
At **Casa Álvarez**, we care about your security. That's why we offer you a wide variety of ventilated cabinets, with air recirculation and exit to the outside, so that the samples can be stored safely in containers with formalin and a suitable working temperature maintained, free from fumes harmful to health.

Two cabinets with sliding doors

Cabinet with swinging doors

- Divided into two areas, upper and lower, with separate ventilation in each area towards the rear ventilation panel.
- The gases produced by the formalin are extracted by the rear panel with upper central outlet to the outside, favouring clean air inside the cabinet.
- (Optional) Air recirculation unit with CARUSORB aluminium oxide filter impregnated with potassium permanganate, specifically for formaldehyde.
- 6 shelves, 4 of them height adjustable. For load of 80 Kg in each shelf spread in a uniform way.
- 4 Sliding doors of transparent safety glass, preventing the typical formation of air currents in the case of swinging doors. Facilitate manoeuvrability in tight spaces.
- Option of glass hinged doors instead of sliding doors.
- Ability to attach cabinets.
- Option of wheeled type cabinets for easy access between the samples reception room and the grossing room with no transit of personnel.

Recirculation unit and air filter



Upper collar for connecting outlet pipe to the outside.

Height regulation of the shelves

Removal of gases in upper and lower areas

OPTIONAL FEATURES

RECIRCULATION UNIT AND AIR FILTER

Interchangeable filter cartridge of aluminium oxide with potassium permanganate specifically for formaldehyde. Speed switch and controller.

COLLAR FOR PIPE TO THE OUTSIDE

Collar for connection of tube for gas exhaust system to the outside or to external extraction system.

ALARM SYSTEM FOR OPEN DOOR

Open door alarm with delay warning that the door is open. Only in the swinging door version. Disconnection possible.

BUCKETS FOR LIQUID RETENTION

Two removable buckets, on the bottom part of each area, for accidental spills. Recommended to also use the formalin neutralising pads due to their great absorbent power.

ADDITIONAL SHELVES

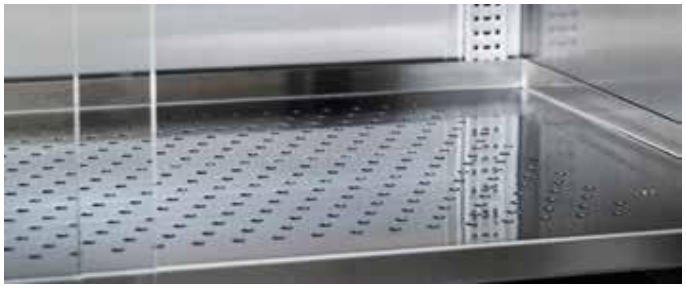
To offer better storage of samples in small containers.

INTERIOR LIGHTING

LED strip lighting system on side panels for lighting the whole of the interior. Separate switch in the frame.

Lock to prevent the opening of doors (optional).

Filtration system (optional) with easy access to change the filter from the front.



Shelves gently sloping towards the centre for drainage of possible spills to the fluid retention bucket (optional system).

SPECIFICATIONS

AIR RENEWAL:

Cabinet 1,000 mm: 100 m^3/hour.
Cabinet 1,200 mm: 83.3 m^3/hour.
Cabinet 1,500 mm: 66.6 m^3/hour.

DIMENSIONS:

Different Widths:

1,000: 1,200; and 1,500 mm. We also adapt to the needs of the client.
Height: 2,100 mm (2,300 mm with ventilation and filtration unit),

Bottom: 500 mm or 600 mm (including rear ventilation panel of 50 mm).
Outlet Nozzle: 100 mm Ø centred.

MATERIAL:

Stainless steel AISI304, 320 grit for fine finishing.

CasaÁlvarez
Material Científico desde 1912

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