

MÚLTIPLO is a proposal for laboratory furniture comprising modular freestanding interconnectable benches.

The furniture is designed for the maximum ease of installation, as well as for eventual changes in the laboratory layout, allowing any type of installation and equipment. This model increases the equipment possibilities by allowing its composition to be easily changed.

WALL FITTING BENCHES

Structure formed by legs whose design in square section and made of cold-laminated steel of 30 X 30 mm section gives high mechanical strength. These legs are joined together from behind by a strap and by a resin moulding at the front.

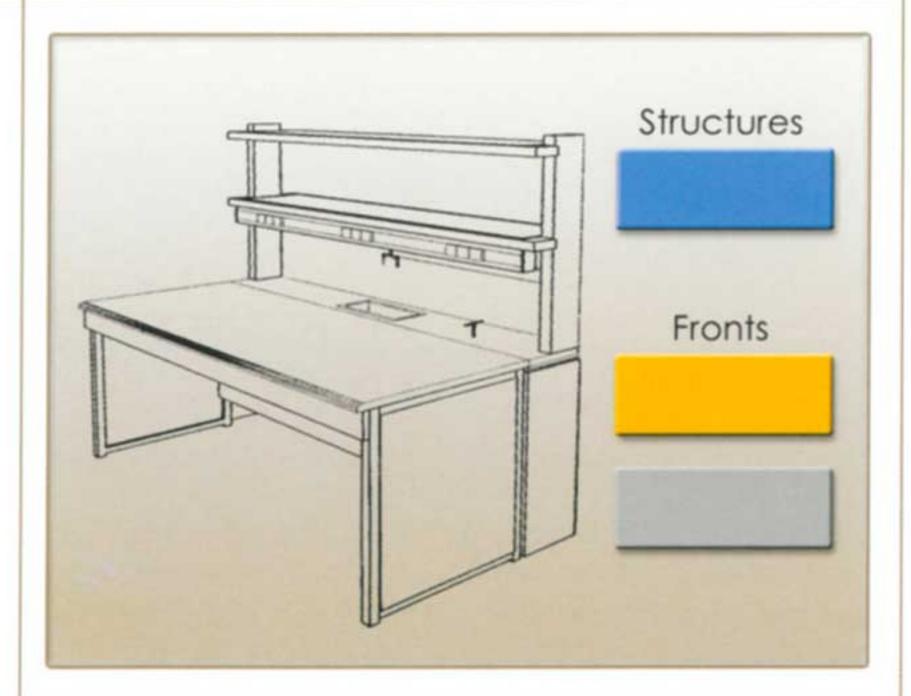
- Levelling system with high load bearing capacity
- Covered in blue epoxy paint RAL 5015
- Modules of 600, 900, 1,200, 1,500 and 1,800 mm
- Weights of 500, 750 and 900 mm

Rear connecting, forming a services gallery for eventual system maintenance.

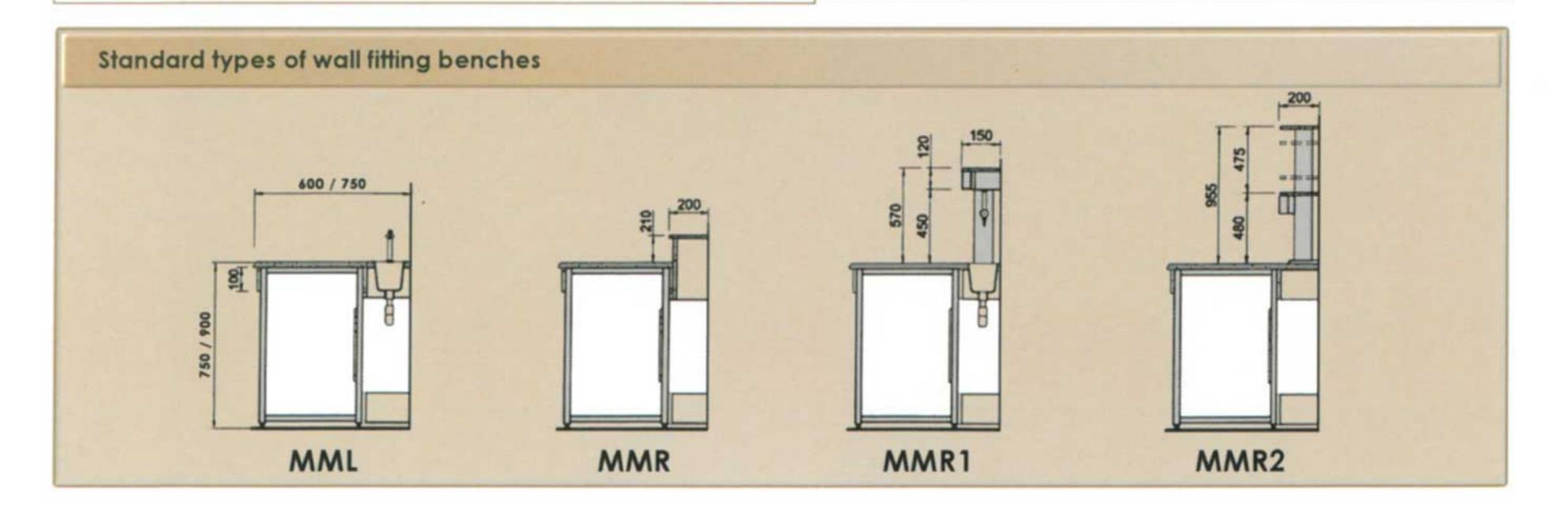
Shelf column constructed from steel section covered with epoxy resin paint.

- Column with a shelf height of 570 mm
- Twin columns of 955 mm with two shelves of adjustable heig
- Several types of single, double or storage shelves can be installed at any height.
- A service panel is located beneath the lower shelf for al kinds of fluid Installation.
- Optionally a service panel can be fitted with PVC conduit for the assembly of electrical equipment or telephone and data lines.

Shelves. Formed from a metal framework painted with epoxy resin paint and a body in melamine wood fitted inside.









CENTRAL BENCHES

Comprising two wall benches joined together back to back, which leaves a generous service gallery.

- Modules of 1,200, 1,500 and 1,800 mm.
- Heights of 750 and 900 mm.
- Versions with single or double shelves similar to those described in the wall-fitting benches.
- Multiple combinations:
 - With sink unit at head of bench
 - With wall-fitting benches linked in "L" or "U" shape, etc.



SPECIAL BENCHES

Our technical department will develop the optimum solution for any type of surface in various working areas:

- Installations for physics and chemistry (bus-bars).
- Installations for chromatography (with gases).
- Electronic laboratory installations.









Standard types of central benches Standard types of central benches MCL MCR MCR MCR1 MCR2

BENCH TOPS

Independently of whether they are wall or central benches and depending on the application, we have available a wide range of materials for the manufacture of different surfaces.

Types and sizes

The shape and final sizes are undertaken in accordance with the customer's specifications or for adapting to the floor plan that is required by each project.

The tops can be smooth or with perforations to enable sinks and taps to be fitted.

- Dry tops, non-perforated
- Wet tops, with specific perforations

Perimeter edging

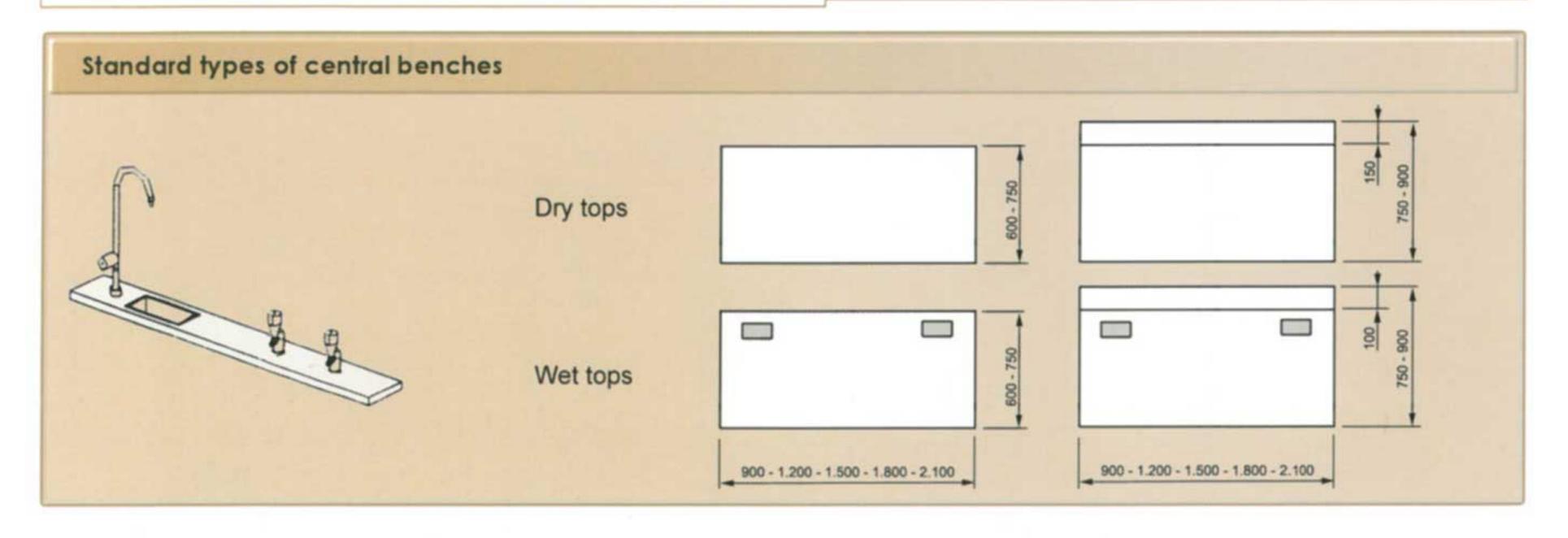
When two or more surfaces are required to form a single top, pieces with a single edging strip are used around the whole piece, except on the interconnecting surface.

Construction

The bench tops are constructed in accordance with the quality criteria of DIN 12916 standard, relative to the materials used, dimensional tolerances and edge and corner finishes.









Granite Tops

Natural stone of high mechanical strength and chemical resistance (inorganic products) in a veined white colour, polished finish and rounded edges. Mounted on water-repellent conglomerate board of 16 mm.

- 20 mm thick with front thickened to 40 mm.
- Flat front.

Ceramic sheet top. Ceramic sheet of 6 mm thickness on a 20 mm thick water repelling chipboard.

- · Smooth face
- Front with epoxy resin perimeter edge

Stainless steel top. Formed by a sheet of AISI 304 stainless steel of 1 mm thickness and mounted on a water repellent board of 19 mm thickness.

- The back of the top can have a continuous fold as a 60 or 150 mm barrier.
- Smooth front over-dimensioned at 40 mm.
- Front with perimeter edging of the same material.

Compact resin top. Solid top formed from thermostable synthetic resins, uniformly reinforced with cellulose fibres, perfectly polymerised throughout their thickness, not affected by moisture and resistant to acid, base and solvent absorption.

- 18 mm thickness in normal compact resin and 20 mm in high chemical resistance compact resin.
- Smooth front with perimeter edging.

Stratified resin top. 0.8 mm thick stratified resin covering a support panel of 30 mm thick water-repelling particles.

- Post-formed edges with simple or compound curves
- Various colours

Tempered glass tops

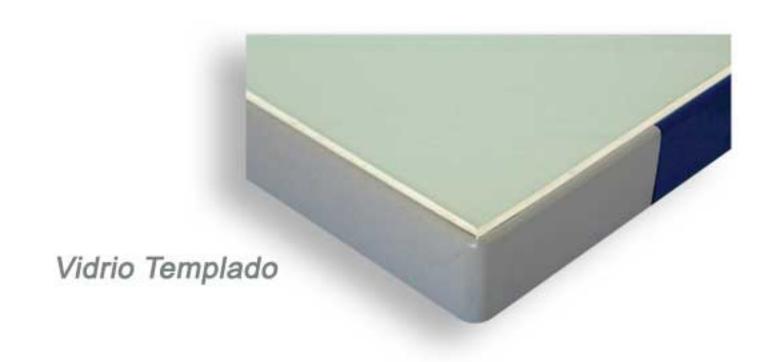
Cover of tempered glass 6 mm thick, light blue in colour, on a panel of water-repellent particles of 25 mm. Joints of acid-resistant white-coloured mastic.

- Flat front with polypropylene profile of 3 mm in thickness.
- Front with peripheral edging of epoxy resin.

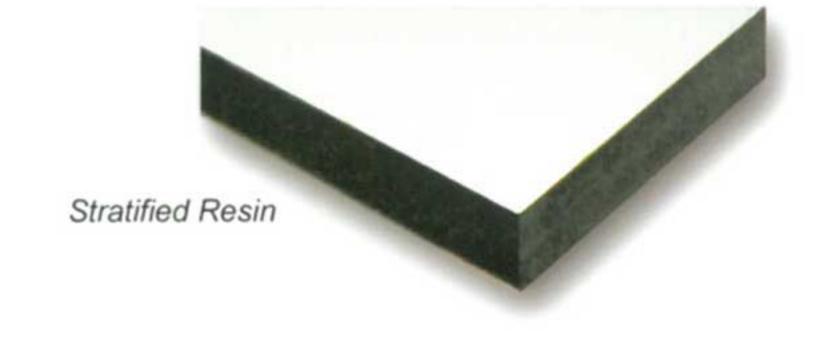


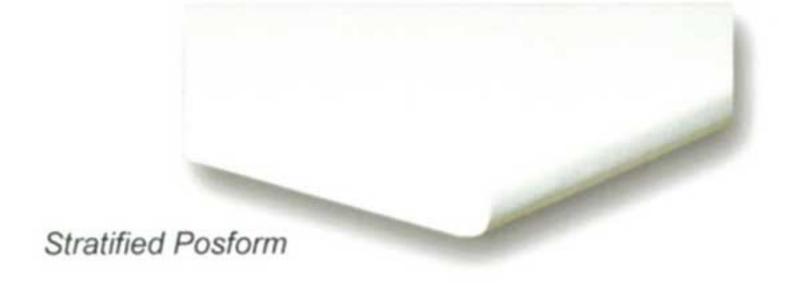












UNDER BENCH MODULES

Made from 19 mm thick melamine boards, with the edges protected by rigid 3 mm thick PVC.

Removable modules

- With 80 mm diameter synthetic resin wheels
- Double support design
- Brakes on front wheels

Drawers

- Side pieces constructed of folded metal sheet, covered with epoxy paint, nylon wheels
- They will bear a weight of 30 kg and withstand 100,000 openings
- Front and rear in 19 mm melamine board and edges with 3 mm PVC
- · Back of cabinet in 10 mm thick melamine

Doors

Constructed of melamine board similar to that mentioned above.

Hinges to allow 180° opening

Door/drawer pulls metallic handles

Adjustable panelings for height and made of melamine wood

WALL FITTING CUPBOARDS

Fixed to the wall and made of 19 mm thick melamine wood with edges in 3 mm thick rigid PVC.

Model Dimensions

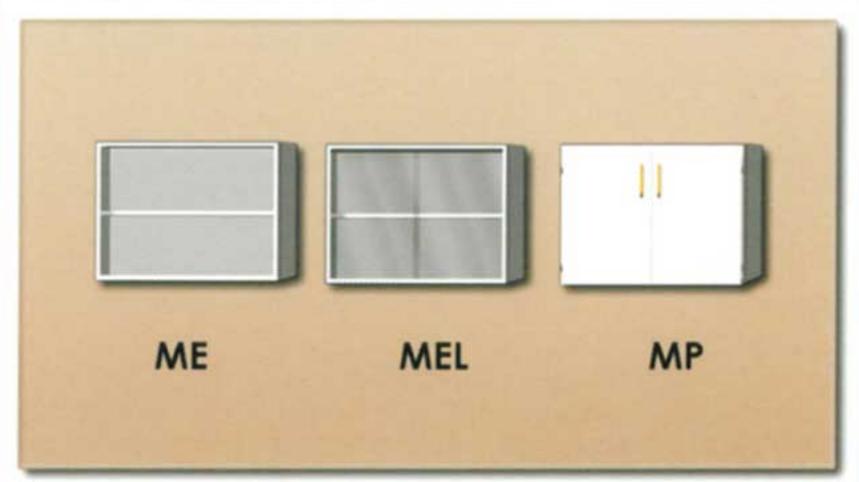
Shelf
Glass door
Plain door

Width: 900-1,200 mm
Depth: 350 mm
height: 700 mm









Standard types of low furniture WIDTH: 530/830 mm DEPTH: 470 mm HEIGHT: 725 mm M4C MCP MP M2P



WASHING MODULES

Structure similarly made to the work benches with the body constructed of 19 mm thick melamine wood with edges in 3 mm thick rigid PVC.

Rear in water repellent resin.

Single or twin module to be attached to wall fitting benches with independent structure with one or two swinging doors.

Front module to be attached to central benches with independent structure and twin swinging door.

- Sliding doors.
- Sinks of stainless steel, polypropylene or ceramic.
- Polypropylene siphon.
- Water mixing tap.
- · Dimensions:

Width: 600, 1,200 or 1,500 mm

Depth:

600 or 750 mm





BALANCE BENCHES

Formed by two independent bodies, each of metallic structure covered by 16 mm melamine wood, with the interior containing the anti-vibration weights and dampers.

- Working surface in epoxy resin board with the base for the balance in polished granite.
- · Dimensions:

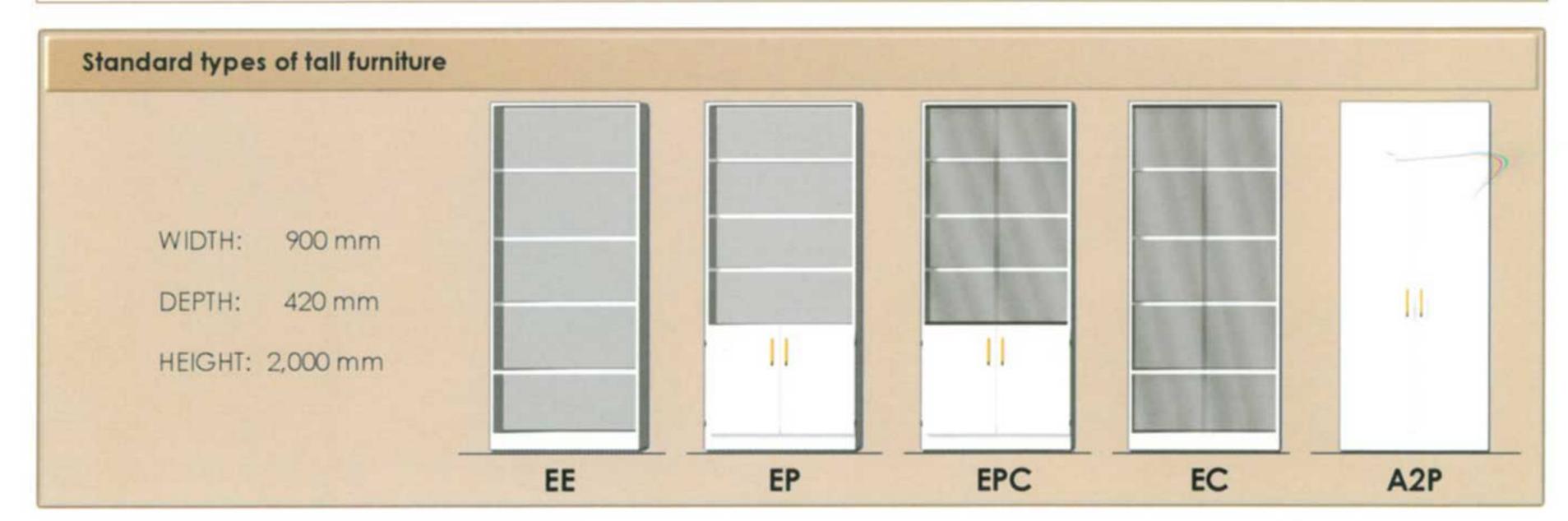
Width: 900 1,000 mm 750 mm Depth: Height: 750 900 mm



TALL FURNITURE

Made from 16 mm thick melamine board with edges in 3 mm thick rigid PVC.

- Top and base adjustable in height
- Plain swinging or sliding glass doors
- Optional locks





FUME CUPBOARDS

It comprises two independent compartments. The **top compartment** is the work space formed by a two-sided structure with fireproof epoxy resin interior, highly resistant to chemicals.

Incorporating:

- Roof-mounted fluorescent lighting.
- A roof extractor with polypropylene runner.
- Vertically sliding sash window with laminated safety glass.
- Water and gas taps on the front.

The bottom compartment is a MULTIPLO work bench that includes the following fittings:

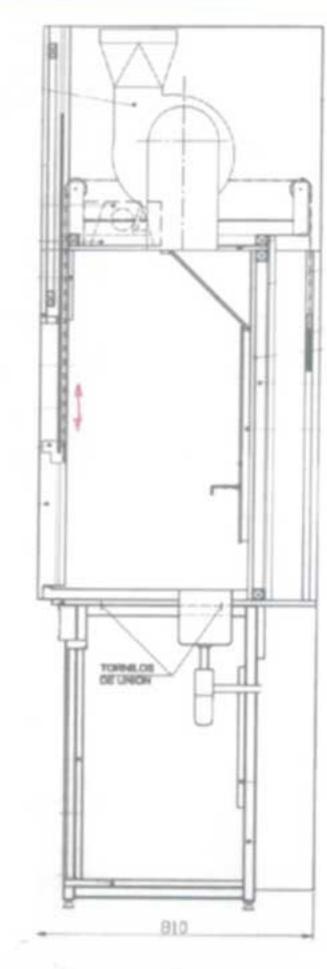
- Work tops in glazed ceramic tiles with built.in sink unit and polypropylene antisiphon trap, epoxy resin or granite.
- Front panel with the electrical fittings and remote controls of water and gas.
- Electrical unit with circuit breaker, lighting and extractor switches, two power outlets and indicator lamps.
- Bottom unit has hinged doors.
- •Temperature monitoring with alarm.

OPTIONAL:

Manual control of motor speed.

Dimensions:

2 lengths: 1.266 et 1.566 mm. Height: 2.540 mm. Depth: 810 mm.









Products incorporated into the furniture described: sinks, taps, electrical ware, extractors, washing machines, autoclaves, refrigerating equipment.

SINK UNITS

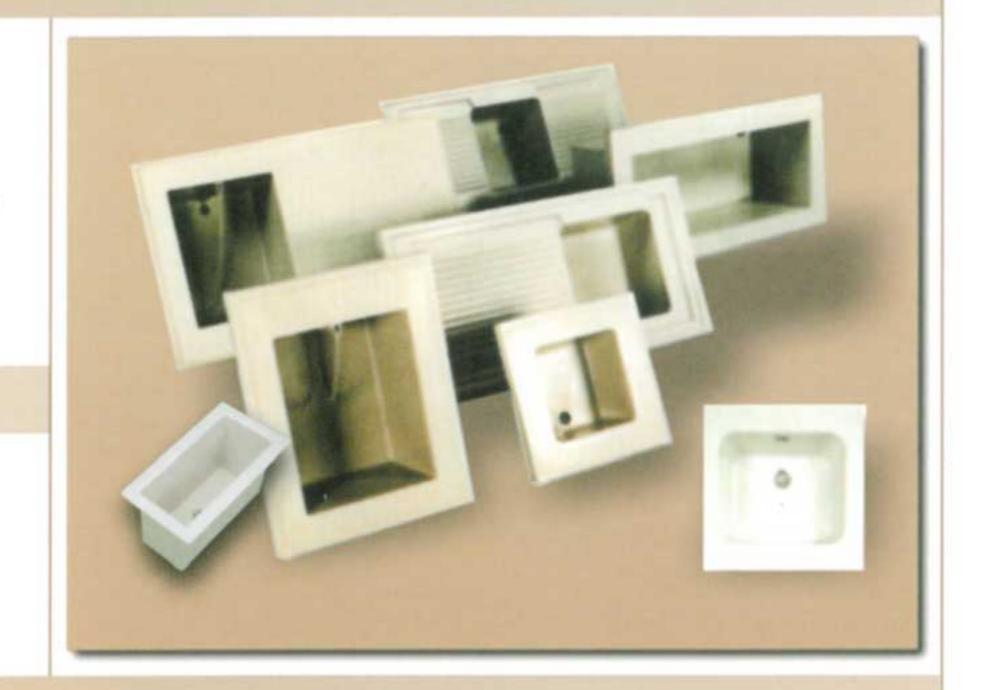
For washing units in either wall fitting or central benches.

- Polypropylene on welded sheet with injection moulded vessel, sizes 600 x 750 mm, 1,000 x 600 mm with lower drainage and overfill outlet.
- One-piece ceramic of 400 x 400 mm and 600 x 600 mm for wall fitted benches and of 1,500 x 600 mm with draining board for central benches.
- · Steel fitted in bench surface or monoblock

SMALL SINKS

For wall fitting and central benches. Assembly level with the bench, flush with the bench top or beneath the bench top.

· Monoblock in injected polypropylene



TAPS

The most up-to-date quality with anti-corrosive plastic covering, with metal or ceramic closure with models for water, gas and with a safety device for gas.

- Taps with single or dual outlets and 45°, 90° and 180° elbow joints.
- Vertical columns with one, two and three outlets.
- Elbow, pedal etc. operation.

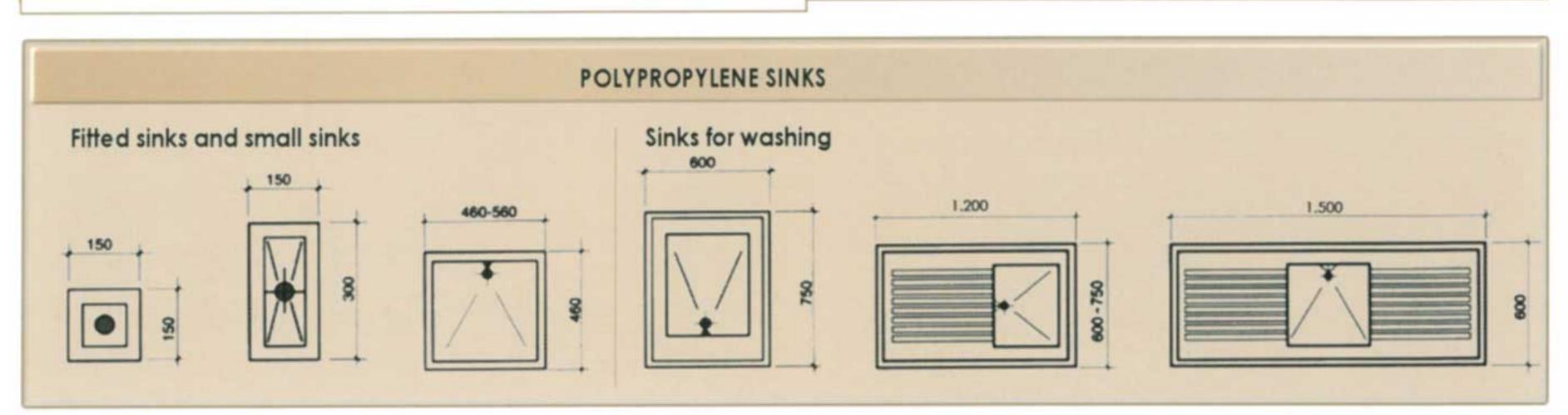
ELECTRICITY

The electricity and mechanisms lines are incorporated into the bench by means of conduits con register boxes, which allows the different types of cables, e.g. electrical, telephone and data, to be separated.

- Single or dual sided electrical Towers with two or more sockets with waterproof cover and protection of the connection holes.
- Various colours according to the type of current.
- Magnetothermic overload protection.
- · Optional pilot lights.







Security products.

CUPBOARDS FOR CHEMICALS

Safety cupboards for chemicals constructed from water repellent chipboard and with a flame resistant plastic laminate coating.

- Doors open 110° to simplify withdrawal of the trays. Safety closure and lock.
- · Four plastic trays with anti-spill lip adjustable for height.
- Activated carbon filter adapted for acids and bases and easily changed in locked closed circuit system.
- Electric extraction fan of 200 M3/hour capacity, with housing of glass reinforced polyamide, self-extinguishing and resistant to corrosives. Internal protection of the Ip44 type in accordance with DIN 40050.

Dimensions Width Depth Height 1,140 600 1,900 mm 600 600 1,900 mm



CUPBOARDS FOR INFLAMMABLE PRODUCTS

Safety cupboards for storing inflammables, fire resistant in accordance with DIN 12925-1, with inner and outer construction of 1 to 2 mm thick steel sheet with intermediate panels in mineral wool. Covered with epoxy paint.

- Three removable trays with rim in stainless steel with a capacity of 100 kg. Deep tray of 40 litre capacity.
- Automatic closing system at ambient temperatures of above 50° C.
- Activated carbon filters for solvents.
- · Safety closure with lock.
- Anti-spark hinges of iron and bronze.

Dimensions Width 590 - 1.190 mm

Depth 600 mm

Height 700 - 1.950 mm

Optionally refrigeration unit that cools the fluid to 15° C, connected to a heat exchanger within the cupboard. temperature control.



ACTIVATED CARBON FILTER

- Filter elements for extraction units
- · Self-aspirating filters made of:
 - PVC and polypropylene
 - PVC and stainless steel
- Extraction capacity from 1,300 to 2,000 m3/hour





REFRIGERATORS AND FREEZERS

Refrigerators

Sheet steel construction with anti-toxic treatment, and interior in PVC, insulated with 50 mm thick high density CFC free polyurethane foam.

- Capacity 70 I. Temperature 20/-30° C
- Magnetic closure that guarantees perfect closing.
- High freezing capacity (8 kg/24 hours).
- · Digital thermometer.
- Refrigeration group with single phase hermetic compressor
- · Ecological gas (R134A) filled circuit.

Freezers

Sheet steel construction with interior of aluminium waffle, insulated with high-density polyurethane foam.

- Capacities 120, 220 and 330 I. Temperature 30/-50° C.
- Stainless steel hinges, safety closure and three rubber strips for completely hermetic sealing.
- Two stage refrigeration unit, hermetic compressors, air condenser and pressurestat protection.
- Internal electronic regulator for accurate temperature Measurement and reading.



SAFETY SHOWERS AND EYE WASHES

Various models with single and twin outlets.

- · Pedal, arm or chain operated foot shower.
- Mixed shower eye wash version with basin.
- Wall-fitted and bench-top eye wash with extendable tubing.

COMPLEMENTS

- Extractors for fume cupboards or exterior
- Extraction hoods with filters and extendable arm and adjustable height.
- Fire resistant ashtrays and waste paper baskets
- Fire blankets



STOOLS

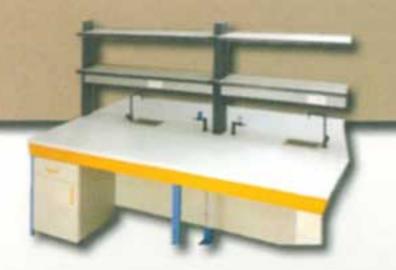
Metallic structure with fivee legs, epoxy painted and chrome ring footrest.

Seat and back in upholstered wood or black, brown or yellow injected polypropylene.

Height regulation by gas or screw from:

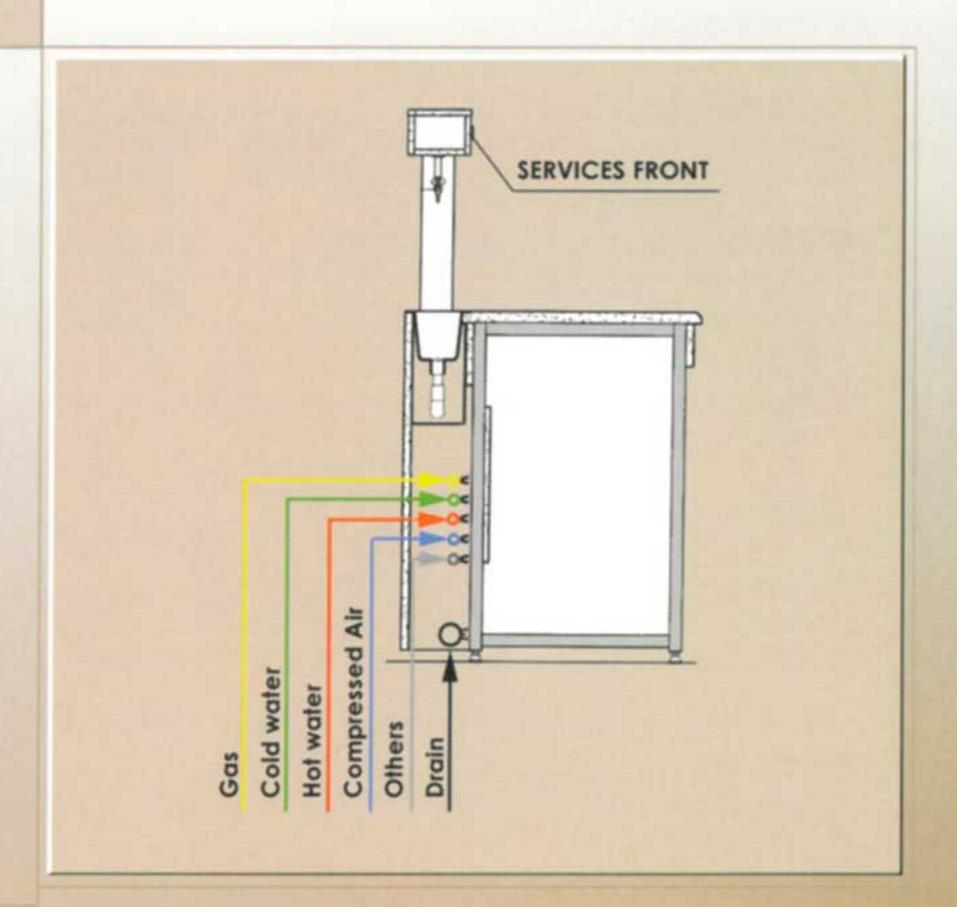
- -530 to 700 mm.
- -450 to 550 mm.





INSTALLATIONS

- The benches are equipped with their own conduit network, pre-installed in the service gallery and easily accessible from the outside.
- The supply tubes are generally copper of the appropriate section for the nature and flow of the contents.
- The specifications of some fluids, such as treated water, acetylene etc. require the use of other materials, e.g. PVC, stainless steel, PVDF etc.
- Drains are made of PVC or polypropylene tubing f the appropriate section. Normally they are 40 mm diameter.
- The electrical lines are incorporated by means of a conduit with a register box, which allows different types of cables for electricity, telephones, data etc. to be kept separate.

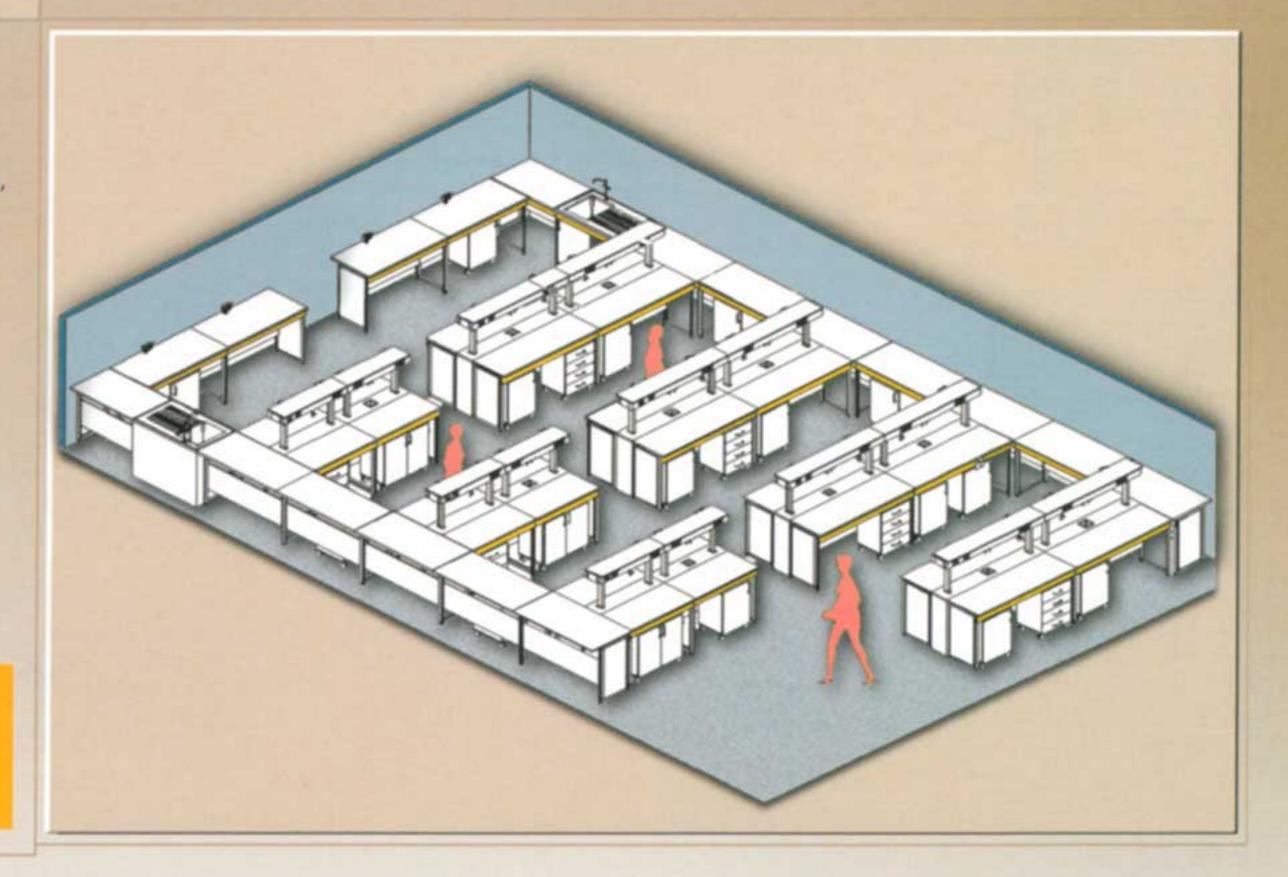


PROJECTS

Our technical department can offer you advice regarding any queries you may have with regards to working area, composition and distribution, adapted to each particular aspect.



information, we can supply more specific data of our products in our TECHNICAL CATALOGUE.



MODU

MODULABO, S.L.

C/ Viento, 8 Pol.Ind. San José de Valderas 28918 LEGANÉS - MADRID

> Tfno: 91 611 00 01 Fax: 91 619 06 13

E mail: modulabo@wanadoo.es www.modulabo.com