

TURNKEY LAB SOLUTIONS



About Us



Protek Analitik is a professional service provider in turnkey laboratory solutions, from designing and building world class laboratories to supplying laboratory equipment and supplies. We do also provide consultancy and training services on GLP (Good Laboratory Practices), ISO17025, laboratory management, effective and feasible laboratory design complying to worldwide standards.

With more than 25 years of experience, a highly skilled technical team and reputable partners, Protek is the leading choice of partner by our customers.

Consultancy on laboratories:

- Infrastructure design
 - Gas Distribution System
 - Data Acquisition System
 - Electrical Diagrams
 - HVAC (Heating, Ventilating and Air Conditioning)
- Layout Planning
- 2D, 3D, Isometric Drawings
- Storage Systems
- Waste Management
- Work Flow Planning
- Equipment & Supply Planning

Our Mission:

- To give the best service by delivering high quality products, on time delivery and after sales support
- To provide our customers with professional and efficient services in a manner reflecting our commitment to the highest standards available today
- Being recognised by our employees and our clients for excellence and integrity

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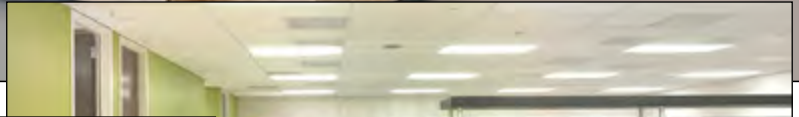
LABORATORY DESIGN AND BUILD



DESIGN & BUILD

- Complying to ISO 17025 and related International Standards
- From A to Z, including infrastructure like electrical, air conditioning and gas systems
- Customized Solutions
- Best quality materials
- Professional expertise input and consultancy





PROTEK, designs, builds and renovates laboratories of all kinds.



LABORATORY BENCHES



THE LABORATORY BENCHES ARE AVAILABLE WITH THREE DIFFERENT TYPES OF CABINETS.

- Suspended Cabinets
- Mobile Cabinets
- Pedestal Cabinets



Suspended Cabinet

Suspended Cabinet: In this setup the under bench cabinets are suspended to the C-Frame. There is a space of 180 mm height between the floor and the underside of the cabinets.

Mobile Cabinet: In this setup the under bench cabinet are placed on the floor. The cabinets are similar to the suspended cabinets.

Pedestal Cabinet: In this setup the benches do not use the C-frames. The cabinets are mounted on a pedestal and thus directly placed on the floor.



Suspended Cabinets



Mobile Cabinets



Pedestal Cabinets



C-Frames

C-Frames

C-Frames form the skeleton of the Laboratory Benches. It supports the worktop and equipment on top of the worktop. It prevents that the weight will be loaded on the under bench cabinets.

Complete Stainless Steel Benches

If required all models of our portfolio can be made of Stainless Steel 316 AISI Cr/Ni. In this case, C-Frames, under bench cabinets and worktops with its sinks are made of stainless steel completely.



Stainless Steel Benches

WORKTOPS

One of the most important choices that have to be made is the worktop of the bench. The choice is depending on purpose of the bench, preference, pricing. The different worktop materials have different properties. One is more chemical resistant, the other more scratch resistant or has higher heat resistant. Also hygienic requirements might impact the decision on the preferred worktop material. We have a wide range of worktop material in our standard program.

- Laminate
- Plywood
- Compact Laminate
- Trespa
- Corian
- Stainless Steel
- Polypropylene
- Epoxy resin
- Ceramic

**WEIGHING TABLES**

The Balance Tables are freestanding units. As they have the same height as other benches they can be installed next to other benches or as separate units in areas like balance rooms. The structure of the balance tables is such that they minimize vibrations. The frame is made of galvanized iron sheet cleaned, epoxy painted and kiln dried. The wide hollow legs are designed to be filled with heavy materials, most commonly sand. Trespa® or compact laminate is used as worktop. The worktop holds a marble slab of 30 mm thickness. The slab is hold in position by a vibration damping construction. The Standard table heights are 750/900 mm. Depths and widths can be 600/750/900 mm.

ENERGY UNITS

Energy units are used for the safe distribution of services throughout the benches. Energy units are separate from the benches allowing for flexibility in maintenance and furniture modifications. There are two different types of service units available, Mediacell and Panel Type. Panel type is more suitable for benches with many services.

Both Mediacell and Panel Type Energy Units consists of two sections;

- **Service Columns**
- **Service Units**

There are various models available depending on origin of services (i.e. floor, ceiling), bench heights and ceiling heights.

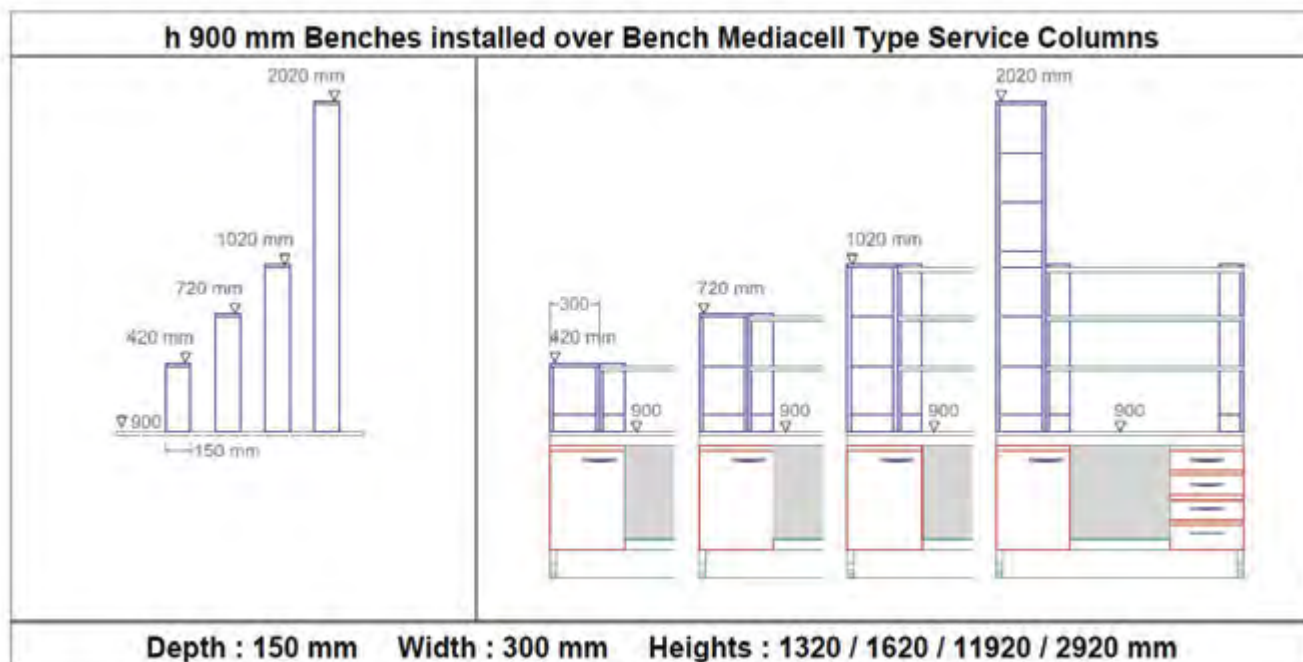


MEDIACELL ENERGY UNITS

Mediacell Service Columns dimensions are 300mm wide, 150 mm deep and available in various heights. The columns are produced from galvanized sheets, painted with anti-acid epoxy paint and kiln dried at 200°C. Their main purpose is to route utilities from the (false) ceiling into the benches. In some case the columns are used as free standing units. The Mediacell Service Columns are used together with the Mediacell Energy Units.

They share the same features. They both can be used as freestanding units or mounted on top of the benches. The Mediacell columns are made from a frame covered with panels. The panels can be used to mount equipment like valves, taps, sockets, switches or junction boxes.





PANEL ENERGY UNITS

The frame of a Panel Service Column is made of 60x30x2 mm hollow sections. The panels are made of galvanized steel sheets. These sheets are cleaned, covered with anti-acid epoxy paint and kiln dried at 200°C. The columns are available in different sizes. The depth of the columns is fixed but the height and width vary depending on project requirements.

The Panels Service Columns are used together with the Panel Service Units. The panel type columns and energy units are always installed on the floor. The panels can be used to mount equipment like valves, taps, sockets, switches or junction boxes.



PANEL TYPE SERVICE COLUMNS - TECHNICAL SPECIFICATIONS

Material	The loader chassis of the Panel Type Service Columns is made of hollow Section and the Panels and the medium travers are made of galvanized sheet of which surface has been cleaned up and painted with anti-acid epoxy paint and afterwards furnace at 200°C Profile Dimensions : 30 x 60 x 2 mm Sheet Thickness : Between 0,80 – 1,00 – 1,20 mm
Colour	Body Block Dark Grey (Rall 7040) Epoxy Paint The front Panels are Light Grey (Rall 7047) Epoxy Paint
Sizes	<u>Over Floor Types – For h 750 and 900 mm Bench</u> Heights : 1320 / 1620 / 1920 / 2920 mm Depth : 80 mm Widths : 375 / 400 / 450 / 500 / 600 mm Front Panel Heights: 450 / 500 / 600 mm

GAS SYSTEMS

The Gas Systems has been gathered in 4 main groups according to the Gas sorts will be used at the Laboratory, as follows;

























- Gas Taps
- Pressure Reducer Regulators
- Manifolds
- Gas Tubing and Installations

GAS TAPS

There are special colour Labels of the Laboratory Gas Taps concerning which will be used according to the utility sort. Those colours are the same and a Standard has been formed all over the world. It's obligatory to have those colours labels on the related taps. Our Laboratory Gas Taps conform with the European Norms and defined under EN 13792 Standard Number.



The Gases and their Label Colours that are probably used at the Laboratories according to the standards are as mentioned below.

International Colour Codes for Gas Taps : EN 13792 : 2000		
Yanıcı Gazlar	Parlayıcı Gazlar	Teknik Gazlar
 Natural Gas G	 Argon - Methane AR/CH4	 Nitrogen N2
 Propane/Butane LPG	 Hydrogen - Nitro- gen H2N2	 Nitrogen Oxide N2O
 Methane CH4	 Hydrogen H2	 Synthetic Air 80/20 SA
 Propane C3H8	 Silane S1H4	 Compressed Air CA
 Butane C4H10	 Hydrogen - He- lium H2HE	 Oxygen O2
 Ethylene C2H4	 Deuterium D2	 Carbon Dioxide CO2
 Propylene C3H6		 Breathing Air BA
 Butane C4H8		 Argon AR
 Acetylene C2H2		 Helium HE

PRESSURE REDUCER REGULATORS

The Pressure Reducers are especially used to adjust or reduce the Technical Gases Pressure that used in connection to the equipments upon necessity. The gases, granted from High Pressure Tubes to installation at 10 bars or more pressure, will be reduced in between 1,5 and 8 bars through those Reducers.

The Reducers can be used as either independent at the benches or Section Service Unit at a suitable place in Laboratory to distribute the gases at low pressure to the bench. It's 316 L Stainless Steel. It can be applied at all normal and pure gases. We can cut off all the gas in case necessity by Gas Cutting Off Valve at the entrance of the regulator. The master source of the necessary Flammable and technical gases are Gas Cylinders.



Pressure Reducer Regulators and Flame arrester

MANIFOLDS

Gases and gas mixtures are being used for many different applications in industry, laboratory, medicine, environment and many others. In order to meet this large variety of demands, we have developed the relevant product ranges. This guarantees that we sufficiently meet the required process parameters and the safety standards in almost every case.

Gas supply equipment for non corrosive gases and gas mixtures up to grade 6.0

The design and the performance of equipment is specially adapted to applications in laboratories as well as R&D with highest demands in terms of accuracy and reliability. The products are made of chrome plated brass.



All pressure regulators and valves are with a stainless steel or Hastelloy diaphragm. The range is diverse and very flexible to meet almost all customer specific needs. Easy, quick and cost saving installation is an additional feature of these products.

Products can be used for a huge variety of pure gas applications as:

- Laboratory applications as e.g. GC, HPLC, GCMS, AAS, ICP
- Regulating and dosing of high purity gases
- and many more applications in laboratories, industries, research and doctrine

GAS TUBING AND INSTALLATIONS

Two types of tubings are carried out at gas installations as per Laboratory Features. Medical Copper Pipes are utilized at areas where the pure gases are not utilized. At the same time, the copper pipes are also used at normal water installations in bench. The Copper piping can be fixed by either Oxygen Welding or as seamless by using Swagelok type Brass fittings which is completely locked system. 316L Stainless Steel Pipes are utilized especially for pure gases necessary to equipments used at instrumental Laboratories.

The Seam is affected with Orbital Welding System for Copper Pipes. Besides, it can be also affected as seamless by using Swagelok type Stainless Steel Fittings which is completely locked system. The Gas Tubings in Bench are generally locked types and offered together with benches. The diameters of the pipes used in bench installations are in between 1/4" and 3/8".

The Generally Gas Tubings out of bench are offered separately. The Welded or lock system can be applied according to the pipe lengths. The diameters of the used pipes can be fixed 1/2" or 3/8".

The pipe diameters can be reduced or increased as per lengths and distances. After Completion of the Installations, it is Tested under 10 bars pressure with Nitrogen. In this way, we affect both Leakage Test of our installations and washing inside with nitrogen.



Copper Gas Tubings



Stainless Steel Gas Tubings



Stainless Steel Swagelok Type Gas Tubing

EXHAUST DISCHARGE SYSTEMS

The exhaust discharge systems are designed to safely remove contaminated air from the working environment. Depending on the level of protection needed and the area to be extracted different systems are available;

- Fume Cupboards
- Draft Chambers
- Fume Canopies
- Chemical Cupboards
- Local Extractions
- Ventilation Systems

Each system is available in several models described on the other pages. All these systems require a ventilation system to actively extract the air.

FUME CUPBOARDS

Firstly we have to state that the main function of all Fume Hoods are safely discharging the acid vapour comes out during tests held within them. The function of the other Fume Hoods Types are the same but their physical structures are different.

STANDARD FUME HOODS

Standard Fume Hoods that have been produced and certificated according to TS EN 14175 Quality Standards are generally utilized at Chemistry, Physical and Biological Laboratories. We have stated before that those have been designed at various dimensions. Now Lets check the physical, mechanical and electrical features and their functions in details.

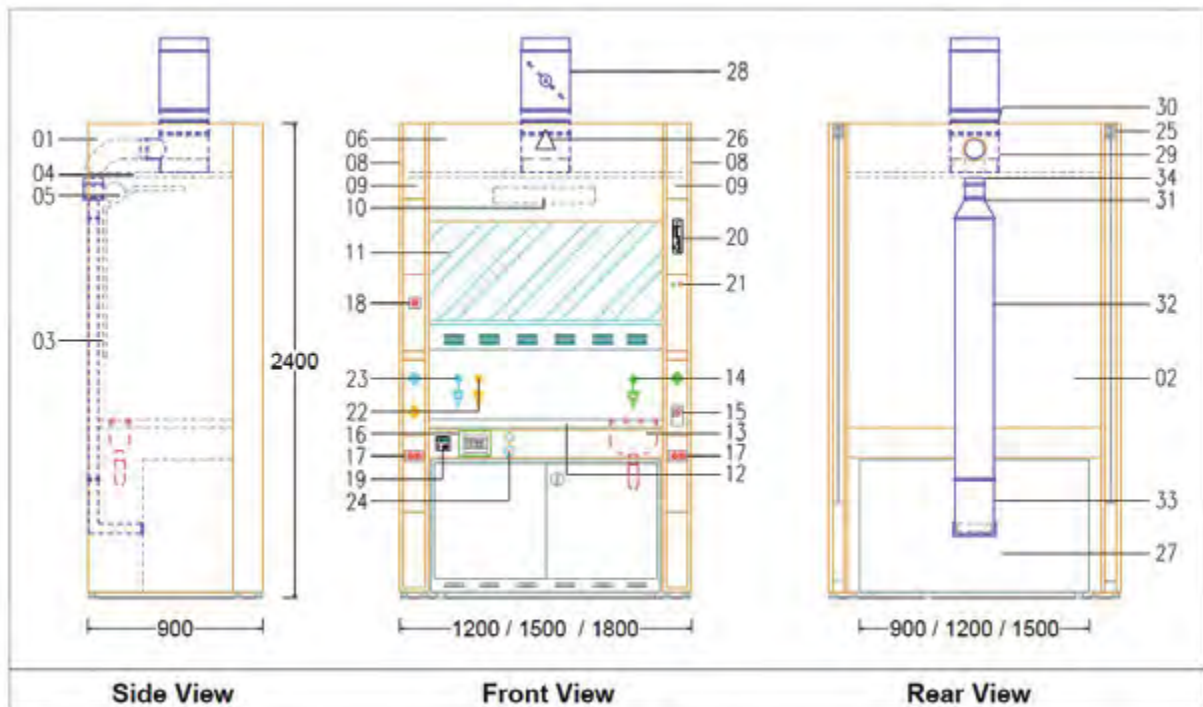


PHYSICAL SPECIFICATIONS

All surfaces of the body block, side panels, rear panels, gas discharging panels, illumination panels, service columns and mobile under benches of the fume cupboards are completely made of Galvanized Steel Sheets at various thicknesses that are kiln-dried at 200 Deg C after painting with 60 micron thick epoxy paint which has highly resistant to acids.

Side Panels are designed so as to form carrying section of the Fume Cupboard and so as to protect the weight system allowing up and down movement of the front glass. Also, in order to affect balance adjustment and provide protection against corrosion, there are hard PVC screw legs at the side panels' bottom sections that contact to the floor.

The rear panel of the fume cupboard is suitable to assemble gas and water fittings. At inside of the rear panel, there is also a second air panel to facilitate discharging of heavy gases separately



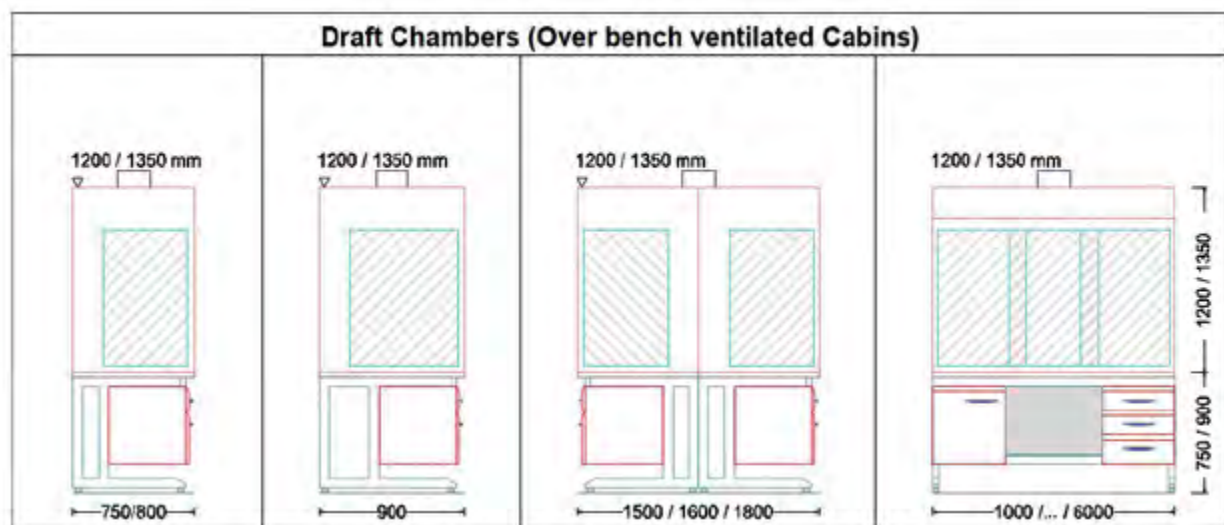
The Technical Definition Of The Units Which Form Fume Hoods

- | | |
|-------------------------------------|--|
| 1. Side Panels | 18. Switches For Light |
| 2. Rear Panels | 19. Fan Control (Inverter) |
| 3. Heavy Gas Compress Panel | 20. Alarm and VAV Control Unit |
| 4. Exhaust Duct Connection Panel | 21. Automatic Glass Manuel Button (Optional) |
| 5. Light Panel | 22. Flammable Gas Nozzle and External Valve |
| 6. Upper Front Panel | 23. Technical Gas Nozzle and External Valve |
| 7. Middle Front Panel | 24. Technical Gas Pressure Reducer (Optional) |
| 8. Service Columns | 25. Weight System for Glass |
| 9. Service Columns Front Panels | 26. Automatic Glass Control Unit (Optional) |
| 10. Light | 27. Underbench Mobile Cabinet (Vent. - Optional) |
| 11. Front Safety Glass | 28. Volume Damper (Optional) |
| 12. Work Top | 29. Tee Reducer (Ø 200/100 mm - Optional) |
| 13. Cup Sink | 30. Bracelet (Optional) |
| 14. Water Nozzle and External Valve | 31. Prismatic Reducer (Ø 200/100 mm - Optional) |
| 15. Master Switch | 32. Prismatic Duct (200 x 100 - Optional) |
| 16. Master Fuse Box | 33. Prismatic Elbow (200 x 100 - Optional) |
| 17. Electrical Sockets | 34. Flexible Connection (Ø 100 mm - Optional) |

DRAFT CHAMBERS

The Draft Chambers are the closed system ventilated cabins that installed on either Corner Type Benches or Middle type Island Benches. Although its function seems to be same as Fume Hoods, It's used at discharging locally the slight gas, heat and smell which comes out during the tests and experiments, before spreading to the laboratory atmosphere.

The lengths and the depths can be changed according to the bench's lengths and depths. The heights can be changed according to 750 mm and 900 mm Bench Heights. Two sides of the cabins are steady, and the front sections are sliding glass system. The used glasses are also safe, laminated or Tempered glasses. The upside and the side frames are made of galvanized metal which painted by anti acid epoxy paint.



FUME CANOPIES

Canopy Hood is a system which discharges locally at open system the heat, smell, Water and Acid vapour that can be accrued at the test and experiments held generally on the benches in Laboratories. It is completely made of 316 AISI Cr/Ni Stainless Steel with various thicknesses. Therefore, it is highly resistant against acid vapour and heat. Their dimensions are changed according to the physical specifications of the bench and the equipment on which will be used. As it can be installed generally over Corner Benches suspended on the wall, it can be used at Middle Benches with special suspenders system, as well.



CHEMICAL CUPBOARD

Metal storage cabinets for the safe storage and segregation of chemicals, paints, flammable and hazardous substances as defined by COSHH guidelines.



- Constructed from high quality 0.7-1.5mm steel for extra rigidity and to maintain structural integrity under extreme conditions
- Supplied with new GHS easy-peel labels in line with the CLP regulations that come into effect in June 2015
- Doors are reinforced with steel door stiffeners and fitted with a quality chrome lock (1-point locking on single doors, 3-point on double doors)

LOCAL EXTRACTIONS

Local Fume Hood System is an exhaust discharging system with 3 arms acrobat type which can move to left/right, forward/backward, and up/down on the bench. It's produced of polypropylen and aluminium material and the pipe diameters can be 50/75/100 mm as per usage features. The Spigot funnel diameter is 300 mm. The air extraction speed and quantity can be adjusted through volume damper on it self. The arm lengths change according to the physical specifications of the equipment and the bench which will be used on. Although it is usually installed over the Corner Bench and on the wall as suspended, it can be used by a special suspenders system at Island benches. It is usually installed over Gas Chromatography (GC) machines.



The ducting that is needed for exhaust discharging of Local Extraction, connected to Discharging Spigot at the top side and contacted with ventilators. The Fan Controller Switch, which will command to ventilator in Exhaust System, can be installed to the wall or Energy Panel and is a Thermic system that works in single circuit.

The unique joint design of the local extractions results in a very low pressure drop, which produces many valuable benefits:

- Energy-saving
- Lower noise levels
- Less risk of disruptive ventilation noise
- Low pressure drop without having to use a larger dimension system
- Easy to combine with other extractors in the same ventilation system



The standard version is suitable for extracting most types of airborne pollutants in:

- Laboratories
- Schools, universities
- Hospitals
- The pharmaceutical industry
- Hairdressing salons
- The electronics industry



VENTILATION SYSTEMS

Ventilation System is a general definition for discharging the dirty air at all Fume Hoods, Draft Chambers, Canopy Hoods and Local Extractions that used at Exhaust Discharging Systems with which the ventilators are used as connected but installed separately and the exhaust ducting connected to those. According to this, the ventilation system is formed of two sections as follows;

- Ventilators
- Exhaust Ducting



We have various choices as per utility features. The ventilators have also two section as Snail Type and Channel Type. The body block of Snail Type Ventilators are completely Polypropylen and high resistant against acid vapour. Because of the motors have been installed to body block from outside, it doesn't directly contact with the discharging dirty gases and doesn't constitute danger, as well. It's usually installed to the roof of building or to the external wall. Spigot diameters are 100 / 150 / 200 / 250 / 315 mm and as having 5 various capacities the ventilators have various motor capacities as per ventilators volume.

The Channel Type ventilators are two kinds as PVC and Galvanized. Those ventilators have 5 various capacities with 100 / 150 / 200 / 250 / 315 spigot diameters and their motor capacities are also various according to ventilators' volume. According to the models and kinds of ventilators, the extraction capacities change in between 255m³/h and 2300m³/h. It's preferred according to the unit that will be used and the ducting length and afterwards applied to the system accordingly. Those are preferred usually at systems that little chemicals are used.



PVC Channel Type Ventilator

These type motors are d-phase, furthermore, the air speed can gradually be adjusted with 5 graded Fan Control Unit that will be fixed over bench or machine that will be used separately. The energy cables which is needed to enable all ventilators work, can be seen at chapter Electrical Specifications of Fume Hoods.



Galvanized Channel Type Ventilator

The Exhaust Ducting are made of 4 various materials which are Spiral Swage Lock Stainless Steel, Galvanized, Polypropylen and PVC as per usage features. The ducting diameters can be 75 / 100 / 125 / 150 / 200 / 250 / 315 mm. The Elbow, Tee, Reducer and Bracelets that will be used at Ducting are made of the same materials, as well. The connection points of Exhaust Ducting with machine and also the ducting and ventilators are fixed by flexible connection component, thus, vibration is prevented. At channel type ventilators, the ducting length can be maximum 5 m. At the spiral type ventilators, however, the ducting length is not important.



STORAGE UNITS / SHELVING SYSTEMS

Storage Units are different solutions to store different material available inside laboratories. Ranging from gas cylinders to glassware to chemicals to general material;

- Under Bench Cabinets
- Wall Cabinets
- Shelving
- Storage Cabinets
- Cupboards
- Ventilated Cupboards
- Gas Cylinder Cabinets & Gas Shelters

The Storage cabinet features beefier construction with heavier material than competitive cabinets with exclusive features including reinforced shelves and backs, reinforced doors with smooth operating, easy lift-off hinges and easy to use four-point in cabinet leveling.

Strength and durability

- Manufactured of heavy-duty steel (18-gauge, furniture-grade, cold-rolled)
- Reinforced doors, shelves and back
- Durable powdercoat finish





LAMINAR AIRFLOW CABINETS / BIOSAFETY CABINETS

STERILE CABINETS

Sterile Cabinets are most commonly used at microbiology sections of laboratories. There are two types available, horizontal and vertical. The vertical type has a sash that can move up and down with a manual controller. The air is blown in vertically.

The horizontal type has a rear panel which takes care of the air supply to the cabinet. This model has no sash in the front and therefore is always open.

The panels and frame of the cabinets are made of galvanized steel sheets, painted with anti-acid epoxy paint and kiln dried at 200 °C. The worktop is made of 304 stainless steel. The sides consist of fixed safety glass panels. The air taken in from the room passes through Carbon and Hepa filters before entering the cabinet.

Class II A1-A2, certified according to the European Standards EN12469–2000.

- Dual motors system with auto adjustment of airflow within the working space according to filter loading conditions.
- Built-in V worktop. Anti-blocking air return slots.
- Electrical and angled front window.
- Right side glass with three port holes to allow the insertion of facilities inside the cabinet.
- Powerful lightning.
- Integrated UV Lamp.
- Optimal angle, of the front panel, to keep a clear view and increase the comfort.



The wide touch screen, the tilting electrical front glass, quiet, comfortable, the easy to clean and to use.

Designed to match all GMP guidelines CLASS 2 series key features includes germicidal UV lamp installed on a tilt-away holder, very bright working area, supporting structure epoxy coated, ventilation system by means of two centrifugal fans with a degree of protection IP 55, recirculation and exhaust air filtration by HEPA H14 filters according to EN1822 (with 99.995% efficiency MPPS).

LAMINAR AIRFLOW CABINETS

- V Cabinets
- H Cabinets

V CABINETS

V Cabinets are ISO Class 3 vertical laminar flow cabinets which represent far more economical and valid alternatives to clean-rooms, as they are capable of providing uncontaminated, particle-free and sterile conditions for materials in the work-space. They guarantee and maintain excellent product protection factors by offering a positive pressure particle-free working area by virtue of the prefilter with a minimum efficiency of 80%-90% ASHRAE - and the HEPA filter with an efficiency better than 99,995 % MPPS (H14 - EN:1822).



H CABINETS

H Cabinets are ISO Class 3 horizontal laminar flow cabinets which represent far more economical and valid alternatives to clean-rooms, as they are capable of providing uncontaminated, particle-free and sterile conditions for materials in the work-space. They guarantee and maintain excellent product protection factors by offering a decontaminated working area by virtue of the pre-filter with a minimum efficiency of 80%-90% ASHRAE - and the HEPA filter with an efficiency better than 99,995 % MPPS (H14 - EN:1822). The FlowFast H horizontal laminar airflow cabinets have epoxy powder coated steel structures and an AISI 304L stainless steel working surface as standard. Laminated working surface available on demand. Alternatively special models made in AISI 304L stainless steel for superior cleanability are also available on demand.



BIOSAFETY CABINETS

- Elite Cabinets
- Top Cabinets

ELITE CABINETS

Elite cabinet has been designed to protect both the material to be manipulated from contamination and to protect the operator and the environment from cytotoxic contamination and harmful agents. Elite has been manufactured according to EN 12469:2000 and DIN 12980:2005 standards, with about 70% laminar flow recirculated air and 30% exhausted air with prior HEPA filtering.

Third bank of class H14 HEPA filters with easy replace system is positioned beneath work surface. Built for handling cytotoxic drugs CytoFAST Elite is also suitable for product, personnel and environment protection while handling harmful agents pathogenic to human beings and/or animals as defined in the appropriate international standards.



TOP CABINETS

Top Cabinets, Cytotoxic Drug and Microbiological Safety Cabinets Class II, have been designed to protect both the material to be manipulated from contamination and to protect the operator and the environment from cytotoxic contamination and pathogens hazards. Top Cabinets has been manufactured according to EN12469:2000 and DIN-12980:2005 standards.

Faster CytoSAFE cabinets are Class II Microbiological Safety Cabinets - designed and built to performance requirements of the EN-12469:2000 European Standard and German norm DIN12980:2005 suitable for cytotoxic handling, with 100% air filtered through the main Class H 14 HEPA filter, 70% of the air re-circulated via the recirculation Class H14 HEPA filter within the working chamber, whilst the remaining 30% is discharged through an exhaust Class H14 HEPA filter.



CLEANROOM DEMOUNTABLE PANEL WALL / CEILING SYSTEMS**DEMOUNTABLE PANEL SYSTEMS**

- Resistant to bumps and scratches, disinfectants
- Completely smooth surfaces
- HPL surface Pharma-Clean series
- Metal surface, fire-safe insulated Meta-Clean series
- It is produced in three different series: Metal surface, PU insulated PU-Clean Series
- All equipment is compatible with each other such as window, door, pass-box, the interlock system, and etc.

DEMOUNTABLE SUSPENDED CEILING SYSTEMS

- Non-walkable, lay-in type that can carry 50 kg/m²
- Walkable, that can carry 120 kg/m²



CLEANROOM DOORS / PASS BOXES

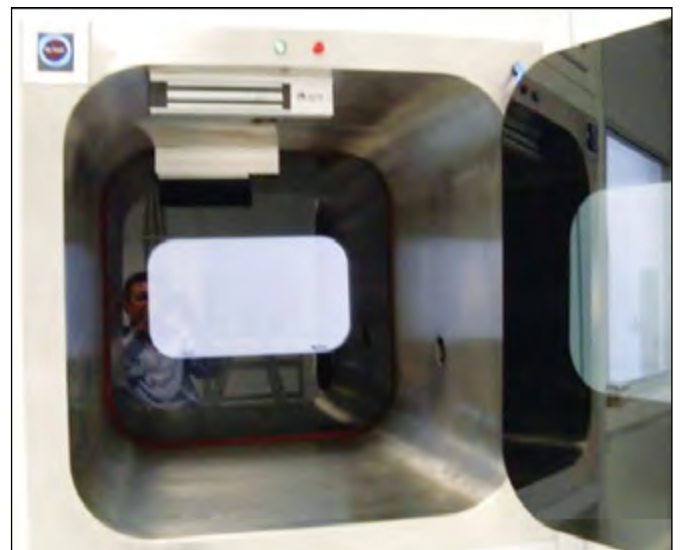


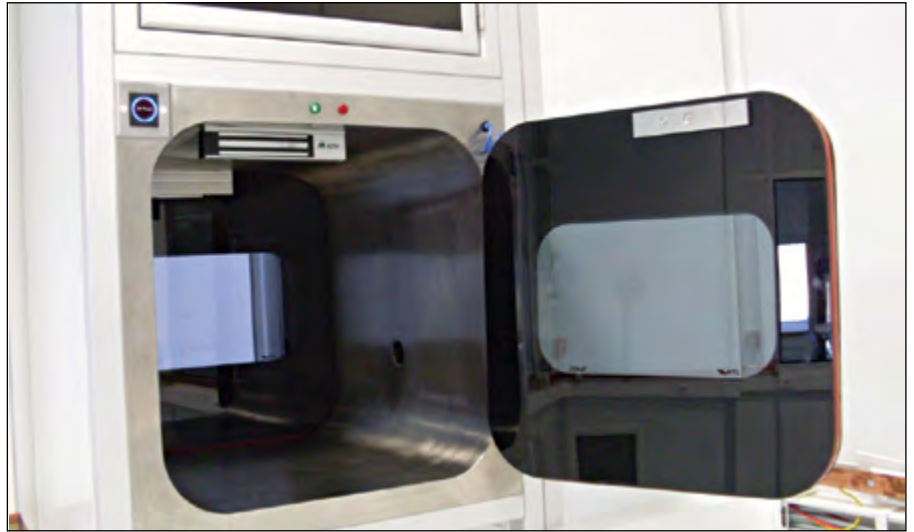
CLEANROOM DOORS

- Metal or HPL surface
- Manual or automatic
- Complete solutions with glass, interlock system, magnetic contacts, electric, etc.

PASS BOXES

- Electrical interlock
- Standard or to the desired size
- Optional: • 253.7 nm UVGI sterilization • Hepa filter • Gas - Tight inflatable gasket • H₂O₂ Sterilization



GAS - TIGHT PRODUCTS**GAS - TIGHT SYSTEMS APPLICATIONS**

- High-level biosafety BSL-3 / BSL-4 virus and recombinant DNA Laboratories
- Decontamination, fumigation rooms
- Pharmaceutical production facilities
- Places Requiring Fumigation Microbiology, GMO Laboratories
- Nuclear, biological and chemical plants, dry rooms
- Facilities where sealing is vital for the safety of environment, personnel and product like NBC shelters
- Operating rooms sterilized with H₂O₂ sterilization, etc. facilities.

PNEUMATIC SEAL GAS - TIGHT SYSTEMS PRODUCT RANGE

- Gas-tight door
- Gas-tight dampers
- Gas-tight pass-boxes
- Decontamination showers

GAS-TIGHT DOORS

- 304,316 quality stainless steel or complete glass wings, 304 grade stainless steel case
- Ready for connection to the building management system

GAS-TIGHT PASS-BOXES

- 304,316 quality stainless steel body, aluminum framed complete glass door
- Electrical interlock, ready to connect to building management system
- Optional HEPA filter, UVGI sterilization, sterilization associated with H₂O₂

GAS-TIGHT DAMPERS

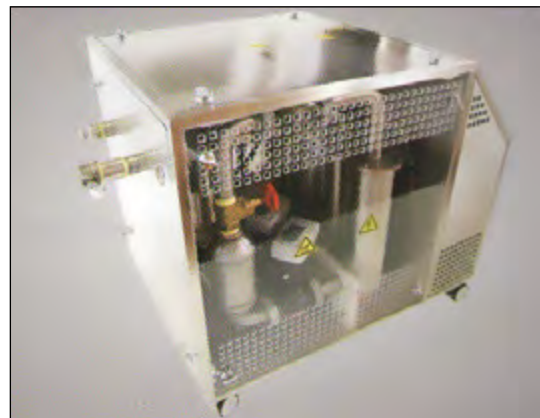
- 304,316 quality stainless steel
- Ready for connection to the building management system
- Damper position can be monitored both visually and electrically

AIR SHOWER / AIR TUNNEL**USAGE AREAS**

- Pharmaceutical industry
- Electronics industry
- Chemical industry
- Optical industry
- Paint industry
- Laboratories

SPECIFICATIONS

- Modular design
- Effective filtration
- 25-30 m / scirvelocity
- HEPA filter which holds 99,97% of 0,3 μm article

**HYDROGEN PEROXIDE CABIN AND ROOM STERILIZATORS****USAGE AREAS**

- High-level biosafety BSL-3 / BSL-4 virus and recombiant DNA Laboratories
- Decontamination, fumigation rooms
- icrobiology, GMO Laboratories Requiring Fumigation
- Nuclear, biological and chemical plants, dry rooms
- Facilities where sealing is vital for the safety of environment, personel and product like NBC shelters
- Operating rooms sterilized with H_2O_2 sterilization, etc. facilities.
- Biosafety cabinets

SPECIFICATIONS

- PEROXMIN for cabinets and for rooms uo 100 m^3
- PEROXMAX for rooms up to 600 m^3
- Ease of use, fully automated design and easy validation

MOBILE CONTAINER LABORATORIES



Mobile Container Labs provide advanced remote on-site response capabilities. These units also maximize available lab space, as they are an ideal solution for surge capacity. Labs allow the user to leave the lab in-place while using the towing vehicle for resupplying the lab or for other purposes.

Mobile Container Labs are available in six, seven, and twelve meter lengths to suit the workspace requirements of lab workers. Labs can be built up to BSL-3 specifications and are self-sustainable in the field. They include on-board generators and water tanks. Labs may also be connected to power and water sources on-site.



ON BENCH SERVICES AND DISTRIBUTION SYSTEMS

- Electricity
- Sink and Water
- Gas
- Emergency Showers

The benches have been designed to allow for easy distribution of services throughout the benches. When needed the services can be reached easily.



Emergency showers are used for safety purposes such as preventing contacts with chemicals to employees so as to protect human health, Possession of these systems are compulsory and obligatory in places where there is a risk of contamination. Therefore HPM is specialized in the production of these systems and manufactures emergency shower systems for the whole body and eye.



HACCP AND HYGIENE SYSTEMS

HYGIENE BARRIERS

It is a one-in-all solution for the enterprises and produced for controlled transfer of the workers to the production areas after passing through the hygiene and sanitation line. This system enables users to provide foot sanitation, hand washing, hand drying (with a paper towel), as well as the hand sanitization.

Hygiene Control Systems are designed for controlled transfer of the employees to the production areas after passing through the hygiene and sanitation line.



PHOTOCELL DISPENSERS

Touch-free photocell dispensers are designed to be used for personnel hygiene, cleaning, disinfection and hands. The system sprays a desired amount of liquid mixture thanks to its infrared detection system. Thus it works automatically without any hand contact.



SANITARY (HYGIENIC) PALLETS

These sort of sanitary pallets are usually made of metal and they are more durable than the traditional wooden types. These type of hygienic pallets are utilized for the air, land and sea transportation for various purposes.



Aluminum Euro Pallet

Stainless Steel Euro Pallets

HACCP AND HYGIENE EQUIPMENT



YIBTECH FS 2500
304/4N S.S Satin finish
infrared soap and
disinfectant dispenser
with lock system.



YIBTECH FS 1000
Stainless steel
automatic soap
dispenser.



YIBTECH FS 05 -FS25



YIBTECH FS 02



YIBTECH ST TED 22 A



YIBTECH ST TED 22 AS



YIBTECH ST TED 22



YIBTECH F.ED 01

Stainless steel hand disinfection unit with concealed storage and single tank.



YIBTECH F.ED 02

304 4N Stainless steel hand disinfection unit

SCRUB SINKS



YIBTECH STRD 40

304/4N Stainless steel, wall mounted, plain decorative sink, automatic tap or manual tap, automatic soap dispenser or manual soap dispenser can be added if requested.



YIBTECH STD 50 F

304/4N Stainless steel satin, wall mounted, sensor operated sink with mixer. (optional)



YIBTECH STD 50

304/4N Stainless steel, wall mounted, perforated type decorative sink. Automatic tap or manual tap, automatic soap dispenser or manual soap dispenser can be added if requested.

304/4N Stainless steel, 2 automatic taps, 1 automatic soap dispenser, cold or premixed water (can be cold and hot water if requested).



YIBTECH STV 132 F



YIBTECH STV 130 AP

304/4N Stainless steel, 1 push button tap and 1 tap with spray head. Apparatus washing sink with S.S.grid.

PANEL TYPE ENERGY UNITS



Panel Type Over Floor Service Unit



Single Gradual Glass Shelf



Double Gradual Glass Shelf



Panel Installed Wall Cabinet



AUTOMATIC SOAP DISPENSERS



YIBTECH TRENDY



YIBTECH FS 800

Stainless steel automatic soap dispenser.



MEDICLINICS DJ 0070 AC



MEDICLINICS DJ 0070 ACS

KNIFE DISINFECTION CABINETS



YIBTECH YBÇ 10

Stainless steel UV cabinet composed of 120 sec. timer control, UV filtered coloured lid, magnetic hanger for knives.



YIBTECH YBÇ 20

Stainless steel UV cabinet composed of 120 sec. timer control, UV filtered coloured lid, magnetic hanger for knives.

BOOT DISINFECTATION UNITS



YIBTECH YBÇ 40 S



YIBTECH YBÇ 60 S



YIBTECH BCK 30



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