



*MODUASM*  
*LABORATORY SYSTEMS*  
*FURNITURE*  
*FEATURES*  
*FITTINGS*

LABAIRE is situated in Gauteng, a centrally positioned province in South Africa, from where we export primarily into Africa. The products have been designed and manufactured since 1981 specialising in **Laboratory and Hospital** furniture and equipment and **Commercial and Domestic** furniture and counter tops. Our products are continuously researched and developed to meet the market's requirements and to meet and set new standards. We never let the ever increasing and exacting demands of the market escape us.

Our strength lies in our research and development team, which allows the sales and service teams, and agents alike, to carry out the professional supply, installation and commissioning of products and systems.

The LABAIRE Laboratory **MODUASM** furniture is designed by our team utilising three dimensional modelling techniques which ensures that what is required will be delivered and will fit to serve its purpose. We offer a turnkey project for all wet & dry services including all gases, wet supply & drainage, electrical and data lines. Our MANTA ceiling service wings are designed to house all these service supply lines with provision for air extraction ducts.

There are many different products on the market today, each with their own characteristics. It is therefore imperative that in depth discussions and presentations are concluded prior to commencing with a project. We have trained technicians to complete a full assessment of your requirements. Our presentations are all three dimensionally modelled to 1:1 life sized computer renditions of what we have interpreted to be your brief. The final laboratory layout with all services & features required will be fully understood by all parties before the scope & drawings are approved. Manufacture and installation will be completed accordingly and will conform exactly to the model and associated drawings. There will be no surprises.

LABAIRE has formed partnerships with overseas suppliers of laboratory components that are not readily available in South Africa. These include:

- **Farlabs** (Italian) for the supply of taps and fittings, eye wash and emergency showers.
- **Method** (Malaysian) for the supply of polypropylene (Vulcathene) sinks and fittings.
- **MAICA Lab Chem** for work tops.
- **BLUM** motion technologies.
- **NINKA** systems

Our Modular Assembly System (MODUASM) extruded aluminium profiles form the basis of our laboratory furniture support structure. The steel welded construction has been completely replaced with this Modular Assembly System that utilizes fasteners and bracketry to form assemblies. Extruded with our own dies, Labaire warehouses 6m lengths of many extrusions which are precision cut to size when required. All parts can be powder coated or anodized for additional chemical and solvent resistance and durability. The ensuing result is an incredibly flexible, highly sophisticated ergonomic laboratory that will last a life time. Cleanliness and strong lines with all services discreetly housed make for a clinical professional laboratory.



*A typical Labaire installation with suspended cabinets (drawer and sliding glass door cupboard), black anodized aluminium framework, black Phenolic Resin worktops, natural anodized extruded aluminium extensions with electrical services and over bench cabinets. Specialised shelving is installed in this application.*

## Design

The design of a laboratory is often based upon the architect's drawings. These drawings and associated specification would have been concluded upon consultation with the end user (the client) and possibly a laboratory furniture specialist, amongst many other specialists in other fields. We can offer a turnkey solution, working with the architect, to include all the above.

LABAIRE would model the laboratory building according to these architectural drawings (usually after an on-site inspection to check dimensions) and compile a 1:1 floor plan with applicable walls, columns etc. We then place the virtual components to form assemblies that fit into the modelled laboratory. This 3-Dimensional model gives the client an in-depth understanding of what is being offered- so important for a successful project handover.

Our modular system is designed for functionality, flexibility and allows for endless accessories and additions/modifications to be carried out at any point in time. While the world changes to a Data revolution our modular system accommodates for these changes. All our products are manufactured in South Africa with cutting edge technology machinery. The design information is fed to our Computer Numeric Controlled machinery whereby the materials are cut to exact size- by Laser Profile Cutting, CNC Machining or Water Jet Technology.



*Another typical Labaire installation with suspended cabinets (drawer cupboards), natural anodized aluminium framework, grey ECB cured Phenolic Resin worktops, natural anodized extruded aluminium framework, service modules with vertical supply faucets with shelves and service MANTA system.*



## Cabinetry

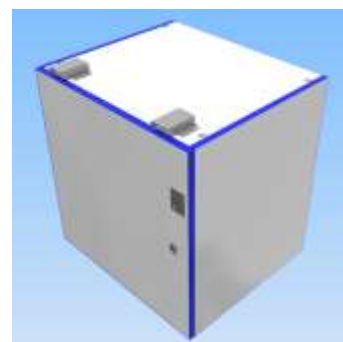
Once a laboratory has been conceptualised and the layout broadly planned, the details need to be attended to. This includes the furniture, storage facilities, services and fittings. The detail of these individual items then needs to be attended to. We commence with the cabinetry. The most important factors when deciding on your furniture are:

1. Size and combination of cupboards, pull-outs and drawers.
2. The motion technology used to open and close these cupboards and drawers.
3. The materials and finishes required for the carcasses, doors and drawer fronts.
4. Storage and divider systems that may be applied to each

We promote the use of the Modular Assembly System- **MODUASM**- which utilizes an aluminium framework anodized to your choice of colour, wherein cabinetry is housed either suspended or lifted off the floor or on castors. This cabinetry can be manufactured from steel, wood, composite resonant materials or PVC Foam Board (waterproof applications). We hence do not promote the use of specific cabinetry until a full assessment of the laboratory processes has been concluded. Wooden cabinetry is often finished with a choice of Melamine laminate. Mild steel cabinetry is coated in baked epoxy powder paint. The various Solid Core Laminate materials with an HPL (High Pressure Laminate) finish, PVC and stainless steel cabinets have their own unique properties and finishes. The right decision will be made for your laboratory to ensure that all cabinetry is chemically, scratch, impact and heat resistant and can handle the wear and tear.



*Steel cabinetry sized to a standard and non-standard range.*



*Wooden cabinetry sized to a standard and non-standard range.*

The supporting aluminium framework is securely assembled together to form the framework upon which the worktop is secured. The cabinetry is then secured to the framework under the worktop or above in the service modules in a manner which allows it to be easily moved or removed and placed elsewhere, laterally moved to a preferred position or expanded upon. The plumbing, gas, electrical and any other services and accessories are then housed in our service spine. The accessories, wet & dry supply services and drainage are well supported and housed in service ducts & trunking which in turn is supported to our aluminium extruded support structure.

The colour combinations for cabinetry, framework and work tops are vast and must be carefully considered for your laboratory. Whilst LABAIRE prefers to use their corporate colours- Blue, Black and White- any available scheme can be chosen to reflect the corporate colours of your institution or unique for each lab.

The **Modular Assembly System** provides a versatile solution and offers many advantages to the free standing cabinets on a plinth without a framework:

**Versatility**

Cabinetry, shelving, services, features and accessories can be placed, removed, moved left or right, raised or lowered, expanded or contracted- it is endless. Service columns with shelving can be positioned at any height and include lighting.

**Accessories**

There many accessories that can be attached or incorporated with our **MODUASM** service rail and spine. Our **MANTA** service wing offers you freedom of choice for your accessories.

**Cleanliness**

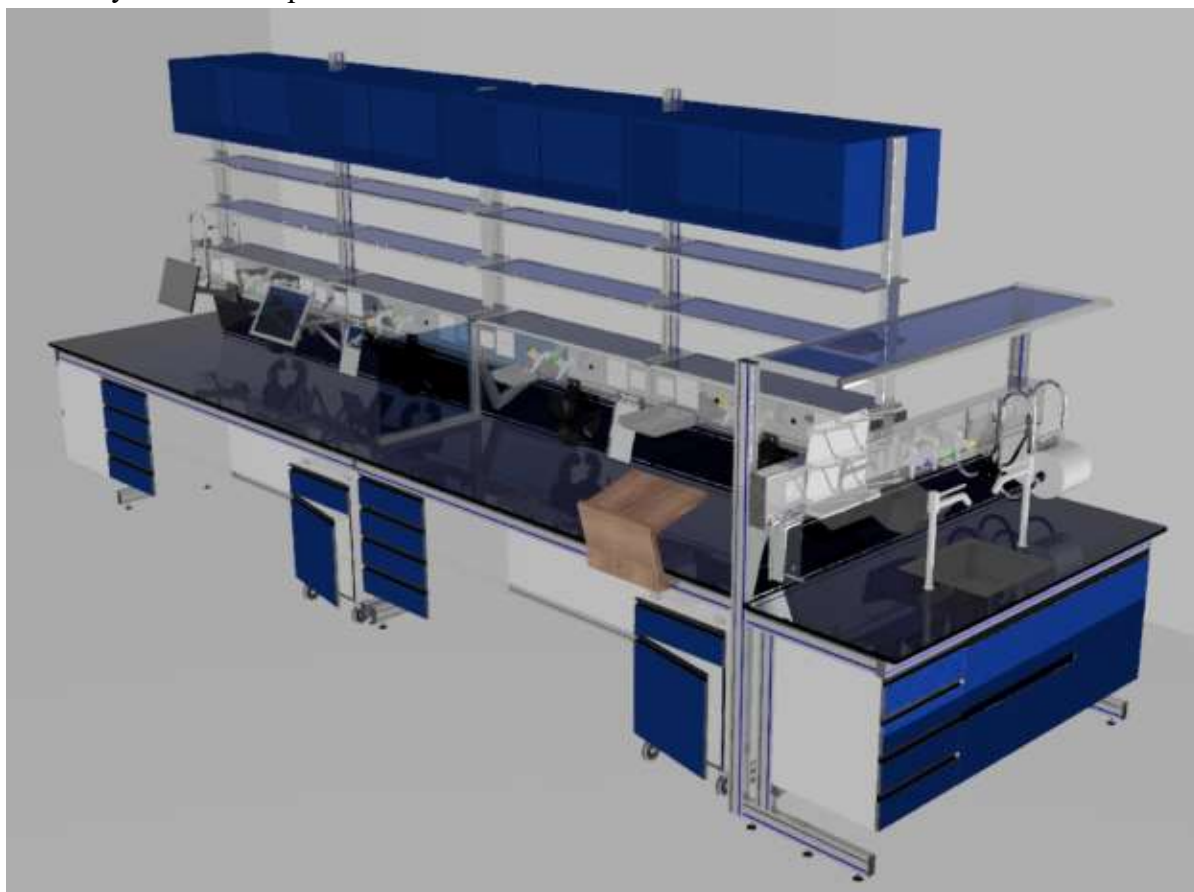
Services are neatly housed in ducts or conduits that form an integral part of our system. Cabinetry is installed off the floor and allows for easy cleaning.

**Maintenance**

If required the cupboards and service panels can easily be removed and replaced without unsettling the main structure.

**Colour**

Many colour options can be used within the confines of the range offered for frames, cabinetry and work tops.



*A Labaire island bench with accessories fitted on center service modules, cabinets on castors and suspended with floating end cabinets, natural anodized aluminium framework, black Phenolic Resin worktops, natural anodized extruded aluminium extensions with shelving and over bench cabinets.*

## ***Design, Systems & Features***

Our state of the art technology and components allows us to design and manufacture a wide range of products required for the laboratory, whether this is furniture, shelving, storage, equipment, features or fittings. The quality of our manufactured & outsourced components once assembled results in finished systems that meet international standards. The completed installation is a laboratory that will last for many decades (we offer a 20 year warrantee). Each laboratory has its own specific requirements. Some labs require island style seating some cinema or wall benches and some have unique layouts or features for various functions that are carried out.

The manufactured components for the laboratory are assembled in our factory or delivered to site in knock down form whereupon assembly & installation takes place. This is carried out by our appointed distributor and their team, often overseen by one of our trained technicians. If the technical skills are not locally available, we will install ourselves.

## ***MODUASM Systems***

The MODUASM system, our flagship, is an assembly of various sized extruded aluminium sections fastened together. The size and thickness of the aluminium extrusions, the support structure or combinations of the aluminium extruded sections and the shape depends on the size and configuration of the bench. There are over 70 different sized extrusions ranging from 15mm to 200mm with different wall thicknesses in each size- light, standard and heavy. We will size and configure your required lab system with the most efficient combinations. The following factors are taken into consideration:

- Point loading
- Total loading
- Ergonomics
- Maximum deflection
- Bending strengths of sections
- Twist factor of sections
- Possible future system extensions or contractions
- Environment and external factors



***Island C-Channel Assembly  
Aluminium Main Frame & Service Modules***



***Extruded Aluminium Framework with one  
support leg each side supporting the cabinetry or  
cabinets to be tucked away on castors.***

This allows for maximum flexibility in design and layout without compromising on strength or durability. The load of the work surface and whether cabinets are supported (hung on the framework of free standing) and their position, the type of work and physical exposure are all design defining issues. Cabinets may be placed and moved laterally to any position within the confines of the support framework. There are no support legs in the front and thus no obstruction to cabinet position or combinations. The different cabinet widths, heights and depths and openings are easily accommodated but all contribute to the forces and load bearing on the structure. The cabinets can be clipped in and out, moved left or right and secured into position. The framework (and the cabinetry) can be mounted with castors for further flexibility. It must be noted that this system allows for cabinetry to be sized according to your needs.

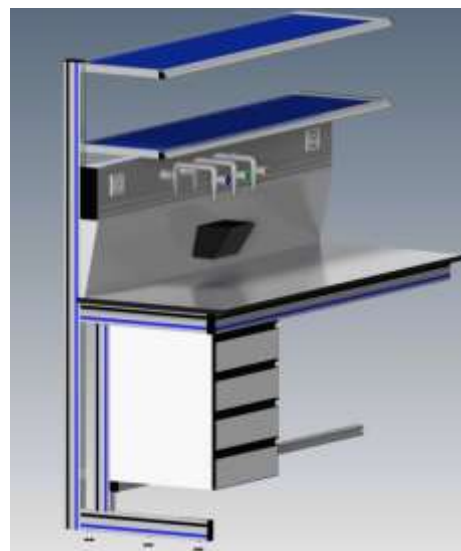
There are no protruding legs in the front of the MODUASM framework which allows for freedom in design

### ***MODUASM Supporting Framework***

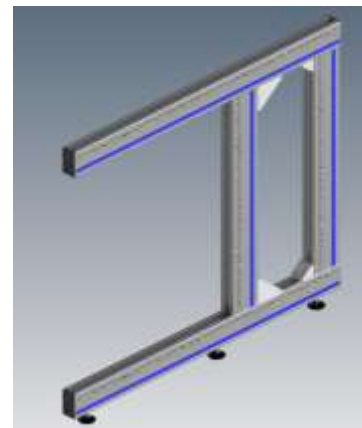
The MODUASM framework is designed to suite standard work top depths of 600/750/900mm for wall or side benches and 1200/1500/1800mm of island benches. Each system has a load capacity that requires certain sized aluminium sections to be used and, more importantly, these sections need to be configured to withstand these forces. Further more there are a range of stabilization and support brackets that need to be positioned in order to ensure stability. The object is for a framework to be designed that maximises the flexibility of your benches to allow freedom of movement while providing maximum stability. The main focus is to position the leg-support assemblies as far apart as possible. The larger the width (or depth) of the work top and the bigger the span between support assemblies the more bracketry and larger aluminium sections are required. While carrying out the engineering of your system we never let the ergonomic appeal of the final result slip. The aluminium extrusions can be anodized in a range of colours however we recommend a natural anodized finish with colour coding of the insert strips. This works very effectively with the colour choice of the edging of the cabinetry. Again these strips can be easily removed and replaced with another colour if so desired. Flexibility!!!!

There are custom designs available if the forces exceed our preset parameters for each design.

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*Typical leg-support for 600mm C-Frame installation- our most common style. Note the detailed support and stabilization*



*Typical leg-support for 900mm C-Frame installation.*

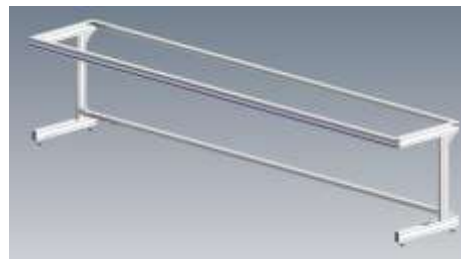


### ***Wall or Side Framework Styles***

Wall benches are single benches positioned against the wall or cinema style benches. There are varying depths required and each size has a certain design and configuration.

#### **C-Framework**

The simplest is a conventional C-Frame. The deeper the work top the more bracketry and supports required. Depicted on the right is a very sturdy side support for a 900mm deep work top and 500mm deep cabinetry. Two different sized brackets are used and an 80x40mm aluminium extrusion. The colour of the insert strips, natural and blue, may vary according to installations as required.



*Typical leg-support for C-Frame installation.*

#### **H-Framework**

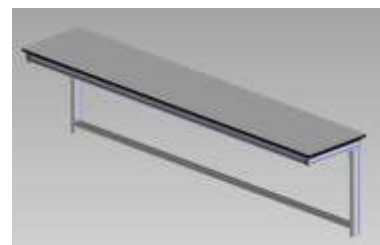
The H-Frame has been the most promoted design in the past. It is simplistic and provides support however limits the freedom of the C-Frame primarily due to the support leg in the front. Due to the strength of our aluminium extrusions, we have managed to extend the space between supports which does allow more freedom. The modularity is compromised with the H-Frame and hence the development of the C-Frame above. The H-Frame is now mainly used for individual stand-alone benches such as balance benches or mobile benches within the laboratory.



*Typical leg-support for H-Frame installation.*

#### **Cantilever Framework**

The cantilever frame is basically a C-Channel mounted on the wall without the bottom support leg. It works very well with the aluminium extruded sections but does limit the flexibility. The deeper work tops require an additional support leg which often then negates the simplicity due to extra bracketry, fasteners, and supports required. It has its uses for narrow wall benches and does save cost.



*Typical leg-support for cantilever Frame installation.*



## Technical Details Framework

Configuration									
C-Frame			H-Frame				Cantilever		
Dimensions									
Width (mm)	600	900	1200	1500	1800	2100	2400	2700	3000
Depth (mm)	600			750			900		
Height (mm)	750				900				
Load Bearing Capacity									
Total (kg/m)	100 to 200								
Material			Size (mm)			Finish			
Aluminium			40x40/40x80			Natural or coloured anodized			
Insert Strips									
Natural		Black		Blue			Orange		

## Service Modules

Wet and dry supply tubing, electrical and data cabling and their associated outlets (faucets or sockets) play a major part in a laboratory system. Our MODUASM service spine combined with the MANTA ceiling service system makes for versatile design options. The ergonomically designed service system is defined by flexibility with modules clipped into the spine. This allows for future expansion and changes in the laboratory. Due to their modular design, our new MODUASM service spine with suspended and ground service pendants and MANTA service wing, provides for all services in the laboratory and meets the needs of the people working there. Services are mounted in the service conduit above the worktop with supply and drainage (usually from the floor above) hidden in supply ducts or conduits. Characterised by many useful details and a straight forward design, our service modules are fitted to meet all requirements of laboratory design. They clip in and out without fasteners. All piping to faucets has quick release connections making additions or changes very simple.

### Space saving services installation

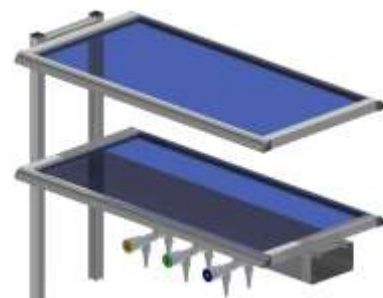
The wet and dry services supply lines are integrated in the service conduit away from the work area to save space. The modular service ducts, sized to suite the application, are inclined towards the user for ergonomic access and handling. This, in turn, leads to a greater usable depth of the worktop. Service lines supplied from the floor or ceiling are housed in ducts including the drainage from basins and drip cups.

### The Service Spine

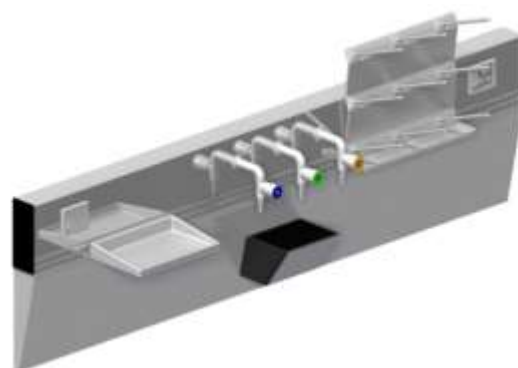
Our service spine forms the basis for designing the laboratory environment providing a large variety of options for varying designs and rapid changes. The service spine is an autonomous unit and can be combined with freely selectable bench frames to form a wall bench or an island work bench.

### The Accessory Rail

The accessory rail as shown on the right sits below the service conduit that houses the wet and dry services and above the service duct. It is used for fitting useful accessories such as Pipette holders, trays, mini-shelves, peg boards, paper towel holder, support arms for computer screens, drip cups and basins, soap dispensers, podiums etc. Each accessory is clipped in or simply fastened to the accessory rail and moved into position with a common fastening mechanism.



*Standard aluminium sections forming service module for island or wall benches accommodating vertical faucets with electrical & data point and shelves above.*



*Service spine with service duct & sink, accessory rail with small tray & peg board, service conduit with faucets and electrical & data sockets.*



*A Paper Towel holder on the end, a wooden document holder with screen monitor in front, drip cup, universal dispenser and pipette holder.*

These additional features can be moved laterally in the service rail along the service spine or removed and stored away. It simplifies the operations being carried out on the work bench and removes clutter. It also stows loose items away from being knocked off the work top. While we have depicted our standard accessories below and on the right, most small items used in your laboratory can be adapted to be attached. Simply photograph the item and email to [sales@labaire.co.za](mailto:sales@labaire.co.za) and a representative will get back to you. Labaire will also adapt a fitting to suite our rail without damaging it- for example pipette holders which are supplied by others. We work with suppliers to modify their equipment to ensure no warranties are broken.



*Above is a glass framed document holder, a splash protector, soap dispenser and three trays of different sizes.*

### Simple upgradability

The modular service panels (300mm wide segments) clip into place and are easily removable. Supply pipes for wet & dry services can be rapidly expanded and fitted using a quick release coupling system without interrupting laboratory operation.



### Shelves and Top Cabinetry

The service spine has a reagent repository shelf positioned on top of the service conduit. Both the spine and the standard service modules can have extension pillars fitted to ceiling height fitted with shelves or suspended cabinets. Shelves or over-bench suspended cabinets are fastened into position. These items can be set at any determined height and remain variable to the user to raise or lower. The shelves positioned above the service modules or spine are sized to your storage requirements. Shelves are from basic melamine chipboard OSB, glass, solid core, polypropylene or stainless steel. Most shelves have an aluminium extruded border that acts as a bund reducing risk of accidents and breakages. Any number of shelves can be fitted and raised or lowered to any height.



The MANTA wing can be fitted between the ceiling and pillar extensions.

### The Service Pendant or Column

The compact Services Pendant (hanging) or Services Column (floor mounted), enables transparent design of the lab. The service column is equipped with removable panels (from 300x160mm, 600x160mm) and accessory rails. Both Pendant and Column connect to the ceiling or MANTA systems wings. Service supply lines and drainage are housed within.

## The Service Wall Duct

The service wall duct supplies a range of wet and dry services which are then accessed on the duct or traversed to a service spine. A combination of the MANTA wing, wall duct and service spine are used in laboratories with complex services such as Nuclear Laboratories.

### Technical details Service Modules

Configuration Service Modules				
Standard Single Leg				
Dimensions				
Width (mm)	900	1200	1500	1800
Depth (mm)	300			
Height (mm)	300/400/500/750/1200/1800/2400			
Material	Size (mm)		Finish	
Aluminium	40x80		Natural Anodized or coloured	
Shelves				
Material	600	900	1200	1800
Aluminium				
Configuration				
Standard Double Leg				
Dimensions Service Module				
Width (mm)	900	1200	1500	1800
Depth (mm)	80 wall & 240 island spine		300 for single & double leg	
Height (mm)	Single & Double Leg			Spine
	300	400	500	500
Configuration				
Spine				
Dimensions Service Module				
Width (mm)	900	1200	1500	1800
Depth (mm)	80 wall & 240 island spine		300 for single & double leg	
Height (mm)	Single & Double Leg			Spine
	300	400	500	500
Load Bearing Shelf Capacities kg/m				
Spine respiratory	100			
Shelves glass	20			
Shelves chipboard	30			
Material		Size (mm)	Finish	
Aluminium		40x40/40x80	Natural Anodized or coloured	
Insert Strips				
Natural	Black	Blue	Orange	

### ***Accessories for Service Modules***

Besides standard accessories such as faucets, sinks, electrical and data sockets etc. we have a dedicated range of accessories tailor made for our MODUASM system. We have two sized accessory rails- 40x40 and 40x80mm. We will decide which one to install after assessing the scope of work going to be carried out in the laboratory. All accessories can be very easily fastened and removed.

#### ***Drip Cups***

There are two sized polypropylene drip cups 265x117x135mm and 175x105x115mm. Both can be mounted onto the work top or better still onto our accessory arm. The drainage is diverted straight into our service duct and never seen again. This item is fixed due to the drainage- if it has to be moved so does the drainage- but they can be repositioned with a little effort. Remember the faucet is also lifted off the work top in the service conduit so a lot of space is freed up.



#### ***Pipette Holder***

Universal Pipette holder for most types. Stainless steel or mild steel powder coated. Most branded Pipette holders can be adapted to suite the accessory rail. Comes in different widths to accommodate many pipettes at one time.



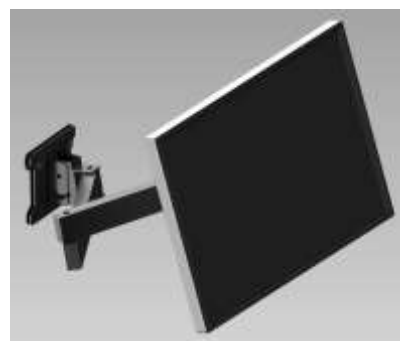
#### ***Dispensers***

Universal and soap dispensers are required in most laboratories. There are many different brands that can be adapted to suite our accessory rail.



#### ***Monitor Screen***

As we charge forward with the data revolution and paperless systems become more the norm so our text books and learning methods are on the move. Monitor screens and arms are adapted to suite our accessory rail.



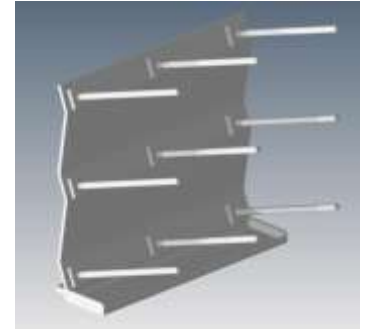


***Paper Towel Holder***

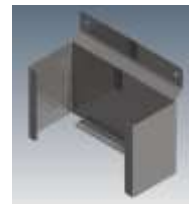
Paper towel holders are manufactured to suite our accessory rail and be positioned at an appropriate place usually near a sink. Sized to suite locally available rolls of paper or packs of tissues.

***Peg Boards***

There are many different sized peg boards that can be accommodated and your choice will depend on the space available and size required for your load.

***Glove Box Holders***

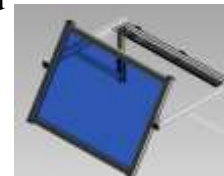
Glove boxes come in various sizes however are universally sized by manufacturers.

***Mini-Waste Bins***

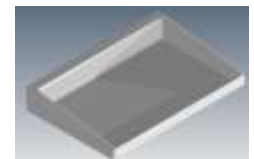
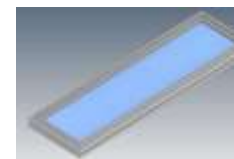
Sized to suite your locally available plastic bags, our mini waste bins assist in keeping individual work stations clean and tidy. Cleaning up after procedures requires the removal of all the plastic bags into a large waste bin or bag. See our NINKA waste disposal system described further on.

***Document Holders***

Labaires document holders are designed to fit on the front of the bench or on the accessory rail. The rail option is aluminium and glass and the front holder is wood. Both can be easily positioned and removed.

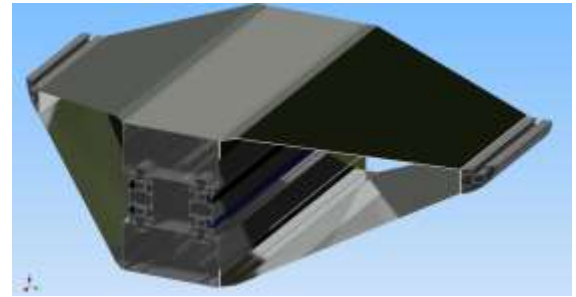
***Mini Trays or shelf***

Sometimes localised temporary storage is required to make processes easier. Simply connect a mini shelf and remove when finished.



## MANTA SERVICE WING

Our MANTA service wing defines the term “freedom in the laboratory” in a very special way: The new service wing is a major design element which integrates all services such as mechanical or electrical services, energy-saving lighting, extract air and the waste water disposal system, thus offering a high degree of flexibility. The possibility of being able to plug into the service wing for reliable supply and disposal connections practically everywhere means maximum freedom of movement and floor plan design in the laboratory.



### Expansion of the MANTA service wing

The MANTA service wing is again a modular design that offers five independent ducts or conduits:

1. Stage 1 & 2: The service ducts on the top and bottom of the center conduit allows fittings and connections to be placed as desired.
2. Stage 3: Center duct for mounting fittings on the inside and outside to hold piping etc.
3. Stage 4 & 5: Two wings on either side to house lighting or extract air ducts.



### Factory assembly

The service wing for your laboratory project is fully pre-assembled by our laboratory builders in accordance with the plans. You save assembly time on-site and your service wing will be quickly installed and ready to use. On site modifications and expansion is simple. Since it is an individual system unit, the service wing can always be modified. Expanding, upgrading and checking the system are possible with little effort.



### Integration of Service MANTA wing.

Using the service wing simplifies the laboratory fitting out process and the coordination of different trades- gas, electrical, data, water, compressed air, vacuum, extraction ducts etc. One central feed point suffices. Existing architectural features and building materials often require costly and time-consuming installations. The MANTA service wing is especially useful requiring minimum installation efforts.

### Energy-saving

The service wing can be equipped with energy-saving lamps that illuminate the entire workspace and room and save up to 50 % power.

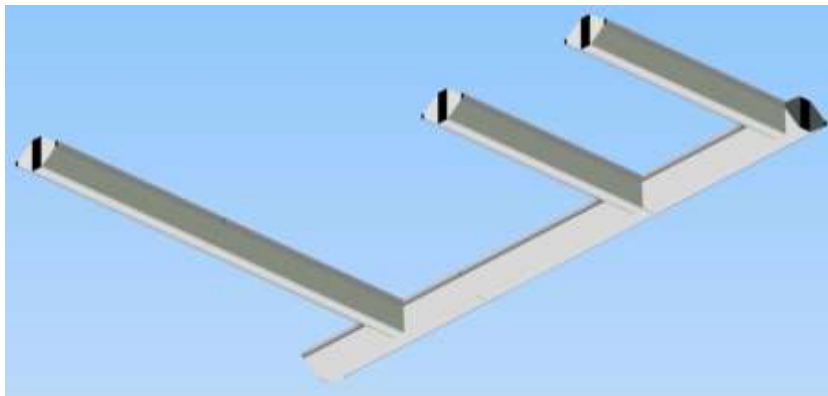
### Reaches of MANTA system

All areas of the laboratory are reached using T-elements and our wing segments of different lengths. A large number of possible configurations are possible however each wing has a prescribed area to work within. The extraction ducting for large fume cabinets or a large number of fume cabinets may cause congestion in the wings. Besides this, all services may be accommodated creating a flexible working environment.



### Flexibility

The MANTA ceiling service wing renders a flexible laboratory. It is becoming increasingly important that users are able to adapt the laboratory quickly to their changing needs. The MANTA service ceiling wing integrates all liquid laboratory services as well as gases,



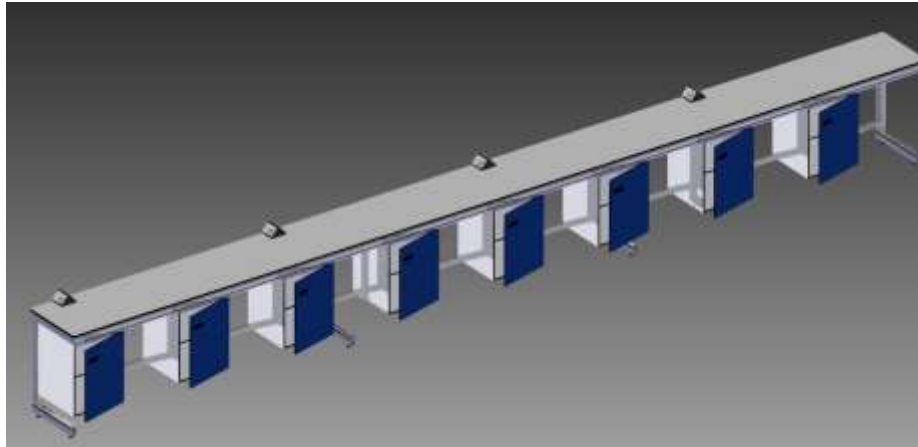
electricity, data supply lines, lighting, ventilation and supply and waste air ducts, and enables the laboratory to be adapted easily to new design layout requirements. In this way, the service ceiling makes the laboratory flexible and independent from connections, services, supply and disposal units, and the entire laboratory space can be freely adapted to the user's requirements and optimized according to their specific needs.

The service ceiling simplifies laboratory building planning. Entire floors can be covered with the service ceiling and can be restructured as required due to the grid-analogous sectioning, without interfering with the basic structures of the building. The costs for restructuring rooms are considerably reduced compared with conventional laboratory furniture systems. The space-saving assembly of the integrated trades of our services system saves room height thus reducing the building size.

The service ceiling elements are pre-assembled at the factory and supplied with all components to the almost finished laboratory rooms. There is no need for coordinating different suppliers which, in turn, saves costs and co-ordination. Compared with conventional installation, 90 % less bore holes must be drilled for mounting the entire service ceiling. The service ceiling can also be integrated into the existing architecture.

## Cabinetry

Firstly cabinets can be mounted on the laboratory slab- known as Plinth Cabinets; or they can be Suspended Cabinets allowing lateral movement; or they can be on castors. This decision must be made as early as possible to suite your laboratory procedures. Cabinets can be manufactured from various materials and from Particle Board to PVC Foam Boards, from mild steel to stainless steel or Solid Core Laminates each with their own categories and finishes. There must be a distinction made between what material and finishes are required for the carcasses and for the doors. Doors provide the bulk of the aesthetics to the lab as they are the main visible feature and are subjected to more rigorous handling than carcasses requiring more resilient finishes.



The assembly of a cabinet is also very important. Cabinets are usually delivered completely assembled or in knock down form. If delivered in latter form, they then must be assembled on site. The assembly can be carried out in the following manner:

- Cam fittings
- Dowel rods
- Glued
- Biscuit joints
- A combination of the above

Ensure that your cabinets have been well assembled with quality fittings and support panels. They are going to be subjected to handling and force and must last at least 20 years.



## Edging

Edging primarily serves to protect the edges of the wood. The carcasses, which are subject to less stresses and strains, are usually edged with 1mm thick edging. The doors on the other hand are edged with 2mm thick edging. Edging is also aesthetic. It frames your furniture and, because it can be framed in many different colours, your attention to is must be drawn to this choice as depicted on the right.



### Chipboard

Chip Board can be supplied in Standard Grade and Moisture Resistant grade without any finish. Laboratory furniture is usually finished in a limited range of Melamine standard, mat, or gloss colours or with wood grain as depicted on the right. The carcasses are usually white however the colour of the doors can be chosen to suite your laboratory theme.

### Medium Density Fibreboard (MDF)

MDF is a denser board than chipboard which can be finished in the same range as above.

### PVC Foam Board

This product is rising fast as a replacement to particle board being Eco-Friendly (Green) and 100% recyclable. Completely water proof (mildew & rot proof), pigmented with many colours of choice (colour fastness and no deformation), has no toxins, is durable and sturdy but light weight (high tear strength and crack resistance), is chemical, germ & pathogen resistant, fire retardant and self-extinguishing, has a life span of 30-40 years and is relatively inexpensive. PVC foam board can be finished in the Melamine, Formica, printed on or painted.

### Formica

Formica finishes are available as shown however are seldom used.



Melamine flat finishes



Melamine wood grain finishes



Formica wood grain finishes



**Mild Steel**

Steel cabinets are superior to wood in that they are longer lasting and more resistant to moisture. A fully welded construction with a large colour chart that can be applied to the whole cabinet or part thereof. Finish in durable epoxy paint with anti-Microbial properties.

**Stainless Steel**

Three basic grades #430, #304 and #316, can have mat or mirror finish, is corrosive resistant and hard wearing but is expensive. Very elegant but hard to keep untarnished.

**Polypropylene**

Is not heat or scratch resistant but is highly chemical resistant. These cabinets are reserved for special applications where highly corrosive and/or wet conditions prevail.

**Solid Core Laminate**

This is an expensive option used in high traffic areas or where robust procedures are being carried out.



*Labaire island benches with a wall bench, simple service column, black anodized support framework, white Phenolic resin worktops, suspended cabinets and floating end cupboards.*

## Cabinet Configuration

We understand that a laboratory is not a kitchen. It cannot be personalised like a kitchen but it can be designed to simplify things and keep your space organised. Simple systems result in efficient results and general organisational structure- things are at hand in times of immediate need. Simplicity is the basic common sense theme and it is this that we wish to impart knowledge of what is available for you.



### Pull-out verses Door with a shelf

The most important point to note is that a drawer or pull-out provides far more effective storage space than a cupboard with fixed shelves. We therefore try and implement pull-out systems for most cupboards and storage spaces. These are some of the pull-out systems available:

- A simple drawer in varying height, depth and widths
  - Various types of runner systems available
  - Tip-on opening devices
- Corner drawer utilizing all available corner space.
- Space tower (laboratory cupboard) with cupboard doors
  - Individual inner pull-outs
  - Single tower pull-out
- Narrow drawers
- Waste drawer



A shelf or drawer that does not pull-out is more often than not problematic when it comes to accessing stored items or storing them. Understanding the products and systems that are available to you is the most important thing. Making life easy with efficient storage produces fewer breakages.

### Drawers & Pull-outs

Firstly a Pull-out is a drawer that is housed in a cabinet carcass behind a cupboard door- you have to open the door to access the pull-out or shelf or basket all of which are on runners. Drawers and pull-outs must be sized correctly. Thus the width, depth and height have to be taken into consideration. This is not only governed by the stored items but also by the available space. Once these dimensions are decided upon and the material and finishes established the type of runners or box system must be decided upon.

The following Box Systems are available in the Labaire range:

- Wooden drawer sides with standard runners.
- Glass drawer sides and standard runners.
- Legrabox system
- Tandembox system
  - Tandembox Intivo
  - Tandembox Antaro
  - Tandembox Plus
- Metabox system

The following runners are available within the Labaire range:

- Movento
- Tandem
- Standard



Each of the above can be fitted the following accessories:

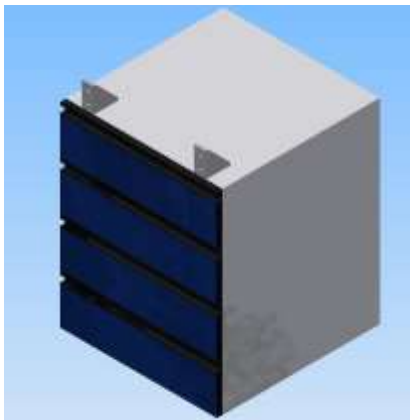
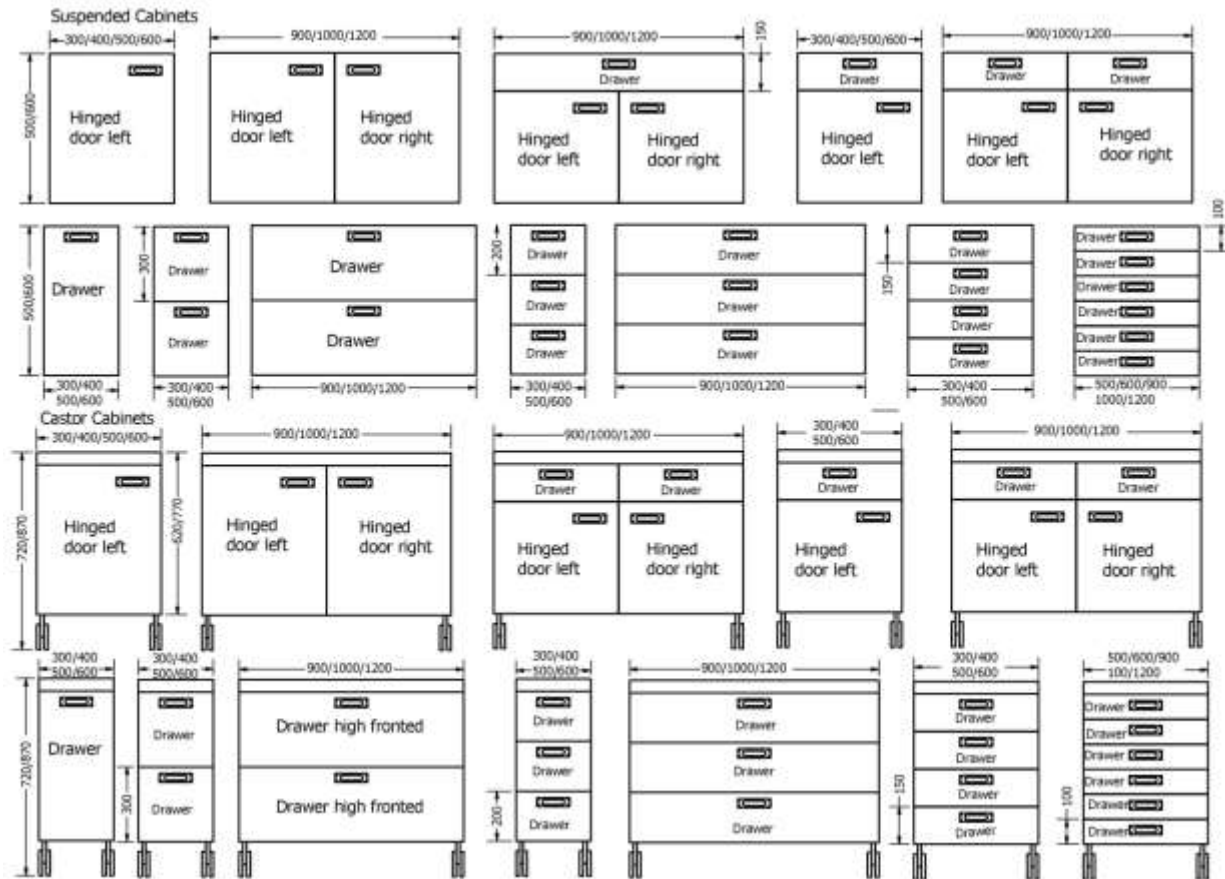
- BLUMOTION silent and effortless closing action
- SERVO-DRIVE for light touch opening.
- TIP-ON for handle-less opening and closing.

Most of the above are for ease of motion in opening and closing the drawer. Box systems and runners are not cheap items so one needs to make good choices. These runners have been tested to 100 000 openings FULLY LOADED. The load factor has to be determined in order to choose the runner type.

There is detailed information and specifications for the above that is available on below or visit BLUM site [www.blum.com](http://www.blum.com)

## Suspended and Castor Cabinets

Both Suspended and Castor cabinets require a framework to house them. Suspended cabinets are required to be hung and cabinets on castors need to have the work tops supported for them to be housed underneath. Remember the Labaire suspended cabinets can be moved within the confines of the work bench. Drawer heights can vary and shelves can be positioned in predetermined positions. Castor cabinets have two fixed castors and two swivel and brake castors.



*Suspended Cabinet*



*Cabinet on castors*

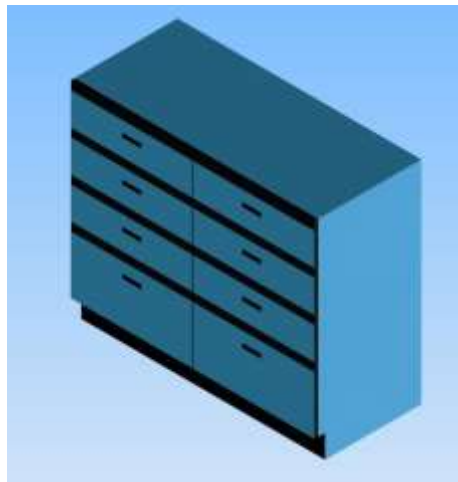
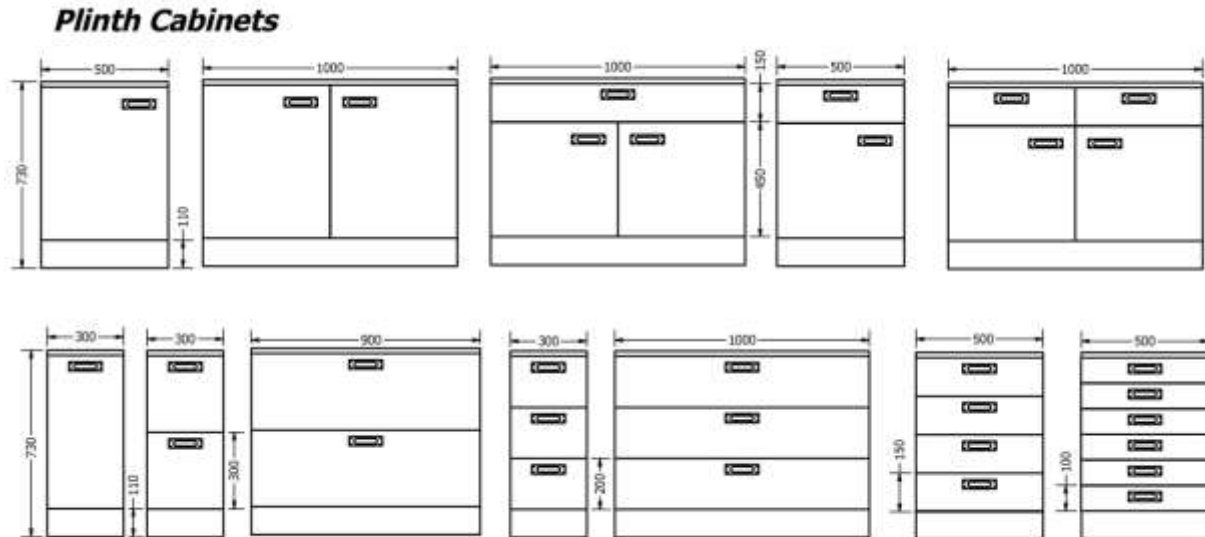
Configuration				
<i>Suspended Cabinets Drawers &amp; Doors</i>				
Types & Codes				
Description	Width mm	Depth mm	Height mm	Code
<b>Single Door:</b> <b>Hinge left</b> <b>Suspended</b> *If hinge right change L to R Example: L355CR-S	300	500	500	L355CL-S
	400	500	500	L455CL-S
	500	500	500	L555CL-S
	600	500	500	L655CL-S
	300	500	600	L356CL-S
	400	500	600	L456CL-S
	500	500	600	L556CL-S
	600	500	600	L656CL-S
<b>Double Doors:</b> <b>Suspended</b>	900	500	500	L955CC-S
	1000	500	500	L1055CC-S
	1200	500	500	L1255CC-S
	900	500	600	L956CC-S
	1000	500	600	L1056CC-S
	1200	500	600	L1256CC-S
<b>Double Doors &amp; Single Drawer:</b> <b>Suspended</b>	900	500	500	L955CCD-S
	1000	500	500	L1055CCD-S
	1200	500	500	L1255CCD-S
	900	500	600	L956CCD-S
	1000	500	600	L1056CCD-S
	1200	500	600	L1256CCD-S
<b>Single Door &amp; Drawer:</b> <b>Hinge left</b> <b>Suspended</b> *If hinge right change L to R: Example: L355CDR-S	300	500	500	L355CDL-S
	400	500	500	L455CDL-S
	500	500	500	L555CDL-S
	600	500	500	L655CDL-S
	300	500	600	L356CDL-S
	400	500	600	L456CDL-S
	500	500	600	L556CDL-S
	600	500	600	L656CDL-S
<b>Double Doors &amp; Drawers:</b> <b>Suspended</b>	900	500	500	L955CCDD-S
	1000	500	500	L1055CCDD-S
	1200	500	500	L1255CCDD-S
	900	500	600	L956CCDD-S
	1000	500	600	L1056CCDD-S
	1200	500	600	L1256CCDD-S
Material				
Chipboard 16/22mm	CB16 or CB22			
Mild Steel 1,2mm	MS12			



Configuration				
Castor Cabinets Drawers & Doors				
Types & Codes		Dimensions include castor height		
Description	Width mm	Depth mm	Height mm	Code
<b>Single Door:</b> <b>Hinge left</b> <b>Suspended</b> *If hinge right change L to R Example: L355CR-S	300	500	640	L356CL-C
	400	500	640	L456CL-C
	500	500	640	L556CL-C
	600	500	640	L656CL-C
	300	500	790	L358CL-C
	400	500	790	L458CL-C
	500	500	790	L558CL-C
	600	500	790	L658CL-C
<b>Double Doors:</b> <b>Suspended</b>	900	500	640	L956CC-C
	1000	500	640	L1056CC-C
	1200	500	640	L1256CC-C
	900	500	790	L958CC-C
	1000	500	790	L1058CC-C
	1200	500	790	L1258CC-C
<b>Double Doors &amp; Single Drawer:</b> <b>Suspended</b>	900	500	640	L956CCD-C
	1000	500	640	L1056CCD-C
	1200	500	640	L1256CCD-C
	900	500	790	L958CCD-C
	1000	500	790	L1058CCD-C
	1200	500	790	L1258CCD-C
<b>Single Door &amp; Drawer:</b> <b>Hinge left</b> <b>Suspended</b> *If hinge right change L to R: Example: L355CDR-S	300	500	640	L356CDL-C
	400	500	640	L456CDL-C
	500	500	640	L556CDL-C
	600	500	640	L656CDL-C
	300	500	790	L358CDL-C
	400	500	790	L458CDL-C
	500	500	790	L558CDL-C
	600	500	790	L658CDL-C
<b>Double Doors &amp; Drawers:</b> <b>Suspended</b>	900	500	640	L956CCDD-C
	1000	500	640	L1056CCDD-C
	1200	500	640	L1256CCDD-C
	900	500	790	L958CCDD-C
	1000	500	790	L1058CCDD-C
	1200	500	790	L1258CCDD-C
Material				
Chipboard 16/22mm	CB16 or CB22			
Mild Steel 1,2mm	MS12			

### ***Plinth Cabinets***

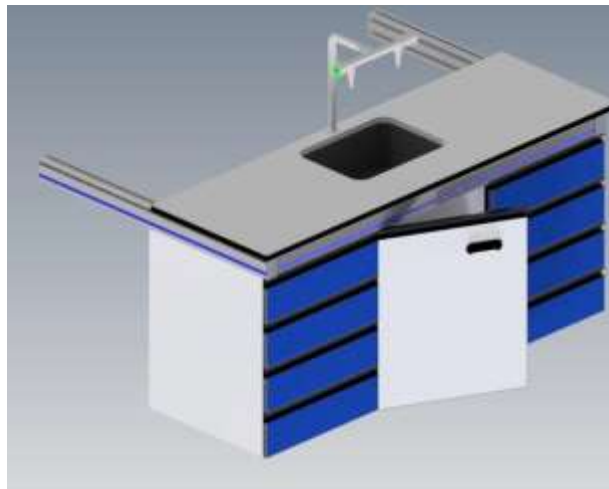
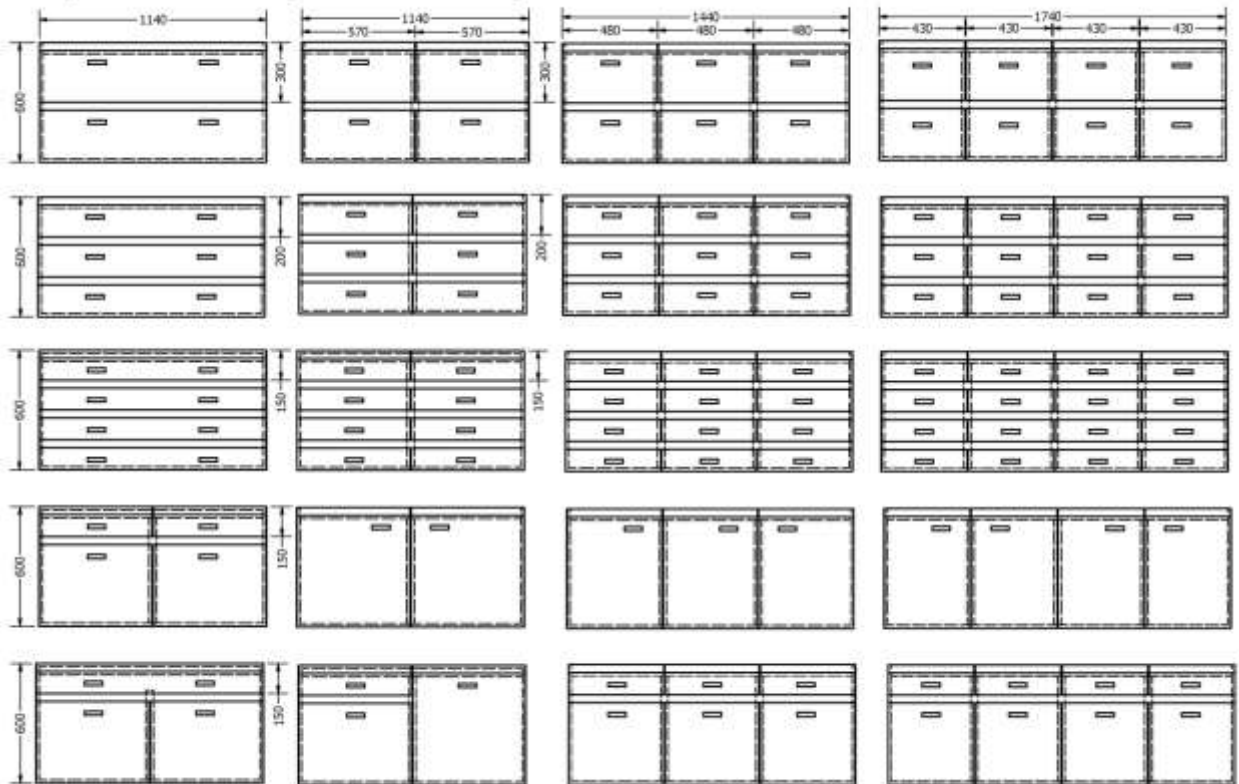
Cabinets are mounted on the floor with a 110mm plinth or kick plate. The work tops are supported by the cabinetry. This type of furniture is for a static laboratory that is not going to change. Once cabinetry is positioned and work tops fitted the layout of the laboratory is set. To change it required renovations. Drawer heights can vary and shelves can be positioned in predetermined positions.



*Plinth cabinet three rows 190mm high  
drawers one row 250mm high drawer*

Configuration				
Plinth Cabinets Drawers & Doors				
Types & Codes				
Description	Width mm	Depth mm	Height mm	Code
<b>Single Door:</b> <b>Hinge left</b> <b>Plinth</b> *If hinge right change L to R Example: L355CR-S	300	500	730	L356CL-P
	400	500	730	L456CL-P
	500	500	730	L556CL-P
	600	500	730	L656CL-P
	300	500	880	L358CL-P
	400	500	880	L458CL-P
	500	500	880	L558CL-P
	600	500	880	L658CL-P
<b>Double Doors:</b> <b>Plinth</b>	900	500	730	L956CC-P
	1000	500	730	L1056CC-P
	1200	500	730	L1256CC-P
	900	500	880	L958CC-P
	1000	500	880	L1058CC-P
	1200	500	880	L1258CC-P
<b>Double Doors &amp; Single Drawer:</b> <b>Plinth</b>	900	500	730	L956CCD-P
	1000	500	730	L1056CCD-P
	1200	500	730	L1256CCD-P
	900	500	880	L958CCD-P
	1000	500	880	L1058CCD-P
	1200	500	880	L1258CCD-P
<b>Single Door &amp; Drawer:</b> <b>Hinge left</b> <b>Plinth</b> *If hinge right change L to R: Example: L355CDR-S	300	500	730	L356CDL-P
	400	500	730	L456CDL-P
	500	500	730	L556CDL-P
	600	500	730	L656CDL-P
	300	500	790	L358CDL-P
	400	500	790	L458CDL-P
	500	500	790	L558CDL-P
	600	500	790	L658CDL-P
<b>Double Doors &amp; Drawers:</b> <b>Plinth</b>	900	500	640	L956CCDD-P
	1000	500	640	L1056CCDD-P
	1200	500	640	L1256CCDD-P
	900	500	790	L958CCDD-P
	1000	500	790	L1058CCDD-P
	1200	500	790	L1258CCDD-P
Material				
Chipboard 16/22mm	CB16 or CB22			
Mild Steel 1,2mm	MS12			

### ***Suspended Floating Island End Cupboards***



*The floating end furniture comprises of three different widths and many combinations fitted to 900mm high work stations. Above combo has a sink cupboard and four drawer cabinets.*

There are many combinations of cupboards and drawers not shown above. The end cabinets do not usually have an operator positioned and hence are usually used for storage purposes. If you wish to combine different height drawers together or drawers and cupboards, please send the request through.

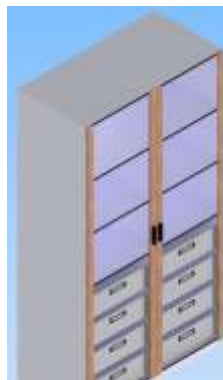
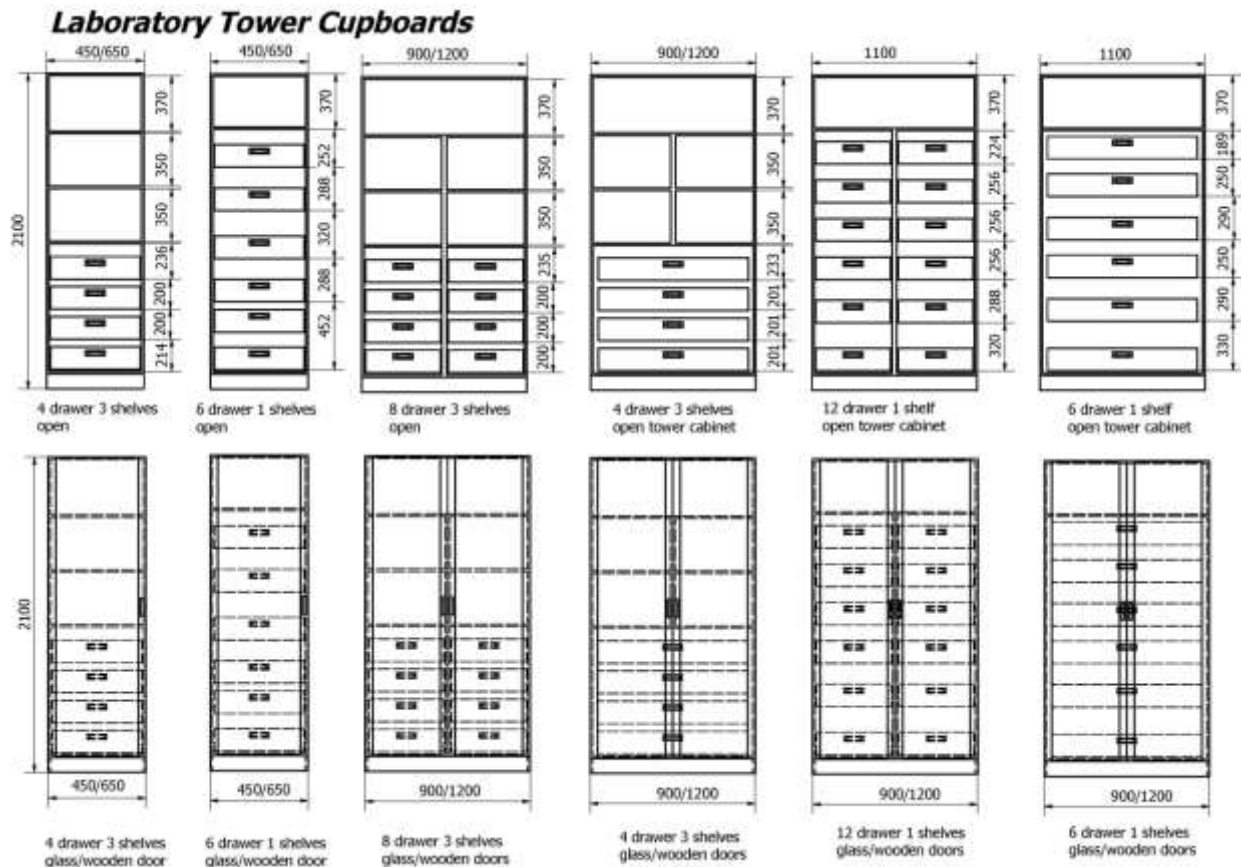
Configuration				
<i>Floating End Cabinets Drawers</i>				
Types & Codes				
Description	Width mm	Depth mm	Height mm	Code
Two rows 570x300 drawers x4	1140	500	600	L1156D4-F
Two rows 475x300 drawers x6	1440	500	600	L1456D6-F
Two rows 570x150 drawers x8	1740	500	600	L1756D8-F
Three rows 6 drawers:	1140	500	600	L1156D6-F
Three rows 9 drawers:	1440	500	600	L1456D9-F
Three rows 12 drawers:	1740	500	600	L1756D12-F
Four rows 8 drawers:	1140	500	600	L1156D8-F
Four rows 12 drawers:	1440	500	600	L1456D12-F
Four rows 16 drawers:	1740	500	600	L1756D16-F
Two cupboards:	1140	500	600	L1156C2-F
Three cupboards:	1440	500	600	L1456C3-F
Four cupboards:	1740	500	600	L1756C4-F
Combination of Drawer & Cupboard				
1140 wide floating end bench	Width mm	Depth mm	Height mm	Code
Full width drawers x 2	1140	500	600	L1156DF-F
Full width drawers x 3	1140	500	600	L1156DF3-F
Full width drawers x 4	1140	500	600	L1156DF4-F
Full width drawers x 6	1140	500	600	L1156DF6-F
Two drawers & one cupboard	1140	500	600	L1156D2C-F
Three drawers & one cupboard	1140	500	600	L1156D3C-F
Four drawers & one cupboard	1140	500	600	L1156D4C-F
Six drawers & one cupboard	1140	500	600	L1156D6C-F
Full width drawer two cupboards	1140	500	600	L1156D6C-F
Two drawers two cupboards	1140	500	600	L1156D2C2-F
1440 wide floating end bench				
Two 900 drawers one cupboard	1440	500	600	L1456D2C-F
Three 900 drawers one cupboard	1440	500	600	L1456D3C-F
Four 900 drawers one cupboard	1440	500	600	L1456D4C-F
Six 900 drawers one cupboard	1440	500	600	L1456D4C-F
One 900 drawers three cupboards	1440	500	600	L1456DC3-F
Two 480 drawers three cupboard	1440	500	600	L1456D2C3-F
1740 wide floating end bench				
Four 430 drawers four cupboards	1740	500	600	L1740D4C4-F
Material				
Chipboard 16/22mm	CB16 or CB22			
Mild Steel 1,2mm	MS12			



### Laboratory Tower Cabinets

Tower Cabinets are usually used to store chemicals, equipment or consumables. They are plinth standing and come in four different widths, 450/650/900/1200, two different depths, 350/550 and are 2100mm high. The Tower Cabinets can be supplied open with no doors or with a glass or wooden door. Drawer heights can vary as can their positions. Similarly the shelves above the drawers can vary in configuration, height and position. Drawers and doors can be lockable or not.

**Storage of acids, alkalis, flammable, self-igniting liquids, gas cylinders and decomposing substances are NOT allowed.**



Standard Laboratory  
Tower Cabinets

Configuration				
Tower Cabinets				
Types & Codes				
Description	Width mm	Depth mm	Height mm	Code
<b>Single Open: 4/6 Drawer 3/1 shelves Plinth</b>	450	350	2100	L4321TC43-O L4321TC61-O
	450	550	2100	L4521TC43-O L4521TC61-O
	650	350	2100	L6321TC43-O L6321TC61-O
	650	550	2100	L6521TC43-O L6321TC61-O
<b>Single Glass Doors: 4/6 Drawer 3/1 shelves Plinth</b>	450	350	2100	L4321TC43-G L4321TC61-G
	450	550	2100	L4521TC43-G L4521TC61-G
	650	350	2100	L6321TC43-G L6321TC61-G
	650	550	2100	L6521TC43-G L6521TC61-G
<b>Single Wooden Doors: 4/6 Drawer 3/1 shelves Plinth</b>	450	350	2100	L4321TC43-W L4321TC61-W
	450	550	2100	L4521TC43-W L4521TC61-W
	650	350	2100	L6321TC43-W L6321TC61-W
	650	550	2100	L6521TC43-W L6521TC61-W
<b>Double Open: 8/4 drawer 3 shelves Plinth</b>	900	350	2100	L9321TC43-O L9321TC83-O
	900	550	2100	L9521TC43-O L9521TC83-O
	1200	350	2100	L9321TC43-O L9321TC83-O
	1200	550	2100	L12521TC43-O L12521TC83-O
<b>Double Glass: 8/4 drawer 3 shelves Plinth</b>	900	350	2100	L9321TC43-G L9321TC83-G
	900	550	2100	L9521TC43-G L9521TC83-G
	1200	350	2100	L9321TC43-G L9321TC83-G
	1200	550	2100	L12521TC43-G L12521TC83-G

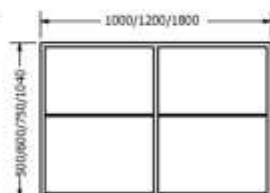
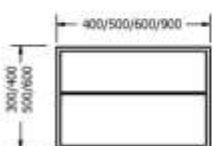
Configuration				
Tower Cabinets				
Types & Codes				
Description	Width mm	Depth mm	Height mm	Code
<b>Double Wooden: 8/4 Drawer 3 shelves Plinth</b>	900	350	2100	L9321TC43-W L9321TC83-W
	900	550	2100	L9521TC43-W L9521TC83-W
	1200	350	2100	L9321TC43-W L9321TC83-W
	1200	550	2100	L12521TC43-W L12521TC83-W
<b>Double Open: 6/12 Drawer 3/1 shelves Plinth</b>	900	350	2100	L9321TC63-O L9321TC121-O
	900	550	2100	L9521TC63-O L9521TC121-O
	1200	350	2100	L12321TC63-O L12321TC121-O
	1200	550	2100	L12521TC63-O L12521TC121-O
<b>Double Glass Doors: 6/12 Drawer 3/1 shelves Plinth</b>	450	350	2100	L9321TC63-G L9321TC121-G
	450	550	2100	L9521TC63-G L9521TC121-G
	650	350	2100	L12321TC63-G L12321TC121-G
	650	550	2100	L12521TC63-G L12521TC121-G
<b>Double Wooden Doors: 6/12 Drawer 3/1 shelves Plinth</b>	900	350	2100	L9321TC63-W L9321TC121-W
	900	550	2100	L9521TC63-W L9521TC121-W
	1200	350	2100	L12321TC63-W L12321TC121-W
	1200	550	2100	L12521TC63-W L12521TC121-W
<b>Double Open: 6/12 drawer 3/1 shelves Plinth</b>	900	350	2100	L9321TC63-G L9321TC121-G
	900	550	2100	L9521TC43-G L9521TC61-G
	1200	350	2100	L12321TC43-G L12321TC61-G
	1200	550	2100	L12521TC43-G L12521TC61-G

## Over Bench Cabinets

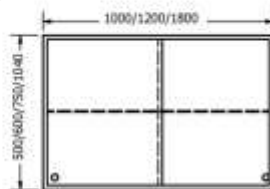
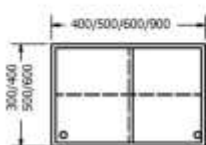
Over bench cabinets are required in most laboratories as they are a very effective storage space being out of side above the worktop. Accessing these cabinets to load or remove items can be an issue primarily due to their height. Keeping items safe is often achieved by a door. Opening and closing of this door can also be an issue. Hence it requires some thought as to what type of Over Bench Cabinet suites your application.

### Over Bench Cabinets

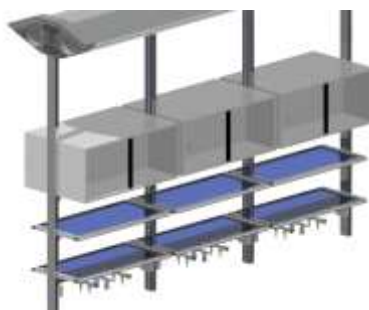
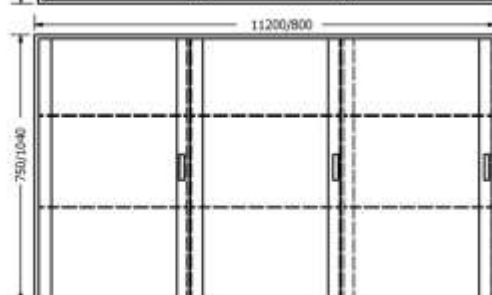
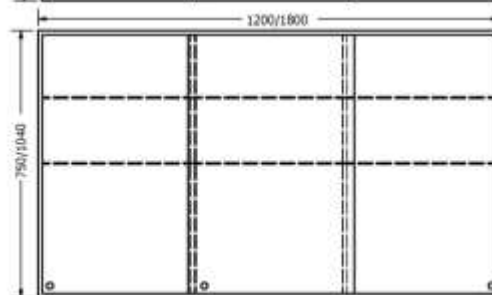
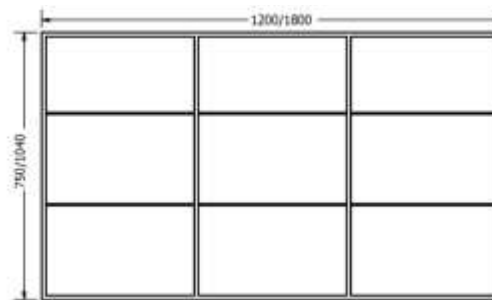
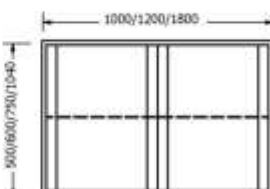
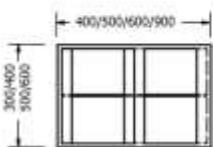
Open Fronted Cabinets  
300/400/500/600mm deep



Sliding Door Cabinets  
300/400/500/600mm deep



Cabinets with Glass or Wooden Doors  
300/400/500/600mm deep



*Wooden Over Bench Cabinets back-to-back with sliding glass doors.*

Configuration				
<i>Over Bench Cabinets</i>				
Types & Codes				
Description	Width mm	Depth mm	Height mm	Code
<b>Open Fronted Cabinet:</b>	600	300	400	L634BC-O
		600	750	L667BC-O
	900	300	400	L934BC-O
		600	750	L967BC-O
	1200	300	400	L1234BC-O
		600	750	L1267BC-O
	1500	300	400	L1534BC-O
		600	750	L1567BC-O
	1800	300	400	L1834BC-O
		600	750	L1867BC-O
<b>Glass Fronted Sliding Doors:</b>	600	300	400	L634BC-G
		600	750	L667BC-G
	900	300	400	L934BC-G
		600	750	L967BC-G
	1200	300	400	L1234BC-G
		600	750	L1267BC-G
	1500	300	400	L1534BC-G
		600	750	L1567BC-G
	1800	300	400	L1834BC-G
		600	750	L1867BC-G
<b>Wooden Door:</b>	600	300	750	L637BC-W
		600	1040	L6610BC-W
	900	300	750	L937BC-W
		600	1040	L9610BC-W
	1200	300	750	L1237BC-W
		600	1040	L1210BC-W
	1500	300	750	L1537BC-W
		600	1040	L15610BC-W
	1800	300	750	L1837BC-W
		600	1040	L18610BC-W
<b>Glass in Aluminium Frame: Bi-Fold Door</b>	600	300	750	L637BC-GF
		600	1040	L6610BC-GF
	900	300	750	L937BC-GF
		600	1040	L9610BC-GF
	1200	300	750	L1237BC-GF
		600	1040	L12610BC-GF
	1500	300	750	L1537BC-GF
		600	1040	L15610BC-GF
	1800	300	750	L1837C-GF
		600	1040	L18610BC-GF

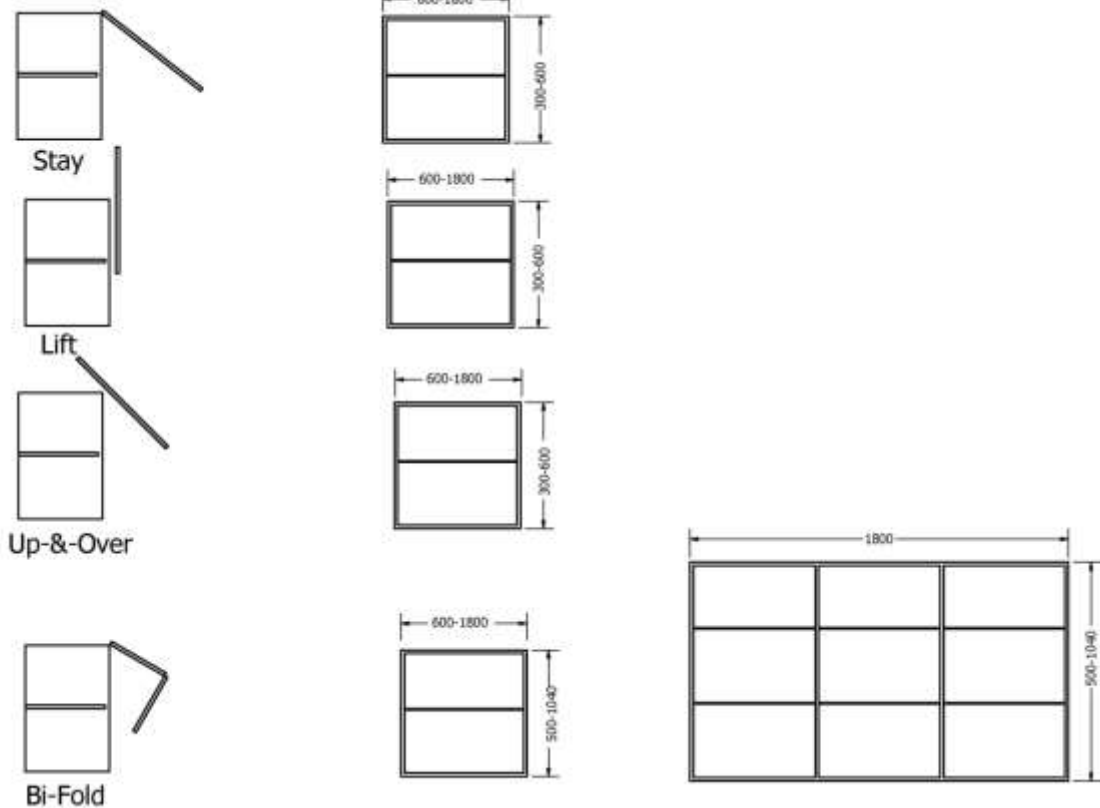


## Lifting Systems

As mentioned above, opening of Over Benches doors can be tiresome and cumbersome especially when you have things to load or closing when you have removed an item. Laborie has a number of systems that makes this task very easy. There are three different lifting movements:

- Lift- straight up and down.
- Stay- hinges open upwards
- Up & Over- moves up and over the cabinet
- Bi-Fold- two horizontal doors folds up and down

### Over Bench Aventos



## ***Hinges, Handles, Runners Locks & Latches***

These items can make or break a laboratory furniture installation. There are many cheap products that exist and a few brands that stand out with lifetime guarantees of 20 years. BLUM is a brand with unsurpassed quality products. Quality hinges and runners result in fluid open and closing motion and a more compact and aligned installation with minimal gaps between drawers and cupboards.

A cupboard with door hinges should have the following:

- The hinge is coated in zinc, nickel and a final protective layer.
- The hinge is tested fully loaded to withstand 200 000 opening and closing motions
- A standard 100° to 110° opening hinge or with a 125°, 155° or 170° opening
- The standard hinge must be screwed into place with 6mm diameter Euro screws, plugs or CLIP technology in (INSERTA
- Infinitely 3-Dimensionally adjustable
- Be able to have a soft close mechanism fitted that can withstand high closing force
- Most importantly must carry a 20 year lifetime guarantee

A drawer with runners should have the following:

- The runner is coated in zinc, nickel and a final protective layer.
- The runner is tested fully loaded to withstand 100 000 opening and closing motions
- Must offer full and single extension (¾ opening)
- Must state its load carrying capacity 25-60kg
- Most importantly must carry a 20 year lifetime guarantee

The science of motion technology, storage systems and lifting devices stems from the demand for quality, compact and functional storage systems. We have devoted a separate document for these.

### **Hinges**

Generally speaking two types of hinges can be used- Pot hinge for wood and a Butt hinge for steel. Both are manufactured from either mild steel Zinc or Nickel coated or stainless steel. They have a 95° to 270° opening range and have accessories such as soft-close operation and CLIP on technology. The fastening of these hinges to the doors and cabinetry must be very strong and the coating must be multi layered for durability (three layers). Butt hinges must be nylon bushed or have roller bearings.



## Handles

While handles are becoming obsolete due to advanced motion technology, there are many different types of handles- too many to state. Your preference of either flush or stand out, aluminium, brass, stainless steel or other must be selected as with the colour.



## Runners

As with hinges, runners have evolved to a sophisticated motion technology that can handle full extension while catering for relatively heavy loading. Integral box systems are available for synchronized feather-light guide, motorised opening and 4-dimensional adjustment. All runners must be available in  $\frac{3}{4}$  extension and full extension and accommodate soft close features. These are usually specified by load carrying mass 25-70kgs.



## Latches

Latches are generally not required as the hinges and runners have inbuilt devices.



## Locks

Locks can be master keyed with different combinations for student, lab manager and department head. Strength of lock latching depends upon the type specified.

A laboratory with handleless drawers has unprecedented clinical appeal all with a 20 year guarantee. Your choice of motion technology is important.

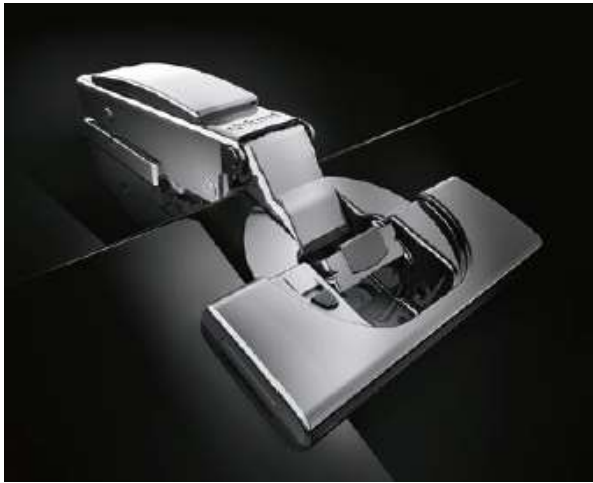


***TIP-ON BLUMOTION for MOVENTO combines the advantages of the TIP-ON mechanical opening support system with the reliable BLUMOTION dampening for silent and effort-less closing – 100% mechanically.***

***TIP-ON BLUMOTION's extensive trigger range provides inspirational ease of use for handle-less pull-outs and drawers. An optional synchronisation can be used to extend the trigger range even further.***

## Hinges

The BLUM hinges are tested to 200,000 openings fully loaded. Furthermore they are protected from elements with three protective layers.



With CLIP top BLUMOTION everything “is included”, because BLUMOTION, our function for silent and effortless closing, is now integrated into the boss.

With integrated BLUMOTION (with deactivation option)

- Compatible with all CLIP mounting plates
- Extremely reliable CLIP mechanism
- Compatible with all CLIP mounting plates
- Tool-free assembly and removal
- 110° standard hinges for door thicknesses up to approx. 24 mm
- 107° standard hinges for door thicknesses of 15 mm and above
- Special hinges available, e.g. for 0-protrusion, glass doors and thin doors



New furniture manufacturing design trends are opening up even more options for customisation, including thin fronts made from a wide range of materials and dark-coloured furniture. The CLIP top BLUMOTION hinge for thin doors, with the EXPANDO T special fixing, and the onyx black colour variant make it possible to implement these trends in line with Blum’s usual high quality standards



You have the option of deactivating BLUMOTION if required

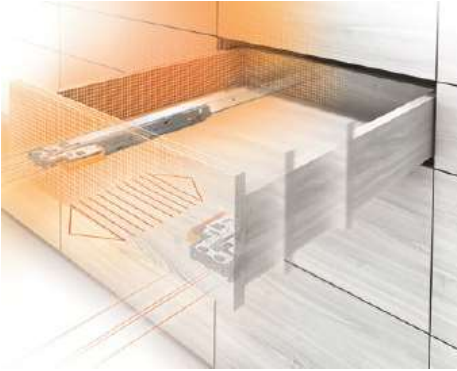
The proven CLIP mechanism stands for simple, tool-free hinge assembly

INERTIA Hinges for angled solutions from  $-50^\circ$  to  $+50^\circ$

Thin 8mm thick doors for specialised materials are available with the same quality warrantee. There is a wide range of hinges which can be viewed on [www.blum.com](http://www.blum.com).

## Runners

“Perfecting motion” has driven BLUM to develop the MOVENTO, TANDEM and STANDARD runners they have today. Labaire only uses BLUM motion technology in their products and installations. There are many inferior products in the market that must NOT be considered.



With our MOVENTO runner system, we provide you with synchronised smooth running action, four-dimensional front adjustment, and a dynamic carrying capacity of 40 and 60 kg with high stability and excellent sag values.



### Synchronised feather-light glide

Low-friction nylon rollers in the roller carriage and the synchronisation of the drawer profile and roller carriage ensure synchronised, smooth running action



### 4-dimensional adjustment ease

With MOVENTO the front can now be adjusted to the side and depth along with the height and tilt. Fast, easy and tool-free



### Carrying capacity and stability

MOVENTO is available in a 40 kg and a 60 kg load bearing class. MOVENTO impresses with high stability and excellent sag values



### Handle-less options

Using SERVO-DRIVE, TIP-ON BLUMOTION or TIP-ON – even handle-less options are not a problem for MOVENTO. Furniture opens with just a light touch



***MOVENTO Concealed Runner System***

The MOVENTO concealed runner system for wooden drawers and pull-outs, provides an even more precise runner movement, synchronised smooth running action as well as new adjustment options. Low opening forces and a gentle transition to the smooth running action characterise the optimised opening behaviour. Low friction nylon rollers in the roller carriage ensure the smooth running action. Regardless of how large or heavy the pull-out or how much force is used for closing: Blum's proven BLUMOTION adapts and always ensures silent and effortless closing.

- New quality of motion from opening to closing
- New 4 dimensional easy setting option for an exact gap design
- 40kg and 60kg carrying capacity, excellent sag values and high stability, can be used in many applications
- Suitable for handle-less furniture
- Available with integrated TIP-ON BLUMOTION mechanical opening support system
- Optional: SERVO-DRIVE - the electrical opening support system
- The quality lasts for the lifetime of the furniture



### ***TANDEM - The smoothest running action for wooden drawers***

TANDEM is the proven concealed runner system for wooden drawers with a feather-light glide and smooth running action. TANDEM can be used in all areas of the laboratory adding value throughout. Even with heavy loads drawers glide open smoothly with TANDEM. With BLUMOTION closing is silent and effortless. For handle-less fronts the system can be used with SERVO-DRIVE.

- Single and full extension
- Nominal lengths of 250 - 750mm
- Locking device and hook and peg feature
- Dynamic load bearing of 30kg and 50kg
- Optional: BLUMOTION for silent and effortless closing
- Can be used with SERVO-DRIVE, electrical opening support system
- Optional side stabilisation
- Simple assembly, easy setup
- Excellent durability

### ***Advantages of TANDEM Single extension runners***

#### **Concealed from view**

TANDEM runners are installed on the underside of wooden drawers creating neat, uncluttered drawer sides.

#### **Feather light glide**

TANDEM ensures a feather-light glide and high ease of use thanks to low-friction. TANDEM single extensions now have a soft stop action when pulled into the open position due to improvements to the roller carriage runner.

#### **Varied programme**

The wide range of nominal lengths and a load bearing class of 30kg provides versatile options.

#### **Enhanced ease of use**

TANDEM is available with or without BLUMOTION and can be equipped with SERVO-DRIVE for handle-less furniture

#### **High quality**

Blum lifetime guarantee of 15-20 years



*Standard White Runner on the side of drawer*



*TANDEM runner highlighted in orange*

### ***Box Systems for Metal Drawers***

Metal drawer (BOX) systems are used mainly in Post Graduate or commercial Laboratories as well as in the office. We provide the right solutions for these different areas. It doesn't matter whether drawers are heavily laden or empty, pushed gently or with force - thanks to BLUMOTION they will close silently and effortlessly every time. BLUM products are only used in Labaire's furniture systems including LEGRABOX, TANDEMBOX, and METABOX.

#### ***LEGRABOX Pure***

LEGRABOX Pure offers a minimalistic, straightforward, simple and elegant drawer solution. Clear design lines characterise the look of LEGRABOX along with the straight interior and exterior side panels with all three sides' uniform. The LEGRABOX Pure design supports current trends and opens up a wide range of design options. LEGRABOX Pure is versatile in its application as a drawer, inner drawer or high-fronted drawer.

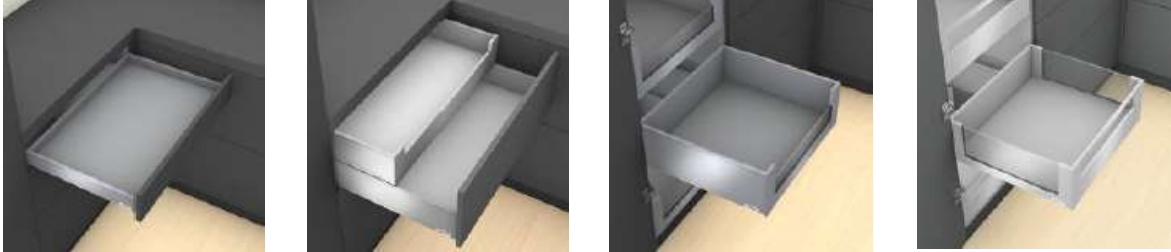
LEGRABOX Pure has a new type of runner system that provides an even higher quality of motion. The synchronised smooth running action increases comfort of motion and ensures a new level of runner smoothness and quality. Integrated BLUMOTION allows drawers to close silently and effortlessly every time - perfectly tuned to the nominal lengths and load bearing classes.

An inner dividing system, LAB-LINE, has been specially tailored to match the LEGRABOX Pure design.

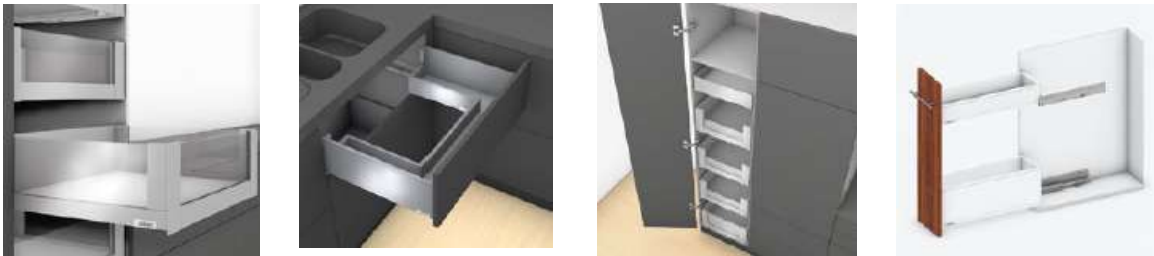


**LEGRABOX Free**

LEGRABOX Free allows large surface design elements to be integrated harmoniously and effectively into the furniture. LEGRABOX free offers the freedom of individual design through the use of different materials such as glass which creates an open and light overall appearance. This option is exclusively available for the high fronted drawer in height C.



- High stability even when fully extended and heavily loaded. (suitable for wide and heavy drawers)
- High dynamic carrying capacity of 40 or 70kg.
- Full extension with nominal lengths of 270 - 650mm Synchronised feather-light glide
- Can use 8mm materials for side design elements such as glass, wood, solid core etc.
- 3 dimensional adjustment with easily accessible height, side and tilt adjustment options thus achieving precise gap design of drawers.
- Includes integrated, switchable BLUMOTION S for silent and effortless closing, and can be combined with TIP-ON BLUMOTION or SERVO-DRIVE
- Available in Orion Grey.



Clockwise from top left:

- LEGRABOX standard drawer with three different height side panels in matt Black, Grey, Silver and White, Stainless Steel Finger Print, matt Nickel and polished Nickel.
- LEGRABOX high fronted drawer with inner pull out- positioned behind drawer front panel and opens independently behind main drawer- concealed when main drawer closed.
- LEGRABOX inner drawer with glass front situated behind a hinged cupboard door
- LEGRABOX inner drawer with glass front instead of gallery rail
- LEGRABOX inner pull-outs with glass sides & fronts.
- LEGRABOX sink drawer
- LEGRABOX Laboratory Tower Cabinet (see Labaire Drawer Dividers for tray details)
- LEGRABOX narrow drawer/pull-out

Please note that glass design panels for sides and pull-out fronts can be replaced with wood, leather, stone solid core materials.

## **TANDEMBOX**

The TANDEMBOX drawer systems technology has been updated, taking it to a whole new level.

### **Easy opening**

Lower opening forces and an even smoother transition to the feather-light glide improve performance from the moment you open. Full extension opening for easy loading & access.

### **Quality to the touch**

You can feel the increased stability provided by the combination of the optimised drawer side and new front fixing bracket. Stable even when fully extended and heavily loaded.

### **Feather-light glide**

Components in the drawer side and cabinet profile have been further developed to optimise the feather-light glide of TANDEMBOX and the smooth running action.

TANDEMBOX is available in two dynamic load bearing capacities, 30kg and the new 65kg.

### **TANDEMBOX intivo - Versatile system**

TANDEMBOX intivo is a versatile system offering limitless design options for the construction of drawers, inner drawers, high fronted drawers of the highest quality. TANDEMBOX intivo is based on specially developed drawer sides for high fronted drawers.

For improved organisation and overview, TANDEMBOX intivo can also be equipped with ORGA-LINE inner dividing systems. With additional special solutions including the corner cabinet SPACE CORNER with SYNCROMOTION, the possibilities are endless.

The TANDEMBOX runner system with integrated BLUMOTION provides unsurpassed running action as well as silent and effortless closing action for all load bearing classes. Tested with 100,000 opening and closing cycles.

3-dimensional adjustment of gap size between drawers.

Available in nominal lengths from 270-650mm

Corner drawer makes use of dead space.



TANDEMBOX is now available with TIP-ON BLUMOTION, a mechanical opening system.

Enhance the drawer sides with either:

- **BOXCAP** - A cap on the drawer side to create a sleek, uniform design.
- **BOXCOVER** - Select a design element from any desired material (eg. glass, wood, leather or stone) by using the BOXCOVER fixing and reveal endless design options.





### ***TANDEMBOX Design Ideas***



***Inner drawer***



***Make the inside of your furniture unique with design elements***



***ORGA-LINE inner dividing system***



***Space corner drawer with SYNCROMOTION***

### ***TANDEMBOX antaro***

TANDEMBOX antaro has a clear style - whether it's open with a rectangular gallery or as a closed drawer with a design element. Side design elements can be made from various materials to express unique style e.g. glass, wood, metal and solid core. With integrated BLUMOTION, pull-outs close silently and effortlessly regardless of how much force is used for closing. TANDEMBOX is now available with TIP-ON BLUMOTION, a mechanical opening system. Drawer sides are available silk white.

(Grey and stainless steel drawer sides are available - orders on special request only)

### ***Features of TANDEMBOX antaro:***

- Uniform design for all applications
- Colour co-ordinated individual components
- Full extension for a easy access and removal of items
- Stable even when fully extended and heavily loaded
- Feather light glide
- Optional side stabilisation is available
- High dynamic carrying capacity of 30kg and 65kg
- Fully loaded drawers are tested with 100 000 opening and closing cycles
- Front pieces are available for inner drawers
- Nominal lengths from 270 - 650mm
- 3-dimensional adjustment of the gap design
- Available in silk white (Grey is available on special order only)
- ORGA-LINE inner dividing systems and accessories available

**METABOX**

METABOX was the first Box System developed by Blum in this modern era. TANDEMBOX followed and then LEGRABOX. It is by no means a poor design just simplistic and for an Under Graduate Student Laboratory it works very well. There are few component parts however, in its simplicity it is very sturdy with perhaps the only two issues being its load capacity of 25-30kg and single extension instead of full extension. In many instance this serves the purpose. METABOX carries the same 20 year lifetime guarantee.

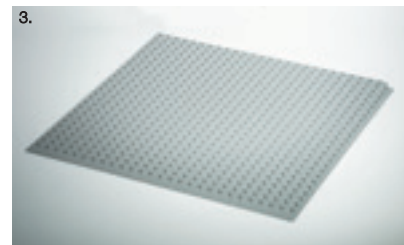
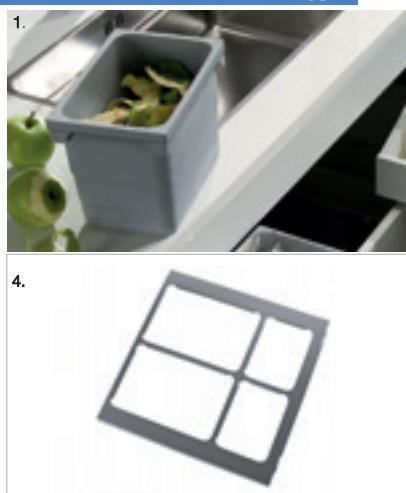


eins2vier



## Freestanding waste bin system that's right for many applications

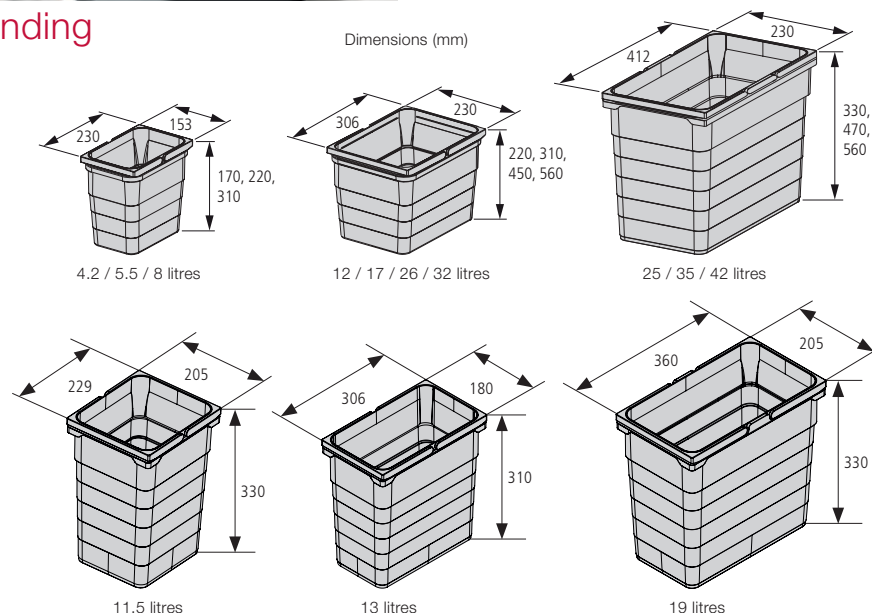
This intelligent waste separation system is available in different sizes and volumes. The one-piece moulded bins are particularly resistant and can be combined as a set for any application: basic, double, triple or multiple separation. The bins are kept in position by a plate with fixing nubs which is placed on the drawer bottom, or by a positioning frame which is simply put on the top of the metal drawer.



1. Multipurpose bin without handles: also for single use
2. Lid cover plate with fixing rails
3. Bottom plate with fixing nubs
4. Cover frame
5. Cover frame in use

## eins2vier (one2four) freestanding waste separation system

- 7 bin heights for all established drawer and cabinet types
- Injection moulded from resistant, recyclable polymers
- Robust, glass-fibre reinforced carrying handles fix the waste bags in place and facilitate the bin removal
- The bins can also be used for the storage of cleaning agents
- Bins suited for single or combined use
- Matching width and depth grids
- Can be used with base plate or cover frame for stable positioning



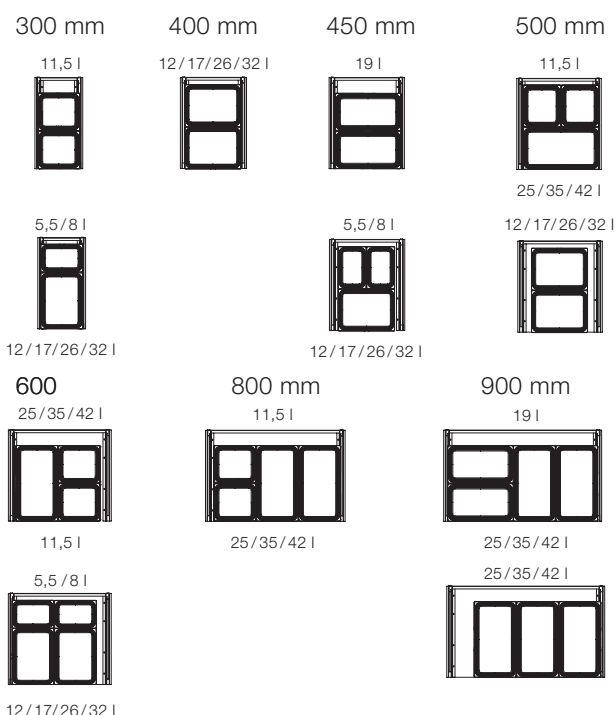
### Finishes

- Colours: Aluminium grey, Dark grey

### Part list for waste separation system

Ref. No.	Description	Height
5178.92 XXXXX	Multipurpose bin 4.2 litres	170 mm
5175.92 XXXXX	Waste bin 5.5 litres	220 mm
5170.92 XXXXX	Waste bin 12 litres	220 mm
5150.90 XXXXX	Waste bin 8 litres	310 mm
5070.90 XXXXX	Waste bin 13 litres	310 mm
5160.90 XXXXX	Waste bin 17 litres	310 mm
5072.90 XXXXX	Waste bin 11,5 litres	330 mm
5063.90 XXXXX	Waste bin 19 litres	330 mm
5061.90 XXXXX	Large capacity bin 25 litres	330 mm
5258.90 XXXXX	Large capacity bin 26 litres	450 mm
5062.90 XXXXX	Large capacity bin 35 litres	470 mm
5075.90 XXXXX	Large capacity bin 32 litres	560 mm
5074.90 XXXXX	Large capacity bin 42 litres	560 mm
Ref. No.	Description	Cabinet width
5280.XX XXXXX	Lid cover plate	300 - 1200 mm
9060.50 XXXXX	Bottom plate	300 - 1200 mm
0000.50 XXXXX	Cover frame	300 - 1200 mm

### Layout examples







## Simple waste separation for recycling in modern laboratories

This frame system for suspended bins is flexible and fits a wide range of drawer systems. It features a closed, linear design which means it is extremely easy to clean. Containers of various sizes can be deployed in various combinations. The frame is perfectly integrated with each drawer-system and is characterised by its simple assembly.



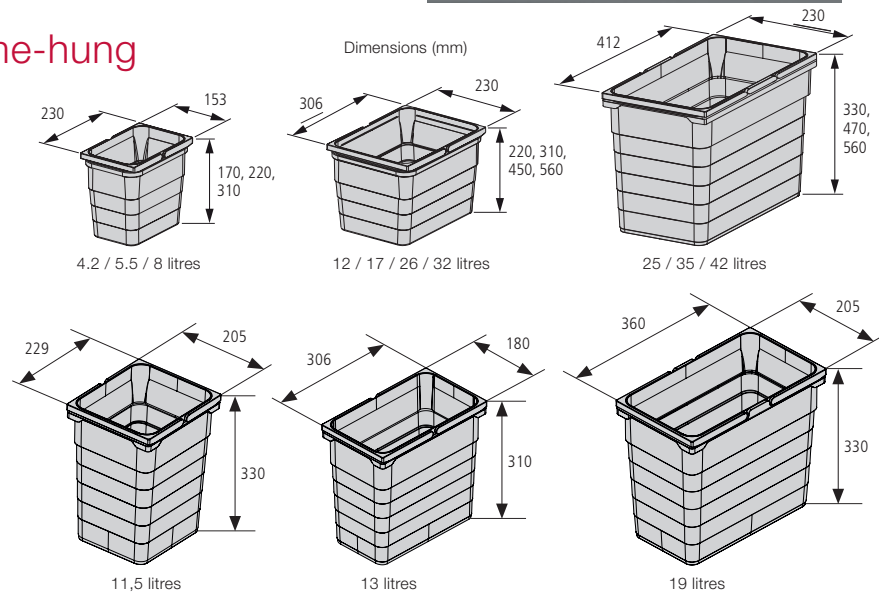


## eins2sechs (one2six) frame-hung waste separation system

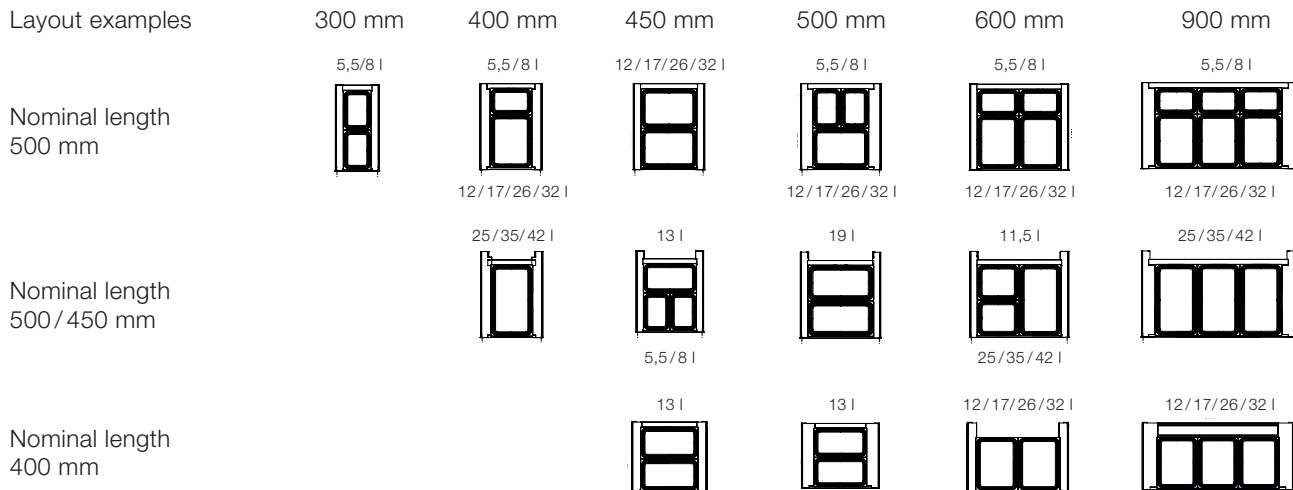
- Seamlessly integrated in drawer frames from various manufactures
- Numerous container combinations possible
- Straight-lined closed surface
- Easy to assemble and disassemble
- Delivery pre-assembled with drawer system possible

### Finishes

- Hanging Frame: Aluminium grey, Dark grey
- Waste bins: Aluminium grey, Dark grey



### Layout examples



### Part list for waste separation system

Ref. No.	Description	Cabinet width	Suitable for drawer systems by
60XX.XX XXXXX	Hanging frame	300 - 1000 mm	Blum, Grass, Hettich

Further versions on request

eins2fünf



## A frame hung waste bin system with excellent design

Clean, hygienic waste separation, adaptable to all cabinet types. The bins are available in different sizes and can be integrated into the drawer system by means of a stable frame.



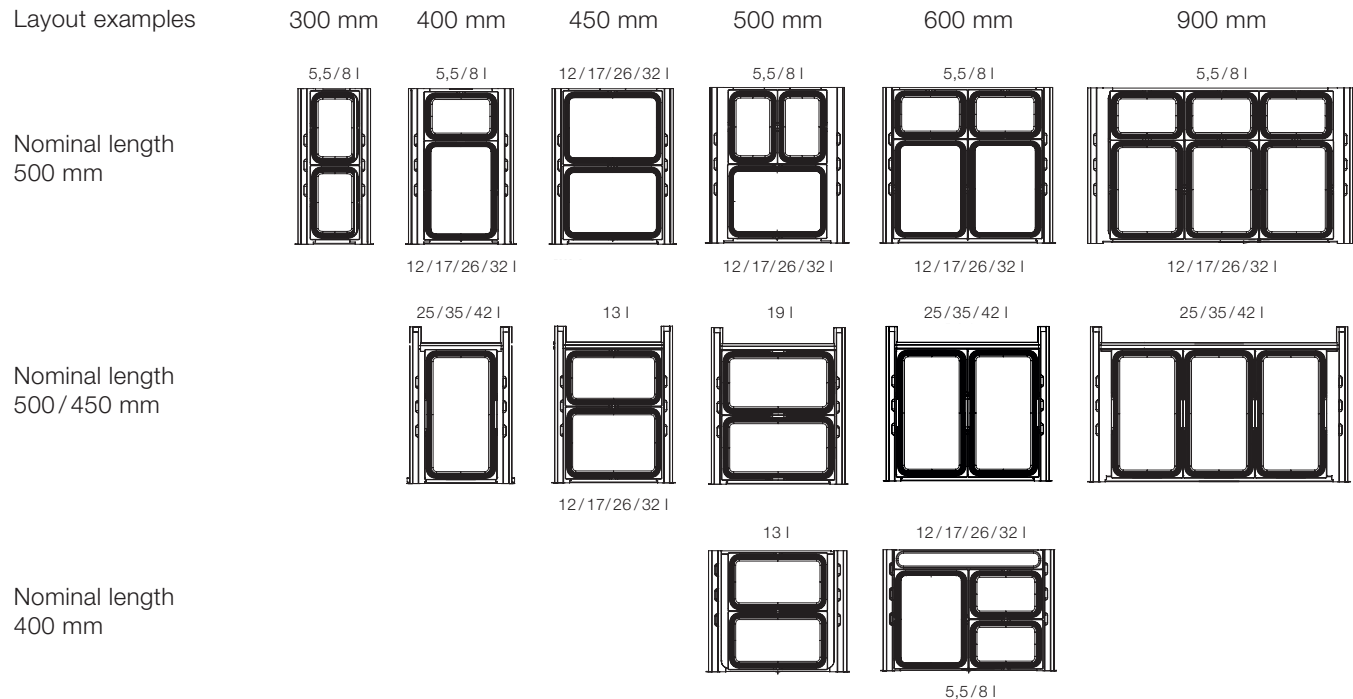
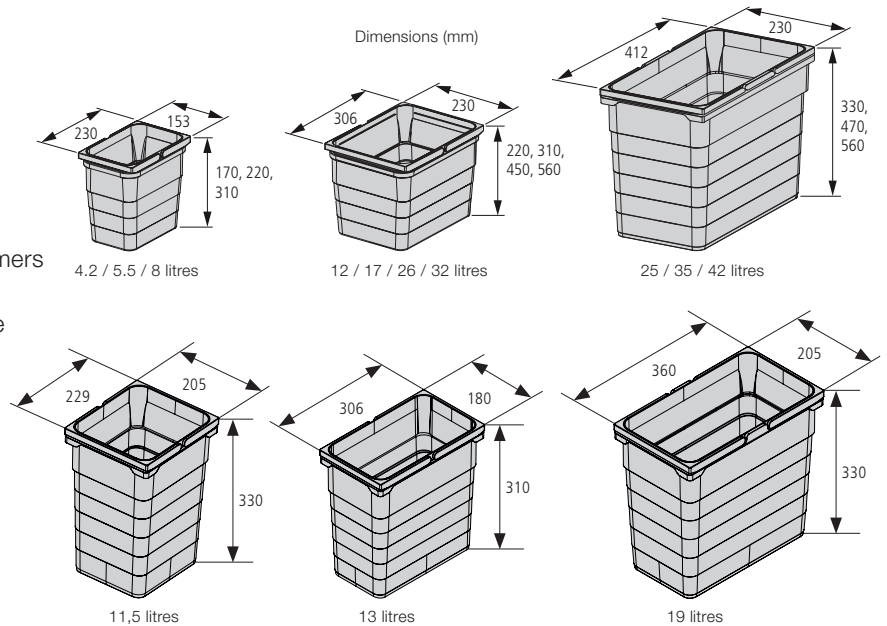
1. Stable frame construction assuring a firm hold
2. Below the worktop
3. With lid cover plate

## eins2fünf (one2five) frame-hung waste separation system

- A frame provides stability for adapting to a drawer system
- Equipped with eins2vier bins, volumes from 4.2 to 42 litres
- 7 bin sizes for all established drawer and cabinet types
- Injection-moulded from recyclable polymers
- Stable, glass-fibre reinforced carrying handles fix the waste bags and facilitate the removal of the bins
- The bins can also be used for the storage of cleaning agents

### Finishes

- Hanging Frame: Aluminium grey, Dark grey
- Waste bins: Aluminium grey, Dark grey



### Part list for waste separation system

Ref. No.	Description	Cabinet width*	Suitable for drawer systems by
526X.XX XXXX	Hanging frame	300 - 900 mm	Blum, Grass, Häfele
5280.XX XXXX	Lid cover plate	300 - 1200 mm	

\*For side panel thicknesses of 16 and 19 mm and nominal depths of 400/500 mm (individual solutions on request)

eins2sieben



## Elegant and practical waste recycling

This modern hanging frame system for waste containers follows the trend of a slim, linear design language and is specially developed for drawer systems that use drawer slides mounted under the drawer-base. The frame can be equipped with a wide range of waste containers in various sizes and combinations. The easy-clean system also offers simple installation.

### eins2sieben (one2seven) waste separation system

- For use with drawer systems using under-mounted drawer slides
- Perfectly matched to the drawer system design
- A closed design makes cleaning easy
- Numerous waste containers combinations

Layout examples

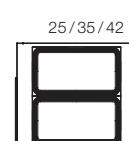
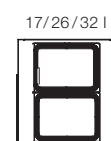
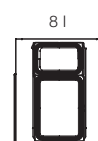
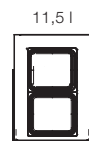
400 mm

450 mm

500 mm

600 mm

Nominal length  
500 mm



Nominal length  
450 mm

17/26/32 l

17/26/32 l

25/35/42 l

25/35/42 l

13 l

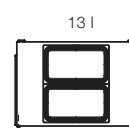
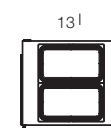
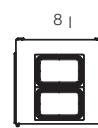
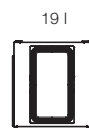
19 l



#### Finishes

- Hanging frame: Dark grey
- Waste bins: Aluminium grey, Dark grey

Nominal length  
400 mm



Hanging frame and drawer system form one unit

#### Part list for waste separation system

Ref. No.	Description	Cabinet width	Suitable for drawer systems by
6030.XX XXXXX	Hanging frame	400 - 600 mm	Blum





## Excels in small laboratories

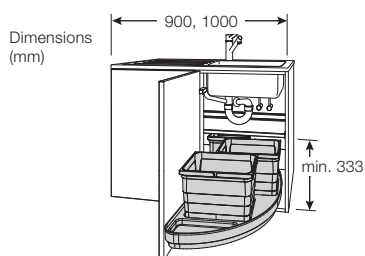
Especially suitable for sink corner cabinets in small laboratories. When the door is opened, this compact unit slides out automatically, so it's immediately available for waste separation.

### eins2slide (one2slide) pull-out waste bin system

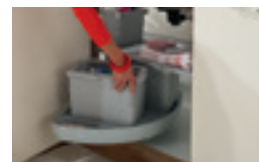
- Optimal space utilization in small laboratories
- Just one fitting (PowerSlide) for all door widths
- Supporting fitting made of massive aluminium with pro(arc carousel tray and eins2vier bins
- Smooth sliding of the tray
- Available for left- and right-hand opening cabinets
- Available with the accessories system eins2top and lid cover plate

#### Finishes

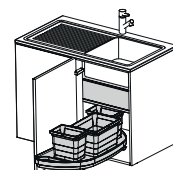
- Colours: Aluminium grey



Motion of eins2slide

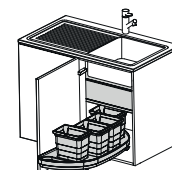


Layout examples

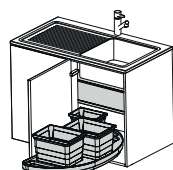


Triple separation

450 mm

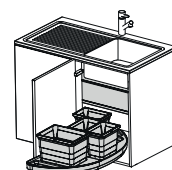


Quadruple separation



Triple separation

500 mm



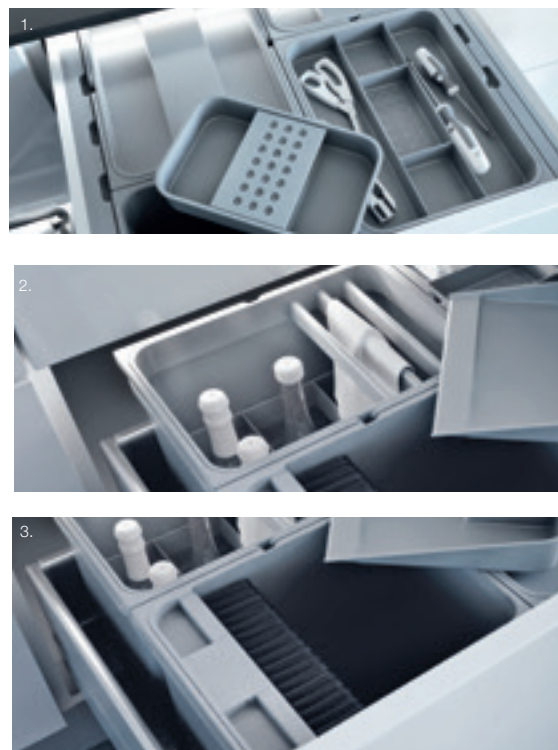
Quadruple separation

#### Part list for pull-out waste bin system sets

Ref. No.	Description	Cabinet width	Door width	Waste bins	Version	
9600.XX XXXXX	Pull-out waste bin system	900 mm	450 mm	1x 12 litres / 2x 5,5 litres	Left-handed	
9600.XX XXXXX	Pull-out waste bin system	900 mm	450 mm	1x 12 litres / 2x 5,5 litres	Right-handed	
9600.XX XXXXX	Pull-out waste bin system	900 mm	450 mm	4x 5,5 litres	Left-handed	
9600.XX XXXXX	Pull-out waste bin system	900 mm	450 mm	4x 5,5 litres	Right-handed	
9610.XX XXXXX	Pull-out waste bin system	1000 mm	500 mm	2x 12 litres / 1x 5,5 litres	Left-handed	
9610.XX XXXXX	Pull-out waste bin system	1000 mm	500 mm	2x 12 litres / 1x 5,5 litres	Right-handed	
9610.XX XXXXX	Pull-out waste bin system	1000 mm	500 mm	1x 12 litres / 3x 5,5 litres	Left-handed	
9610.XX XXXXX	Pull-out waste bin system	1000 mm	500 mm	1x 12 litres / 3x 5,5 litres	Right-handed	



eins2top



1. Individual lid big / Bio tray small with a biological filter to neutralize unpleasant smells
2. Cleaning set
3. Dustpan and brush set

## Complements waste bins

This intelligent accessories system combines waste separation with the storage of other laboratory, and cleaning utensils. It provides a versatile and efficient new storage option under the sink.

### eins2top (one2top) functional components

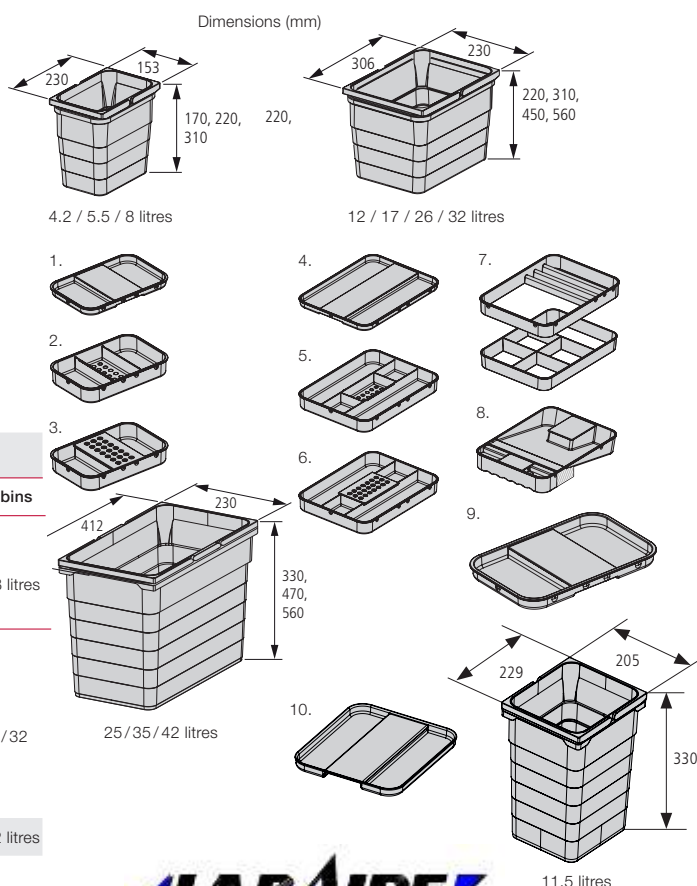
- Additional storage possibilities in an existing space
- Clean and hygienic cover of the waste bins
- Officially rewarded design, adapted to the bins
- Made from robust polymers
- Compatible with the ninka waste separation systems eins2vier, eins2fünf, eins2sechs and eins2slide

#### Finishes

- Colours: Aluminium grey, Dark grey

#### Part list for functional components

Ref. No.	Description	Applicable with ninka waste bins
5001.11 XXXXX	Individual lid, small	1.
5003.11 XXXXX	Three-compartment tray, small	2.
5003.91 XXXXX	Bio tray, small, including filter	3.
5000.11 XXXXX	Individual lid, big	4.
5002.11 XXXXX	Five-compartment tray, big	5.
5002.91 XXXXX	Bio tray, big, including filter	6.
5004.90 XXXXX	Cleaning set	7.
5006.90 XXXXX	Dustpan and brush set	8.
5010.11 XXXXX	Individual lid, big	9.
0000.50 5262X	Individual lid	10.





## Simple organic waste disposal

bioBin simply hangs on the outside of a cabinet door to capture your waste and then unhooks to store inside the cabinet when not in use. It's ergonomic and easy to use.

### Bio waste container

- Can be used in any **laboratory**
- Volume of 4.2 litres
- Hooks over the top of the cupboard door and fitting under the worktop
- Suitable for door thickness 16-22 mm
- Easy to close with hygienic lid
- Easy to clean

#### Finishes

- Colours: Aluminium grey, Dark grey



#### Part list bioBin

Ref. No.	Description
5188.91 XXXXX	bioBin

1. bioBin hanging with lid  
2. bioBin

# easyWaste



1. Compact unit  
3. Triple separation

2. Double separation  
4. Neutral cardboard box

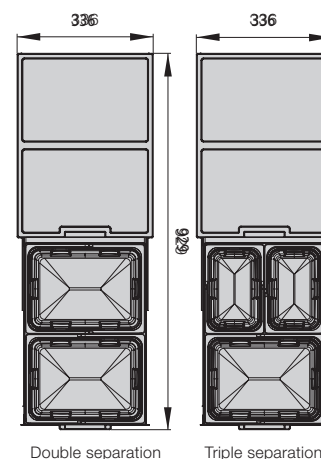
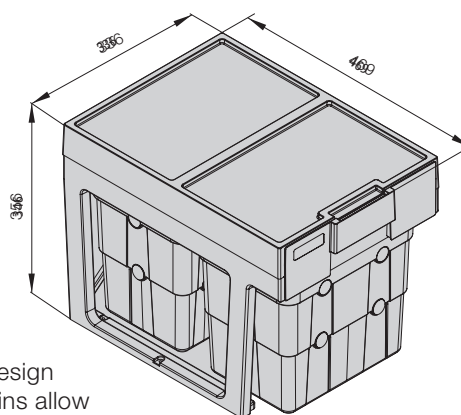
## A compact waste bin solution, with compact packaging to match

This small format combination unit offers surprising container volumes while fitting under sink pipework. Two 16 litre containers or substitute one of them with two 7 litre containers means versatility for the user. The Trade will also value the compact packaging due to the unique container construction.

### easyWaste – Waste bin system

- Compact, space-saving design for installation under the siphon in the sink base cabinet
- For door widths from 400 mm
- Stable frame construction
- Waste bins and frame injection-molded from resistant and recyclable polymers
- Minimum transport and storage volume due to telescopic waste bins
- Waste bins: 2 x 16 litres (double separation) or 1 x 16 and 2 x 7 litres (triple separation)
- Clever bin liner fixation
- A resistant finish (RAL7040), an optimized design and small gap sizes between handles and bins allow a clean and hygienic waste separation
- Full-extension runners ensuring extremely smooth running
- Simple base mounting
- With cover plate offering additional storage space

Dimensions (mm)



Double separation

Triple separation

#### Part list for easyWaste – Waste bin system

Ref. No.	Description	Waste bins
5700.92 77XXX	Compact unit with double separation	2 x 16 litres each
5700.93 77XXX	Compact unit with triple separation	1 x 16 litres, 2 x 7 litres each





## Simply more space

This modern corner cabinet offers effective use of the corner space, with our design providing an astonishing amount of storage for all manner of laboratory items. Options are available for trays from the budget conscious to something more special offering height adjustment to ensure they are perfect for the job.



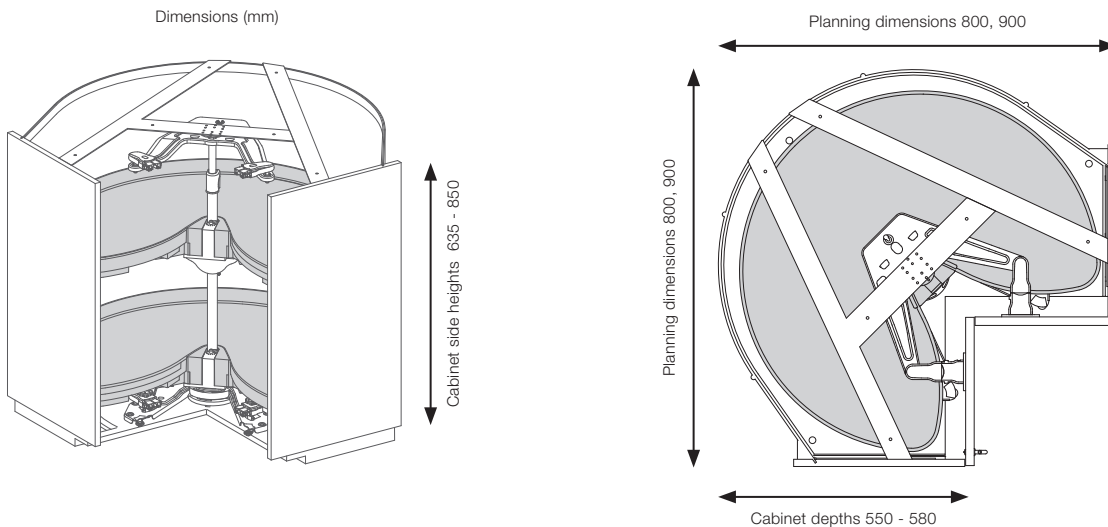
1. mondo with eco carousel trays
2. mondo with pro(arc) carousel trays
3. mondo with pro(arc) carousel trays and edge profile
4. mondo with pro(arc) carousel trays and chrome rail

## mondo corner cabinets

- Perfect utilisation of the symmetric **laboratory** corner
- High-quality folding fitting with easy to adjust soft-close mechanism for smooth opening and closing of the cabinet doors
- The back panel closely surrounds the carousel trays and prevents the stored items from falling down
- Is delivered as completely assembled corner cabinet including plinth feet (70 to 200 mm) and plinth adapters
- Easy assembly to adjacent cabinets thanks to wooden side panels
- Individual height adjustment of the upper carousel tray

### Finishes

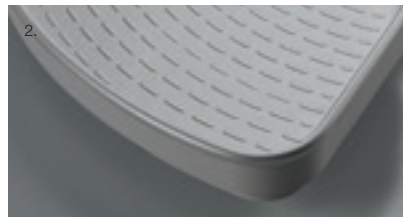
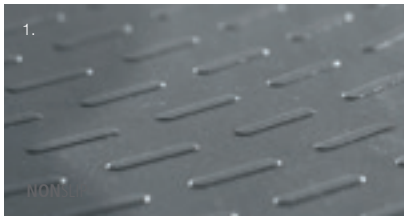
- Planning dimensions: 800 x 800 mm, 900 x 900 mm
- Carousel tray system: eco, pro(arc)



### Part list for corner cabinet with carousel trays

Ref. No.	Description	Cabinet width	Equipment
597X.XX XXXXX	Corner cabinet	800 x 800 mm	eco carousel trays
597X. XX XXXXX	Corner cabinet	800 x 800 mm	pro(arc) carousel trays
598X.XX XXXXX	Corner cabinet	900 x 900 mm	eco carousel trays
598X.XX XXXXX	Corner cabinet	900 x 900 mm	pro(arc) carousel trays





1. Optionally with integrated non-slip foil
2. Aluminium grey tray with edge profile
3. White tray with chrome rail

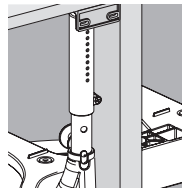
## PowerSlide fitting

- One fitting for all door widths, trays can be operated individually
- Adapts to left- or right-hand opening corner cabinets, easy and quick assembly
- Solid aluminium fitting, allowing perfect sliding of the trays
- Trays can easily be assembled and disassembled

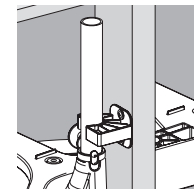
### Finishes

- Fitting: Silver, Dark grey

Cabinet connection



Telescopic sleeve



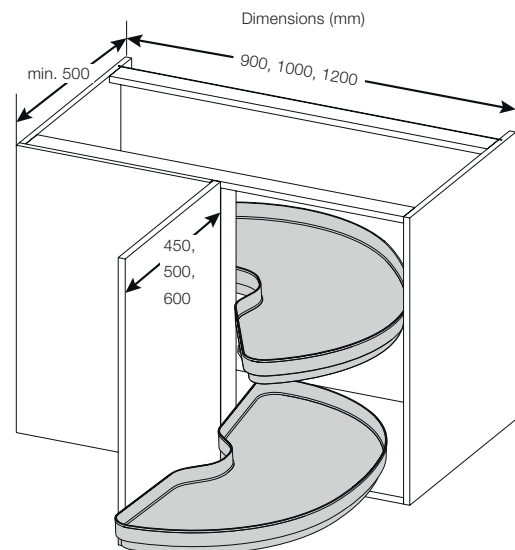
Tube support

## pro(arc tray system

- Classic, timeless design with individualization possibilities
- Non-slip foil to prevent the stocked items from sliding around
- Hidden construction ribs provide high stiffness and solidity
- Design family with aKIS and modul under oven plinth drawer

### Finishes

- Trays: Aluminium grey, White, Dark grey
- Edge design: Without profile, Edge profile, Chrome rail
- Non-slip foil: Without, Metallic, White, Dark grey



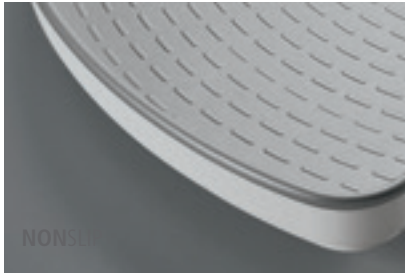
Part list for pull-out trays (incl. PowerSlide fitting)

Ref. No.	Description	Cabinet width	Door width	Version	
9531.XX XXXXX	Trays	900 mm	450 mm	Left-handed	
9532.XX XXXXX	Trays	900 mm	450 mm	Right-handed	
9533.XX XXXXX	Trays	1000 mm	500 mm	Left-handed	
9534.XX XXXXX	Trays	1000 mm	500 mm	Right-handed	
9535.XX XXXXX	Trays	1200 mm	600 mm	Left-handed	
9536.XX XXXXX	Trays	1200 mm	600 mm	Right-handed	

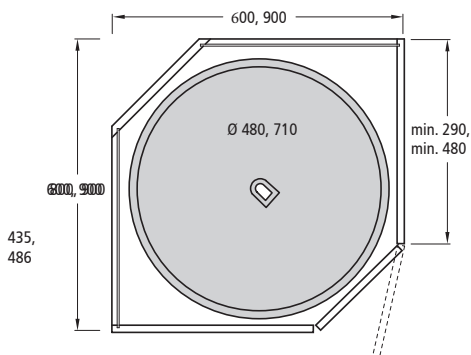
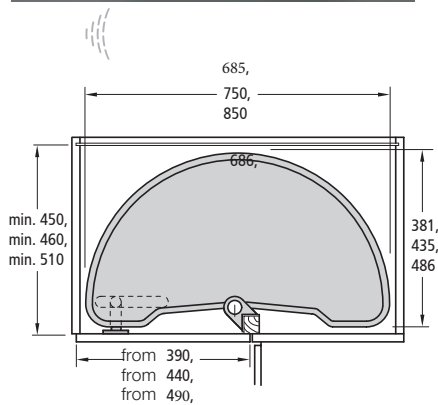


## Practical solution for laboratory corners

Whether for symmetrical or asymmetrical corners – the pro(arc tray system fits corner cabinets in modern L and U shaped **laboratories** and offers various custom options – such as colour, edge and surface design – and it looks great in any corner. An optional non-slip foil is available and prevents the stored items from sliding around.



1. pro(arc) tray in aluminium grey
2. pro(arc) tray in dark grey
3. pro(arc) tray in aluminium grey with edge profile
4. pro(arc) tray in white with non-slip foil in metallic and edge profile
5. pro(arc) tray in white with non-slip foil in white and chrome rail



## pro(arc) for symmetrical and asymmetrical corner cabinets

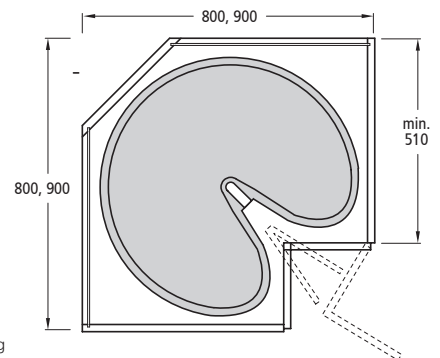
- Optimum utilisation of the storage space in every **laboratory** corner
- Ergonomic access thanks to pull-out or revolving trays
- Timeless design which matches aKIS and modul under oven plinth drawer
- Surfaces loadable up to 25 kg thanks to solid underside ribbing
- Optionally with integrated non-slip foil as well as edge profile or chrome rail
- Wide fitting range available for all established cabinet heights and different corner situations
- Compatible with the mondo and PowerSlide corner cabinet systems

### Finishes

- Shape: Semi circle, Full-round, With recess
- Colours: Dark grey, Light grey, Aluminium grey, Stone grey, White
- Non-slip foil: Without foil, Metallic, White, Dark grey
- Fitting: Tube fitting (incl. catch), Rotating fitting, Brake fitting (individually rotating trays), Brake fitting (synchronously rotating trays)
- Tray outside: Without profile, Edge profile, Chrome rail

### Part list for trays for corner cabinets

Ref. No.	Description	Cabinet width	Fitting
5890.11 XXXXX	Half tray 686 mm	800 mm	3836.XX XXXXX Tube fitting
5870.90 XXXXX	Half tray 750 mm	900 mm	3836.XX XXXXX Tube fitting
5880.90 XXXXX	Half tray 850 mm	1000 mm	3836.XX XXXXX Tube fitting
5840.98 XXXXX	Carousel tray full-round 480 mm	600 x 600 mm	3137.XX XXXXX Rotating fitting
5850.98 XXXXX	Carousel tray full-round 710 mm	900 x 900 mm	3137.XX XXXXX Rotating fitting
5850.96 XXXXX	Carousel tray with recess 710 mm	800 x 800 mm	3638.XX XXXXX Brake fitting, Folding fitting
5860.97 XXXXX	Carousel tray with recess 810 mm	900 x 900 mm	3638.XX XXXXX Brake fitting, F





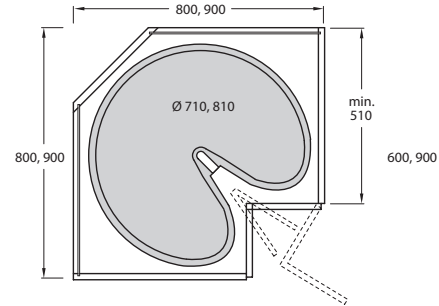
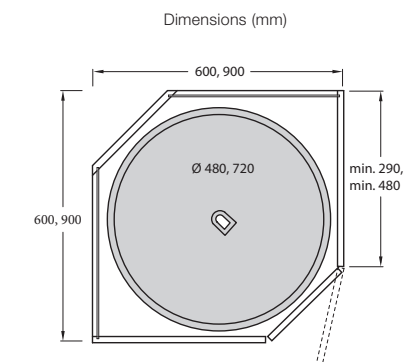
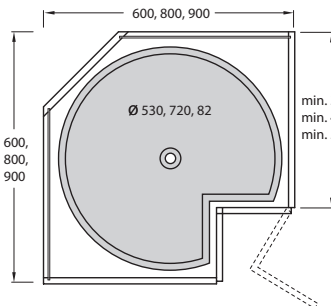
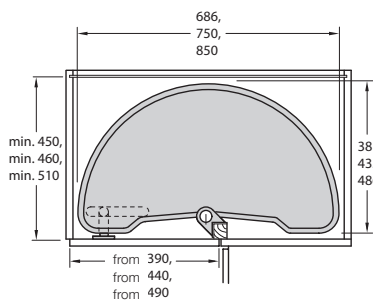
1. eco tray in aluminium grey  
2. eco tray in white  
3. eco tray in stone grey

## eco trays for symmetrical and asymmetrical corner cabinets

- Optimum use of the storage space in every **laboratory** corner
- Easy access to the stored items thanks to extractable or revolving trays
- High load capacity thanks to solid underside ribbing
- Wide fitting range available for all established cabinet heights and different corner conditions
- Compatible with the mondo corner cabinet system

### Finishes

- Shape: Semi circle, Full-round,  $\frac{3}{4}$  circle, With recess
- Colours: Dark grey, Light grey, Aluminium grey, Stone grey, White
- Fitting: Tube fitting (incl. catch), Rotating fitting, Brake fitting (individually rotating trays), Brake fitting (synchronously rotating trays)



### Part list for trays for corner cabinets

Ref.No.	Description	Cabinet width	Fitting
5810.11 XXXXX	Half tray 686 mm	800 mm	3836.XX XXXXX Tube fitting
5120.90 XXXXX	Half tray 750 mm	900 mm	3836.XX XXXXX Tube fitting
5130.90 XXXXX	Half tray 850 mm	1000 mm	3836.XX XXXXX Tube fitting
5210.98 XXXXX	Carousel tray full-round 480 mm	600 x 600 mm	3137.XX XXXXX Rotating fitting
5250.98 XXXXX	Carousel tray full-round 720 mm	900 x 900 mm	3137.XX XXXXX Rotating fitting
5720.94 XXXXX	Carousel tray $\frac{3}{4}$ circle 530 mm	600 x 600 mm	3638.XX XXXXX Brake fitting
5250.94 XXXXX	Carousel tray $\frac{3}{4}$ circle 720 mm	800 x 800 mm	3638.XX XXXXX Brake fitting
5270.94 XXXXX	Carousel tray $\frac{3}{4}$ circle 820 mm	900 x 900 mm	3638.XX XXXXX Brake fitting
5255.96 XXXXX	Carousel tray with recess 710 mm	800 x 800 mm	3638.XX XXXXX Brake fitting, Folding fitting
5275.96 XXXXX	Carousel tray with recess 810 mm	900 x 900 mm	3638.XX XXXXX Brake fitting, Folding fitting



### ***Work or Counter Tops***

The choice of worktop must be carefully considered. The following are some of the more commonly used materials:

- **Phenolic Resin EBC film**

A synthetic man made product manufactured specifically for laboratory work tops. Heat, scratch, stain, acid and solvent resistant these panels are made with an Electron Beam Cured urethane-acrylic surface and a cellulose fibre core reinforced with Phenolic resin. The drawback is the limited range of colours.

- **Granite**

A natural product with very good resistance to staining, heat, acids and solvents. It does not scratch easily and is very durable. Limited choice of colours and not green.

- **Corian**

A synthetic product manufactured by DuPont for laboratory worktops from acrylic resins and natural minerals in a wide range of colours but is not very chemical or scratch resistant. See DuPont web site for details.

- **Formica**

A synthetic product 1mm thick laminated onto particle board or similar. Not very resistant to heat, stains, scratching or wet conditions. A wooden chipboard core is most often used which is not durable. Limited choice of colours- mainly wood grain finishes.

- **Stainless Steel & Polypropylene**

Mainly used in medical, chemical and wet laboratories for specific applications.

- **Laminated Saligna or Iroko**

These solid timber products are used mainly in educational laboratories where no chemicals or wet services are present. They require a very good sealant such as Glatex 8 to ensure corrosion and scratch resistance.

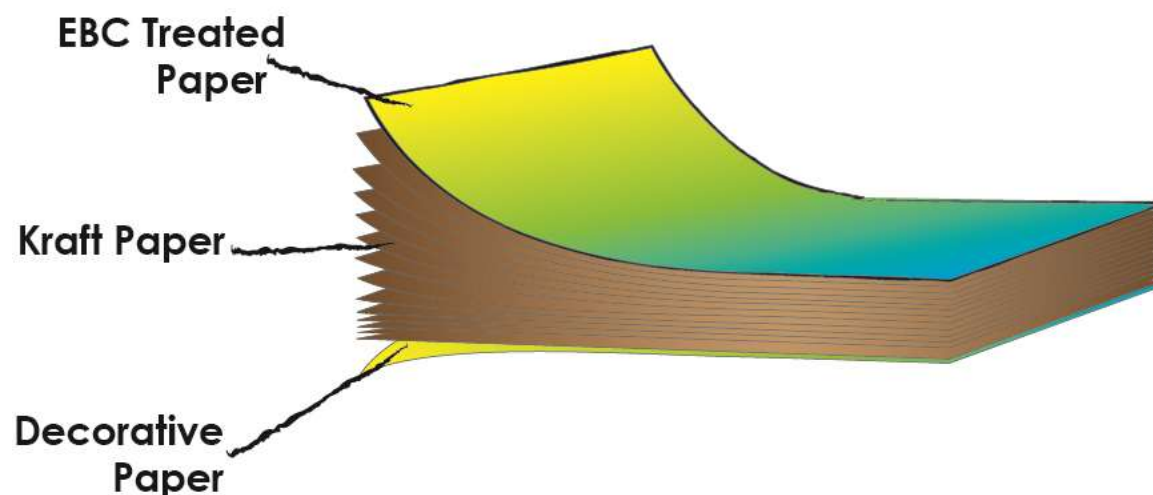




### ***Phenolic Resin EBC work tops***

Electron Beam curing (EBC) is one of the most powerful industrial curing technologies commercially available today. The specialty of EBC is the ability of the EBC to penetrate the surface to fully cure and close the surface of the very thick, multiple Acrylic coating layers, which makes it possible for the high chemical resistance surface of Labaire's Lab Chem work tops, characterized by high performance surface finish.

Lab Chem utilizes the advantages of the EBC technology with acrylic resin. Lab Chem has not a single, but double-coating of acrylic combination for better surface performance, reduced VOCs and low carbon footprint since the EBC process does not produce CO<sub>2</sub>. Lab Chem's EBC surface layer is combined with phenolic treated virgin-pulp kraft paper, processed under high temperature and high pressure to ensure compliance with the EN438 standards for its physical properties. The process requires special calibration to the temperature, pressure and duration of production. The end result is Lab Chem with a flat surface, complete with chemical resistance suitable for professional laboratory use.



***Illustration 1: The build-up of Lab Chem.***

The careful planning and processes for the production of Lab Chem results in a product that has been tested and certified for compliance for the following properties.

Quality Standards / Certificate	Properties / Attributes
European Standard EN438	<p>Physical endurance based on the EN438 Part 4, as Lab Chem has a built-up similar to that of a compact laminate with the exception of an EBC chemical resistant product surface.</p> <p>The EN438 also includes the criteria for "Surface Flatness". The careful control of temperature, pressure and duration of the production, coupled with the EBC cured surface and virgin-pulp phenolic resin impregnated kraft paper ensures the compliance for Lab Chem with high stability and flatness value.</p>

GREENGUARD / GREENGUARD GOLD	Low VOC emission, due to the use of the acrylic resin and the EBC process, making the product suitable for indoor applications such as closed-laboratory environment.
Singapore Green Label	An ecolabel certificate testifying the use of sustainable materials made from virgin-pulp.
SEFA 8 and Selected 91 Chemicals Tests	A most important attribute of the product for its chemical resistance, Lab Chem has been tested for 91 most common chemicals used in laboratories worldwide, including the 49 chemicals specified by SEFA. All tests are done for a duration of 24 hours by third-party internationally accredited laboratory, TUV SUV PSB Laboratory in Singapore.
Termite Resistance	<p>Termites thrive in an environment where microbes are present. These microbes help to break down the cellulose of wood materials into food sources that can be digested by termites.</p> <p>Lab Chem is a product of high heat and high pressure, with a high density of at least <math>1.35\text{g/cm}^3</math>. There is no air pocket or moisture trap in the product core, making it a non-conductive environment for microbes, especially fungi, to grow. The absence of these microbes makes Lab Chem unattractive for the survival of even the most dangerous termite for buildings, the Subterranean termite.</p>

**Table 1: Properties and attributes of Lab Chem**

## ***Storage and Transit***

Every laboratory has storage for various equipment, chemicals, consumables etc. We have mentioned above laboratory tower and over bench cabinets both of which are storage cabinets. Further to that there are the shelves that form part of the service modules. Laboratory storage facilities are either in the laboratory or in a dedicated store room. The following are wall racks and Gondola shelving that can be configured in many different ways.

### ***Racks & Shelving***

The Labiare wall racks have an aluminium frame that is bolted to the wall and may rest on levelling feet. Racks and shelving sizes can be configured to your requirements.

Racks can be fitted with castors however the configuration is governed. Castors are sized to suite the carrying weight. Labaire has a range of standard light duty trolleys and heavy duty trolleys. Shelves can be from Melamine chipboard, stainless steel, solid core boards or other materials to suite.

Gondola shelving is often used in store rooms where large storage facilities are required. Gondola racks and shelves can be from stainless steel or mild steel finished with powder paint or galvanized.

The material thickness and size of the gondola racks wall and shelf supports are sized to suite.



***Wall rack & shelves***



***Gondola racking with shelves***



***Light duty Trolley with two work tops or shelves***



***Heavy duty Trolley with four trays***



***Mobile rack with four trays***



***Acid & solvent storage cabinets***

### ***Sinks and Drainage***

Sinks are mostly polypropylene or epoxy resin. Ceramic and stainless steel sinks also often used. There are also cast sinks to match the worktops and seamlessly formed sinks in Solid Surface Worktops. Sizes vary according to supplier and design. The drainage must be polypropylene not PVC and adequately supported to the framework. For more information please go to [www.method.com.my](http://www.method.com.my)

The drop-in sink is preferable to the under-mount as it is mechanically supported and not adhered to the underside of the counter. The drop-in sink should be recessed flush with the worktop.






When a number of sinks or drip cups are connected in series a bottle trap is not used for each but rather a Dilution Recovery Trap at the end of the line. Both must be Polypropylene as must the drainage fittings and piping.



Polypropylene Drainage system with bottle trap



Dilution Recovery Trap



Configuration				
<i>Sinks, drainage &amp; plumbing</i>				
Types & Codes				
Description	Length mm	Width mm	Height mm	Code
<b>Laboratory Polypropylene Sinks</b> 	350	350	235	MS313
	420	320	215	MS401
	560	355	230	MS808
	552	400	235	MS505
	810	420	330	MS900
Description				
<b>Anti-Siphon Bottle Traps:</b> 	Bottle trap			MT800
	Bottle Trap			MV88
	2.3l Dilution Recovery Trap			MT2300
	2.3l Dilution Recovery Trap Vulcathene			MT2300v
	4.5l Dilution Trap			V915P
	Waste fitting			MS805/810/815
<b>Drip Cups:</b> 	Drip Cup circular 150mm diameter			MD150D
	Drip Cup 175x100 oval			M22
	Drip Cup 265x115 oval			PP80D
	Drip Cup circular 170mm			MD150D
	Drip Cup circular 190mm			PP70D



## Fittings

Fittings for wet and dry services are supplied as per customer requirements. Again there is a wide range of products and your choice should be well considered. They are either bench or vertically mounted. Details of the range can be forwarded upon request or visit the Nuova Farlabs website [www.farlabs.com](http://www.farlabs.com).

Farlab fittings meet all international standards and do not require servicing. If there is physical damage to the fittings due to normal wear and tear they will be replaced. They carry the same lifetime 20 year guarantee. We strongly advise that Labaire executes the entire gas installation with the fittings in or to carry out a pressure test and issue a Certificate of Compliance (COC) upon completion.

Configuration				
Wet & Dry Faucets				
Types & Codes				
Description	Length mm	Width mm	Height mm	Code
<b>Water Faucets</b> 				
	Description			
<b>Burning Gases</b> 				
<b>Drip Cups:</b> 				
<b>Pure Gases</b> 				

## ***Electrical Trunking and Sockets***

Fitting of electrical and/or data trunking with sockets is required in a laboratory. It forms an integral part of our system and we strongly advise that the scope of this work is included in Labaire's scope. If there is an appointed electrical contractor, we will work closely with them to ensure any installation that is linked to the main building is accepted as one. This in order to achieve a certificate of compliance (COC) . The conduit or trunking to house the sockets and run the wiring to these sockets is an integral part of our system. So are the mini-distribution boards and subsequent junctions pulling all the benches and their accessories into one installation.

Electrical trunking is usually mounted in the service modules or service spine. The placement and quantity of sockets is often a problem. It is often stated that you can never install too many electrical sockets however we wish to offer you that flexibility to add, remove and move these points.

### ***Electrical Sockets***

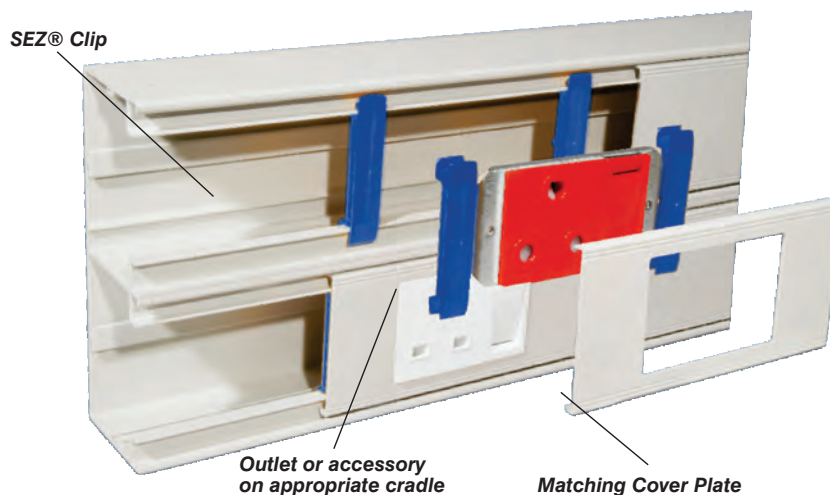
The most important step is to state what type of socket you require. There are many types and your country or area will have adopted a certain code. Do not just state round pin, square pin etc but state a recognized code such as BS, SA etc.



13A BS Switched  
socket

13A SA Switched  
socket

The next step is to state the quantity required and where you wish to have them installed.

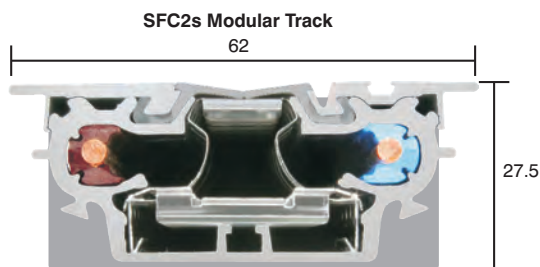


Labaire again includes accessories to enhance flexibility. Below is a Modular Track that allows you to freedom to clip in sockets at your will and move them laterally into position. This system is often separate to the main installation and allows you to have a highly flexible zone with UPS connected in the event of a power failure.

### LABAIRE's modular electrical & data system Flexibility

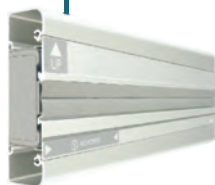
**Place sockets where you want, as many as you want and move them to where you want.  
No need to state where or how many sockets you require.**

Eubiq is the perfect solution for residential, retail, commercial and industrial applications  
End terminals fitted as standard  
Stock finish natural anodised  
Light & easy to install  
Clean & aesthetic  
Safe GSS system  
Modular



Product Code	Length
SFC2 / 400 W/ET	400mm
SFC2 / 600 W/ET	600mm
SFC2 / 800 W/ET	800mm
SFC2 / 1000 W/ET	1000mm
SFC2 / BLANK COVER	2100mm
Stock lengths (other lengths to order)	

The SFC2s Modular Track is common to SH1, DMS1, RH1/2, VSF1-MB/MC & SOHO housings featured below



SH1 Surface Mounting Power & Data Housing



RH1 Recess Power & Cable Management Housing



VSF1-MB & MC Power & Data Housing (Mounting Base)



DMS1 Cable Management Housing



RH2 Recess Power & Data Housing



SOHO Multi Function Work Centre & Data Housing

**This versatile system is often linked to a UPS for dedicated supply within a laboratory .**

Certain equipment forms an integral part of the lab such as a fume cabinet and acid or solvent storage cabinet as depicted below.

**Labaire**

129 5<sup>th</sup> Street, Wynberg, Sandton  
Gauteng, South Africa

**Web page:** [www.labaire.co.za](http://www.labaire.co.za)

**Email:** [sales@labaire.co.za](mailto:sales@labaire.co.za)

**Phone:** 27 10 007 5782

**Cell:** 27 79 397 9038

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**LABAIRE****Laboratory Furniture**