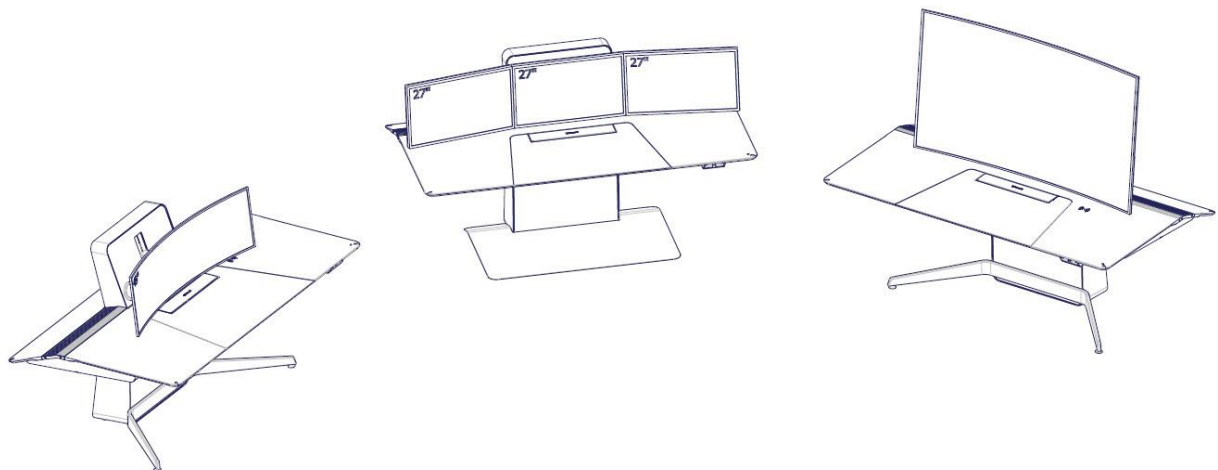




# Technical Report

## ACTEA MAX

Revision 0  
October 2018



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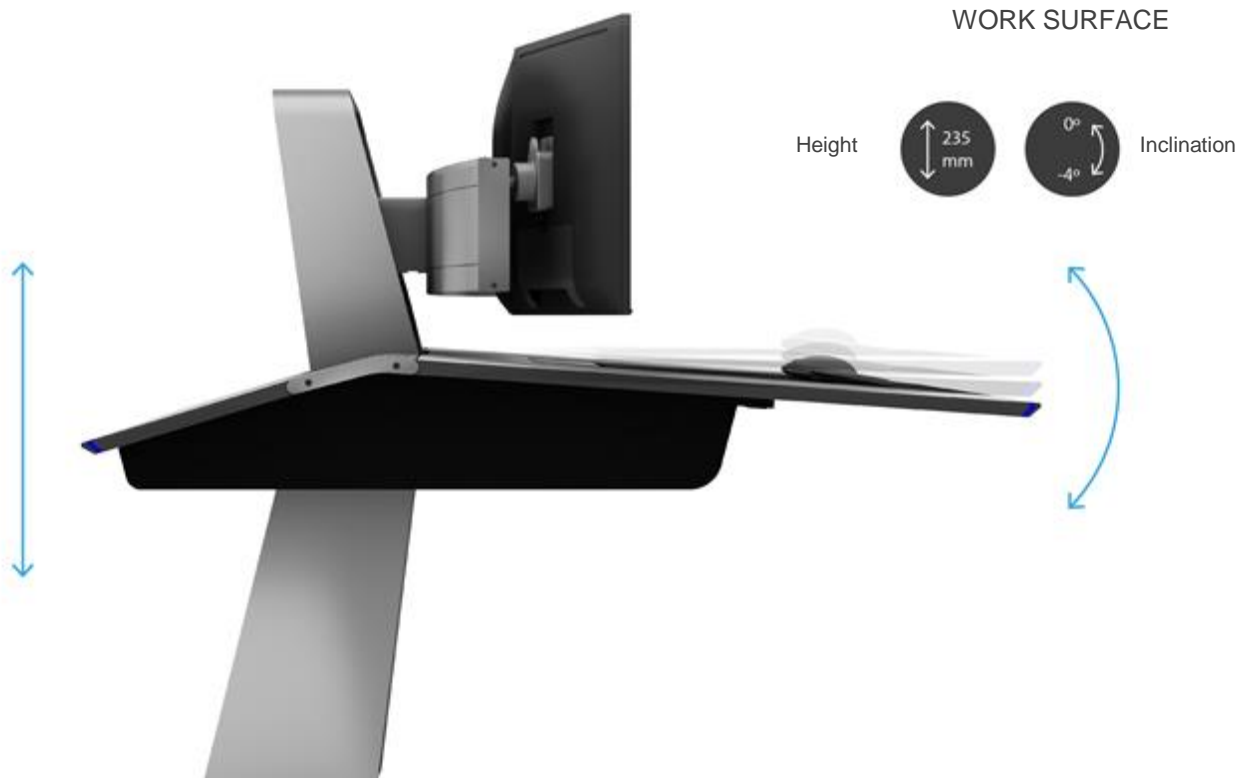
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## 1. SUMMARY OF ACTEA PROFESSIONAL CONSOLE



ACTEA is the first control console with Adaptive Central Column that allows its configuration in height and inclination electronically to adapt to any operator, and centralising the technical functions in a single central space, generating a light and obstacle-free assembly.

### ELECTRONICALLY ADAPTABLE WORK SURFACE

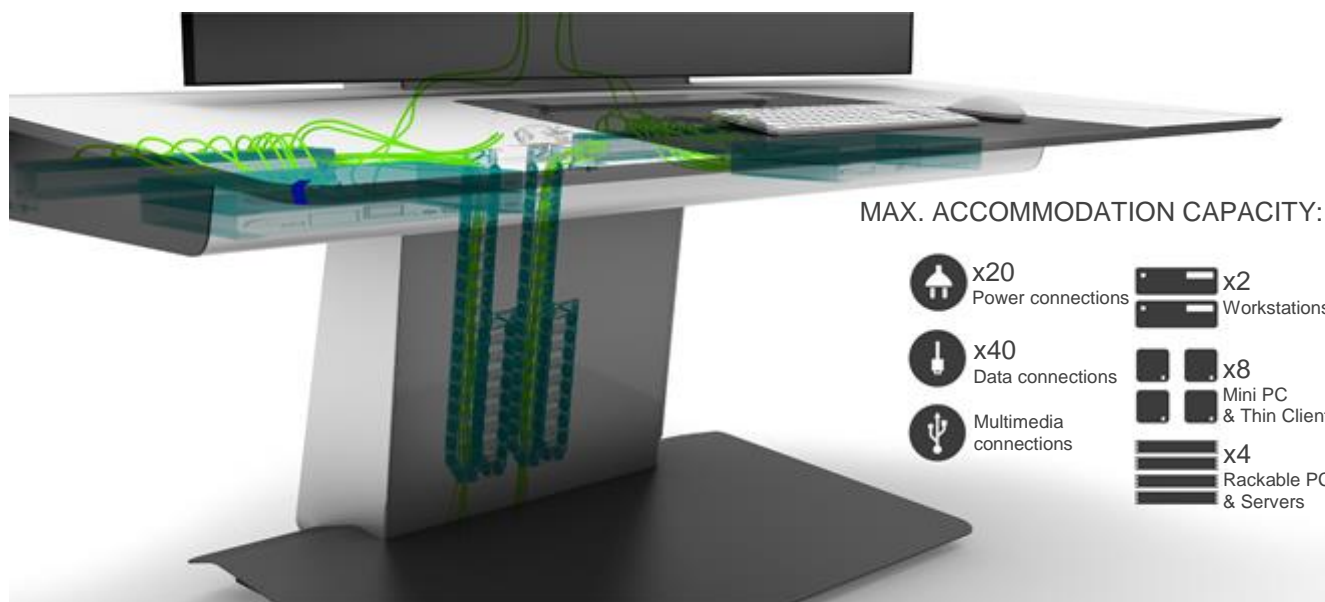


The innovative AW (Adaptive Workspace) system provides electronic adjustment both in height and inclination of the workspace to adapt to any user's needs, according to the physical or psychological requirements of each task.



Innovation for the health of all users, from the operator to the maintenance staff, to offer an exceptional user experience. All points of interaction studied in detail to ensure that different users can perform their functions in the most comfortable and fast possible way. From the Active Control function to the folding work surfaces, every millimetre of the console has been studied to offer the perfect balance between performance and ergonomics.

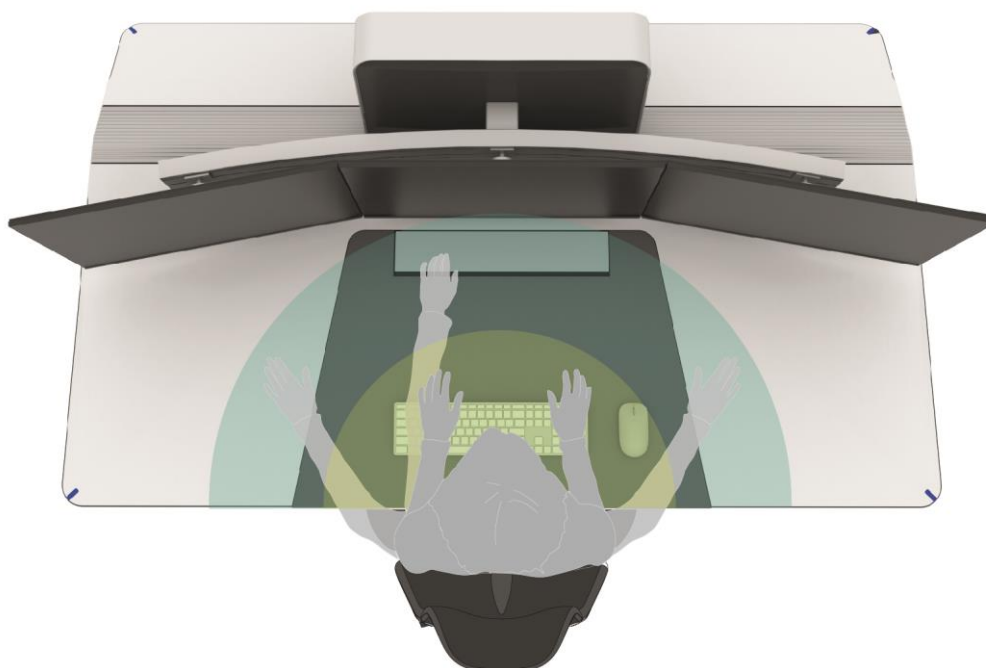
ACTEA property of GESAB S.A.U.



The set also provides intelligent management and maintenance with virtual integral access to any technical area of the console in a fast, simple and easy way.

The way in which it interacts with the console directly defines the user experience, for that reason ACTEA has been designed giving shape to the functional needs and based on the most demanding ergonomic requirements to obtain the highest satisfaction and the best possible use experience with minimum effort. All the elements are arranged

strategically to enhance the intuitive use of the set. There are no barriers, everything is within reach of the operator, in the right place, at the required moment to have everything under control even in the most critical environments.

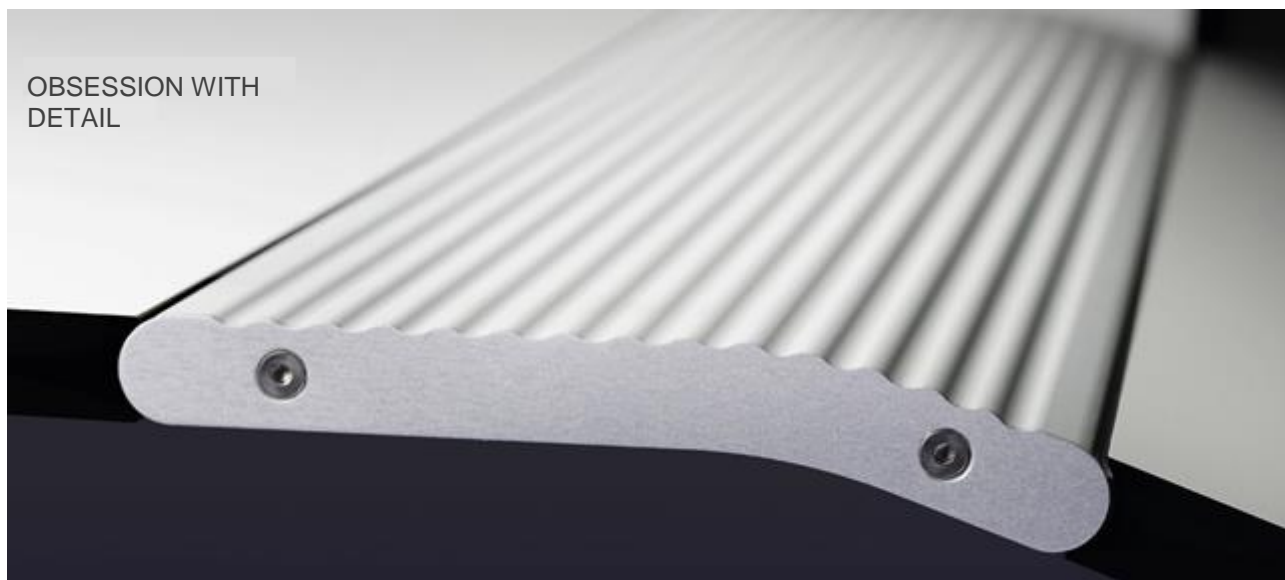


ACTEA is the first control console to introduce the Active Control concept, through which a tool is provided to develop control tasks from an upright position, promoting the activity and physical movements of the operator, with the aim of improving ergonomics and health of users. The lifting and tilting capacity of the work surfaces is the optimal solution for high-performance 24/7 environments.



For enhanced active safety, ACTEA uses a built-in LED-RGB system on the work surface itself, designed to meet the safety and functionality requirements of control room environments.

Materials of the highest quality complete the sensory experience provided by ACTEA. The work surfaces in phenolic compact, extremely resistant but comfortable for 24/7 environments, and the anodised aluminium of the outer covers provide exclusive finishes to ACTEA to achieve a one-of-a-kind design.



Strokes created to perfectly combine aesthetics with functionality.

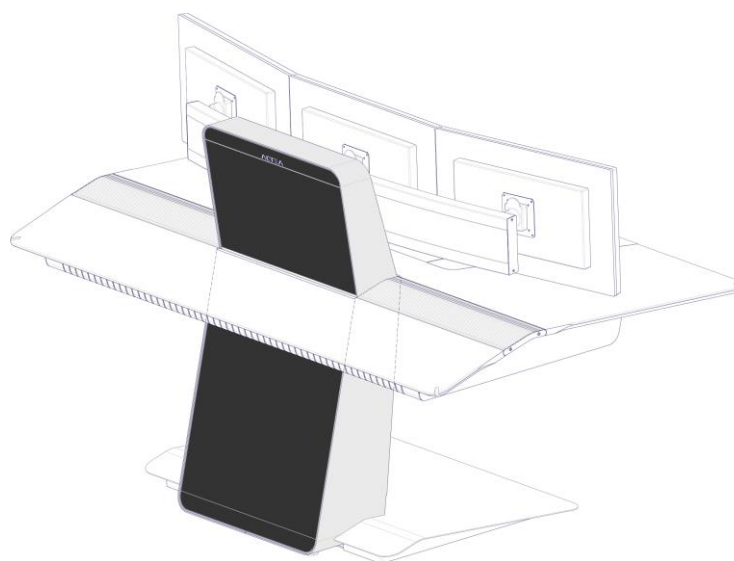


## 2. GENERAL SPECIFICATIONS

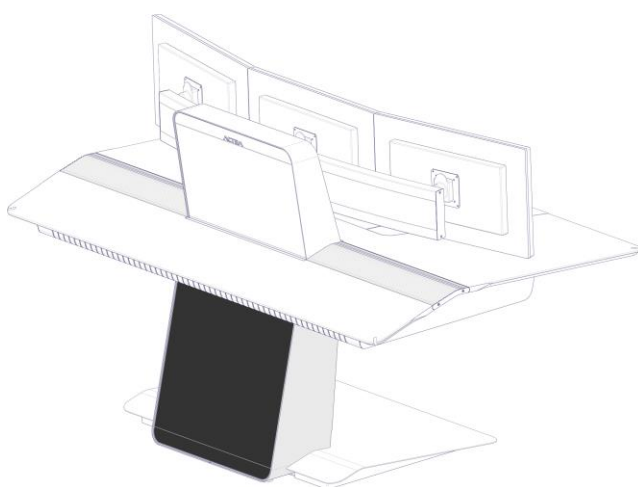
ACTEA is the most advanced control platform and the first console with a central column capable of adapting to each operator, centralising all the functions in a single obstacle-free space. Design executed as an intrinsic part of the product, from its conception to the definition of the smallest detail. The complexity of a rational and simple-looking design, with the ability to surprise and offer a unique experience.

### 2.1. ADAPTIVE CENTRAL COLUMN

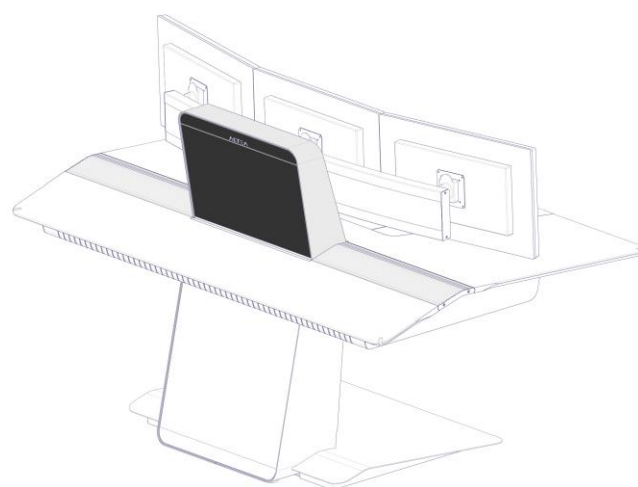
One of the main components of the ACTEA console is its innovative Adaptive Central Column that, in addition to providing height regulation of the work surface, also fulfils the functions of accommodation and integration of technical components such as the lifting motor, the management of wiring or the integration of multimedia elements and monitor management systems.



The Central Column is divided into 2 sections. In the lower section, the lifting and wiring central conduction motor is housed from the technical floor to the Open-Frame rack, where the computer equipment is housed under the work surfaces. The upper column integrates the different monitor management systems, configurable multimedia systems such as speakers and microphones, and integrated wiring management to the Open-Frame rack.



Lower section central column



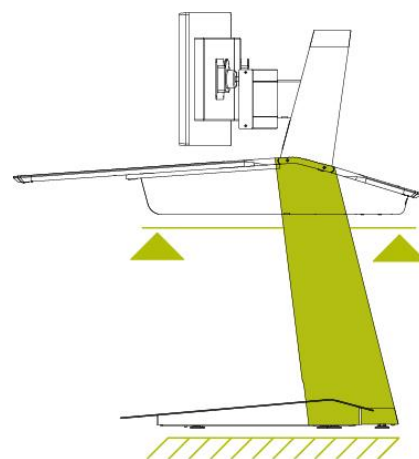
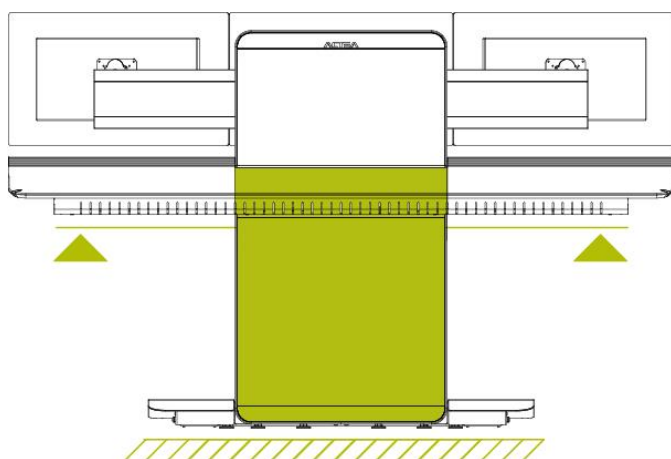
Upper section central column



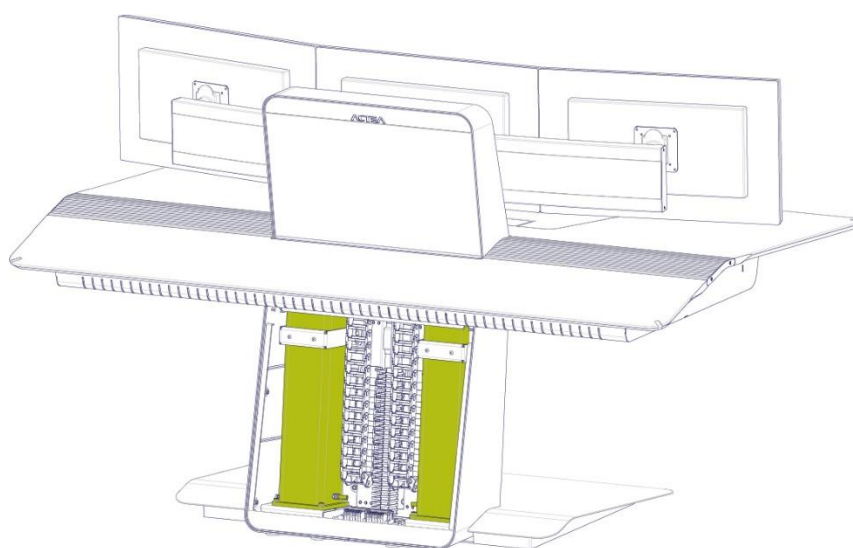
## 2.2. LOWER SECTION ADAPTIVE CENTRAL COLUMN

The lower section of the Adaptive Central Column fulfils 3 main functions: structural axis of the set with several options of bases available, integration of the set's lifting system, and the management of the wiring and main connections.

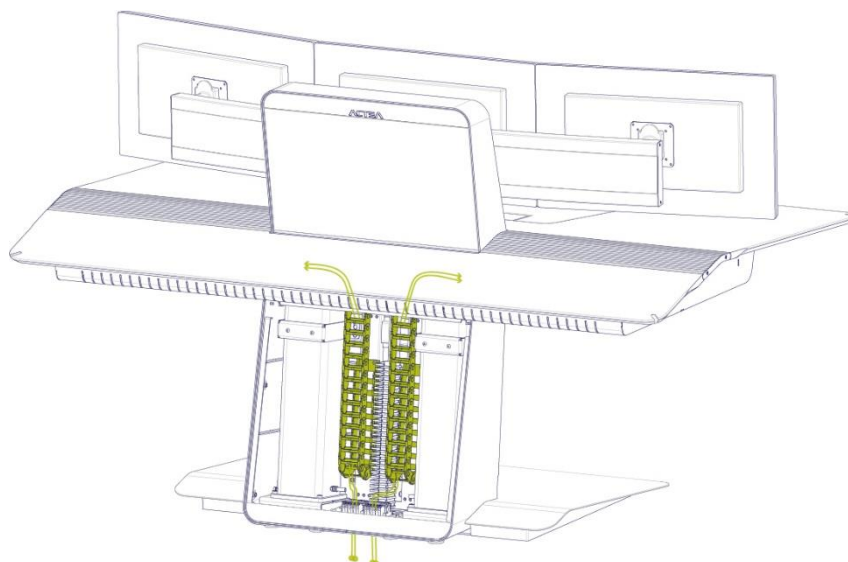
The innovative design through a single structural axis with height adaptation and regulation, in addition to providing maximum adaptability to the user, also radically improves the free space for both the user and the surroundings. Thanks to the central column design, space is freed under the work surface and the technical section is centralised in a single element without obstacles.



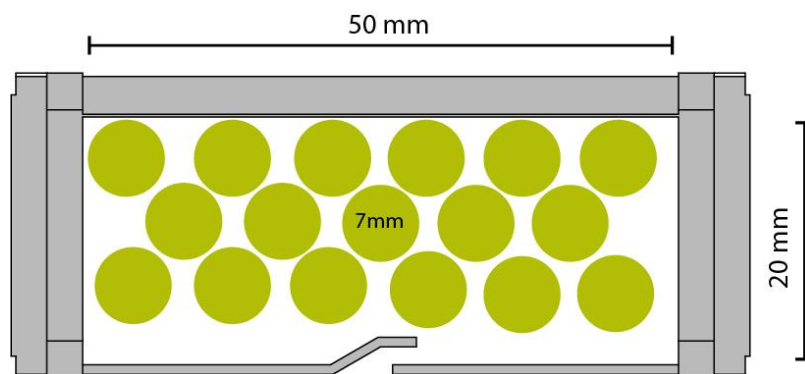
In spite of having a sleek appearance, the Adaptive Central Column has a large internal capacity. Inside, the electric lifting columns that provide the height adjustment of the set are housed and thanks to their great power they allow the elevation of the Open-Frame rack with equipment and screens included. In this way, the entire operative set of the console is modified with a single movement to adapt to the user's needs.



Inside the Adaptive Central Column, 2 high-performance cable-carrying chains are also integrated so that the wiring can follow the movement of the Open-Frame rack and the work surface with total fluidity, thus improving the organisation and protection of the wiring.



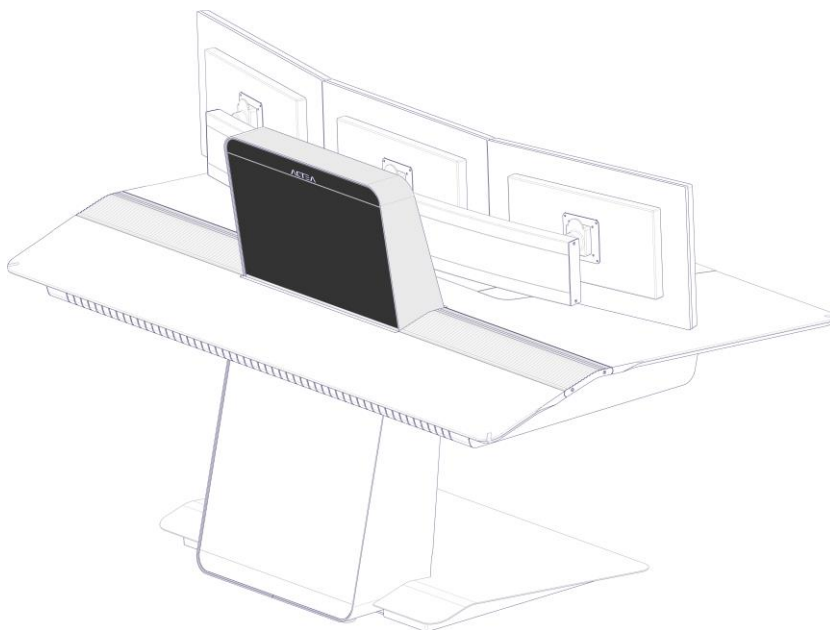
The 2 cable-carrying chains that ACTEA incorporates facilitate the organisation of the wiring and have a large capacity with an approximate maximum volume of 34 cables (average cable diameter of 7.5 mm).



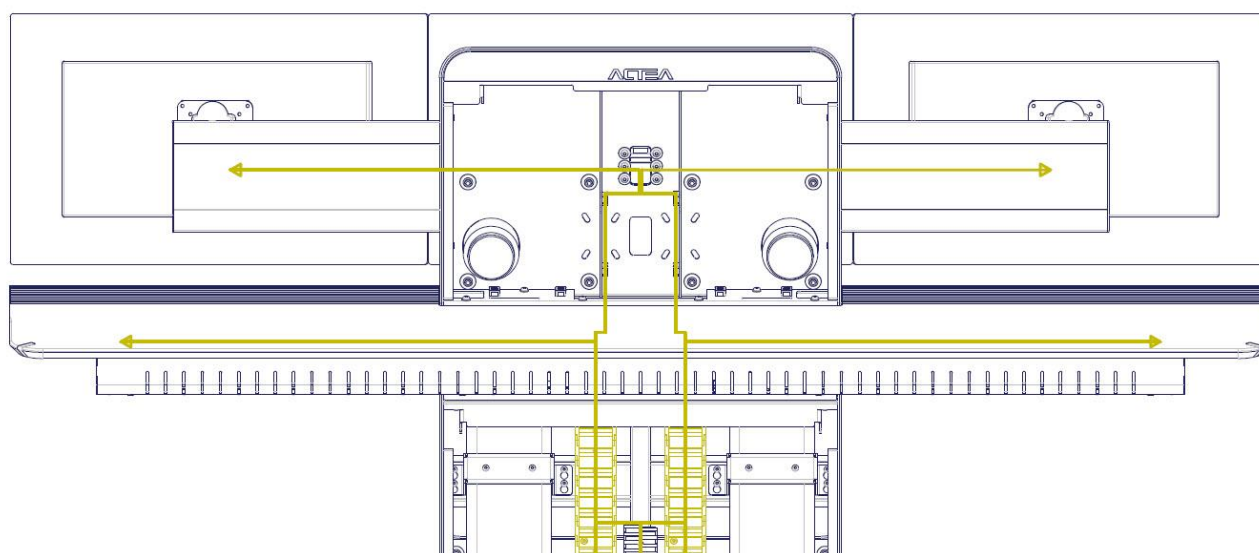
The picture shows the standard average capacity of 1 cable-carrying chain.

### 2.3. UPPER SECTION ADAPTIVE CENTRAL COLUMN

The upper section of the Adaptive Central Column fulfills 2 main functions: it works as an integrating component of the display systems, whether AccessRail or adaptations for special monitors, and on the other hand it centralises the wiring management of the monitors, as well as the integration of multimedia elements such as speakers, microphones or special connections.

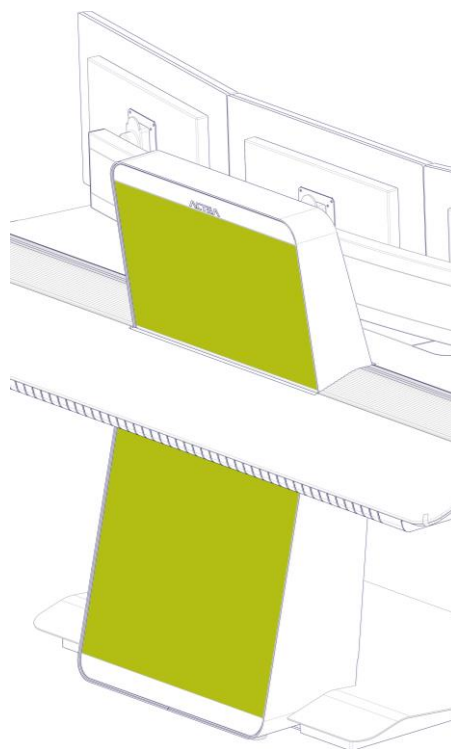


The wiring canalised by the cable-carrying chains of the lower section can be directed both to the area of equipment/connections inside the frame, and to the upper area for the connection of the monitors or different display systems. Thanks to the intelligent design of the Adaptive Central Column, the wiring is always well organised, protected and concealed inside the structure, an essential aspect in critical 24/7 environments and which GESAB now integrates into a console with movement, the first in the sector to meet these demanding design, management and protection requirements.

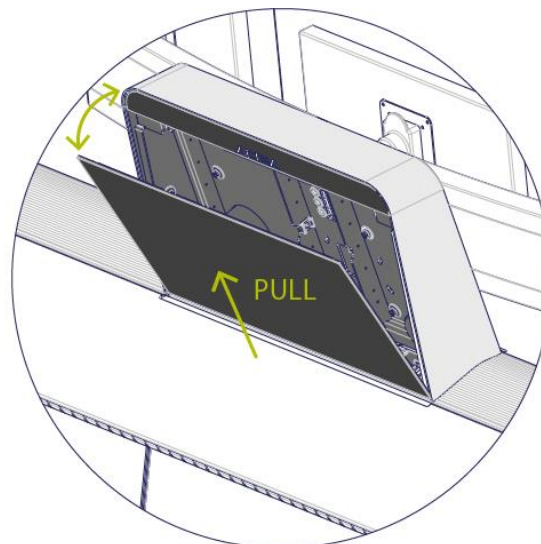
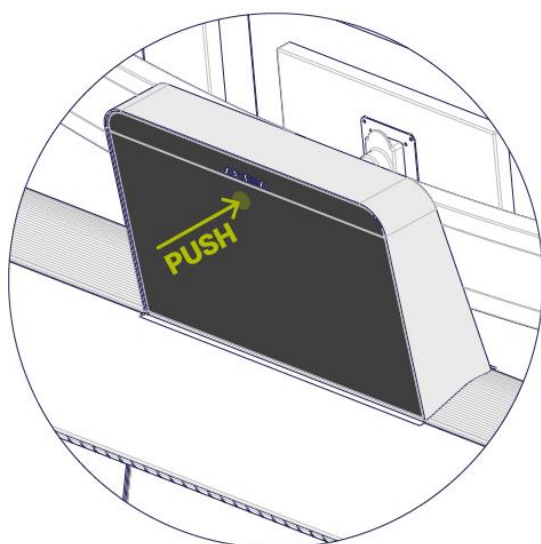


#### 2.4. LOWER AND UPPER COLUMN PROTECTION COVERS

The new cover system of ACTEA allows to conceal the technical areas of the product in an integral way and without visible handles or closures by means of an opening system with an automatic pressure mechanism. When performing a slight pressure in the opening areas, the lid is folded down, pivoting from the base, so that it can be removed comfortably. The mechanism works in a similar way for the closure, after placing the lid in its base position, when performing a slight pressure in the closing area, it is fitted automatically, without any marking, handle or external fitting that affects the design of the set.

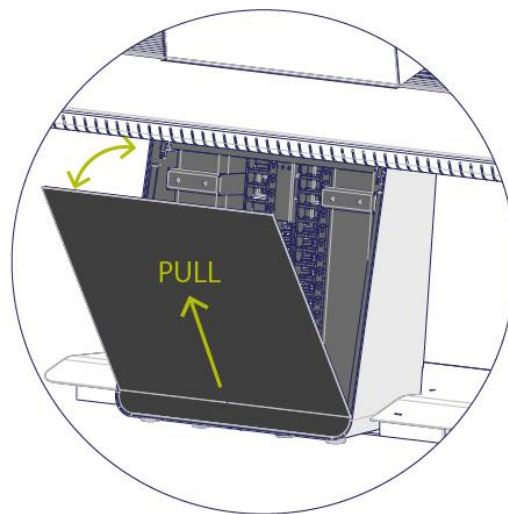
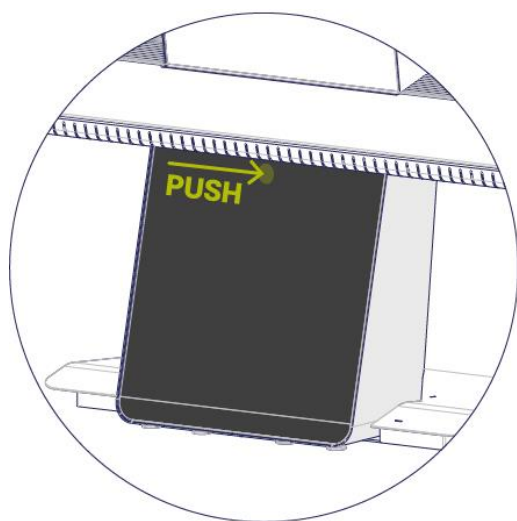


Upper Central Column Lid Opening:



1. To open the lid, apply pressure in the upper central area.
2. Once the mechanism is released, pivot the lid from its base and remove it in the opposite direction to the base.

Lower Central Column Lid Opening:

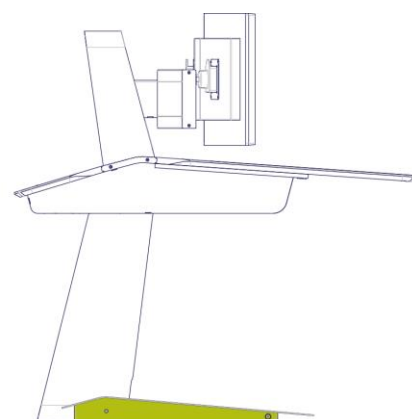
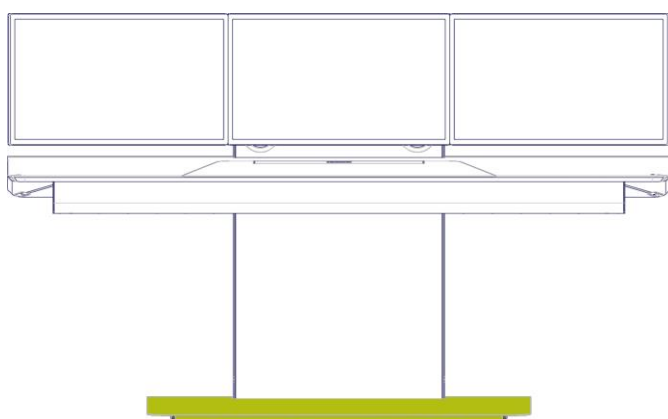


1. To open the lid, apply pressure in the upper central area.
2. Once the mechanism is released, pivot the lid from its base and remove it in the opposite direction to the base.

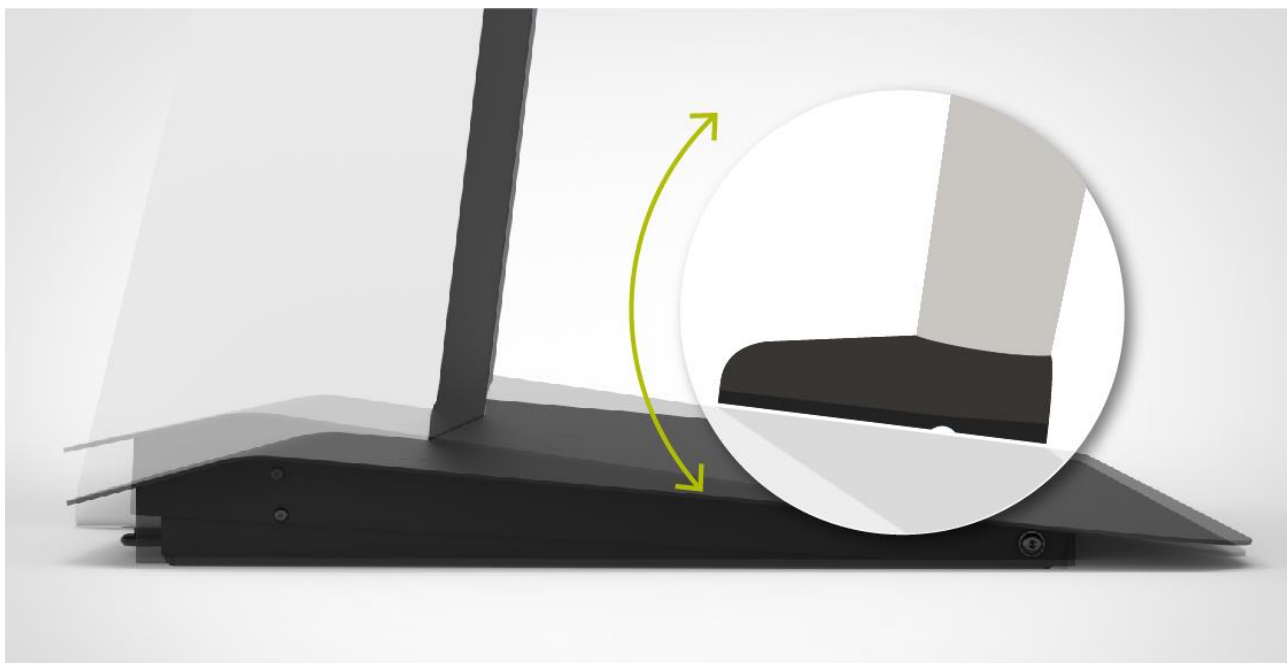
## 2.5. STRUCTURAL BASE OPTIONS

In order to adapt to the specific needs of each project, GESAB has developed 3 types of structural bases for ACTEA, each of them with features focused on enhancing different characteristics of the product.

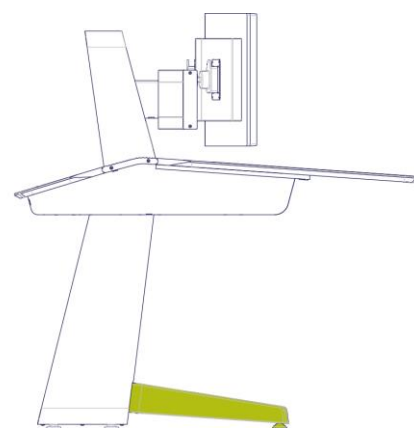
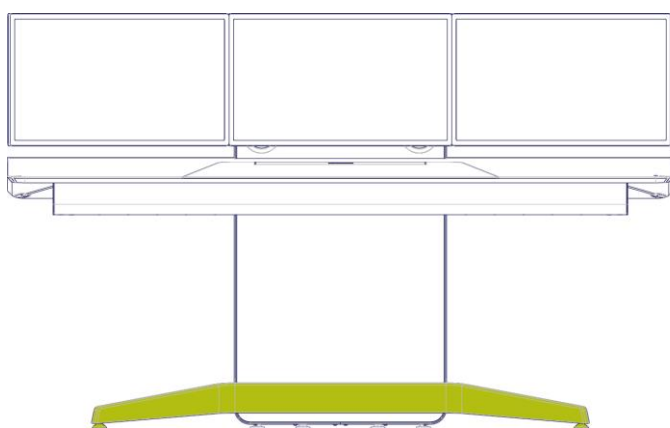
**ERGOFOOT:** The Ergofoot option provides an ergonomic base with the ability to adapt to the movements of the foot and legs through a tilting resting surface that improves the ergonomics of the operator by facilitating the natural movement of the extremities.



With an inclination of 5°, the Ergofoot structural base option is the best alternative for projects where the operator does not exercise great mobility during prolonged periods of time due to his/her function. With this ergonomic improvement, the mobility of the lower extremities is increased in a natural and non-intrusive way.



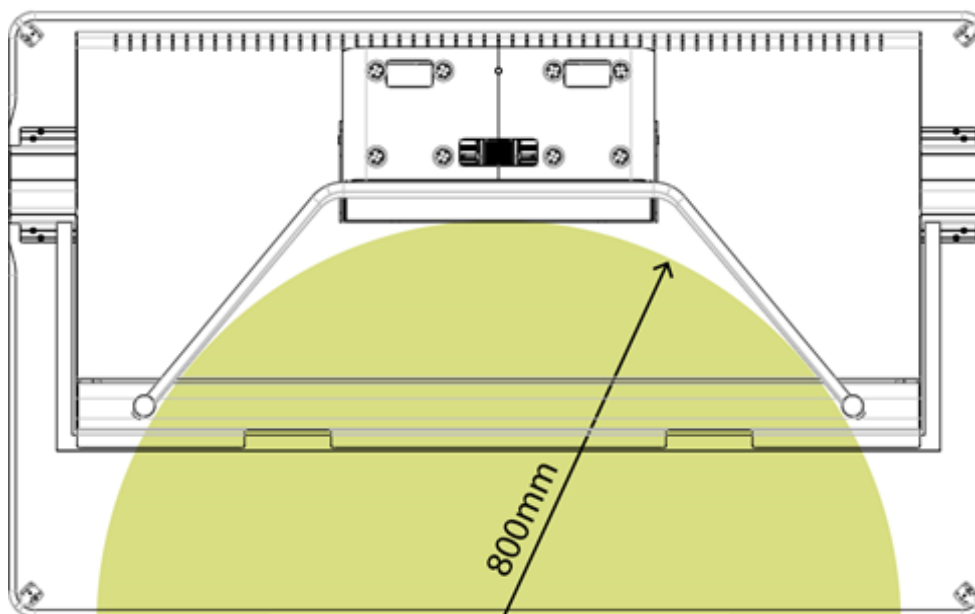
**FOOTPRINT:** The Footprint structural base option is the best alternative in projects where the ergonomic criteria described in the Ergofoot option are not essential. This option offers a leg-free space that complies with the most demanding ergonomics standards (ISO 527-2011), with a design that integrates perfectly with the console and the environment thanks to its minimalist design.



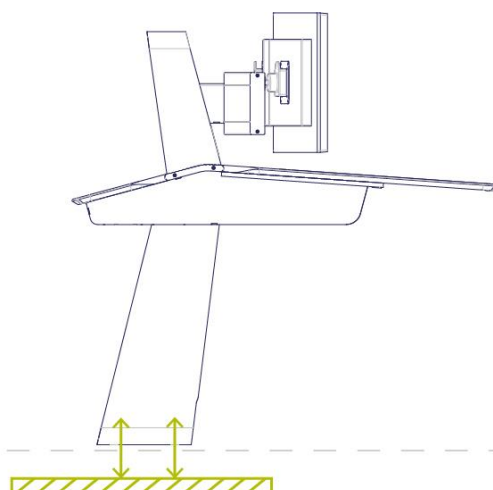
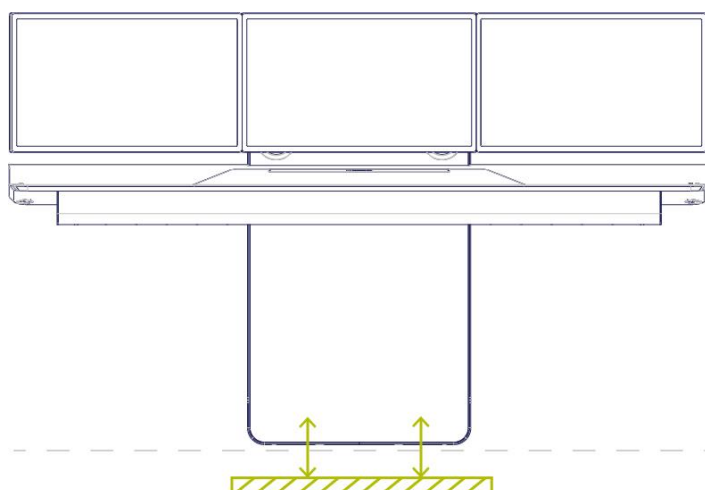


The optimised, low-profile design of the Footprint base offers the operator a comfortable, unobstructed under-the-table space that benefits the comfort and ergonomics of the console.

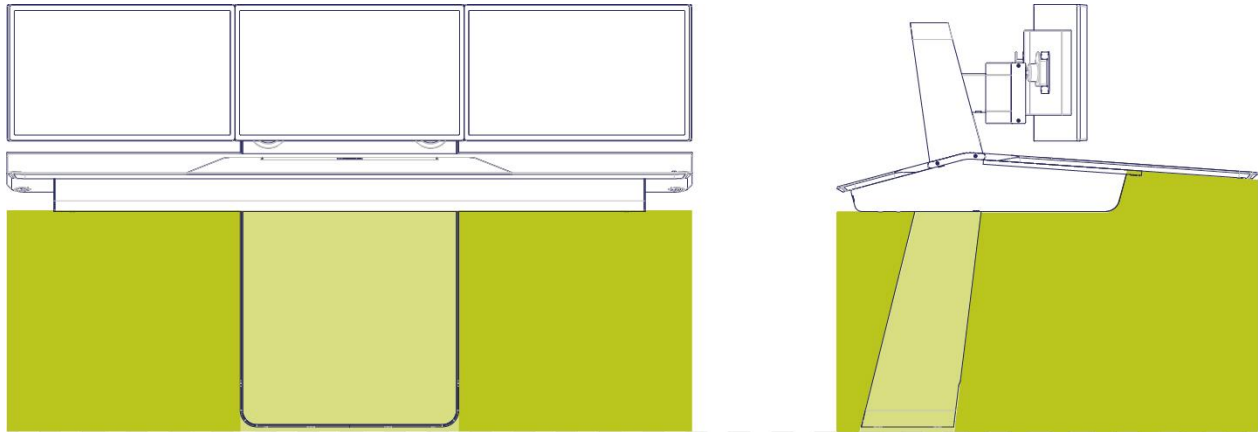
Bottom View ACTEA Footprint



**GROUNDING:** The Grounded option is the one that provides more free space for the operator and helps create a space with fewer obstacles in the room. The Grounded base system is designed for use both in rooms with technical floor and forged. In the cases that are installed on technical ground, a sub-structure will be integrated to guarantee the good stability of the set.



The free space under the work surface is total since all the stabilisation supports are eliminated, thus avoiding the possibility of any interference in the leg area.



## 2.6. PREPARED FOR THE FUTURE

ACTEA has been designed with the new forms of interaction and control that will be developed in the future. The design must be sustainable and therefore durable, not only in terms of material resistance, but also technologically. Today, due to the rapid development of technologies, it is imperative that consoles can adapt to new developments and, in this regard, ACTEA is ready for the future.

From the central column, and thanks to the ergonomic and adaptable design of the work surfaces, it is possible to adapt different types of control methods, from the current hardware control to the future types of control, which are already being implemented in the most pioneering environments, where the functions of software control and manipulation will be performed by touch functions on the screens or even by gestural control, greatly simplifying functions that today limit the positioning of the controller, as well as performing simultaneous tasks or control of various platforms from the same operative position.





Hardware Control



Touch Control



Gestural Control



## 2.7. ERGONOMIC DISPLAY SYSTEMS

For the ACTEA control platform, different alternatives for the adaptation of the display systems have been designed and patented, offering in each project the optimal solution according to the specific needs of adaptability, installation, management and ergonomics.

The different ergonomic display systems have been designed to adapt in the best possible way to the different intrinsic needs of control rooms, offering the best solution in each case. For projects where capacity in terms of size and number of monitors is critical, GESAB's curved Access Rail solution is the best option, since the wiring and support structure management are integrated in the same component. In projects where a "gaming" panoramic monitor is required, the systems that integrate VESA support are the optimal solution to increase user ergonomics. Ergonomic display systems are solutions designed by GESAB and can integrate any monitor on the market.

Lastly, ACTEA is the first control platform that allows large-format curved screens to be fitted as standard. The simplification of several independent monitors on a single screen where different layouts can be adapted, according to the room's display needs, will be the future of control rooms and ACTEA is already prepared for this type of pioneering solutions in the sector.

MAX. MONITOR ACCOMMODATION  
CAPACITY:



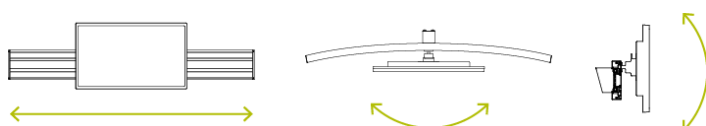
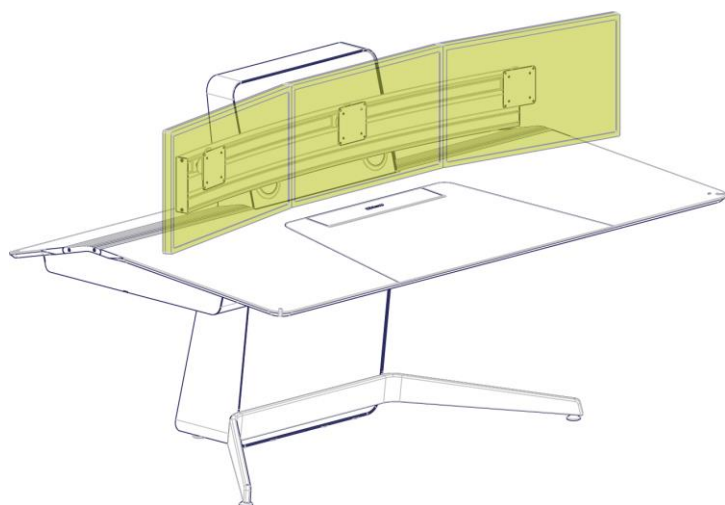
x6

Monitor 27"

x1

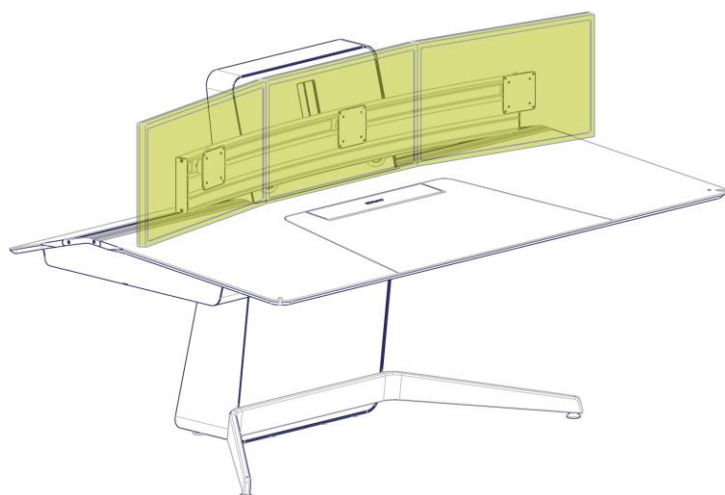
Display 55" /65"





### CURVED ACCESS RAIL SYSTEM

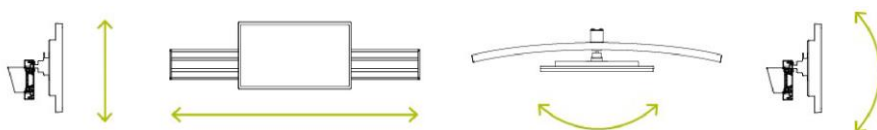
The curved Access Rail system can accommodate up to 3 monitors of 27" in the ACTEA console on a single level. The set allows the adjustment in height of the system during the assembly of 150mm in total (Column adjustment + profile adjustment) and the longitudinal adaptation from the position of the operator at any time throughout the length of the profile since the monitors are supported on a guidance system integrated in the system. One of the main characteristics of the Access Rail system is the capacity of management and concealment of the display systems wiring thanks to the system of recordable lids of the curved profile.



capacity of movement in operative state.

### MOTORISED CURVED ACCESS RAIL SYSTEM

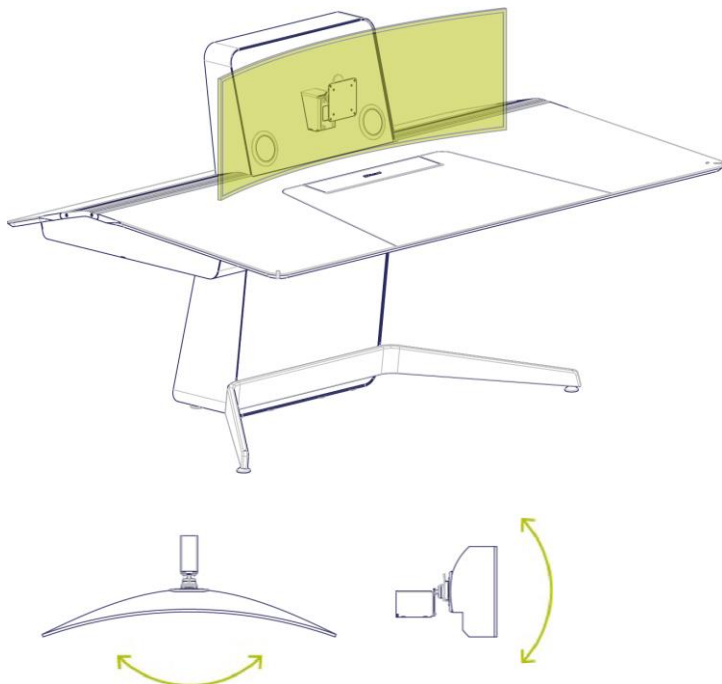
The curved Access Rail system can accommodate up to 3 monitors of 27" in the ACTEA console on a single level. The set allows the adjustment in height of the system during the assembly of 112mm (profile adjustment), also the adjustment in motorised height in operative state of 100mm (column motorisation adjustment), and the longitudinal adaptation from the position of the operator at any time throughout the length of the profile, since the monitors are supported on a guidance system integrated in the system. One of the main features of the Access Rail system is the capacity of management and concealment of the display systems wiring thanks to the system of recordable lids of the curved profile and the



### GAMING ARM SYSTEM

The Gaming system allows the integration of a 49" monitor in the Central Column. The set allows the adjustment in height of the system during the assembly of 40mm (Column adjustment). One of the main characteristics of the Gaming system is the capacity of management and concealment of the display systems wiring thanks to the access inside the arm to the column.

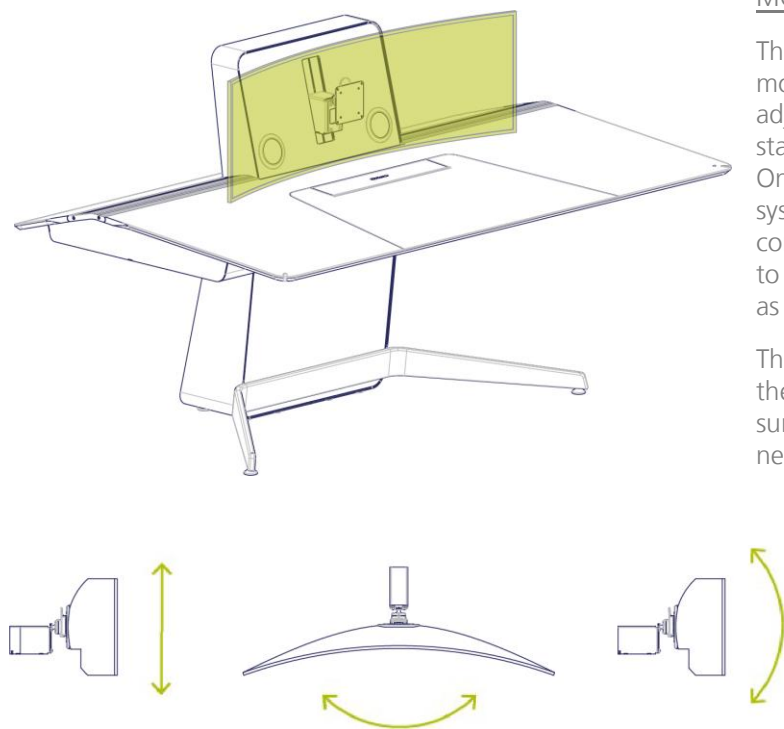
The new gaming display formats allow replacing the old monitor layout with a continuous display surface that can be configured according to the needs of the project and operator.

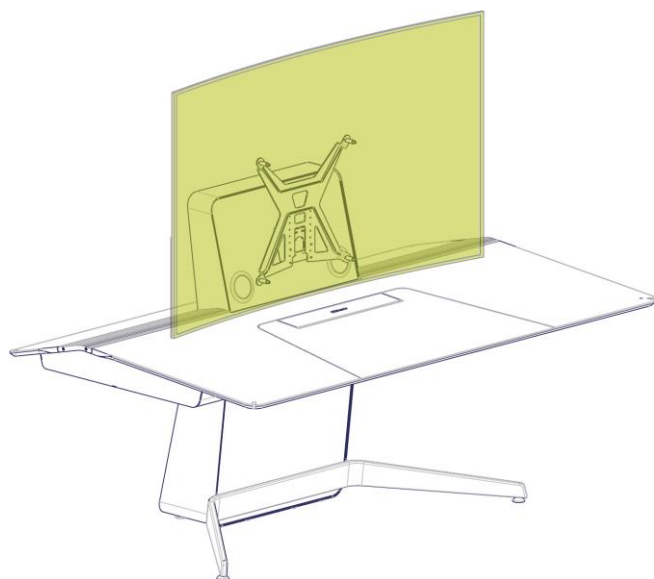


### MOTORISED GAMING ARM SYSTEM

The Gaming system allows the integration of a 49" monitor in the Central Column. The set allows the adjustment in height of the system in operative state of 100mm (column motorisation adjustment). One of the main characteristics of the Gaming system is the capacity of management and concealment of the display systems wiring thanks to the access inside the arm to the column, as well as the ability to move in an operative state.

The new Gaming display formats allow replacing the old monitor layout with a continuous display surface that can be configured according to the needs of the project and operator.

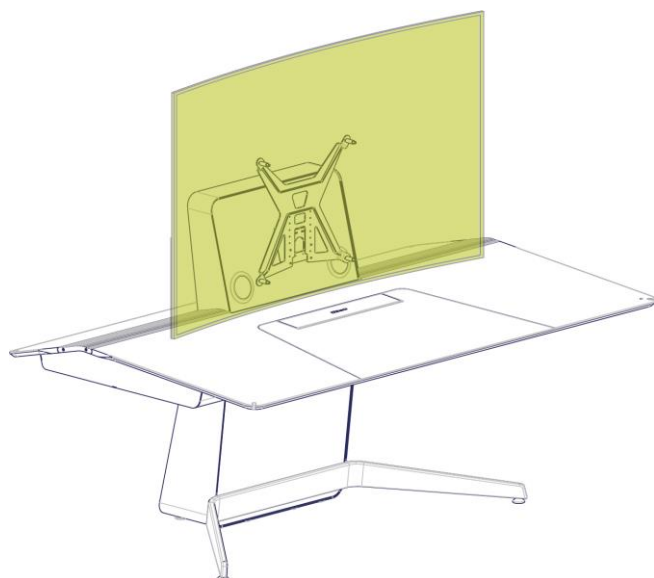




#### LARGE-FORMAT DISPLAY SYSTEM

ACTEA is the first control console with height adjustment during the assembly of 160mm, which allows the integration of large-format display systems and curved screens, thus offering an integral solution for new display formats and environment management in the most innovative control rooms.

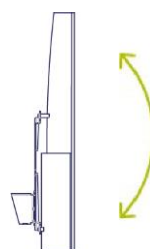
The new large-size display formats allow replacing the old monitor layout with a large continuous display surface that can be configured according to the needs of the project and operator.



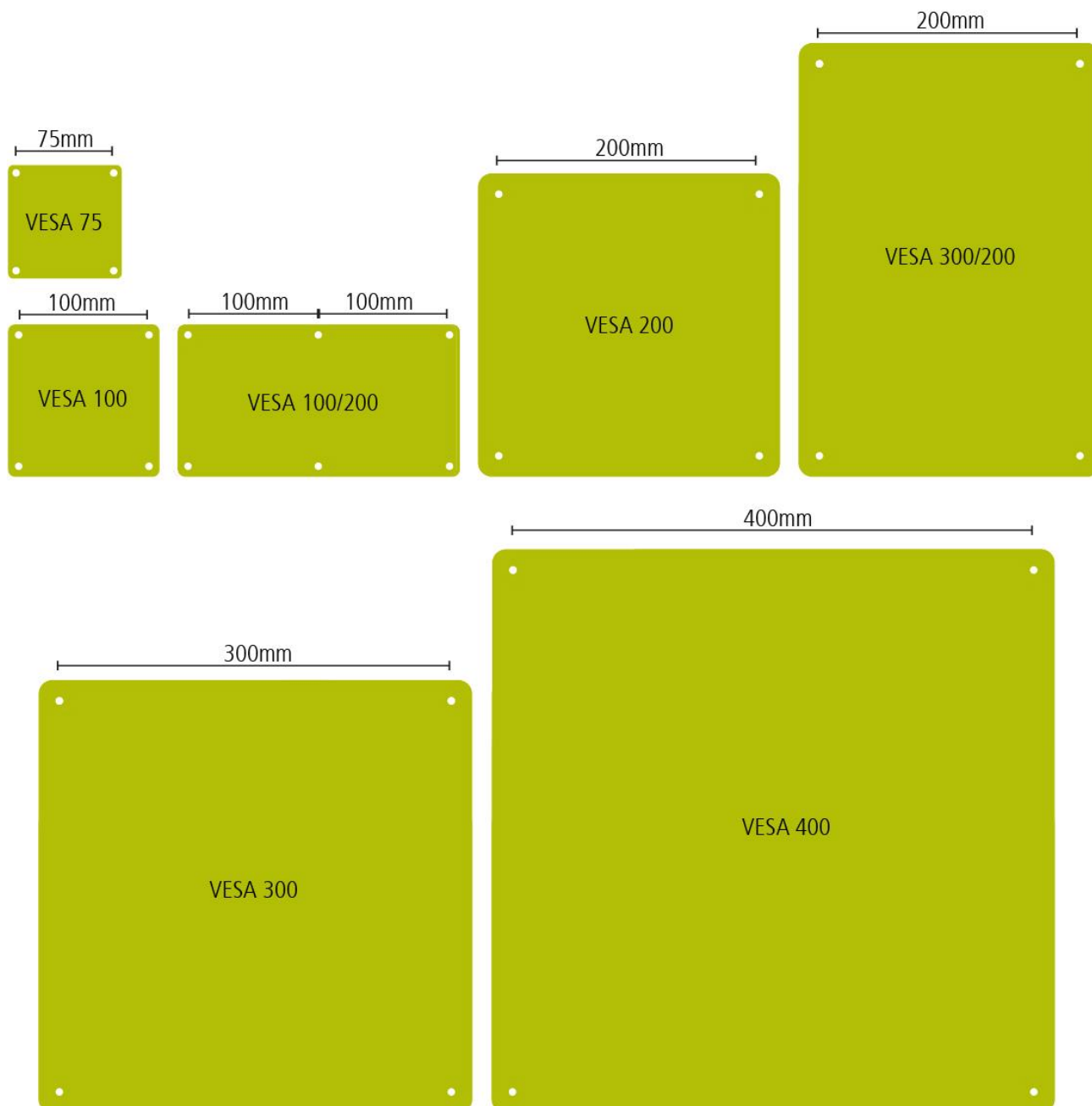
#### LARGE-FORMAT MOTORISED DISPLAY SYSTEM

ACTEA is the first control console with height adjustment during the assembly of 160mm and in an operative state. It also has a vertical rotation adjustment of 23° thanks to the motorised adjustment of the column. This system allows the integration of large-format display systems and curved screens, thus offering an integral solution for new display formats and environment management in the most innovative control rooms.

The new large-size display formats allow replacing the old monitor layout with a large continuous display surface that can be configured according to the needs of the project and operator.



The large-format display system can integrate any screen up to 65" in any of the standard VESA formats from 75 up to 400. For special screens, such as radar monitors or air control, please consult the weight limitations for proper operation.

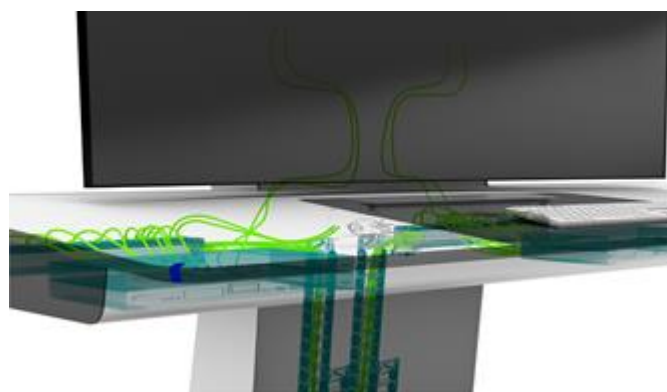


## 2.8. OPEN-FRAME RACK







Together with the innovative Adaptive Central Column, the Open-Frame rack is another great innovation of the ACTEA console. The Open-Frame rack fulfils several critical functions in the exceptional operation of the console. On the one hand, it performs the structural function of the set of work surfaces and the Upper Central Column (including display systems) by transferring the vertical movement to all the components of the upper zone.

On the other hand, the Open-Frame rack performs the functions of mobile compartment where a host of extra components and technical parts of the set are housed, such as the surface tilt system, the Personal Dock, the connection channels and the computer equipment needed in each operational position. All these components move and adapt with the movement of the column to adapt to the user's needs.

The integral access system, by opening the work surfaces, allows for easier and more efficient management, installation and maintenance, reducing the time needed to handle the equipment installed and taking into account the good ergonomics and physical health of the people in charge of management and maintenance of the equipment.

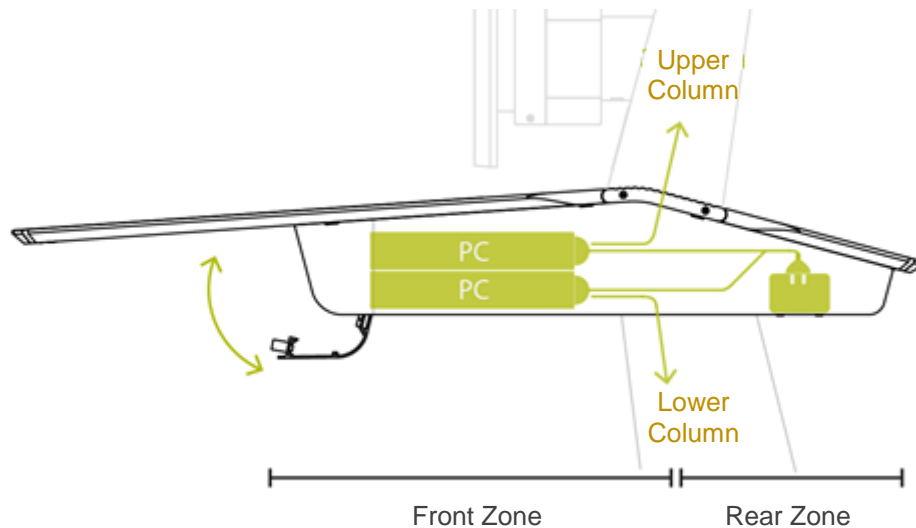


### MAX. ACCOMMODATION CAPACITY:

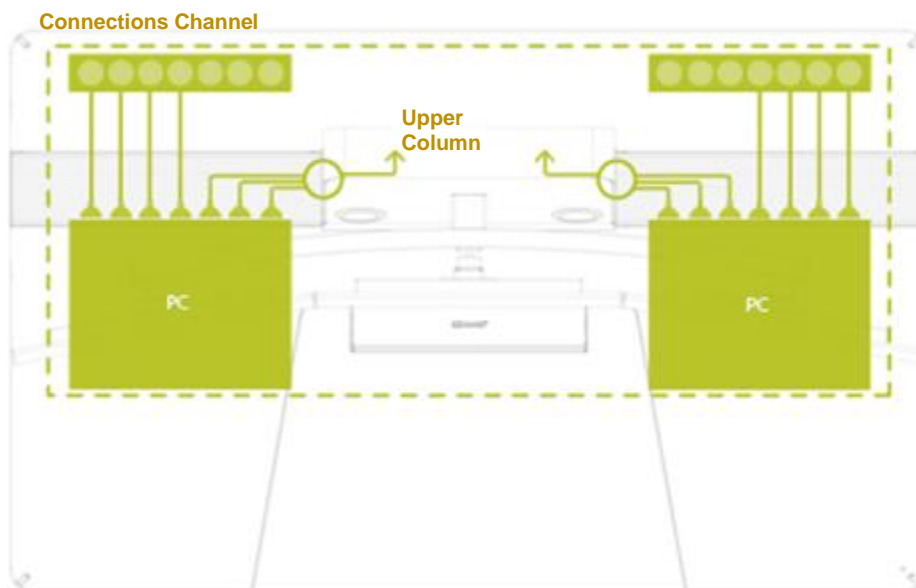
	x20 Power connections		x2 Workstations
	x40 Data connections		x8 Mini PC & Thin Client
	Multimedia connections		x4 Rackable PC & Servers



The ACTEA Open-Frame Rack provides large free space under the work surface for the accommodation of technical components and computer equipment. The distribution of the different spaces is designed to facilitate the management and maintenance of the equipment and its corresponding wiring. The front zone is reserved to locate computer equipment of greater volume, such as Workstations (up to 2 units), rackable PCs and servers (up to 4 units), or other smaller equipment such as mini-PCs and Thin Client equipment (8 units approx.). The rear zone is reserved for connections, with 2 channels of connections with a total of 20 spaces configurable according to the project and needs of the operational position.

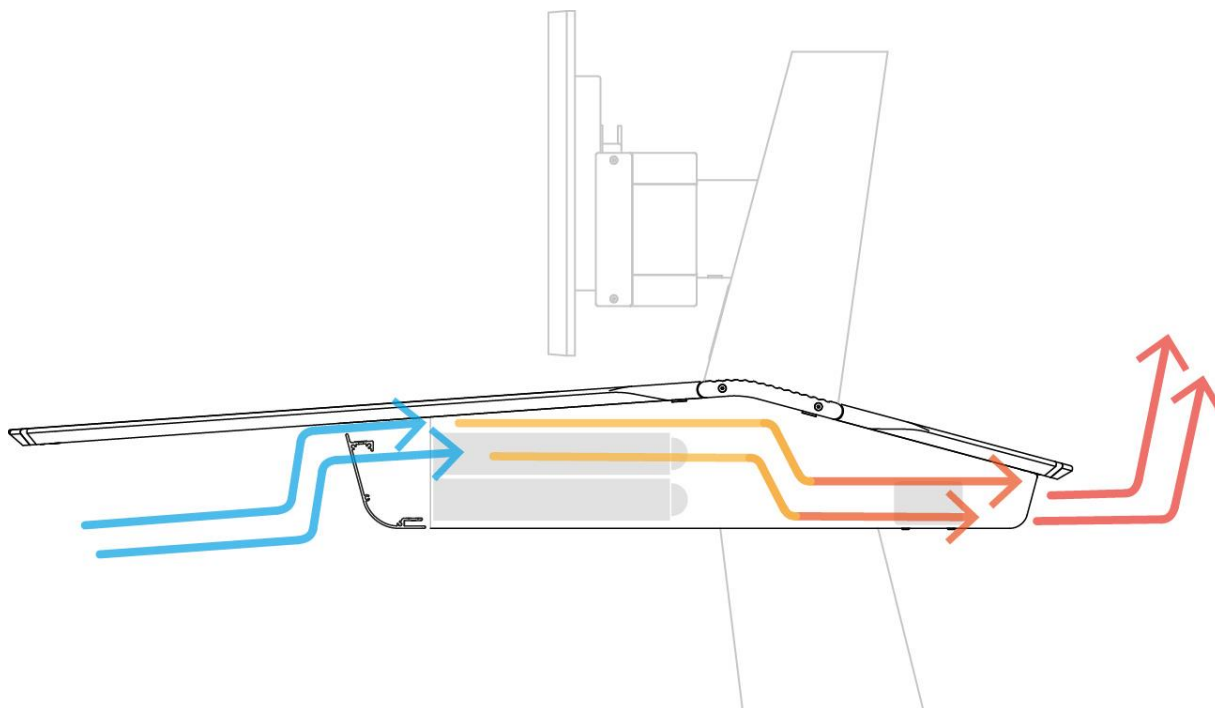


The Open-Frame Rack also works as a wiring distributor, being able to directly connect the wiring to the Upper Column where the display systems are located, or to the Lower Column, the general entrance area of the wiring where the cable-carrying chains are also located, and access to the technical floor from inside the console. For fast and easy access to computer equipment, a front pivoting lid has been designed that allows more direct access without opening the front maintenance area, and therefore without interfering with the operator's usual functions.





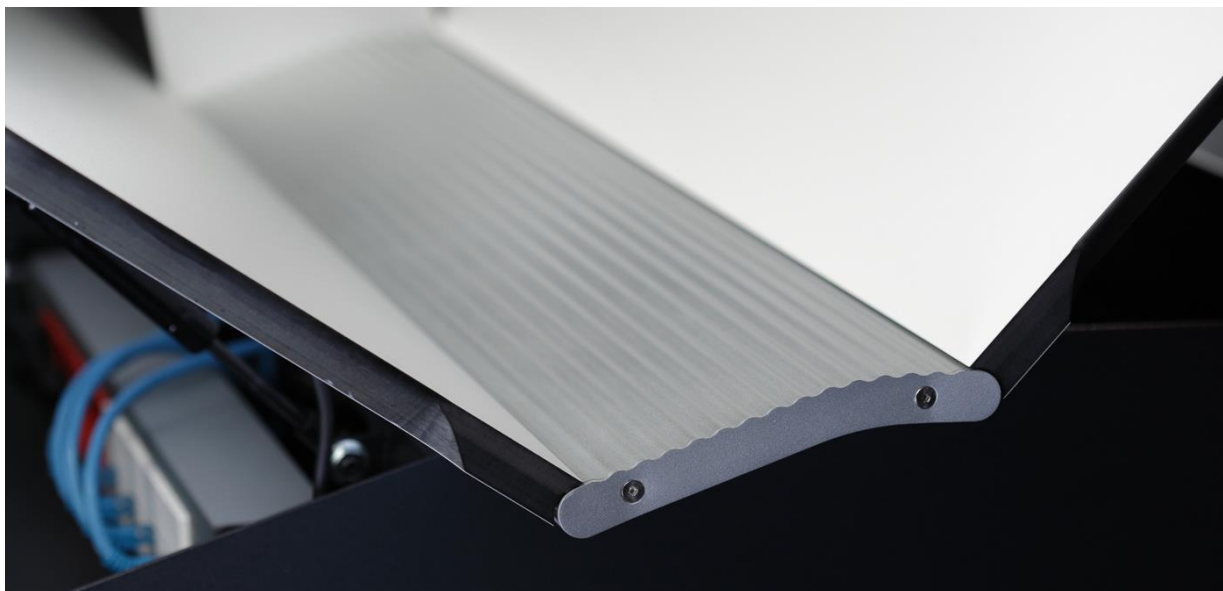
The design of the structure of the Open-Frame Rack and its components facilitate the entry and exit of air from the assembly to provide a correct ventilation of the interior, where computer equipment is housed, and thus avoid equipment overheating. Optionally, assisted ventilation systems can be adapted for special cases where heat generation is critical.



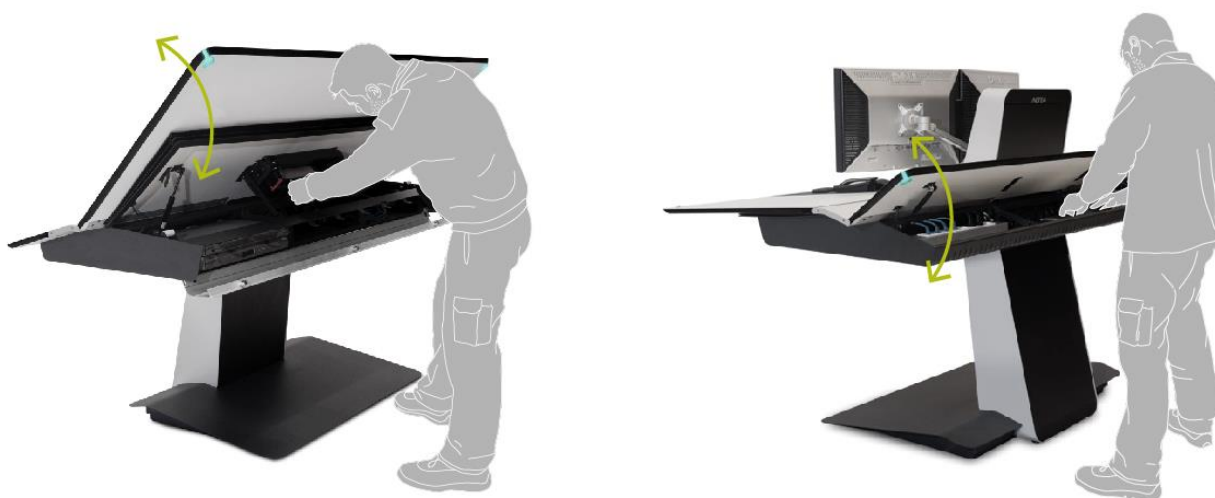
The central aluminium profile is a key element in the innovative design of ACTEA. With an intelligent and visually appealing design, the profile integrates several key functions of the set in a single piece and also enhances the aesthetics of the product. On the one hand, the profile allows the surfaces to be pivoted by means of a hinge system integrated in its interior. The union of the surfaces integrates perfectly with the profile and creates a visually attractive transition and an excellent finish between the front and rear of the console.



In parallel, the zone created by the profile in the central zone serves to adapt the Adaptive Central Column, in this way the central space fulfils the function of integrating element and fusion between the surfaces, the Central Column and the profile. In this way, the user interaction space, and greater visibility, is resolved in an elegant way, with exceptional finishes and increased functionality thanks to the concealed opening system inside the profile.



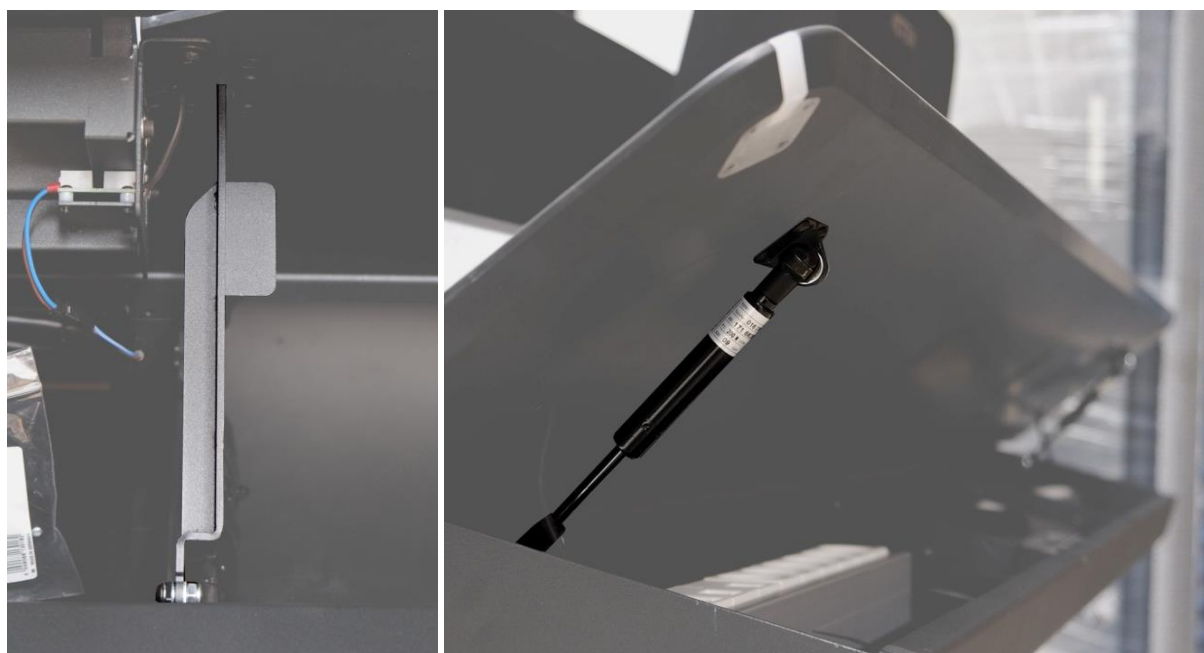
One of the main innovations of the Open-Frame Rack resides in its capacity to open the maintenance areas, in an almost integral way, to facilitate the management and maintenance of the console and the installed equipment. Both the front and rear work surfaces can pivot for opening thanks to the central aluminium profile and the hinge system integrated in the profile itself, so that the excellent design and finishing of ACTEA are not interfered with by the functional qualities of the set. In this way, both the user experience, ergonomics and health of the console maintenance or installation staff are improved since all the technical operations can be carried out from an upright position and without obstacles that hinder their work. The most uncomfortable and complex tasks are facilitated and less tedious thanks to the integral opening and access system of the Open-Frame Rack.



Both the front and rear work surfaces can be lifted easily and comfortably thanks to the help system, using gas pistons, which exerts the necessary force so that the user can lift the large front surface effortlessly and safely. Once the surface is in its fully open position, it allows an integral access to all the internal zones of the Open-Frame Rack, facilitating significantly the installation and maintenance tasks.



In the two opening zones, a security system has been integrated which, once correctly positioned, serves as an additional support structure. This system is especially useful in maintenance tasks when manipulation of the internal console structure is required to double the security of the assembly.



## 2.9. ACTIVE CONTROL

The design of ACTEA has been conceived to offer the best user experience and usability, paying special attention to aspects related to ergonomics and operator health.

The main organisations specialised in ergonomics and health at work recommend encouraging mobility in the workplace to promote physical activity and thus counteract the negative effect of incorrect work postures that are adopted during the day. One of the main problems of jobs based on a static space (main work with display screens) lies in the limitation of movements and activity of the body, which causes the great majority of long-term injuries in people who perform this kind of tasks.

For these reasons, ACTEA allows a new way of working within the control rooms and critical environments to improve the health and ergonomics of the operators. The ACTIVE CONTROL concept allows to perform control tasks temporarily from an upright position, improving operator mobility and allowing to change physical posture in a temporary way to relieve tensions and increase user activity in order to improve their health long-term. The control functions of the operators are critical tasks and of a high demand that require the most of operators, and ACTEA provides them with the adequate tools to carry them out in a safe, comfortable and intelligent way.



Simply adapt the height of the work surface and its inclination to allow to perform the same usual control tasks from an upright position. You just need to activate two movements from the control panel integrated in the Personal Dock of the work surface.

## 2.10. WORK SURFACES

The work surfaces are the contact element between the operator and the console and for that reason both technical and sensory excellence have been addressed. The work surfaces of ACTEA adapt to the user by modifying the closest environment to perform critical control tasks in a more comfortable and intuitive way. Each element has its exact place so that the operator has at his/her fingertips all that is necessary in an obstacle-free space and at the same time pleasant and comfortable to work. High-quality materials, extremely durable and resistant but at the same time comfortable and carefully designed to the last detail.



ACTEA property of GESAB S.A.U.

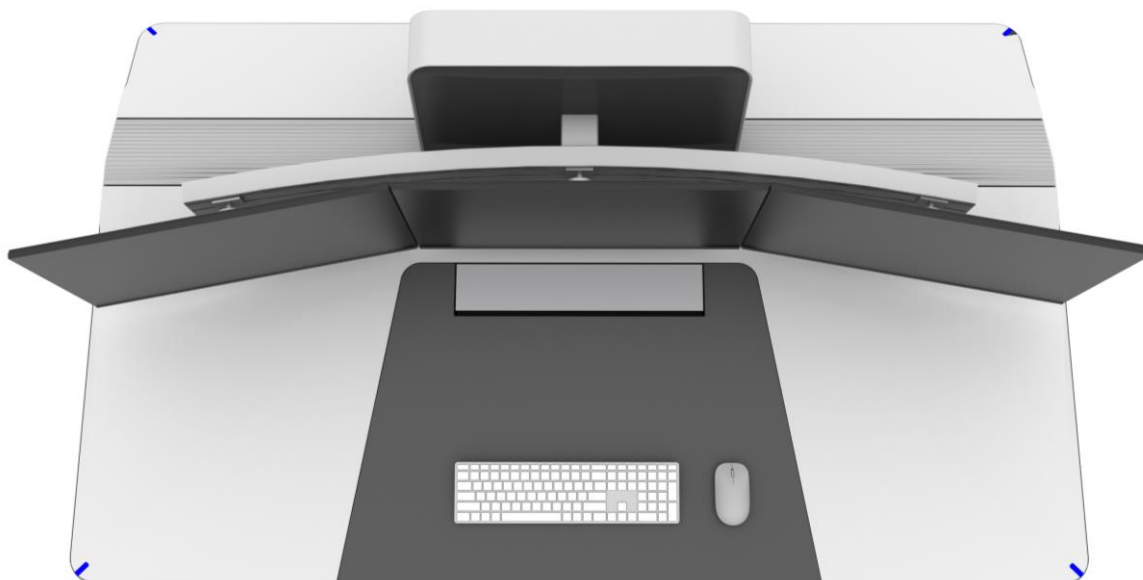
The ergonomics and the experience of use in this area are vital for good performance, for that reason GESAB has developed the first system of adaptation in inclination of the sector so that the operator can adjust the height, but also the inclination of the work surface according to his/her needs. Control rooms are changing environments, depending on the situation or the moment you can go from an apparently calm environment to an extremely critical environment and for that reason ACTEA is a control platform that changes and adapts to the situation.

The new system of inclination adjustment of the work surface allows to position the work plane from minus 4° to 0° (traditional plane) thus offering a variety of options available according to the preferences and work needs of each operator and environment.

The arrangement of accessories and other elements such as equipment and monitors are also key to good user performance.

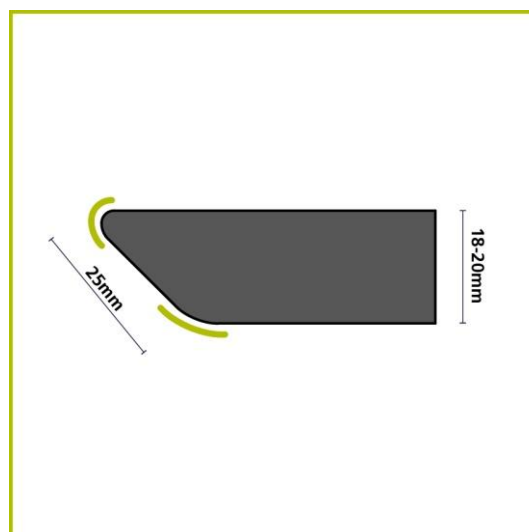
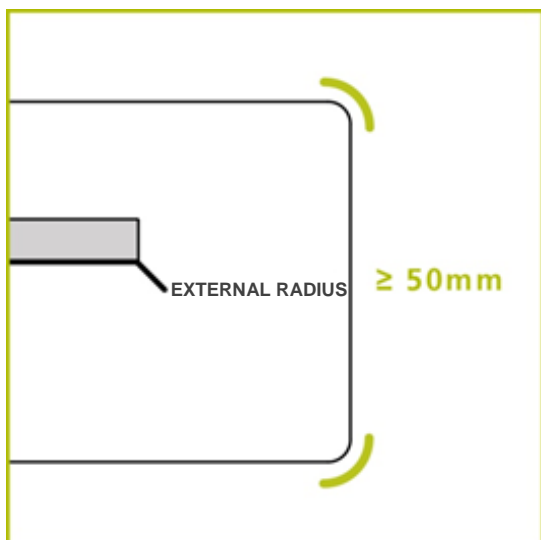


In the main work area, a leather area has been integrated so that the space of greatest interaction is as comfortable as possible but without losing the properties of durability and design of the set.



In addition, the incorporation of the Personal Dock in the central zone allows an improved management of the desktop wiring, allowing the passage of cables from the surface to the Open-Frame Rack where the equipment is located. The Personal Dock also offers a personal space for the operator to make electrical or data connections in a comfortable and extremely accessible way from his/her work position.

The finishing of the work surfaces is designed taking into account the recommendations of different studies and reflected in the document "HEALTH + GESAB". To avoid micro-trauma, the work surfaces are bevelled and rounded at all points of contact, eliminating any type of edge or aggressive angle.



## 2.11. PERSONAL DOCK

**Personal Dock** is a space for the personal effects of the operator and for connectivity. Comfortable, flexible. Everything at hand, without ever leaving the control tasks. Its design also allows channelling the wiring of the work area into the Open-Frame Rack, unifying design, functionality and features for the operator.



GESAB's Personal Dock exclusive concept is the result of design and innovation studies carried out on control rooms and the detailed analysis of the connectivity and functional needs of the day-to-day tasks of operators. The Personal Dock offers users everything they need at their fingertips to be able to focus 100% on the control functions without distractions or obstacles.

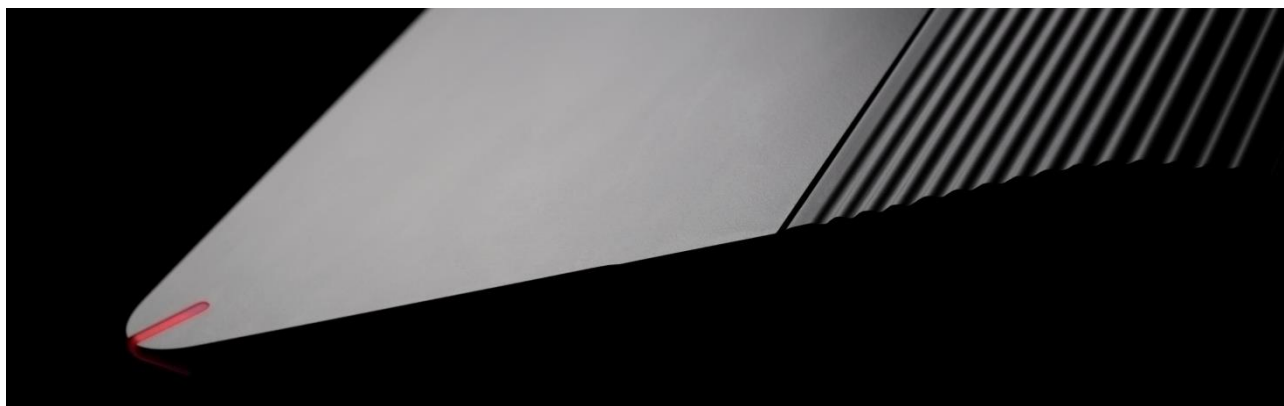
For the ACTEA console, a special version of the Personal Dock has been designed that includes the control of movements and the security system within the Personal Dock. In this way, the operator has the control command in an accessible and comfortable position to configure the different adaptation options of ACTEA. The location inside the Personal Dock protects the control of possible involuntary interactions that could affect the user of the console.

Different configurations of personal connections are available according to the needs of the operational position.



## 2.12. FINISHES

Careful design with precision. Each material, each form has its place. Created to surprise the most demanding users. The high quality of the materials completes the sensory experience offered by ACTEA. Strokes created to perfectly combine aesthetics and functionality, ensuring maximum durability of a design with a guarantee of the future.

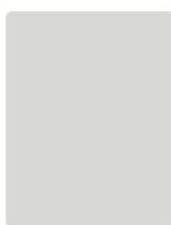


### PHENOLIC COMPACT ON WORK SURFACES

The material applied to the work surfaces is MaxCompact phenolic compact by FunderMax, for its excellent structural properties, its high resistance to wear and for the freedom of design it provides, being able to adapt to any shape however complex it may be.

The standard colour of the product is the white matte finish with low reflection. On the one hand, the white colour provides a suitable reflection index to optimise the natural or artificial light of the room, because the white colour has the highest light reflection index, between 65-85% depending on the surface. At the same time, the surface finish is matte to avoid reflections produced by intense light sources that could have a negative effect on the visual ergonomics of the operator.

Optionally, GESAB can provide any finish of the wide range by FunderMax available under the condition of minimum quantities.





## LEATHER PERSONAL AREA

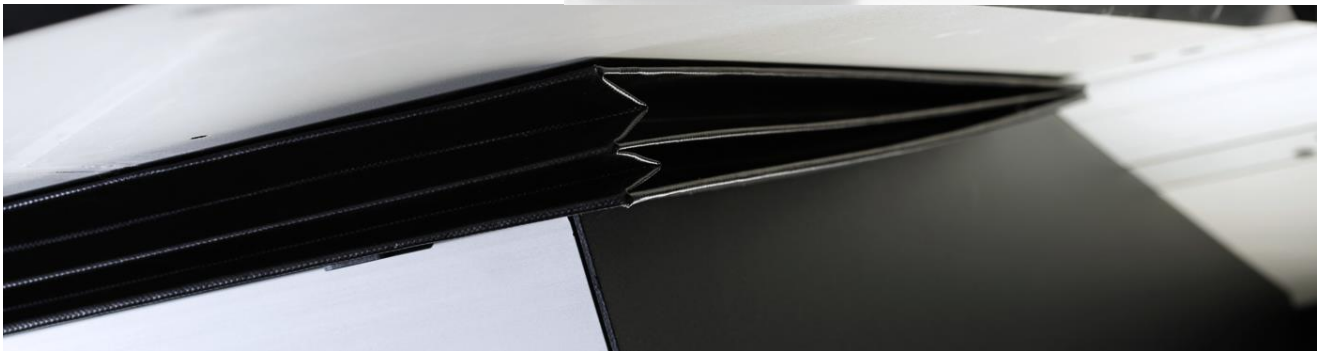
The central area of the work surface, the area of greatest contact with the operator, has been covered with natural leather with high resistance to cutting and abrasion. With this design, the comfort and quality of leather is provided in the area of greater interaction with the console by the operator, but guaranteeing the durability of the rest of the ACTEA finishes.

## COMPONENTS IN PREMIUM FINISHES

ACTEA offers standard high quality finishes in its exterior components, finished in anodised aluminium that provides an image of quality and design unprecedented in the sector.

The exterior covers, such as the adjustable lids, the exterior of the Central Column and the front access lid of the rack, as well as the central joining profile between the work surfaces are made of aluminium, with different types of anodised according to the available colour configuration.

As standard, ACTEA incorporates adaptive design protection for the mobile areas between the work surfaces and the rack. This component is key to guarantee the safety of the moving console (especially during the modification of angle) as well as to avoid the entry of strange elements into the rack where the computer equipment is located.



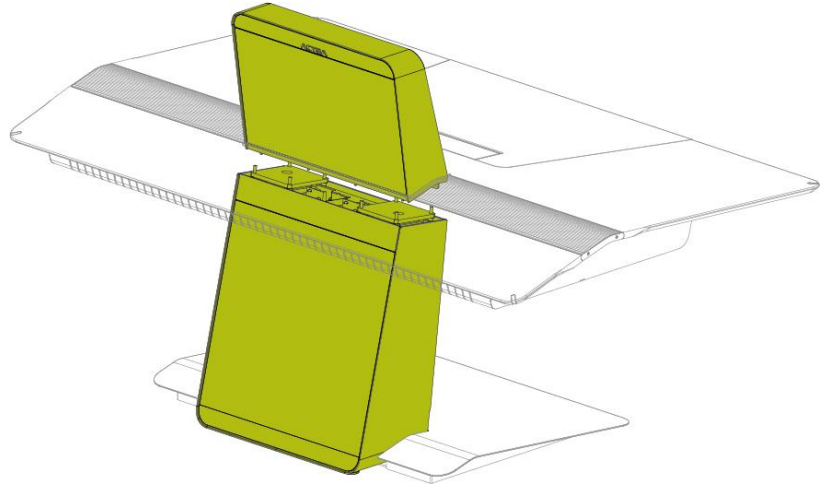
## STRUCTURAL METAL COMPONENTS

All the structural metal components are protected with high-durability Epoxy Paint of black colour to increase the useful life of the product, as well as guaranteeing the same degree of aesthetic quality no matter how demanding the environments where it is installed.

### 3. ACTEA TECHNICAL FEATURES

#### 3.1. ADAPTIVE CENTRAL COLUMN

The Adaptive Central Column is divided into two main blocks connected by the Open-Frame Rack with a width of 606mm and a variable height and depth depending on the position. Internal structure in 3mm **steel sheet** (general), cold rolled according to UNE EN 10130:1999 standard and UNE EN 10024:2006 quality certificate, painted with high-quality micro-textured epoxy powder paint according to UNE 48-098-90; UNE 48-031-80; UNE 48-026-80; UNE 48-024-80; UNE 48-032-80; UNE 48-183-84 48-024-80; UNE 48-032-80; UNE 48-183-84 and UNE 48-169-92 and subjected to demanding aesthetic finish durability tests according to ISO 7253 and DIN 50021 standards, carried out in laboratories accredited by ENAC.



**Recordable lids** in 3mm aluminium sheet (general), 6060S alloy quality certificate according to UNE-EN 573-3 (chemical composition) and UNE-EN 755-2 (mechanical characteristics). With T-5 heat treatment. Matte black anodised finish according to ISO 7599:2010 standard, micrage between less than 15µm according to ISO 2360:2003 and sealing 0 according to ISO 2143:2010.

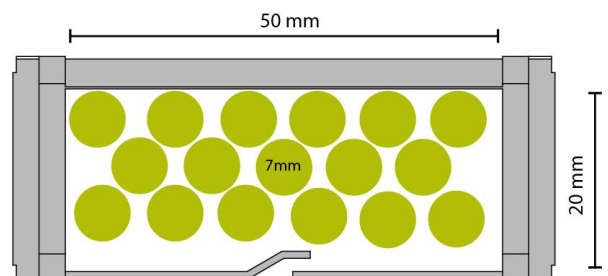
**External Covers** in 3mm aluminium sheet, 6060S alloy quality certificate according to UNE-EN 573-3 (chemical composition) and UNE-EN 755-2 (mechanical characteristics). With T-5 heat treatment. Silver anodised finish according to ISO 7599:2010 standard, micrage between 5-15µm according to ISO 2360:2003 and sealing 0 according to ISO 2143:2010.



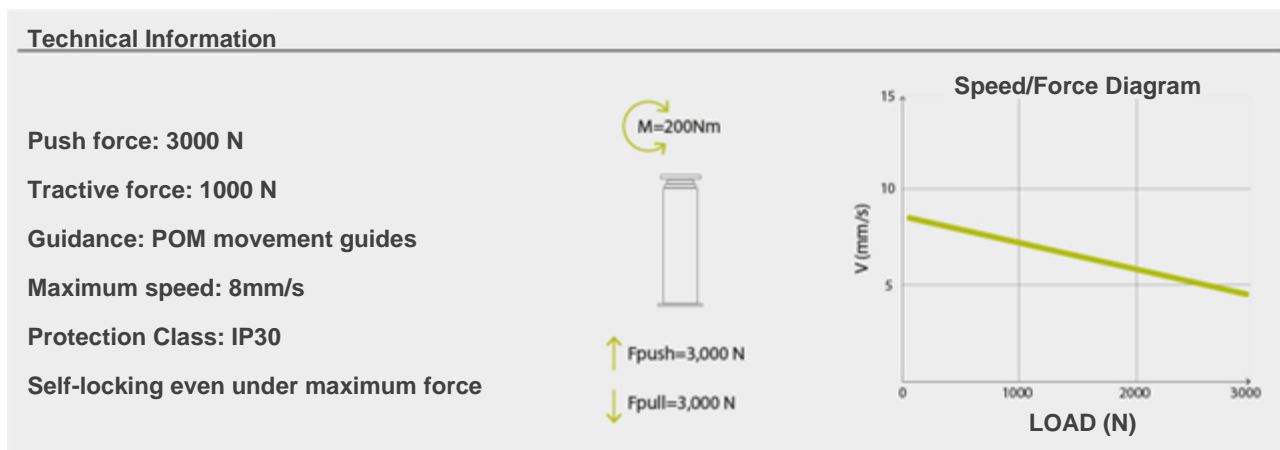
On request, it is possible to carry out a **grounding connection** as a preventive and safety measure, to avoid the passage of current to the user due to failure of the insulation of active conductors.

High-durability technical polymer **Igus cable-carrying chains**. With quick opening in external radius for easy and fast wiring in all its length. Chain systems with extensive durability. Optional modular internal divisions for optimised wiring management.

Free internal measures of 50mmx20mm and maximum approximate volume of 17 cables (average cable diameter of 7.5 mm) per chain.



High-load capacity **lifting columns** and self-locking system even under maximum force to ensure the lifting of the assembly, including display systems as well as the fully equipped Open-Frame Rack and the working surfaces with usual load exerted by the user. Vertical adjustment of the route of 180mm without tilting movement included.

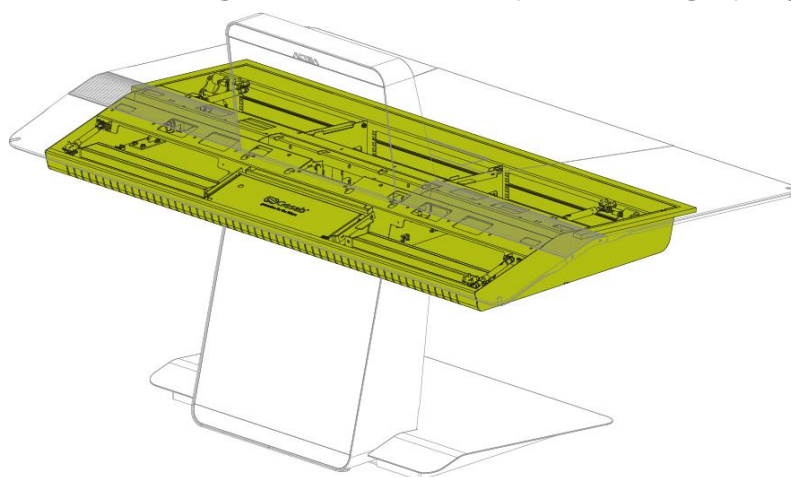


**Special guidance system.** ACTEA incorporates a special system of reinforcement to the guidance of the column designed by GESAB and that increases the stability of the assembly in all its route, providing a stable work surface in any position.

### 3.2. OPEN-FRAME RACK

Frame set in 2mm-thick **steel sheet** (general), cold rolled according to UNE EN 10130:1999, painted with high-quality micro-textured epoxy powder paint according to UNE 48-098-90; UNE 48-031-80; UNE 48-026-80; UNE 48-024-80; UNE 48-032-80; UNE 48-183-84, 48-024-80; UNE 48-032-80; UNE 48-183-84 and UNE 48-169-92 and subjected to demanding aesthetic finish durability tests according to ISO 7253 and DIN 50021 standards, carried out in laboratories accredited by ENAC.

**Pivoting front door** with extruded aluminium profile with a general thickness of 2.5mm. 6060S alloy quality certificate according to UNE-EN 573-3 (chemical composition) and UNE-EN 755-2 (mechanical characteristics). T-5 heat treatment. Silver anodised finish according to ISO 7599:2010 standard, micrage between 5-15 $\mu$ m according to ISO 2360:2003 and sealing 0 according to ISO 2143:2010.



**Fall retention movement and opening adjustment** of the doors by means of low-profile **friction hinges**, integrated in the access door. Properties of the Southco ST series hinges: Zinc and Steel material, minimum operating cycle of 20,000 cycles, maximum static load: 1000 N.

Door security retention system using **neodymium magnets**, maximum force 90N per magnet.

**Gas pistons** to help the opening of surfaces with soft brake limit. Range of use under temperatures between -25°C and 60°C. The front support system incorporates 2 gas pistons with maximum force of 600N per unit. The rear support system incorporates 2 gas pistons with maximum force of 200N per unit.

**Aluminium channelling:** Aluminium channel, for installation of 45x45 universal connectors and mechanisms, 6060 alloy according to UNE 38-337-82 standard with anodised surface finish fulfilling the requirements of the EWAA/EURAS Quality Mark (QUALANOD), subject to aesthetic finish durability tests according to ASTM B-136 and CE marking.

GESAB inclination system for working surface with regulation between 0° and -4°. The solution allows the Auto-Locking of the system for maintenance.

#### Technical Information

**Total push force:** 1500 N

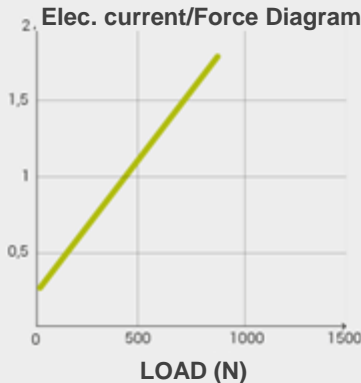
**Total tractive force:** 1500 N

**Protection Class:** IPX4

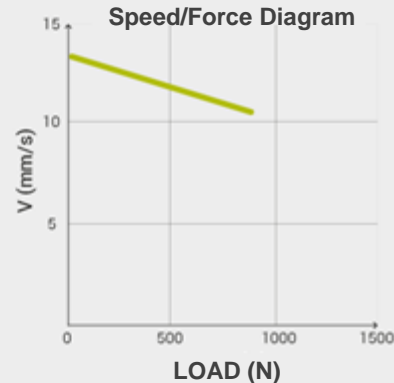
**Maximum speed:** 10-12mm/s

**Self-unlocking system for maintenance**

**Elec. current/Force Diagram**



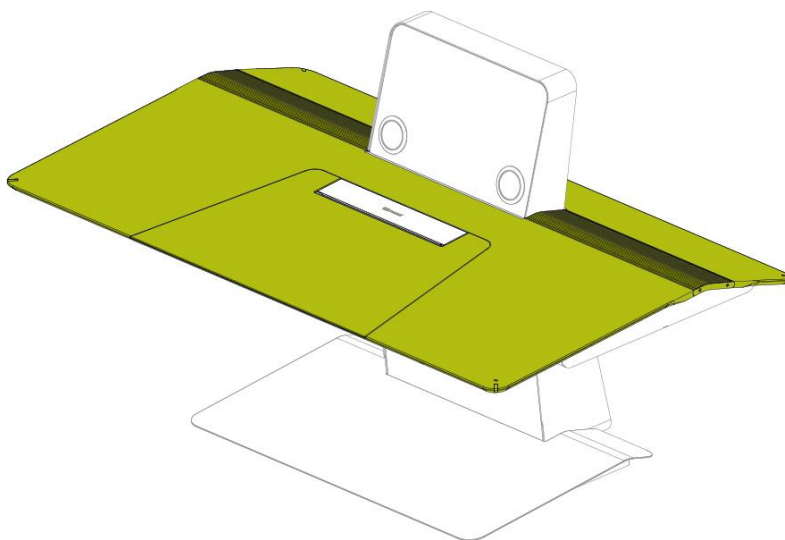
**Speed/Force Diagram**



### 3.3. WORK SURFACES

Surface on which the operator performs all the functions of interaction with the control platform. The work surface integrates a pivoting lid that reveals the Personal Dock personal connection area.

The rear area is reserved for the management of connections and equipment that are integrated inside the Open-Frame Rack. The rear surface in its open position gives direct access to the connection channels located on the sides and connects directly with the wiring network of the Central Column and the rest of the console. In the central zone of the space is located the control electronics of the RGB-LED lifting, tilting and security system.



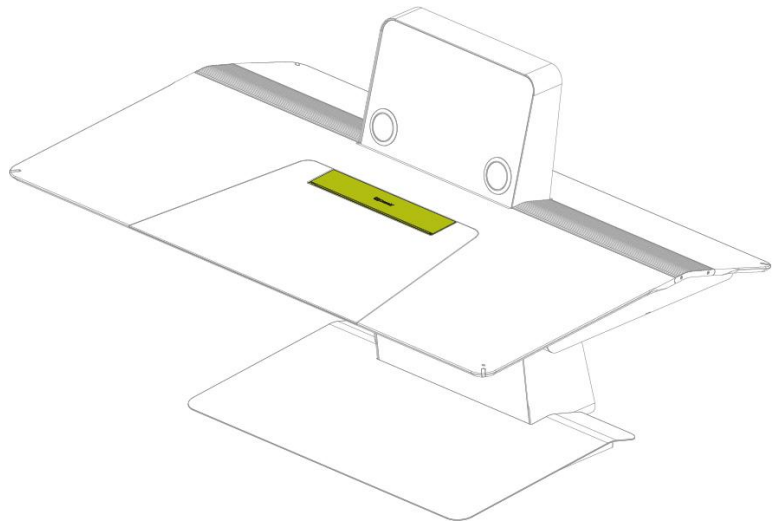
High-quality work surfaces for table in phenolic compact of 18mm thickness, white colour of black core and FH surface. High-pressure laminate (HPL) manufactured according to EN 438 standard; composed of cellulose and impregnated with thermosetting resins and pressed at high pressure and temperature. Its inner core is standard black. On request, you can ask for Max Compact "F quality", which is Euroclass B-s2, d0 of fire behaviour and for the application of vertical coating from 6mm according to B-s1, d0 test.

### 3.4. PERSONAL DOCK WITH CONTROL SYSTEM

The exclusive **Personal Dock** is a space for the personal effects of the operator and for connectivity. Comfortable, flexible. Everything at hand, without ever leaving the control tasks.

Its design also allows channelling the wiring of the work area to the frame, unifying design, functionality and performance for the operator.

The system by means of a tilting and retractable mechanism incorporates the Facility Custom connection area with 3 configurable spaces according to the needs of the project with power, data and multimedia connectors. Aluminium extruded profile lid of general thickness of 2.5mm. 6060S alloy quality certificate according to UNE-EN 573-3 (chemical composition) and UNE-EN 755-2 (mechanical characteristics). With T-5 heat treatment. Silver anodised finish according to ISO 7599:2010 standard, micrage between 5-15µm according to ISO 2360:2003 and sealing 0 according to ISO 2143:2010. As standard, ACTEA includes a special version of the Personal Dock that integrates a control command for the lifting and tilting movements of the console. In parallel, the same command is used to configure the ACTEA RGB-LED security system. By means of a command shown in the picture, the colour of the console LEDs can be customised according to the requirements of the project.



#### CONTROL PANEL FEATURES

Lifting Control Panel



Tilting Control Panel



Security LEDs Configuration Panel

Selectable pre-configured colour options.  
Possibility of custom colours upon request.



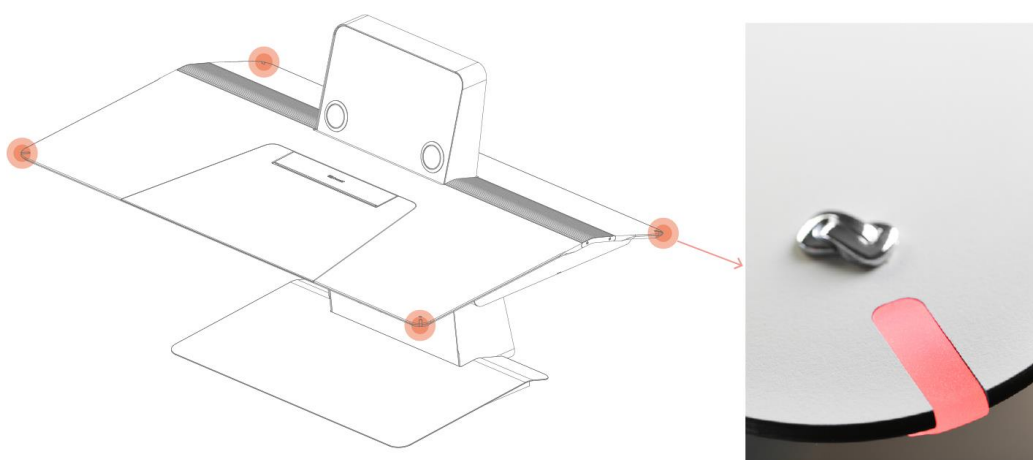
The Facility Custom system, thanks to the extendable plug-in terminal strips and the Facility Custom Modules for a custom element assembly, allow multiple paths to create flexible connections. With their practical units, they provide a secure interconnection in networks at the table and thanks to the elegant retractable supply systems they favour communication without difficulties for the operator and a long-term guarantee through maximum flexibility. The modification of the equipment offers the possibility to update at any time according to the most current state of the art. In this case, it is not possible to touch the contacts under current thanks to the integrated insulation.



Unlimited installation possibilities. With only a few additional components, completely new possibilities open up in the electrical installation. The wide range of Custom Modules offers the possibility to easily integrate audio, video and networks. Thanks to the 50 x 50 mm and 55 x 55 mm adapter frames, available as standard, the Custom Modules optimally complete all common switching programs from renowned manufacturers.

### 3.5. PRL SECURITY SYSTEM

At the ends of each console or lines, the PRL security system is installed using RGB-LED lighting. The work surfaces incorporate in their final ends a specific housing for the translucent injection polycarbonate receiver that houses the encapsulated MSL0101 LEDs inside. This system has functional and safety features, is red and identifies the protrusions of the console. Just as the lights of a car identify it in the dark, and they can report that it has an open door, the built-in lights of the console identify, following the same values of passive safety, the protrusions of the tables.



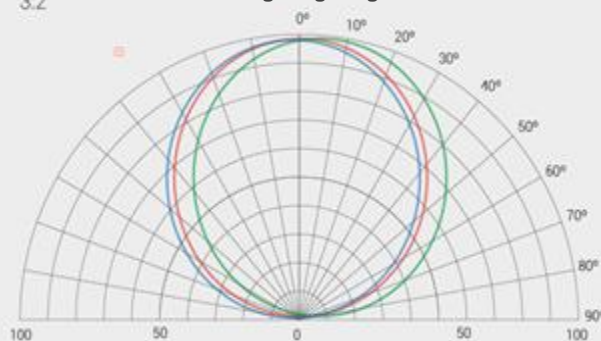
In addition to signalling the position of the protrusions, the security system lights intermittently to alert that the movement system is active.

The following are the technical features of the RGB LEDs used:

#### Technical Information

<b>Emitting color:</b>	Blue	Green	Red
<b>Dominant wavelength (nm):</b>	470	527	624
<b>Light intensity (mcd)</b>	400	1200	700
<b>Voltage (V)</b>	2.1	3.3	3.2
Predefined and customised standard colour options			

RGB Lighting Diagram



### 3.6. ELECTRIFICATION AND CHANNELING ALUMINUM CHANNELS

The aluminium channels for voice, data and multimedia connections are integrated into the frame. The K45 system facilitates the speed of installation since the mechanisms are installed by direct clipping without the need for tools. The mechanisms of the K45 range are compatible with all connectors on the market and are made of self-extinguishing and halogen-free materials, guarantee of safety for people, equipment and information.



#### Multibases:

The AC11 connection accessory serves to compose multibases.



#### Shutter:

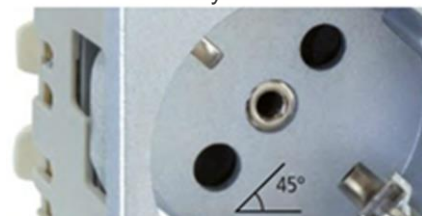


All our bases have protective shutters that avoid direct contact with active parts.

They protect the UPS line, **allowing only the connection of computer equipment.**

#### High connection density:

Alveoli at 45° that allow for high connection density.



#### Quick and screw connection:

##### Quick

##### Screw



Allows rigid and flexible cable of 2.5mm²

Multibase assembly using the connection block



Insert connection block in the contacts of the base.



Press until connection block is completely inserted in the contacts.



Repeat the process with the next base and so on.

## VOICE AND DATA K45 PLATES

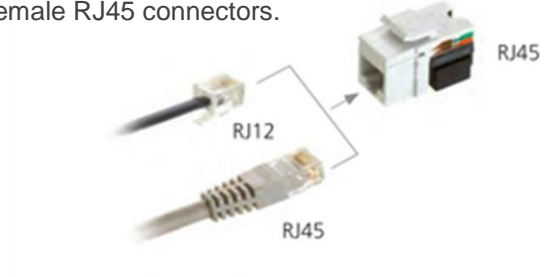
### Flat plates:

Flat plates offer full integration in the boxes and channels.



### 1 connector for several types of patch chords:

The RJ11 and RJ12 patch cords connect perfectly to the female RJ45 connectors.



## K45 MULTIMEDIA PLATES (VDM)

New easier connection system. No welding needed.



Screw connection



Female-Female



### 3.7. PACKAGING AND TRACEABILITY

To guarantee the traceability of our product and to be able to give a good service to our customers at all times, all GESAB products are identified with a plate showing the model, year of manufacture, reference and product code. In this way, in case of any anomaly, it would allow us to act quickly and diligently.

The set of pre-established procedures, the identification of the parts as well as their marking, allow us to know the history, location and trajectory of our products along the chain of manufacturing, supplies and installation at any time.



The packaging of the product must ensure its integrity, both in the structural part and in the properties of the materials (by oxidation or other type of degradation caused by the environmental conditions of the shipment).

Each piece or subset must be individually protected and packed for collection inside the treated box for packaging and transportation to destination.

The packaging must comply with the international SOLAS-IMO standard, referring to the security points for lashing.

All packaging must comply with the phytosanitary treatment of the wood, according to FAO ISPM N-15.

The outside of the packaging must be properly identified, with the name of the company, and quantity of the different boxes that make up the total shipment, together with the destination address. The boxes must be marked with the relevant signage.

For maritime shipments, the product must be secured by thermo-sealed VCI covers.

#### 4. ACTEA TECHNICAL FEATURES

All the products designed by GESAB comply with the regulations in force on ergonomics, the related UNE regulations and the standards published by prestigious entities related to the design of stations with data display screens and control centres.

- UNE-EN 527-2011
- UNE-EN ISO 11064 STANDARD, on Ergonomic Design of Control Centres.
- NTP 602: Ergonomic design of the workstation with display screens.
- Law 31/1995 of 8 November on Prevention of Occupational Risks.
- Royal Decree 486/1997, of 14 April, which establishes the minimum safety and health provisions in workplaces.
- Royal Decree 488/1997, of 14 April, on minimum safety and health provisions relating to work with equipment that includes display screens, together with the manual of technical standards for the ergonomic design of stations with data display screen prepared by the INSHT.
- Royal Decree 1801/2003, of 26 December, on general product safety.

#### 5. QUALITY CERTIFICATIONS AND APPROVALS

##### ISO 9001 QUALITY CERTIFICATION



COMPANY REGISTERED IN THE  
OFFICIAL REGISTER OF BIDDERS AND  
CLASSIFIED COMPANIES OF THE STATE



##### ISO 14001 ENVIRONMENT CERTIFICATION



COMPANY REGISTERED IN THE  
PROGRAM OF VOLUNTARY  
AGREEMENTS FOR CO2 REDUCTION.



##### OHSAS 18001 PREVENTION OF OCCUPATIONAL RISKS CERTIFICATION



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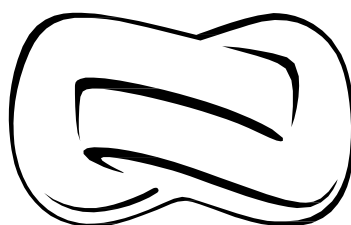
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